



NYOUG Fall 2010 Training Session
"Scripts and Tools for Oracle Troubleshooting and
Advanced Performance Analysis"
Presented by Tanel Poder

DATE: Tuesday November 16, 2010

TIME: 9:00 AM - 5:00 PM

LOCATION: St. John's University - 101 Murray St. New York, NY 10007 – Saval Auditorium

SCHEDULE: (Break times are approximate)

Time	Activity	Location
8:00-9:00 AM	Registration and Breakfast	Lobby/Room 123
9:00-10:30 AM	Part 1	Auditorium
10:30-11:00 AM	BREAK	Room 123
11:00 AM-12:30 PM	Part 1	Auditorium
12:30-1:30 PM	LUNCH	Room 123
1:30-3:00 PM	Part 2	Auditorium
3:00-3:30 PM	BREAK	Room 123
3:30-5:00 PM	Part 2	Auditorium
4:30-5:00 PM	Questions	Auditorium

Tanel Poder is an experienced consultant with deep expertise in Oracle database internals, advanced performance tuning and end-to-end troubleshooting. He specializes in solving complex problems spanning multiple infrastructure layers such as UNIX, Oracle, networks, storage and recently the whole Exadata hardware/software stack. Tanel is one of the first Oracle Certified Masters in the world, passing the OCM DBA exam in 2002. He is also an Oracle ACE Director and a proud member of the OakTable Network. In addition to consulting and delivering seminars worldwide, Tanel also publishes troubleshooting tools and technical articles at his website <http://tech.e2sn.com> and blog <http://blog.tanelpoder.com>.

Detailed Description of Session

The aim of this training day is to make everyday Oracle troubleshooting and performance analysis work easier, by providing the right tools for the right problems. It is not simply necessary to optimize databases and SQL statements, but also *your* time. Using the right tools for the right problem allows you to perform your existing tasks faster and focus more on proactive work. This session will demonstrate the main scripts and tools that Tanel uses in his everyday work to facilitate troubleshooting and performance analysis quickly and accurately. A systematic approach for diagnosing different types of performance problems will be used throughout all the demos. The training day content will be roughly split into two focus areas:

1. How to make your everyday troubleshooting and DBA work easier
2. How to collect and analyze *relevant* performance data

Part 1

The first part of this session will focus on optimizing your time and increasing your productivity. You will learn how to set up and use your Oracle client environment for fast action and efficient work.

Topics covered include:

1. How to achieve searchable command line history and even tab-completion of syntax and schema object names in SQL*Plus
2. How to easily extract any SQL resultset into Excel or a web browser
3. SQL*Plus and shell scripting techniques for quickly creating flexible tools for troubleshooting and tuning work

Part 2

Part 2 addresses the problem of information overload in classic performance tools and focuses on the important performance data only and on systematic ways of reading it.

Tanel will demonstrate multiple fundamental tuning scripts, along with providing advice and examples of how to use these for troubleshooting Oracle and SQL performance.

Major updates to Tanel's performance tools include:

- Snapper v3.0, with built-in ASH style session activity sampling, support for parallel execution (Snapper still does not require any changes to be made to the database!)
- LatchProf v2.0 and MutexProf v2.0 which identify problem SQL in addition to blocking sessions and "guilty" Oracle kernel functions. They also allow capturing latch and mutex holder data over long periods of time for post-mortem analysis and trending.
- New scripts for understanding Parallel Execution performance in single-instance and RAC environments
- PerfSheet v3.0, which allows you easily, visualize performance data in Excel for trend and outlier analysis.
- A free online tool for visualizing execution plans and the response time consumed by individual lines in the execution plan!

All of the scripts and tools demonstrated will be downloadable for free from Tanel's website.