Installing a Key Management Services (KMS) Server

Key Management Services (KMS) uses a client-server model to activate Windows clients. KMS is used for volume activation on your local network. KMS clients connect to a KMS server, called the KMS host, for activation.

1. Installing build tools

Debian	sudo apt install -y build-essential git
RHEL	sudo yum groupinstall -y "Development Tools" sudo yum install -y git

2. Clone the repository

Clone the repository that contains the files needed to build the service.

```
git clone https://github.com/macosxamd/vlmcsd-linux.git
```

```
root@server:~# git clone https://github.com/macosxamd/vlmcsd-linux.git
Cloning into 'vlmcsd-linux'...
remote: Enumerating objects: 3111, done.
remote: Counting objects: 100% (594/594), done.
remote: Compressing objects: 100% (447/447), done.
remote: Total 3111 (delta 205), reused 383 (delta 133), pack-reused 2517 (from 1)
Receiving objects: 100% (3111/3111), 45.48 MiB | 11.20 MiB/s, done.
Resolving deltas: 100% (1593/1593), done.
root@server:~#
```

3. Build the service

Navigate to the folder containing the source files and compile the service binary.

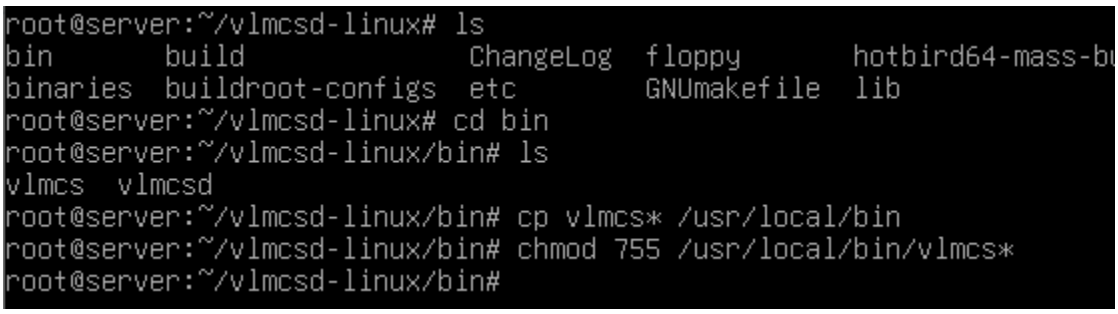
```
cd vlmcsd-linux
make
```

```
root@server:~# cd vlmcsd-linux/
root@server:~/vlmcsd-linux# make
```

4. Copy the service files to the system

Copy the compiled binaries (**vlmcs, vlmcsd**) to the system binaries folder **/usr/local/bin/.** The binaries are inside the folder "**bin**".

```
sudo cp bin/vlmcs* /usr/local/bin/
sudo chmod 755 /usr/local/bin/vlmcs*
```

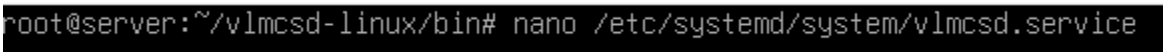


5. Configure the service

Now we need to configure the binary to **run as a service** to allow activation of Windows and Office clients. To make that possible, simply create a new **vlmcsd.service** file in **/etc/systemd/system/** and type the following information:

Create the file:

```
nano /etc/systemd/system/vlmcsd.service
```



Create the file with the following contents:

```
[Unit]
Description=vlmcsd KMS Emulator Service
After=network.target

[Service]
Type=simple
ExecStart=/usr/local/bin/vlmcsd -D
Restart=on-failure
User=nobody
Group=nogroup

[Install]
WantedBy=multi-user.target
```

```
[Unit]
Description= Key Management Server
After=network.target

[Service]
Type=simple
ExecStart=/usr/local/bin/vlmcsd -D
Restart=on-failure
User=nobody
Group=nogroup

[Install]
WantedBy=multi-user.target
```

6. Starting the service

Now we need to **reload the service** to apply the new configuration, enable it and start it to begin serving clients.

```
sudo systemctl daemon-reload
sudo systemctl enable vlmcsd
sudo systemctl start vlmcsd
systemctl status vlmcsd
```

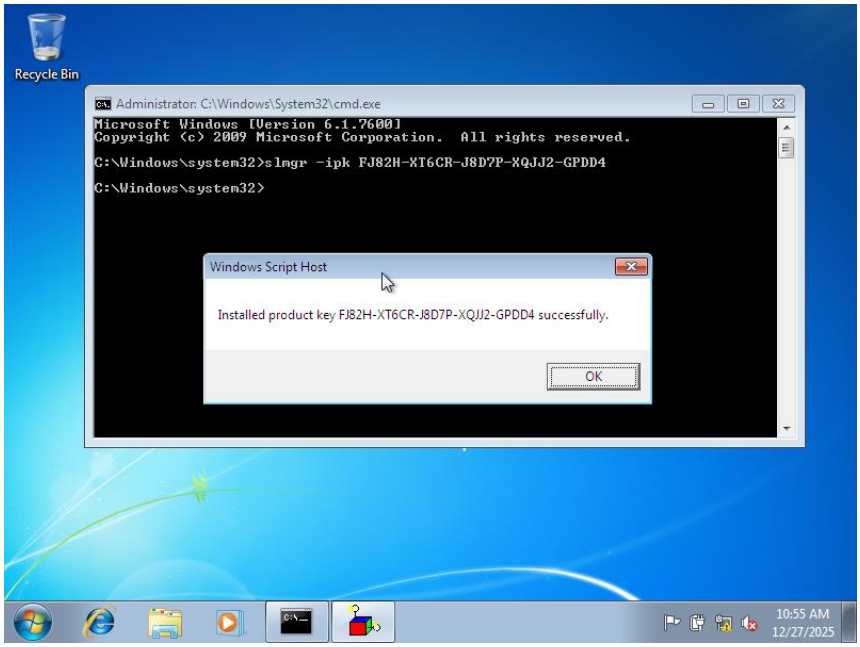
```
root@server:/etc/bind# systemctl daemon-reload
root@server:/etc/bind# systemctl enable vlmcsd
Created symlink '/etc/systemd/system/multi-user.target.wants/vlmcsd.service' → '/etc/systemd/system/vlmcsd.service'.
root@server:/etc/bind# systemctl start vlmcsd
root@server:/etc/bind# systemctl status vlmcsd
● vlmcsd.service - Key Management Server
     Loaded: loaded (/etc/systemd/system/vlmcsd.service; enabled; preset: enabled)
     Active: active (running) since Sat 2025-12-27 05:29:49 EST; 4s ago
 Invocation: 7b3a4c8a43dc4b659277ca85c4769dd0
   Main PID: 2390 (vlmcsd)
      Tasks: 1 (limit: 2317)
     Memory: 184K (peak: 1.8M)
        CPU: 4ms
     CGroup: /system.slice/vlmcsd.service
             └─2390 /usr/local/bin/vlmcsd -D

Dec 27 05:29:49 server systemd[1]: Started vlmcsd.service - Key Management Server.
root@server:/etc/bind#
```

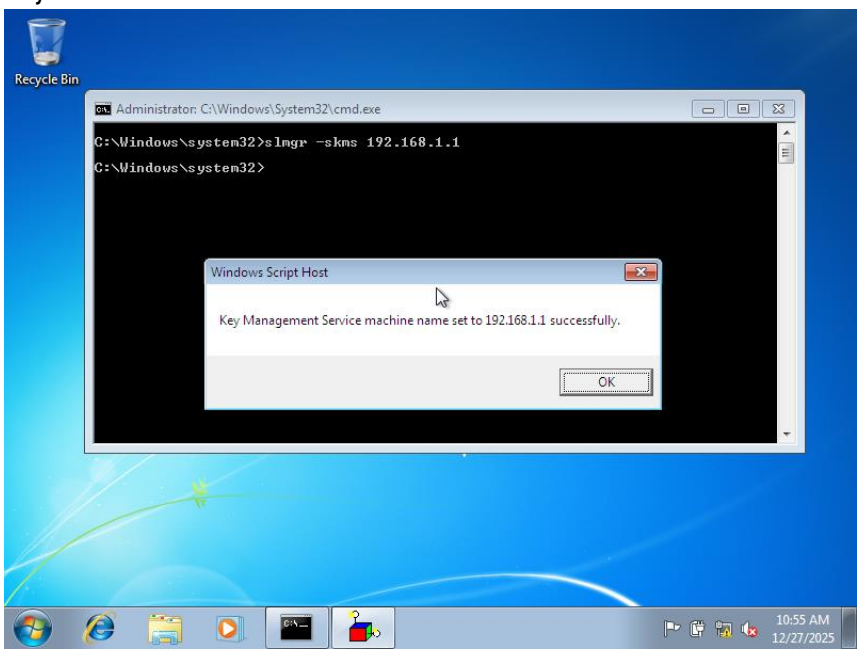
Your server is now ready to **perform activation** on Windows and Office clients.

Activate a client

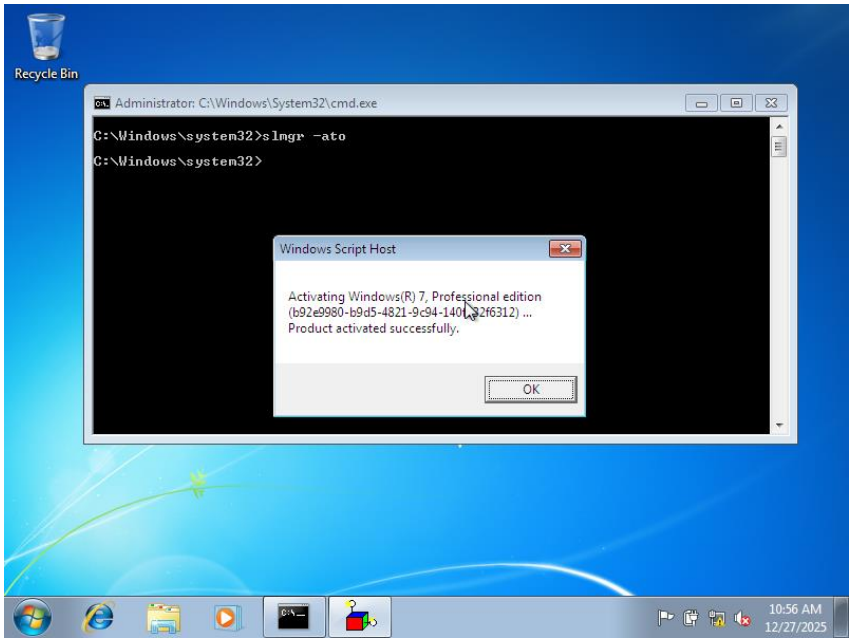
- Windows
  - Open **Command Prompt** as an Administrator
  - Type **"slmgr.vbs –ipk <key>"**. Replace <key> with your product key. You can get generic keys from this Microsoft article: https://docs.microsoft.com/en-us/windows-server/get-started/kms-client-activation-keys



  - Type **"slmgr.vbs –skms <your-server-ip>".** Replace <your-server-ip> with the IP address of your server.



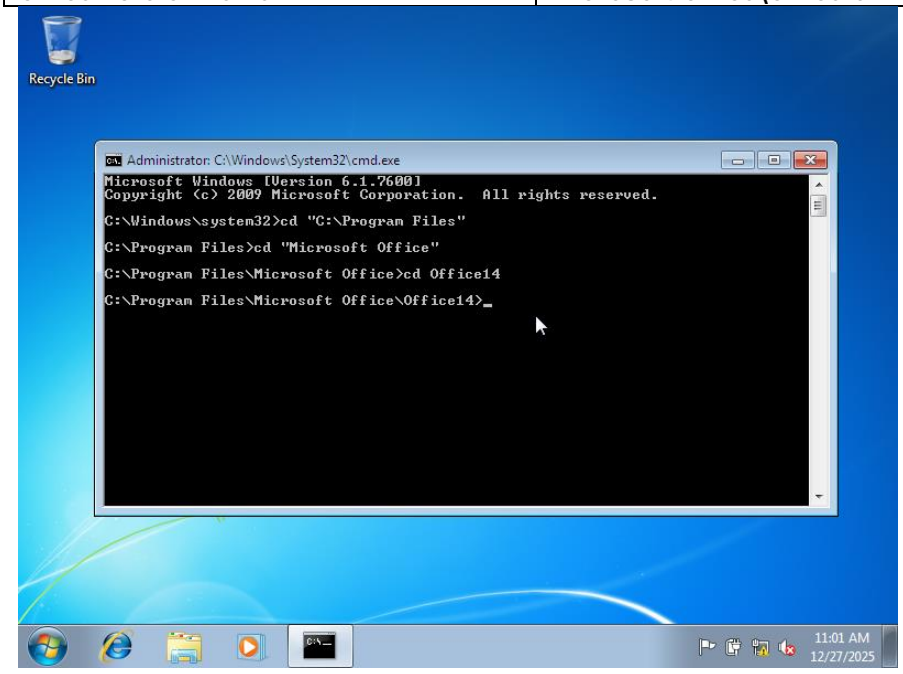
- Type “**slmgr.vbs –ato**” to activate Windows.



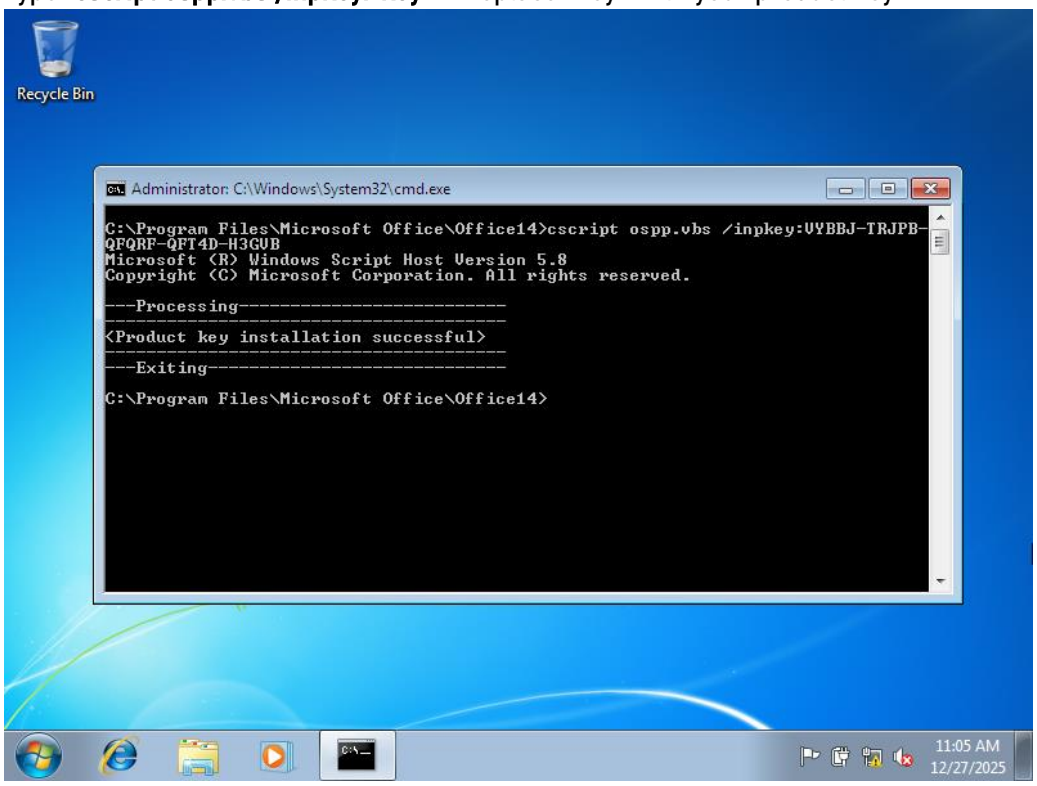
• Office

- Open **Command Prompt** as an Administrator
- Go to Program Files\Microsoft Office folder:

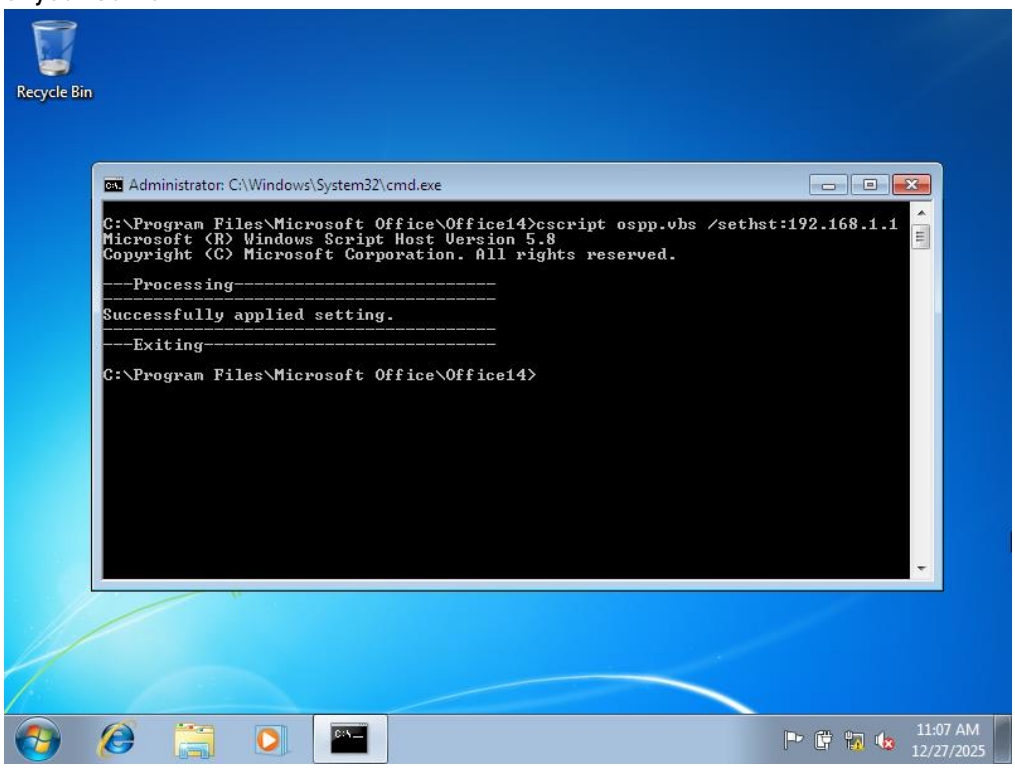
Office 2010	Microsoft Office\Office14
Office 2013	Microsoft Office\Office15
Office 2016 or newer	Microsoft Office\Office16



- Type **“cscript ospp.vbs /inpkey:<key>”**. Replace <key> with your product key.



- Type **“cscript ospp.vbs /sethst:<ip-server>”.** Replace <server-ip> with the IP address of your server.



- Type “**cscript ospp.vbs /act**” to activate Office.