

# Opensip

- [Install on Debian Opensip](#)

# Install on Debian Opensip

add opensips-cli

```
curl https://apt.opensips.org/opensips-org.gpg -o /usr/share/keyrings/opensips-org.gpg
echo "deb [signed-by=/usr/share/keyrings/opensips-org.gpg] https://apt.opensips.org bookworm cli-nightly"
>/etc/apt/sources.list.d/opensips-cli.list
```

add opensips

```
curl https://apt.opensips.org/opensips-org.gpg -o /usr/share/keyrings/opensips-org.gpg
echo "deb [signed-by=/usr/share/keyrings/opensips-org.gpg] https://apt.opensips.org bookworm 3.5-releases"
>/etc/apt/sources.list.d/opensips.list
```

this will add new source lists to download opensips and components

sudo apt update

sudo apt install opensips

sudo apt install opensips-cli

sudo apt install opensips-mysql-module

or install all modules by doing apt install opensips\*

systemctl start opensips

systemctl status opensips

```
root@opensips:~# systemctl start opensips
root@opensips:~# systemctl status opensips
● opensips.service - OpenSIPS is a very fast and flexible SIP (RFC3261) server
   Loaded: loaded (/lib/systemd/system/opensips.service; enabled; preset: enabled)
   Active: active (running) since Wed 2025-02-12 00:23:01 CST; 1s ago
     Docs: man:opensips
   Process: 15897 ExecStart=/usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m
   $S_MEMORY -M $P_MEMORY $OPTIONS (code=exited, status=0/SUCCESS)
  Main PID: 15899 (opensips)
    Tasks: 9 (limit: 2305)
```

Memory: 9.4M

CPU: 28ms

CGroup: /system.slice/opensips.service

```
├─15899 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15900 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15901 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15902 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15903 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15904 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15905 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
├─15906 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
└─15907 /usr/sbin/opensips -P /run/opensips/opensips.pid -f /etc/opensips/opensips.cfg -m 64 -M 4
```

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:core:evi\_publish\_event: Registered event <E\_UL\_LATENCY\_UPDATE(12)>

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:registrar:mod\_init: initializing...

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:acc:mod\_init: initializing...

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:core:evi\_publish\_event: Registered event <E\_ACC\_EVENT(13)>

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:core:evi\_publish\_event: Registered event <E\_ACC\_CDR(14)>

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:core:evi\_publish\_event: Registered event <E\_ACC\_MISSED\_EVENT(15)>

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:core:mod\_init: initializing UDP-plain protocol

Feb 12 00:23:01 opensips /usr/sbin/opensips[15899]: INFO:core:evi\_publish\_event: Registered event <E\_CORE\_LOG(16)>

Feb 12 00:23:01 opensips opensips[15897]: INFO:core:daemonize: pre-daemon process exiting with 0

Feb 12 00:23:01 opensips systemd[1]: Started opensips.service - OpenSIPS is a very fast and flexible SIP (RFC3261) server.

We also need to install apache, sql and php

```
apt install -y apache2
```

```
apt install -y php php-curl php-gd php-pear php-cli php-mysql php-apcu
```

```
apt install libapache2-mod-php unzip
```

now install mysql

```
wget https://dev.mysql.com/get/mysql-apt-config\_0.8.30-1\_all.deb
```

```
$ sudo apt install ./mysql-apt-config_0.8.30-1_all.deb
```

```
Configuring mysql-apt-config
MySQL APT Repo features MySQL Server along with a variety of MySQL components. You may select the appropriate product to choose the version that you wish to receive.
Once you are satisfied with the configuration then select last option 'Ok' to save the configuration, then run 'apt-get update' to load package list. Advanced users can
always change the configurations later, depending on their own needs.
Which MySQL product do you wish to configure?
MySQL Server & Cluster (Currently selected: mysql-8.4-lts)
MySQL Tools & Connectors (Currently selected: Enabled)
MySQL Preview Packages (Currently selected: Disabled)
Ok
<Ok>
```

```
Configuring mysql-apt-config
This configuration program has determined that no MySQL Server is configured on your system, and has highlighted the most appropriate repository package. If you are not sure
which version to install, do not change the auto-selected version. Advanced users can always change the version as needed later. Note that MySQL Cluster also contains MySQL
Server.
Which server version do you wish to receive?
mysql-8.0
mysql-innovation
mysql-8.4-lts
mysql-cluster-8.0
mysql-cluster-innovation
mysql-cluster-8.4-lts
None
<Ok>
```

```
Configuring mysql-apt-config
MySQL APT Repo features MySQL Server along with a variety of MySQL components. You may select the appropriate product to choose the version that you wish to receive.
Once you are satisfied with the configuration then select last option 'Ok' to save the configuration, then run 'apt-get update' to load package list. Advanced users can
always change the configurations later, depending on their own needs.
Which MySQL product do you wish to configure?
MySQL Server & Cluster (Currently selected: mysql-8.4-lts)
MySQL Tools & Connectors (Currently selected: Enabled)
MySQL Preview Packages (Currently selected: Disabled)
Ok
<Ok>
```

now sudo apt update

sudo apt install mysql-server

```
csr@opensips:~$ sudo systemctl status mysql
● mysql.service - MySQL Community Server
   Loaded: loaded (/lib/systemd/system/mysql.service; enabled; preset: enabled)
   Active: active (running) since Wed 2025-02-12 00:43:39 CST; 1min 49s ago
     Docs: man:mysql8(8)
           http://dev.mysql.com/doc/refman/en/using-systemd.html
   Main PID: 1941 (mysqld)
     Status: "Server is operational"
```

```
Tasks: 34 (limit: 2305)
```

```
Memory: 438.0M
```

```
CPU: 1.350s
```

```
CGroup: /system.slice/mysql.service
```

```
└─1941 /usr/sbin/mysqld
```

```
Feb 12 00:43:38 opensips systemd[1]: Starting mysql.service - MySQL Community Server...
```

```
Feb 12 00:43:39 opensips systemd[1]: Started mysql.service - MySQL Community Server.
```

```
cd /var/www/html;
```

```
wget https://github.com/OpenSIPS/opensips-cp/archive/master.zip;
```

```
unzip master.zip;
```

```
mv opensips-cp-master opensips-cp
```

```
chown -R www-data:www-data /var/www/html/opensips-cp/;
```

### **Setup a Backup Point to restore if database fail**

```
mysql -Dopensips -p < /var/www/html/opensips-cp/config/db_schema.mysql;
```

```
cp /var/www/html/opensips-cp/config/tools/system/smonitor/opensips_stats_cron /etc/cron.d/
```

Create database using opensips-cli

## Creating the Database

In order to create the `database_name` database that you have provisioned above, run

```
opensips-cli -x database create
```

Later, if you decide to add a new module, for example presence, simply call:

```
opensips-cli -x database add presence
```

You can also specify a different name for the database, for example `opensips_test`, using:

```
opensips-cli -x database create opensips_test
```

```
mysql -uroot -p
```

```
Enter password:
```

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
```

Your MySQL connection id is 13

Server version: 8.4.4 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> use opensips
```

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

```
mysql> desc ocp_admin_privileges;
```

```
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra      |
+-----+-----+-----+-----+-----+-----+
| id         | int unsigned | NO   | PRI | NULL    | auto_increment |
| first_name | varchar(64) | NO   |     |         |               |
| last_name  | varchar(64) | NO   |     |         |               |
| username   | varchar(64) | NO   |     |         |               |
| password   | varchar(64) | NO   |     |         |               |
| ha1        | varchar(256) | YES  |     |         |               |
| blocked    | varchar(60) | YES  |     | NULL    |               |
| failed_attempts | int       | YES  |     | 0       |               |
| available_tools | varchar(512) | NO   |     |         |               |
| permissions | varchar(512) | YES  |     | NULL    |               |
| secret     | varchar(20) | YES  |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
```

11 rows in set (0.01 sec)

mysql -p -e "CREATE USER 'opensips'@'localhost' IDENTIFIED BY 'opensips';" (if you modify the password here you need to update the file /var/www/html/opensips-cp/config/db.inc.php and add the password for database connection here)

```
mysql -p -e "GRANT ALL PRIVILEGES ON opensips.* TO 'opensips'@'localhost';"  
mysql -p -e "FLUSH PRIVILEGES;"
```

```
mysql -p -e "CREATE USER 'admin'@'localhost' IDENTIFIED BY 'Admin123';"  
mysql -p -e "GRANT ALL PRIVILEGES ON *.* TO 'admin'@'localhost';"  
mysql -p -e "FLUSH PRIVILEGES;"
```

systemctl restart cron

modify /etc/apache2/sites-available/000-default.conf

```
root@opensips:/etc/apache2/sites-available/000-default.conf  
<VirtualHost *:80>  
    #ServerName www.example.com  
  
    ServerAdmin webmaster@localhost  
    DocumentRoot /var/www/html  
    ErrorLog ${APACHE_LOG_DIR}/error.log  
    CustomLog ${APACHE_LOG_DIR}/access.log combined  
    #  
    <Directory /var/www/html/opensips-cp/web>  
        Options Indexes FollowSymLinks MultiViews  
        AllowOverride None  
        Require all granted  
    </Directory>  
  
    <Directory> /var/www/html/opensips-cp<  
        Options Indexes FollowSymLinks MultiViews  
        AllowOverride None  
        Require all denied  
    </Directory>  
  
    Alias /cp /var/www/html/opensips-cp/web  
  
    <DirectoryMatch "/var/www/html/opensips-cp/web/tools/.*.*(template|custom_actions|lib)/">  
        Require all denied  
    </DirectoryMatch>  
  
</VirtualHost>
```

Restart Apache2 and test by logging into <http://x.x.x.x/cp>

More on SQL

```
mysql> use opensips
```

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

```
mysql> CREATE USER 'cesar'@'%' IDENTIFIED BY 'Cesar123';
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> GRANT ALL PRIVILEGES ON *.* TO 'cesar'@'%';
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> FLUSH PRIVILEGES;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> use opensips
```

Database changed

```
mysql> SELECT * FROM accounts WHERE username = 'admin';
```

ERROR 1146 (42S02): Table 'opensips.accounts' doesn't exist

```
mysql> SELECT * FROM accountsSELECT * FROM ocp_admin_privileges WHERE username = 'admin'; WHERE username = 'admin';
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '\* FROM ocp\_admin\_privileges WHERE username = 'admin'' at line 1

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'WHERE username = 'admin'' at line 1

```
mysql> SELECT * FROM ocp_admin_privileges WHERE username = 'admin';
```

```
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| id | first_name | last_name | username | password | ha1 | blocked |
failed_attempts | available_tools | permissions | secret |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| 1 | Super | Admin | admin | opensips | 0273461fc6bf55340b21e41b9adc41bf | NULL |
0 | all | all | NULL |
```

```
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM ocp_admin_privileges WHERE username = 'Cesar';
```

Empty set (0.00 sec)

```
mysql> SELECT * FROM ocp_admin_privileges WHERE username = 'cesar';
Empty set (0.00 sec)
```

```
mysql> INSERT INTO ocp_admin_privileges (first_name, last_name, username, password, ha1,
blocked, failed_attempts, available_tools, permissions, secret)
-> VALUES ('Cesar', 'User', 'cesar', 'opensips', MD5('opensips'), NULL, 0, 'all', 'all', NULL);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT * FROM ocp_admin_privileges WHERE username = 'cesar';
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| id | first_name | last_name | username | password | ha1 | blocked |
failed_attempts | available_tools | permissions | secret |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| 2 | Cesar | User | cesar | opensips | bd1146b4cfa503eb2c1056b693377f30 | NULL |
0 | all | all | NULL |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT * FROM ocp_admin_privileges;
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| id | first_name | last_name | username | password | ha1 | blocked |
failed_attempts | available_tools | permissions | secret |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| 1 | Super | Admin | admin | opensips | 0273461fc6bf55340b21e41b9adc41bf | NULL |
0 | all | all | NULL |
| 2 | Cesar | User | cesar | opensips | bd1146b4cfa503eb2c1056b693377f30 | NULL |
0 | all | all | NULL |
+----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> SHOW TABLES;
+-----+
| Tables_in_opensips |
+-----+
| config |
| ocp_admin_privileges |
| ocp_boxes_config |
| ocp_dashboard |
| ocp_db_config |
| ocp_extra_stats |
```

```
| ocp_monitored_stats |  
| ocp_monitoring_stats |  
| ocp_system_config |  
| ocp_tools_config |  
+-----+  
10 rows in set (0.00 sec)
```

```
mysql> exit  
Bye
```