



OTN Developer Day: Hands-on Oracle Database 11g Application Development

Abstracts

[Keynotes](#)

Keynote Part 1: Application Development Frameworks

The common thread for all application is the database. Oracle cares about all application development communities including Java, .Net, APEX, SQL Dev, PHP and other open source scripting languages. This demo packed part 1 of the keynote will look at application development frameworks, their corresponding Oracle extensions and what makes successful application development through examples such as Oracle store.

Keynote Part 2: Building Innovative Applications with Oracle Database 11g

This second part of the keynote will cover built-in database mechanisms for innovative application development such as:

- Performance
 - Top best SQL things to know: SQL optimization, recursive subquery factoring, analytic functions
 - Reduce Network roundtrip with Stored Procedures: PL/SQL, Java in the database and PreFetching
 - Compression / Partitioning
- Caching Strategy
 - Continuous query notification and mid-tier cache invalidation
 - In-Memory Database (TimesTen)
- Scalability: DRCP
- Information Management, Advanced Data Types: XMLDB, Text, Spatial
- Application Life Cycle: Edition-Based Redefinition
- Networking: Net Services.

[Java Track](#)

Simpler Enterprise Java Development with Oracle

In this two-hour lab you'll see how Oracle simplify developing enterprise Java applications on top of the Oracle database. Create web-based applications that interact with your database and provide rich and dynamic user interface. Learn how to use JSF and the rich ADF Faces set of components to create Ajax-enabled rich internet applications. Work with Oracle JDeveloper and Oracle ADF to learn how to simplify database access from your Java applications. This lab uses the same technology stack used to develop the Oracle Fusion Applications.

Developing with JDBC, UCP, and Java in the Database

Participants learn the latest about JDBC, Universal Connection Pool and Java in the database. They develop query change notification application using JDBC. They learn how the new Java Universal Connection Pool (UCP) work through a stock ticker application that retrieves stock price information from the database, and implementing client-query result cache. They develop and run Java in the database: loading Java classes; JIT compilation of Java classes in the database; mapping SQL and object types to/from Java types; define Call Specs; invoke Java in the database.

Oracle Application Express Track

Getting Started with Oracle Application Express 4.0

This hands on lab is designed for those that are new to Application Express and want to start from scratch and build an application. The lab starts with manipulating database objects before creating and running an application. The lab then continues by adding additional components and finishes with adding security to your application.

Building, Customizing and Using Interactive Reports in Oracle Application Express 4.0

Can your end-users see all the information you have stored in your database the way they want to see it? Do they keep coming back asking for different reports or formats of their data and need it yesterday? Chances are you answered yes to both of these questions. So the way to solve these problems is to give your end-users the power to maintain their own view of the data. This hands-on session will teach you how to utilize Oracle Application Express Interactive Reporting to exceed your user's online reporting expectations. What's more, if you can write simple SQL such as 'SELECT * FROM *my_favorite_table*' you are most of the way to delivering Interactive Reports through Oracle's browser based RAD tool Oracle Application Express. This lab covers both the basics and more advanced techniques which you can use with Interactive Reports.

Building Dynamic Actions in Oracle Application Express 4.0

Oracle Application Express 4.0 introduces Dynamic Actions which provide a declarative means to define client-side processing. Previously this involved hand crafting JavaScript and AJAX but with APEX 4.0 many Dynamic Actions require zero coding using the built-in wizards. This lab will cover the creation of various types of Dynamic Actions from the very basic to more advanced processes utilizing APEX Plug-Ins. {Plug-Ins will be provided and participants will not need to develop them in this lab}

Building Charts, Gantts and Maps with Oracle Application Express 4.0

If a picture tells a thousand words then it follows that a chart shows a thousand numbers. In this session learn how to create a variety of different chart types, from the most basic to more advanced charts including Gantt charts and Flash Maps, introduced in APEX 4.0. With APEX 4.0 the declarative capabilities within charts has been greatly expanded to make charts easier to customize and maintain. This lab will give enable you to fully utilize the charting capabilities built into Oracle Application Express.

Database Development Track

Introducing Oracle SQL Developer Data Modeler

Participants learn how to work with logical and relational models, import a design based on a script and directly from the data dictionary, make modifications and generate the DDL. The session includes creating a multi-dimensional model.

- Adding a Table to An Existing Database
- Modifying a Logical Model Using Inheritance and Object Types
- Generating a Multi-Dimensional Model
- Reviewing Your Oracle SQL Developer Data Modeler Design

Working with PL/SQL In SQL Developer

Participants work with PL/SQL, creating a new procedure, compiling, and debugging the procedure. They work with the latest new features introduced into SQL Developer 2.1, by creating and running unit tests for a PL/SQL procedure.

- Developing and Debugging PL/SQL
- Creating Unit Tests for your PL/SQL

Developing Database Applications using Oracle In-Memory Database Cache

Participants will learn how to cache a subset of Oracle Database tables in an in-memory database cache grid to improve response time and scalability in the application tier. They will also learn how PL/SQL can be speeded up by storing performance sensitive PL/SQL subprograms into a TimesTen In-Memory database, resulting in shorter SQL processing time and faster application response time.

Developing DB Applications using XML DB

Oracle XML DB provides high-performance native storage, retrieval, and management of XML data. With Oracle Database 11g Release 2, XML DB is taking another leap forward, providing exciting new storage and indexing options that improve performance and scalability for both structured and unstructured XML content. Learn how XML DB allows you to use industry standards like SQL/XML and XQuery and to store, index, query, transform, and access XML and relational data.

This HOL will provide an introduction to the following items:

- Using binary XML storage to store, query structured and unstructured XML content
- Indexing binary XML content
- Partitioning binary XML storage to improve performance and scalability

.NET Track

Getting Started with Oracle and .NET

This entry-level session introduces Oracle's offerings for .NET programmers including the Oracle Data Provider for .NET (ODP.NET), Oracle's high performance ADO.NET data provider. Also, learn about the Oracle Developer Tools for Visual Studio, Oracle Providers for ASP.NET, and .NET Stored Procedures. Step by step demos will be used to illustrate how you can get started using each of these free products. New and upcoming features will also be highlighted in this session, including Entity Framework, LINQ, WCF Data Services, 100% managed ODP.NET, and support for TimesTen.

Oracle and .NET: Best Practices for Performance and Deployment

This session explores how to tune Oracle Data Provider for .NET (ODP.NET) for fast data retrieval and statement execution. Particular emphasis will be made on new ODP.NET and Oracle Developer Tools for Visual Studio (ODT) tuning features. ODP.NET introduces self-tuning, which optimizes data retrieval based on run-time sampling. ODT now includes the Oracle Performance Analyzer, which monitors the running application, highlights performance problems, and offers specific recommendations, such as SQL tuning and indexing. This session will show how to use these new features and existing performance tuning techniques, including statement caching, setting fetch sizes, and statement batching. We will also dive into the best practices for deploying your application with a focus on xcopy deployment, the popular new way to bundle and deploy your application with ODP.NET.

Building .NET Applications with Oracle

At this Oracle/.NET hands-on lab, try out the latest features of Oracle Data Provider for .NET (ODP.NET) and experience Oracle Database's tight integration with Visual Studio. Step-by-step labs include using the integrated PL/SQL debugger in Visual Studio, ASP.NET web application development, Oracle Performance Analyzer, creating applications with Oracle User-Defined Types, ADO.NET support, ODP.NET best practices for performance, and database event driven development techniques. Choose whichever topic interests you and work at your own pace. Lessons cover different

levels of experience, including those for attendees who are new to .NET and Oracle, those who want to find out what's new, and those who are experienced users.