

Course Overview

PostgreSQL on Linux is an intensive two-day course for a variety of IT professionals that provides two days of instruction and hands-on lab activities on PostgreSQL Database, an object-relational database powered by PostgreSQL.

Prerequisites:

The participants should have a conceptual understanding of RDBMS and fair knowledge of SQL commands.

Target Audience

The audience for this course include Database Administrators, Web Developers and programmers.

Course Outline

Database Terminology

- DBMS and RDBMS
- Relational Databases
- Structured Query Language
- SQL as DDL, DML and DCL

Installation and configuration

- Features of PostgreSQL
- Installation
- Creating the PostgreSQL User
- Configuration
- Initialization
- Starting the Server

PostgreSQL Basic Queries

- Create and Drop Tables
- Adding Data with INSERT
- Viewing Data with SELECT
- Removing Data with DELETE
- Modifying Data with UPDATE
- Sorting Data with ORDER BY

PostgreSQL Database Design

- Columns and Datatypes
- Primary Keys and Foreign Keys
- Unique key and NOT NULL
- Auto Increment Values
- Table, View & Database Creation

PostgreSQL Database Queries

- NULL and DEFAULT
- AND/OR Usage
- Range of Values
- LIKE Comparison
- CASE Clause
- Distinct Rows
- Functions and Operators
- SET, SHOW, and RESET
- Using GROUP BY, HAVING

Joining Tables

- Creating Joined Tables

- Three- and Four-Table Joins
- Choosing a Join Key
- One-to-Many Joins
- Unjoined Tables
- Table Aliases and Self-joins

Managing database privileges

- Temporary Tables
- ALTER TABLE
- Assigning users to roles
- Understanding role access
- GRANT and REVOKE
- Views
- Rules
- LISTEN and NOTIFY

Functions and Triggers

- Functions
- SQL Functions
- PL/PGSQL Functions
- Triggers

Importing and Exporting Data

- Using COPY
- COPY File Format
- DELIMITERS
- COPY Without Files

Advance Administration

- Creating Users
- Backup and Restore
- Server Start-up and Shutdown
- Performance Monitoring
- System Tables
- PostgreSQL logging

API Based PostgreSQL Server

- Basic of Standards APIs
- Overview of Using PHP API
- PHPpgAdmin
- Application Integration to PostgreSQL

Course Duration: Two Days: 10 am - 5.30 pm

Course Fee Rs. 3,000/-

(Plus Service Tax as applicable)