Puppet Configuration

Databases 3

School of Information Technology Otago Polytechnic Dunedin, New Zealand

The plan

During this last part of the semester we will

- Learn about the duties of a Database Administrator,
- Practice some core DBA tasks;
- Prepare for and perform a Skills Based Assessment about database administration.

Database Administrator (DBA)

- Job title
- The role sits between Systems Administration and Development
- Involves operating DBMS servers and working with application developers
- Consistently in demand for employment

DBA duties

- Install DBMS software
- Configure (and reconfigure) DBMS software
- Administer DB user accounts
- Consult with developers about DB design
- Write SQL queries
- Perform backup and recovery of databases
- Perform performance tuning
- Handle DBMS security

Database platform expert

Basically, for a large class of IT projects, the database is the critical component in terms of

- Performance
- Functionality
- Value

You can change the code, you can even break the code, but as long as the DB is in good shape you will be ok.

DBA skills/knowledge

- Understanding of operating systems
- Knowledge of database theory
- Some programming/scripting skills
- SQL skills
- Knowledge and experience with particular DBMSs

Practical

- Install PostgreSQL on your EC2 servers
- Create a database account for your Rails app
- Configure Rails
- initialise the database