

OSDA-22 - POSTGRESQL DEVELOPER

Categoria: **Data & Big Data**

INFORMAZIONI SUL CORSO



Durata:
3 Giorni



Categoria:
Data & Big Data



Qualifica Istruttore:
Docente Senior (min.
5 anni)



Dedicato a:
Sviluppatore



Produttore:
PCSNET

OBIETTIVI

Il corso presenta il linguaggio SQL, linguaggio dichiarativo che permette di modificare i dati e creare oggetti quali tabelle e indici.

Saranno presentati i costrutti per la definizione di procedure interne a PostgreSQL ed affrontate problematiche di tuning.

Nel corso verranno svolte diverse esercitazioni a supporto della teoria.

PREREQUISITI

Nessuno

CONTENUTI

Client Interfaces

- Command Line Interface – psql
- Graphical Interface - pgadmin4

Understanding PostgreSQL Data Types

- Numeric data types
- Character types
- Binary data types
- Date & time types
- Boolean values
- Array types
- Other data types

Retrieving information from tables using SELECT

Performing table joins

- Cross joins
- Inner joins
- Outer joins
- Natural joins

Restricting selections using the WHERE clause

Using ORDER BY to sort query results

Limiting rows returned using LIMIT

Computing summary values

- Using the GROUP BY clause
- Using the HAVING clause

Using UNION, INTERSECT and EXCEPT to join SELECT Results

Pattern matching using LIKE

Conditional expressions: The CASE statement, the COALESCE and NULLIF function

Subquery expressions

- The EXISTS expression
- The IN (and NOT IN) expression

Working with array values

Performing type casting and conversion

Understanding & managing sequence numbers

Creating tables (DDL)

- Using CREATE TABLE
- NOT NULL constraints
- PRIMARY KEY constraints
- FOREIGN KEY constraints

Modifying tables (ALTER TABLE)

Data manipulation language (DML)

- Inserting data
- Using COPY to perform data loads
- Using DELETE to remove rows
- Updating data using UPDATE

Transactions and Concurrency

- Transactions and Isolations
- Multi-Version Concurrency Control

Server Programming

- Extending SQL
- Triggers
- The Rule System
- Procedural Languages
- PL/pgSQL - SQL Procedural Language

- Error Handling
- Cursors

Foreign Data Wrappers

- Extension in PostgreSQL
- Adding FDW in a Database
- postgres_fdw
- file_fdw
- Other FDWs

SQL Tuning

- Logging in PostgreSQL
- Query Plans
- Optimizing Queries
- Statistics
- Planner Parameters
- Parallel Query Scans
- SQL Best Practices
- Indexes
- Table Partitioning

INFO

Materiale didattico:

Costo materiale didattico: NON incluso nel prezzo del corso

Natura del corso: Operativo (previsti lab su PC)