ORACLE JHEADSTART 12C

DEVELOPING JEE APPLICATIONS HAS NEVER BEEN SO EASY

Are you concerned about developer productivity and the quality of your applications when moving to Java Enterprise Edition (JEE) platform? Do you lack JEE expertise in your organization? If so, you'll need to either hire JEE gurus or depend on powerful and flexible JEE frameworks.

The fully standard based Oracle Application Development Framework (ADF) in Oracle JDeveloper is a first-class JEE framework that hides JEE complexity and includes an easy to use drag-and-drop development environment. With ADF all your developers, not just Java gurus, can rapidly automate your business processes through applications that are easy to maintain and fit perfectly in a service oriented architecture (SOA)

Thanks to our experience with customers, Oracle Consulting has collected and embedded Oracle ADF best practices into powerful generators bundled with Oracle JHeadstart that allow you to increase developer productivity. Oracle JHeadstart enables JEE developers to create applications in minutes. Only limited knowledge of Oracle ADF is necessary to get started.

KEY BENEFITS

FOR JEE ENVIRONMENTS

- Unprecedented JEE developer productivity
- Only limited knowledge required to get started
- Consistent application because of generation approach
- Does not generate Java, simplifying maintenance
- Seamlessly integrated with ADF, allowing you to use ADF design time features for very complex pages
- ADF Faces allows you to easily set up your own look and feel
- Completely standards based, fully compliant with Java Server Faces, fits in a Service Oriented Architecture (SOA)
- Runs on every JEE-certified application server

EXTRA BENEFITS FOR DESIGNER/FORMS ENVIRONMENTS

- Makes the step to JEE easier
- Workflow is very similar to Oracle Forms and Oracle Designer
- Protects current investment because of reuse of metadata in Oracle Forms
- Helps you migrate Forms to JEE/ADF

RELATED SERVICES

The following services are available from Oracle Expert Services:

- JEE Pilot
- Forms to ADF Assessment
- Forms to ADF Migration Factory
- ADF-JHeadstart Workshop

The Oracle Application Development Framework

In addition to being a first-class IDE, Oracle JDeveloper includes the Oracle Application Development Framework (ADF). Oracle ADF simplifies JEE development by minimizing the need to write code that implements design patterns and applications infrastructure. Key characteristics include:

- **Integrated Development Environment** includes visual aids and a declarative approach.
- **Platform independence** ensures that applications based on ADF run on every JEE certified application server.
- **Model-View-Controller Architecture** simplifies maintaining and reusing components across applications.
- **Technology choice** allows developers to choose from multiple options for each layer in the model-view-controller architecture.
- **An end-to-end solution**, Oracle ADF provides a complete solution for every JEE layer and every phase in the development life cycle.

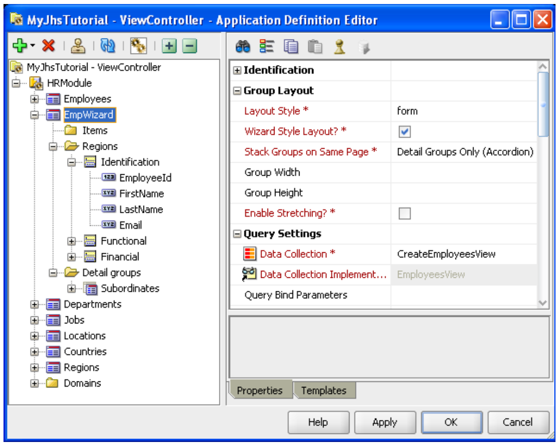
These characteristics make Oracle ADF a productive, powerful and flexible framework, indispensable for every JEE developer who wants to focus on functional requirements instead of low-level plumbing.

Oracle JHeadstart

JHeadstart is a development toolkit built on top of ADF that uses JDeveloper's extension API to fully integrate with the JDeveloper IDE. JHeadstart generates richly functional, ADF-based web applications with sophisticated features such as wizards, trees, shuttles (multi-select) LOV's with validation, advanced search, quick search, conditional dependent items, multi-language support, fine-grained security, dynamic breadcrumbs, dynamic menus, flex fields, pending changes alert, skin switcher, language switcher, page template switcher, and much more.

Oracle JDeveloper and ADF provide you with a way to build your application page by page declaratively. Oracle JHeadstart adds a new approach by specifying metadata and generating a complete application at once. Oracle JHeadstart automatically creates initial metadata. Based on data collections defined in your model layer, your first prototype can be running in minutes.

By refining your metadata via a simple property editor, you can create sophisticated applications that include many advanced transactional features, like wizards, trees and shuttles. The only thing you have to do is to click the generation button!



⊞ Identification	
⊟ Group Layout	
Layout Style *	form
Wizard Style Layout? *	☑
Stack Groups on Same Page *	Detail Groups Only (Accordion)
Group Width	
Group Height	
Enable Stretching? *	□
⊟ Query Settings	
Data Collection *	CreateEmployeesView
Data Collection Implement...	EmployeesView
Query Bind Parameters	

Figure 1 JHeadstart Property Editor

Why Oracle JHeadstart?

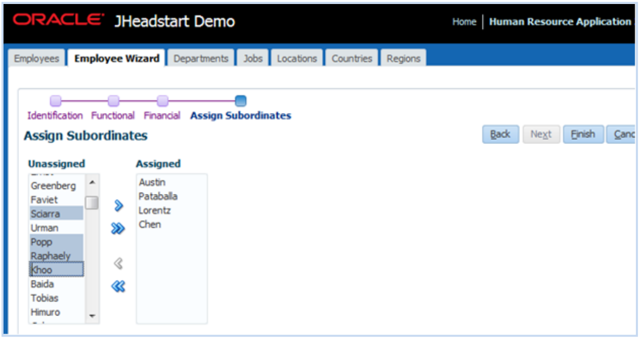
The main reasons to start using Oracle JHeadstart include:

Productivity: JHeadstart boosts JEE developer productivity and simplifies development so that everybody on your development team needn't be a JEE guru. *All* developers will be productive and can create complex pages from the first day. With traditional JEE development tools it might take days or weeks to get things done, with Oracle JHeadstart, they can be done in minutes or hours. JHeadstart also includes a set of standard components around fine grained security, the use of flex field, support for multiple languages and utilities to automate ADF development tasks. These alone will save you months of development work.

Flexibility: The JHeadstart generator architecture is extremely flexible. All generated content is 100% driven by generator templates that use the open source Velocity template engine. Each default template can be replaced by a custom template at the level of your choice: service, data collection group, region, item, domain, etc. By moving your post-generation changes to custom templates, and configuring JHeadstart to use your custom templates, you can keep your application 100% generatable, no matter what your functional and layout requirements are. The advantage of this template-based approach to customization over the option to switch of generation for certain files is agility: you keep all the benefits of agile development as described below.

Maintainability: Oracle JHeadstart does not generate any Java code. It generates XML files that configure and wire reusable components (JSF managed bean classes included in the JHeadstart Runtime) together in ADF controller files. This approach dramatically simplifies customization and maintenance of the generated application. The generated application auto-implements a host of ADF best practices that make it easier and faster to maintain the application

Reuse. The generated application uses all of the ADF best practices to maximize reuse of generated artifacts. JHeadstart generates a menu-driven application out of the box, but you can easily reuse the generated artifacts in other user interaction patterns, for example in a workflow-driven application where the transactions are launched from a personal task list.



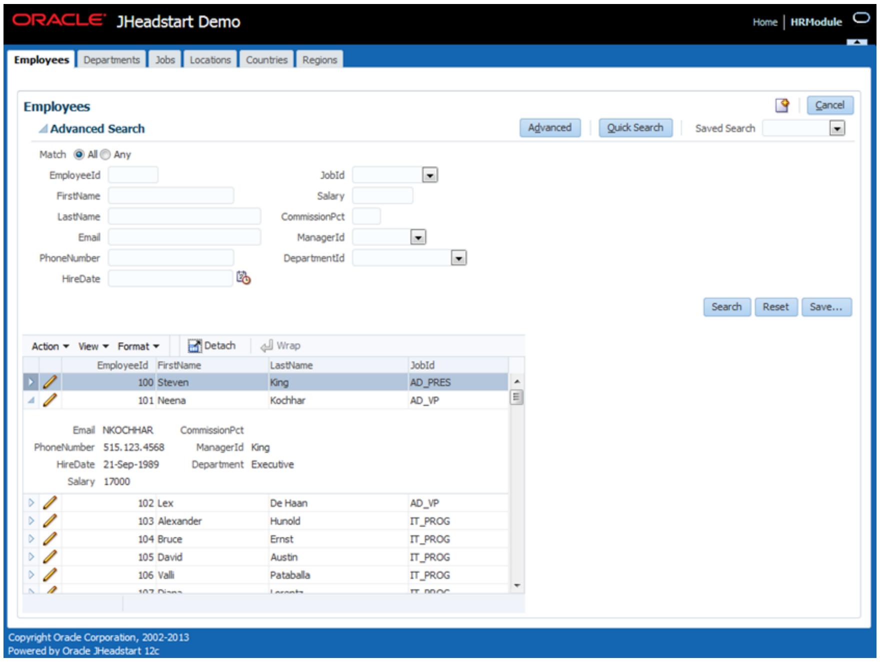
Assign Subordinates

Unassigned	Assigned
Greenberg	Austin
Faviet	Pataballa
Sciarra	Lorentz
Urman	Chen
Popp	
Raphaely	
Khoo	
Baida	
Tobias	
Himuro	

Figure 2 Wizard with shuttle control

Consistency: Because the application is generated you will receive a consistent look and feel across your complete application--from the outside as well as the inside.

Standards-based: Your generated application is standards based, fully compliant with Java Server Faces and can run on every ADF-certified JEE application server. The generation process allows you to grow with new and evolving standards such as AJAX. Updated generators will take your metadata and make your application compliant with these new standards.



EmployeeId	FirstName	LastName	JobId
100	Steven	King	AD_PRES
101	Neena	Kochhar	AD_VP
102	Lex	De Haan	AD_VP
103	Alexander	Hunold	IT_PROG
104	Bruce	Ernst	IT_PROG
105	David	Austin	IT_PROG
106	Valli	Pataballa	IT_PROG

Email NKOCHHAR CommissionPct
PhoneNumber 515.123.4568 ManagerId King
HireDate 21-Sep-1989 Department Executive
Salary 17000

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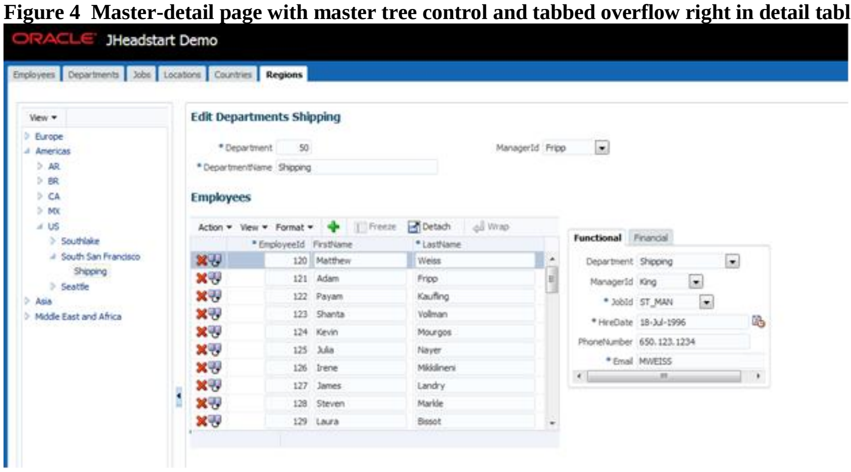
Figure 3 Table page with advanced search, inline overflow and deeplink on Job

Easy transition for Forms developers: For Oracle Designer and Oracle Forms customers, Oracle JHeadstart offers extra benefits. The visual and declarative development experience in Oracle JHeadstart and Oracle ADF is similar to that of Oracle Designer Forms Generator and Forms Builder respectively. As a result, making the transition to JEE is much easier for your development staff--even more so because JHeadstart includes the JHeadstart Forms2ADF generator which allows you to generate ADF application based on existing Oracle Forms definitions. With this capability you can continue to use Oracle Forms for back office applications and add self-service or internet applications using ADF based on the same Forms definitions. (For RuleFrame users, your business rules will be validated in both applications.) Or, if you prefer a more extreme approach, you can use JHeadstart to migrate your entire Forms application to ADF.

Agile Development: In traditional development methods, the analysis phase often results in massive piles of papers that should be read and signed-off by the user community. The disadvantages of this approach are widely known: if read at all, the requirements are easily misunderstood or misinterpreted by the users resulting in a system that does not meet expectations. JHeadstart allows for a better and faster approach: by quickly generating fully functional prototypes the user has a much better understanding of the functionality you will be providing. But agile development methods are much more than just rapid prototyping: rather than avoiding changing requirements as much as possible by signing off user requirements, they take change as a given, and even embrace change. JHeadstart embraces change as well. The more changes you have, the more JHeadstart shines.

Figure 4 Master-detail page with master tree control and tabbed overflow right in detail table



Edit Departments Shipping

* Department 50

* DepartmentName Shipping

ManagerId Fripp

Employees

* EmployeeId	FirstName	* LastName
120	Matthew	Weiss
121	Adam	Fripp
122	Payam	Kaufling
123	Shanta	Vollman
124	Kevin	Mourgos
125	Julia	Nayer
126	Irene	Mikkilineni
127	James	Landry
128	Steven	Markle
129	Laura	Bissot

Department Shipping

ManagerId King

* JobId ST_MAN

* HireDate 18-Jul-1996

PhoneNumber 650.123.1234

* Email MWEISS

More Information

To help you get acquainted with Oracle's JEE environment Oracle Consulting offers the JEE Pilot. Using your own business case, the JEE pilot provides you with a comprehensive introduction to JEE technology. When you are planning to move from Forms to ADF Oracle Consulting offers the Forms2ADF Assessment that results in a pilot application and a roadmap for the transformation to ADF.

For more information about Oracle JHeadstart and related services, please refer to the Oracle JHeadstart Product Center on OTN, contact your Oracle Consulting representative, or send an email to idevcoe_nl@oracle.com.