



Connexion SSH avec MobaXterm

1. Présentation

Ce TP consiste à établir une connexion SSH vers une machine virtuelle Debian en utilisant le logiciel MobaXterm sous Windows.

L'objectif est de configurer un serveur SSH sur la VM puis d'y accéder à distance via une session sécurisée .

Contexte

- Formation : BTS SIO
- Module : Administration Système
- Auteur : Alexis De Jesus
- Environnement : Windows + VM Debian

2. Objectif

- Télécharger et installer MobaXterm
- Installer le serveur SSH sur la VM
- Récupérer l'adresse IP de la machine
- Configurer une session SSH
- Se connecter à distance en toute sécurité

3. Environnement technique

- OS client : Windows
- OS serveur : Debian
- Logiciel : MobaXterm (Home Edition – Portable)
- Service : OpenSSH Server
- Port utilisé : 22

4. Architecture

Connexion réseau :

Poste Windows → MobaXterm → SSH (port 22) → VM Debian

5. Installation et configuration

5.1 Téléchargement de MobaXterm

1. Accéder au site officiel [MobaXterm](https://mobaxterm.mobatek.net/)

2. Cliquer sur **Download Free**
3. Télécharger la version **Home Edition – Portable**

Capture – Page téléchargement MobaXterm

The screenshot shows the MobaXterm website's download page. The navigation bar includes links for Home, Demo, Features, Download (highlighted), Plugins, Help, Contact, and a user icon. There are buttons for 'Customer area' and 'Buy'. The main content is divided into two columns: 'Home Edition' (Free) and 'Professional Edition' (\$69 / 49€ per user*). The Home Edition list includes features like Full X server and SSH support, Remote desktop, Remote terminal, X11-Forwarding, Automatic SFTP browser, Master password protection, Plugins support, Portable and installer versions, Full documentation, Max. 12 sessions, Max. 2 SSH tunnels, Max. 4 macros, and Max. 360 seconds for Tftp, Nfs and Cron. The Professional Edition list includes every feature from the Home Edition plus customization options, removal of unwanted games, unlimited sessions, tunnels, macros, run time, security settings, updates, company deployment, and lifetime right to use. Both editions have a 'Download now' button. The footer contains links for About us, Home License, Pro License, Terms&Conditions, Export rules, copyright information (© 2008 - 2026 Mobatek), and a user icon.

Home Edition

Free

Full **X server** and **SSH** support
Remote desktop (RDP, VNC, Xdmcp)
Remote terminal (SSH, telnet, rlogin, Mosh)
X11-Forwarding
Automatic SFTP browser
Master password protection
Plugins support
Portable and installer versions
Full documentation
Max. **12** sessions
Max. **2** SSH tunnels
Max. **4** macros
Max. **360** seconds for Tftp, Nfs and Cron

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Professional Edition

\$69 / 49€ per user*

* Excluding tax. Volume discounts [available](#)

Every feature from Home Edition +
Customize your startup message and logo
Modify your profile script
Remove unwanted games, screensaver or tools
Unlimited number of sessions
Unlimited number of tunnels and macros
Unlimited run time for network daemons
Enhanced security settings
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Capture – Version Portable sélectionnée

The screenshot shows the MobaXterm download page with the 'Home Edition' selected. It displays two main download options: 'MobaXterm Home Edition v25.4 (Portable edition)' and 'MobaXterm Home Edition v25.4 (Installer edition)'. Below these, it provides links for 'Download previous stable version: MobaXterm Portable v25.3' and 'MobaXterm Installer v25.3'. At the bottom, it mentions 'You can also get early access to the latest features and improvements by downloading MobaXterm Preview version:' with a corresponding button.

MobaXterm Home Edition

Download MobaXterm Home Edition (current version):

[MobaXterm Home Edition v25.4 \(Portable edition\)](#)

[MobaXterm Home Edition v25.4 \(Installer edition\)](#)

Download previous stable version: [MobaXterm Portable v25.3](#) [MobaXterm Installer v25.3](#)

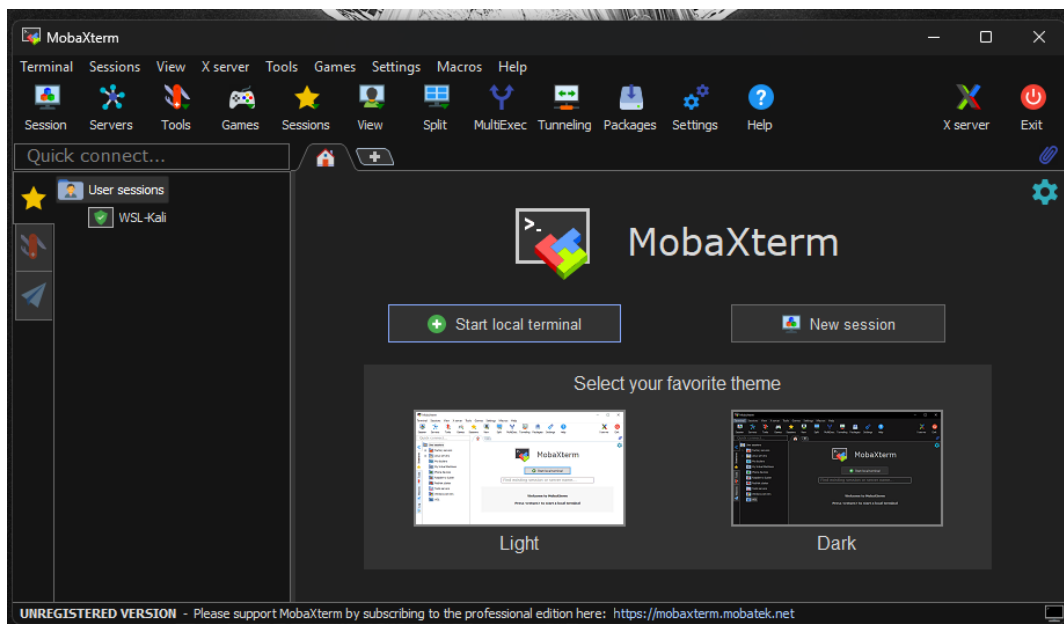
You can also get early access to the latest features and improvements by downloading MobaXterm Preview version:

[MobaXterm Preview Version](#)

5.2 Lancement du logiciel

- Ouvrir MobaXterm
- Cliquer sur **Session**

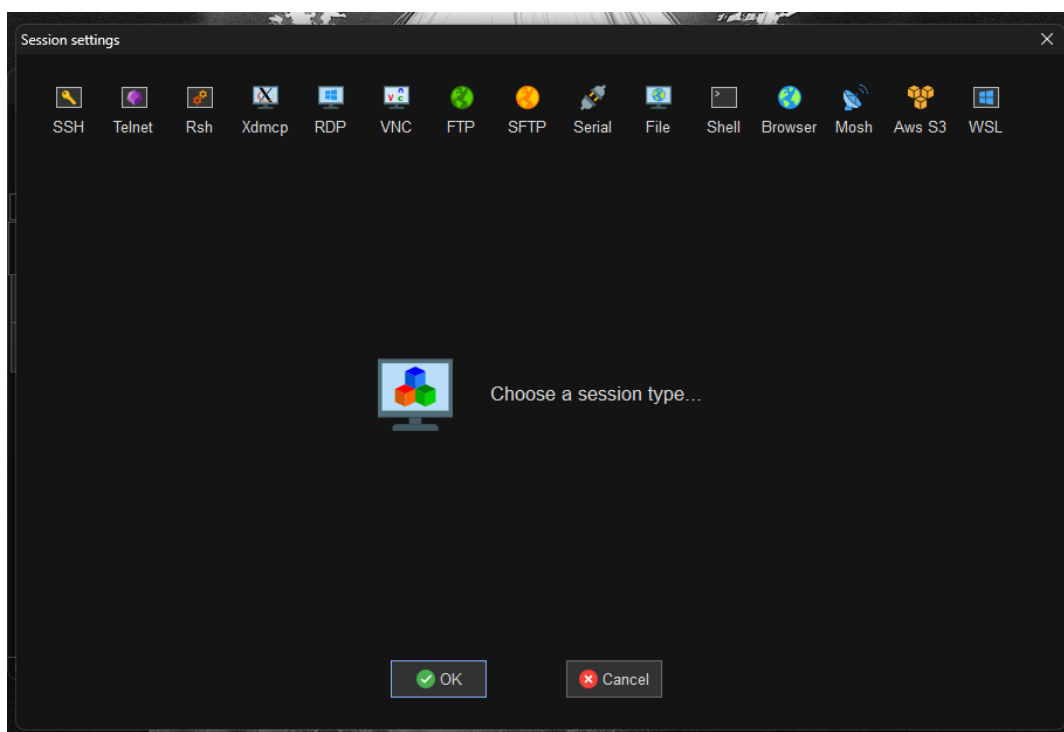
Capture – Interface principale MobaXterm



5.3 Choix du type de session

- Cliquer sur **SSH**

Capture – Fenêtre choix type de session



5.4 Installation du serveur SSH sur la VM

Sur Debian :

```
sudo apt install openssh-server
```

Capture – Installation openssh-server

```
debian@apache2:~$ sudo apt install openssh-server
[sudo] password for debian:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  linux-image-6.1.0-13-amd64
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  openssh-sftp-server runit-helper
Suggested packages:
  molly-guard monkeysphere ssh-askpass ufw
The following NEW packages will be installed:
  openssh-server openssh-sftp-server runit-helper
0 upgraded, 3 newly installed, 0 to remove and 108 not upgraded.
Need to get 529 kB of archives.
After this operation, 2,218 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://deb.debian.org/debian bookworm/main amd64 openssh-sftp-server amd64 1:9.2p1-2+deb12u7 [65.9 kB]
Get:2 http://deb.debian.org/debian bookworm/main amd64 runit-helper all 2.15.2 [6,520 B]
Get:3 http://deb.debian.org/debian bookworm/main amd64 openssh-server amd64 1:9.2p1-2+deb12u7 [457 kB]
Fetched 529 kB in 0s (1,679 kB/s)
Preconfiguring packages ...
Selecting previously unselected package openssh-sftp-server.
(Reading database ... 156806 files and directories currently installed.)
Preparing to unpack .../openssh-sftp-server_1%3a9.2p1-2+deb12u7_amd64.deb ...
Unpacking openssh-sftp-server (1:9.2p1-2+deb12u7) ...
Selecting previously unselected package runit-helper.
Preparing to unpack .../runit-helper_2.15.2_all.deb ...
Unpacking runit-helper (2.15.2) ...
Selecting previously unselected package openssh-server.
Preparing to unpack .../openssh-server_1%3a9.2p1-2+deb12u7_amd64.deb ...
Unpacking openssh-server (1:9.2p1-2+deb12u7) ...
Setting up runit-helper (2.15.2) ...
Setting up openssh-sftp-server (1:9.2p1-2+deb12u7) ...
Setting up openssh-server (1:9.2p1-2+deb12u7) ...

Creating config file /etc/ssh/sshd_config with new version
Creating SSH2 RSA key; this may take some time ...
3072 SHA256:hjc+Z52y+nyl+DUEvROfII7QX94u5w69z0NMvZ5C5/q root@apache2 (RSA)
```

5.5 Récupération de l'adresse IP

```
ip a
```

Identifier l'adresse IP (exemple : 192.168.x.x)

Capture – Résultat commande ip a

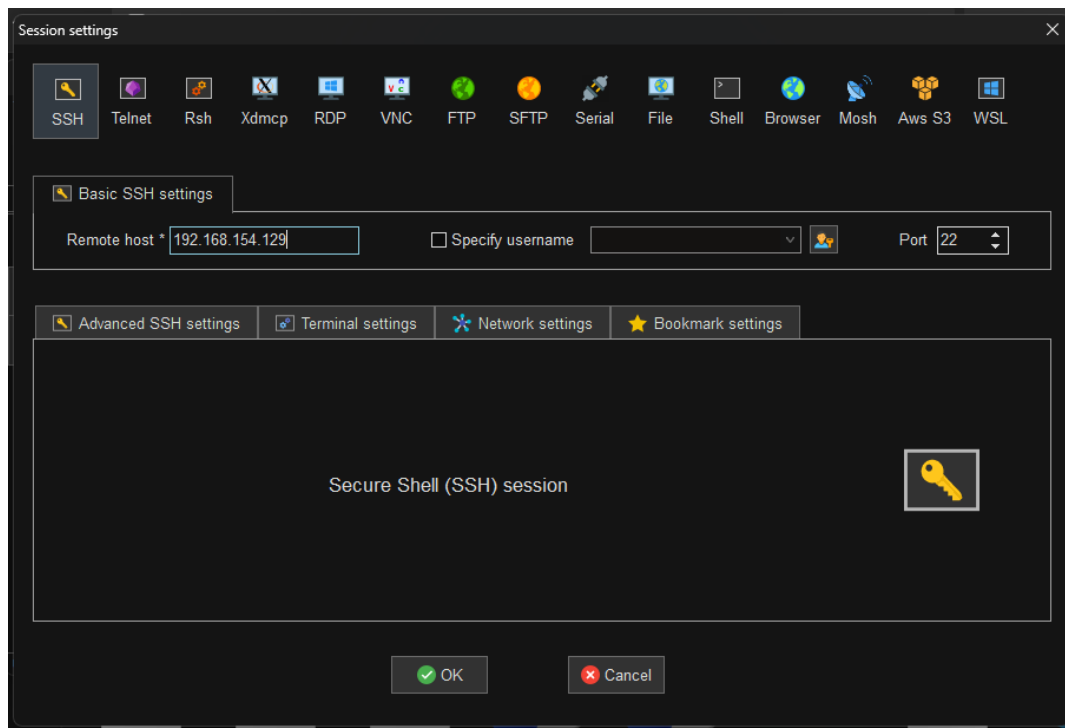
```
debian@apache2:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:0c:29:91:57:9c brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.154.129/24 brd 192.168.154.255 scope global dynamic noprefixroute ens33
        valid_lft 1514sec preferred_lft 1514sec
    inet6 fe80::20c:29ff:fe91:579c/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
debian@apache2:~$
```

5.6 Configuration de la session SSH

Dans MobaXterm :

- Remote Host → entrer l'adresse IP
- Port : 22
- Username : utilisateur Debian

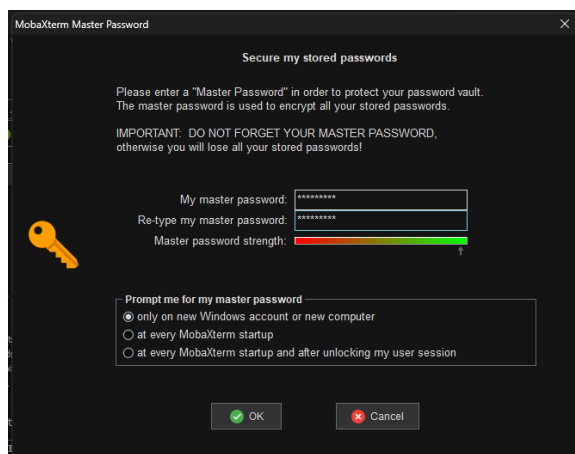
Capture – Paramétrage Remote Host



5.7 Sécurisation de la session

Création d'un mot de passe maître pour protéger les sessions enregistrées.

Capture – Création mot de passe MobaXterm

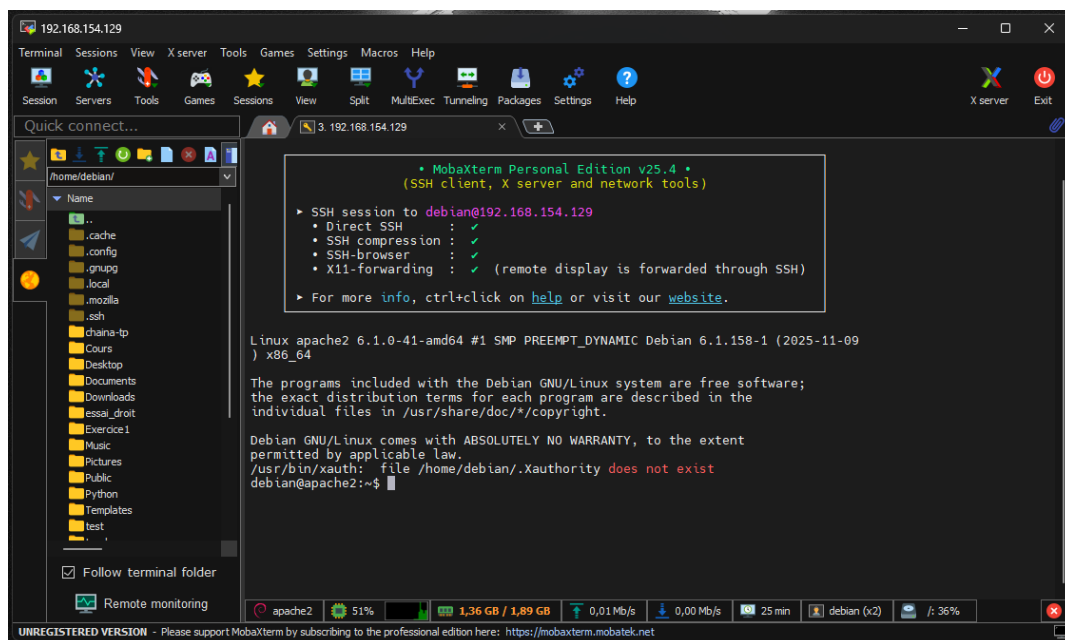


6. Mise en service

Connexion via :

- Username
- Mot de passe Debian

Capture – Terminal SSH connecté



Résultat : connexion SSH établie avec succès.

7. Tests et validation

Tests effectués :

- Vérification installation openssh-server
- Test ping entre machines
- Connexion SSH réussie
- Exécution de commandes à distance

8. Difficultés rencontrées

Problème	Solution
Service SSH non démarré	<code>sudo systemctl start ssh</code>
Mauvaise IP	Vérification via <code>ip a</code>
Port bloqué	Vérification firewall
Authentification refusée	Vérification login/mot de passe

9. Résultats

- Serveur SSH fonctionnel
- Connexion distante sécurisée établie
- Communication client-serveur validée
- Accès distant à la VM réussi

10. Compétences mobilisées

- Administration Linux
- Installation services réseau
- Configuration SSH
- Compréhension protocole sécurisé
- Diagnostic réseau

11. Améliorations possibles

- Mise en place authentification par clé SSH
- Désactivation connexion root
- Changement du port SSH
- Configuration firewall (UFW)
- Restriction par IP

12. Conclusion

Ce TP a permis de comprendre le fonctionnement du protocole SSH et la mise en place d'un accès distant sécurisé à une machine Linux via MobaXterm.

Il constitue une base essentielle en administration système et en gestion des accès distants sécurisés .

Alexis DE JESUS - BTS SIO SLAM