
Vancouver User Group

www.vanoug.org



January 2010 Meeting

www.vanoug.org



Introduction

- Daniel Morgan – damorgan@u.washington.edu
- Oracle Ace Director 
- University of Washington, retired
- The Morgan of Morgan's Library on the web
 - www.morganslibrary.org/library.html
- Member: Western Washington Oracle Users Group
- Member: UK Oracle Users Group
- Member: Oracle Applications Users Group
- Frequent speaker



- Oracle since version 6
- 11g beta test site



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Morgan's Library: www.morganslibrary.org

Morgan's Library

Morgan's Library

Search

www library

Morgan's 2009 - 2010 Calendar

Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Oracle OpenWorld				ORACLE OPEN WORLD							
Oct. 11 - 15, 2009 Moscone Center San Francisco, CA				SELECT seat INTO scheduleBuilder FROM oov2009 WHERE session_id = 'S307422' AND title = 'Oracle Advanced Compression in Database 11g Rel. 2: Value/Performance' AND sessn_date = TO_DATE('15-OCT-2009 09:00:00', 'DD-MON-YYYY HH24:MI:SS') AND location = 'Moscone South, Room 102' AND copresenters = 'ACE Director Dan Morgan and Oak Table Member Kevin Closson';							

Community

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Presentations Map



Our Founder



Morgan


aboard USA-71

Training Events

- [Oracle ClosedWorld](#) - Oct 11-15, San Francisco
- [Miracle 9th Anniversary](#) - Oct 30, Ballerup, DK
- [DUGF](#) - Nov 5, Helsinki, Finland
- [UKOUG](#) - Nov 30 – Dec 2, Birmingham, UK
- [RMOUG](#) - Feb 16 - Feb 18, Denver, CO
- [NZOUG](#) - Mar 15 - Mar 16, Rotorua, NZ
- [DUGN](#) - Apr 14-16, Oslo Norway

Oracle Events

- [Oracle OpenWorld](#) - Oct 11-15, San Francisco



Sign up for Session S307422
Oracle Advanced Compression
Thursday Oct. 15
9:00am, Moscone South, Room 102

Library News

- [Morgan's Notepad vi \(Blog\)](#) UPDATED
- [Western Washington OUG](#) NEW
- [Morgan's Oracle Podcast](#)
- [DBA Best Practice Guidelines](#)
- [Bryn Llewellyn's 2009 White Paper](#)
- [Troubleshooting Performance](#)
- [Translators Wanted:](#)

ACE News

Would you like to become an Oracle ACE? 

Learn more about becoming an ACE



- [ACE Directory](#)
- [ACE Google Map](#)
- [ACE Nomination Form](#)
- [Stanley's Blog](#)





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Vancouver Oracle Users Group



Database 11gR2 Rollout



Thursday, January 14, 2010 Tom Kyte will be providing the keynote address at Oracle's 11gR2 rollout and VanOUG will be holding its first meeting.

January 14, 2010 11:30am - 4:30pm

To Find Out More And Register: [Register](#)

Vancouver Oracle User Group Renewal Meeting



Following the Oracle Database 11gR2 Rollout we will be holding a meeting to reform the Vancouver Oracle Users Group.

January 14, 2010 4:30pm - 5:00pm

Oracle ACE Director Dan Morgan and Victoria Oracle Users Group Chairman Caleb Small will be joining us to help us bring the group back together and don't be surprised if Morgan does live demos of an 11gR2 feature not covered by Oracle. He's been known to do that .. Registration is not required but an [email](#) will be appreciated. Thank you.

After the brief VanOUG meeting please join us, and Oracle, for cocktails.

Links

[Oracle Corporation](#)
[Oracle Technology Network](#)

ORACLE®



This is your group. What do you want it to be?

- What is a user group?
 - Presentations, training, conferences, guest lectures
 - Networking
 - An opportunity to learn what your salesperson doesn't know
- What isn't a user group?
 - A canned audience for salespeople
- Where do you want to meet (location)
- When do you want to meet (day of the Week)
- Time of Day (during work or after work)
- Topics (DBA, Developer, Middleware, third-party products)
- Leadership (local leadership is required for success)

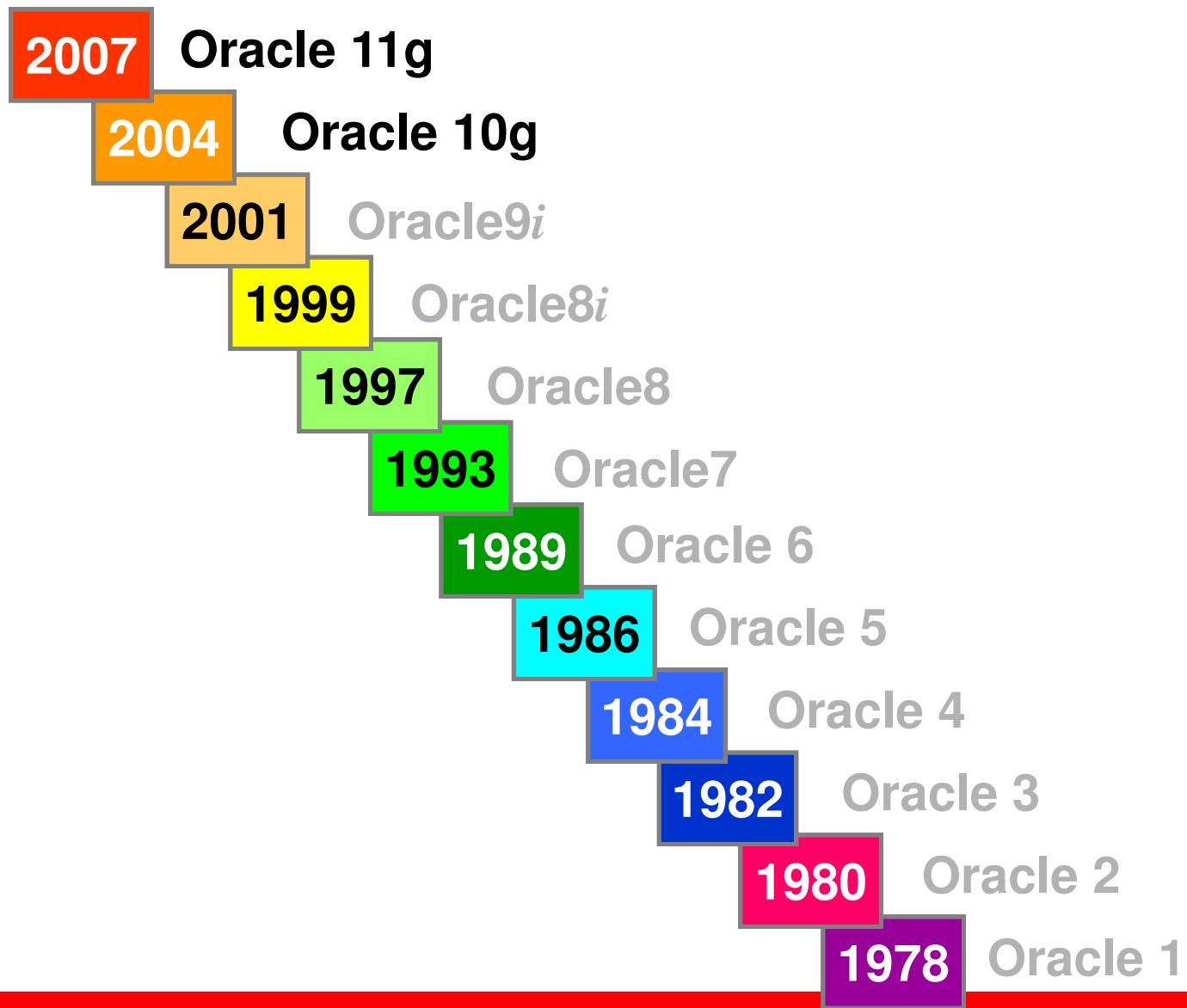


WWOUG Yesterday

- Panel discussion on moving to 11gR1 or R2
 - Jeremiah Wilton (First Senior DBA at Amazon.com)
 - Matt Parker (Amazon.com)
 - Rand Bell (Starbucks)
- Topics
 - Our experience with performance/migration issues
 - Amazon.com is giving us their wiki for the 16min upgrade
 - How best to create the 11g infrastructure (new home?)
 - What is the most compelling feature/reason to move to 11g?



Oracle Server History



New in 11gR1

That you will not hear about from Oracle



New in 11gR1

- ADR
- Case Sensitive Passwords
- Query for default passwords ←
- SKIP LOCKED
- Pivot & Unpivot Operators
- Compound Triggers
- Trigger Follows Clause
- New PL/SQL Warnings
- Vastly Improved Native Compilation



New in 11gR2

That you will not hear about from Oracle



What Oracle Isn't Talking About

- Structure Changes in the ADR
- DataGuard Compressed Table Support for Logical Standbys and LogMiner
- DataPump Legacy Mode



Execute for Directory Objects

- In 10g we granted READ and/or WRITE
- But this also allowed executing the ORACLE_LOADER access driver
- Only a user that has been given EXECUTE access to the directory object is allowed to run programs in it

```
CREATE DIRECTORY stage AS '/home/oracle/stage';

GRANT read ON stage;

GRANT write ON stage;

GRANT execute ON stage;
```



RMAN

- Automatic Block Repair
- New options for DUPLICATE DATABASE
- Enhanced Tablespace PITR



Storage

- Tablespaces
 - Enhancements to SecureFiles
 - New Tablespace Master Rekey with Wallets
- Tables
 - Segment creation on demand



SQL

- New Analytic Functions
 - LISTAGG
 - NTH_VALUE
 - RESPECT or IGNORE NULLS

```
SELECT department_id "Dept .",
LISTAGG(last_name, ' ') WITHIN GROUP (ORDER BY hire_date) "Employees"
FROM employees
GROUP BY department_id;
```

```
SELECT prod_id, channel_id, MIN(amount_sold),
NTH_VALUE(MIN(amount_sold), 2)
OVER (PARTITION BY prod_id ORDER BY channel_id ROWS
BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING) NV
FROM sales
WHERE prod_id BETWEEN 13 AND 16
GROUP BY prod_id, channel_id;
```

```
FIRST_VALUE(<expression> [<RESPECT | IGNORE> NULLS]) OVER (<analytic clause>)
```



SQL

- ALTER DATABASE LINK
- IGNORE_ROW_ON_DUPKEY_INDEX Hint for INSERT Statement
- DATABASE_ROLE parameter FOR SYS_CONTEXT function
 - PRIMARY
 - PHYSICAL STANDBY
 - LOGICAL STANDBY
 - SNAPSHOT STANDBY

```
SELECT sys_context('USERENV', 'DATABASE_ROLE') FROM dual;
```



SQL

- Recursive Queries
 - CONNECT BY
- Recursive Common Table Expressions (WITH)

```
WITH <alias> AS
  (subquery_sql_statement)
  SEARCH <BREADTH | DEPTH>
    FIRST BY <column_name> [ASC | DESC] [NULLS FIRST | NULLS LAST]
  SET <ordering_column>
  CYCLE <alias> SET <cycle_mark_alias>
    TO <cycle_value> DEFAULT <no_cycle_value>
  SELECT <column_name_list>
  FROM <alias_one>, <alias_two>
  WHERE <join_condition>;
```

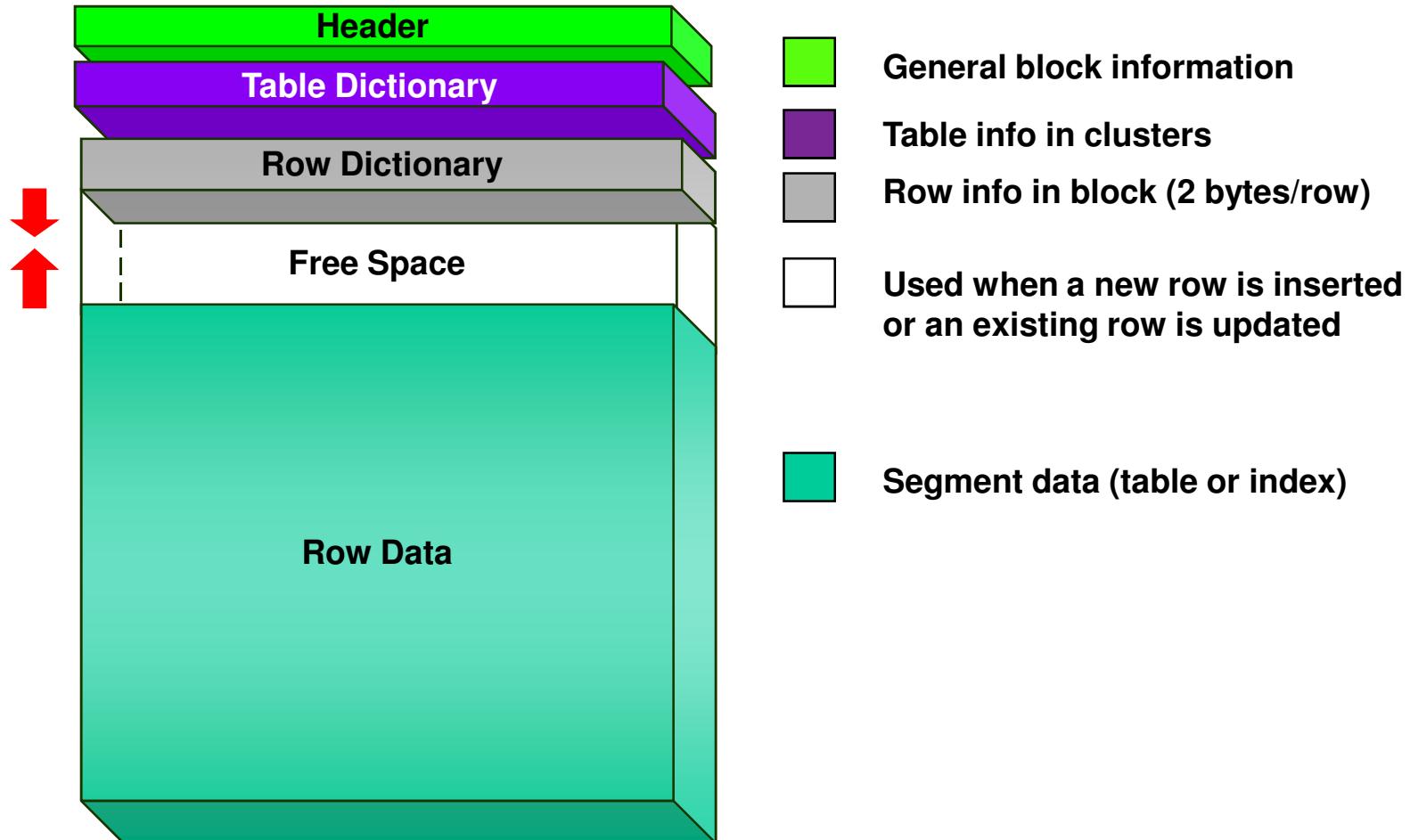


PL/SQL

- **New Warnings**
 - **Severe**
 - 5018 - omitted optional AUTHID clause
 - 5019 - deprecated language element
 - 5020 - parameter name must be identified
 - **Informative**
 - 6016 - native code generation turned off (size/time)
 - 6017 - operation will raise an exception
 - 6018 - an infinity or NaN value computed or used
 - **Performance**
 - None

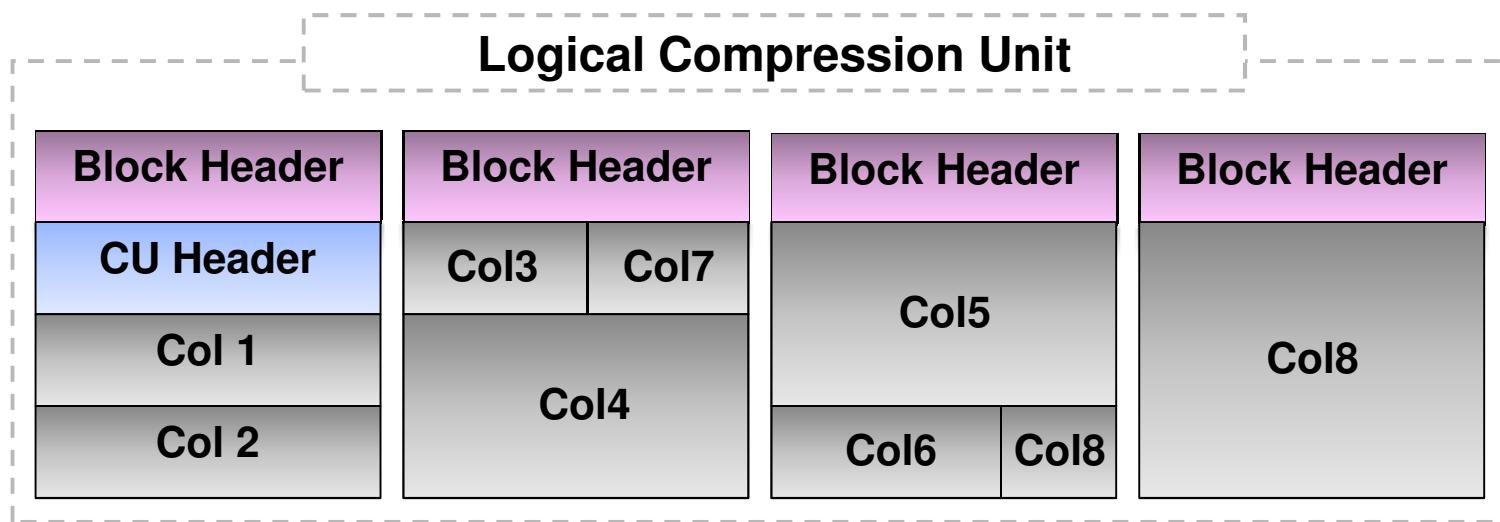


Database Block Anatomy



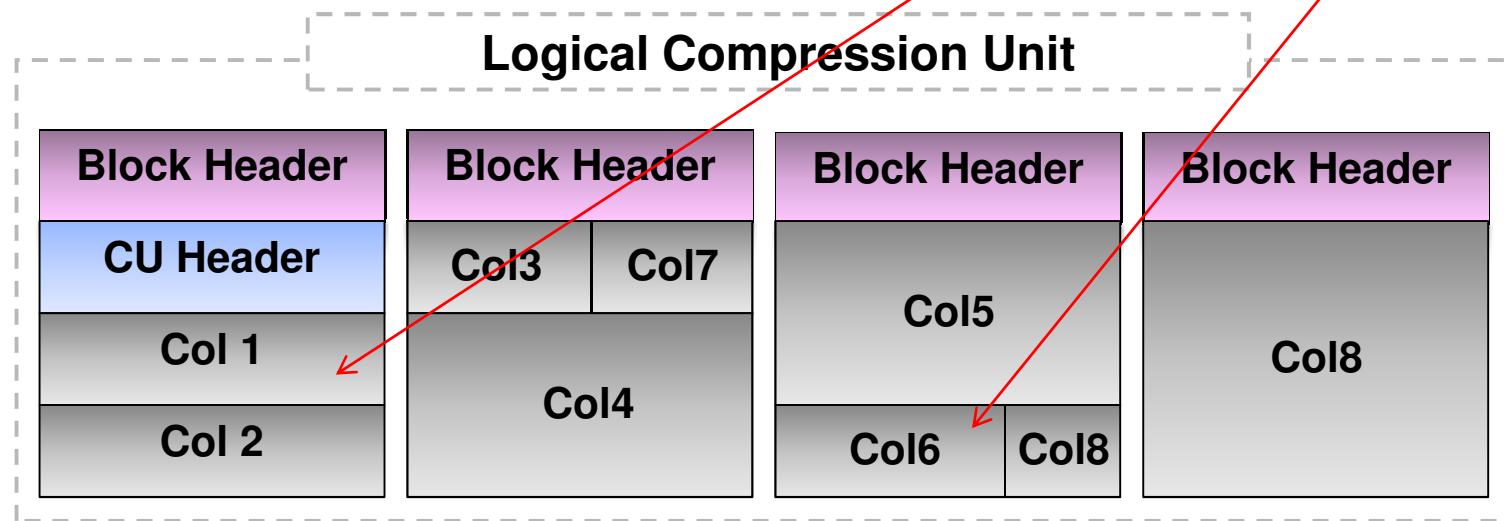
Logical Compression Unit

- Tables are organized into Compression Units (CU)
 - CU's are logical structure spanning multiple database blocks
 - Typically 32K - (4 x 8K block size)
 - Data is organized by column during data load
 - Each column is compressed separately
 - Column organization brings similar values close together



Logical Compression Unit

```
CREATE TABLE demo (
  person_id      NUMBER(10),
  first_name     VARCHAR2(20),
  mid_initial    VARCHAR2(4),
  last_name      VARCHAR2(35),
  date_of_birth  DATE,
  hire_date      DATE,
  status          VARCHAR2(5),
  comments        VARCHAR2(500));
```



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Thank you.

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