

## Déploiement d'application avec FOG

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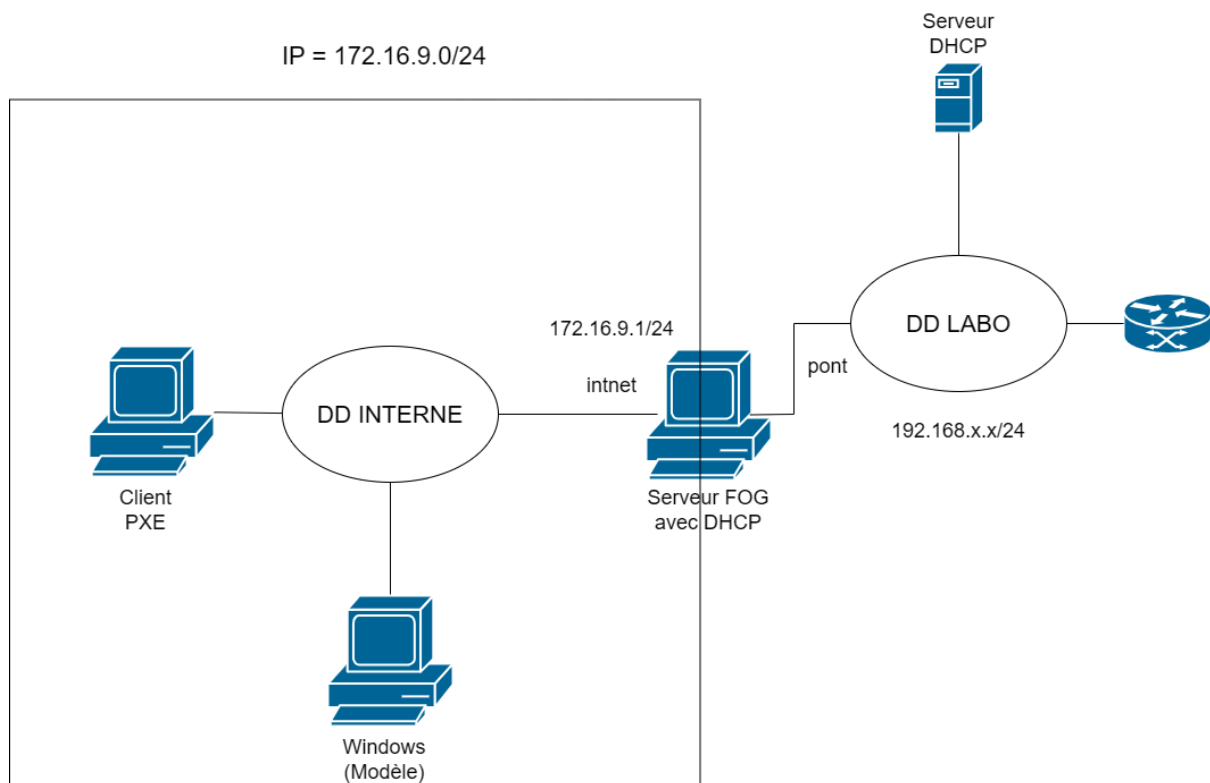
### Pré-requis :

Machine Xubuntu hébergeant le serveur fog

1 machine modèles (Windows)

machine cliente PXE (Windows)

### Infrastructure réseau :



## Paramètre du serveur FOG avant installation

```
* Here are the settings FOG will use:
* Base Linux: Debian
* Detected Linux Distribution: Ubuntu
* Interface: enp0s8
* Server IP Address: 172.16.9.1
* Server Subnet Mask: 255.255.255.0
* Server Hostname: yanis-fog
* Installation Type: Normal Server
* Internationalization: 0
* Image Storage Location: /images
* Using FOG DHCP: Yes
* DHCP router Address:

* Are you sure you wish to continue (Y/N) █
```

Après avoir terminé l'installation de fog, il faut ensuite se rendre vers la page web du logiciel. Dans notre cas le lien sera : <http://172.16.9.1/fog/management> (adresse IP du serveur). avec les logins fournis

```
* Setup complete

You can now login to the FOG Management Portal using
the information listed below. The login information
is only if this is the first install.

This can be done by opening a web browser and going to:

http://172.16.9.1/fog/management

Default User Information
Username: fog
Password: password

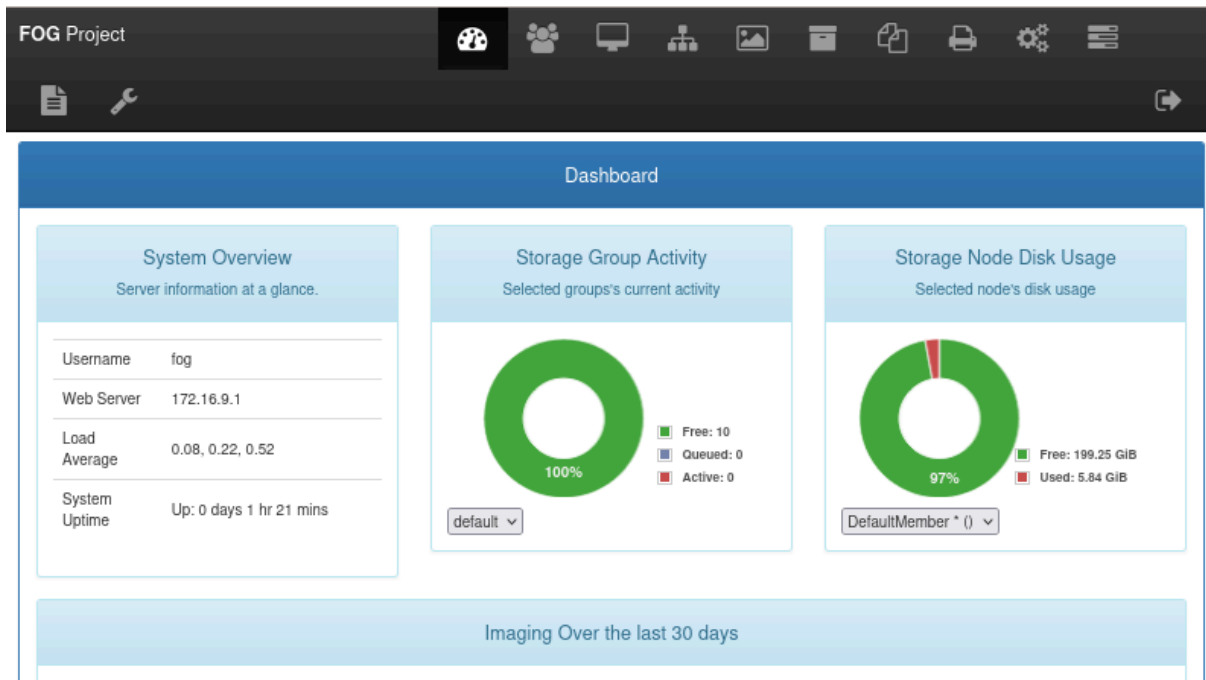
* Changed configurations:

The FOG installer changed configuration files and created the
following backup files from your original files:
* /etc/dhcp/dhcpd.conf <=> /etc/dhcp/dhcpd.conf.1726391077
* /etc/vsftpd.conf <=> /etc/vsftpd.conf.1726391077
* /etc/exports <=> /etc/exports.1726391077

root@osboxes:/home/master/Downloads/fogproject-1.5.9/bin# █
```

## Travaux post installation

Après s'être connecté, nous nous retrouvons dans le tableau de bord d'activité du serveur



### Changement du mot de passe initial :

Utilisateur : Fog

Mot de passe : admin123

### Qu'est ce qu'un serveur LAMP ?

Un serveur LAMP correspond à un ensemble de logiciels libres permettant le développement et l'hébergement d'un site Web. Ce serveur utilise Linux comme système d'exploitation, Apache comme serveur Web, MySQL comme système de gestion de base de données relationnelle et PHP comme langage objet.

### Test des services associés à LAMP

#### Base de données

```
root@osboxes:/home/master/Downloads/fogproject-1.5.9/bin# mariadb
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 4504
Server version: 10.1.48-MariaDB-0ubuntu0.18.04.1 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

**Apache :**

```
root@osboxes:/home/master/Downloads/fogproject-1.5.9/bin# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enable)
   Drop-In: /lib/systemd/system/apache2.service.d
            └─apache2-systemd.conf
   Active: active (running) since Sun 2024-09-15 05:32:39 EDT; 59min ago
     Main PID: 921 (apache2)
        Tasks: 11 (limit: 2333)
```

**MYSQL**

```
root@osboxes:/home/master/Downloads/fogproject-1.5.9/bin# mysql
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 5636
Server version: 10.1.48-MariaDB-0ubuntu0.18.04.1 Ubuntu 18.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> SHOW DATABASES ;
+-----+
| Database |
+-----+
| fog      |
| information_schema |
| mysql    |
| performance_schema |
+-----+
4 rows in set (0.00 sec)
```

On peut également constater que la base de données se nomme fog.

**Ensuite, pour changer le timeout du menu PXE de FOG par défaut, se rendre dans :**

- Fog configuration
- IPXE General Configuration
- Menu Hide No Menu Settings
- Hide Menu timeout

The screenshot shows the 'FOG Configuration' interface. On the left is a 'Main Menu' sidebar with links: Home, License, Kernel Update, iPXE General Configuration, iPXE Menu Item Settings, iPXE New Menu Entry, Client Updater, MAC Address List, and FOG Settings. The main content area is titled 'iPXE Menu Settings' and contains two sections: 'Menu colors, pairings, settings' and 'Menu Hide/No Menu settings'. The 'Menu Hide/No Menu settings' section includes a table with the following rows: 'No Menu' with a checkbox and a help icon, 'Hide Menu' with a checkbox and a help icon, 'Hide Menu Timeout' with a text input field containing '10' and a help icon, and 'Boot Key Sequence' with a dropdown menu showing '- Please select an option -' and a help icon. Below the table is a 'Make Changes?' section with an 'Update' button.

Cette fonction permet d'augmenter le délai d'affichage du menu PXE

**Pour sauvegarder la base de donnée, se rendre dans :**

- Fog Configuration
- Configuration Save

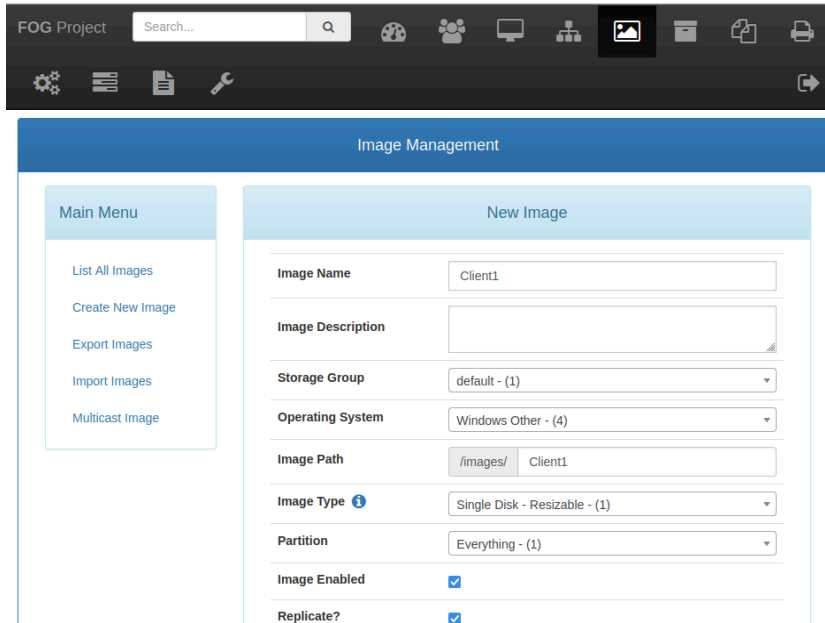
Cliquer sur export

**Pour restaurer la BDD,** sélectionner browse (parcourir), prendre la base de donnée sauvegardé et sélectionner import

The screenshot shows the 'FOG Configuration' interface. On the left is a 'Main Menu' sidebar with links: Home, License, Kernel Update, iPXE General Configuration, iPXE Menu Item Settings, iPXE New Menu Entry, Client Updater, MAC Address List, and FOG Settings. The main content area is titled 'Configuration Import/Export' and contains two sections: 'Export Database' and 'Import Database'. The 'Export Database' section has a label 'Export Database?' and an 'Export' button. The 'Import Database' section has a label 'Import Database?' with 'Max Size: 3000M' below it, a 'Browse' button, and an 'Import' button.

## Création des images

Se rendre dans image management puis créer une nouvelle image.



FOG Project Search...

Image Management

Main Menu

- List All Images
- Create New Image
- Export Images
- Import Images
- Multicast Image

New Image

Image Name: Client1

Image Description:

Storage Group: default - (1)

Operating System: Windows Other - (4)

Image Path: /images/ Client1

Image Type: Single Disk - Resizable - (1)

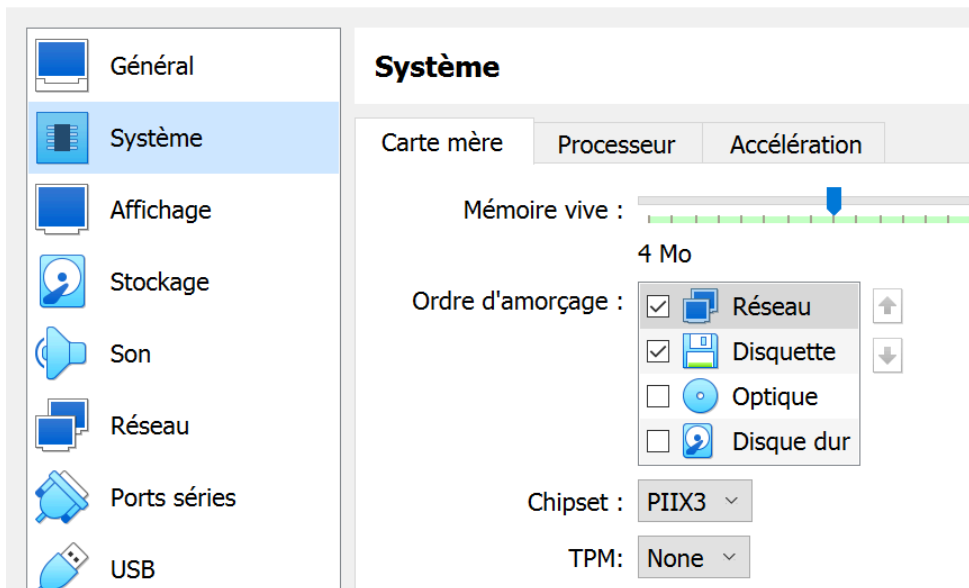
Partition: Everything - (1)

Image Enabled: ☒

Replicate?: ☒

Puis prioriser le boot en PXE dans les paramètres VirtualBox

win client pxe - Paramètres



Général

Système

Affichage

Stockage

Son

Réseau

Ports séries

USB

Système

Carte mère

Processeur

Accélération

Mémoire vive : 4 Mo

Ordre d'amorçage :

- ☒ Réseau
- ☒ Disquette
- ☐ Optique
- ☐ Disque dur

Chipset : PIIX3

TPM: None

## la machine cliente PXE a démarré à partir de l'interface FOG

```
Host is registered as Client1?  
-----  
Boot from hard disk  
Run Mentest86+  
Update Product Key  
Deploy Image  
Join Multicast Session  
Quick Host Deletion  
Client System Information (Compatibility)
```

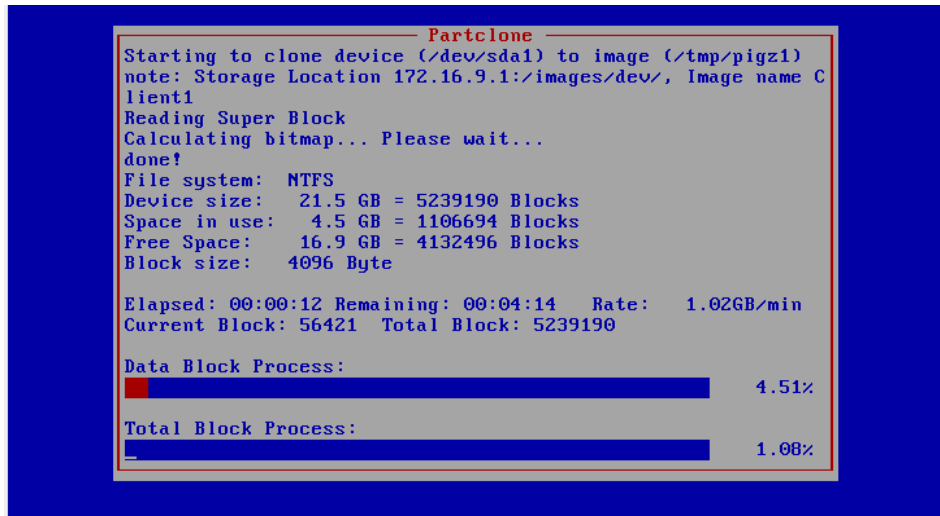


**FOG Project**  
Open Source Computer Cloning Solution

## Après avoir répondu au questionnaire, on déploie l'image de la machine cliente

```
* Using disk device...../dev/sda  
* Starting host registration  
* Enter hostname for this computer: Client1  
  Enter the image ID to associate with computer (? for listing): ?  
    ID# 1 - Client1  
  Enter the image ID to associate with computer (? for listing): 1  
  Would you like to associate this host with groups? (y/N) y  
  Enter the group IDs separated with , to associate with computer (? for listing): ?  
There are no groups on this server  
  Enter the group IDs separated with , to associate with computer (? for listing):  
  Would you like to associate this host with snapins? (y/N) y  
  Enter the snapin IDs separated with , to associate with computer (? for listing): ?  
There are no snapins on this server  
  Enter the snapin IDs separated with , to associate with computer (? for listing):  
  Would you like to associate a product key to this host? (y/N) n  
  Would you like this host to join a domain, (using default settings)? (y/N) N  
* Enter the primary user for this computer: Client1  
* Enter the other tag #1 for this computer:  
* Enter the other tag #2 for this computer:  
* You entered all required information,  
  Would you like to deploy image to this computer now? (y/N) y_
```

Ici, on observe la machine boot qui récupère automatiquement l'image.



On retrouve ainsi dans le gestionnaire, l'image capturée

