

# Simplify Open Source with AppFuse

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# Who is Matt Raible?

- Developing websites since 1994 (before Netscape 1.0) ~  
Developing in Java since 1999
- Committer on several open source projects: Roller  
Weblogger, XDoclet, Struts Menu, Display Tag, AppFuse
- J2EE 5.0 and JSF 1.2 Expert Group Member
- Author: Spring Live (SourceBeat) and contributor to  
Pro JSP (Apress)



# Who are you?

- Your Experience with webapps?
- What do you want to get from this presentation?
- Open Source experience with Ant, XDoclet, Struts, Hibernate, Spring?

# Presentation Agenda

- What is AppFuse?
- History
- Demo of Features
- HowTo: CRUD a database table
- Recent Usability Improvements
- Questions?

# AppFuse ~ what is it?

- A directory structure, build file and project classes to get your project started quickly
- The hard part is getting started and configuring dependencies
- Uses popular open-source tools: Ant, XDoclet, Spring, Hibernate, Struts (or Spring MVC/WebWork)
- Top 5 java.net project in hits, accesses and mail traffic

# History

- Started as a sample app for Pro JSP
- Became a toolkit for starting new projects
- Lots of community feedback makes it a “best practices” webapp for J2EE
- Documentation and Tutorials written November 2003
- AppGen ~ CRUD made easy



# Demo of Features

- Container Managed Authentication ~ easily switch from JDBC to LDAP or Windows domain authentication
- Remember Me and Self Registration
- GZip Compression Built-in
- Testing environment ready to go, Anthill and CruiseControl files included
- <http://demo.raibledesigns.com/appfuse>

# Dependencies

Name
ant-contrib-1.0b1
cargo-0.3
checkstyle-3.1
clickstream-1.0.2
dbunit-2.1
displaytag-1.0-rc2-SNAPSHOT
dumbster-1.2
hibernate-2.1.6
jakarta-log4j-1.2.8
jakarta-struts-1.2.4
jakarta-taglibs
java2html-1.3.1
javamail-1.3.1
jmock-1.0.1
junit3.8.1
JUnitDoclet.1.0.2
mysql-connector-java-3.0.14-production
pmd-1.2
postgresql-jdbc-7.4
servletapi-2.3
sitemesh-2.2
spring-1.1.1
struts-menu-2.3
strutstest-2.1.2
urlrewrite-1.2
velocity-1.4
webtest-build543
xdoclet-1.2.2



# Create database, POJO, table and CRUD code

A Quick HowTo

# Development Environment Setup

- Use instructions at: <http://raibledesigns.com/wiki/Wiki.jsp?page=DevelopmentEnvironment>
- Recommended Tools: Eclipse 3.1, JDK 1.4.2, Tomcat 5.0.28, Ant 1.6.2, MySQL 4.1.7
- OS X: IntelliJ IDEA, BBEdit, Cocoa MySQL, Smart CVS
- Windows: HomeSite, TopStyle, Cygwin, Tortoise CVS, MySQL CC / Administrator

# Part I: Create database and table

- Create new database with Ant
- Create Person.java POJO and generate Hibernate mapping file with XDoclet
- Configure Spring to be aware of Person object
- Create “person” table from POJO using Ant

# Part II: Create DAO

- What is a DAO?
- Create PersonDAOTest ~ Test First!
- Create PersonDAO Interface
- Create PersonDAOHibernate implementation class
- Configure PersonDAO in Spring
- Run JUnit Test

# Recent Usability Improvements

# Tiles to SiteMesh

- Used Tiles since it first came out in 2001
- Integrated into AppFuse since the beginning
- SiteMesh much easier to setup and use
- Tiles can be used with Struts, Spring and JSF
- SiteMesh can be used with almost anything
  - Very little maintenance required after setup



# AppGen

- To create CRUD for a table, it required you create 11 files and modify 5
- AppGen requires you create 1 and modify 1
- Uses BaseHibernateDAO and BaseManager for generic CRUD methods
- Still requires you to “pretty up” the UI

# AppFuse Roadmap

- Add Tapestry and JSF
- Continue to try and make IDE integration easier
- Support/Documentation for more app servers
- Other things you'd like to see?

# Equinox

- AppFuse Light ~ designed for quick apps with few requirements (i.e. prototypes)
- No build-time dependencies (i.e. XDoclet), no out-of-the-box security
- Includes 5 MVC implementations: Spring, Struts, WebWork, Tapestry and JSF
- Equinox code can be easily ported to AppFuse if you need AppFuse features
- Demos at <http://equinox.dev.java.net>

# Questions?

- AppFuse Official Homepage:
  - <http://raibledesigns.com/appfuse>
- AppFuse Demo:
  - <http://demo.raibledesigns.com/appfuse>
- This Presentation:
  - <http://appfuse.dev.java.net/AppFuse.pdf>