

Website Architecture

Lezione 15

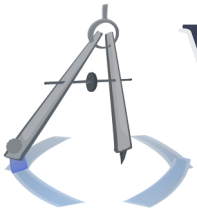
PostgreSQL

An introduction to the DBMS server, looking at its specific features and also presenting it as an archetypal DBMS server, including design consequences.

Michael Serritella

Summer 2010



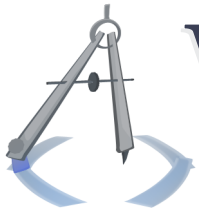


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Intro to PostgreSQL



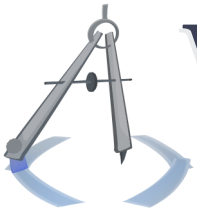


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Introduction to a DBMS server





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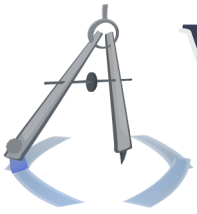
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Example execution

Standalone console

Via an API



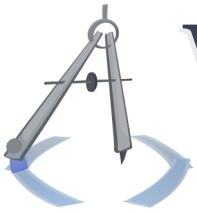


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Database configuration via GUIs





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Feature set

Advanced, server-characteristic features

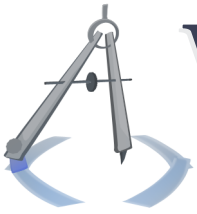
Complex query execution plans

Concurrency and correctness

Additional structural abstractions

Excellent software design





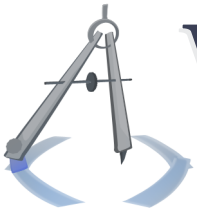
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Disadvantages

```
SELECT COUNT(*)
```





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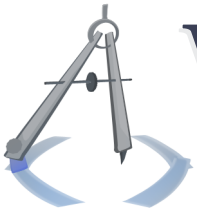
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General-purpose use

For large datasets

For multi-user/mult-role environments





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Website architecture implications

Abstract and efficient interface to database

Airtight security

Complex searching and query tasks

Separation of resources

Distributed architectures

