

Querying PostgreSQL Databases

Learn to write, filter and manage SQL queries in PostgreSQL, from data types and joins to functions, views and indexes.

15

MODULES

13

TOPICS

COURSE OVERVIEW

This course covers the PostgreSQL server and its internals, followed by the fundamentals of writing and structuring SQL queries. It addresses data types, built-in functions, filtering with WHERE, NULL handling, ORDER BY and DISTINCT, as well as type conversions, operators, and UNION operations. It then covers joins, grouping and aggregation, window functions, views, subqueries and common table expressions, along with custom functions, metadata querying, data manipulation language, indexes, collations, and the pgAdmin III tool.

WHO THIS COURSE IS FOR

Database Administrators

SQL Developers

Data Analysts

Database Developers

Report Developers

LEARNING OBJECTIVES

- Explain PostgreSQL server architecture and internals
- Write and structure SQL queries
- Apply filtering techniques using WHERE, NULL and DISTINCT
- Use type conversions and operators such as logical and comparison
- Implement joins, grouping and aggregation in queries
- Apply window functions for advanced data analysis
- Build views, subqueries and common table expressions
- Query metadata using system information functions

15 Modules, 13 Topics

01

Introduction to PostgreSQL Server

TOPICS

Overview · History · PostgreSQL Internals

02

Introduction to SQL Language

TOPICS

Writing SQL Queries · Structure of SQL Queries

03

Working with Data Types

04

Working with Built-In-Functions

05

Querying and Filtering Data

TOPICS

Where Clause · NULL Values · ORDER BY · DISTINCT

06

Working with Type Conversions and Operators

TOPICS

- Logical, Mathematical, Comparison, Bit String Operators
- UNION and UNION ALL

07

Working with Joins

08

Working with Group and Aggregation

09

Working with Windows Function

10

Working with Views, Sub Query Expressions and Common Table Expressions

11

Working with Functions

12

Querying Metadata of PostgreSQL

TOPICS

System Information Functions · System Administration Functions

13

Introduction to DML

14

Introduction to Indexes and Collations

15

Introduction of PGADMIN III

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

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Who We Are

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