## oracle 10g 研究ORACLE\_HOME rdbms admin 下的脚本的功能 (29) c1001000.sql

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```
#upgrade Oracle RDBMS from 10.1.0 to the new release
#Put any dictionary related changes here (ie-create, alter,
         update,...). If you must upgrade using PL/SQL packages,
Rem
         put the PL/SQL block in a1001000.sql since catalog.sql and
Rem
         catproc. sql will be run before a1001000. sql is invoked.
Rem
Rem
         This script is called from u1001000.sql and c0902000.sql
Rem
         This script performs the upgrade in the following stages:
Rem
           STAGE 1: upgrade from 10.1.0 to 10.2.0
Rem
           STAGE 2: call catalog.sql and catproc.sql
Rem
Rem $Header: c1001000.sql 20-jun-2005.15:06:00 pthornto Exp $
Rem c1001000.sal
Rem
Rem Copyright (c) 1999, 2005, Oracle. All rights reserved.
Rem
Rem
       NAME
         c1001000.sql - upgrade Oracle RDBMS from 10.1.0 to the new release
Rem
Rem
Rem
       DESCRIPTION
         Put any dictionary related changes here (ie-create, alter,
Rem
         update,...). If you must upgrade using PL/SQL packages,
Rem
         put the PL/SQL block in a1001000. sql since catalog. sql and
Rem
         catproc. sql will be run before a1001000. sql is invoked.
Rem
Rem
         This script is called from u1001000. sq1 and c0902000. sq1
Rem
         This script performs the upgrade in the following stages:
Rem
Rem
           STAGE 1: upgrade from 10.1.0 to 10.2.0
           STAGE 2: call catalog. sql and catproc. sql
Rem
       NOTES
Rem
Rem
         * This script must be run using SQL*PLUS.
         * You must be connected AS SYSDBA to run this script.
Rem
       MODIFIED
                  (MM/DD/YY)
Rem
Rem
       pthornto
                   06/20/05 - correct revoke statments for CONNECT
                   05/31/05 - fix null column with re-upgrade
Rem
       mlfeng
Rem
       mlfeng
                   05/25/05 - bug 4393879: disable metrics constraints
                   05/18/05 - 4180912: improved info in PLSQL_TRACE_EVENTS
       dalpern
                   05/20/05 - Bug 4382313: Zero out flags in streams$_prepare*
Rem
       bpwang
Rem
       mlfeng
                   05/19/05 - fix AWR upgrade issues
                   05/16/05 - increase the row id member size in chnf$ rdesc
Rem
       ssvemuri
Rem
       mvemulap
                   05/13/05 - 1rg 1852422 fix
Rem
       ajadams
                   05/09/05 - dbms_logstdby_public package depricated
       pbe1knap
                   05/02/05 - wri$_adv_sqlt_rtn_plan constraint name change
Rem
                   05/03/05 - bug fix for 4318925
Rem
       mvemulap
                   04/28/05 - #4280015: update array_index col name
Rem
       qyu
```

```
04/20/05 - change colklc column size in enc$
Rem
       mhho
                   04/22/05 - add constructor for aq\frac{\text{reg_info}}{\text{res}}
Rem
       ksurlake
       mlfeng
                   04/11/05 - add column to wrh$ sqlstat
Rem
                   03/24/05 - added new columns to wrh$_active_sess_history
Rem
       adagarwa
       tfyu
                   03/17/05 - Bug 4262763
Rem
                   03/11/05 - remove transportable from fgr_tablespace_info
       htran
Rem
Rem
       1kap1an
                   03/18/05 - bug 4112826 - upgrade and downgrade of
Rem
                              catqueue. sql needed
                   03/15/05 - Upgrade script for bug 4186885 - sync partition
Rem
       bvaranas
Rem
                              numbers for overflow partitions with base
                               table partitions
Rem
Rem
       rhurns
                   03/14/05 - use dbms registry sys timestamp
Rem
       wyang
                   03/02/05 - add columns to wrh&undostat
       alakshmi
                   02/23/05 - error recovery for maintain_ apis
Rem
                   02/24/05 - increase maximum line size for dbms_xplan
Rem
       bdagevi1
                   02/16/05 - Bug 4189150, remove logmnr_log$_active index
Rem
       mtao
Rem
       imallory
                   02/02/05 - Drop dbms dbupgrade
Rem
                   01/19/05 - 3979461: revoke public exec priv for xml funcs
       mture
                              and drop AggXMLInputType
Rem
                   01/18/05 - scheduler_run_details cpu_used datatype change
Rem
       evoss
                   01/11/05 - #(4052436) add hint string to outln.ol$hints
       ddas
Rem
Rem
       sourghos
                   01/06/05 -
                   01/03/05 - apply spilling
Rem
Rem
       sourghos
                   12/30/04 - Fix bug 4043119
       ilyubash
                   11/05/04 - Add gen column to i_aw_prop$ index
Rem
       htran
                   11/16/04 - streams$ prepare *: add spare2 and flags columns
Rem
Rem
       apadmana
                   10/05/04 - bug3607838: manage any queue
                   11/17/04 - Add revoke and drop synonym for the utl_xml
Rem
       rpfau
Rem
                              package.
                   11/15/04 - 1rg 1796684 delete old privs before reuse
       clei.
Rem
                   10/28/04 - add merger [any] view permission
       clei.
Rem
Rem
       kyagoub
                   10/10/04 - add other column to advisor objects table
                   09/03/04 - add indexes to AWR tables
Rem
       mlfeng
Rem
       rgmani
                   10/26/04 - scheduler attributes table has new columns
                   10/15/04 - 3651756 revoke SELECT on exu?lnk from
Rem
       igalanes
                              SELECT CATALOG ROLE
Rem
                   09/27/04 - insert rows for plsql_ccflags in settings$
Rem
       mxyang
Rem
       rramkiss
                   09/21/04 - security bug #3897723
Rem
       arithikr
                   09/13/04 - 3877613 - create index atempind$
                   09/03/04 - #(3350342) create mon mods all$
       mtakahar
Rem
Rem
       rburns
                   09/02/04 - remove serveroutput
                   08/02/04 - EUS Proxy auditing changes
Rem
       jnarasin
Rem
       mlfeng
                   07/29/04 - modifications for AWR tables
Rem
       xuhuali
                   06/30/04 - audit java
                   07/16/04 - AWR report types
Rem
       pbe1knap
Rem
       kyagoub
                   08/03/04 - add new column diret_writes to
Rem
                              wri$_adv_sqlt_statistics
Rem
       rjenkins
                   08/11/04 - 3074260: func indexes should use REF
Rem
                              dependencies
                   08/03/04 - Revoke CONNECT role from LOGSTDBY ADMINISTRATOR
Rem
       inesheiw
                   04/21/04 - add CREATE EXTERNAL JOB system privilege
Rem
       rramkiss
       kdias
                   07/21/04 - privs for OUTLN user
Rem
                   07/20/04 - bug 3690876 - clean privs 194-199, 239, 240
Rem
       nmanappa
       rburns
                   07/15/04 - remove dbms_output compiles
Rem
                   07/21/04 - remove old priv. from connect
Rem
       dmwong
                   07/09/04 - split tsm_hist$ into tsm_src$, tsm_dst$
Rem
       skaluska
Rem
       pbe1knap
                   07/14/04 - rerun case for STS changes
Rem
       araghava
                   07/07/04 - (3748430): make partitioning indexes unique
```

```
07/07/04 - add enc$ for Transparent Column Encryption
Rem
      clei.
                   06/29/04 - move sqlt block to 'a' script
Rem
      pbe1knap
                   06/29/04 - upgrade regress errors
Rem
      pbe1knap
Rem
      pbe1knap
                   06/28/04 - add plan_hash_value to mask table
      nbhatt
                   06/11/04 - add delivery mode to message_properties_t
Rem
      hxlin
                   06/28/04 - upgrade sql response time
Rem
Rem
      a jadams
                   06/20/04 - add index to logstdby events table
Rem
      rhurns
                   06/18/04 - remove final timestamp
                   06/16/04 - increase size of WRH$_ASH.PROGRAM
Rem
       veeve
Rem
       sbalaram
                   06/14/04 - Bug 3676284: drop dbms_streams_xml_lcr_ut1 pkg
                   05/28/04 - upgrade awr report types
Rem
      mramache
Rem
                   06/25/04 - add timestamp to plans table
      phe1knap
Rem
      pbe1knap
                   06/11/04 - add deltas for capture
      pbe1knap
                   05/14/04 - SQLSET_ROW change
Rem
                   05/12/04 - SQL tuning set schema changes
Rem
      pbe1knap
                   06/15/04 - Change notification dictionary and types
Rem
      ssvemuri
Rem
      ahwang
                   06/10/04 - add restore point audit actions rows
Rem
      mlfeng
                   05/21/04 - upgrade wr_control with topnsql
      ksurlake
                   06/01/04 - Evolve reg$ and related types
Rem
      bdagevi1
                   06/03/04 - increase size of object_node
Rem
                   05/05/04 - add upgrade for dblink pwd encoding
Rem
      rvissanr
Rem
      vakrishn
                   06/01/04 - add status column to WRH$ UNDOSTAT
                   05/28/04 - add WRH$_SEG_STAT_OBJ. [INDEX_TYPE, BASE*]
Rem
       veeve
Rem
      rramkiss
                   05/31/04 - update name column of scheduler$_event_log
                   05/13/04 - truncate obsoleted scheduler chains data
Rem
      rramkiss
                   06/09/04 - Add get source time
      liwong
Rem
Rem
      liwong
                   06/08/04 - Add oldest_transaction_id
                   05/27/04 - changed streams$_apply_process
Rem
      dcassine
Rem
      dsemler
                   05/14/04 - add dtp support
                   05/26/04 - generalize timestamp column in explain plan
      bdagevi1
Rem
                   05/24/04 - new other xml in plan table
      bdagevi1
Rem
Rem
      veeve
                   05/06/04 - blocking_session, xid columns in ASH
                   05/18/04 - update swrf_version in wr_control
Rem
      mlfeng
Rem
      skaluska
                   05/05/04 - merge to MAIN
                   04/28/04 - sync with RDBMS MAIN SOLARIS 040426
      skaluska
Rem
Rem
                   04/28/04 - merge from RDBMS MAIN SOLARIS 040426
       iciminsk
                   04/15/04 - TSM modifications
Rem
       skaluska
Rem
       1chidamb
                   04/09/04 - merge
Rem
       iciminsk
                   04/09/04 - merge from RDBMS_MAIN_SOLARIS_040405
      1chidamb
                   03/23/04 - add director history/reason table
Rem
Rem
       skaluska
                   03/30/04 - instance SID in tsm hist$
                   03/18/04 - move TSM changes from c0902000.sql to
Rem
       skaluska
Rem
       jciminsk
                   03/04/04 - move grid from c0902000
Rem
      ckantarj
                   02/27/04 - add cardinality columns to service$
                   02/25/04 - director indexes
Rem
      jstamos
Rem
      mxiao
                   05/13/04 - add chdlevid# to dimjoinkey$
                   03/09/04 - rules upgrade change
Rem
      weiwang
Rem
       1kaplan
                   02/22/04 - generic lob assembly
Rem
      rgmani
                   05/19/04 - Upgrade for scheduler
                   05/18/04 - one more stat to seg_stat
Rem
      smuthuli
                   05/04/04 - bugfix 3431498: drop extract & existsnode op
Rem
       vmedi
                   04/22/04 - file group tables
Rem
      htran
Rem
      alakshmi
                   04/19/04 - system privilege READ_ANY_FILE_GROUP
                   04/20/04 - Adding new member to advisor type
Rem
      gssmith
                   04/14/04 - ADD a column TO dimlevel$
Rem
      sbodaga1
Rem
      dsemler
                   04/13/04 - upgrade service$ for 10g2
Rem
       rburns
                   04/07/04 - add scripts for release upgrade
```

05/12/04 - alter column datatype to system.logstdby $\$ events

Rem

jmzhang

```
- add columns to system.logstdby$apply_milestone
Rem
                          - add columns to system.logstdby$apply_progress
Rem
      mlfeng
                 04/26/04 - p1, p2, p3 for event name
      rburns
                 03/26/04 - invalidate MVs
Rem
Rem
      mxiao
                 03/30/04 - add columns to Materialized View metadata
      arithikr
                 03/29/04 - 3473968 - correct mispell privilege
Rem
Rem
      mbrev
                 04/08/04 - CDC meta changes for sequences
Rem
      mbrey
                 03/30/04 - CDC change sources/propagations
                 03/03/04 - add index on type$.hashcode
Rem
      avoaz
Rem
      clei
                 03/02/04 - remove encryption profiles
                 02/09/04 - Upgrade apply$_error
Rem
      bpwang
Rem
      alakshmi
                 02/24/04 - insert new system privileges for file groups
                 02/12/04 - case-sensitive sqlset definitions
Rem
      pbe1knap
Rem
      mlfeng
                 02/03/04 - awr seg stat and rac changes
                 02/03/04 - add apply$_error_txn
Rem
      sbalaram
                 02/11/04 - Advisor Framework changes
Rem
      gssmith
Rem
      rburns
                 01/16/04 - rburns_add_10_1_updw_scripts
                 01/07/04 - Created
Rem
      rburns
Rem BEGIN STAGE 1: upgrade from 10.1.0 to 10.2
Rem Remove entries from sys.duc\$ - rebuilt for 10.2 by catalog and catproc
truncate table duc$:
Rem Begin Advisor Framework upgrade items
alter table sys.wri$_adv_recommendations add (flags number);
alter table sys.wri$_adv_def_parameters add (description varchar2(9));
alter table sys.wri$_adv_parameters add (description varchar2(9));
alter table sys.wri$_adv_sqlt_plans add (other_xml clob);
alter table sys.wri$_adv_objects add (other clob);
alter type wri$_adv_abstract_t
  add member procedure sub_implement(task_id in number,
                                  rec_id in number,
                                  exit_on_error number)
  cascade:
alter type wri$_adv_sqlaccess_adv
  add overriding member procedure sub\_implement(task\_id\ in\ number,
                                             rec_id in number,
                                             exit_on_error number)
  cascade;
alter type wri$_adv_tunemview_adv
  add overriding member procedure sub_implement(task_id in number,
                                            rec id in number,
                                             exit_on_error number)
  cascade;
Rem End Advisor Framework upgrade items
```

Rem

```
Rem=
Rem Add new system privileges here
delete from SYSAUTH$ where privilege# = -233;
delete from SYSTEM_PRIVILEGE_MAP where privilege = -233;
delete from audit$ where option# = 233;
insert into SYSTEM_PRIVILEGE_MAP values (-233, 'MERGE ANY VIEW', 0);
insert into SYSTEM_PRIVILEGE_MAP values (-276, 'MANAGE FILE GROUP', 1);
insert into SYSTEM_PRIVILEGE_MAP values (-277, 'MANAGE ANY FILE GROUP', 1);
insert into SYSTEM PRIVILEGE MAP values (-278, 'READ ANY FILE GROUP', 1);
insert into SYSTEM_PRIVILEGE_MAP values (-279, 'CHANGE NOTIFICATION', 0);
insert into SYSTEM_PRIVILEGE_MAP values (-280, 'CREATE EXTERNAL JOB', 0);
grant all privileges, analyze any dictionary to dba with admin option;
delete from SYSTEM PRIVILEGE MAP
  where privilege in (-194, -195, -196, -197, -198, -199,
                     -229, -230, -231, -232,
                     -239, -240);
delete from STMT AUDIT OPTION MAP
  where option# in (194, 195, 196, 197, 198, 199,
                   239, 240);
update SYSTEM PRIVILEGE MAP set name = 'GRANT ANY OBJECT PRIVILEGE'
  where privilege=-244;
update STMT_AUDIT_OPTION_MAP set name = 'GRANT ANY OBJECT PRIVILEGE'
  where option#=244;
delete from sysauth$ where privilege# in (-194, -195, -196, -197, -198, -199,
                                         -229, -230, -231, -232, -239, -240);
delete from audit$ where option# in (194, 195, 196, 197, 198, 199,
                                    229, 230, 231, 232, 239, 240);
BEGIN
  EXECUTE IMMEDIATE
  'REVOKE CONNECT from LOGSTDBY_ADMINISTRATOR';
EXCEPTION
  WHEN OTHERS THEN
      IF SQLCODE IN (-1917, -1918, -1919, -1951, -1952) THEN NULL;
     ELSE RAISE;
     END IF;
END;
Rem Add new object privileges here
Rem======
insert into TABLE PRIVILEGE MAP values (28, 'MERGE');
Rem Grant CREATE EXTERNAL JOB to all users with CREATE JOB (for compatibility)
DECLARE
 TYPE varchartab IS TABLE OF VARCHAR2 (60);
  user_clauses varchartab;
```

```
i PLS_INTEGER;
BEGIN
  SELECT '"'|| grantee || '"' ||
    decode(admin_option,'YES',' WITH ADMIN OPTION','')
  BULK COLLECT INTO user_clauses FROM dba_sys_privs
  WHERE PRIVILEGE='CREATE JOB';
  FOR i IN user_clauses.FIRST .. user_clauses.LAST
    EXECUTE IMMEDIATE 'GRANT CREATE EXTERNAL JOB TO ' || user_clauses(i);
  END LOOP;
END;
Rem Removal old privileges from CONNECT role
BEGIN
  EXECUTE IMMEDIATE 'REVOKE ALTER SESSION FROM CONNECT';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE = -1952 THEN NULL;
    ELSE RAISE;
    END IF;
END;
BEGIN
  EXECUTE IMMEDIATE 'REVOKE CREATE SYNONYM FROM CONNECT';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE = -1952 THEN NULL;
    ELSE RAISE;
    END IF;
END;
  EXECUTE IMMEDIATE 'REVOKE CREATE VIEW FROM CONNECT';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE = -1952 THEN NULL;
    ELSE RAISE;
    END IF;
END;
BEGIN
  EXECUTE IMMEDIATE 'REVOKE CREATE DATABASE LINK FROM CONNECT';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE = -1952 THEN NULL;
    ELSE RAISE;
    END IF;
END;
/
  EXECUTE IMMEDIATE 'REVOKE CREATE TABLE FROM CONNECT';
EXCEPTION
  WHEN OTHERS THEN
```

```
IF SQLCODE = -1952 THEN NULL;
   ELSE RAISE;
   END IF;
END;
BEGIN
 EXECUTE IMMEDIATE 'REVOKE CREATE CLUSTER FROM CONNECT';
 WHEN OTHERS THEN
   IF SQLCODE = -1952 THEN NULL;
   ELSE RAISE;
   END IF:
END;
BEGIN
 EXECUTE IMMEDIATE 'REVOKE CREATE SEQUENCE FROM CONNECT';
EXCEPTION
 WHEN OTHERS THEN
   IF SQLCODE = -1952 THEN NULL;
   ELSE RAISE;
   END IF:
END;
Rem Revoke SELECT on exu?1nk FROM SELECT_CATALOG_ROLE
BEGIN
 EXECUTE IMMEDIATE 'REVOKE SELECT ON sys.exu91nk FROM SELECT_CATALOG_ROLE';
EXCEPTION
 WHEN OTHERS THEN
   IF SQLCODE IN ( -942, -1927 ) THEN NULL;
   ELSE RAISE;
   END IF;
END;
 EXECUTE IMMEDIATE 'REVOKE SELECT ON sys.exu81nk FROM SELECT_CATALOG_ROLE';
EXCEPTION
 WHEN OTHERS THEN
   IF SQLCODE IN ( -942, -1927 ) THEN NULL;
   ELSE RAISE;
   END IF;
END;
BEGIN
 EXECUTE IMMEDIATE 'REVOKE SELECT ON sys.exu71nk FROM SELECT_CATALOG_ROLE';
EXCEPTION
 WHEN OTHERS THEN
   IF SQLCODE IN ( -942, -1927 ) THEN NULL;
   ELSE RAISE;
   END IF;
END;
Rem Add new audit options here
```

```
insert into STMT AUDIT OPTION MAP values (276, 'MANAGE FILE GROUP', 0);
insert into STMT_AUDIT_OPTION_MAP values (277, 'MANAGE ANY FILE GROUP', 0);
insert into STMT_AUDIT_OPTION_MAP values (278, 'READ ANY FILE GROUP', 0);
insert into STMT_AUDIT_OPTION_MAP values (279, 'CHANGE NOTIFICATION', 0);
insert into STMT_AUDIT_OPTION_MAP values (280, 'CREATE EXTERNAL JOB', 0);
insert into STMT AUDIT OPTION MAP values (93, 'CREATE JAVA SOURCE', 0);
insert into STMT_AUDIT_OPTION_MAP values (94, 'CREATE JAVA CLASS', 0);
insert into STMT_AUDIT_OPTION_MAP values (95, 'CREATE JAVA RESOURCE', 0);
insert into STMT AUDIT OPTION MAP values (96, 'ALTER JAVA SOURCE', 0);
insert into STMT_AUDIT_OPTION_MAP values (97, 'ALTER JAVA CLASS', 0);
insert into STMT_AUDIT_OPTION_MAP values (98, 'ALTER JAVA RESOURCE', 0);
insert into STMT_AUDIT_OPTION_MAP values (99, 'DROP JAVA SOURCE', 0);
insert into STMT_AUDIT_OPTION_MAP values (100, 'DROP JAVA CLASS', 0);
insert into STMT AUDIT OPTION MAP values (101, 'DROP JAVA RESOURCE', 0);
update STMT_AUDIT_OPTION_MAP set property = 0
  where option# = 218 and name = 'MANAGE ANY QUEUE';
update STMT AUDIT OPTION MAP set property = 0
  where option# = 219 and name = 'ENQUEUE ANY QUEUE';
update STMT_AUDIT_OPTION_MAP set property = 0
  where option# = 220 and name = 'DEQUEUE ANY QUEUE';
insert into STMT AUDIT OPTION MAP values (245, 'CREATE EVALUATION CONTEXT', 0);
insert into STMT_AUDIT_OPTION_MAP
   values (246, 'CREATE ANY EVALUATION CONTEXT', 0);
insert into STMT_AUDIT_OPTION_MAP
   values (247, 'ALTER ANY EVALUATION CONTEXT', 0);
insert into STMT AUDIT OPTION MAP
   values (248, 'DROP ANY EVALUATION CONTEXT', 0);
insert into STMT_AUDIT_OPTION_MAP
   values (249, 'EXECUTE ANY EVALUATION CONTEXT', 0);
insert into STMT AUDIT OPTION MAP values (250, 'CREATE RULE SET', 0);
insert into STMT_AUDIT_OPTION_MAP values (251, 'CREATE ANY RULE SET', 0);
insert into STMT_AUDIT_OPTION_MAP values (252, 'ALTER ANY RULE SET', 0);
insert into STMT AUDIT OPTION MAP values (253, 'DROP ANY RULE SET', 0);
insert into STMT_AUDIT_OPTION_MAP values (254, 'EXECUTE ANY RULE SET', 0);
insert into STMT_AUDIT_OPTION_MAP values (257, 'CREATE RULE', 0);
insert into STMT AUDIT OPTION MAP values (258, 'CREATE ANY RULE', 0);
insert into STMT_AUDIT_OPTION_MAP values (259, 'ALTER ANY RULE', 0);
insert into STMT_AUDIT_OPTION_MAP values (260, 'DROP ANY RULE', 0);
insert into STMT_AUDIT_OPTION_MAP values (261, 'EXECUTE ANY RULE', 0);
Rem=======
Rem Add new audit_actions rows here
-- add restore point related rows
insert into audit actions values (206, 'CREATE RESTORE POINT');
insert into audit_actions values (207, 'DROP RESTORE POINT');
-- add single session proxy related rows
insert into audit_actions values (208, 'PROXY AUTHENTICATION ONLY') ;
```

insert into STMT\_AUDIT\_OPTION\_MAP values (233, 'MERGE ANY VIEW', 0);

```
Rem Drop views removed from last release here
Rem Remove obsolete dependencies for any fixed views in i1001000.sql
drop view DBA_HIST_CLASS_CACHE_TRANSFER;
drop\ public\ synonym\ DBA\_HIST\_CLASS\_CACHE\_TRANSFER;
Rem Drop packages removed from last release here
Rem=====
drop package DBMS STREAMS XML LCR UTL;
drop package DBMS_DBUPGRADE;
drop package DBMS_LOGSTDBY_PUBLIC;
Rem For the 10.1 to 10.2 upgrade, utlip.sql is NOT run as part of the
Rem upgrade since PL/SQL objects do not need to be recompiled. Any other
Rem types of objects that need to be invalidated should be include here.
Rem Invalite Materialized Views
update obj$ set status = 5 where type# = 42;
commit;
Rem Add changes to sql.bsq dictionary tables here
Rem Recreate atempind\$ just in case it did not get create by c0800050.sql
Rem ORA-00955 if the index is already created.
create index atempind$ on atemptab$(id)
            Rem
Rem Add generation number to i_aw_prop$ index
begin
 execute immediate 'drop index sys.i_aw_prop$';
exception
  when others then
     if sqlcode = -1418 then null;
     else raise;
     end if;
end;
create index sys.i_aw_prop$
 on sys.aw_prop$ (awseq#, oid, propname, gen#)
 tablespace sysaux
Rem Add cardinality columns to service$
```

ALTER TABLE service\$ ADD

Rem=

```
(
  min_cardinality
                     number,
                                                               /* cardinality */
  max_cardinality
                     number,
  goa1
                     number,
                                                              /* service goal */
                                                                  /* none : 0 */
                                                          /* service time : 1 */
                                                              /* throughput : 2 */
  flags
                     number
                                                   /* service attribute flags */
                                                        /* GRID enabled : 0x1 */
                                                         /* DTP service : 0x2 */
);
Rem
Rem director changes
begin
  execute immediate 'drop index sys.i_dir$migrate_ui';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise:
      end if;
end;
create unique index sys.i_dir$migrate_ui
  on sys.dir\migrate_operations(job_name, status)
  tablespace sysaux
create index sys.i_dir$migrate_status
  on sys.dir$migrate_operations(status)
  tablespace sysaux
begin
  execute immediate 'drop index sys.i_dir$service_ui';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end;
create unique index sys.i_dir$service_ui
  on sys.dir$service_operations(job_name, status)
  tablespace sysaux
create index sys. i dir$service status
  on sys.dir$service_operations(status)
  tablespace sysaux
begin
  execute immediate 'drop index sys.i_dir$quiesce_ui';
exception
```

```
when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end;
create unique index sys.i_dir$quiesce_ui
  on sys.dir$quiesce_operations(job_name, status)
  tablespace sysaux
begin
  execute immediate 'drop index sys.i_dir$resonate_ui';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end;
create unique index sys. i_dir$resonate_ui
  on sys.dir$resonate_operations(job_name, status)
  tablespace sysaux
  execute immediate 'drop index i_dir$escalate_ui';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end;
create unique index sys. i_dir$escalate_ui
  on sys.dir$escalate_operations(escalation_id, status)
  tablespace sysaux
create index sys.i_dir$escalate_status
  on sys.dir$escalate_operations(status)
  tablespace sysaux
  execute immediate 'drop index sys.i_dir$db_attributes_ui';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end;
create unique index sys.i_dir$db_attributes_ui
```

```
on sys.dir$database_attributes(database_name, attribute_name)
  tablespace sysaux
  execute immediate 'drop index sys.i_dir\service_attributes_serv';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end:
create unique index sys.i_dir$service_attributes_ui
  on sys.dir$service_attributes(service_id, attribute_name)
  tablespace sysaux
rem table used by director for keeping alert history
create table dir$alert history
   alert_name
                    varchar2(200),
   {\tt message\_level}
                    number,
   action_id
                    number,
   reason id
                    number,
   last_time
                    date,
   next\_time
                    date,
   action_time
                    date,
   incarnation_info varchar2(4000),
   job_name
                    varchar2(100),
   sparen1
                    number,
   sparen2
                    number,
   sparen3
                    number,
                    number,
   sparen4
   sparen5
                    number,
   sparevc1
                    varchar2(4000),
                    varchar2 (4000),
   sparevc2
   sparevc3
                    varchar2 (4000),
                    varchar2 (4000),
   sparevc4
   sparevc5
                    varchar2(4000))
tablespace sysaux
create index sys.i_dir$alert_history_name
  on sys.dir$alert_history(alert_name)
  tablespace sysaux
create index sys.i_dir$alert_history_action_id
  on sys.dir$alert_history(action_id)
  tablespace sysaux
create index sys.i_dir$alert_history_reason_id
  on sys.dir$alert_history(reason_id)
  tablespace sysaux
create index sys.i_dir$alert_history_at
  on sys.dir$alert_history(action_time)
```

```
tablespace sysaux
rem table used by director for keeping reasons
create table dir$reason_strings
   reason_id
                    number,
                    varchar2 (4000),
   reason
   sparen1
                    number,
   sparen2
                    number,
   sparevc1
                    varchar2(4000),
   sparevc2
                    varchar2(4000))
tablespace sysaux
create unique index sys.i_dir$reason_strings_ui
  on sys.dir$reason_strings(reason_id)
  tablespace sysaux
Rem
Rem TSM (transparent session migration)
begin
  execute immediate 'drop index i_tsm_hist1';
exception
   when others then
      if sqlcode = -1418 then null;
      else raise;
      end if;
end;
drop table tsm_hist$;
create table tsm src$
  /* the following are set by start_migration */
                             varchar2(4000),
  src_db_name
                                                             /* source db name */
                             varchar2(4000),
                                                       /* source instance name */
  src_inst_name
  src_inst_id
                             varchar2(4000),
                                                         /* source instance id */
  src_inst_start_time
                             timestamp with time zone,
                                            /* start time for source instance */
                                                 /* migration sequence number */
  sequence#
                             number,
  src_sid
                                             /* session id on source instance */
                             number,
                                                 /* serial# on source instance */
  src_serial#
                             number,
  src_state
                             number,
                                                            /* migration state */
  connect_string
                             varchar2(4000),
                                                /* destination connect string */
  {\tt src\_start\_time}
                             timestamp with time zone, /* migration start time */
  /st the following are updated by source session st/
                             number,
                                                  /* estimated migration cost */
  cost
  failure_reason
                             number,
                                           /* reason for failure of migration */
                             timestamp with time zone, /* migration end time */
  src_end_time
                             number, /* number of roundtrips during migration */
  roundtrips
  src userid
                             number,
                                                                    /* user id */
  src_schemaid
                             number,
                                                                  /* schema id */
  dst_db_name
                             varchar2 (4000)
                                                        /* destination db name */
)
```

```
tablespace SYSAUX
create index i tsm src1$ on tsm src$(sequence#)
tablespace SYSAUX
create index i_tsm_src2$ on tsm_src$(src_sid, src_serial#, sequence#)
tablespace SYSAUX
create table tsm_dst$
                            varchar2(4000),
                                                            /* source db name */
  src\_db\_name
  dst db name
                            varchar2 (4000),
                                                       /* destination db name */
                            varchar2(4000),
                                                 /* destination instance name */
  dst_inst_name
  dst\_inst\_id
                            varchar2 (4000),
                                                  /* destination instance id */
  {\tt dst\_inst\_start\_time}
                            timestamp with time zone,
                                      /* start time for destination instance */
  sequence#
                            number.
                                                /* migration sequence number */
  dst_sid
                                        /* session id on destination instance */
                            number,
  dst_serial#
                            number,
                                           /* serial# on destination instance */
                            timestamp with time zone,/* migration start time */
  dst\_start\_time
  dst end time
                            timestamp with time zone, /* migration end time */
                                                                   /* user id */
  dst userid
                            number,
  dst\_schemaid
                            number,
                                                                 /* schema id */
  dst\_state
                            number
                                              /* destination migration state */
tablespace SYSAUX
create index i_tsm_dst1\ on tsm_dst\(sequence#)
tablespace SYSAUX
create index i_tsm_dst2$ on tsm_dst$(dst_sid, dst_serial#, sequence#)
tablespace SYSAUX
create sequence tsm_mig_seq$
  increment by 1
  start with 1
  minvalue 0
  nomaxvalue
 cache 10
 order
  nocycle
Rem Add columns to Materialized View metadata
ALTER TABLE snap$ ADD(syn_count INTEGER);
ALTER TABLE sumdep$ ADD(syn_own
                                   VARCHAR2 (30));
ALTER TABLE sumdep$ ADD(syn_name VARCHAR2(30));
ALTER TABLE sumdep$ ADD(syn_master NUMBER);
ALTER TABLE sumdep$ ADD(vw_query LONG);
ALTER TABLE sumdep$ ADD(vw_query_len NUMBER);
UPDATE snap$ SET syn count = 0;
UPDATE sumdep$ SET syn_master = 0;
UPDATE sumdep$ SET vw_query_len = 0;
Rem Begin streams changes.
-- add lob assembly
alter table sys.apply$_dest_obj_ops add
  (assemble_lobs
                       char(1) default 'N');
```

```
rem table used to store message ids of error transactions for Streams
create table apply$ error txn
  msg\_id
                       raw (16),
                                        /* unique id of a msg, same as in the */
                                                               /* queue table */
  local_transaction_id varchar2(22),
                                            /* id of txn that created the err */
  txn message number number
                                        /* unique number of a msg in the txn. */
rem Recoverable script : table storing recoverable script details
create table reco_script$
(
                         raw(16),
                                                          /* global unique id */
  oid
  invoking_package_owner varchar2(30),
                                                /* pkg owner of invoking proc */
                         varchar2(30),
                                                  /* name of the invoking pkg */
  invoking_package
  invoking_procedure
                         varchar2(30),
                                                 /* name of the invoking proc */
  invoking_user
                         varchar2(30),
                                                             /* invoking user */
  total blocks
                         number.
                                     /* total number of blocks in the script */
  context
                         clob,
                                       /* any context the user wishes to pass */
                                 /* between blocks, like some state variables */
  status
                         number,
                                   /* GENERATING, EXECUTING, EXECUTED, ERROR */
  done_block_num
                         number.
                            /* nth block that has been successfully executed */
                         varchar2(4000),
                                                /* comments passed in by user */
  script_comment
  ctime
                         date default SYSDATE,
                                                        /* script create time */
  spare1
                         number,
                         number,
  spare2
  spare3
                         number.
  spare4
                         varchar2(1000),
  spare5
                         varchar2(1000),
  spare6
                         date
tablespace SYSAUX
create unique index reco_script$_unq
  on reco_script$ (oid)
tablespace SYSAUX
rem Recoverable script : table storing operation parameters
create table reco_script_params$
  oid
                 raw(16),
                                         /* global unique id of the operation */
                                        /* to associate multivalue parameters */
  param_index
                 number,
                 varchar2(30),
                                                         /* name of parameter */
  name
                 varchar2(4000),
                                                        /* value of parameter */
  value
                 number,
  spare1
  spare2
                 number,
                 varchar2(1000)
  spare3
tablespace SYSAUX
```

```
on reco_script_params$ (oid, name, param_index)
tablespace SYSAUX
rem Recoverable script : table storing recoverable script blocks
create table reco_script_block$
(
  oid
                                                           /* global unique id */
                       raw (16),
  block_num
                       number,
                                                   /* nth block in the script */
  forward_block
                       clob,
                                              /* forward block to be executed */
  forward_block_dblink varchar2(128),
                                           /* where forward block is executed */
  undo block
                       clob.
                                 /* block to be executed in case of rollback */
  undo_block_dblink
                       varchar2(128),
                                              /* where undo block is executed */
  state_block
                       clob,
                                     /* block to be executed to set the state */
                                  /st EXECUTED, ERROR, NOT EXECUTED, EXECUTING st/
  status
                       number,
                       clob,
                                           /* any ctx the user wishes to pass */
  context
  block comment
                       varchar2 (4000),
                                               /* user comments for the block */
                       date default SYSDATE,
                                               /* time the block was created */
  ctime
  spare1
                       number,
                       number.
  spare2
                       number.
  spare3
                       varchar2(1000),
  spare4
  spare5
                       varchar2(1000),
  spare6
                       date
tablespace SYSAUX
create unique index reco_script_block$_unq
  on reco_script_block$ (oid, block num)
tablespace SYSAUX
rem Recoverable script : table storing recoverable script errors
create table reco_script_error$
  oid
                      raw(16),
                                                           /* global unique id */
                                                     /* nth block that failed */
  block_num
                      number,
  error_number
                      number,
                                                               /* error number */
                      varchar2 (4000),
                                                              /* error message */
  error_message
  error_creation_time date default SYSDATE,
                                                        /* time error occured */
  spare1
                      number,
                      varchar2(1000)
  spare2
tablespace SYSAUX
Rem\ add\ oldest\_transaction\_id\ to\ streams\$\_apply\_milestone
ALTER TABLE streams$_apply_milestone ADD
  oldest_transaction_id varchar2(22)
                                                     /* oldest transaction id */
)
Rem add ua_notification_handler to streams$_apply_process
ALTER TABLE streams\$_app1y_process ADD
(
```

```
UA_NOTIFICATION_HANDLER VARCHAR2 (98),
  UA_RULESET_OWNER
                           VARCHAR2(30),
  UA RULESET NAME
                           VARCHAR2 (30)
);
create unique index streams$_apply_error_txn_unq
  on apply$_error_txn(local_transaction_id, txn_message_number)
  tablespace SYSAUX
ALTER TABLE apply$_error ADD
(
  error_creation_time
                                                  /* time this error occurred */
Rem apply spilling transaction information
create table streams$_apply_spill_txn
(
                          varchar2(30) NOT NULL, /* name of the apply process */
  app1yname
                             number NOT NULL,
                                                 /* source transaction ID usn */
  xidusn
  xids1t
                             number NOT NULL,
                                                 /* source transaction ID slt */
  xidsqn
                             number NOT NULL,
                                                  /* source transaction ID sqn */
  first_scn
                             number NOT NULL,
                                                       /* first SCN in the txn */
                                                        /* last SCN in the txn */
  last_scn
                             number,
                                                   /* last sequence in the txn */
  last_scn_seq
                             number.
  last_cap_instno
                             number,
                                               /* capture instantiation number */
  {\tt commit\_scn}
                             number,
                                                     /* commit SCN for the txn */
  spillcount
                             number,
                                             /* the number of messages spilled */
                                                               /* raised error */
  err_num
                             number,
                                           /* index of 1cr which raised error */
  err_idx
                             number.
  sender
                             varchar2(30),
                                                  /* user who enqueued the txn */
  flags
                             number,
                                                            /* txn level flags */
  priv_state
                             number,
                                                                   /* txn state */
                                                     /* distributed commit SCN */
  distrib_cscn
                             number,
  src\_commit\_time
                                      /* time when txn committed on the source */
                             number.
  dep_flag
                                                           /* dependency state */
                             number,
  spill flags
                             number,
                                                       /* spill specific flags */
  first_message_create_time date,
                                             /* time first message was created */
                             date DEFAULT SYSDATE, /* time of spill creation */
  spill\_creation\_time
  txnkey
                             number,
                                           /* the id key for this transaction */
  spare1
                  number,
  spare2
                  number,
  spare3
                  number,
  spare4
                  number.
  spare5
                  varchar2 (4000),
                   varchar2 (4000),
  spare6
                   varchar2 (4000)
  spare7
tablespace SYSAUX
create unique index i_streams_apply_spill_txn
 on streams$_apply_spill_txn(applyname, xidusn, xidslt, xidsqn)
tablespace SYSAUX
rem apply spill tracking table
create table streams$_apply_spill_txn_list
```

```
(
  txnkey
                            number,/* the id key in streams$_apply_spill_txn */
                            varchar2(1),
  status
  spare1
                            number,
  spare2
                            number,
                            varchar2(4000),
  spare3
  spare4
                            varchar2 (4000)
tablespace SYSAUX
Rem add spare2 and flags columns to streams$_prepare_ddl
ALTER TABLE streams$_prepare_ddl ADD
(
  flags
                                /* flags for supplemental logging: see knl.h */
              number,
              varchar2(1000)
  spare2
Rem add spare2 and flags columns to streams$_prepare_object
ALTER TABLE streams$_prepare_object ADD
  flags
              number,
                                /* flags for supplemental logging: see knl.h */
  spare2
              varchar2(1000)
Rem Zero out flags column
UPDATE streams$_prepare_dd1
  SET flags = 0
  WHERE flags IS NULL;
COMMIT;
UPDATE streams$_prepare_object
  SET flags = 0
  WHERE flags IS NULL;
COMMIT;
Rem
Rem Begin CDC changes here
Rem
Rem add new columns to cdc_change_sources$
alter table cdc_change_sources$
add (
  capture_name
                     varchar2(30),
                                              /* Streams capture engine name */
                     varchar2(30),
                                               /* Streams capture queue name */
  capqueue_name
  capqueue\_tabname
                     varchar2(30),
                                         /* Streams capture queue table name */
  source_enabled
                     char(1)
                                              /* Y or N - is capture started */
Rem add new columns to cdc_change_sets$
alter table cdc_change_sets$
add (
  set_sequence varchar2(30)
                                            /* sequence object name for rsid */
```

```
Rem add new tables
create table cdc_propagations$
                                                                                                               /* cdc propagation info */
(
                                                                                           /* describes a given propagation */
                                            varchar2(30) not null,
                                                                                                         /*Streams propagation name */
    propagation name
    destqueue_publisher varchar2(30) not null,
                                                                                                                 /* owner of dest queue */
    destqueue_name
                                            varchar2(30) not null,
                                                                                                            /* destination queue name */
    staging_database
                                            varchar2(128) not null,
                                                                                                                /* stage db global name */
    sourceid name
                                            varchar2(30) not null.
                                                                                    /* source identifier name for propag */
    source_class
                                            number not null
                                                                                    /* class of source
                                                                                                                                                                  */
                                                                                    /* 1=propag starts at change source
                                                                                                                                                                */
                                                                                    /* 2=propag starts at change set
\verb|create| index i_cdc_propagations| so cdc_propagations| (propagation_name)|
create table cdc_propagated_sets$
                                                                                                       /* cdc set propagation info */
                                                                             /* correlates progations to change sets */
                                              varchar2(30) not null,
                                                                                                           /*Streams propagation name*/
    propagation_name
    change_set_publisher varchar2(30) not null,
                                                                                                             /* change set publisher */
                                              varchar2(30) not null
                                                                                                         /* change set name-stage db*/
    change_set_name
\verb|create index i_cdc_propagated_sets| for cdc_propagated_sets| for cd
Rem
Rem end CDC changes
Rem
Rem BEGIN File Group tables
rem file groups
create table fgr$ file groups
(
                                                                                  not null,
    file_group_id
                                                                                                                 /* obj# for file group */
                                          number
    keep_files
                                          varchar2(1)
                                                                                  not null,
                                                                                                                      /* keep files setting*/
    min_versions
                                          number
                                                                                  not null,
                                                                                                                    /* min number to keep */
                                                                                                                    /* max number to keep */
    max_versions
                                          number
                                                                                  not null,
                                                                                                                        /* max days to keep */
    retention_days
                                          number
                                                                                  not null,
                                          varchar2(30) not null,
                                                                                                                    /* file group creator */
    creator
    creation_time
                                          timestamp with time zone not null,
                                                                                                                               /* creation time */
                                          varchar2(30) not null,
                                                                                                         /* sequence for version id */
    sequence_name
    audit$
                                          varchar2(38) not null,
                                                                                                                        /* auditing options */
                                          varchar2 (4000),
                                                                                                                                 /* user comment */
    user_comment
    default_dir_obj
                                          varchar2(30),
                                                                                                       /* default directory object */
    spare1
                                          number,
    spare2
                                          number,
                                          varchar2(30),
    spare3
                                          varchar2 (128)
    spare4
```

```
on fgr$_file_groups(file_group_id)
rem file group versions
create table fgr$_file_group_versions
  version_id
                    number
                                        not null,
                                                       /* internal version id */
                    number
                                        not null,
                                                      /* version's file group */
  file group id
  creator
                    varchar2(30) not null,
                                                         /* version's creator */
  creation_time
                    timestamp with time zone not null,
                                                             /* creation time */
                                       not null,
                                                            /* version's GUID */
                    raw(16)
  version\_guid
  version name
                    varchar2(30) not null.
                                                           /* name of version */
  user_comment
                    varchar2(4000),
                                                               /* user comment */
  \tt default\_dir\_obj
                    varchar2(30),
                                                 /* default directory object */
  spare1
                    number,
  spare2
                    number.
  spare3
                    varchar2(30),
                    varchar2(128)
  spare4
create unique index i_fgr$_file_group_versions1
on fgr$_file_group_versions(version_name, file_group_id)
create \ unique \ index \ i\_fgr\$\_file\_group\_versions2
on fgr$_file_group_versions(file_group_id, version_id)
create unique index i_fgr$_file_group_versions3
on fgr$_file_group_versions(version_guid)
rem file group versions export info
create table fgr$_file_group_export_info
                                                            /* version's GUID */
  version_guid
                    raw (16)
                                        not null.
                    varchar2(30) not null.
                                                      /* export compatibility */
  export\_version
  {\tt export\_platform}
                    varchar2(101)
                                       not null,
                                                           /* export platform */
                    date
                                       not null,
                                                                /* export time */
  export\_time
  export\_scn
                    number,
                                                                 /* export scn */
                    varchar2(128),
  source_db_name
                                                 /* global name of the source */
  spare1
                    number,
  spare2
                    number,
  spare3
                    varchar2(30),
                    varchar2(128)
  spare4
create unique index i_fgr$_file_group_export_infol
on fgr$_file_group_export_info(version_guid)
rem file group files
create table fgr$ file group files
                    varchar2(512) not null,
                                                                 /* file name */
  file_name
                    VARCHAR2(30) not null,
                                                              /* file creator */
 creator
  /* file's creation time */
  creation_time
                    timestamp with time zone not null,
  file_dir_obj
                    varchar2(30) not null, /* directory object for file */
  version_guid
                    raw(16)
                                       not null,
                                                            /* version's GUID */
```

```
/* file size */
  file_size
                     number,
  file_blocksize
                     number,
                                                             /* file block size */
                                                                   /* file type */
  file_type
                     varchar2(32),
  user_comment
                     varchar2 (4000),
                                                                /* user comment */
  spare1
                     number,
  spare2
                     number.
  spare3
                     varchar2(30),
                     varchar2 (128)
  spare4
create \ unique \ index \ i\_fgr\$\_file\_group\_files1
on fgr$_file_group_files(file_name, version_guid)
create index i_fgr$_file_group_files2
on fgr$_file_group_files(version_guid)
create table fgr$_tablespace_info
                                                              /* version's GUID */
  version_guid
                     raw(16)
                                         not null,
                    varchar2(30)
                                         not null,
                                                             /* tablespace name */
  tablespace name
  spare1
                     number,
  spare2
                     number,
  spare3
                     varchar2(30),
                     varchar2 (128)
  spare4
create unique index i_fgr$_tablespace_infol
on fgr$_tablespace_info(version_guid, tablespace_name)
create \ index \ i\_fgr\$\_tablespace\_info2
on fgr$_tablespace_info(tablespace_name)
create\ table\ fgr\$\_table\_info
  version_guid
                     raw(16)
                                         not null,
                                                              /* version's GUID */
  schema_name
                     varchar2(30) not null,
                                                                 /* schema name */
                     varchar2(30) not null,
  table_name
                                                                  /* table name */
                    varchar2(30),
  {\tt table space\_name}
                                                             /* tablespace name */
                     number,
                                                                  /* export scn */
  scn
                     number,
  spare1
  spare2
                     number,
  spare3
                     varchar2(30),
                     varchar2(128)
  spare4
create unique index i_fgr$_table_info1
on fgr$_table_info(version_guid, schema_name, table_name, tablespace_name)
create index i fgr$ table info2
on fgr$_table_info(schema_name, table_name, tablespace_name)
create index i_fgr$_table_info3
on fgr$_table_info(table_name)
```

```
Rem Add a new column to dimlevel$ TO support dimensions with SKIP WHEN NULL
ALTER TABLE sys.dimlevel$ ADD (flags NUMBER DEFAULT 0);
Rem Add a new column to dimjoinkey$ for child level id
ALTER TABLE sys.dimjoinkey$ ADD (chdlevid# NUMBER DEFAULT 0);
rem Add goal column to service$
alter table service$ add
                                                             /* service goal */
            number.
  goa1
                                                                 /* none : 0 */
                                                         /* service time : 1 */
                                                             /* throughput : 2 */
                                                  /* service attribute flags */
  flags
             number
                                                        /* DTP service : 0x1 */
Rem LINK$ TABLE HAS TWO NEW COLUMNS
ALTER TABLE link$ ADD (passwordx RAW(128));
ALTER TABLE link$ ADD (authpwdx RAW(128));
Rem Change partitioning index to be unique (bug 3748430)
Rem before creating unique indexes, lets fix bug 3802863 which could have
Rem created non-unique part# values in indpart$ and indsubpart$.
merge into indpart$ ipO using
  (select 1f. frag# part#, ip. obj# obj#
  from indpart$ ip, lobfrag$ lf
  where ip.obj# = 1f.indfragobj# and ip.part# != 1f.frag#) ip1
on (ip1.obj# = ip0.obj#)
when matched then
update set ip0.part# = ip1.part#;
merge into indsubpart$ isp0 using
  (select 1f.frag# subpart#, isp.obj# obj#
  from indsubpart$ isp, lobfrag$ lf
   where isp.obj# = lf.indfragobj# and isp.subpart# != lf.frag#) isp1
on (isp1.obj# = isp0.obj#)
when matched then
update set isp0.subpart# = isp1.subpart#;
drop index i_tabpart$
create unique index i_tabpart_bopart$ on tabpart$(bo#, part#)
drop index i_tabpart_obj$
create unique index i_tabpart_obj$ on tabpart$(obj#)
drop\ index\ i\_indpart\$
create unique index i_indpart_bopart$ on indpart$(bo#, part#)
drop index i_indpart_obj$
```

```
create unique index i_indpart_obj$ on indpart$(obj#)
drop index i_tabsubpart$
create unique index i_tabsubpart_pobjsubpart$ on tabsubpart$(pobj#, subpart#)
drop index i tabsubpart$ obj$
create unique index i_tabsubpart$_obj$ on tabsubpart$(obj#)
drop index i indsubpart$
create unique index i_indsubpart_pobjsubpart$ on indsubpart$(pobj#, subpart#)
drop index i_indsubpart_obj$
create unique index i_indsubpart_obj$ on indsubpart$(obj#)
create unique index i_tabcompart_bopart$ on tabcompart$(bo#, part#)
create unique index i_indcompart_bopart$ on indcompart$(bo#, part#)
drop index i_lobfrag$_parentobj$
create unique index i_lobfrag_parentobjfrag$ on lobfrag$(parentobj#, frag#)
drop index i_lobfrag$_fragobj$
create \ unique \ index \ i\_lobfrag\$\_fragobj\$ \ on \ lobfrag\$(fragobj\#)
drop index i_lobcomppart$_partlobj$
create index i_lobcomppart_lobjpart$ on lobcomppart$(lobj#, part#)
drop index i_lobcomppart$_partobj$
create unique index i_lobcomppart$_partobj$ on lobcomppart$(partobj#)
drop\ index\ i\_defsubpart\$
create unique index i_defsubpart$ on defsubpart$ (bo#, spart_position)
drop index i_defsubpartlob$
create unique index i_defsubpartlob\$ on defsubpartlob\$
(bo#, intcol#, spart_position)
Rem end make partitioning indexes unique
{\tt Rem \ Begin \ (bug \ 4186885): \ sync \ partition \ numbers \ for \ overflow \ partitions}
Rem
                         with base table partitions
Rem =============
merge into sys.tabpart$ tp0 using
(select ovfl_parts.tp_obj# obj#, base_parts.tp_part# part#
```

```
from
(select row_number() over (partition by tp.bo# order by tp.part#) tp_rank#,
  tp.part# tp_part#, tp.obj# tp_obj#, t.bobj# t_bobj#, t.obj# t obj#
  from sys. tabpart$ tp, sys. tab$ t
  where tp.bo# = t.obj# and to_number(bitand(t.property, 544))=544) ovfl_parts,
(select row_number() over (partition by tp.bo# order by tp.part#) tp_rank#,
  tp.part# tp_part#, t.bobj# t_bobj#, t.obj# t_obj#
  from sys. tabpart$ tp, sys. tab$ t
 where tp.bo# = t.obj# and to_number(bitand(t.property, 224))=224) base_parts
where
ovfl_parts.t_bobj\# = base_parts.t_obj\#  and
base parts.t bobj# = ovfl parts.t obj# and
base_parts.tp_part# != ovfl_parts.tp_part# and
ovfl_parts.tp_rank# = base_parts.tp_rank#) tp1
on (tp1.obj\# = tp0.obj\#)
when matched then
update set tp0.part# = tp1.part#;
commit;
Rem ===
Rem End (bug 4186885)
Rem BEGIN Transparent Column Encryption
create table enc$ (
 obj#
                                                      /* table object number */
         number.
                                          /* user id of the master key owner */
 owner# number.
 mkeyid varchar2(64),
                                                  /* global id of master key */
  encalg number,
                                                  /* encryption algorithm id */
  intalg number,
                                                   /* integrity algorithm id */
 colklc raw(2000),
                                                       /* column key locator */
 klclen number,
                                                    /* length of key locator */
  flag
         number
                                                                     /* flag */
create unique index enc_idx on enc$(obj#, owner#)
Rem END Transparent Column Encryption
Rem Change notification related dictionary tables
create table invalidation_registry$ (
  regid number,
  regflags NUMBER,
 numobjs number,
 objarray RAW(512),
  plsqlcallback varchar2(128),
  changelag number,
  username varchar2(30)
create index i_invalidation_registry$ on invalidation_registry$(regid)
create sequence invalidation_reg_id$
                                              /* registration sequence number */
```

```
increment by 1
 minvalue 1
  nomaxvalue
  cache 20
  order
  nocycle
Rem End Change notification related dictionary tables
Rem #(3350342) Secondary modification info table with partition rollup
create table mon_mods_all$
                                                          /* object number */
 ob.j#
                   number,
  inserts
                   number, /* approx. number of inserts since last analyze */
                           /* approx. number of updates since last analyze */
  updates
                   number,
  deletes
                           /* approx. number of deletes since last analyze */
                             /* timestamp of last time this row was changed */
  timestamp
                   date,
 flags
                   number,
                                                                  /* flags */
                                          /* 0x01 object has been truncated */
                   number
                           /* number of segemnt in part/subpartition table */
  drop_segments
  storage (initial 200K next 100k maxextents unlimited pctincrease 0)
create unique index i_mon_mods_all$_obj on mon_mods_all$(obj#)
  storage (maxextents unlimited)
Rem Begin bug 4318925 fix
DECLARE
 EXTENT MANAGEMENT VARCHAR2 (10);
BEGIN
  select EXTENT MANAGEMENT into EXTENT MANAGEMENT
 from dba_tablespaces where tablespace_name='SYSTEM';
  IF (EXTENT MANAGEMENT <> 'LOCAL') THEN
    EXECUTE IMMEDIATE
     'alter table ncomp_dll$ modify lob (dll) ' ||
       '(storage (next 1m maxextents unlimited pctincrease 0))';
  END IF;
END;
Rem End bug 4318925 fix
Rem=======
Rem
Rem update array_index col name to sys_nc_array_index$ for octs
update co1$ c set c.name='SYS_NC_ARRAY_INDEX$'
  where c.name = 'ARRAY INDEX' and c.col#=0 and c.intcol#=1 and
    bitand(c.property, 32) = 32 and c.obj# in (select n.ntab# from ntab$ n)
commit:
```

start with 1

Rem Add changes to other SYS dictionary objects here

```
Rem
        (created in catproc.sql scripts)
Rem======
{\tt Rem \ XMLAgg \ and \ XMLSequence \ related \ changes - BEGIN}
Rem --
drop type AggXMLInputType FORCE;
-- the following 5 privileges were not in 8.\,17 or 9.\,01
BEGIN
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON XMLAGG FROM PUBLIC';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
    ELSE RAISE;
    END IF;
END;
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON AggXMLImp FROM PUBLIC';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
    ELSE RAISE;
    END IF;
END;
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON XMLSeq_Imp_t FROM PUBLIC';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
    ELSE RAISE;
    END IF;
END;
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON XMLSeqCur_Imp_t FROM PUBLIC';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
    ELSE RAISE;
    END IF;
END;
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON XMLSeqCur2_Imp_t FROM PUBLIC';
EXCEPTION
  WHEN OTHERS THEN
    IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
    ELSE RAISE;
    END IF;
```

```
END;
    XMLAgg and XMLSequence related changes - END
Rem
Rem
Rem Metadata API changes
Rem processor). Drop public synonym and revoke grants.
drop public synonym utl_xml;
-- Grant was to PUBLIC in 9.01 and 9.20
BEGIN
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON utl_xml FROM PUBLIC';
EXCEPTION
 WHEN OTHERS THEN
   IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
   ELSE RAISE;
   END IF;
END;
-- Grant was to EXECUTE_CATALOG_ROLE in 10.1
BEGIN
  EXECUTE IMMEDIATE 'REVOKE EXECUTE ON ut1_xm1 FROM EXECUTE_CATALOG_ROLE';
EXCEPTION
 WHEN OTHERS THEN
   IF SQLCODE IN ( -04042, -1927 ) THEN NULL;
   ELSE RAISE;
   END IF;
END;
Rem End Metadata API changes
Rem
Rem upgrade rules engine objects
Rem Begin Scheduler Upgrade
ALTER TABLE sys.scheduler$_job ADD (
               varchar2(30),
  queue_owner
  queue_name
               varchar2(30),
  queue agent
               varchar2(30),
  event_rule
               varchar2(65),
 mxdur\_msgid
               raw(16));
ALTER TABLE sys. scheduler$ schedule ADD (
  queue_owner
               varchar2(30),
               varchar2(30),
  queue_name
  queue_agent
               varchar2(30));
```

```
ALTER TABLE sys.scheduler$_global_attribute ADD (
                timestamp with time zone,
  attr tstamp
  attr_intv
                interval day(3) to second(0));
Rem End Scheduler Upgrade
Rem Add changes to other SYS dictionary objects here
       (created in catproc.sql scripts)
Rem
alter table rule$ add (uactx client varchar2(30));
Rem =====
{\tt Rem\ PLSQL\_TRACE\_EVENTS\ is\ an\ optionally-present\ table,\ created\ by\ tracetab.\ sql.}
Rem Add fields added for bug 4180912, if not already present. Table not found
Rem or fields already present are possible, and should just be ignored.
{\tt Rem\ Note\ -\ these\ fields\ are\ deliberately\ not\ dropped\ on\ downgrade,\ since\ bug}
Rem txn might have been backported and their presence won't harm anything.
Rem ===
alter table sys.plsql_trace_events add
-- Fields from dbms_application_info, dbms_session, and ECID
               varchar2 (4000),
 module
  action
                varchar2 (4000),
  client_info varchar2(4000),
  client_id
                varchar2 (4000),
  ecid_id
                varchar2 (4000),
  ecid_seq
                number,
-- Fields for extended callstack and errorstack info
-- (currently set only for "Exception raised" events)
 callstack
               clob,
  errorstack
               clob
);
Rem AQ related upgade
ALTER\ TYPE\ sys.\,msg\_prop\_t\ add\ attribute\ (delivery\_mode\ NUMBER)\ CASCADE;
ALTER TYPE sys.aq$ srvntfn message
ADD ATTRIBUTE (delivery_mode NUMBER, ntfn_flags NUMBER) CASCADE;
Rem =========
Rem Begin STS schema changes
```

-- in R2, wri\$\_sqlset\_definitions stores owner names case-sensitively

```
-- make a best effort to convert case-insensitive R1 names into case-sensitive
-- R2 names
BEGIN
  EXECUTE IMMEDIATE
    'UPDATE wri$_sqlset_definitions set owner = ' ||
         ' (select name from user$ u1 where upper(u1.name) = owner) ' \mid \mid
         , where , ||
               '(select count(*) from user$ u2 ' ||
               'where upper(u2.name) = owner) = 1';
EXCEPTION
   WHEN OTHERS THEN
     IF (SQLCODE = -942) THEN
    ELSE
       RAISE;
     END IF;
END;
-- SQL tuning set names are also now unique by (name, owner) rather than
-- just by name (the index is re-created in catsqlt)
BEGIN
  EXECUTE IMMEDIATE
   'drop index wri$_sqlset_definitions_idx_01';
EXCEPTION
  WHEN OTHERS THEN
    IF (SQLCODE = -1418) THEN
      NULL;
   ELSE
      RAISE;
    END IF;
END;
-- We will need to migrate data from the 10gR1 versions of the statements
-- and binds tables into a 10 \mathrm{gR2} version. We rename the R1 versions of the
-- tables here, and then in a1001000 we move the data from the R1 version to
-- the R2 version (after first detecting the re-run case)
DECLARE
  already_r2 NUMBER;
BEGIN
  already_r2 := 0;
  - Check to see if the data migration has already been done
  -- in R2 we have no buffer gets column in the statements table
  select DECODE(count(*),
                0, 1,
                0)
        already r2
  into
        dba_tab_columns
  where owner = 'SYS' and table_name = 'WRI$_SQLSET_STATEMENTS' AND
         column_name = 'BUFFER_GETS';
  IF (already_r2 = 0) THEN
    EXECUTE IMMEDIATE 'ALTER TABLE wri\sl sql set\_statements RENAME TO ' \sl \mid
                      'wri$_sqlset_statements_10gR1';
```

```
EXECUTE IMMEDIATE 'ALTER TABLE wri$_sqlset_statements_10gR1 '
                     ' RENAME CONSTRAINT wri$_sqlset_statements_pk ' ||
                      ' TO wri$ sqlset stmts pk 10gR1';
    BEGIN
      {\tt EXECUTE\ IMMEDIATE\ 'ALTER\ INDEX\ wri\$\_sqlset\_statements\_pk\ '}
                     ' RENAME TO wri$_sqlset_stmts_pk_10gR1';
      EXCEPTION
        WHEN OTHERS THEN
         IF (SQLCODE = -1418) THEN
           NULL;
          ELSE
            RAISE;
          END IF;
    END;
    EXECUTE IMMEDIATE 'ALTER TABLE wri$ sqlset binds'
                     ' RENAME TO wri$_sqlset_binds_10gR1';
    EXECUTE IMMEDIATE 'ALTER TABLE wri$_sqlset_binds_10gR1 '
                     ' RENAME CONSTRAINT wri$_sqlset_binds_pk '
                     ' TO wri$ sqlset binds pk 10gR1';
    BEGIN
      EXECUTE IMMEDIATE 'ALTER INDEX wri$_sqlset_binds_pk '
                       ' RENAME TO wri$_sqlset_binds_pk_10gR1';
     EXCEPTION
        WHEN OTHERS THEN
          IF (SQLCODE = -1418) THEN
           NULL;
          ELSE
           RAISE;
         END IF;
    END;
    END IF; - if the schema is in its R2 format we dont need to do anything
END:
Rem End STS schema changes
Rem =======
Rem =======
Rem Begin sqltune schema changes
ALTER TABLE wri$_adv_sqlt_statistics ADD (direct_writes NUMBER)
-- in R1 the wri\$_adv_sqlt_rtn_plan table had the same name as its constraint
ALTER TABLE wri$_adv_sqlt_rtn_plan RENAME CONSTRAINT wri$_adv_sqlt_rtn_plan TO wri$_adv_sqlt_rtn_plan_pk
BEGIN
  EXECUTE IMMEDIATE 'ALTER INDEX wri$_adv_sqlt_rtn_plan '
                    'RENAME TO wri$_adv_sqlt_rtn_plan_pk';
  EXCEPTION
```

```
WHEN OTHERS THEN
      IF (SQLCODE = -1418) THEN
       NULL;
      ELSE
       RAISE;
     END IF;
END;
/
Rem End sqltune schema changes
Rem ========
Rem
Rem Bugfix# 3431498
Rem
drop public synonym extract;
drop operator extract;
drop public synonym existsnode;
drop operator existsnode;
Rem=======
Rem AWR Changes
Rem======
-- Turn ON the event to disable the partition check
alter session set events '14524 trace name context forever, level 1';
-- these types are obsoleted
drop type NUM_ARY force;
drop type VCH_ARY force;
drop type CLB_ARY force;
-- Drop these AWR report types so they will be recreated when catalog is run
drop type AWRRPT_ROW_TYPE force;
drop type AWRRPT_TEXT_TYPE_TABLE force;
drop type AWRRPT_TEXT_TYPE force;
{\tt drop\ type\ AWRRPT\_HTML\_TYPE\_TABLE\ force;}
drop type AWRRPT_HTML_TYPE force;
drop type AWRDRPT_TEXT_TYPE_TABLE force;
drop type AWRDRPT_TEXT_TYPE force;
-- drop the WRH$_SQLBIND and associate BL table. This
-- table has been replaced by WRH$_SQL_BIND_METADATA
-- and the BIND_DATA column in WRH$_SQLSTAT.
drop table WRH$_SQLBIND;
drop table WRH$_SQLBIND_BL;
drop table WRH$_CLASS_CACHE_TRANSFER;
drop table WRH$_CLASS_CACHE_TRANSFER_BL;
-- add and rename columns to WRH$_SQLSTAT and WRH$_SQLSTAT_BL
alter table WRH$_SQLSTAT
                           add PX_SERVERS_EXECS_TOTAL
                                                        number:
alter table WRH$_SQLSTAT
                           add PX_SERVERS_EXECS_DELTA
                                                       number;
alter table WRH$ SQLSTAT
                           add FORCE MATCHING SIGNATURE number;
alter table WRH$_SQLSTAT
                           add PARSING_SCHEMA_NAME
                                                        varchar2(30);
                                                        raw(2000);
alter table WRH$_SQLSTAT
                           add BIND_DATA
alter table WRH$_SQLSTAT
                           add FLAG
                                                        number;
```

```
alter table WRH$ SQLSTAT BL add PX SERVERS EXECS DELTA
                                                          number;
alter table WRH$_SQLSTAT_BL add FORCE_MATCHING_SIGNATURE number;
alter table WRH$_SQLSTAT_BL add PARSING_SCHEMA_NAME
                                                          varchar2(30);
alter table WRH$_SQLSTAT_BL add BIND_DATA
                                                          raw(2000);
alter table WRH$_SQLSTAT_BL add FLAG
                                                          number;
-- bump up size of optimizer env column
alter table WRH$_OPTIMIZER_ENV modify (OPTIMIZER_ENV raw(1000));
-- add and rename columns to WRH$ SEG STAT and WRH$ SEG STAT BL
alter table WRH$_SEG_STAT add GC_BUFFER_BUSY_TOTAL number;
alter table WRH$_SEG_STAT add GC_BUFFER_BUSY_DELTA number;
alter table WRH$_SEG_STAT
  rename column GC CR BLOCKS SERVED TOTAL to GC CR BLOCKS RECEIVED TOTAL;
alter table WRH$ SEG STAT
  rename column GC_CR_BLOCKS_SERVED_DELTA to GC_CR_BLOCKS_RECEIVED_DELTA;
alter table WRH$_SEG_STAT
  rename column GC_CU_BLOCKS_SERVED_TOTAL to GC_CU_BLOCKS_RECEIVED_TOTAL;
alter table WRH$ SEG STAT
  rename column GC CU BLOCKS SERVED DELTA to GC CU BLOCKS RECEIVED DELTA;
alter table WRH$_SEG_STAT add chain_row_excess_total number;
alter table WRH\$_SEG_STAT add chain_row_excess_delta number;
alter table WRH$ SEG STAT BL add GC BUFFER BUSY TOTAL number;
alter table WRH$_SEG_STAT_BL add GC_BUFFER_BUSY_DELTA number;
alter table WRH$_SEG_STAT_BL
  rename column GC_CR_BLOCKS_SERVED_TOTAL to GC_CR_BLOCKS_RECEIVED_TOTAL;
alter table WRH$_SEG_STAT_BL
  rename column GC_CR_BLOCKS_SERVED_DELTA to GC_CR_BLOCKS_RECEIVED_DELTA;
alter table WRH$_SEG_STAT_BL
  \hbox{rename column $\tt GC\_CU\_BLOCKS\_SERVED\_TOTAL to $\tt GC\_CU\_BLOCKS\_RECEIVED\_TOTAL;}\\
alter table WRH$ SEG STAT BL
  rename column GC CU BLOCKS SERVED DELTA to GC CU BLOCKS RECEIVED DELTA;
alter table WRH$_SEG_STAT_BL add chain_row_excess_total number;
alter table WRH$_SEG_STAT_BL add chain_row_excess_delta number;
-- add new timestamp column to wrh$_sql_plan
alter table sys.wrh$_sql_plan add (timestamp date);
-- add new other_xml column to wrh$_sql_plan
alter table sys.wrh$_sql_plan add (other_xml clob);
-- increase size of the object_node column in wrh$_sql_plan
alter table sys.wrh$_sql_plan modify (object_node varchar2(128));
-- increase size of the pool column in wrh$_sgastat_bl
alter table sys.wrh$_sgastat_bl modify (pool varchar2(12));
-- reorganize primary key
alter table WRH$ SEG STAT
  drop constraint WRH$_SEG_STAT_PK;
alter table WRH$_SEG_STAT
  add constraint WRH$ SEG STAT PK
    PRIMARY KEY (dbid, snap_id, instance_number, obj#, dataobj#)
    using index local tablespace SYSAUX;
```

alter table WRH\$\_SQLSTAT\_BL add PX\_SERVERS\_EXECS\_TOTAL

number:

```
alter table WRH$_SEG_STAT_BL
  drop constraint WRH$_SEG_STAT_BL_PK;
alter table WRH$ SEG STAT BL
  add constraint WRH$_SEG_STAT_BL_PK
    PRIMARY KEY (dbid, snap_id, instance_number, obj#, dataobj#)
    using index tablespace SYSAUX;
alter table WRH$ SEG STAT OBJ
  drop constraint WRH$_SEG_STAT_OBJ_PK;
alter table WRH$_SEG_STAT_OBJ
  add constraint WRH$_SEG_STAT_OBJ_PK
    PRIMARY KEY (dbid, obj#, dataobj#)
    using index tablespace SYSAUX;
alter table WRH$_SEG_STAT_OBJ
  add ( index_type
                              varchar2(27)
      , base obj#
                              number
      , base_object_name
                              varchar2(30)
      , base_object_owner
                               varchar2(30));
alter table WRH$ CURRENT BLOCK SERVER
  drop constraint WRH$ CURRENT BLOCK SERVER PK;
alter table WRH$_CURRENT_BLOCK_SERVER
  add constraint WRH$_CURRENT_BLOCK_SERVER_PK
    PRIMARY KEY (dbid, snap_id, instance_number)
    using index tablespace SYSAUX;
alter table WRM$_SNAP_ERROR
  drop constraint WRM$_SNAP_ERROR_PK;
alter table WRM$ SNAP ERROR
  add constraint WRM$_SNAP_ERROR_PK
    PRIMARY KEY (dbid, snap_id, instance_number, table_name)
    using index tablespace SYSAUX;
Rem
Rem Clean up the duplicate metrics data from the previous release
Rem Disabled until we add constraints to the metrics tables.
Rem
Rem DECLARE
Rem
     PROCEDURE exec_delete(table_name IN VARCHAR2,
Rem
                            metric cols IN VARCHAR2) IS
       pkco1s
                         VARCHAR2 (100);
Rem
                         VARCHAR2 (1000);
Rem
       sqlstr
       table_not_exist EXCEPTION;
Rem
       PRAGMA exception_init(table_not_exist, -942);
Rem
Rem
       -- set up the PK columns
Rem
       {\tt pkcols} := {\tt 'dbid}, \; {\tt snap\_id}, \; {\tt instance\_number}, \; {\tt '} \; | \; | \; {\tt metric\_cols}; \\
Rem
       \operatorname{--} set up the SQL string
Rem
       sqlstr := 'delete from ' || table_name ||
Rem
                     ' where (' \mid \mid pkcols
                                                || ')' ||
Rem
                     ' in (select'
Rem
                                        || pkcols
                          ' from '
                                        || table_name ||
Rem
                          ' group by ' \mid\mid pkcols
Rem
                          'having count(*) > 1)';
Rem
Rem
Rem
       execute immediate sqlstr;
Rem
       commit;
```

```
Rem EXCEPTION
Rem
      WHEN table_not_exist THEN null;
Rem
    END;
Rem BEGIN
     exec_delete('WRH$_SYSMETRIC_HISTORY', 'group_id, metric_id, begin_time');
     exec_delete('WRH$_SYSMETRIC_SUMMARY', 'group_id, metric_id');
Rem
     exec delete ('WRH$ SESSMETRIC HISTORY',
Rem
                 'group id, sessid, metric id, begin time');
Rem
     exec_delete('WRH$_FILEMETRIC_HISTORY', 'group_id, fileid, begin_time');
Rem
     exec_delete('WRH$_WAITCLASSMETRIC_HISTORY',
Rem
                 'group_id, wait_class_id, begin_time');
Rem
Rem END:
Rem /
Rem
Rem Add indexes to metrics tables
Rem
DECLARE
PROCEDURE exec_addindex(table_name IN VARCHAR2,
                        index name IN VARCHAR2,
                        metric cols IN VARCHAR2) IS
   index\_cols
                   VARCHAR2 (100);
   sqlstr
                   VARCHAR2 (1000);
   table_not_exist EXCEPTION;
  PRAGMA exception_init(table_not_exist, -942);
 BEGIN
   \operatorname{--} add the common columns
   index_cols := 'dbid, snap_id, instance_number, ' || metric_cols;
   -- set up the SQL string
   sqlstr := 'create index '|| index_name ||
            on ,
                         table_name
            ' ('
                           || index_cols ||
            ') tablespace SYSAUX';
   execute immediate sqlstr;
   commit;
 EXCEPTION
   WHEN table not exist THEN null;
END;
BEGIN
  exec_addindex('WRH$_SYSMETRIC_HISTORY', 'WRH$_SYSMETRIC_HISTORY_INDEX',
               'group_id, metric_id, begin_time');
  exec_addindex('WRH$_SYSMETRIC_SUMMARY', 'WRH$_SYSMETRIC_SUMMARY_INDEX',
               'group_id, metric_id');
  'group_id, sessid, metric_id, begin_time');
  exec_addindex('WRH$_FILEMETRIC_HISTORY', 'WRH$_FILEMETRIC_HISTORY_INDEX',
               'group_id, fileid, begin_time');
  \verb|exec_addindex| ("WRH\$_WAITCLASSMETRIC_HISTORY", "WRH\$_WAITCLASSMETRIC_HIST_IND"), \\
               'group_id, wait_class_id, begin_time');
END;
Rem
Rem Add blocking session serial#, force matching signature to
Rem WRH$_ACTIVE_SESSION_HISTORY, WRH$_ACTIVE_SESSION_HISTORY_BL
Rem Add blocking_session, xid to WRH$_ACTIVE_SESSION_HISTORY and its _BL
Rem Modify program to be varchar2(64)
```

```
alter table WRH$ ACTIVE SESSION HISTORY add (force matching signature NUMBER);
alter table WRH$_ACTIVE_SESSION_HISTORY add (blocking_session
alter table WRH$_ACTIVE_SESSION_HISTORY add (blocking_session_serial# NUMBER);
alter table WRH\$_ACTIVE\_SESSION\_HISTORY add (xid
alter table WRH$ ACTIVE SESSION HISTORY BL add (force matching signature NUMBER);
alter table WRH\$_ACTIVE_SESSION_HISTORY_BL add (blocking_session
alter table WRH$_ACTIVE_SESSION_HISTORY_BL add (blocking_session_serial# NUMBER);
alter table WRH$_ACTIVE_SESSION_HISTORY_BL add (xid
                                                                         RAW(8)):
alter table WRH$_ACTIVE_SESSION_HISTORY
                                         modify (program VARCHAR2(64));
alter table WRH$_ACTIVE_SESSION_HISTORY_BL modify (program VARCHAR2(64));
Rem
Rem Add P1, P2, P3 columns to WRH$ EVENT NAME
alter table WRH$_EVENT_NAME add (PARAMETER1 varchar2(64));
alter table WRH$_EVENT_NAME add (PARAMETER2 varchar2(64));
alter table WRH$ EVENT NAME add (PARAMETER3 varchar2(64));
alter table WRH$_UNDOSTAT ADD (status NUMBER DEFAULT 0);
alter table WRH$_UNDOSTAT ADD (spcprs_retention NUMBER DEFAULT 0);
alter table WRH$_UNDOSTAT ADD (runawayquerysqlid varchar2(13) DEFAULT NULL);
Rem
Rem\ Add\ the\ Top\ N\ SQL\ column\ to\ the\ WRM\$_WR_CONTROL\ table
Rem and set the the Top N SQL column to the Default value.
Rem
alter table WRM$_WR_CONTROL add (TOPNSQL number);
  execute immediate 'update WRM$_WR_CONTROL set TOPNSQL = 20000000000';
 commit;
EXCEPTION
  WHEN OTHERS THEN
    IF (SQLCODE = -942) THEN
     NULL;
   ELSE
     RAISE:
    END IF;
END;
Rem == Update the SWRF_VERSION to the current version. ==
               (10gR2 = SWRF Version 2)
Rem ==
\mbox{Rem} = \mbox{This step must be the last step for the AWR}
Rem == upgrade changes. Place all other AWR upgrade
Rem == changes above this.
Rem =======
BEGIN
  EXECUTE IMMEDIATE 'UPDATE wrm$ wr control SET swrf version = 2';
 COMMIT;
EXCEPTION
  WHEN OTHERS THEN
```

```
IF (SQLCODE = -942) THEN
      NULL;
    ELSE
      RAISE;
    END IF;
END;
-- Turn OFF the event to disable the partition check for AWR
alter session set events '14524 trace name context off';
-- truncate obsoleted Scheduler chains data if present
-- these tables are no longer created or used in 10.2 and up
-- their use was never supported in 10.1
BEGIN
EXECUTE IMMEDIATE 'delete from sys.obj$ where obj# in ' ||
 '(select obj# from sys.scheduler$_job_chain)';
   WHEN OTHERS THEN
      IF SQLCODE = -942 THEN NULL;
      ELSE RAISE:
      END IF;
END;
DECLARE
  PROCEDURE execute_truncate(table_name IN VARCHAR2) IS
    no_such_table EXCEPTION;
    PRAGMA exception_init(no_such_table, -942);
  BEGIN
    execute immediate 'truncate table ' || table_name;
  EXCEPTION
    WHEN no_such_table THEN null;
  END;
BEGIN
  execute_truncate('sys.scheduler$_job_chain');
  execute_truncate('sys.scheduler$_chain_varlist');
  execute_truncate('sys.scheduler$_job_step_state');
  execute_truncate('sys.scheduler$_job_step');
END;
-- name column of table scheduler$_event_log has an increased length
ALTER TABLE scheduler$_event_log MODIFY name varchar2(65);
-- datatype change for cpu_used
EXECUTE IMMEDIATE 'UPDATE sys. scheduler$_job_run_details SET cpu_used = NULL';
EXCEPTION
   WHEN OTHERS THEN
      IF SQLCODE = -942 THEN NULL;
      ELSE RAISE;
      END IF;
END;
/
COMMIT;
```

```
);
Rem Add changes to SYSTEM dictionary objects here
Rem=====
UPDATE sys.aq$_propagation_status set destqueue_id = 0;
ALTER TABLE sys.aq$_propagation_status
DROP CONSTRAINT aq$_propagation_status_primary;
ALTER TABLE sys.aq$_propagation_status
ADD CONSTRAINT aq$_propagation_status_primary
PRIMARY KEY (queue_id, destination, destqueue_id);
ALTER TABLE sys.aq\propagation_status
MODIFY (destqueue id DEFAULT 0);
-- drop any index on the event_time column of logstdby$events table
declare
  ind name varchar2(30) := null;
  ind_owner varchar2(30) := null;
begin
 begin
  select index_owner, index_name into ind_owner, ind_name
  from dba_ind_columns
  where table_name = 'LOGSTDBY$EVENTS' and
       table_owner = 'SYSTEM' and
       column_name = 'EVENT_TIME';
exception
  when others then
     ind name := null;
 end:
 if (ind_name is not null) then
  execute immediate 'drop index ' || ind_owner || '.' || ind_name;
 end if;
end;
-- drop an index added in 9.2.0.7, logmnr_logs_active.
- no longer needed because the primary key is sufficient in 10 \mathrm{g}
begin
  execute immediate 'drop index system.logmnr_log$_active';
  when others then
     if sqlcode = -1418 then null;
     else raise;
     end if;
end;
```

(

cpu\_used

interval day(3) to second(2)

```
alter table system.logstdby$events modify (event_time timestamp);
 -- add columns to logstdby$apply milestone
alter table system.logstdby$apply_milestone
    add (commit_time date, processed_time date);
 -- add column to logstdby$apply_progress
alter table system.logstdby$apply_progress add (commit_time date);
{\tt Rem \ Begin \ SQL \ Response \ Time \ upgrade \ items}
Rem=======
drop table dbsnmp.mgmt_response_v$sq1_snapshot;
drop table dbsnmp.mgmt_response_baseline;
drop table dbsnmp.mgmt_response_capture;
drop table dbsnmp.mgmt_response_config;
drop table dbsnmp.mgmt_response_tempt;
drop sequence dbsnmp.mgmt_response_capture_id;
drop sequence dbsnmp.mgmt_response_snapshot_id;
Rem Begin SQL Response Time upgrade items
Rem Upgrade system types to 10.2
Rem Evolve Type sys.aq$_reg_info
ALTER TYPE sys. aq$_reg_info
ADD ATTRIBUTE(qosflags NUMBER, payloadcbk VARCHAR2(4000), timeout NUMBER)
CASCADE:
ALTER TYPE sys.aq\_reg_info ADD CONSTRUCTOR FUNCTION aq\_reg_info(
               VARCHAR2,
 name
 namespace
               NUMBER,
 callback
               VARCHAR2,
               RAW,
 context
 anyctx
                SYS. ANYDATA,
                NUMBER)
 ctxtype
RETURN SELF AS RESULT CASCADE;
ALTER TYPE sys.aq$_reg_info ADD CONSTRUCTOR FUNCTION aq$_reg_info(
 name
                VARCHAR2,
                NUMBER,
 namespace
 callback
                VARCHAR2,
                 RAW,
 context
 qosflags
                NUMBER,
                 NUMBER)
 timeout
RETURN SELF AS RESULT CASCADE;
ALTER TYPE sys.aq$_event_message MODIFY ATTRIBUTE
(sub name VARCHAR2(128), queue name VARCHAR2(65)) CASCADE
```

-- change the datatype of column event\_time in logstdby\$events

```
queue_name VARCHAR2 (65) CASCADE
-- create type for storing generic ntfn descriptor for plsql notification
-- and add the type as an atribute to aq$_descriptor
CREATE or replace TYPE sys.aq$_ntfn_descriptor AS OBJECT (
                          number)
        ntfn_flags
                                                       -- flags
ALTER TYPE sys. aq$ descriptor
  ADD ATTRIBUTE (gen_desc sys.aq\_ntfn_descriptor)
  CASCADE
Rem =======
Rem All additions/modifications to lcr$_{row, ddl}_record must go here.
ALTER TYPE 1cr$_row_record ADD MEMBER FUNCTION
   get source time RETURN DATE CASCADE;
ALTER TYPE 1cr$_dd1_record ADD MEMBER FUNCTION
   get_source_time RETURN DATE CASCADE;
Rem Evolve Type sys.aq$_reg_info
Rem Change notification types
create or replace type sys.chnf$_reg_info_oc4j as object (
       network_ip_address varchar2(128),
       network port number,
       qosflags number,
       timeout number,
       operations_filter number,
       transaction_lag number)
create or replace type sys.chnf$_reg_info as object (
       callback varchar2(64),
       qosflags number,
       timeout number,
       operations_filter number,
       transaction_lag number)
create or replace type chnf$_rdesc as object(
   opflags number,
   row_id varchar2(2000))
create or replace type chnf\_rdesc_array as VARRAY(1024) of chnf\_rdesc
create or replace type chnf\t _{tdesc} as object(
   opflags number,
   table name varchar2(64),
   numrows number,
   row_desc_array chnf$_rdesc_array)
create or replace type chnf$_tdesc_array as VARRAY(1024) of chnf$_tdesc
```

```
create or replace type chnf$_desc as object(
   registration_id number,
   transaction_id raw(8),
   dbname
                 varchar2(30),
   event_type
                  number,
                 number,
   numtables
   table_desc_array chnf$_tdesc_array)
GRANT EXECUTE on chnf\[ \text{reg_info_oc4j} to PUBLIC; \]
GRANT EXECUTE on chnf\_reg_info to PUBLIC;
GRANT EXECUTE on chnf\( \frac{1}{2} \) desc to PUBLIC;
GRANT EXECUTE on chnf\_tdesc to PUBLIC;
GRANT EXECUTE on chnf\_rdesc to PUBLIC;
Rem End change notification types
CREATE OR REPLACE LIBRARY UPGRADE_LIB TRUSTED AS STATIC
CREATE OR REPLACE PROCEDURE upgrade_system_types_from_101 IS
LANGUAGE C
NAME "UPG_FROM_101"
LIBRARY UPGRADE_LIB;
DROP PROCEDURE upgrade_system_types_from_101;
Rem -----
Rem SQL Tuning Set type changes
Rem --
-- We now store plans in the SQL tuning set, which means they are also
-- in the \ensuremath{\mathsf{SQLSET\_ROW}} . We drop the type here and recreate it later in catsqlt.
DROP TYPE sqlset_row FORCE
DROP TYPE sqlset FORCE
DROP PUBLIC SYNONYM sqlset_row
DROP PUBLIC SYNONYM sqlset
Rem =======
Rem Begin outline changes
Rem =======
Rem OUTLN user priv changes
revoke connect from outln;
grant create session to outln;
```

Rem Add hint\_string to outln.ol\$hints

```
alter table outln.ol$hints add (hint_string clob);
Rem Add hint string to system.ol$hints
alter table system.ol$hints add (hint_string clob);
Rem ========
Rem End outline changes
Rem ========
Rem ==========
Rem Begin dbms xplan changes
alter type dbms_xplan_type modify attribute (plan_table_output varchar2(300)) cascade;
Rem =======
Rem End dbms_xplan changes
Rem =======
Rem -
Rem dbms sched main export changes
revoke\ execute\ on\ dbms\_sched\_main\_export\ from\ public;
drop public synonym dbms_sched_main_export;
Rem 3074260: Function-based indexes should use REF dependencies
update dependency$
  set property = 2
  where property = 1
   and d_{obj}# in (select obj# from ind$ i
                    where bitand(i.property, 16) = 16)
   and p_obj# in (select obj# from obj$ o where type# in (8,9));
Rem
Rem The table settings\$ stores the persistent switches for all stored PL/SQL
Rem units. The plsql_ccflags switch did not exist in pre-10gR2 releases.
Rem The default value of plsql_ccflags is the empty string ''. We need to
Rem insert rows into the settings$ table so that each stored PL/SQL unit
Rem will have a row containing the empty string '' for the plsql_ccflags
Rem switch.
Rem
insert into settings$
  (select unique(obj#), 'plsql_ccflags', '' from settings$ MINUS
   select obj#, param, '' from settings$ where param = 'plsql_ccflags');
commit:
Rem END STAGE 1: upgrade from 10.1.0 to 10.2.0
Rem BEGIN STAGE 2: run the current release version of catalog and catproc
```

SELECT 'COMP_TIMESTAMP CATALG_BGN'     TO_CHAR(SYSTIMESTAMP,'YYYY-MM-DD HH24:MI:SS')     TO_CHAR(SYSTIMESTAMP,'J SSSSS')  AS timestamp FROM DUAL;  @@catalog @@catproc
SELECT dbms_registry_sys.time_stamp('CATPROC') AS timestamp FROM DUAL;
Rem turn server output off in case catproc script leaves it on set serveroutput off
Rem====================================
Rem====================================
Rem Run the remainder of the RDBMS upgrade in the "a" scripts
@@a&upgrade_file SELECT dbms_registry_sys.time_stamp('rdbms_end') as timestamp from dual;
Rem Upgrade each of the components loaded into the database
@@cmpdbmig
Rem END STAGE 3: Complete upgrade steps
Rem When updating this script for the next release, move steps 2 and 3 to Rem the next release script and uncomment the line below.
Rem @@c1002000
Rem************************************