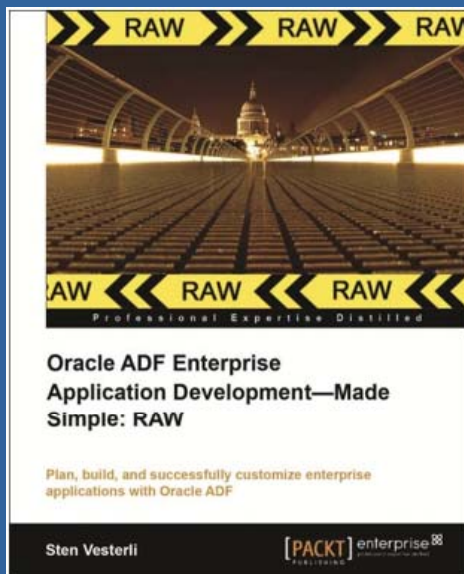
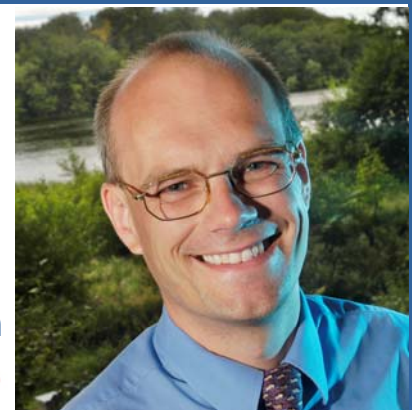


# Starting an Enterprise ADF Project



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scott/tiger



<http://groups.google.com/group/adf-methodology>

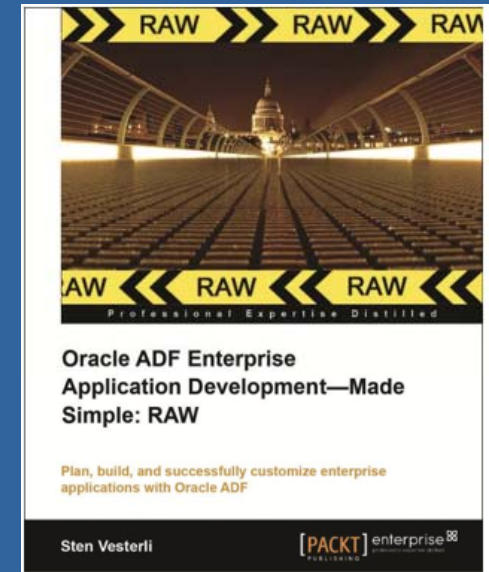
# ADF EMG



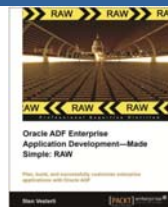
- A place to discuss **best practices** and methodologies for JDeveloper ADF enterprise applications
- Founded mid-2008 by Chris Muir, now **600+ members**
- Focus is **Fusion Tech Stack** (ADF Faces, ADF BC)
- Online forum plus sessions at major Oracle conferences (OOW, ODTUG, UKOUG, DOAG...)

# About me

- Developer, consultant, trainer
- 17 years of Oracle experience
- Oracle ACE Director
- Author of “Oracle ADF Enterprise Application Development – Made Simple”
- Partner in Scott/Tiger



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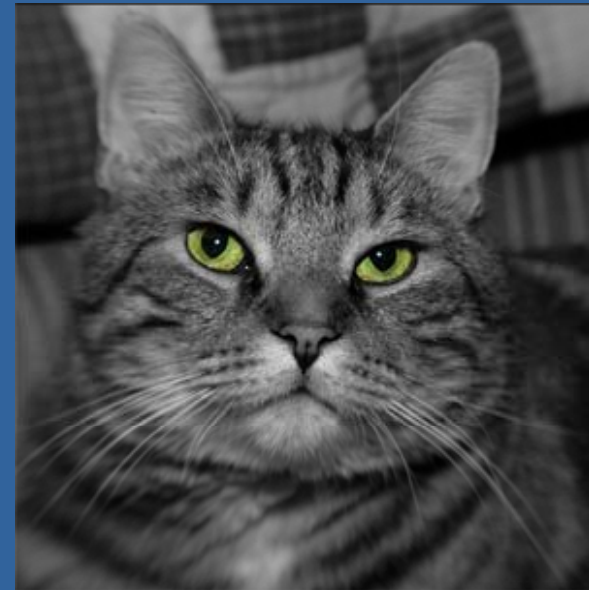
# About Scott/Tiger

## Scott



Bruce Scott  
(Oracle employee no. 4)

## Tiger



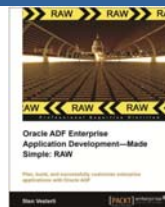
Bruce's daughter's cat

Also an Oracle-focused consultancy based in Denmark...



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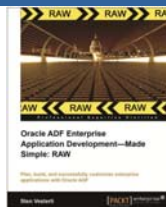


# Agenda

- Necessary skills and training
- Structure your code
- Efficient use of templates
- Using pages and page fragments
- Framework extension classes
- The hidden power of ADF Libraries
- Securing, packaging and deploying



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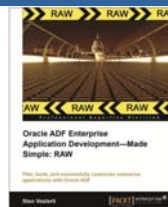


# Necessary Skills and Training



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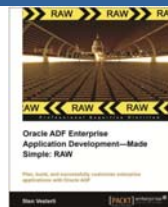


# Skills Required

- ADF Framework knowledge
- Object-Oriented programming
- Java programming
- Database programming
- XML
- Regular expressions
- Graphics design
- Usability



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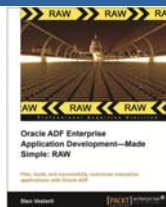


# Organizing your Team

- Lead Programmer
- Regular programmers
- Build/Configuration Manager
- Database administration
- Graphics Designers
- Usability Experts
- Users
- (Data Modelers)



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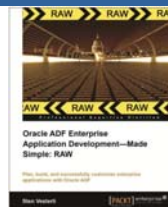


# Programmer specialization

- Building Business Components
- Building User Interface
- Skinning
- Data Validation
- Support Classes
- Database stored procedures
- Nutcracker



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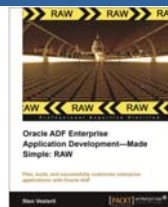


# Initial Training

- Classroom
  - Oracle University
  - Other training providers  
(look for an Oracle ACE/Director)
- Self-study
  - Lots of good, free material on OTN
  - Oracle JDeveloper 11g Handbook, Part V



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Training Complete!





A dramatic photograph of a massive, curling wave crashing over a person in the ocean. The person is small in the foreground, emphasizing the scale and power of the wave. The water is a deep blue, and the white foam of the wave is prominent. The sky is dark, suggesting a storm or late afternoon.

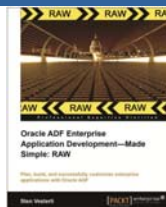
# Starting an Enterprise ADF Project

# Ongoing ADF Education

- Work on a small project first month
  - with “customer” (internal is OK)
  - with access to a mentor
- Participate in enterprise project
  - count first two months as junior programmer
  - fully productive after 3 months total
- Make sure you have access to ADF expertise



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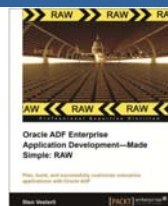


# Structure Your Code



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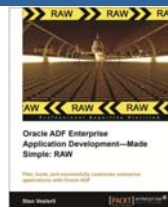


# Workspaces

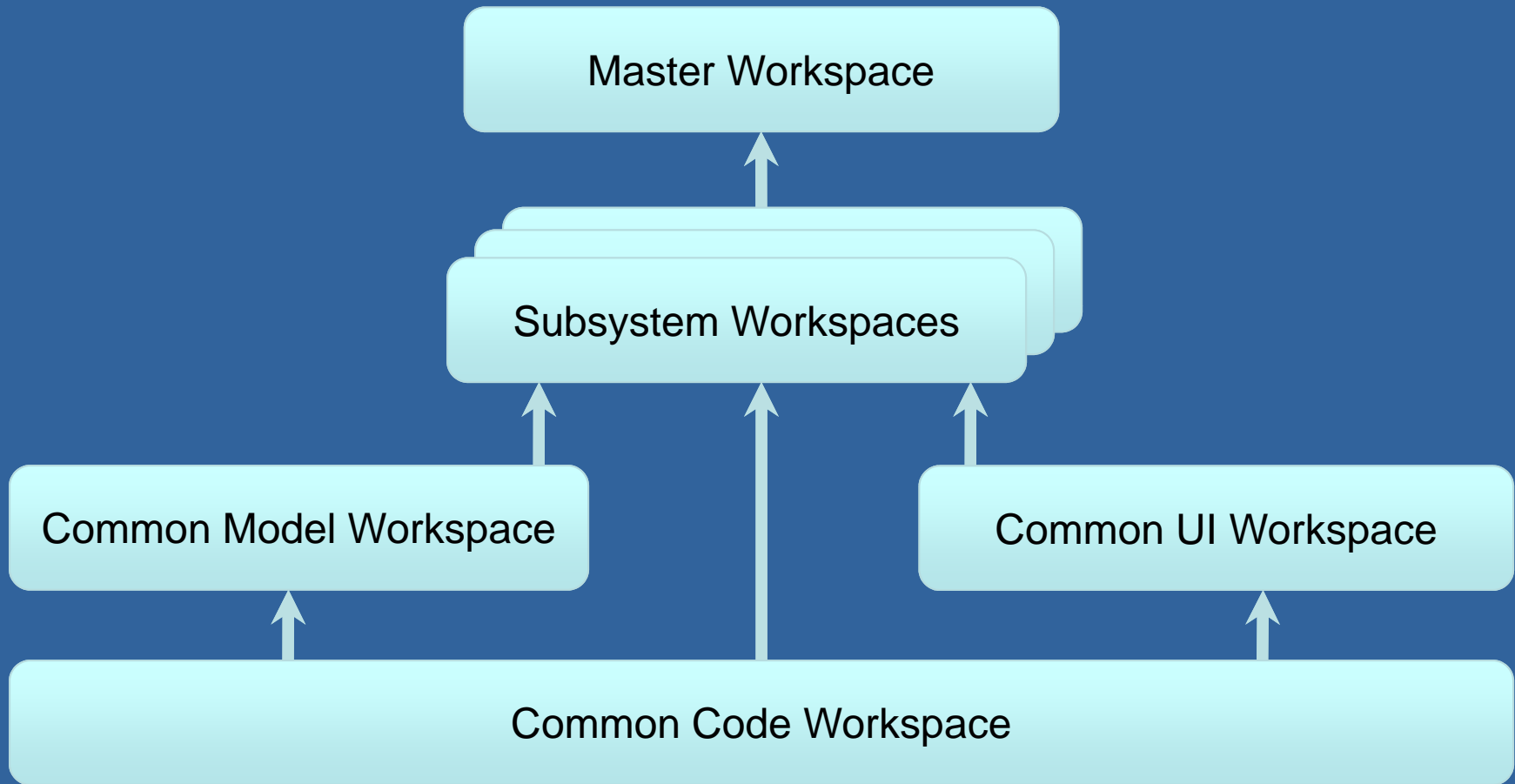
- Common Code
- Common User Interface
- Common Model
- (Database)
- Subsystem workspaces
- Master workspace



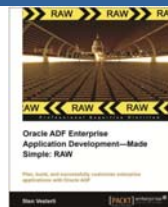
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# Workspaces



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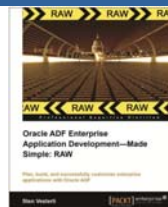


# ADF Task Flows

- One unbounded task flow
- Any number of bounded task flows
- A bounded task flow is a complete, re-usable component
- Recommendation: Your whole application should consist of bounded task flows



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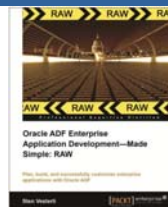


# Efficient Use of Templates



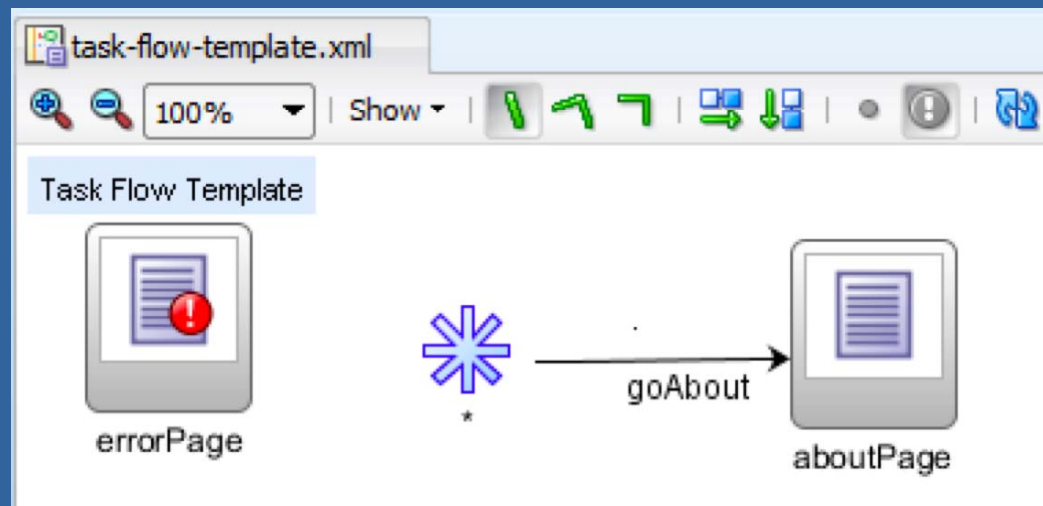
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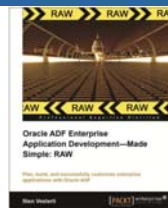


# Page Flow Templates

- A common exception handling page
- Common help or about pages
- Initializer and finalizer code



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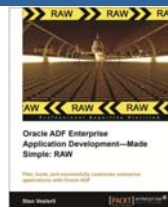


# Page Templates

- From scratch or from Quick Start
- Define facets
- Define attributes
  - For page-specific information in template areas
  - For different layouts based on the same template



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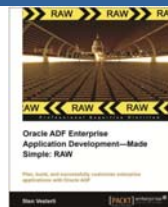


# Demo: Page Template



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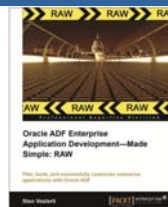


# Using Pages and Page Fragments



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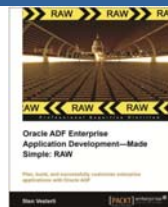


# Pages and Page Fragments

- Page
  - uses whole browser window
  - can run on its own
- Page Fragment
  - runs inside a region
  - can be replaced at runtime in a dynamic region



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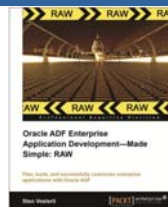


# Recommendation: Page Fragments

- Build your application using page fragments
- Use few pages (possibly only one)
- Use dynamic region to swap page fragments
  - this makes your application feel like a desktop application, not a web application



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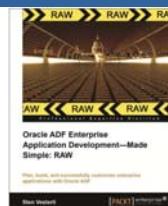


# Framework Extension Classes



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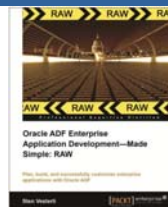


# The ADF BC Classes

- If you don't generate Java, the ADF BC classes are silently used
- If you do generate Java, your Java class will extend the ADF BC classes



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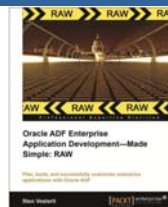


# Insert Your Own Classes

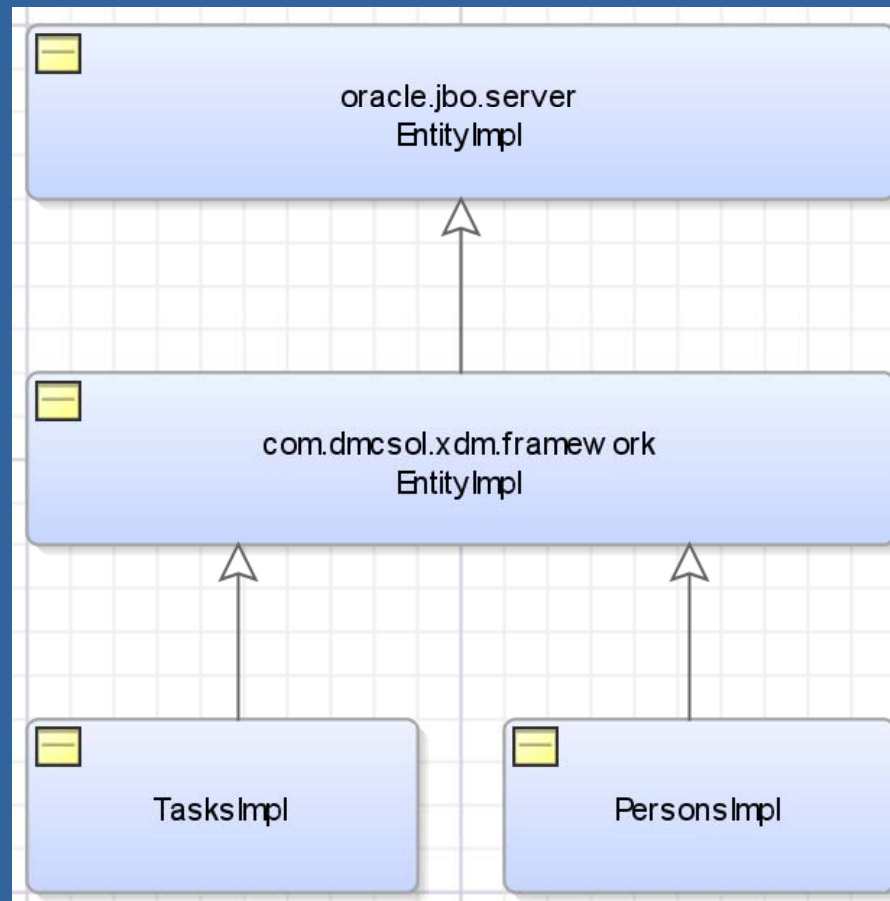
- Oracle delivers the ADF BC Base classes in the oracle.jbo.server package
- You can insert your own classes between your business components and the base classes



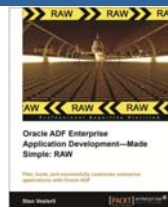
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# Insert Your Own Classes



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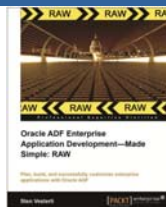


# The 8 ADF BC Classes

- Extend
  - EntityImpl
  - ViewObjectImpl
  - ViewRowImpl
  - ApplicationModuleImpl
- Don't mess with
  - EntityCache
  - EntityDefImpl
  - ViewDefImpl
  - ApplicationModuleDefImpl



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# Demo: Framework Extension



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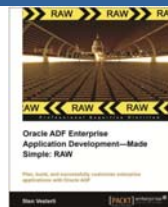


# The Hidden Power of ADF Libraries



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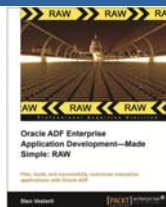


# ADF Libraries

- Package the output of a project into an ADF Library
- Place finished ADF Library under version control
- Other workspaces can use the ADF Library
- Build/Configuration manager decides on rollout of new versions of libraries



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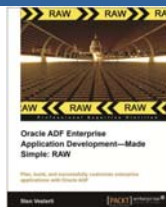


# Demo: ADF Libraries



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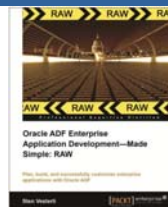


# Securing, Packaging and Deploying



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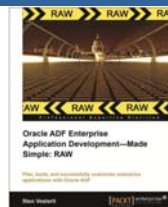


# ADF Security

- Authentication
  - Identifying a user
  - Container-managed
- Authorization
  - What a user can do
  - Application defines application roles
  - Application roles are mapped to user groups on deployment



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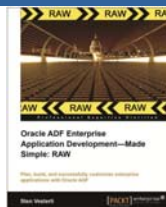


# ADF Security

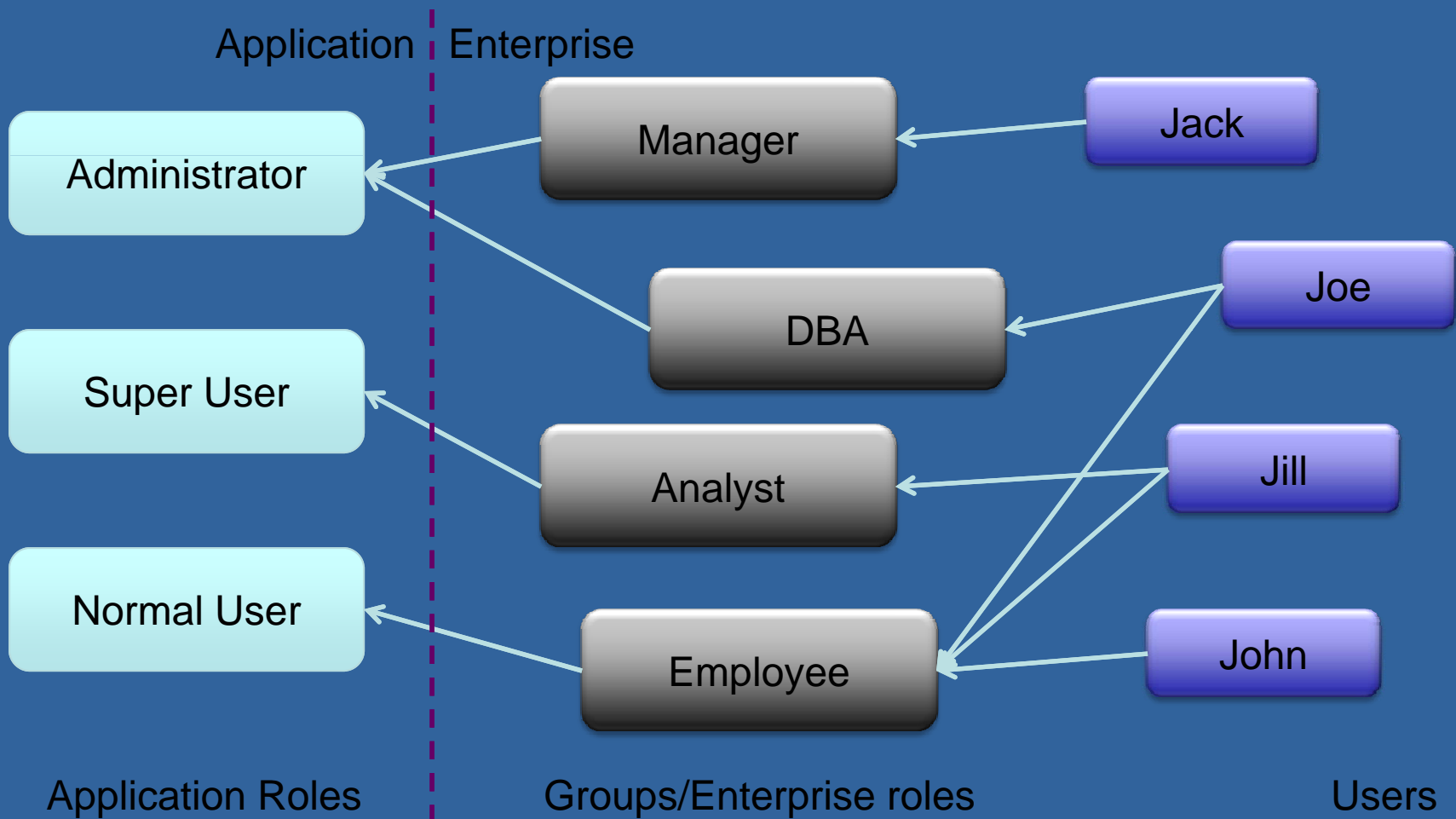
- Wizard for applying default security to your application
- Security at page, page flow and entity level



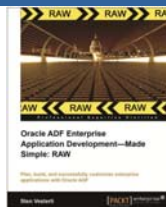
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# Mapping Application Roles



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# Data Sources

- Your application should use a named datasource
- When deploying, only include connection name
- Your application server administrator will define the data source on the application server



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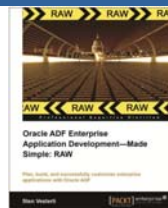


# The ojdeploy Tool

- Don't hand-deploy from JDeveloper to build your production code
- JDeveloper includes ojdeploy
  - a command-line tool that can do all deployment
- Example of use:
  - Add Ant to project technology and create Buildfile from Project

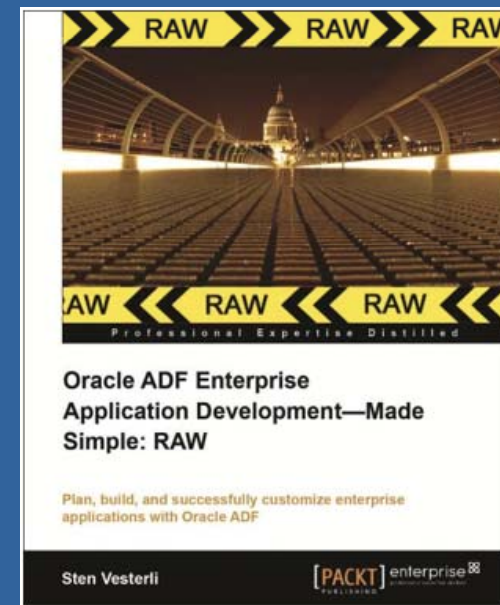


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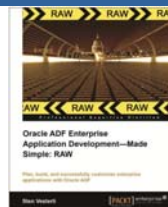


# References

- ADF Enterprise Methodology Group  
<http://groups.google.com/group/adf-methodology>
- My book: Oracle ADF Enterprise Application Development  
([www.packtpub.com](http://www.packtpub.com))
- My blog: [www.vesterli.com](http://www.vesterli.com)
- Twitter: [stenvesterli](https://twitter.com/stenvesterli)



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# Thank you for listening!

## Questions?



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