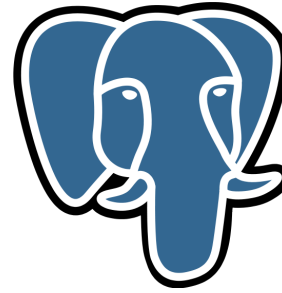## About C-DAC

C-DAC is a premier R&D organization of the Ministry of Electronics and Information Technology (MeitY), Govt. of India. C-DAC was established in 1988 and has R&D centers across 11 cities of India.

Mumbai centre of C-DAC actively carries out R&D activities into various fields of software technologies such as e-Governance, Artificial Intelligence, Blockchain, Biometrics, Language Computing, Mobile Computing, Machine Translation, Accessibility etc. C-DAC also has its strong presence in Education and Training.

C-DAC Mumbai has successfully delivered many nationwide projects with large scale databases and the team has expertise in handling legacy as well contemporary data. We have vast experience in delivering industry projects, trainings and consultancy on PostgreSQL and other database technologies.

SHORT TERM COURSE ON

PostgreSQL

WITH

RELATIONAL DATABASE DESIGN

12th -15th June, 2019
Duration: 4 Days

PostgreSQL

Database is a critical component of any application. The way an application stores and manages data affects the availability, performance and security of the application and contributes to overall reliability of the application to a great extent.

In this era of big data and NoSQL, Relational Database Management Systems (RDBMS) stand firm as the most popular storage method due to their strong foundation, and PostgreSQL is arguably the **Most Advanced Open Source RDBMS** as on today. Features like SQL compliance, ability to handle complex queries, object-relational support, scalability and security make PostgreSQL unparalleled. Latest versions of PostgreSQL also supports NoSQL features like key-value and document store.

Database design defines the organization of data in a system. It determines the data elements and relationship among them. A good database design ensures a reliable, robust, scalable and high performance database.

Venue

Centre for Development of
Advanced Computing
(C-DAC)
Gulmohar Cross Road No 9
Juhu, Mumbai - 400049
Phone: (+91) - 022- 2620 1604

PostgreSQL is the
"Fastest Growing Database"
out of the 343 monitored databases.
It has been declared as the
"DBMS of the Year 2018"

- www.db-engines.com

Course Objectives

On completion of the course, participants will be able to:

- Design databases for application using relational database design principles.
- Write SQL queries and PL/pgSQL routines.
- Install and Upgrade PostgreSQL
- Perform day-to-day administrative/ maintenance tasks.
- Configure PostgreSQL for Security, Performance, Scalability and High Availability.

Course Highlights

- A participant centric classroom course with attention to individual participant.
- Delivered by PostgreSQL certified C-DAC experts having experience on production databases.
- Take away study material and exercises.
- Case studies/Assignments/Quiz
- Certificate from C-DAC.

Who Should Attend

- IT Professionals - DBAs, Developers, Architects etc.
- Faculty Members.
- Students/Individuals familiar with basics of programming.

32 Hours of Classroom & Lab Sessions

Registration Details

FEE DETAILS	
Students	Rs. 10000 + GST @ 18%
Others	Rs. 15000 + GST @18%

- Participants have to bring their own laptop for training purpose.
- Laptop can be arranged for a participant on prior request with an additional payment of Rs. 2000 + GST.
- Registration fee covers Training, Courseware, Lunch, Tea/Coffee & C-DAC Certificate.
- Payments can be made through **NEFT/UPI/SBI Collect**.

For registration and payment details please visit:
http://www.kbcs.in/postgres

CONTACT
Phone: (+91)-22-2620 1604 Ext. - 585
Mobile/Whatsapp : (+91) - 9769 028 820
E-mail: db-course@cdac.in

Registration Open Till
3rd Jun, 2019
(Limited Seats)

Curriculum

Database Design and PostgreSQL

- Introduction to RDBMS
- Database Design Principles
- Entity Relationship (ER) Modal
- Codd's Rules, ACID Properties
- Normalization
- PostgreSQL Introduction and Architecture
- PostgreSQL CLI & GUI Interfaces

SQL and PL/pgSQL

- SQL (DDL/DML/DTL/DCL/DRL)
- SQL Data Types and Constraints
- SQL Queries (Advance - Joins & Subqueries)
- Sequence, Views and Indexes
- Bulk Insert/Copy and Import Export

PostgreSQL Administration

- PostgreSQL Installation (Linux)
- Directory Structure and Permissions
- PostgreSQL Extensions
- PostgreSQL Data Dictionary
- Server Configuration
- Logging and Performance Configuration
- Client Authentication and Security
- Backup and Restore
- Upgrading PostgreSQL

PostgreSQL HA and Replication

- Synchronous vs Asynchronous Replication
- Streaming Master-Slave Application
- Write Ahead Logs (WAL) and Point In Time Recovery (PITR)
- Connection Pooling