

MISSION-2-CHOIX-B

DIAGOURAGA

TS2SIO

Ibrahim

Choix B : Projet d'installation d'un serveur Bastion guacamole pour se connecter à distance et de manière sécurisée aux serveurs.

[OOENT : Installation Guacamole 1.5.3 sur DEBIAN 11](#)

<https://www.it-connect.fr/tuto-apache-guacamole-bastion-rdp-ssh-debian/>

■ = Commandes

Installer les Dépendances

```
sudo apt-get install libcairo2-dev libjpeg-turbo8-dev libpng-dev libtool-bin uuid-dev  
libossp-uuid-dev libwebsockets-dev libssl-dev libavcodec-dev freerdp2-dev  
libpango1.0-dev libssh2-1-dev libtelnet-dev libwebsockets-dev libpulse-dev libvorbis-dev  
libwebp-dev libavcodec-dev libavformat-dev libavutil-dev libswscale-dev
```

télécharger Guacamole server

wget <https://downloads.apache.org/guacamole/1.5.3/source/guacamole-server-1.5.3.tar.gz>

```
root@debian-admin:/home/devadmin/Guacamole# wget https://downloads.apache.org/guacamole/1.5.3/  
source/guacamole-server-1.5.3.tar.gz  
--2024-02-25 21:30:27-- https://downloads.apache.org/guacamole/1.5.3/source/guacamole-server-  
1.5.3.tar.gz  
Résolution de downloads.apache.org (downloads.apache.org)... 88.99.208.237, 135.181.214.104, 2a0  
1:4f8:10a:39da::2, ...  
Connexion à downloads.apache.org (downloads.apache.org)|88.99.208.237|:443... connecté.  
requête HTTP transmise, en attente de la réponse... 200 OK  
Taille : 1105466 (1,1M) [application/x-gzip]  
Sauvegarde en : « guacamole-server-1.5.3.tar.gz »  
  
guacamole-server-1.5.3.tar.gz 100%[=====]  
,40MB/s ds 0,4s 1,05M 2  
  
2024-02-25 21:30:28 (2,40 MB/s) - « guacamole-server-1.5.3.tar.gz » sauvegardé [1105466/110546  
6]
```

Décompresser et se déplacer dans le dossier décompresser

```
tar -xvf guacamole-server-1.5.3.tar.gz
```

```
cd guacamole-server-1.5.3
```

```
guacamole-server-1.5.3/Dockerfile  
guacamole-server-1.5.3/LICENSE  
guacamole-server-1.5.3/NOTICE  
root@debian-admin:/home/devadmin/Guacamole# cd guacamole-server-1.5.3  
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3#
```

```
apt update
```

```
apt install -y build-essential \
```

```
libcairo2-dev \
```

```
libjpeg62-turbo-dev \  
libpng-dev \  
libtool-bin \  
    uuid-dev \  
libosspp-uuid-dev \  
libavcodec-dev \  
libavformat-dev \  
libavutil-dev \  
libswscale-dev \  
    freerdp2-dev \  
libpango1.0-dev \  
libssh2-1-dev \  
libvncserver-dev \  
libtelnet-dev \  
libwebsockets-dev \  
libssl-dev \  
libvorbis-dev \  
libwebp-dev \  
libpulse-dev \  
    sudo \  
    vim
```

```
./configure --with-systemd-dir=/etc/systemd/system/  
./configure --with-systemd-dir=/etc/systemd/system/ --disable-guacenc  
make  
make install  
sudo ldconfig
```

autoreconf -fi

```
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# autoreconf -fi  
libtoolize: putting auxiliary files in AC_CONFIG_AUX_DIR, 'build-aux'.  
libtoolize: copying file 'build-aux/ltmain.sh'  
libtoolize: putting macros in AC_CONFIG_MACRO_DIRS, 'm4'.  
libtoolize: copying file 'm4/libtool.m4'  
libtoolize: copying file 'm4/ltoptions.m4'  
libtoolize: copying file 'm4/ltsugar.m4'  
libtoolize: copying file 'm4/ltversion.m4'  
libtoolize: copying file 'm4/lt~obsolete.m4'  
configure.ac:27: installing 'build-aux/compile'  
configure.ac:23: installing 'build-aux/missing'  
src/common-ssh/Makefile.am: installing 'build-aux/depcomp'
```

Ensuite, exécutez le script de configuration pour vérifier s'il manque des dépendances.

```
./configure --with-init-dir=/etc/init.d
```

Protocol support:

```
Kubernetes .... yes
RDP ..... no
SSH ..... no
Telnet ..... yes
VNC ..... no
```

Services / tools:

```
guacd ..... yes
guacenc .... yes
guaclog .... yes
```

```
FreeRDP plugins: no
Init scripts: /etc/init.d
Systemd units: no
```

type "make" to compile guacamole-server.

Puis compiler et installer le tout

make

make install

```
libtool: install: /usr/bin/install -c .libs/guaclog /usr/local/bin/guaclog
/usr/bin/mkdir -p '/usr/local/share/man/man1'
/usr/bin/install -c -m 644 man/guaclog.1 '/usr/local/share/man/man1'
make[2]: on quitte le répertoire « /home/devadmin/Guacamole/guacamole-server-1.5.3/src/guaclog »
make[1]: on quitte le répertoire « /home/devadmin/Guacamole/guacamole-server-1.5.3/src/guaclog »
make[1]: on entre dans le répertoire « /home/devadmin/Guacamole/guacamole-server-1.5.3 »
make[2]: on entre dans le répertoire « /home/devadmin/Guacamole/guacamole-server-1.5.3 »
make[2]: rien à faire pour « install-exec-am ».
make[2]: rien à faire pour « install-data-am ».
make[2]: on quitte le répertoire « /home/devadmin/Guacamole/guacamole-server-1.5.3 »
make[1]: on quitte le répertoire « /home/devadmin/Guacamole/guacamole-server-1.5.3 »
```

Exécutez ensuite la commande sudo ldconfig pour créer les liens avec les bibliothèques installés

```
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# sudo ldconfig
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3#
```

démarrer et activer le service

systemctl start guacd

systemctl enable guacd

systemctl status guacd

```
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# systemctl status guacd
● guacd.service - Guacamole Server
   Loaded: loaded (/etc/systemd/system/guacd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2024-02-25 21:53:30 CET; 5min ago
     Docs: man:guacd(8)
  Main PID: 29644 (guacd)
    Tasks: 1 (limit: 2315)
   Memory: 11.3M
   CGroup: /system.slice/guacd.service
           └─29644 /usr/local/sbin/guacd -f

févr. 25 21:53:30 debian-admin systemd[1]: Started Guacamole Server.
févr. 25 21:53:30 debian-admin guacd[29644]: Guacamole proxy daemon (guacd) version 1.5.3 started
févr. 25 21:53:30 debian-admin guacd[29644]: guacd[29644]: INFO: Guacamole proxy daemon (guacd) version
févr. 25 21:53:30 debian-admin guacd[29644]: Listening on host ::1, port 4822
févr. 25 21:53:30 debian-admin guacd[29644]: guacd[29644]: INFO: Listening on host ::1, port 4822
Lines 1-15/15 (END)
```

installation de tomcat

apt-get install tomcat9 tomcat9-admin tomcat9-common tomcat9-user

```

Creating config file /etc/tomcat9/catalina.properties with new version
Creating config file /etc/tomcat9/jaspic-providers.xml with new version
Creating config file /etc/logrotate.d/tomcat9 with new version

Creating config file /etc/default/tomcat9 with new version
Created symlink /etc/systemd/system/multi-user.target.wants/tomcat9.service → /lib/systemd/system/tomcat9.service.
Traitement des actions différées (« triggers ») pour libc-bin (2.28-10+deb10u1) ...
Traitement des actions différées (« triggers ») pour rsyslog (8.1901.0-1+deb10u2) ...
Traitement des actions différées (« triggers ») pour man-db (2.8.5-2) ...
Traitement des actions différées (« triggers ») pour ca-certificates (20200601~deb10u2) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...

done.
done.

```

sudo mkdir /etc/guacamole/

```

root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# sudo mkdir /etc/guacamole/
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3#

```

sudo wget https://downloads.apache.org/guacamole/1.5.3/binary/guacamole-1.5.3.war -O /etc/guacamole/guacamole.war

```

root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# sudo wget https://downloads.apache.org/guacamole/1.5.3/binary/guacamole-1.5.3.war -O /etc/guacamole/guacamole.war
--2024-02-25 22:08:59-- https://downloads.apache.org/guacamole/1.5.3/binary/guacamole-1.5.3.war
Résolution de downloads.apache.org (downloads.apache.org)... 135.181.214.104, 88.99.208.237, 2a01:4f9:3a:2c57::2
, ...
Connexion à downloads.apache.org (downloads.apache.org)|135.181.214.104|:443... connecté.
requête HTTP transmise, en attente de la réponse... 200 OK
Taille : 13631953 (13M)
Sauvegarde en : « /etc/guacamole/guacamole.war »

/etc/guacamole/guacamole.wa 100%[=====>] 13,00M 24,1MB/s ds 0,5s
2024-02-25 22:08:59 (24,1 MB/s) – « /etc/guacamole/guacamole.war » sauvegardé [13631953/13631953]

```

#####Une fois téléchargé, créez un lien symbolique avec tomcat

ln -s /etc/guacamole/guacamole.war /var/lib/tomcat9/webapps/

```

root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# ln -s /etc/guacamole/guacamole.war /var/lib/tomcat9/webapps/

```

#####REDEMARER GUACD ET TOMCAT

systemctl restart tomcat9

systemctl restart guacd

```

root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# systemctl restart guacd
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# systemctl restart tomcat9

```

#####créer des répertoires pour les extensions et les bibliothèques.

mkdir /etc/guacamole/{extensions,lib}

```

root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# mkdir /etc/guacamole/{extensions,lib}

```

#####Configurer l'authentification des utilisateurs installer mysql apt install mariadb-server

```
Traitement des actions différées (« triggers ») pour systemd (241-7~deb10u8) ...
Traitement des actions différées (« triggers ») pour man-db (2.8.5-2) ...
Traitement des actions différées (« triggers ») pour libc-bin (2.28-10+deb10u1) ...
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3#
```

mysql_secure_installation

```
Remove anonymous users? [Y/n] y
... Success!

Normally, root should only be allowed to connect from 'localhost'. This
ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n] y
... Success!

By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] y
... Success!

Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
```

#####Créer une base de donnée GUACAMOLE

mysql -u root -p

```
root@debian-admin:/home/devadmin/Guacamole/guacamole-server-1.5.3# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 42
Server version: 10.3.39-MariaDB-0+deb10u2 Debian 10

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)]>
```

CREATE DATABASE guacamole_db;

```
MariaDB [(none)]> CREATE DATABASE guacamole_db;
Query OK, 1 row affected (0,000 sec)

MariaDB [(none)]>
```

CREATE USER 'guacamole_user:lo , '@localhost' IDENTIFIED BY 'Ibrahim';

```
MariaDB [(none)]> CREATE USER 'guacamole_user'@'localhost' IDENTIFIED BY 'Ibrahim';
Query OK, 0 rows affected (0,000 sec)
```

GRANT SELECT,INSERT,UPDATE,DELETE ON guacamole_db.* TO 'guacamole_user'@'localhost';

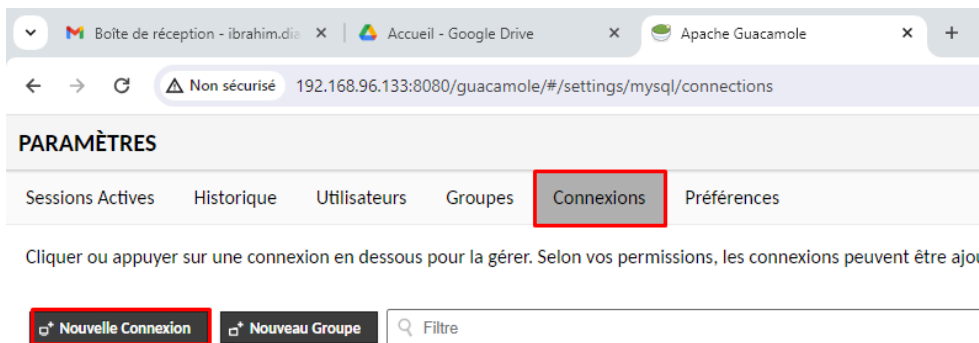
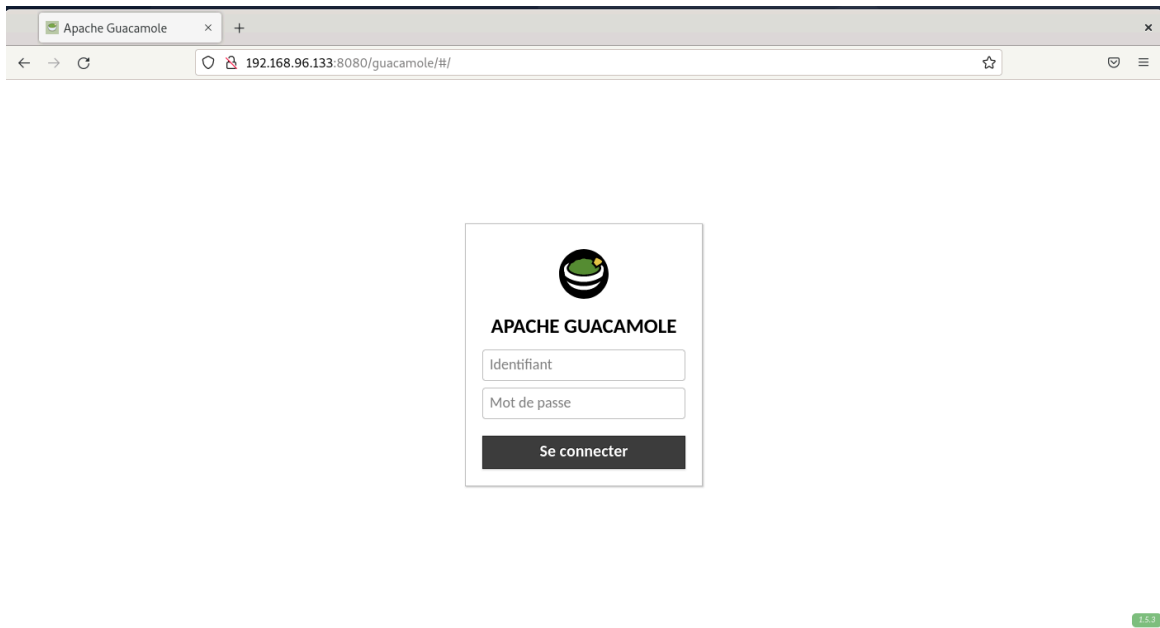
```
MariaDB [(none)]> GRANT SELECT,INSERT,UPDATE,DELETE ON guacamole_db.* TO
-> 'guacamole_user'@'localhost';
Query OK, 0 rows affected (0,000 sec)
```

FLUSH PRIVILEGES;

```
MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0,000 sec)
```

quit;

```
MariaDB [(none)]> quit;  
Bye
```



PARAMÈTRES

Réseau

Nom d'hôte:

Port:

Authentification

```
VH-DEV-WEB x  
devadmin@dev-w  
Fichier Édition Affichage Rechercher Terminal Aide  
Object "a*" is unknown, try "ip help".  
devadmin@dev-web:~$ ls  
B1-SQL Documents Modèles Public V  
Bureau Images Musique Téléchargements  
devadmin@dev-web:~$ ls  
B1-SQL Documents Modèles Public V  
Bureau Images Musique Téléchargements  
devadmin@dev-web:~$ ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc  
t qlen 1000  
    link/loopback 00:00:00:00:00:00 brd 00:00:  
    inet 127.0.0.1/8 scope host lo  
        valid lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid lft forever preferred_lft forever  
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mt  
roup default qlen 1000  
    link/ether 00:0c:29:57:e7:71 brd ff:ff:ff:  
    inet 192.168.96.137/24 brd 192.168.96.255  
ens33
```