
Oracle 11g New Features

Hand's on in SQL*Plus



presentation for:

Rocky Mountain Oracle Users Group
Training Days 2008

Daniel A. Morgan



Who am I?

- Daniel Morgan
- Oracle Ace Director 
- University of Washington 
 - Wrote UW Oracle curricula
 - Primary program instructor - 8 years
- Education Chair: PSOUG 
- Member: UKOUG 
- Frequent speaker – OOW and user group events
- 10g, 11g, and TimesTen Beta tester
- Oracle since version 6
- Too many years of Fortran and COBOL
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Additional Resources

SQL University

www.sqluniversity.net

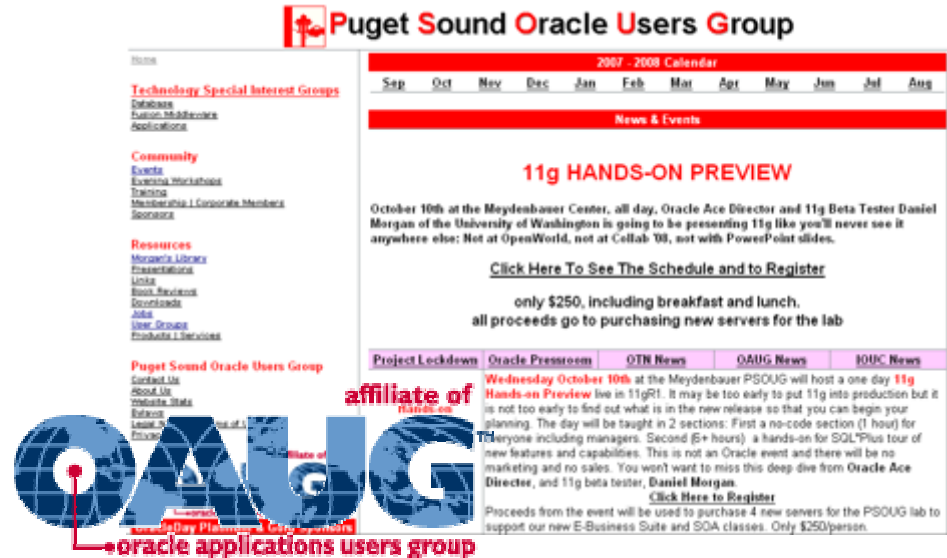
Streaming Video



Morgan's Library

www.psoug.org

Demo Source Code



Daniel A. Morgan



Lab Hardware



YellowDog | Grid | AuditVault

Lab Hardware



10-100 Public
GigE Memory Interconnect
GigE Storage
Fibre SAN

Student Servers



Lab Hardware



NetApp®

pillar
DATA SYSTEMS



Daniel A. Morgan





APRIL 13-17, 2008
COLORADO CONVENTION CENTER
DENVER, COLORADO

COLLABORATE 08, featuring the OAUG Forum, will offer more than **500 presentations** facilitated by industry experts, members of the OAUG and Oracle.

Early Bird Registration Deadline

March 13

Exhibitor Showcase Sales

Now open

For additional information and to register

<http://oaug.collaborate08.com>

New in 11g

- Architecture
 - BDUMP and UDUMP are gone
 - SQL*Plus (Windows is gone)
- Bugs — just one
- Security
 - Passwords can be case sensitive
 - New System privileges
- Create PFILE from memory
- Table Changes
 - READ ONLY Tables
 - Virtual Columns



New in 11g

- Tablespaces

- Exabytes
- Compressed
- SecureFiles
 - compression
 - deduplication
 - encryption

Kilobyte	1, 000
Megabyte	1, 000, 000
Gigabyte	1, 000, 000, 000
Terabyte	1, 000, 000, 000, 000
Petabyte	1, 000, 000, 000, 000, 000
Exabyte	1, 000, 000, 000, 000, 000, 000

billions of gigabyte

- SELECT

- FOR UPDATE SKIP LOCKED
- Cross Tabulation
 - PIVOT
 - UNPIVOT
- REGEXP_COUNT
- SQL Result Cache ... virtual column demo



New in 11g

- Tables
 - READ ONLY
 - Compression
 - Transparent Data Encryption
 - Virtual Columns
- Partitioning
 - Partition by Interval
 - Partition by Reference
 - Partition by System
 - Partition by Virtual Column
 - Composite Partitions
- Indexes
 - Invisible



New in 11g

- PL/SQL Changes
 - Sequences
 - Follows Clause
 - New PL/SQL Warnings
 - Result Cache
- Explain Plan
 - Review `dbms_xplan.display` & `display_cursor`
 - `dbms_xplan.build_plan_xml`
 - `dbms_xplan.display_plan`
- Native Compilation
 - `SIMPLE_INTEGER` data type
- Sequences



New in 11g

- Loops
 - CONTINUE Statement
- Table Triggers
 - FOLLOWS Clause
 - Composite Triggers
- DBMS_FLASHBACK
 - Transaction Backout
- PRAGMA INLINE
- DBMS_NETWORK_ACL_ADMIN
- Flashback Archive



New in 11g

- DBMS_AUTO_TASK_IMMEDIATE
- DBMS_COMPARISON
 - COMPARE
 - CONVERGE
 - CREATE COMPARISON
 - RECHECK
- DBMS_CONNECTION_POOL
- DBMS_CSX_ADMIN
- DBMS_EDITIONS_UTILITIES
- DBMS_HPROF
 - replaces DBMS_PROFILER



New in 11g

- DBMS_HM (Health Management)
 - GET_RUN_REPORT
 - RUN_CHECK
- DBMS_IR (Intelligent Repair)
- DBMS_LOB
 - Deduplication
 - SecureFiles
- DBMS_METADATA
 - COMPARE_ALTER
 - COMPARE_ALTER_XML
 - COMPARE_SXML
 - GET_DEPENDENT_DDL
 - GET_GRANTED_DDL



New in 11g

- DBMS_REDEFINITION
- DBMS_RESOURCE_MANAGER
 - CALIBRATE_IO
- DBMS_STATS
- DBMS_WORKLOAD_REPOSITORY
 - COLORED SQL
 - ASH REPORT
 - BASELINES
- DICOM
- XML Functions



Health Warning

Due to complaints from the Environmental Protection Agency ...



You are now entering ...

... a ...



This what I am not going to talk about

- Invisible Indexes
- Read Only Tables
- Composite Partitioning (new types)
- Interval Partitioning
- Partition by Reference
- System Partitioning
- New PL/SQL Sequence syntax
- LOB Deduplication
- LOB Encryption
- SELECT FOR UPDATE SKIP LOCKED
- PIVOT and UNPIVOT
- PL/SQL Continue
- Mixed Notation in SQL
- DBMS_AW_STATS
- DBMS_COMPARISON
- DBMS_CONNECTION_POOL
- DBMS_CQ_NOTIFICATIONS
- DBMS_CSX_ADMIN – TTS w/ binary info
- DBMS_EDITIONS_UTILITIES
- DBMS_HM (Health Management)
- DBMS_HPROF (Hierarchical Profiler)
- DBMS_IR (RMAN Repair)
- DBMS_LOB
- DBMS_LOBUTIL
- DBMS_MANAGEMENT_PACKS
- DBMS_METADATA
- DBMS_NETWORK_ACL_ADMIN (Access Control List)
- DBMS_SESSION
- DBMS_SPM (SQL Plan Management)
- DBMS_SQLDIAG
- DBMS_SQLPA (Predict environment changes impact)
- DBMS_STATS (beyond your imagination)
- DBMS_STORAGE_MAP (FMON API)
- DBMS_WLM (Workload Management)
- DBMS_WORKLOAD_CAPTURE (**RAT**)
- DBMS_WORKLOAD_REPLAY
- DBMS_WORKLOAD_REPOSITORY (AWR)
- DBMS_XA (XA/Open interface access)
- DBMS_XPLAN (Explain Plan improvements)
- Automated Diagnostic Repository (ADR / ADRCI)
- Data Guard
- RAC
- Streams
- Table Trigger Follows Clause
- New AWR Reports
- Object Redefinition includes MView Logs
- Pragma INLINE
- RESULT CACHE
- SecureFiles
- and much much more

