Introduction to Postgres SQL

2 day training course







Course contents

This course will cover the following topics. Those marked with (*) will be covered if time allows.

Getting started with Postgres

- Installing Postgres
- Postgres Admin

About relational databases

- Designing databases
- Primary keys
- Field types in Postgres

Working with tables

- Creating tables
- Allowing nulls or not
- Identity and serial fields
- Creating relationships

Simple Queries

- Creating queries
- Comments
- Indentation and case
- ORDER BY and LIMIT

Setting criteria using WHERE

- Wildcards (% and _)
- Setting criteria for dates
- Coping with nulls

Calculations

- Calculated columns
- Using aliases
- String functions and concatenation

Calculations using dates

- Built-in date and time functions
- Converting dates
- Useful date functions

Basic joins

- Inner joins
- Table aliases
- Left and right outer joins

Aggregation and grouping

- SUM, AVG, MIN, MAX
- Various ways to count
- Grouping by fields
- Using HAVING to filter results

Views

- Turning queries into views
- Ordering in views
- Saving and editing views

Subqueries (*)

- The concept of a subquery
- Syntax of subqueries
- Using subqueries in a query