



On-site Oracle Course Descriptions

Instructor: Dan Hotka

Give your technical staff that competitive edge with Oracle Workshops. These courses are designed to enhance your staffs skill set to perform their job functions better. Authored Oracle Expert Dan Hotka has over 26 years experience with the Oracle RDBMS product and has designed the following courses to meet the demands of today's computing environment.

Each of these courses has a full descriptive course outline.

These workshops are designed to be held on-site, at your location. Dan has his own portable computer lab. On-site instruction enables more people to be trained with the same training dollar.

The course utilizes a variety of current tools. Students will have the opportunity to learn more about TOAD, SQL Developer, TextPAD, as well as the Oracle tools like SQL*Plus, and Dan's Java-based SQL Tuner.

Jump to [Business Intelligence Courses](#)

Jump to [What is Included](#)

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Oracle SQL Performance Tuning Tips and Techniques (1-Day, 2-day, and 3-day options):

The course starts out with a complete overview of the Oracle architecture so students can get an understanding how their SQL and applications can take advantage of the computing environment. This course includes a discussion on the differences of the various Explain Plan steps such as Merge-Join and Nested-Loop, and when is it best to use each. Dan goes into considerable detail, with SQL examples, on how the optimizers (both rule and cost) make their decisions. Students will work with a variety of SQL statements, reviewing explain plans and making changes to make these SQL statements perform better. Students will also experience how to monitor their application environment, their indexes, and see how to find problem SQL in their applications. This course takes a close look at indexes: how Oracle selects them, why they are sometimes not used, and how to tell if indexes are being used/not being used.

The focus this course is tuning SQL via coding style. The instructor finds that tuning in this fashion maintains the performance of the SQL when migrating to other Oracle environments (upgrades to newer releases). Students will also experience how to monitor

their application environment, their indexes, and see how to find problem SQL in their applications using Stats Pack and the V\$ dictionary tables.

This course covers hints, index utilization, as well as a variety of useful tools such as Oracle Trace, PL/SQL Profiler, StatsPack and Advanced Workload Repository.

Topics covered includes:

- Understanding SQL Tuning Statement Topics
- Reading Explain Plans/Understanding Explain Plans
- Controlling both the Cost and Rule-based Optimizers
- A close look at Indexes – how they work and how they are selected
- SQL Tuning via coding style
- Oracle Trace Facility/Stats Pack/Wait Events covered
- Profiling PL/SQL, PL/SQL Coding Tips
- Various Oracle traces
- Advanced Workload Repository
- Materialized Views, Partitioning, and SGA segmentation reviewed
- Tablespace options, fragmentation, and clustering factor topics

SQL Developer for IT Staff (1-day)

Dan will illustrate the latest features of SQL Developer necessary to view, extract, and manipulate data within the Oracle database. This workshop covers all of the features necessary to develop, manipulate, and debug PL/SQL code, develop & tune SQL statements, and discover all of the features of SQL Developer. This short course will also cover exactly how to put Oracle data into Excel spreadsheets. Dan will also show how to see the data relationships of the application data and how to view this data. This course includes a copy of my book: Oracle SQL Developer Handbook by Oracle Press.

TOAD for IT Staff (1-day)

Dan will illustrate the latest features of TOAD necessary to view, extract, and manipulate data within the Oracle database. This workshop covers all of the features necessary to develop, manipulate, and debug PL/SQL code, develop & tune SQL statements, and discover all of the features of TOAD. This short course will also cover exactly how to put Oracle data into Excel spreadsheets and take data in Excel spreadsheets and put it back into the Oracle database! Dan will also show how to see the data relationships of the application data and how to view this data.

TOAD Power User Tips and Techniques (1-day)

Dan will illustrate the latest features of TOAD necessary to view, extract, and manipulate data within the Oracle database. This short course will also cover exactly how to put Oracle data into Excel spreadsheets and take data in Excel spreadsheets and put it back into the Oracle database! Dan covers the SQL Editor, formatting data in the Data Grids, creating reports from TOAD, and more.

Dan will also show how to see the data relationships of the application data and how to view this data.

Introduction to Oracle (2-day):

This course is excellent for users and managers who simply need to know more about Oracle.

- Oracle Architecture
- Introduction to SQL topics: Select, Insert, Update, Delete
- SQL Scripting Topics (Formatting SQL & creating web-based reports!)
- Creating Tables/Indexes
- Working with ODBC and Microsoft Products
- Advanced Topics (Functions, cross-reference output, Referential Integrity)

Introduction to PL/SQL (2-day):

The attendees have the opportunity to construct various PL/SQL routines to solve simple and complex business questions. Dan will cover how to code PL/SQL, access data in a variety of methods, error handling, and will touch on debugging PL/SQL.

Topics covered:

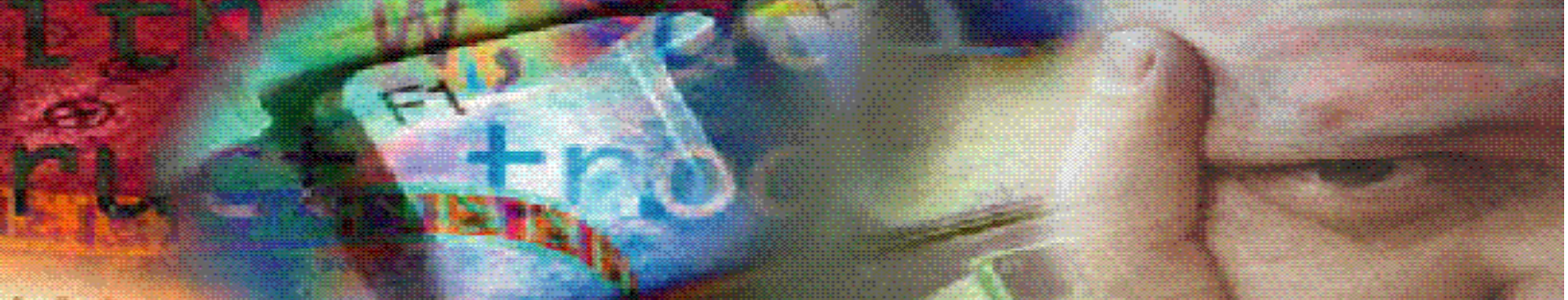
- Oracle Architecture
- Introduction to PL/SQL
 - Syntax and language structure
- PL/SQL Topics
 - Cursor management
 - Exception handling
 - Procedures/Functions/Triggers
 - Packages
 - Collections

Advanced PL/SQL Tips and Techniques (3-day):

The attendees have the opportunity to learn a variety of advanced PL/SQL techniques including advanced cursor management/cursor sharing, code sharing, code debugging, transaction management, and more. This course includes a variety of Oracle performance techniques and also is a good overview of Oracle10g and Oracle11g new PL/SQL features.

Topics covered:

- Oracle Architecture
- Introduction to PL/SQL



- Syntax and language structure review
- PL/SQL Topics
 - Package Usage (both User Defined and Oracle Defined Packages)
 - Compiling options
 - Cursor Sharing/Cursor Variables
 - Collections
 - Dynamic SQL
 - Autonomous Transactions
 - Working with Large Objects
 - PL/SQL Coding Tips
 - Debugging PL/SQL
 - Profiling PL/SQL

Oracle10g New Features for Developers (4-day):

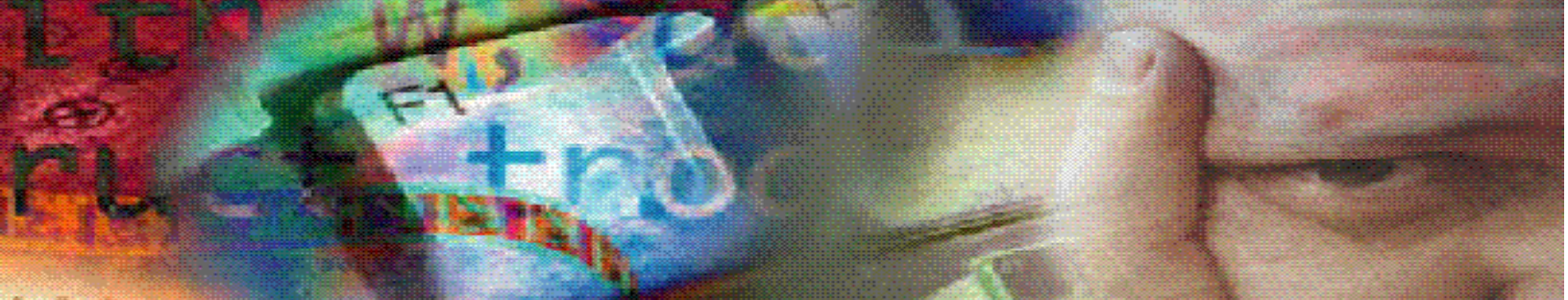
The purpose of this course is to present some of the most advanced features available to database developers. Many of these features are either newly available with the Oracle10g release or have been substantially improved with that release. Among the specific subjects presented in this course are:

- A review of the grid-computing and manageability architecture available from the Oracle 10g release of the database and the application server.
- Database flashback technology, including flashback queries, flashback table, flashback versions query and flashback transaction query capabilities.
- Creating and using directory objects within the database.
- The Data Pump Export and Import utilities.
- A comprehensive look at all index types available when building an application schema, including B-tree internals, function-based, compressed, reverse key, linguistic, bitmap and bitmap join indexes.
- A comprehensive look at all table types available when building an application schema, including heap-organized tables, index clusters, hash clusters, index-organized tables, external tables, temporary tables and compressed tables.
- Advanced SQL hierarchical data processing capabilities available from the CONNECT BY PRIOR and related language structures.
- Enhanced SQL and transactional capabilities, including asynchronous commits, DML error trapping and use of regular expressions.
- Enhanced PL/SQL programming capabilities and compiler directives.
- A brief glimpse into the Enterprise Manager database interface which may be of occasional use to senior developers.

Oracle/Unix Scripting Tips and Techniques (3-days):

This course is perfect for those who know Oracle but are new to Unix. Dan has assembled many of his Oracle/SQL*Plus/Unix scripting techniques into a single course. This course covers scripting techniques for Oracle, Oracle SQL*Plus, Unix/Linux, and mixing Oracle and Unix/Linux together.

- Introduction to 'tools of the trade' – various editors in Today's scripting world
- Introduction to shell programming
- SQL*Plus Reporting and Web reporting techniques
- SQL creating SQL
- Building Oracle data-driven scripts
- Unix Shell Programming: Paging Script, Monitoring Scripts, Scripts to Automate Repetitive tasks
- Oracle/Unix Shell Techniques



Oracle for Business Intelligence Users:

Oracle Answers (Oracle BI EE Analytics) Training for End Users (2-day)

This course introduces students to the querying and analytical capabilities of Oracle Analytics (Oracle BI Enterprise Edition) using the web interface. Students will learn to create, modify, run, and refine ad hoc queries. They will learn to view, chart, and analyze multidimensional data. They will also learn to produce individual ad hoc reports.

Oracle Analytics (Oracle BI EE) Training for Administrators (2-day)

This course gives students hands-on experience with setting up the Oracle Analytics end user data access environment. Students will practice administrative tasks using Oracle's Administration Enterprise Edition tool. Students will learn to create the RPD data definition repository and create and manage business areas. Students will learn how to hide the complexity of the data source and provide a user-friendly view of the data for end users.

Oracle Discoverer (Oracle BI SE) for End Users (2-day)

This course introduces students to the querying and analytical capabilities of Oracle Discoverer Desktop or Discoverer Plus/Viewer (web interfaces). Students will learn to create, modify, run, and refine ad hoc queries. They will learn to view, chart, and analyze multidimensional data. They will also learn to produce individual ad hoc reports.

Oracle Discoverer (Oracle BI SE) for Administrators (2-day)

This course gives students hands-on experience with setting up Oracle Discoverer. Students will practice administrative tasks using Discoverer's Administration Edition tool. Students will learn to create an End User Layer and create and manage business areas. They will learn how to hide the complexity of the data source and provide a user-friendly view of the data for end users.

Introduction to Oracle (2-day):

This course is excellent for users and managers who simply need to know more about Oracle.

- Oracle Architecture
- Introduction to SQL topics: Select, Insert, Update, Delete
- SQL Scripting Topics (Formatting SQL & creating web-based reports!)
- Creating Tables/Indexes
- Installing and using ODBC Drivers with Microsoft Tools
- Advanced Topics (Functions, cross-reference output, Referential Integrity)

Advanced Oracle for Business Intelligence Users (2-day):

- Oracle Analytical SQL (Rollup/Cube/Rank Over/Percentiles/Offset Functions)
- Introduction to SQL Statement Tuning:
 - Using Explain Plan Tools
 - Indexing Review
 - Reading SQL Explain Plans
 - Understanding the Oracle SQL Optimizers

Dan offers the following training as well...

These classes are available on-site, in your own training center or conference room.

[Introduction to UNIX/Linux \(2 days\)](#)

[UNIX/Linux Shell Programming \(2 days\)](#)

All Courses Include:

Lectures and topics are enhanced with live illustrations and hands-on exercises. Dan has his own portable computer lab or we can use your PC lab facility

Course descriptions are available at www.DanHotka.com .

Attendees Receive:

- Study guide with presentations and relevant white papers
- Most workshops include a relevant book
- Diskette full of tuning and problem discovery scripts
- Opportunity to ask the tough Oracle questions
- A hands-on opportunity to learn more about Oracle

About Dan Hotka:

Dan Hotka is a Training Specialist who has over 31 years in the computer industry and over 26 years of experience with Oracle products. He is an internationally recognized Oracle expert with Oracle experience dating back to the Oracle V4.0 days. Dan's latest book is the TOAD Handbook by Pearson. He is also the author of SQL Developer Handbook by Oracle Press, SQL Developer Handbook by Oracle Press, Oracle9i Development By Example, and Oracle8i from Scratch by Que and has co-authored 7 other popular books including the Database Oracle10g Linux Administration by Oracle Press. He is frequently published in Oracle trade journals, and regularly speaks at Oracle conferences and user groups around the world. Visit his website at www.DanHotka.com. Dan can be reached at dhotka@earthlink.net .

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Reference from one client to a prospective client:

As Coordinator of Human Resources Development, I oversee training and development for all of our employees (approximately 1400 employees).

In May of this year, I hired Dan Hotka as an independent contractor to train 36 of our programmers on our campus. Dan worked with one of our IT managers and myself to customize a SQL Tuning and Troubleshooting program that would meet our specific training needs.

The resulting program exceeded our expectations, and our employees came out of the training with skills that they were able to immediately apply to their jobs.

From my perspective, one of Dan's greatest strengths as a trainer is that he has real world experience using the software. He's not just a trainer who has learned the software and teaches a class. When I contract with a trainer, I expect him to be able to answer specific questions that our employees have about the work they are doing. Dan was able to take on that consulting role and apply the software to the work we are doing here.

We have recently approved our development plans for FY04, and I am certain that we will be working with Dan to develop training programs again this year. I would most definitely recommend Dan Hotka to our best clients because of the real world experience he brings to the classroom and his willingness to meet our specific training needs.

Regards,

(name and company withheld by request)

*Coordinator Human Resources Development not-for-profit organization
Iowa City, IA*