

TP-Déploiement FOG



1°) Installation de FOG

1.1 –

- Installation d'un Debian 9
- Une fois l'installation finie, on se place dans : `cd /usr/src`
- Téléchargement de l'archive de FOG : `wget`
<https://github.com/FOGProject/fogproject/archive/1.5.7.tar.gz>
- On extrait le contenu : `tar -xvzf fogproject-1.5.7.tar.gz`
- On se place dans le dossier extrait : `cd fogproject-1.5.7/`
- `Cd bin/`
- Lancement de l'installation : `./installfog.sh`

```
*** New option 'hostname' since FOG 1.5.6 ***

Would you like to change the default hostname >FOG-Enzo-2<?
The fully qualified hostname is used for the webserver certificate.
If you are not sure, select No. [y/N] n

#####
#   FOG now has everything it needs for this setup, but please   #
#   understand that this script will overwrite any setting you may #
#   have setup for services like DHCP, apache, pxe, tftp, and NFS. #
#####
# It is not recommended that you install this on a production system #
#   as this script modifies many of your system settings.         #
#####
#           This script should be run by the root user.           #
#   It will prepend the running with sudo if root is not set      #
#####
#           Please see our wiki for more information at:         #
#####
#           https://wiki.fogproject.org/wiki/index.php           #
#####

* Here are the settings FOG will use:
* Base Linux: Debian
* Detected Linux Distribution: Debian GNU/Linux
* Interface: enp0s3
* Server IP Address: 192.168.44.71
* Server Subnet Mask: 255.255.255.0
* Server Hostname: FOG-Enzo-2
* Installation Type: Normal Server
* Internationalization: 1
* Image Storage Location: /images
* Using FOG DHCP: Yes
* DHCP router Address: 192.168.44.71

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

- Configuration de mysql : [mysql_secure_installation](#)

Installation de FOG sur un Debian 9 en mode console (Adresse IP : 192.168.44.71 /24)

Création d'un deuxième utilisateur pour le client :

New User

User Name

enzo

Friendly Name

User Password

sio2018

User Password (confirm)

sio2018

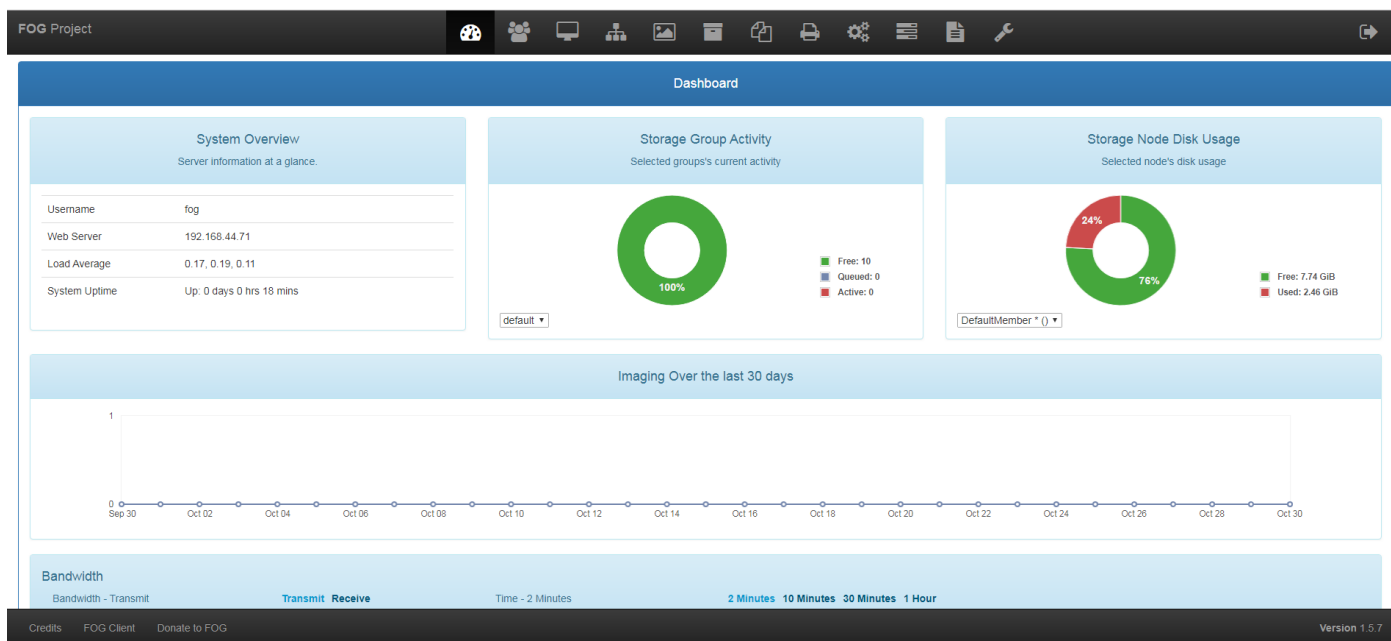
1.2 –

Machine cliente sur un Windows 10 sur le réseau interne 192.168.44.X /24

Adresse IP : 192.168.44.10 /24

Utilisateur : PC-1

MDP : sio2018

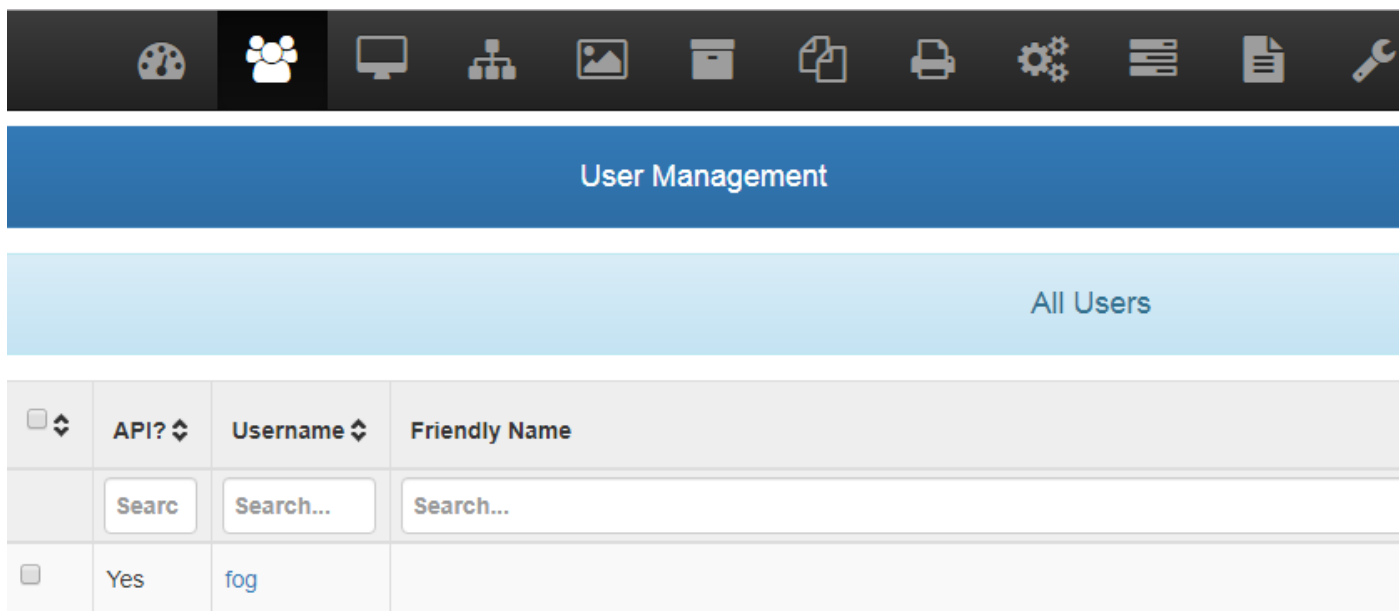


2°) Travaux post installation

2.1 –

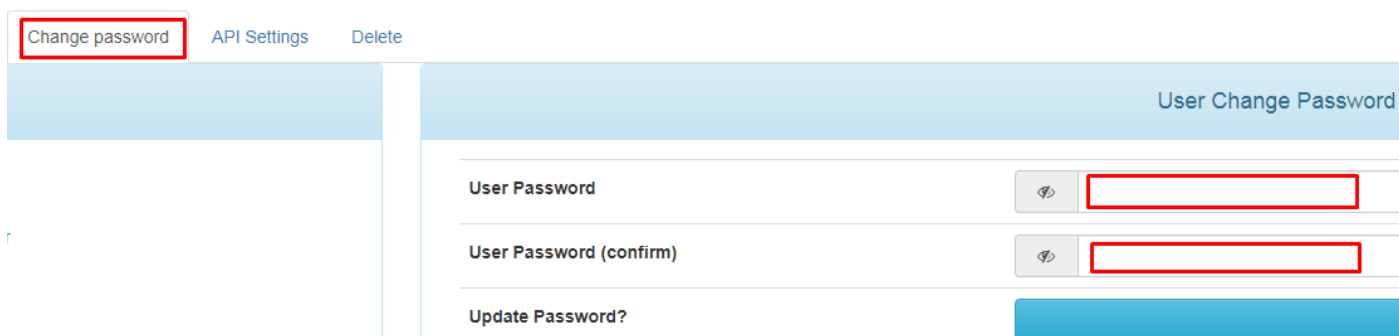
Changement du mot de passe par défaut de l'utilisateur fog :

Onglet utilisateurs > List All Users > on choisi l'utilisateur



	API?	Username	Friendly Name
☐	Yes	fog	

Puis dans l'onglet Change password



Change password

API Settings

Delete

User Password

User Password (confirm)

Update Password?

2.2 –

Un serveur LAMP :

LAMP est un acronyme désignant un ensemble de logiciels libres permettant de construire des serveurs de sites web. L'acronyme original se réfère aux logiciels suivants :

- « Linux », le système d'exploitation (GNU/Linux) ;
- « Apache », le serveur Web ;
- « MySQL ou MariaDB », le serveur de base de données ;
- À l'origine1, « PHP », « Perl » ou « Python », les langages de script.

2.3 –

Pour tester les services associés à LAMP on lance les commande service httpd start et service mysql start :

```
root@FOG-Enzo-2:/home/sio# service httpd start
```

```
root@FOG-Enzo-2:/home/sio# service mysqld start
```

Test apache : dans un navigateur on marque l'adresse ip du serveur



Apache2 Debian Default Page

It works!

Test mysql : en console saisir mysql et tester une commande SQL.

2.4 –

Pour connaitre les bases de données sur le serveur :

mysql -u root -p

SHOW DATABASES ;

```
root@FOG-Enzo-Z:/home/sio# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 774
Server version: 10.1.41-MariaDB-0+deb9u1 Debian 9.9

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

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

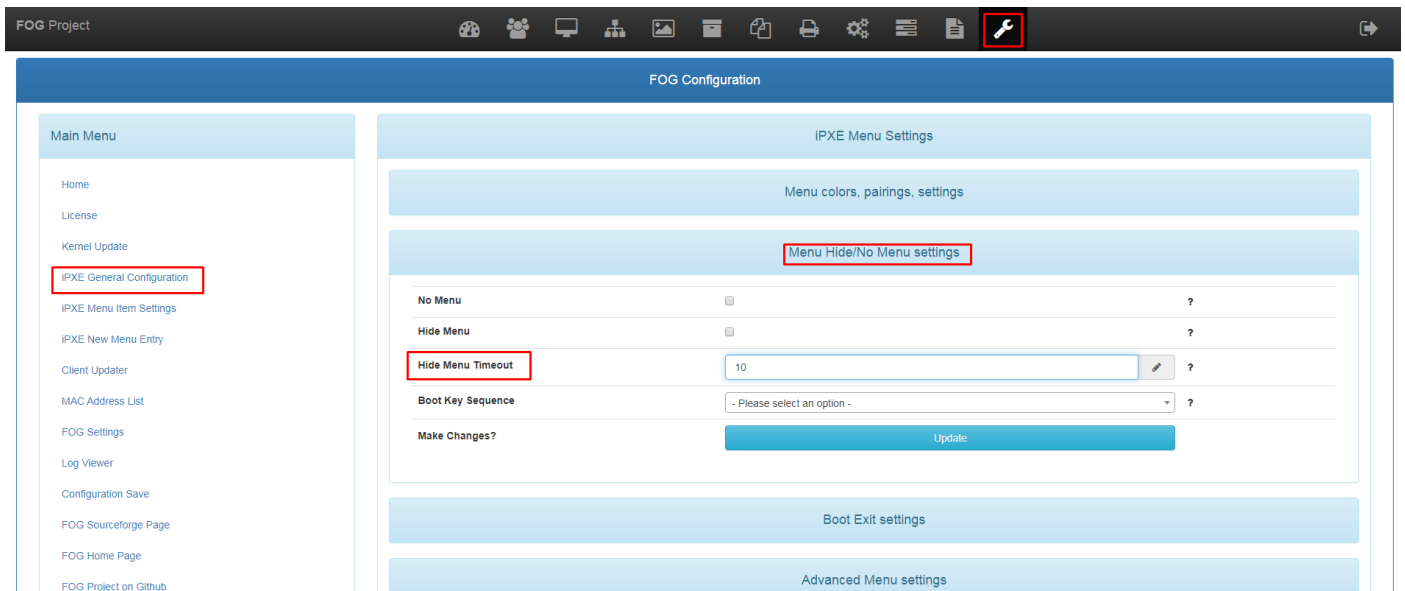
MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| fog      |
| information_schema |
| mysql    |
| performance_schema |
+-----+
4 rows in set (0.03 sec)
```

Ici la base s'appelle FOG.

2.5 –

Changement du timeout du menu PXE de FOG par défaut :

Paramètre > IPXE General Configuration > Menu Hide / No Menu Settings > Hide Menu timeout



2.6 –

Sauvegarde de la configuration de FOG sur une base de donnée et restauration de la sauvegarde :

`mysqldump --user=root --password=sio2018 --databases fog > fog.sql`

```
root@FOG-Enzo-2:/home/sio# mysqldump --user=root --password=sio2018 --databases fog > fog.sql
```

Restauration de la configuration :

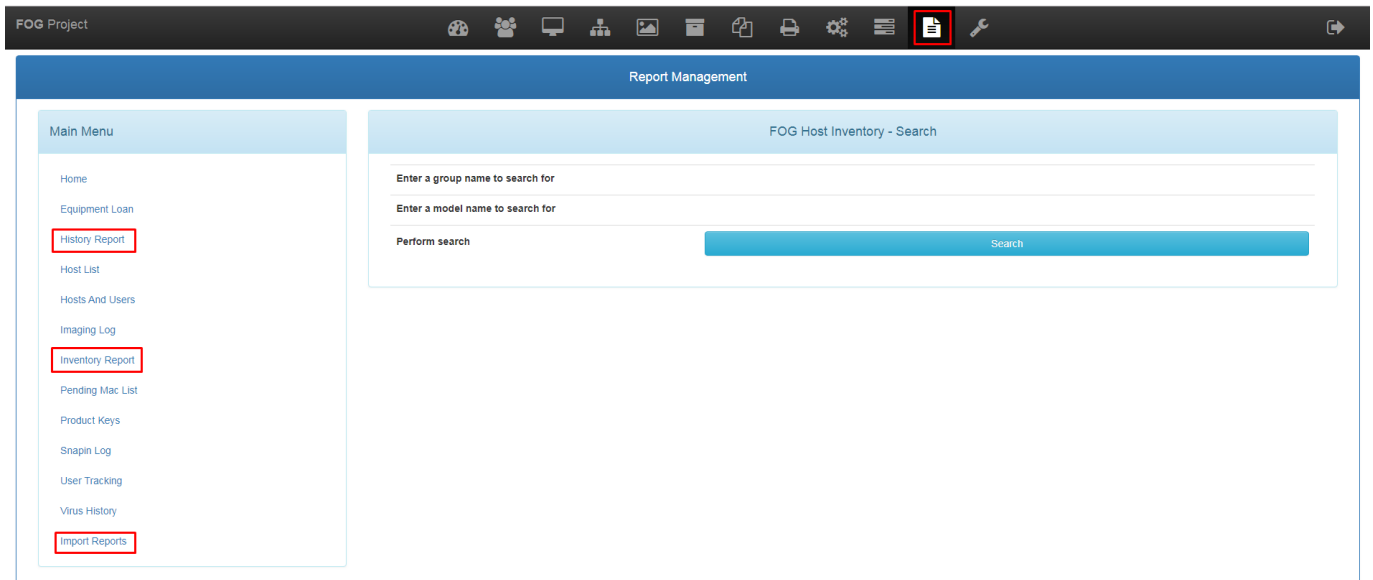
`mysql--user=root --password=sio2018 fog < fog.sql`

```
root@FOG-Enzo-2:/home/sio# mysql --user=root --password=sio2018 fog < fog.sql
```

2.7 –

Exportation des taches effectuées et des activités :

Reports > History Report / Inventory Report / Import Reports >



Full History Export			
Export PDF			
User	Information	Time	IP
Search...	Search...	Search...	Search...
fog	[2019-10-10 11:02:08] HookEvent ID: 13 NAME: LoginSuccess has been successfully updated.	2019-10-10 11:02:08	192.168.44.10
fog	[2019-10-10 11:02:08] HookEvent ID: 14 NAME: MAIN_MENU_DATA has been successfully updated.	2019-10-10 11:02:08	192.168.44.10
fog	[2019-10-10 11:02:08] HookEvent ID: 15 NAME: DashboardData has been successfully updated.	2019-10-10 11:02:08	192.168.44.10
fog	[2019-10-10 11:02:08] HookEvent ID: 16 NAME: ACTIONBOX has been successfully updated.	2019-10-10 11:02:08	192.168.44.10
fog	[2019-10-10 11:02:08] HookEvent ID: 17 NAME: CONTENT_DISPLAY has been successfully updated.	2019-10-10 11:02:08	192.168.44.10
fog	[2019-10-30 11:49:22] HookEvent ID: 23 NAME: REPORT_TYPES has been successfully updated.	2019-10-30 11:49:22	192.168.44.72
fog	[2019-10-30 11:49:26] HookEvent ID: 24 NAME: IMPORT_REPORT has been successfully updated.	2019-10-30 11:49:26	192.168.44.72

3°) Création des images

3.1-

Creation de l'Host (machine) :

FOG Project

Search...

Host Management Edit: PC1

Info

General

Basic Tasks

Active Directory

Printers

Snapins

Service Settings

Power Management

Inventory

Virus History

Login History

Image History

Snapin History

Membership

Delete

Main Menu

List All Hosts

Create New Host

Export Hosts

Import Hosts

Host general

Host Name

PC1

Primary MAC

Load MAC Vendors

08:00:27:d1:d9:50

I.M.C.

I.M.I.

Host description

3.2-

Creation de l'image :

FOG Project Search...

Image Management

Main Menu

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

New Image

Image Name: PC1

Image Description:

Storage Group: default - (1)

Operating System: Windows 10 - (9)

Image Path: /images/ PC1

Image Type: Single Disk - Resizable - (1)

Partition: Everything - (1)

Image Enabled: ☒

Replicate?: ☒

Compression: 6

Image Manager: Partclone Gzip

Create Image Add

Enregistrement de la machine :

FOG-Enzo-client - Paramètres

Général

Système

Affichage

Stockage

Son

Réseau

Système

Carte mère

Processeur

Accélération

Mémoire vive : 4096 Mo

Ordre d'amorçage :

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

Host is NOT registered!

Boot from hard disk
Run Memtest86+
Perform Full Host Registration and Inventory
Quick Registration and Inventory
Deploy Image
Join Multicast Session
Client System Information (Compatibility)



Il y a possibilité aussi de faire Quick Registration and Inventory, pour éviter de répondre aux questions et pour que cela soit plus rapide.

```
* Running post init scripts.....Done
=====
===          ===          ===          ===
===  =====  ==  ===  ==  ===
===  =====  =====  ==  =====  ===
===  =====  =====  ==  =====
===          =====  ==  =====
===  =====  =====  ==  ===  ===
===  =====  =====  ==  =====  ===
===  =====  ==  ===  ==  ===
===  =====          =====  =====
=====
===== Free Opensource Ghost =====
=====
===== Credits =====
= https://fogproject.org/Credits =
=====
== Released under GPL Version 3 ==
=====
Version: 1.5.7
Init Version: 20190714
* Using disk device...../dev/sda
* Starting host registration
* Enter hostname for this computer: PC-1
```

Assignment de l'image a l'adresse mac de la machine :

?			PC1 08:00:27:d1:d9:50
---	--	--	--------------------------

Choix de l'image :

Host general	
Host Name	PC1
Primary MAC	Load MAC Vendors 08:00:27:d1:d9:50 + I.M.C. I.M.I.
Host description	
Host Product Key	
Host Image	PC1 - (1)
Host Kernel	
Host Kernel Arguments	- Please select an option - PC1 - (1)

Creation de la tache de remonter d'image :

Appuyer sur la flèche orange pour remonter l'image.

?			PC1 08:00:27:d1:d9:50	No Data		PC1
---	--	--	--------------------------	---------	---	-----

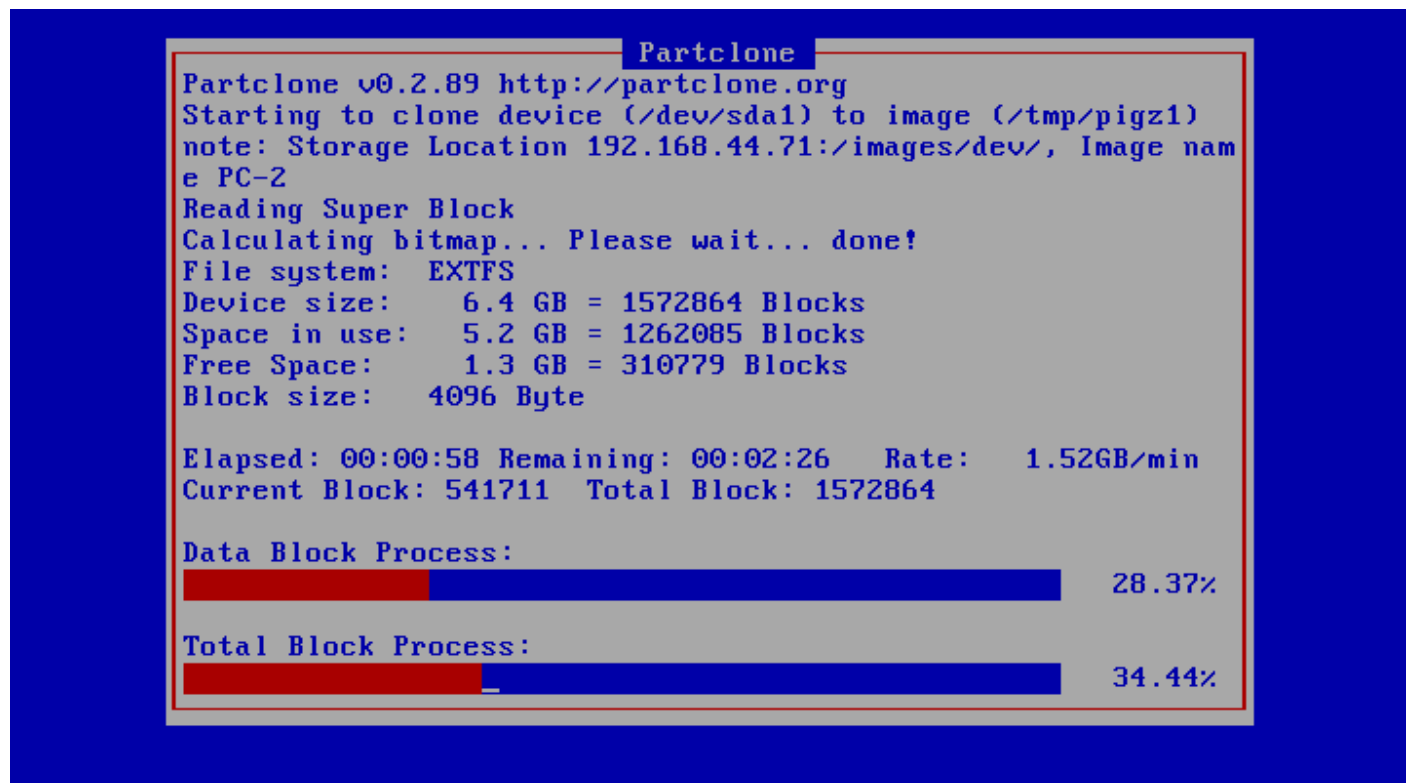
Configuration des paramètre de la tâche :

Confirm tasking	
Image Associated: PC1	
Advanced Settings	
☐ Schedule with shutdown ☒ Wake on lan? ☐ Schedule as debug task ☒ Schedule instant ☐ Schedule delayed ☐ Schedule cron-style	Create Capture Tasking Task

3.3-

Remonter de l'image :

Au démarrage de la machine :



Taille de l'image remonter :

			PC-2 - 3 Single Disk - Resizable Partclone Compressed	default	5.00 GiB	2019-10-17 07:26:48
--	--	--	---	---------	----------	------------------------

4°) Déploiement unicast/multicast

4.1-

Inventorier trois nouvelles machines (2 Windows W-1 et W-2, et une Linux L-1) :

				Host	Imaged	Task	Assigned Image
				Search...	Search...		Search...
?				L-1 08:00:27:cb:e2:84	No Data		L-1
?				W-1 08:00:27:87:02:50	No Data		W-1
?				W-2 08:00:27:87:02:51	No Data		W-2

4.2-

Création du groupe GrpeWindows :

The screenshot shows the 'Group Management' interface in the FOG Project. On the left is a 'Main Menu' with options: 'List All Groups', 'Create New Group' (highlighted with a red box), 'Export Groups', and 'Import Groups'. The main area is titled 'New Group' and contains a form with the following fields: 'Group Name' (containing 'GrpeWindows' and highlighted with a red box), 'Group Description', 'Group Kernel', 'Group Kernel Arguments', and 'Group Primary Disk'. At the bottom right of the form is a blue 'Add' button.

Ajout des deux machines dans le groupe :

The screenshot shows the 'Group Management Edit: GrpeWindows' interface. The 'Membership' tab is selected and highlighted with a red box. The main area is titled 'Group Membership' and contains a section 'Add Hosts'. Above this section is a checkbox labeled 'Check here to see what hosts can be added' which is checked. The 'Add Hosts' section has a search bar and a list of hosts: 'L-1', 'W-1', and 'W-2'. The 'W-1' and 'W-2' hosts have checkboxes next to them that are checked with red boxes. At the bottom right of the list is a blue 'Add' button.

4.3-

Déploiement unicast de la machine Linux :

Dans Host > List all host > et flèche verte pour la création de la tâche pour le déploiement de l'image :

?	☐		L-1 08:00:27:cb:e2:84	No Data		L-1
---	--------------------------	--	--------------------------	---------	--	-----

Détails de la création de la tâche :

The screenshot shows the 'Advanced Settings' interface for creating a task. It contains several checkboxes: 'Schedule with shutdown', 'Wake on lan?' (checked), 'Schedule as debug task', 'Schedule instant' (selected with a radio button), 'Schedule delayed', and 'Schedule cron-style'. At the bottom right is a blue 'Task' button.

Au moment du démarrage sur la machine cible apres le boot PXE le serveur va deployer automatiquement l'image sur cette machine.

4.4-

Déploiement multicast de la machine Windows :

Dans Host > List all host > et le logo encadré en rouge pour la création de la tâche pour le déploiement de l'image :

?			W-1 08:00:27:87:02:50	No Data	 	W-1
---	---	---	--------------------------	---------	---	-----

Détails de la création de la tâche :

Advanced Settings

☐ Schedule with shutdown

☒ Wake on lan?

☐ Schedule as debug task

☒ Schedule instant

☐ Schedule delayed

☐ Schedule cron-style

Create Multi-Cast Tasking

Task

Au moment du démarrage sur la machine cible apres le boot PXE le serveur va deployer automatiquement l'image sur cette machine.

5°) Déploiement de l'agent OCS

5.1-

Sur la machine cliente Windows il faut installer le Smart Installer. Pour cela il faut aller dans le navigateur et marquer l'adresse ip du server/fog/client : 192.168.44.71/fog/client

Puis cliquer sur Smart Installer, un executable se télécharge :

FOG Client Installer

Non sécurisé | 192.168.44.71/fog/management/index.php?node=client

FOG Project

New Client and Utilities

The installers for the fog client
Client Version: 0.11.16

Cross platform, more secure, faster, and much easier on the server. Especially when your organization has many hosts.

[MSI -- Network Installer](#)
[Smart Installer \(Recommended\)](#)

Help and Guide

Where to get help

Use the links below if you need assistance.
NOTE: Forums are the most common and fastest method of getting help with any aspect of FOG.

This is the recommended installer to use now. It can be used on Windows, Linux, and Mac OS X.

Legacy Client and Utilities

The old client and fogcrypt, deprecated

The legacy client and fog crypt utility for those that are not yet using the new client. We highly recommend you make the switch for more security and faster client communication and management.

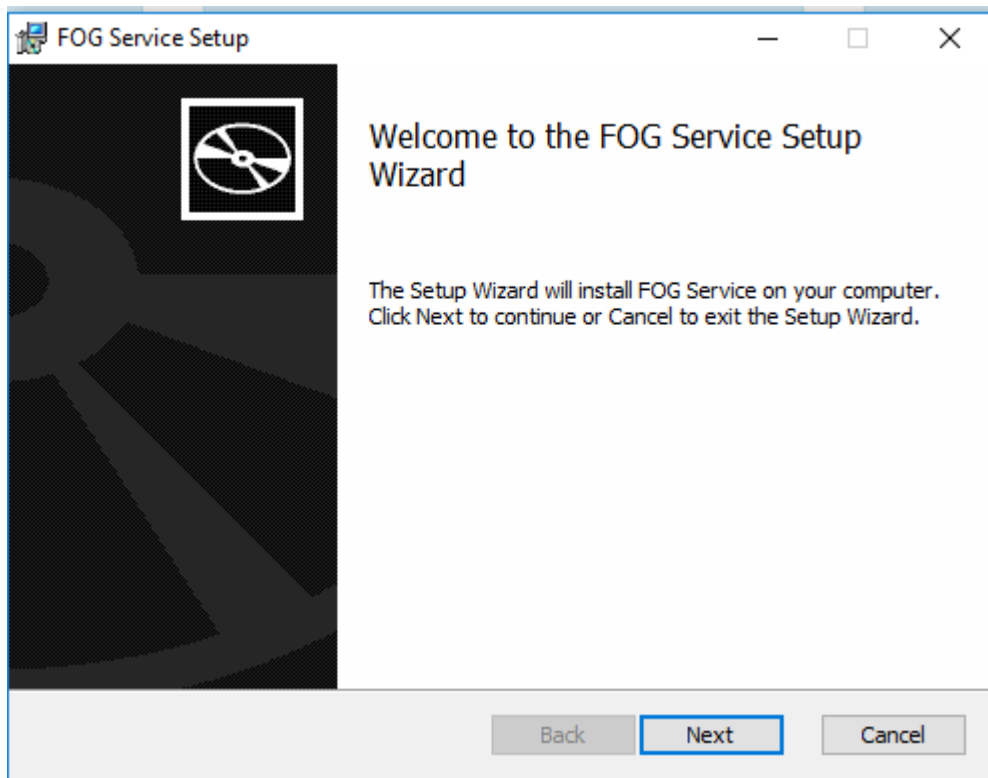
[Legacy FOG Client](#)
[FOG Crypt](#)

Credits FOG Client Donate to FOG

[SmartInstaller.exe](#)

Tout afficher

Installation de l'exécutable :



Téléchargement de l'agent OCS pour Windows :

Téléchargement OCS Inventory

MERCI POUR VOTRE ENREGISTREMENT SUR LE SITE D'OCS INVENTORY NG !

SERVEUR :

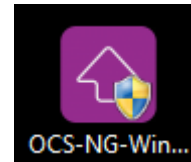
Serveur pour Linux/Unix 2.6

Serveur pour Windows (OBSOLÈTE)

AGENTS :

Agent pour Windows 2.6.0.0 (64 bits uniquement)

Agent pour Windows 2.4.0.0 (32 bits)



Pour créer le snapin : Snapin > Create new snapin :

Configuration du Snapin pour déployer l'agent OCS :

New Snapin	
Snapin Name	OCS
Snapin Description	OCS
Storage Group	default - (1)
Snapin Type	Normal Snapin
Snapin Template	MSI
Snapin Run With	msiexec.exe
Snapin Run With Argument	/i
Snapin File Max Size: 3000M	Browse OCS-NG-Windows-Agent-Setup.exe
Snapin Arguments	/quiet
Snapin Enabled	☒
Snapin Arguments Hidden	☐
Snapin Timeout (seconds)	
Replicate?	☒
Reboot after install	☐
Shutdown after install	☐
Snapin Command read-only	msiexec.exe /i OCS-NG-Windows-Agent-Setup.exe /quiet
Create New Snapin	Add

Ajout du snapin au groupe GrpeWindows :

Groups > List all groups > GrpeWindows > Snapin > selection du snapin > Add

Group Management Edit: GrpeWindows

DirectoryPrintersSnapinsService SettingsPower ManagementInventoryMembershipDelete

Group Snapins

Available Snapins

☐	Snapin Name	Snapin Created
	Search...	Search...
☒	OCS	2019-10-30 13:15:37

Make Snapin Changes

Add selected snapins

Add

Remove selected snapins

Remove

Création de la tâche de déploiement du snapin :

Tasks > List all groups > logo encadré en rouge

FOG Project

Search...



Task Management

Main Menu

Active TasksList All HostsList All GroupsActive Multicast TasksActive Snapin TasksScheduled Tasks

All Groups

Group Name	Tasking
Search...	
GrpeWindows	 

Choisir Single Snapin :

Single Snapin

This option allows you to send a single snapin to a host. (Requires FOG Client to be installed on client)

Vérifier la tâche : Tasks > Active Tasks

FOG Project

Search...



Task Management

Main Menu

Active TasksList All HostsList All GroupsActive Multicast TasksActive Snapin TasksScheduled Tasks

Active Tasks

||

☐	Started By:	Hostname MAC	Image Name	Start Time	Working with node	Status
	Search...	Search...	Search...	Search...	Search...	
☐	fog	W-1		2019-10-30 14:30:10		 
☐	fog	W-2		2019-10-30 14:30:10		 

Cancel selected tasks?

5.2-

Pour Avast c'est le même fonctionnement, il faut juste télécharger l'exécutable Avast, créer le snapin, l'ajouter dans le groupe et créer la tâche.

5.3-

Pour vérifier le bon déroulement et le journal d'activité de cette tâche :

Reports > Snapin Log > sélection du snapin > Search

The screenshot shows the FOG Project web interface. At the top, there's a navigation bar with 'FOG Project' and several icons. Below this is a 'Report Management' section. On the left, a 'Main Menu' sidebar lists various reports, with 'Snapin Log' highlighted. The main content area is titled 'FOG Snapin - Search'. It contains two search input fields: 'Enter a snapin name to search for' (with 'OCS' entered) and 'Enter a hostname to search for' (with '- Please select an option -' selected). Below these is a 'Perform search' button and a 'Search!' button.

Journal d'activité (ici ils sont tous arrêtés) :

Found snapin information							
Host Name	Snapin Name	State	Return Code	Return Desc	Checkin Time	Complete Time	
Search...	Search...	Search...	Search...	Search...	Search...	Search...	
W-1	OCS	Cancelled	0		2019-10-30 14:19:38	2019-10-30 13:29:31	
W-2	OCS	Cancelled	0		2019-10-30 14:19:38	2019-10-30 13:29:31	
W-1	OCS	Cancelled	0		2019-10-30 14:21:29	2019-10-30 13:29:31	
W-2	OCS	Cancelled	0		2019-10-30 14:21:29	2019-10-30 13:29:31	
W-1	OCS	Cancelled	0		2019-10-30 14:22:37	2019-10-30 13:29:31	
W-2	OCS	Cancelled	0		2019-10-30 14:22:37	2019-10-30 13:29:31	
W-1	OCS	Cancelled	0		2019-10-30 14:26:51	2019-10-30 13:29:31	
W-2	OCS	Cancelled	0		2019-10-30 14:26:51	2019-10-30 13:29:31	
W-1	OCS	Queued	0		2019-10-30 14:30:10	0000-00-00 00:00:00	
W-2	OCS	Queued	0		2019-10-30 14:30:10	0000-00-00 00:00:00	