PostgreSQL Extension Installation Guide

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Contrib package download link:-

https://download.postgresql.org/pub/repos/yum/15/redhat/rhel-8.7-x86_64/

To see all extension:-

SELECT * FROM pg_available_extensions;

export PG_CONFIG=/usr/lib/pgsql-15.6/bin/pg_config

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https://centos.pkgs.org/7/centos-sclo-rh-x86_64/rh-postgresql13-pgaudit-1.5.0-1.el7.x86_64.rpm.html

https://gist.github.com/joelonsql/e5aa27f8cc9bd22b8999b7de8aee9d47 ------------ 1000+ extension package

--if you install postgresql through rpm package than use following website to install extension.

1. https://ubuntu.pkgs.org/22.04/ubuntu-universe-amd64/postgresql-15-partman_4.6.0-1_amd64.deb.html

pg_cron and pg_partman

git clone https://github.com/pgpartman/pg_partman.git

git clone https://github.com/citusdata/pg_cron.git

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if postgresql is installed through an rpm package:

extension dependency:- (pgxs.mk)

sudo yum install -y centos-release-scl

sudo yum install -y llvm-toolset-7

sudo yum install -y postgresql15-devel-15.3

export PATH=$PATH:/usr/pgsql-15/bin

Install pg_cron extension:

1. Go to path & install pg_cron package:-

cd /data/postgresql/postgresql-15.6/contrib

git clone https://github.com/citusdata/pg_cron.git

2. Change permission:-

chown -R postgres:postgres pg_cron

3. Switch user & configure pg_cron:-

su - postgres

cd /data/postgresql/postgresql-15.6/contrib/pg_cron

make

make install

4. Add parameter in the postgresql.conf file:-

vi postgresql.conf

shared_preload_libraries = 'pg_cron,pg_partman_bgw'

cron.timezone='Asia/Kolkata'

5. Restart PostgreSQL service:

systemctl restart postgresql.service

6. Create extension:-

create extension pg_cron;

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2. UUID extension :-

1. Configure:

```
sudo apt-get update

sudo apt-get install uuid-dev libossp-uuid-dev build-essential ----Ubuntu
```

For CentOS/RedHat:

```
sudo yum install libuuid-devel

sudo yum install ossp-uuid-devel
```

```
cd /path/to/postgresql-15.6

./configure --with-uuid=e2fs  # Or --with-uuid=ossp if using OSSP UUID
```

2. Install:

```
cd /data/postgresql-15/postgresql-15.6/contrib/uuid-ossp

make && make install
```

3. Create extension:

```
create extension "uuid-ossp";
```

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3. pg_partman:

1. Go to path & install pg_partman package:

cd /data/postgresql/postgresql-15.6/contrib

git clone https://github.com/pgpartman/pg_partman.git

2. Change permission:

chown -R postgres:postgres pg_partman

3. Switch user & configure pg_partman:

su - postgres

cd /data/postgresql/postgresql-15.6/contrib/pg_partman

make

make install

4. Create extension:

create extension pg_partman;

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4. pg_financial: (For RPM-based PostgreSQL installations)

1. Extension dependency:

sudo yum install -y centos-release-scl

sudo yum install -y llvm-toolset-7

sudo yum install -y postgresql15-devel-15.3

yum install gcc

2. Download & configure:

git clone https://github.com/intgr/pg_financial

chown -R postgres:postgres pg_financial

export PATH=$PATH:/usr/pgsql-15/bin

make && make install

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5. pgaudit:

For PostgreSQL-15:

1. Go to the contrib directory and install pgaudit package:

wget https://github.com/pgaudit/pgaudit/releases/tag/1.7.0

unzip 1.7.0.zip

2. Go to the pgaudit directory and run make & install:

cd pgaudit-1.7.0

make && make install

3. Add pgaudit parameters in postgresql.conf:

shared_preload_libraries = 'pgaudit'

log_destination = 'stderr'

pgaudit.log = 'all'

pgaudit.log_relation = on

4. Create extension:

create extension pgaudit;

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Vacuum and Log Configuration:

log_min_duration_statement = 5000 # log queries longer than 5 seconds

log_statement = 'ddl'   # log only DDL statements

log_lock_waits = on   # log lock waits

Vacuum parameters:

autovacuum = on

autovacuum_max_workers = 3

autovacuum_naptime = 15min