



www.DanHotka.com Quarterly Newsletter

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Dan Hotka is now an Ace Director 🏆. Please invite me to speak at your user group...this program from Oracle Corp will help me with my expenses to/from your event.

http://www.oracle.com/technology/community/oracle_ace/index.html

Oracle ACEs and Oracle ACE Directors are known for their strong credentials as Oracle community enthusiasts and advocates, with candidates nominated by anyone in the Oracle Technology and Applications communities.

Dan Hotka is a Training Specialist who has over 32 years in the computer industry and over 25 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, 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.

Oracle Open Week. I am dedicating this newsletter to things learned at Oracle Open Week 2011. This was another massive event that drew over 45,000 to the Bay Area!

My ACE Director status had me in special meetings designed just for the ACE program the week before OOW. I am assigned to the Optimizer Group and met with members of the team that actually write the Cost-Based Optimizer! I have already updated my SQL Tuning class and related user group presentations with this information.

I will discuss Oracle's direction with:

- Big Data
- Cloud Computing

I am offering the below two classes over the web. I work with a great fellow out of Ireland so will offer these classes twice on the same day! 10am to 1pm Chicago time for those of you based in the USA and 12pm to 3pm London Time for those of you in Europe. People elsewhere...pick the time zone that works best for you. IF I get a lot of interest from Asia/Pacific...sure...I can run them in a third time zone!

SQL Performance Tuning: My ever-popular class in 4 half-day sessions aimed squarely at developers. The focus of this class is problem SQL. I concentrate on how Oracle assembles explain plans and how to control the explain plan thru hints and coding style. My material goes into great detail on how indexes work and how Oracle selects them and skips them. I cover the important tools needed to capture and tune problem SQL.

Advanced PL/SQL Programming Tips and Techniques: Another popular class that runs all week in a half-day format. This class could easily be called 'New Features for Developers'. I cover the new compiler features, trigger features, cursor management, and collection features. This

course covers many of the performance issues associated with both SQL and PL/SQL. I share my years of tuning experience using PL/SQL to solve some of the more difficult issues I have faced.

More information and registration: [Click Here](#)

Check out my new book!

This newsletter, along with all prior newsletters, are available at www.DanHotka.com.

What's in this issue?

User Group Information:

- See Dan in Omaha and Denver!
- I have several new presentations for User Groups – See New Presentations. A complete list of topics is at <http://www.danhotka.com/>

OOW: Big Data

- [Click here](#) to learn what this is, some new terminology, and Oracle's approach.

OOW: Cloud Computing

- Again, [click here](#) to learn some new terminology and I'll discuss Oracle's offerings as outlined during the conference

Blogging

I've been blogging lately on TOADWorld.com. [Click here](#) to check out my entries on cool stuff both Oracle and TOAD provides. Also check out DanHotka.Blogspot.com. I have been posting some of my newsletter articles out there.

Training at your Desk!

Training over the web by Dan. [Click here](#)

Educational Offerings

- [Training at your Desk!](#) Training over the web by Dan.
- [On-site at your company](#) or in your city via user group participation.

Featured Presentation

- TOAD as a Tuning Tool (New Presentation) [Click here](#)

Book Reviews

TOAD Handbook by Scalzo and Hotka (Pearson Education)

Oracle SQL Tuning: A Close Look at Explain Plans by Dan Hotka.

[Click here.](#)

Free Downloads

- New SQL Trace start/stop scripts available. [Click here](#)

The Back Page:

- Early Telephone Systems
- A Pioneer Village
- [Click here](#)

Puzzler...

What is considered the first Internet?

Go to www.DanHotka.com for the answer! There are other popular Windows operating systems lines of code as well.

Educational Offerings

Training at your Desk!

These 3 classes are offered on a regular basis thru this fall.

Oracle SQL Performance Tuning for Developers

Oracle Advanced PL/SQL Tips and Techniques

Introduction to TOAD for Oracle

You get the same quality lectures packed full of current Oracle information and the ability to ask relevant questions. The half-day format provides the perfect learning experience and allows you to perform your regular job functions during company time.

These classes will be offered twice in the same day to accommodate the USA and Europe.

- 10am to 1pm Chicago time zone
- 12pm to 3pm London time zone

All of my course offerings include hands-on lab exercises. These web classes depend on you to have your own lab environment. I provide:

:

- The scripts to build the lab environment on your companies development environment
- Links to get Oracle10g Express, SQL Developer, and TOAD to setup your own personal lab environment, along with the scripts to build the lab environment
- VMWare images with Oracle10g Express, SQL Developer, TOAD, and the lab environment scripts all pre-installed.

Course guides and the above lab environment assistance will be delivered prior to the class via email. The course guides contain all the presentation slides, instructors' notes, and lab exercises with lab answers.

[Click here](#) for course outlines and registration detail.

Onsite Training at your company!

Please remember that my portable computer lab make these courses very easy to teach at your site. The cost of this lab is included in my 1-fee pricing model (see below).

My PL/SQL training offerings include both Intro to PL/SQL (a 2-day course) and Advanced PL/SQL (a 3-day course). This advanced course could easily be named "New Features for Developers". Both courses cover using the Oracle PL/SQL Profiler and other PL/SQL tuning topics.

The focus of my SQL Performance Tuning course is to cover exactly how Oracle arrives at the explain plan, how Oracle uses/includes indexes in these plans, and tuning using a coding style that I find helps keep the tuned SQL stay tuned.

I have adapted this course to 1-day, 2-day, and 3-day offerings. The 2-day version is aimed at developers where the 3rd day features more advanced topics typically of interest to DBAs. This course also illustrates various tuning tools such as Stats Pack, SQL Trace, and the PL/SQL profiler, as well as advanced topics that include SQL Profiling, finding SQL problems using the V\$ tables, and Oracle10g performance issues.

Pricing Model for Training

I price my on-site courses at a fixed rate for up to 12 attendees. This rate compares to the price that others charge for just 2 to 4 attendees. This course fee always includes the use of my portable computer lab and the course guides.

The web-based training is a per-person price and is all-inclusive. The course guide and lab setup scripts will be delivered via email and the lectures will be live over the Web.

Current Course Offerings

Give your technical staff that competitive edge with Oracle Workshops! These courses are designed to enhance your staff's skill set to perform their job better.

These workshops are:

- Designed to be held at your location
- Use my 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,

TextPAD, as well as the Oracle tools like SQL*Plus and SQL Developer, and Dan's Java-based SQL Tuner.

Oracle SQL Performance Tuning (1-day, 2-day, or 3-day offerings)

Oracle Advanced PL/SQL

TOAD for IT Staff

Oracle Analytics/Answers for End Users

Oracle Analytics for Administrators

APEX (Oracle Application Express)

Oracle Discoverer for End Users

Oracle Discoverer for Administrators

Introduction to Oracle (SQL)

Oracle Intro to PL/SQL

Introduction to UNIX/Linux

UNIX/Linux Shell Programming

Oracle/Unix Scripting Tips and Techniques

OOW: Big Data

Big Data

Big Data was the topic of many presentations at OOW.

Big Data is more like the old ISAM indexed file structure. You have large volumes of unstructured data indexed by a field or series of fields.

You have Big Data if you have:

- Large Volumes of unstructured data
- Velocity (time and how data relates to other data)
- Variety (of access methods such as social media)
- Value (is of interest)

Oracle has had a Big Data solution for quite a while: Berkley DB. This database is a noSQL database. Google/Wiki defines NoSQL as a shell-based relational database management system that runs under Unix-like operating systems. Its name merely reflects the fact that it does not express its queries using Structured Query

Language; the NoSQL RDBMS is distinct from the circa-2009 general concept of NoSQL databases, which are typically non-relational, unlike the NoSQL RDBMS. This offering also has replication and other safety measures for your data.

Hadoop is a management file system for large data, typically works with Java. Google/Wiki defines Hadoop as a framework for running applications on large cluster built of commodity hardware.

There are several current offerings and query facilities for Big Data. "R" is an analytical tool being taught and used in major universities and government agencies. Oracle Data Integrator is another. This facility does code generation and ETL.

Oracle Corp has a Big Data Appliance, that is a combination of their Exedata offering with the above-listed software installed.

OOW: Cloud Computing

Cloud Computing

OOW 2011 was all about the cloud!

Lets start with some new terminology.

PAAS: Platform as a Service

IAAS: Infrastructure as a Service

SAAS Service as a Service

Basically, cloud computing is renting time on a platform elsewhere and all software and services are managed by the hosting site. It is easy to add more hardware/software but maybe difficult to rehost to another cloud provider.

Cloud Burst: unexpected additional load on an application during a short time period. Oracle RAC is the solution today. In the near future, it will be easy to add additional resources as needed.

Private Clouds are good for new application development and testing. The cloud allows for companies to configure a computing environment that matches their production without having to buy duplicate hardware/software.

Private Clouds supports:

- Applications
- PAAS
- IAAS
- Self services
- Charge back
- Capacity Planning

Public Clouds are good for apps that might be difficult to deploy and maintain over a wide range. Sales force automation is a classic application that makes good sense to deploy over the cloud.

Public Clouds supports:

- SAAS
- PAAS
- IAAS

Oracle announced Enterprise Manager 12c, an enterprise manager for 'total cloud control'. This new release allows complete management of the cloud and apps associated with the cloud: Plan – Build – Deploy – Manage.

More information: www.Oracle.com/Cloud

Book Review

Book Reviews

TOAD Handbook

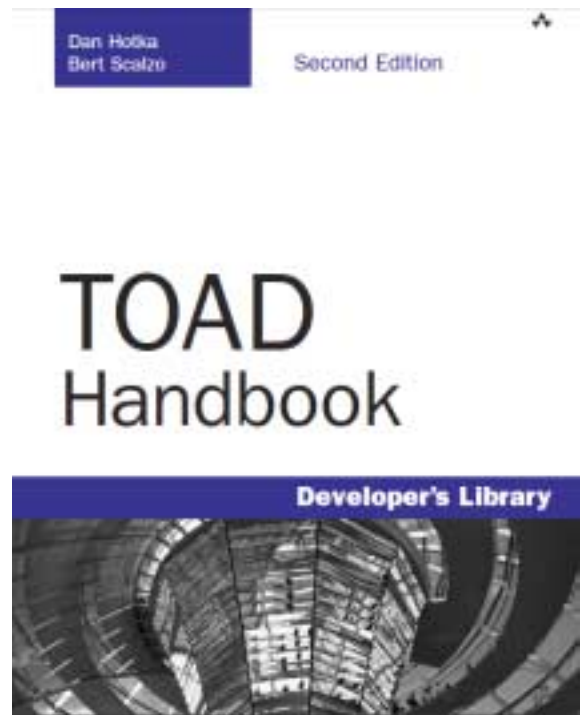
ISBN: 0-321-64910-9

By Scalzo and Hotka

Publisher: Addison-Wesley/Pearson Education., 350 pages

Dan and Bert team up again and update their popular TOAD Handbook! This includes documentation, working examples, and tips/techniques on all the latest features of TOAD. I'm just slightly biased here but we did a nice job on this already-popular book.

ALL the topics covered in the [Featured Presentation](#) are covered in this book.



This book contains chapters on:

- Setup and Configuration
- Schema Browser
- SQL and PL/SQL Editors
- Database Reporting
- Tuning Tools in TOAD
 - Including the new AWR and Trace File Browsers!
- Database Management
 - Includes many common DBA tasks that TOAD automates
- Other useful tools
- TOAD Apps Designer

Order today from Amazon.com.

Thank you Bert for partnering with me again!

Oracle SQL Tuning: A Close Look at Explain Plans

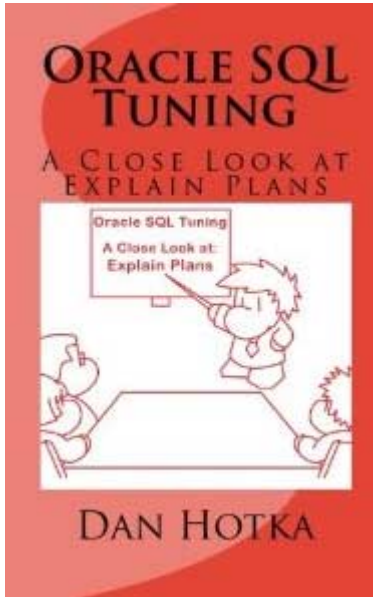
ISBN: 978-1453804193

By: Dan Hotka

Publisher: Amazon.com, 116 pages

Dan has assembled a nice book for those who need to understand the Oracle Explain Plan for any given SQL statement. This book also goes into detail on how to make adjustments to the SQL to improve performance. Dan

covers cost-based optimizer hints as well, the hints that he has found useful in his experience tuning SQL.



This book contains chapters on:

- Using Explain Plan Tools
- Reading Explain Plans
- CBO Hint Review

My son Thomas did the illustrations! Enjoy Kel throughout the book.

Order Today!

[Click Here to Order Now](#)

Featured Presentation

TOAD as a Tuning Tool

This is a NEW presentation!

This presentation is a must-see for anyone doing SQL performance tuning! Dan demonstrates the advantages and features of using TOAD for

tuning. Dan is an experienced instructor who has a vast knowledge of Oracle and what it takes to make SQL perform. Dan thinks TOAD is a great tool for many things, he will demonstrate the features he likes in TOAD that greatly aids in this tuning process.

Dan covers:

- TOAD Explain Plans (how to adjust content, etc)
- SQL Trace Features
 - Turning on/off Trace
 - TKProf Interface
 - Valuable Trace Analysis tool!!!
- StatsPack Interface
- AWR Interface
- PL/SQL Profiling
- SQL Optimizer for current SQL – a hidden gem!!!

Summary:

This is a live-demo presentation. Dan shows how to use TOAD to perform many SQL tuning tasks and the value of the information being presented. TOAD has some interfaces that simply do not exist in other tools. TOAD also has some little known features that comes with both the base TOAD and TOAD for Developers. The attendee will gain valuable insights as to how Oracle processes SQL and many tips on how to improve SQL performance.

Free Downloads

Downloads

Oracle SQL Trace File start/stop Scripts: These scripts can be used to start and stop the SQL Trace Facility in your session or another user session. Download this script from www.DanHotka.com.

TOAD

<http://www.toadworld.com/Downloads/FreewareandTrials/ToadforOracleFreeware/tabid/558/Default.aspx>

SQL Developer

<http://www.oracle.com/technology/software/products/sql/index.html>

Oracle11g Express – A single-user Oracle Database with most of the Oracle functionality but available for your use

free of charge from Oracle. Please read and understand the license agreement associated with this product.
<http://www.oracle.com/technology/products/database/xe/index.html>

Oracle Documentation – Oracle has done a fine job of a nice hyper linked set of documents that makes finding the topic of interest a snap! Kind of a large download but worth the wait! This page has the current Oracle 11g doc set as well as links to just about all of Oracle's documentation libraries.
<http://www.oracle.com/technology/documentation/databases.html>

Oracle PL/SQL Profiler Paper and Script: Learn how to use this free PL/SQL profiler from Oracle Corp. The paper also covers using the PL/SQL Profiler from TOAD. Download this paper and script from www.DanHotka.com.

Email Dan at Dhotka@Earthlink.net for any of these items:

- **Oracle SQL Trace Start and Stop Scripts:** Use these scripts to start and stop the Oracle Trace.
- **JS Tuner:** This tool will assist you with enhanced explain plans and useful index info/hints/and SQL history at your fingertips.
- **JS Analyzer:** This tool makes running the character-mode TKProf and SQL*Plus interface Trace Analyzer a snap. No more typing long trace file names.
- **SHOW_PLAN.sql:** Use to give an explain plan from the PLAN_TABLE that shows the statement ID relationships.

The Back Page

The Back Page

The Guthrie Center Historical Society (Panora Iowa) has this cool 'living history' village. This is a true 'must see' Midwest bit of history. The cost is \$2 I think.

There are many actual buildings moved here from the area. Buildings such as the school house, a church, the train depot, and more. A law office, the newspaper office and old press, the general store was really fascinating! I cannot seem to find the pictures but each building has a lot of the items found at the time.



This is an original 32-port telephone switch! The operator wore the white cone-shaped microphone found in the middle of the console. Notice there are 2 sides. Each side could handle 16 calls. Looks like this switch could handle a couple of hundred phone lines.

Each wire represents a line that can connect one caller to another. Each telephone in the system has a socket in the top side. The incoming lines come in on the lower side. The operator, with a switch, assigns the incoming call to one of these available lines and then is plugged into the party they wish to call.

IF you look carefully, there are 3 lights by each wire. These show the status of the line. Ringing, Talking, or hang=up but the line is still plugged in.

The person calling in, either pushes a button or turns a crank on their phone. This generates electricity on the line and comes into this console and rings an alarm and a light (on the top side) as to who is 'ringing' in. The operator then plugs in to their line via a toggle switch, the person says who they want to chat with, and the operator then 'connects' them via plugging in an available line and pushes a switch that rings that phone. When they pick up, their light lights up. The operator can listen or toggle off the line.

What existed before this was the true 'Party Line'. You turn the generator and it rang all the phones on the system! Everyone could listen. This switch used that same house equipment but only allowed for 2-way conversation. Maybe there were patch cords to allow more but I don't know...just thinking the ability might have existed to 'conference in' more people ☺

I probably don't have the facts exactly right. A family friend used to de-install these, replacing these with the dial switch that automatically did this same job (5 numbers when he started...). He knew what the switches did and what the lights meant. He bumped something and a museum person scolded him for touching it.

He had not seen one of these in 50 years...it was fun to listen to him explain how it worked. Thank you Chester!