

A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from this bar, containing the date.

05/12/2023

# Configuration SSH

Several thin, dark blue curved lines originate from the bottom left corner and sweep upwards and to the right, creating a sense of movement or a stylized 'S' shape.

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## Configuration

- Connexion SSH
- Connexion par clé SSH et désactivation de mot de passe.
- Activer L'A2F SSH.

### 1 Commencer par installer SSH

```
valid_lft forever preferred_lft forever
2: ens18: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group defa
    link/ether 56:23:a0:ba:74:88 brd ff:ff:ff:ff:ff:ff
    altname enp0s18
    inet 10.74.3.178/22 brd 10.74.3.255 scope global dynamic ens18
        valid_lft 6565sec preferred_lft 6565sec
    inet6 fe80::5423:a0ff:feba:7488/64 scope link
        valid_lft forever preferred_lft forever
root@Zabbix:/home/sukuku# apt install ssh_
```

### 2 Se connecter comme cela avec le nom d'utilisateur suivie de l'adresse IP

```
PS C:\Users\dyland> ssh
usage: ssh [-46AaCfGgKkMMNnqsTtVvXxYy] [-B bind_interface]
          [-b bind_address] [-c cipher_spec] [-D [bind_address:]port]
          [-E log_file] [-e escape_char] [-F configfile] [-I pkcs11]
          [-i identity_file] [-J [user@]host[:port]] [-L address]
          [-l login_name] [-m mac_spec] [-O ctl_cmd] [-o option] [-p port]
          [-Q query_option] [-R address] [-S ctl_path] [-W host:port]
          [-w local_tun[:remote_tun]] destination [command]
PS C:\Users\dyland> ssh <nom_utilisateur>@<ipaddress> -p <num_port>
```

### 3 Une fois connecter ceci s'affichera.

```
sukuku@Zabbix: ~
(c) Microsoft Corporation. Tous droits réservés.

C:\Users\dyland>ssh Sukuku@10.74.3.178
The authenticity of host '10.74.3.178 (10.74.3.178)' can't be established.
ED25519 key fingerprint is SHA256:blND5bjX7jPwnXJV66VJNBDzWeT3UA8nFDixa7I0U9s.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.74.3.178' (ED25519) to the list of known hosts.
Sukuku@10.74.3.178's password:
Permission denied, please try again.
Sukuku@10.74.3.178's password:
Permission denied, please try again.
Sukuku@10.74.3.178's password:
Sukuku@10.74.3.178: Permission denied (publickey,password).

C:\Users\dyland>ssh Sukuku@10.74.3.178
Sukuku@10.74.3.178's password:

C:\Users\dyland>ssh sukuku@10.74.3.178
sukuku@10.74.3.178's password:
Linux Zabbix 6.1.0-13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.55-1 (2023-09-29) x86_64

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Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Dec  6 12:22:39 2023
sukuku@Zabbix:~$
```

4 `Systemctl status ssh` vous permet de voir que vous êtes bien connectée

```
sukuku@Zabbix:~$ systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; preset: enabled)
   Active: active (running) since Wed 2023-12-06 12:08:52 CET; 34min ago
     Docs: man:sshd(8)
           man:sshd_config(5)
    Main PID: 1588 (sshd)
      Tasks: 1 (limit: 5731)
     Memory: 8.0M
        CPU: 182ms
    CGroup: /system.slice/ssh.service
            └─1588 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

sukuku@Zabbix:~$
```

## CONNEXION PAR CLE SSH ET DESACTIVATION DE CONNEXION PAR MOT DE PASSE

5 Générer une clé d'activation que l'on ne peut brut forcer

```
sukuku@Zabbix:~$ ssh-keygen -t rsa -b 4096
Generating public/private rsa key pair.
Enter file in which to save the key (/home/sukuku/.ssh/id_rsa):
Created directory '/home/sukuku/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/sukuku/.ssh/id_rsa
Your public key has been saved in /home/sukuku/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:U+BTU4Rf/gMUBcIKHZQnw0H6kioXKPJmq2I+2YuQdE sukuku@Zabbix
The key's randomart image is:
+---[RSA 4096]-----+
|  .  .+.o=B+o.o |
|  . E  .+ *o=* o |
|  .  +..=.oo.+ . |
|  .o = o o. o  = |
|  . *  .S.  . o |
|  . +      . |
|  + .      . |
|  + +      . |
|  +0o      . |
+-----[SHA256]-----+
sukuku@Zabbix:~$
```

6 Chercher dans le dossier la clé donc clé public pour trouver la clé privée

```
sukuku@Zabbix:~$ cd home/
-bash: cd: home/: Aucun fichier ou dossier de ce type
sukuku@Zabbix:~$ cd /home/sukuku/.
./      ../      .local/ .ssh/
sukuku@Zabbix:~$ cd /home/sukuku/.ssh
sukuku@Zabbix:~/.ssh$ ls
id_rsa  id_rsa.pub
sukuku@Zabbix:~/.ssh$ cat id_rsa
-----BEGIN OPENSSH PRIVATE KEY-----
b3BlbnNzaC1rZXktbjEAAAAABG5vbmUAAAAAEbm9uZQAAAAAAAAABAAACFwAAAAAdzc2gtcn
NhAAAAAwEAAQAAAQAEApYKYNV4cY4/ayqWJ06os0tBNNh2DEyhX4LMm4UN9h40eG/nS7ZDJ
Yf00VIx1TaBk1eGjaAZexBD0GQ9bbh8YBCyNwyVo6vSmxL/tHQJSGY96VTXGs8ZL9hb1Cf
TIyR2NBS59jSbyfGYk6iwwDMDGobYlHwDRbq9PQRi+EnN4DI1MN4G9L9iLvGBm56wntpwC
```

7. la clé privée est trouvée.

```
sukuku@Zabbix:~/.ssh$ cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCAQC1gpg1X
HxqELI3DJWjq9KbGX+0dAlIZj3pVNcazxkv2FvUJ9MjJH
```

8 Activer la cle

```

Windows PowerShell
Copyright (C) Microsoft Corporation. Tous droits réservés.

Installez la dernière version de PowerShell pour de nouvelles fonctionnalités et améliorations ! https://aka.ms/PSWindows

PS C:\Users\USER\Documents> ssh -i id_rsa sukuku@10.74.3.178
sukuku@10.74.3.178's password:
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Last login: Wed Dec  6 12:40:33 2023 from 10.74.1.130
sukuku@Zabbix:~$

```

9 rentrer dans le fichier config

```

sukuku@Zabbix:~$ sudo nano /etc/ssh/sshd_config

```

10 Mettre permission au Password = no

```

Host *
# ForwardAgent no
# ForwardX11 no
# ForwardX11Trusted yes
PasswordAuthentication no
# HostbasedAuthentication no
# GSSAPIAuthentication no
# GSSAPIDelegateCredentials no

```

11 Si une erreur de lecture apparaît modifiée les droits d'écriture et de lecture.

```

PS C:\Users\USER\Documents> icacls id_rsa /grant:r USER:R
fichier traité : id_rsa
1 fichiers correctement traités ; échec du traitement de 0 fichiers

```

12 Une fois le fichier modifier faite EXIT.

13 connecter vous avec la clé ssh.

```
ssh -i id_rsa sukuku@10.74.3.178
```

```
Linux Zabbix 6.1.0-13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.55-1 (2023-09-29) x86_64
```

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```
Last login: Wed Dec 6 15:01:48 2023 from 10.74.1.77
```

```
sukuku@Zabbix:~$
```