Titre : Guide d’installation d’

OCS Inventory avec déploiement d’agents par GPO

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I. Découverte d'OCS Inventory

A. Qu'est-ce que c'est

OCS Inventory NG soit **Open Computer and Software Inventory** est une application permettant de réaliser un inventaire sur la configuration matérielle des machines du réseau, sur les logiciels qui y sont installés et de visualiser ces informations grâce à une interface web. Il comporte également la possibilité de télé-déployer des applications sur un ensemble de machines selon des critères de recherche.

B. Pourquoi utiliser ce logiciel

- OCS Inventory permet la gestion d'inventaire

L'objectif de la plateforme est de rendre l'inventaire matériel et logiciel des ordinateurs plus performant. De plus les agents OCS peuvent intégrer la fonctionnalité de scans SNMP, et cela dans l'idée de compléter les données collectées par Ipdiscover. L'utilisation de scans SNMP permettra d'insérer des informations concernant le matériel réseau (imprimantes, commutateurs, ordinateurs, etc...).

- OCS Inventory permet le télé déploiement

La plateforme permet le déploiement de paquet afin d'assurer l'uniformité des environnements logiciels présents sur le réseau. Ainsi ce système de télédiffusion permet de déployer des installations de logiciels ou d'exécuter des scripts et commandes sur les ordinateurs sans surcharger le réseau.

C. Quels sont ses avantages ?

- ✓ Un inventaire matériel et logiciel pertinent
- ✓ Système de recherche multicritère performant
- ✓ Logiciel permettant d'interroger le serveur via une API Rest
- ✓ Support des systèmes d'exploitation, Microsoft Windows, Linux, BSD, Sun Solaris, IBM AIX, HP-UX, Mac OS, Android

II. Installation

A. Prérequis

- **Avoir une machine sous distribution Linux (ici CentOS 7)**
- **Un Serveur Windows pour pouvoir faire une GPO (Stratégies de Groupes)**
- **Installation d'Epel**

```
yum install epel-release yum-utils wget vim -y
```

- **Installation des outils et activation du php7.2 Remi repository**

```
yum install http://rpms.remirepo.net/enterprise/remi-release-7.rpm -y

yum-config-manager --enable remi-php7.2
```

- **Installation et configuration de LAMP (toute la structure du serveur Web)**

//ON INSTALLE APACHE
```
yum install httpd -y
```

//ON LANCE LES SERVICES APACHES
```
systemctl enable --now httpd
```

//ON AUTORISE L'ACCES D'UN APACHE EXTERIEUR AU PARFEU
```
firewall-cmd --permanent --add-service=http
firewall-cmd -reload
```

//ON INSTALLE MARIADB POUR NOTRE BASE DE DONNEE
```
yum install mariadb mariadb-server mariadb-client -y
```

//ON LANCE ET ACTIVE LE SERVICE MARIADB
```
systemctl enable --now mariadb
```

//ON EXECUTE MySQL (suivre la démarche ci-dessous)
```
mysql_secure_installation
```

```
OK, successfully used password, moving on...

...

Set root password? [Y/n] y

New password:

Re-enter new password:

Password updated successfully!

Reloading privilege tables..

 ... Success!

...

Remove anonymous users? [Y/n] y

 ... Success!

...

Disallow root login remotely? [Y/n] y

 ... Success!

...

Remove test database and access to it? [Y/n] y

 - Dropping test database...

 ... Success!

 - Removing privileges on test database...

 ... Success!

...

Reload privilege tables now? [Y/n] y

 ... Success!
```

//ON SE CONNECTE EN ADMIN

```
mysql -u root -p
```

//ON CREE NOTE BD

```
create database ocsweb;
```

//PUIS NOTRE UTILISATEUR

```
CREATE USER 'ocs'@'localhost' IDENTIFIED BY 'ocs';
```

//ON DONNE TOUS LES DROITS A NOTRE UTILISATEUR

```
GRANT ALL PRIVILEGES ON ocsweb. * TO 'ocs'@'localhost' IDENTIFIED BY 'ocs';
```

//ON SAUVEGARDE LES MODIFICATIONS ET ON QUITTE

```
flush privileges;
exit;
```

//ON INSTALLE LES MODULES « PERL » QUI VONT NOUS SERVIR A LA COMMUNICATION DU SERVEUR OCS (EN UNE COMMANDE)

```
yum install perl-XML-Simple perl-Compress-Zlib perl-DBI
perl-DBD-MySQL perl-Net-IP perl-SOAP-Lite perl-Archive-Zip
perl-Mojolicious perl-Plack perl-XML-Entities perl-Switch
mod_perl -y
```

//INSTALLATION D'APACHE DBI PACKAGE

```
wget http://rpm.ocsinventory-
ng.org/enterprise/7/x86_64/perl-Apache-DBI-1.12-
2.el7.ocs.noarch.rpm
yum install ./perl-Apache-DBI-1.12-2.el7.ocs.noarch.rpm -y
```

//ON INSTALLE LES MODULES PHP NECESSAIRES

```
yum install php php-pecl-zip perl-XML-Simple perl-DBI perl-
DBD-MySQL perl-Net-IP php-mbstring php-gd php-mysqlnd php-
xml -y
```

B. Installation d'OCS serveur

On télécharge l'archive hébergée sur GitHub :

```
wget https://github.com/OCSInventory-NG/OCSInventory-ocsreports/releases/download/2.9.2/OCSNG_UNIX_SERVER-2.9.2.tar.gz
```

On extrait l'archive (rappel : tar -option) :

```
tar xzf OCSNG_UNIX_SERVER-2.9.2.tar.gz
```

Puis on lance le Setup.sh qui se trouve dans notre dossier

```
cd OCSNG_UNIX_SERVER-2.9.2
sh setup.sh
```

Suivre les étapes suivantes avec attention !!!

```
+------------------------------------------------------------+

|                                                            |

|  Welcome to OCS Inventory NG Management server setup !     |

|                                                            |

+------------------------------------------------------------+



Trying to determine which OS or Linux distribution you use

+------------------------------------------------------------+

| Checking for Apache web server binaries
!                          |

+------------------------------------------------------------+
```

```
CAUTION: If upgrading Communication server from OCS Inventory NG
1.0 RC2 and

previous, please remove any Apache configuration for
Communication Server!



Do you wish to continue ([y]/n)?y

Assuming Communication server 1.0 RC2 or previous is not
installed

on this computer.



Starting OCS Inventory NG Management server setup from folder
/root/OCSNG_UNIX_SERVER-2.9.2

Storing log in file /root/OCSNG_UNIX_SERVER-
2.9.2/ocs_server_setup.log



+-----------------------------------------------------------+

| Checking for database server properties...                |

+-----------------------------------------------------------+



Your MySQL client seems to be part of MySQL version 5.5.

Your computer seems to be running MySQL 4.1 or higher, good ;-)



Which host is running database server [localhost] ?

OK, database server is running on host localhost ;-)
```

```
On which port is running database server [3306] ?

OK, database server is running on port 3306 ;-)




+-------------------------------------------------------------+

| Checking for Apache web server
daemon...                          |

+-------------------------------------------------------------+



Where is Apache daemon binary [/usr/sbin/httpd] ?

OK, using Apache daemon /usr/sbin/httpd ;-)




+-------------------------------------------------------------+

| Checking for Apache main configuration file...               |

+-------------------------------------------------------------+

Where is Apache main configuration file



[/etc/httpd/conf/httpd.conf] ?

OK, using Apache main configuration file
/etc/httpd/conf/httpd.conf ;-)
```

```
+-----------------------------------------------------------+

| Checking for Apache user
account...                                 |

+-----------------------------------------------------------+



Which user account is running Apache web server [apache] ?

OK, Apache is running under user account apache ;-)




+-----------------------------------------------------------+

| Checking for Apache
group...                                                   |

+-----------------------------------------------------------+



Which user group is running Apache web server [apache] ?

OK, Apache is running under users group apache ;-)




+-----------------------------------------------------------+

| Checking for Apache Include configuration directory...   |

+-----------------------------------------------------------+



Setup found Apache Include configuration directory in
```

```
/etc/httpd/conf.d.

Setup will put OCS Inventory NG Apache configuration in this
directory.

Where is Apache Include configuration directory
[/etc/httpd/conf.d] ?

OK, Apache Include configuration directory /etc/httpd/conf.d
found ;-)




+------------------------------------------------------------+

| Checking for PERL
Interpreter...                                             |

+------------------------------------------------------------+



Found PERL interpreter at </usr/bin/perl> ;-)

Where is PERL interpreter binary [/usr/bin/perl] ?

OK, using PERL interpreter /usr/bin/perl ;-)




Do you wish to setup Communication server on this computer
([y]/n)?y




+------------------------------------------------------------+

|             Checking for Make utility...                   |
```

```
+-------------------------------------------------------------+


OK, Make utility found at </usr/bin/make> ;-)


+-------------------------------------------------------------+
|        Checking for Apache mod_perl version...              |
+-------------------------------------------------------------+


Checking for Apache mod_perl version 1.99_22 or higher

Found that mod_perl version 1.99_22 or higher is available.

OK, Apache is using mod_perl version 1.99_22 or higher ;-)


+-------------------------------------------------------------+
|    Checking for Communication server log directory...       |
+-------------------------------------------------------------+


Communication server can create detailed logs. This logs can be
enabled

by setting integer value of LOGLEVEL to 1 in Administration
console

menu Configuration.

Where to put Communication server log directory
[/var/log/ocsinventory-server] ?
```

```
OK, Communication server will put logs into directory
/var/log/ocsinventory-server ;-)



+------------------------------------------------------------------
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|    Checking for Communication server plugins configuration
directory...    |

+------------------------------------------------------------------
------------+



Communication server need a directory for plugins configuration
files.

Where to put Communication server plugins configuration files
[/etc/ocsinventory-server/plugins] ?

OK, Communication server will put plugins configuration files
into directory /etc/ocsinventory-server/plugins ;-)



+------------------------------------------------------------------
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|   Checking for Communication server plugins perl directory...
|

+------------------------------------------------------------------
---+



Communication server need a directory for plugins Perl modules
files.

Where to put Communication server plugins Perl modules files
[/etc/ocsinventory-server/perl] ?
```

```
OK, Communication server will put plugins Perl modules files into
directory /etc/ocsinventory-server/perl ;-)




+------------------------------------------------------------+

| Checking for required Perl
Modules...                                |

+------------------------------------------------------------+



Checking for DBI PERL module...

Found that PERL module DBI is available.

Checking for Apache::DBI PERL module...

Found that PERL module Apache::DBI is available.

Checking for DBD::mysql PERL module...

Found that PERL module DBD::mysql is available.

Checking for Compress::Zlib PERL module...

Found that PERL module Compress::Zlib is available.

Checking for XML::Simple PERL module...

Found that PERL module XML::Simple is available.

Checking for Net::IP PERL module...

Found that PERL module Net::IP is available.

Checking for Archive::Zip Perl module...

Found that PERL module Archive::Zip is available.
```

```
Do you wish to setup Rest API server on this computer ([y]/n)?

+-----------------------------------------------------------+
| Checking for REST API Dependencies ...
              |
+-----------------------------------------------------------+

Found that PERL module Mojolicious::Lite is available.

Found that PERL module Switch is available.

Found that PERL module Plack::Handler is available.

+-----------------------------------------------------------+
| Configuring REST API Server files ...
              |
+-----------------------------------------------------------+

Where do you want the API code to be store
[/usr/lib64/perl5/vendor_perl] ?

+-----------------------------------------------------------+
|                OK, looks good ;-)                         |
|                                                           |
|     Configuring Communication server Perl modules...      |
+-----------------------------------------------------------+
```

```
Checking if your kit is complete...

Looks good

Writing Makefile for Apache::Ocsinventory



+------------------------------------------------------------+

|                  OK, looks good ;-)                        |

|                                                            |

|      Preparing Communication server Perl modules...        |

+------------------------------------------------------------+




+------------------------------------------------------------+

|                  OK, prepare finshed ;-)                   |

|                                                            |

|     Installing Communication server Perl modules...        |

+------------------------------------------------------------+




+------------------------------------------------------------+

| OK, Communication server Perl modules install finished;-)  |

|                                                            |

|     Creating Communication server log directory...         |
```

```
+------------------------------------------------------------+



Creating Communication server log directory
/var/log/ocsinventory-server.



Fixing Communication server log directory files permissions.

Configuring logrotate for Communication server.

Removing old communication server logrotate file
/etc/logrotate.d/ocsinventory-NG

Writing communication server logrotate to file
/etc/logrotate.d/ocsinventory-server







+------------------------------------------------------------------
------+

|        OK, Communication server log directory created ;-)
|

|
|

|   Creating Communication server plugins configuration
directory...   |

+------------------------------------------------------------------
------+



Creating Communication server plugins configuration directory
/etc/ocsinventory-server/plugins.
```

```
+------------------------------------------------------------------
------+

| OK, Communication server plugins configuration directory
created ;-) |

|
|

|        Creating Communication server plugins Perl directory...
|

+------------------------------------------------------------------
------+



Creating Communication server plugins Perl directory
/etc/ocsinventory-server/perl.




+------------------------------------------------------------------
------+

|     OK, Communication server plugins Perl directory created ;-)
|

|
|

|               Now configuring Apache web server...
|

+------------------------------------------------------------------
------+



To ensure Apache loads mod_perl before OCS Inventory NG
Communication Server,
```

```
Setup can name Communication Server Apache configuration file

'z-ocsinventory-server.conf' instead of 'ocsinventory-
server.conf'.

Do you allow Setup renaming Communication Server Apache
configuration file

to 'z-ocsinventory-server.conf' ([y]/n) ?y

OK, using 'z-ocsinventory-server.conf' as Communication Server
Apache configuration file

Removing old communication server configuration to file
/etc/httpd/conf.d/ocsinventory.conf

Writing communication server configuration to file
/etc/httpd/conf.d/z-ocsinventory-server.conf



+-----------------------------------------------------------------
------+

|       OK, Communication server setup successfully finished ;-)
|

|
|

| Please, review /etc/httpd/conf.d/z-ocsinventory-server.conf |

|         to ensure all is good. Then restart Apache daemon.
|

+-----------------------------------------------------------------
------+




Do you wish to setup Administration Server (Web Administration
Console)
```

```
    on this computer ([y]/n)?y



+-----------------------------------------------------------+

|    Checking for Administration Server directories...      |

+-----------------------------------------------------------+



CAUTION: Setup now install files in accordance with Filesystem
Hierarchy

Standard. So, no file is installed under Apache root document
directory

(Refer to Apache configuration files to locate it).

If you're upgrading from OCS Inventory NG Server 1.01 and
previous, YOU

MUST REMOVE (or move) directories 'ocsreports' and 'download'
from Apache

root document directory.

If you choose to move directory, YOU MUST MOVE 'download'
directory to

Administration Server writable/cache directory (by default

/var/lib/ocsinventory-reports), especially if you use deployment
feature.



Do you wish to continue ([y]/n)?

Assuming directories 'ocsreports' and 'download' removed from

Apache root document directory.
```

```
Where to copy Administration Server static files for PHP Web
Console

[/usr/share/ocsinventory-reports] ?

OK, using directory /usr/share/ocsinventory-reports to install
static files ;-)



Where to create writable/cache directories for deployment
packages,

administration console logs, IPDiscover and SNMP
[/var/lib/ocsinventory-reports] ?

OK, writable/cache directory is /var/lib/ocsinventory-reports ;-)




+-----------------------------------------------------------+

|         Checking for required Perl Modules...             |

+-----------------------------------------------------------+



Checking for DBI PERL module...

Found that PERL module DBI is available.

Checking for DBD::mysql PERL module...

Found that PERL module DBD::mysql is available.

Checking for XML::Simple PERL module...

Found that PERL module XML::Simple is available.
```

```
Checking for Net::IP PERL module...

Found that PERL module Net::IP is available.



+------------------------------------------------------------+

|      Installing files for Administration server...       |

+------------------------------------------------------------+



Creating PHP directory /usr/share/ocsinventory-
reports/ocsreports.

Copying PHP files to /usr/share/ocsinventory-reports/ocsreports.

Fixing permissions on directory /usr/share/ocsinventory-
reports/ocsreports.

Creating database configuration file /usr/share/ocsinventory-
reports/ocsreports/dbconfig.inc.php.

Creating IPDiscover directory /var/lib/ocsinventory-reports/ipd.

Fixing permissions on directory /var/lib/ocsinventory-
reports/ipd.

Creating packages directory /var/lib/ocsinventory-
reports/download.

Fixing permissions on directory /var/lib/ocsinventory-
reports/download.

Creating snmp mibs directory /var/lib/ocsinventory-reports/snmp.

Fixing permissions on directory /var/lib/ocsinventory-
reports/snmp.

Creating Administration server log files directory
/var/lib/ocsinventory-reports/logs.
```

```
Fixing permissions on directory /var/lib/ocsinventory-
reports/logs.

Creating Administration server temporary files directory
/var/lib/ocsinventory-reports/tmp_dir.

Fixing permissions on directory /var/lib/ocsinventory-
reports/tmp_dir.

Creating Administration server scripts log files directory
/var/lib/ocsinventory-reports/scripts.

Fixing permissions on directory /var/lib/ocsinventory-
reports/scripts.

Configuring IPDISCOVER-UTIL Perl script.

Writing Administration server configuration to file
/etc/httpd/conf.d/ocsinventory-reports.conf



+-----------------------------------------------------------------
------+

|        OK, Administration server installation finished ;-)
|

|
|

| Please, review /etc/httpd/conf.d/ocsinventory-reports.conf

|          to ensure all is good and restart Apache daemon.
|

|
|

| Then, point your browser to http://server//ocsreports

|        to configure database server and create/update schema.
|
```

```
+-------------------------------------------------------------------
------+




Setup has created a log file /root/OCSNG_UNIX_SERVER-
2.9.2/ocs_server_setup.log. Please, save this file.

If you encounter error while running OCS Inventory NG Management
server,

we can ask you to show us its content !



DON'T FORGET TO RESTART APACHE DAEMON !
```

Vous avez installé OCS Inventory

Il nous reste à paramétrer certaines options sur le serveur. On va donc écrire dans le fichier z-ocsinventory-server.conf. Pour cela, utilisez la commande « vim » ou « vi » si vous n'avez pas installé cette commande.

```
vim /etc/httpd/conf.d/z-ocsinventory-server.conf
```

```
# Master Database settings

  # Replace localhost by hostname or ip of MySQL server for WRITE

  PerlSetEnv OCS_DB_HOST localhost

  # Replace 3306 by port where running MySQL server, generally
3306

  PerlSetEnv OCS_DB_PORT 3306
```

```
# Name of database

PerlSetEnv OCS_DB_NAME ocsweb

PerlSetEnv OCS_DB_LOCAL ocsweb

# User allowed to connect to database

PerlSetEnv OCS_DB_USER ocs

# Password for user

PerlSetVar OCS_DB_PWD ocs
```

Maintenant configurons le fichier zz-ocsinventory-restapi.conf

```
vim /etc/httpd/conf.d/zz-ocsinventory-restapi.conf
```

… **$ENV{OCS_DB_HOST} = 'localhost'; $ENV{OCS_DB_PORT} = '3306'; $ENV{OCS_DB_LOCAL} = 'ocsweb'; $ENV{OCS_DB_USER} = 'ocs'; $ENV{OCS_DB_PWD} = 'ocs';** …

Enfin assurons nous d'avoir les bons paramètres dans le fichier dbconfig.inc.php

```
vim /usr/share/ocsinventory-reports/ocsreports/dbconfig.inc.php
```

```
<?php
  $_SESSION["SERVEUR_SQL"]="localhost";
  $_SESSION["COMPTE_BASE"]="ocsweb";
  $_SESSION["PSWD_BASE"]="ocs";
  ?>
```

On sauvegarde tout et on quitte.

Maintenant il faut faire une étape importante : Gérer les permission d'accès pour l'utilisateur « Apache »

```
chmod -R 766 /usr/share/ocsinventory-reports chown -R
apache:apache /usr/share/ocsinventory-reports chown -R
apache:apache /var/lib/ocsinventory-reports
```

Cette étape est très importante sinon votre client « Apache » ne pourra pas avoir accès à OCS reports

```
chcon -R -t httpd_sys_rw_content_t /usr/share/ocsinventory-
reports
```

On relance les services pour appliquer les différentes modifications :

```
systemctl restart httpd mariadb
```

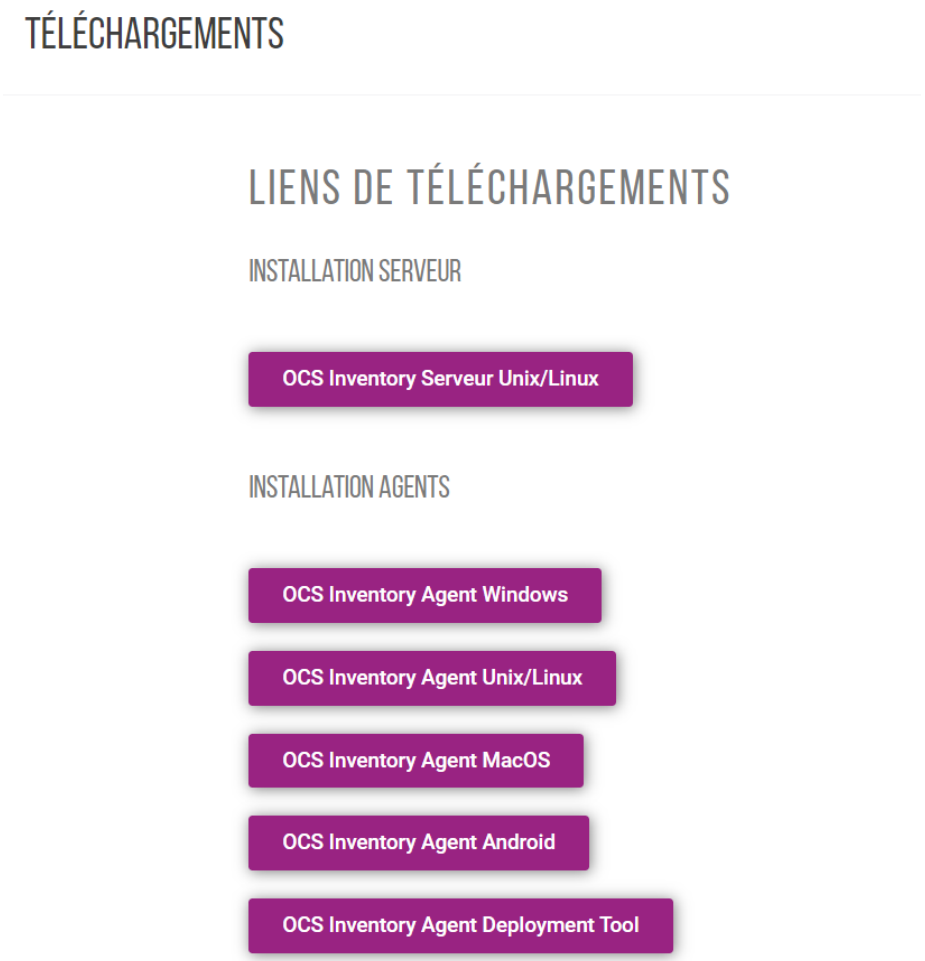
On à ENFIN fini l'installation et la configuration d'OCS Inventory. Il vous reste plus qu'a vous connecter à `http://server-hostname-or-IP/ocsreports`

C. Déploiement des Agents par GPO

Depuis vôtre serveur,

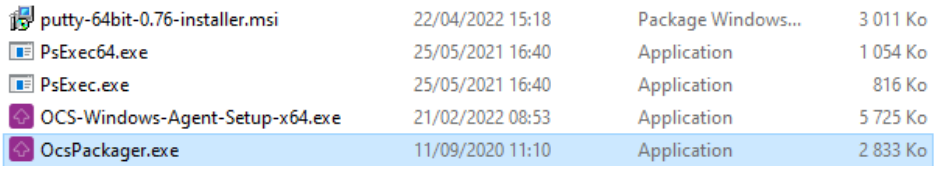
Rendez-vous sur https://ocsinventory-ng.org/?page_id=1235&lang=fr

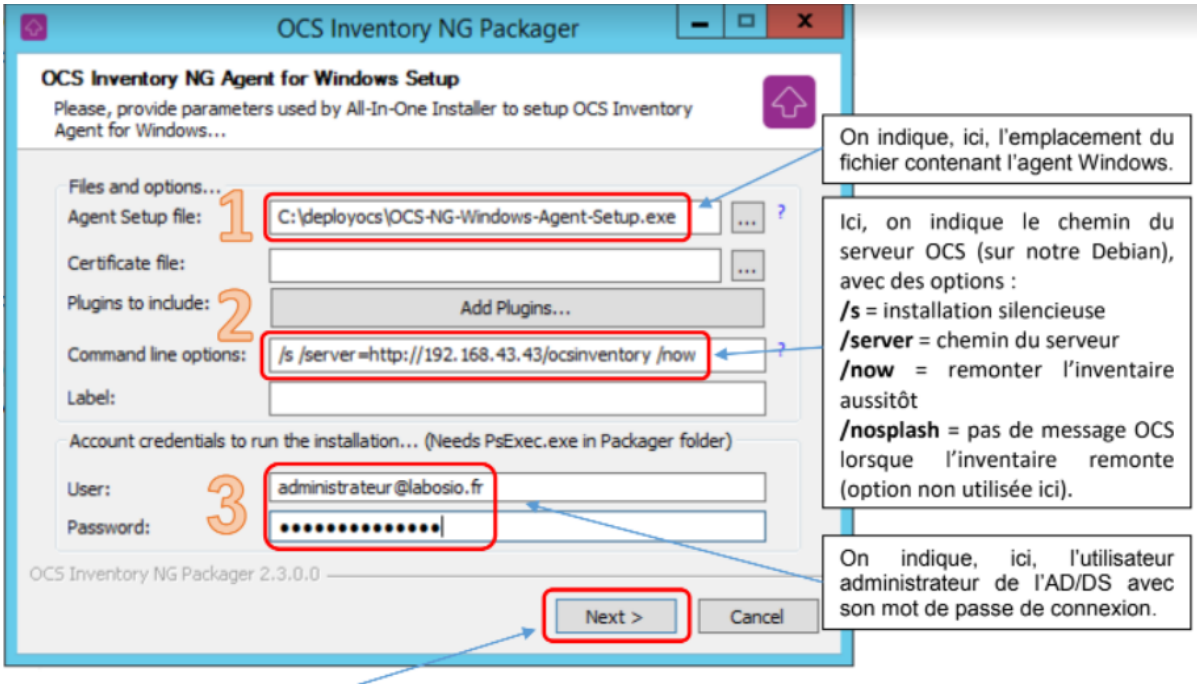
Puis télécharger les agents pour votre système d'exploitation



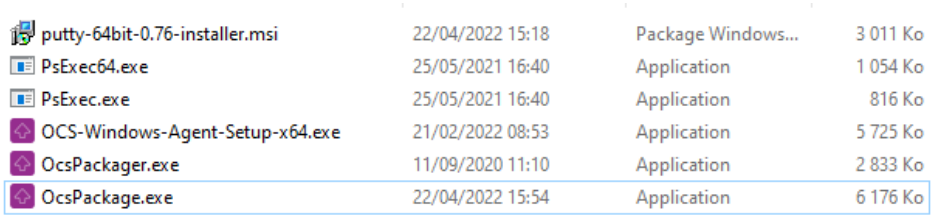
Une fois le bon packager installé, on peut passer à la configuration du package pour nos appareils.

-Double Cliquez sur « OcsPackager.exe »





Une fois l'installation terminé un fichier nommé « OcsPackage.exe » devrait apparaitre

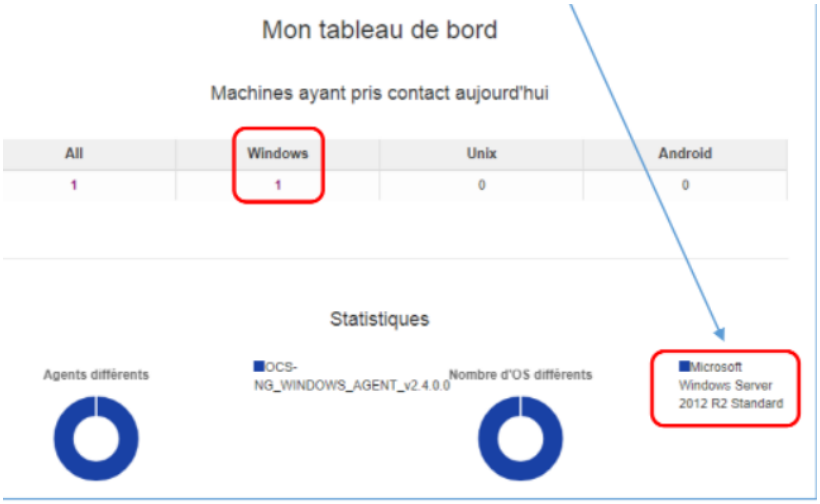


Vous pouvez le tester sur votre machine actuelle.

-Double Cliquez sur OCS Package.exe

-Maintenant rendez-vous sur http://server-hostname-or-IP/ocsreports

Vous devriez avoir cette interface :



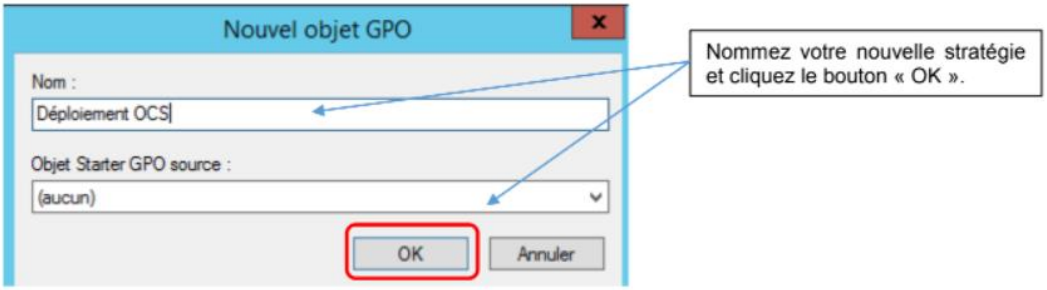
Notre package marche bel et bien nous n'avons plus qu'a le déployer.

-Allez sur le « Gestionnaire de serveur », puis « Outils », « Gestion des stratégies de groupe »

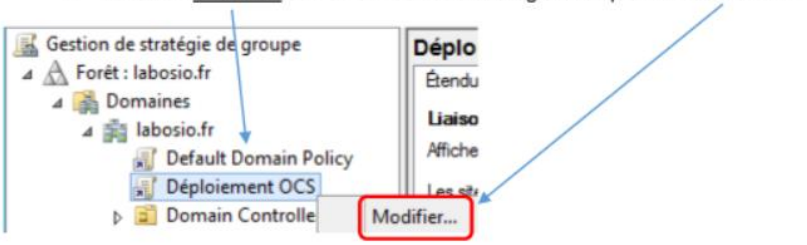
- Déployer l'entrée « **Domaines** » et faites un ***clic droit*** sur votre nom de domaine :

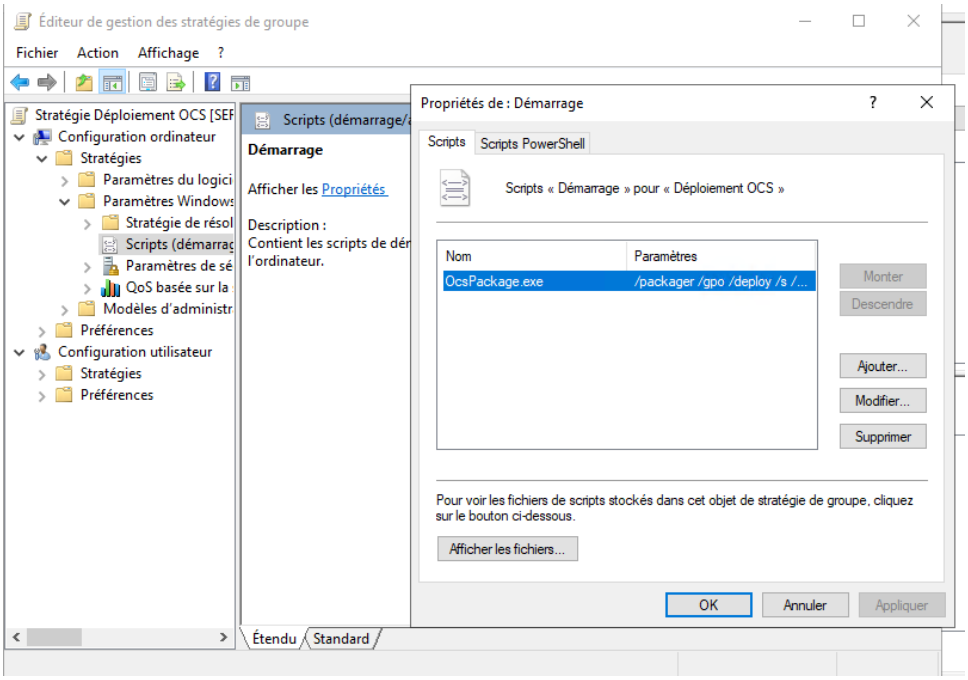
- Cliquez « **Créer un objet GPO dans ce domaine et le lier ici… »**

- Cliquez « **Créer un objet GPO dans ce domaine et le lier ici… »**

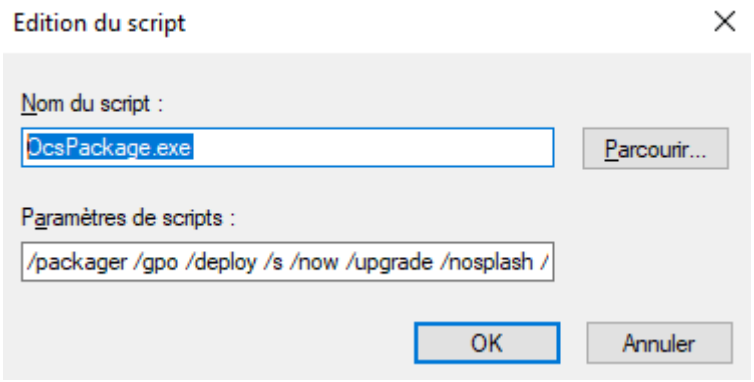


- Faites un ***clic droit*** sur le nom de votre stratégie et cliquez « **Modifier… »** :





-Cliquez sur ajouter et crée un script avec les mêmes options que pour le package

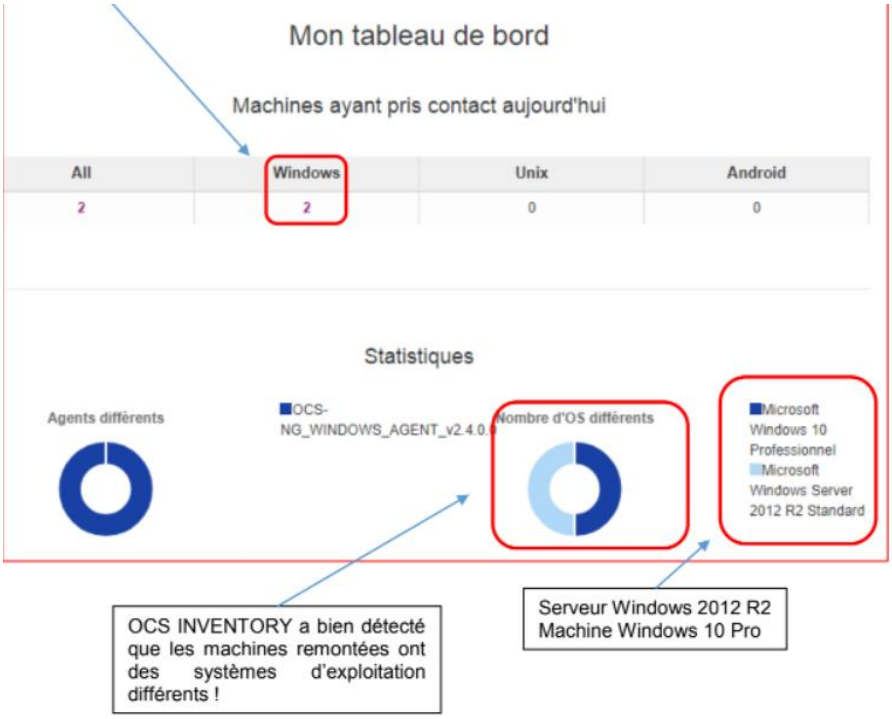


-Enregistrez et ouvrer votre PowerShell depuis vôtre serveur

-Ecrivez

gpupdate /force //Actualise les différents scripts et les agents.

-Regardons si cela a fonctionné, allons sur http://172.16.1.12/ocsinventory



Vous devriez voir apparaitre vos différents OS et appareils.

VOUS AVEZ FINI