



Company: American International Relocation Solutions

Industry: Domestic and Global Relocation Solutions

Oracle Technology and Services:

- Oracle JDeveloper 10.1.3.1 / Oracle ADF
- Oracle JDeveloper plugin for SVN
- Oracle Application Server 10g
- Oracle RDBMS 10g Enterprise Edition

Additional Software

- SVN
- Windows for Client
- Unix for Server

Key Challenges:

- The developers entered the project with no prior knowledge of Oracle ADF, and had to learn the framework and deliver the application to production within a 9-month lead time.
- The new application must integrate seamlessly with the existing application, providing one solution to fulfill two different revenue streams: 1) international shipping of household goods, and 2) relocation services.
- Separate database schemas must also be consolidated into one.
- Hundreds of requests were received during development, and the framework had to be able to provide for quick implementation of the requests.

Solution: A client-server-based application named ISIS (International Shipment Information System) to provide internal users with a system, integrated with another business component application named IRIS (International Relocation Information System). This integrated environment allowed internal users to fulfill the full life cycle requirements of relocating an individual anywhere in the world.

Executive Summary: AIREs is an award-winning provider of world class domestic and global relocation solutions. Founded in 1981, AIREs offers corporate clients more than 26 years of expertise in all aspects of moving and relocation. From household goods moving, to real estate management, to expense management and beyond, AIREs offers the highest quality service for all relocation needs.

The Business Issue: AIREs initially specialized in the international shipment and storage of household goods for corporate employees. ISIS was designed internally in the mid-'90s to facilitate international moving. The application was built using Centura Team Developer, a 4GL high-level visual development system.

ISIS breaks down the relocation process into specific actions: setting up insurance, packing and loading a shipment, confirming departure and arrival dates, clearing customs, etc. An AIREs

Relocation Specialist assists shippers and coordinates with partners who handle shipments. The Relocation Specialist functions as a single point of contact between the relocating employee, the client, and all other service providers.

In 2000, AIREs expanded outside the movement and storage of household goods, and grew into a full-service provider of international relocation services, including Visa/work permit services, home sale/home purchase services, language and cross-cultural training, expense management, destination/settling-in services, and repatriation services. A separate application, IRIS, was designed to manage these additional relocation services. This new Java Swing and EJB2.0 application made use of a different database schema, and required interfaces to keep the two systems, ISIS and IRIS, in sync.

The migration of the ISIS application was a goal as soon as IRIS went into production. The goal of the ISIS migration project was to create a single relocation management system that would seamlessly handle relocation services and shipment of household goods.

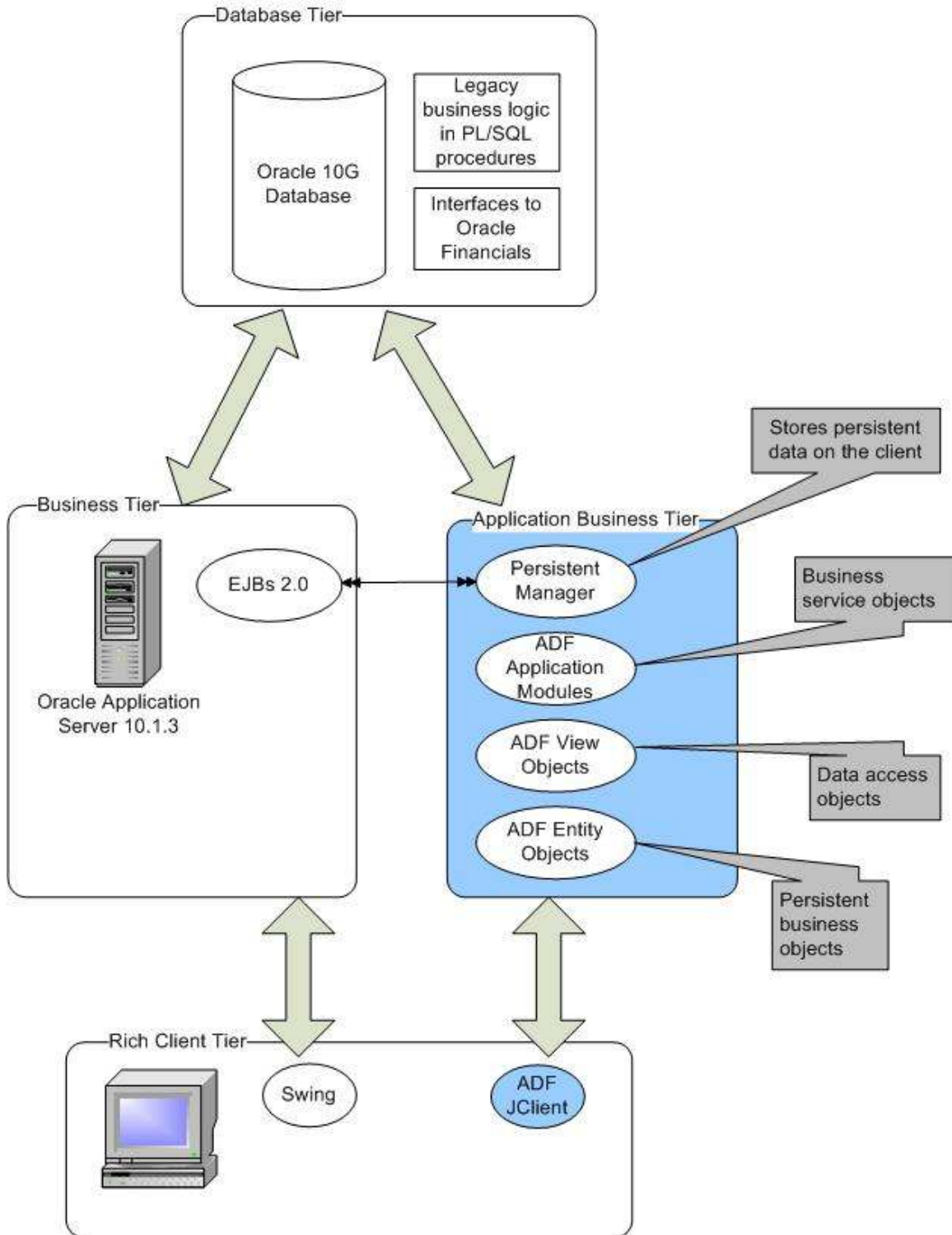
The Oracle Solution: Oracle JDeveloper/Oracle ADF, Oracle Application Server, Oracle RDMS: AIREs' CEO, Bryan Putt, wanted to achieve high development productivity and maintainability. He asked Jey Baskar, IT Director, and Vladimir Kaminsky, project manager at AIREs, to investigate new application frameworks to consolidate their applications and to allow the rapid development of new applications. Upon discovering Oracle's ADF Framework, and after a couple of hours of effort, Vladimir and Jey created a simple proof of concept and decided to move forward with ADF.

ADF Swing components were implemented for the thick client GUI, and ADF Business Components (ADF BC) for the business logic. ADF Bindings were used to bind ADF BC to ADF Swing. JDeveloper 10.1.3.1 was used for design and development, and SVN (along with Oracle's SVN plugin for JDeveloper) was used for source control. According to Vladimir, "SVN and Oracle's SVN plugin for JDeveloper worked seamlessly for both local and offshore development staff."

The application is client-server-based and the thick client runs on Windows. The server architecture consists of a single Oracle iAS 10g server and a single Oracle RDBMS 10g running on separate Solaris servers. The ISIS/IRIS application currently serves 200 internal users, with 90 concurrent users and roughly 6000 transactions per hour.

Vladimir credits the ADF Framework's ease of use with the rapid development of the application and its stability. According to Makrand Pare, senior developer and technical lead on the project, "ADF Data Binding eliminated the need for custom data retrieval and data persistence code. In addition, it helped make the application faster and better structured. Business logic was kept inside ADF BC so that the application was cleanly separated into Model and View projects."

AIReS ISIS/IRIS Architecture Diagram:



Business Value:

- ADF helped to ensure the consistency of development standards, as well as to streamline the efforts of AIReS' development staff, both local and offshore.
- ADF Data Binding eliminated the need for custom data retrieval and data persistence code.
- ADF Data Binding made the application faster and better structured.
- Application/Database consolidation has reduced AIReS' overhead and has provided for a more positive experience for internal users.

Oracle Value:

- Developers picked up the ADF Framework relatively easily, and were able to deliver an initial prototype to AIReS' CEO within a couple of hours.
- ADF BC provided an efficient way of communicating with the database through the object-to-database mapping, thus allowing the developers to think in terms of objects and their attributes, rather than in terms of database rows and columns.
- ADF BC easily were bound to the interface, ADF Swing components, using ADF Binding. This process minimized the amount of effort required to create a presentation tier, and also kept the GUI layer code clean
- The Oracle Solution provides a robust, scalable solution that can continue to support the needs of AIReS as they continue to grow. The application easily can be migrated to a web based solution utilizing ADF Faces in the future.

Project Scale:

- 2 Project Managers (1 local, 1 offshore)
- 2 local developers
- 3 offshore developers
- Approximately 30 plus screens were developed for thick client
- 9 month development lead time

Screen Shots:

IRIS – existing Swing/EJB application supporting relocation services

Assignment: 237870 for Steve Muench of Oracle Corporation

File Query Options Document Management PRS Shipment Help

Overview Transferee & Family Service Comment Activity & Finance PRS Reports

Assignment

Assign ID* 237870 Booked 9/19/2007
Status* Active Type Long-Term
Provider* AI Office* WCRO
Client ID* 44883 Repat Expense Mgmt?
Client Name Oracle Corporation
Policy Select one

Origin Address

Street1 500 Oracle Parkway
Street2
C*/St/Zip Redwood Shores CA 94065
Country* USA
Province

Client Contact

Name(f*/m/l*) Surinder Singh
Prefix/Gen/Email Mr. M ssingh@oracle.com
Comment
Wants to wait to begin the homes sale process until early next year. He will call me if anything changes, but otherwise, I will need to contact him in early January.

Destination Address

Street1 Park West Two
Street2 2000 Cliff Mine Road
C*/St/Zip Pittsbuigh PA 15275
Country* USA
Province

Service

- Service Info
 - CONSULTNG
 - HOSTCTRY
 - REALEST
 - TAXSVC
 - SHIPMENT

Transferee & Family

- Family Info
 - Steve Muench

AM / EMAC / PM / RS History

Function	Emp Name	Start Dt	End Dt
RELO	Chere Kitts	9/19/2007	
SALES	Bryan Putt	9/19/2007	

Add

Phone/Fax

Location	Type	Number
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Authorization/Tracking No.

Type	Number
Dept	Server Technologies
Misc 1	Consulting Product Ma...

Add Del

Recall Save

Migrated shipment application to ADF Swing

Sub-Service ID: 214932; Assignment ID: 237870; Steve Muench of Oracle Corporation #44883

File Options Document Management Reports

Obtain Client Ins Rqmts Mand. Tracing Done Unbilled Shipment

Overview Activity & Finance Containers Shipment Comment

Sub-Service ID: 214932 Status: A Pack*: TRI Routing*: DR Mode*: AIR Type*: EXP Est Move Date*: 01/01/2008 Est Wt: 7500

Auth Wt: 15000 Auth Stg: 5000 Auth Auto: 2 Act Wt: 0 Act Cube: 0 Act Dens: 0 Whse: Select State Cross: INTER Ton Rpt: Ins Claim: N Booked: 09/19/2007

Special Notes: All charges billed to the U.S. office, this is going to be partially unloaded at the residence, two deliveries: one to home and one to Self-Storage unit.

Tracking #s:

Type	No.	Comments
Auth #	45786261981	
PO #	24-784-54	

Add Delete

Origin Address: Street1: 500 Oracle Parkway Street2: C*/St/Zip: Redwood Shores CA 94065 Country: USA Phone: Province:

Destination Address: Street1: Park West Two Street2: 2000 Cliff Mine Road C*/St/Zip: Pittsburgh PA 15275 Country: USA Phone: Province:

Save

Credits:

AIReS
 Jey Baskar, IT Director, AIReS
 Vladimir Kaminsky, Project Manager, AIReS
 Makrand Pare, Senior Developer, AIReS
 Dana Singleterry, Oracle Corporation