Bending GORM

5-minute Techniques for Enterprise Integration

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Introduction

Rapid Web Development For The Java Platform

Getting Started with Grails

Jason Rudolph

Foreward by Venkat Subramaniam

InfoQ *Enterprise Software Development Series*

- **Jason Rudolph**

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Agenda

- **The case for GORM**

    - Conventional thinking, unconventional productivity

    - Relationships, any way you like 'em

    - Constraints, declare and be done

- **GORM for non-conformists**

    - Hibernate mappings

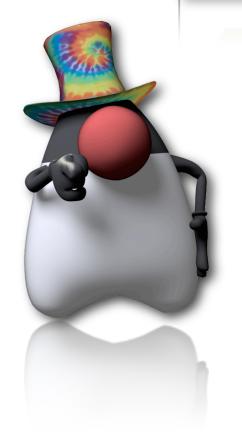   - EJB3 annotations

    - Groovy to the rescue!

DAOs Considered Harmful

- **Grails Object-Relational Mapping (GORM)**
  - Zero-configuration persistence management
  - Rich relationship model
  - Declarative validation
  - Powerful query support
  - Easy scaffolding

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Rock-Solid Foundation

Demo

Defying Conventional Wisdom

- **Non-conforming table/column names**

- **Custom sequences**

- **Complex keys**

- **Advanced mappings**

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No Schema Left Behind

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Hibernate XML - Step-by-Step

- **Define Hibernate artifacts**

  - Add hibernate.cfg.xml

  - Prepare HBM file for each deviant table

  - Consider reverse engineering with Hibernate tools

- **Create Grails domain classes**

- **Add constraints (optional)**

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Why Hibernate XML?

- **Standard Hibernate artifacts**

- **Reuse your existing mappings**

- **Full power of GORM**

  - Dynamic persistence methods

  - Constraints

  - Scaffolding

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Pimp My EJBs

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EJB3 Step-by-Step

- **Start with Java 5 (or higher)**

- **Update DataSource.groovy**

  - configClass = GrailsAnnotationConfiguration.class

- **Add POJOs to src/java**

- **Define hibernate.cfg.xml**

- **Drop in constraints (optional)**

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Why Annotate?

- **Standards-based POJOs**
  - Reuse elsewhere
  - Not tied to Grails

- **Full power of GORM (once again)**
  - Dynamic persistence methods
  - Constraints
  - Scaffolding

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A Groovier Solution

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This Just In...

Brand New for 1.0!

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GORM DSL

```
class Knight {
  // ...
  static mapping = {
    table 'knights'
    version false
    id column: 'knight_id'
    columns {
      numDragonsSlain column: 'dragon_count'
      // ...
    }
  }
}
```

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Demo

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More Declarative DSL Goodness

- **ID generation**

- **Lazy/eager fetching**

- **Inheritance strategy**

- **Index definitions**

- **Caching**

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Why DSL?

- **No additional XML or Java needed**

- **Lean syntax**

- **Mappings close at hand**

- **Full power of GORM (one more time)**

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Going Further with GORM

- **GORM outside of Grails**
  - grails.org/gorm+-+standalone+gorm

- **Java on GORM**
  - jroller.com/page/ie?entry=java_on_grails

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Still More to Explore

- **Custom user types**

  - grails.org/hibernate+integration

- **Migrations**

  - code.google.com/p/dbmigrate/wiki/Grails

- **Explicit Insert Plugin**

  - grails.org/explicit+insert+plugin

Resources

- **grails.org**
  - Downloads
    - Latest release (1.0)
    - Development snapshot (1.0.1)
  - User guide, tutorials, screencasts, etc.
  - Mailing lists (grails.org/mailing+lists)

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Resources (cont'd)

- **GORM Documentation**
  - grails.org/gorm

- **ORM DSL**
  - grails.org/GORM+-+Mapping+DSL

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Resources (cont'd)

- **Grails + EJB3 Tutorial**
  - infoq.com/articles/grails-ejb-tutorial

- **Hibernate Tools**
  - hibernate.org/255.html

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Slides & Examples Available

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jasonrudolph.com/downloads

Please Fill Out Your Evaluations