Abstracts presentations Meet The Oracle Masters – version 4

Get to know your program by instrumentation

Speaker: Patrick Barel
Date: April 28 at 16.00 hours

When we create our programs, we usually don't anticipate anything will go wrong. And it won't, during development and testing. But in production there is always someone who does something unexpected and your code fails. When running in dev you can easily step through your code and see what happens, but in production you are not allowed to do this. How great would it be that you could see what was happening in the production environment? But logging every step takes up a lot of the performance. Installing debuggable code in production just to see what's going on is usually a no-go. By instrumenting your code you can get the information you need by 'flipping a switch'. This session shows how you can use the (extended) Open Source Logger framework to accomplish this.

Summary

This session shows how easy it is to instrument your code using the Open Source Logger Framework, so you can trace the steps in production without having to install a new piece of code.

Key points

- Tips and tricks
- Framework
- Open source

Fast and Furious: Handling Edge Computing Data With Oracle 19c Fast Ingest and Fast Lookup

Speaker: Jim Czuprynski
Date: May 5 at 16.00 hours

The Internet of Things (IoT) has expanded well beyond the hobbyist realm and into the real world, including energy grids, communication networks, policing and security, and modern manufacturing (aka Industrial IoT). This session demonstrates how *Fast Ingest* and *Fast Lookup* – part of the new *Memoptimized Rowstore* features in Oracle 19*c* - makes short work of capturing and loading IoT data from "edge" sources so that developers and data analysts can take immediate advantage of that information in nearly real time as they transition to a digitally-driven IT organization.

Session Outline:

Through presentations and online demonstrations, this session will:

- Explain how edge computing is transforming global industry and societies

- Show how Fast Ingest and Fast Lookup features in Oracle 19*c* fill the need for extremely high-volume transaction processing
- Highlight potential pitfalls of the Memoptimized Rowstore to guard against potential data loss

Topics:

1. Edge Computing, Everywhere You Look
2. Fast Ingest Capabilities of Oracle 19*c*
3. Using DBMS_MEMOPTIMIZE to Control Fast Ingest Features
4. Fast Lookup: Reporting on Recently-Ingested Data
5. Making Sense of Near-Real-Time Data with Oracle Machine Learning and Analytics
6. Putting It All Together: Demonstrating Fast Ingest and Fast Lookup

Objectives:
The attendee will learn how to:

1. Leverage Fast Ingest capabilities to capture diverse data extremely rapidly from edge computing sources
2. Use Fast Lookup techniques to query recently-ingested data effectively
3. Apply best practices to minimize the chance of losing any recently-ingested data

Session Prerequisites:
To gain the most from this presentation, attendees should be familiar with basic Oracle Database memory management and transaction processing concepts. Knowledge about edge computing is helpful but not required.

My top 10 new features of APEX

Speaker: Menno Hoogendijk
Date: May 12 at 16.00 hours

Oracle APEX 21.1 is full of new and exciting features. It might be hard to keep track of all the changes due to the short release cycles. I've made a list of my personal top 10. A list of rich and easy-to-use components, modern technologies, beautifully rendered in your application. Even if you are new to APEX, this session will give you a clear idea about what it's all about. We will be walking through each feature using live demos.

Working with JSON in the Database

Speaker: Jeff Smith
Date: May 19 at 16.00 hours

Did you know that the Oracle Database fully supports schemaless application development using the JSON data model? In addition, in the same database, that developers can use SQL over the same data for analytics or reporting?

This presentation will provide a walkthrough on how the Oracle Database can not only store, index and have transactional consistency (ACID) with JSON documents, but how you can leverage all the power of the database for advanced security, application development and a whole suite of Simple Oracle Document Access (SODA) APIs.

But wait, what about relational tables and storing my JSON there, and using SQL to access that data? Yes, the converged Oracle Database makes that easy. We'll show you how using our development tools, you can make the choice that's right for you and your application.

Building REST APIs for Oracle Database

Speaker: Jeff Smith
Date: May 26 at 16.00 hours

Oracle REST Data Services (ORDS) makes it easy to turn your SQL or PL/SQL into REST APIs for your databases and everything IN those databases. Monitor (GET) the status of your database or INSERT (POST) new data to your tables easily with REST APIs built with a user-friendly development interface, all in your browser.

Have existing PL/SQL APIs for your applications? With a single call, you can automatically publish an HTTPS interface to those libraries. This makes modernizing your application front ends extremely easy – call your PL/SQL, get JSON back.

In this session we'll show how to write your own APIs or REST Enable existing database objects, for your Oracle Database, whether it's an on premises 11g instance or a 21c Autonomous Database in the Oracle Cloud.

JSON, A Splash of SODA, and a SQL Chaser: Real-World Use Cases for Autonomous JSON Database (AJD)

Speaker: Jim Czuprynski
Date: June 9 at 16.00 hours

The popularity of JSON (JavaScript Object Notation) has quickly become a de facto method for retaining valuable business information for many IT organizations. For the modern Oracle DBA, finding the best methods to retain, maintain, and process JSON

documents – especially when that information needs to be combined with non-JSON data - can be a confusing conundrum.

This session demonstrates how to tackle real-life business use cases with the newest member of Oracle's Autonomous Database family – the *Autonomous JSON Database* (AJD) – and explains how it simplifies JSON document management, provides secure access to their data via SODA, and promotes easy combination of JSON and non-JSON data with SQL.

Session Outline:
Through presentations and online demonstrations, this session illustrates how to:

- Use an Autonomous JSON Database (AJD) to store, retrieve, and process JSON information
- Take advantage of Simple Document Oracle Access (SODA) NoSQL APIs to process JSON information … without writing any SQL code
- Leverage SQL to access JSON information within an AJD and combine it with other non-JSON formatted information retained within the same AJD

Topics:

1. The World's Gone JSON. Get Used To It
2. AJD vs. ATP: Advantages, Drawbacks, Limitations
3. Loading, Accessing, and Processing JSON within an AJD
4. Using SODA to Access JSON Within Applications
5. Combining JSON and non-JSON information via Oracle SQL
6. Promoting an AJD Instance to ATP

Objectives:
The attendee will:

1. Understand how to use an Autonomous JSON Database (AJD) to store, retrieve, and process information within JSON documents
2. Learn how to use Simple Document Oracle Access (SODA) NoSQL APIs to process JSON documents without writing any SQL code
3. Leverage Oracle Database SQL language functionalities to access JSON documents and combine it with other non-JSON information stored within the same AJD

Session Prerequisites:
To gain the most from this presentation, attendees should be familiar with basic Oracle PL/SQL and SQL concepts. An understanding of JavaScript Object Notation (JSON) concepts is not required but would be helpful.

Critical success factors for migration of your Oracle environment to the cloud

Speaker: Job Oprel
Date: June 16 at 16.00 hours

It seems it's almost inevitable, running your business in the cloud, now or in the near feature. But still a lot of companies are struggling with the question if cloud is indeed the solution of their challenges with their current Oracle environment. Despite of all the white papers and advises available on the internet. This presentation will address the 'influencers' for making the decision for going to the cloud a bit easier, focused on an Oracle environment.

Technical issues will be addressed, but also issues related to the business, licenses and so on. Unbiased, pragmatic, based on own experiences, interviews and research, this presentation will provide the listener an overview of risks to be mitigated or taken away in order to take a substantiated decision.