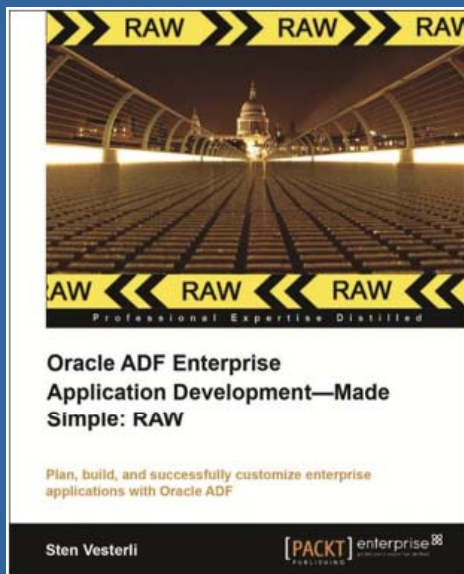


Starting an Enterprise ADF Project



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

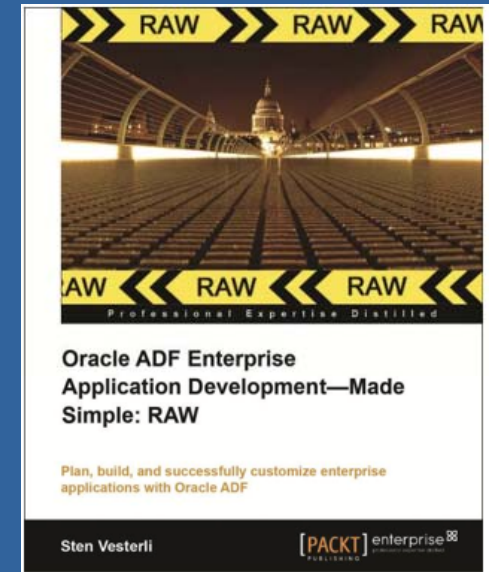
ADF EMG



- 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



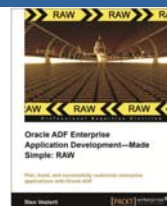
Bruce's daughter's cat

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



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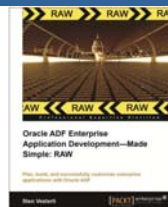


Agenda

- 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



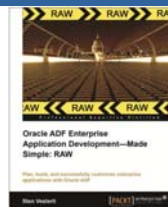
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Necessary Skills and Training



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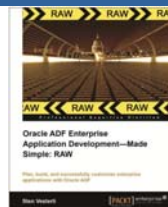


Skills Required

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



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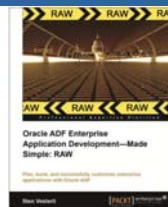


Organizing your Team

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



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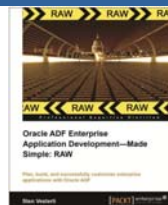


Programmer specialization

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



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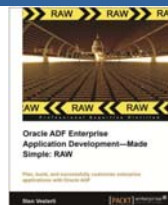


Initial Training

- 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 ocean wave crashing down. The water is a deep blue-green, and the spray is white and dense. In the foreground, a person is seen from the back, standing in the shallow water, looking up at the towering wave. The sky is dark and overcast.

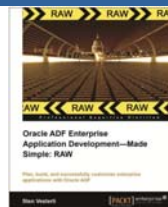
Starting an Enterprise ADF Project

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



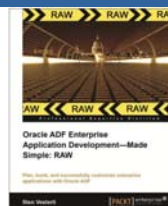
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Structure Your Code



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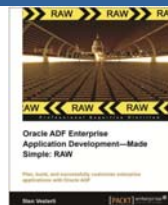


Workspaces

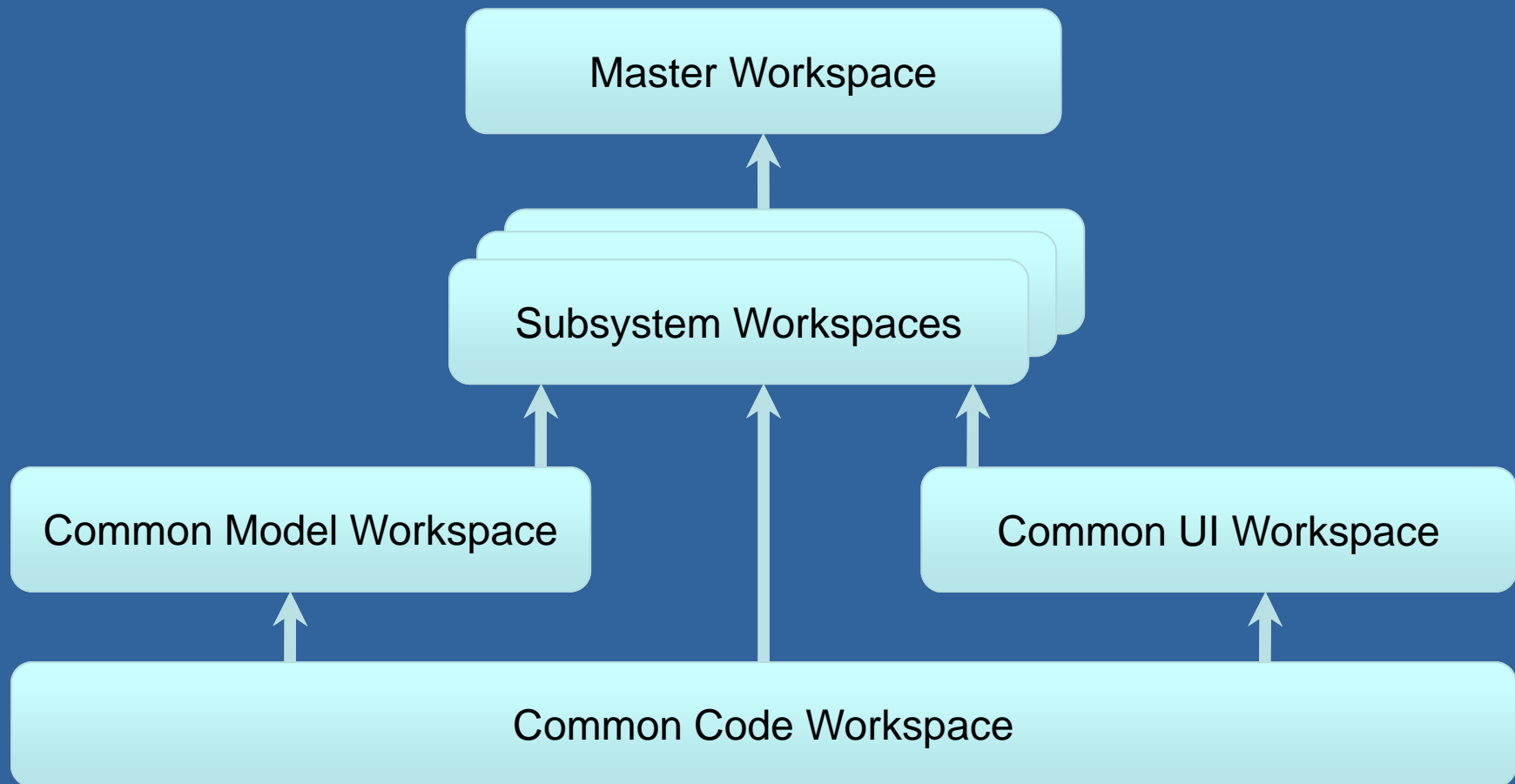
- Common Code
- Common User Interface
- Common Model
- (Database)
- Subsystem workspaces
- Master workspace



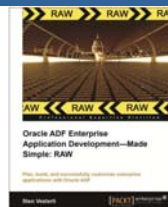
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Workspaces



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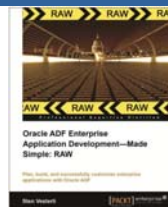


ADF Task Flows

- 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



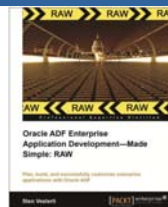
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Efficient Use of Templates

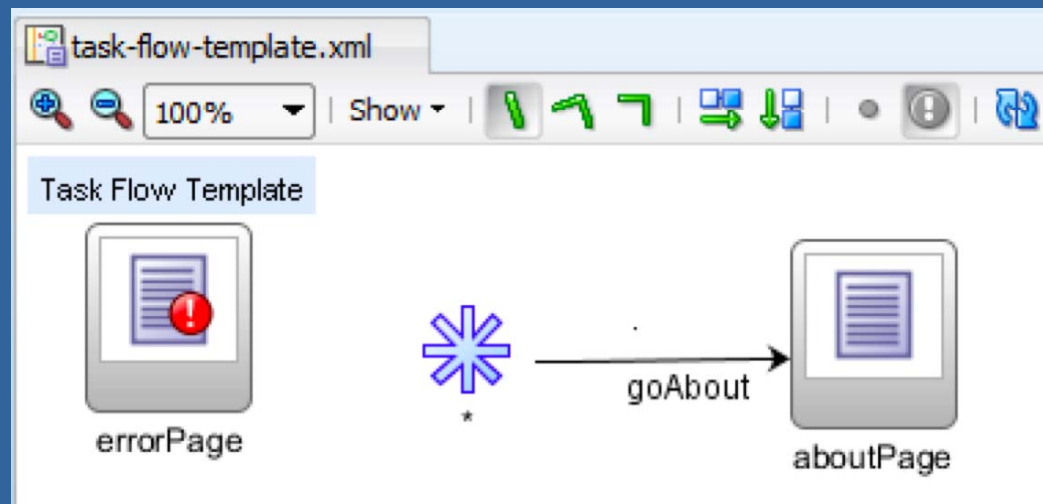


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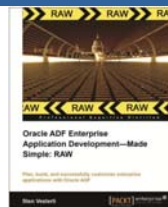


Page Flow Templates

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



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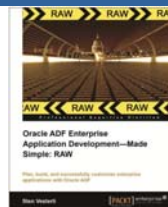


Page Templates

- 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



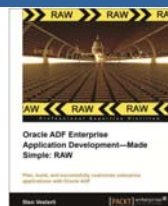
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Using Pages and Page Fragments



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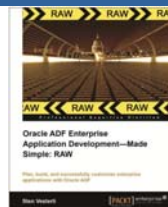


Pages and Page Fragments

- 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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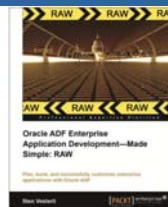


Recommendation: Page Fragments

- 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



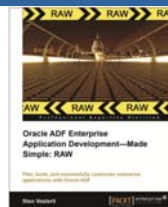
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Framework Extension Classes



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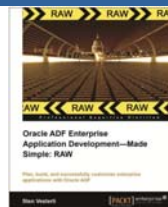


The ADF BC Classes

- 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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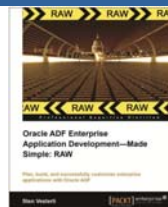


Insert Your Own Classes

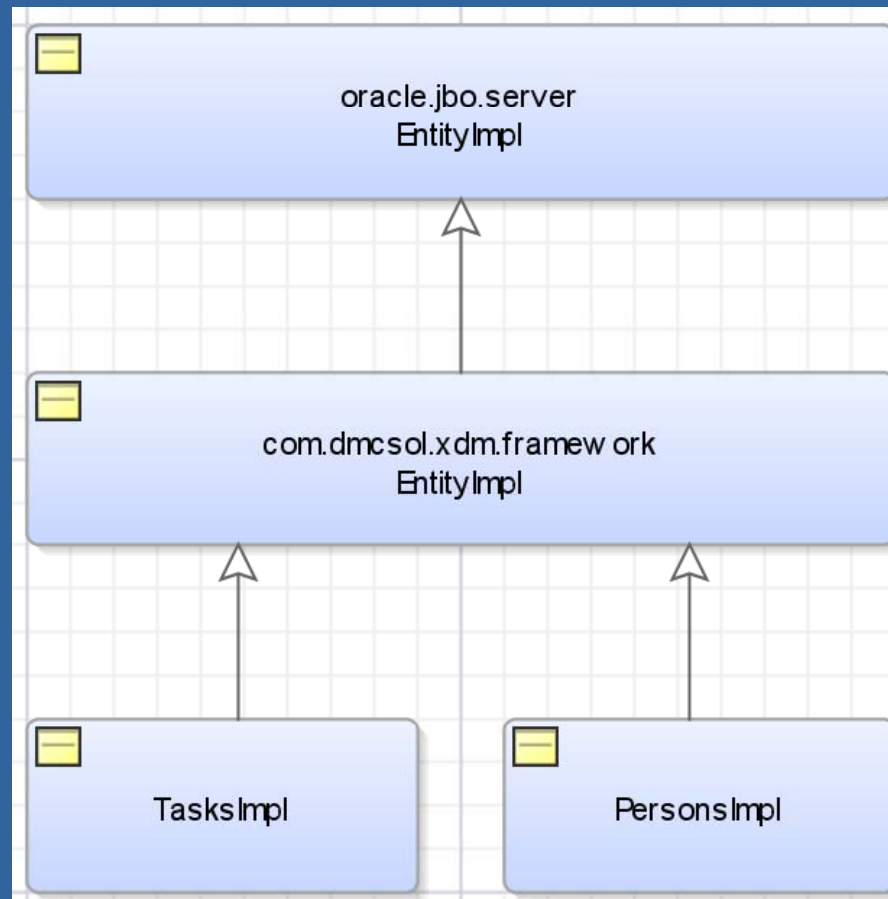
- Oracle delivers the ADF BC Base classes in the oracle.jbo.server package
- You can insert your own classes between your business components and the base classes



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Insert Your Own Classes



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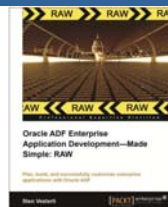


The 8 ADF BC Classes

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



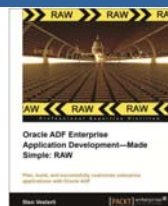
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Demo: Framework Extension



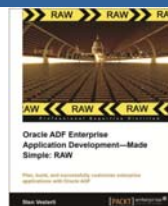
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The Hidden Power of ADF Libraries



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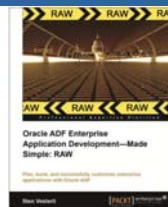


ADF Libraries

- 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



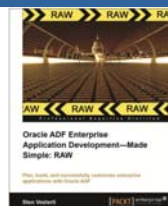
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Demo: ADF Libraries



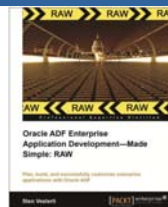
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Securing, Packaging and Deploying



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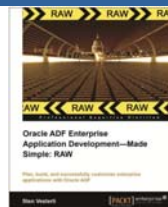


ADF Security

- 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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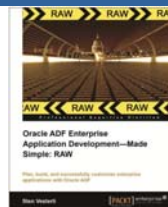


ADF Security

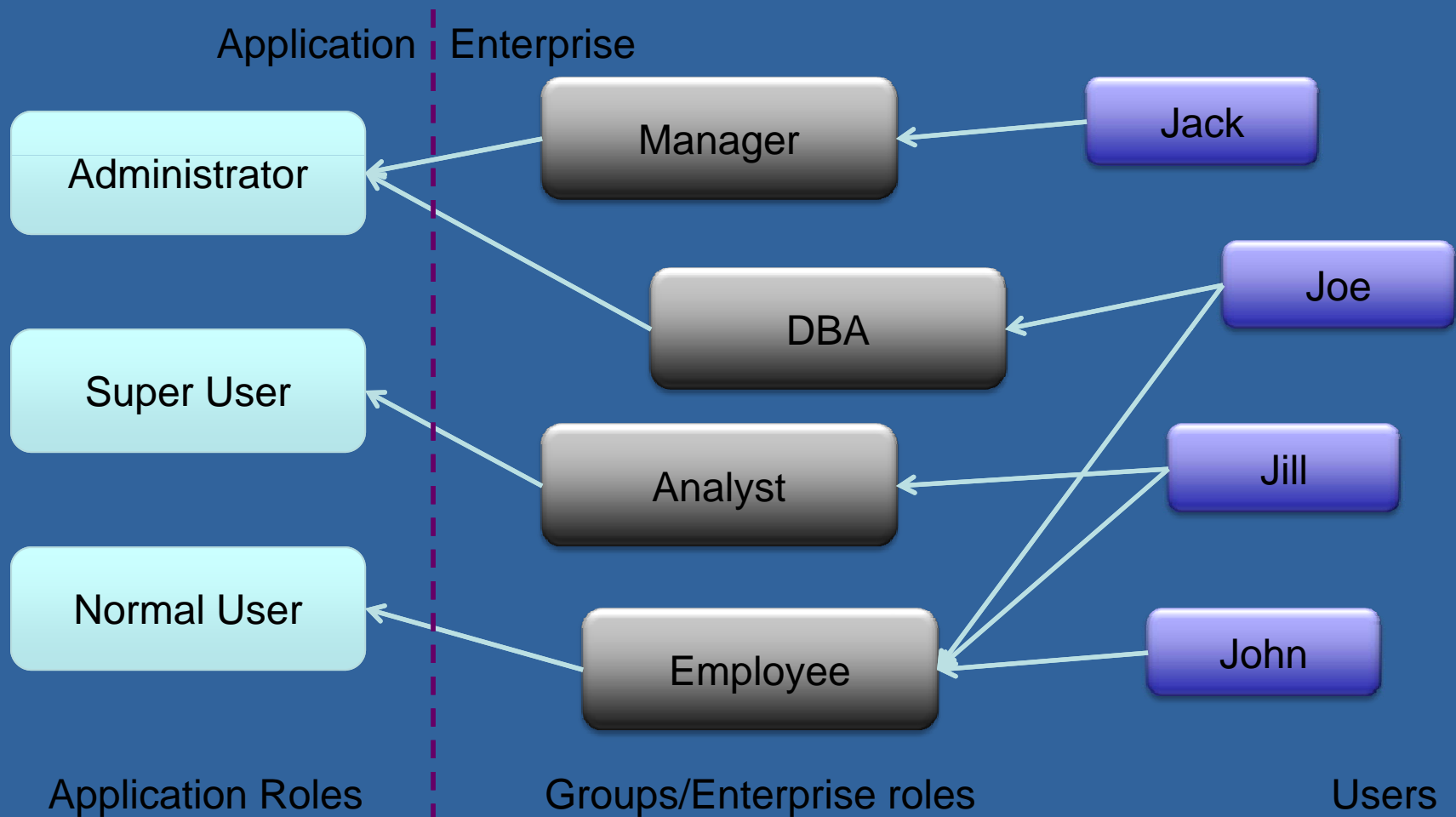
- Wizard for applying default security to your application
- Security at page, page flow and entity level



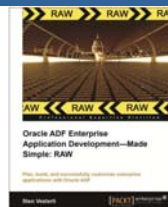
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Mapping Application Roles



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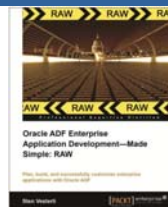


Data Sources

- 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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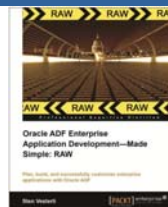


The ojdeploy Tool

- 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

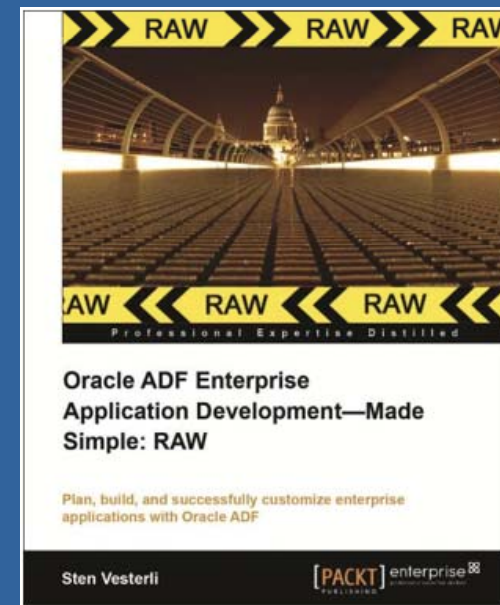


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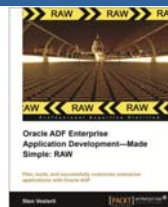


References

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



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Thank you for listening!

Questions?



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