Wouldn't It Be Nice if it Worked Like That?
(and then some)

Some of my experiences with Oracle that are nothing short of comical.

Michael S. Abbey

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Who can you make fun of if you can't take it yourself??

Michael S. Abbey
SQL*Reportwriter

- Flagship reporting tool for many many years
- Table supported in the data dictionary
- Objects clustered like many other data dictionary tables
- Move to de-cluster began ~ 1991
- Part of first level tables to be moved out of cluster

Michael S. Abbey
SQL*Reportwriter

Upgrade from 6.0.32 to 6.0.33 ...

One moment please ...

Updating SQL*Reportwriter executables ...

Initialising sequences ...

De-clustering sqlreportwriter tables ...

3 to 4 minutes
SQL*Reportwriter

Upgrade from 6.0.37 to 7.0.12 ...

One moment please ...

Updating SQL*Reportwriter executables ...

Initialising sequences ...

De-clustering sqlreportwriter tables ...

3 to 4 minutes
SQL*Reportwriter

for i in ...
do
echo '. \c'
i = $((i+1))
sleep 2
done

Michael S. Abbey
The downgrade upgrade

VAX cluster running 6.2

Rest of the world running 6.0.32

Michael S. Abbey
The downgrade upgrade

• 6.0.33 married the VAX cluster version with the rest of the installs
• Landmark release of V6
• Oracle and Digital agreed not to fight over locks
• Distributed lock manager
The downgrade upgrade

Michael S. Abbey
Management committee

Larry
Derry
Barry
Terry
Gerry
Jeff

Michael S. Abbey
EOUG 1993

- UKOUG event in basement of a medieval castle
- place was full to capacity
- Oracle VIP shows up
- I think it's quite appropriate that when the Chairman of a relational database company, Jim Abrahamson, walks into a room, that …

staff starts altering tables!

Michael S. Abbey
Logging a TAR

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Logging a TAR

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Logging a TAR

*Note: For ORA-600/ORA-7445 errors, please complete the ORA-600/ORA-774.

*What platform and Operating System version are you on, include patchset or service pack level*
Logging a TAR

*What version and patchset level of the database are you running? Please include the example, 9.2.0.2.0.*
Logging a TAR

*What version and patchset level of the database are you running? Please include the example, 9.2.0.2.0).

Have not upgraded, re-installed Oracle, or purchased any new hardware since the previous screen!!!
Logging a TAR (pre iTAR)

- call support
- what's your CSI
  - your name
  - your fax number
  - your phone number
  - your O/S version
  - your database version
- ½ hour later → you have a TAR!!
Logging a TAR (pre iTAR)

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Logging a TAR (pre iTAR)

Why not place a

database underneath your TAR intake process ...

Michael S. Abbey
If it Ain't Broken, Don't Fix It
If you put a nickel in a jar everytime you tried this

with Oracle9, you would have one of these ...
SQL*Plus and Server Manager

They are now completely compatible with one another and you should stop using Server Manager.
SQL*Plus and Server Manager

SVRMGR> select *
  2>                              VS.
  3> from dual;

D
- X
1 row selected.
SVRMGR>

SQL> select *
  2
SQL> from dual;
SP2-0042: unknown command "from dual" - rest of line ignored.

SQL>
SQL*Plus and Server Manager

Now that Oracle has plugged the last remaining difference between Server Manager and SQL*Plus, you should stop using the former.

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SQL*Plus and Server Manager

SQL> set sqlbl on
SQL> select *
    2	2
    3 from dual;

D
-
X
SQL>
SQL*Plus admin scripts

SQL> alter tablespace gl add datafile
    2    '/oradata/prod/gl&seq..dbf'
    3    size 1200m;

Enter value for seq: 04
old   2: '/oradata/prod/gl&seq..dbf'
new   2: '/oradata/prod/gl04.dbf'

FILE NAME
-------------------------------------
'/oradata/prod/gl01.dbf'
'/oradata/prod/gl02.dbf'
'/oradata/prod/gl03.dbf'
'/oradata/prod/gl04.dbf'
svrmgrl admin scripts

SQL> alter tablespace gl add datafile
    2    '/oradata/prod/gl&seq..dbf'
    3    size 1200m;

FILE NAME
-------------------------------------
'/oradata/prod/gl01.dbf'
'/oradata/prod/gl02.dbf'
'/oradata/prod/gl03.dbf'
'/oradata/prod/gl&seq..dbf'
SQL*Plus and autotrace

The trace option with `set autot traceonly` instructs Oracle to display an execution plan for SQL statements but not execute them.

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SQL*Plus and autotrace

SQL> set autot trace
SQL> select * from test_trace;

no output

6 rows selected.

Execution Plan

---------------------------------------------
0      SELECT STATEMENT Optimizer=CHOOSE
1 0    TABLE ACCESS (FULL) OF 'TEST_TRACE'

Statistics

---------------------------------------------
0  recursive calls
4  db block gets
...
6  rows processed

Michael S. Abbey
SQL*Plus and autotrace

SQL> delete test_trace;
6 rows deleted.

Execution Plan
--------------------------------------------------
0      DELETE STATEMENT Optimizer=CHOOSE
1      DELETE OF 'TEST_TRACE'
2      TABLE ACCESS (FULL) OF 'TEST_TRACE'

Statistics
--------------------------------------------------
0      recursive calls
10     db block gets

... 6      rows processed
SQL*Plus and autotrace

SQL> select * from test_trace;
no rows selected
Import with `ignore=y`

If you specify `IGNORE=y`, `import` overlooks object creation errors when it attempts to create database objects, and continues without reporting the errors.
Import with \texttt{ignore=yes}

IMP-00017: following statement failed with ORACLE error 2264:
"ALTER TABLE "CUSTOMER" ADD CONSTRAINT "CUSTOMER_FK1" FOREIGN KEY "("STATE_ID") REFERENCES "STATE" ("STATE_ID") ON DELETE CASCADE " "ENABLE NOVALIDATE"

IMP-00003: ORACLE error 2264 encountered
ORA-02264: name already used by an existing constraint
Changing character sets

Oracle8(i) introduces a new documented method of changing the database and national character sets. The method uses two SQL statements, which are described in the Oracle8i National Language Support Guide.

Michael S. Abbey
Changing character sets

ALTER DATABASE [<db_name>] CHARACTER SET <new_character_set>;

ALTER DATABASE [<db_name>] NATIONAL CHARACTER SET <new_NCHAR_character_set>;

SQL> alter database character set we8dec;
*
ERROR at line 1:
ORA-01679: database must be mounted EXCLUSIVE and not open to activate

Michael S. Abbey
Changing character sets

startup mount;
alter system enable restricted session;
alter system set job_queue_processes = 0;
alter system set aq_tm_processes = 0;
alter database open;
alter database character set <NEW_CHARACTER_SET>;
shutdown immediate;
startup restrict;
Monitoring index usage (9i)

The black hole is finally closed
... what indexes are being used? Which are candidates for dropping?
Monitoring index usage (9i)

SQL> alter index user1.prod_pk monitoring usage;
    Index altered.
SQL> alter index user1.cust_pk monitoring usage;
    Index altered.
    . . .
    . . .
SQL> alter system set timed_statistics = true;
    System altered.
Monitoring index usage (9i)

SQL> connect / as sysdba
Connected.
SQL> !date
Thu Mar 20 10:42:01 EST 2003
SQL> select count(*) from v$object_usage;
    COUNT(*)
-------------
       0
SQL> !date
Sun Mar 23 07:11:28 EST 2003
SQL> select count(*) from v$object_usage;
    COUNT(*)
-------------
       0

---

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Monitoring index usage (9i)

SQL> connect owner/of_index
Connected.
SQL> !date
Sun Mar 23 10:54:54 EST 2003
SQL> select count(*) from v$object_usage;
   COUNT(*)
----------
     3412

Must query as owner of indexes!!

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Monitoring index usage (9i)

- Information in `v$object_usage` is questionable
- `DBMS_STATS` activity counts as index usage
- Erroneously appear as in use when may have not been touched for days!
Errors compiling stored objects

SQL> alter package PROD."MAINT_PKG" compile body;

Warning: Package Body altered with compilation errors.

SQL> sho errors
No errors.
SQL> sho errors package body maint_pkg
No errors.
SQL> sho errors maint_pkg
Usage: SHOW ERRORS [ { FUNCTION | PROCEDURE | PACKAGE | PACKAGE BODY | TRIGGER | VIEW | TYPE | TYPE BODY | JAVA SOURCE | JAVA CLASS } [schema.]name]
oraenv

oracle@dsotm.pink.floyd-->(mls)
/usr/users/oracle> . oraenv
ORACLE_HOME = [/usr/users/oracle] ?

oracle@dsotm.pink.floyd-->(mls)
/usr/users/oracle> export ORAENV_ASK=NO

oracle@dsotm.pink.floyd-->(mls)
/usr/users/oracle> . oraenv
ORACLE_HOME = [/usr/users/oracle] ?

oracle@dsotm.pink.floyd-->(mls)
/usr/users/oracle>
Rdb
Rdb

Michael S. Abbey
Secure account passwords

We adhere to a very strict policy with the secure database passwords, not limited to SYS and SYSTEM.

Michael S. Abbey
Secure account passwords

gl/gl

ar/ar

ap/ap

hr/hr

Michael S. Abbey
Vendors' behaviour

Do as we say,
not as we do ...

Michael S. Abbey
Vendors' behaviour
Vendors' behaviour

Please do not make illegal copies of our software, but if you want to copy someone else's, this will assist you!
8i – circa 1998
9i – circa 2001
10g – circa 2003
The new release …

It's actually both "g" and "i"
Was grid computing responsible for the August 14 blackout?

BREAKING NEWS

Investigation focused on grid around Lake Erie

Manhattan sunset 14/08/2003