<A>APPENDIX F

<B>The V$ Dynamic Performance Tables

<B>Appendix E. The V$ Dynamic Performance Tables

As was stated above, under ORACLE8 the V$ tables are actually views against the GV$ tables. The only difference being that the GV (Global View) tables have the instance value for systems using the parallel server option. Since a majority of sites don't use the parallel server option, I will cover just the V$ views and leave the discovery of the additional INST_ID column to you. The companion disk program "Visual Dictionary Lite" shows the actual view creation scripts for the GV$ views, these are direct selects from the GV$ definitions only without the INST_ID column. The definitions for the GV$ DPTs can be found by querying the GV$FIXED_VIEW_DEFINITION DPT (V$FIXED_VIEW_DEFINITION) using a query similar to:

```
COLUMN view_name FORMAT A30 HEADING 'View Name'
COLUMN view_definition FORMAT A40 WORD_WRAPPED HEADING 'View Definition'
SET LONG 1300 PAGES 0
SPOOL rep_out\gv$view
SELECT view_name,view_definition
FROM sys.v_$fixed_view_definition
WHERE VIEW_NAME LIKE 'GV%';
SPOOL OFF
```

The output from the query should resemble:

```
View Name                      View Definition
------------------------------ ----------------------------------------
GV$ACCESS                      select distinct
                               s.inst_id,s.ksusenum,o.kglnaown,o.kglnao
                               bj, decode(o.kglobtyp,     0, 'CURSOR',
                               1, 'INDEX',    2, 'TABLE',    3,
                               'CLUSTER',    4, 'VIEW',    5,
                               'SYNONYM',    6, 'SEQUENCE',    7,
                               'PROCEDURE',    8, 'FUNCTION',    9,
                               'PACKAGE',    10,'NON-EXISTENT',
                               11,'PACKAGE BODY',    12,'TRIGGER',
                               13,'CLASS',    14,'SET',    15,'OBJECT',
                               16,'USER',    17,'DBLINK',    'INVALID
                               TYPE') from x$ksuse s,x$kglob o,x$kgldp
                               d,x$kgllk l where l.kgllkuse=s.addr and
                               l.kgllkhdl=d.kglhdadr and
                               l.kglnahsh=d.kglnahsh and
                               o.kglnahsh=d.kglrfhsh and
                               o.kglhdadr=d.kglrfhdl
```

The Oracle documentation states that you can grant access to the V$ DPTs by running the utlmontr.sql script. Afraid the documentalists at Oracle need to get out more. The utlmontr.sql script has not been available since release 7.2. If you need to grant general access to these DPTs to your users then you must use dynamic SQL like the following:

```
SET HEADING OFF VERIFY OFF FEEDBACK OFF PAGES 0
DEFINE cr=CHR(10)
SPOOL v$grant.sql
SELECT 'GRANT SELECT ON '||view_name||' TO PUBLIC;'||&&cr||
FROM dba_views WHERE view_name LIKE 'V_$%' ;
SPOOL OFF
```

The script will produce a set of public grants to the underlying views to the V$ DPTs. You cannot grant directly against the V$ or GV$ DPTs since they are fixed tables, you must grant against their support views. We don't need to create public synonyms, this is already done for us. The script v$grant.sql only needs to be run once.

<B>1.1 V$ACCESS

The V$ACCESS dynamic performace table (DPT) show objects in the database that are currently locked and the user processes that have the locks.

```
Contents of the DPT V$ACCESS

 Name                           Null?    Type
 ------------------------------ -------- ----
 SID                                     NUMBER
 OWNER                                   VARCHAR2(64)
 OBJECT                                  VARCHAR2(1000)
 TYPE                                    VARCHAR2(12)
```

<B>1.2 V$ACTIVE_INSTANCES

The DPT V$ACTIVE_INSTANCES shows the actual instance names that map to the instance numbers for all of the GV$ views (if parallel server option is installed and the instances are parallel). This DPT was introduced in 7.3.

```
Contents of the DPT V$ACTIVE_INSTANCES

 Name                           Null?    Type
 ------------------------------ -------- ----
 INST_NUMBER                             NUMBER
 INST_NAME                               VARCHAR2(60)
```

<B>1.3 V$ARCHIVE

The V$ARCHIVE DPT contains information on all redo log threads in the database system. Unless you are running parallel server you will only have one thread.

```
Contents of the DPT V$ARCHIVE

 Name                           Null?    Type
 ------------------------------ -------- ----
 GROUP#                                  NUMBER
 THREAD#                                 NUMBER
 SEQUENCE#                               NUMBER
 CURRENT                                 VARCHAR2(3)
 FIRST_CHANGE#                           NUMBER
```

<B>1.4 V$ARCHIVED_LOG

The V$ARCHIVED_LOG DPT shows the information about arhived redo logs. This DPT includes the name of the archived log file. The records are inserted after the online redo log is archived successfully or cleared. If for some reason the log is archived twice it will have two entries identical except for log file name. When an archive log is restored from backup a record is also inserted. This DPT is new for ORACLE8.

```
Contents of the DPT V$ARCHIVED_LOG

 Name                           Null?    Type
```

```
 ------------------------------ -------- ----
 RECID                                   NUMBER
 STAMP                                   NUMBER
 NAME                                    VARCHAR2(513)
 THREAD#                                 NUMBER
 SEQUENCE#                               NUMBER
 RESETLOGS_CHANGE#                       NUMBER
 RESETLOGS_TIME                          DATE
 FIRST_CHANGE#                           NUMBER
 FIRST_TIME                              DATE
 NEXT_CHANGE#                            NUMBER
 NEXT_TIME                               DATE
 BLOCKS                                  NUMBER
 BLOCK_SIZE                              NUMBER
 ARCHIVED                                VARCHAR2(3)
 DELETED                                 VARCHAR2(3)
 COMPLETION_TIME                         DATE
```

<B>1.5 V$ARCHIVE_DEST

The DPT V$ARCHIVE_DEST is used to hold information on the archive log destination and the archive mode required. The default value on 8.0.2 for ARCMODE is “MUST SUCCEED”, and the DESTINATION column should reflect the value of the archive_log_dest parameter in the instance’s initialization file (init<SID>.ora). This DPT is new for ORACLE8.

```
Contents of the DPT V$ARCHIVE_DEST

 Name                           Null?    Type
 ------------------------------ -------- ----
 ARCMODE                                 VARCHAR2(12)
 STATUS                                  VARCHAR2(8)
 DESTINATION                             VARCHAR2(256)
```

<B>1.6 V$BACKUP

(Note: All of the V$ DPTs with BACKUP in their names are used to support the new Oracle Backup Server)

The V$BACKUP DPT is used to store the backup status of all datafiles that are online.

```
Contents of the DPT V$BACKUP

 Name                           Null?    Type
```

```
 ------------------------------ -------- ----
 FILE#                                   NUMBER
 STATUS                                  VARCHAR2(18)
 CHANGE#                                 NUMBER
 TIME                                    DATE
```

<B>1.7 V$BACKUP_CORRUPTION

The DPT V$BACKUP_CORRUPTION DPT holds information about possible corruptions in datafile backups from the controlfile. Corruptions will not be allowed in the controlfile and any archive log backups. This DPT is new for ORACLE8.

```
Contents of the DPT V$BACKUP_CORRUPTION

 Name                           Null?    Type
 ------------------------------ -------- ----
 RECID                                   NUMBER
 STAMP                                   NUMBER
 SET_STAMP                               NUMBER
 SET_COUNT                               NUMBER
 PIECE#                                  NUMBER
 FILE#                                   NUMBER
 BLOCK#                                  NUMBER
 BLOCKS                                  NUMBER
 CORRUPTION_CHANGE#                      NUMBER
 MARKED_CORRUPT                          VARCHAR2(3)
```

<B>1.8 V$BACKUP_DATAFILE

The V$BACKUP_DATAFILE DPT holds information about datafile and controlfile backups. If the file record is for a controlfile the FILE# column will be set to zero (0). The highest change number is recorded as ABSOLUTE_FUZZY_CHANGE#. The MARKED_CORRUPT colume records how many blocks where marked as corrupt, MEDIA_CORRUPT indicates how many blocks where considered media corruptions and LOGICALLY_CORRUPT indicates the number of blocks considered logically corrupt by the instance. This DPT is new with ORACLE8.

```
Contents of the DPT  V$BACKUP_DATAFILE

 Name                           Null?    Type
 ------------------------------ -------- ----
```

```
 RECID                                             NUMBER
 STAMP                                             NUMBER
 SET_STAMP                                         NUMBER
 SET_COUNT                                         NUMBER
 FILE#                                             NUMBER
 CREATION_CHANGE#                                  NUMBER
 CREATION_TIME                                     DATE
 RESETLOGS_CHANGE#                                 NUMBER
 RESETLOGS_TIME                                    DATE
 INCREMENTAL_LEVEL                                 NUMBER
 INCREMENTAL_CHANGE#                               NUMBER
 CHECKPOINT_CHANGE#                                NUMBER
 CHECKPOINT_TIME                                   DATE
 ABSOLUTE_FUZZY_CHANGE#                            NUMBER
 MARKED_CORRUPT                                    NUMBER
 MEDIA_CORRUPT                                     NUMBER
 LOGICALLY_CORRUPT                                 NUMBER
 DATAFILE_BLOCKS                                   NUMBER
 BLOCKS                                            NUMBER
 BLOCK_SIZE                                        NUMBER
 OLDEST_OFFLINE_RANGE                              NUMBER
```

<B>1.9 V$BACKUP_DEVICE

The V$BACKUP_DEVICE DPT holds information about supported backup devices. The table is populated by the kernel from information retrieved automatically from the operating system. If the device type supports named devices then the device names will also be available. This DPT is new for ORACLE8.

```
Contents of the DPT V$BACKUP_DEVICE

 Name                            Null?    Type
 ------------------------------- -------- ----
 DEVICE_TYPE                              VARCHAR2(17)
 DEVICE_NAME                              VARCHAR2(513)
```

<B>1.10 V$BACKUP_PIECE

The V$BACKUP_PIECE DPT contains information about each backup pieces data that is stored in the control file. Each backup has one or more backup pieces. This DPT is new for ORACLE8.

```
Contents of the DPT V$BACKUP_PIECE
```

```
 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 SET_STAMP                                NUMBER
 SET_COUNT                                NUMBER
 PIECE#                                   NUMBER
 DEVICE_TYPE                              VARCHAR2(17)
 HANDLE                                   VARCHAR2(513)
 COMMENTS                                 VARCHAR2(81)
 MEDIA                                    VARCHAR2(65)
 CONCUR                                   VARCHAR2(3)
 TAG                                      VARCHAR2(32)
 DELETED                                  VARCHAR2(3)
 START_TIME                               DATE
 COMPLETION_TIME                          DATE
 ELAPSED_SECONDS                          NUMBER
```

<B>1.11 V$BACKUP_REDOLOG

The V$BACKUP_REDOLOG DPT contains information about archived redo logs contained in backup sets from the control file. An archive log backup set can contain one or more archive logs. This DPT is new for ORACLE8.

```
Contents of the DPT V$BACKUP_REDOLOG

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 SET_STAMP                                NUMBER
 SET_COUNT                                NUMBER
 THREAD#                                  NUMBER
 SEQUENCE#                                NUMBER
 RESETLOGS_CHANGE#                        NUMBER
 RESETLOGS_TIME                           DATE
 FIRST_CHANGE#                            NUMBER
 FIRST_TIME                               DATE
 NEXT_CHANGE#                             NUMBER
 NEXT_TIME                                DATE
 BLOCKS                                   NUMBER
 BLOCK_SIZE                               NUMBER
```

<B>1.12 V$BACKUP_SET

The V$BACKUP_SET DPT contains backup file set information from the controlfile. A backup set record is inserted after a backup set is successful. This DPT is new for ORACLE8.

```
Contents of the DPT V$BACKUP_SET

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 SET_STAMP                                NUMBER
 SET_COUNT                                NUMBER
 BACKUP_TYPE                              VARCHAR2(1)
 CONTROLFILE_INCLUDED                     VARCHAR2(3)
 INCREMENTAL_LEVEL                        NUMBER
 PIECES                                   NUMBER
 START_TIME                               DATE
 COMPLETION_TIME                          DATE
 ELAPSED_SECONDS                          NUMBER
 BLOCK_SIZE                               NUMBER
```

<B>1.13 V$BGPROCESS

The V$BGPROCESS has an entry for each expected background process. If the background process is active the PADDR column is filled. If the PADDR column is set to 00 then the process is not active.

```
Contents of the DPT V$BGPROCESS

 Name                            Null?    Type
 ------------------------------- -------- ----
 PADDR                                    RAW(4)
 NAME                                     VARCHAR2(5)
 DESCRIPTION                              VARCHAR2(64)
 ERROR                                    NUMBER
```

<B>1.14 V$BH

The V$BH DPT is created by the catparr.sql script. The DPT is very useful even without the parallel server option so I suggest running this script even without ever planning on using the

parallel server. The V$BH DPT contains information on the status and pings for every buffer in the SGA. The STATUS colume has the possible values:

Status	Meaning
FREE	Not currently in use
XCUR	Exclusive lock
SCUR	Shared current lock
CR	Consistant Read lock
READ	Being read from disk
MREC	In media recovery mode
IREC	In instance recovery mode

A “Y” in the following columns has the specified meanings:

Column	Meaning
DIRTY	Block has been modified
TEMP	Block is a temporary block
PING	Block has been pinged
STALE	Block is stale
DIRECT	Block is a direct block
NEW	Block is a new block.

```
Contents of the DPT V$BH

 Name                           Null?    Type
 ------------------------------ -------- ----
 FILE#                                   NUMBER
 BLOCK#                                  NUMBER
 CLASS#                                  NUMBER
 STATUS                                  VARCHAR2(4)
 XNC                                     NUMBER
 FORCED_READS                            NUMBER
```

```
FORCED_WRITES                                  NUMBER
LOCK_ELEMENT_ADDR                              RAW(4)
LOCK_ELEMENT_NAME                              NUMBER
LOCK_ELEMENT_CLASS                             NUMBER
DIRTY                                          VARCHAR2(1)
TEMP                                           VARCHAR2(1)
PING                                           VARCHAR2(1)
STALE                                          VARCHAR2(1)
DIRECT                                         VARCHAR2(1)
NEW                                            VARCHAR2(1)
```

<B>1.15 V$CACHE

The V$CACHE DPT is another parallel server DPT defined by the catparr.sql script. The V$CACHE DPT contains information from the block header of each block in the SGA of the current instance as related to certain database objects. The STATUS column has the same possible values as where listed for the V$BH DPT. The KIND column has the follwoing possible values:

KIND	Meaning
TABLE	Block is from a table
CLUSTER	Block is from a cluster
INDEX	Block is from an index
UNDO	Block is from a rollback segment

```
Contents of the DPT V$CACHE

 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 BLOCK#                                   NUMBER
 CLASS#                                   NUMBER
 STATUS                                   VARCHAR2(4)
 XNC                                      NUMBER
 FORCED_READS                             NUMBER
 FORCED_WRITES                            NUMBER
 NAME                                     VARCHAR2(30)
 PARTITION_NAME                           VARCHAR2(30)
 KIND                                     VARCHAR2(15)
 OWNER#                                   NUMBER
 LOCK_ELEMENT_ADDR                        RAW(4)
 LOCK_ELEMENT_NAME                        NUMBER
```

<B>1.16 V$CACHE_LOCK

The V$CACHE_LOCK DPT is created byt he parallel server option via the catparr.sql script. The V$CACHE_LOCK DPT contains information similar to that in the V$CACHE DPT but has platform-specific lock manager identifiers. This data can be used to find the lock element address using IDX and CLASS vlues, then querying the V$BH DPT to find the buffers that are covered by that lock. This information can also be useful to tools that provide monitoring of PCM lock operations. The STATUS column has the same possible values as the V$CACHE DPT and the KIND column has the same range of values as the V$CACHE DPT.

```
Contents of the DPT V$CACHE_LOCK
 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 BLOCK#                                   NUMBER
 STATUS                                   VARCHAR2(4)
 XNC                                      NUMBER
 FORCED_READS                             NUMBER
 FORCED_WRITES                            NUMBER
 NAME                                     VARCHAR2(30)
 KIND                                     VARCHAR2(15)
 OWNER#                                   NUMBER
 LOCK_ELEMENT_ADDR                        RAW(4)
 LOCK_ELEMENT_NAME                        NUMBER
 INDX                                     NUMBER
 CLASS                                    NUMBER
```

<B>1.17 V$CIRCUIT

The V$CIRCUIT DPT contains information about the virtual circuits set up via the dispatchers and servers when using multi-threaded server (MTS). The STATUS colume can have the values:

Status Meaning

BREAK	The circuit has been interrupted
EOF	Circuit is about to be removed
OUTBOUND	Circuit is an outward link to a remote database
NORMAL	Circuit is a normal connection into the local database.

The QUEUE column can have the following possible values:

Queue	Meaning
COMMON	The circuit is using the common queue, it is waiting to be picked up by a server process.
DISPATCHER	The circuit is waiting on the dispatcher process.
SERVER	The circuit is currently being serviced
OUTBOUND	The circuit is waiting to establish an outbound connection
NONE	The circuit is idle

Contents of the DPT V$CIRCUIT

Name	Null?	Type
CIRCUIT		RAW(4)
DISPATCHER		RAW(4)
SERVER		RAW(4)
WAITER		RAW(4)
SADDR		RAW(4)
STATUS		VARCHAR2(16)
QUEUE		VARCHAR2(16)
MESSAGE0		NUMBER
MESSAGE1		NUMBER
MESSAGES		NUMBER
BYTES		NUMBER
BREAKS		NUMBER

<B>1.18 V$COMPATIBILITY

The V$COMPATIBILTY DPT dynamically lists for this instance the various component versions. This data can be used to determine compatibility problems should you need to down grade to a

lower version. This view also lists temporary incompatibilities such as UNDO information that may go awy on a clean shudown.

```
Contents of the DPT V$COMPATIBILITY

 Name                           Null?    Type
 ------------------------------ -------- ----
 TYPE_ID                                 VARCHAR2(8)
 RELEASE                                 VARCHAR2(60)
 DESCRIPTION                             VARCHAR2(64)
```

<B>1.19 V$COMPATSEG

The V$COMPATSEG DPT is a companion DPT to V$COMPATIBILTY. The V$COMPATSEG lists features that will prevent moving back to an earlier release (if you are using them).

```
Contents of the DPT V$COMPATSEG

 Name                           Null?    Type
 ------------------------------ -------- ----
 TYPE_ID                                 VARCHAR2(8)
 RELEASE                                 VARCHAR2(60)
 UPDATED                                 VARCHAR2(60)
```

<B>1.20 V$CONTROLFILE

The V$CONTROLFILE DPT lists the names and status of the control files for this instance. The status is NULL if the name can be found and INVALID if it cannot. Since the database will not startup if all specified control files aren’t available status should never be invalid.

```
Contents of the DPT V$CONTROLFILE

 Name                           Null?    Type
```

```
 ------------------------------ -------- ----
STATUS                                    VARCHAR2(7)
NAME                                      VARCHAR2(513)
```

<B>1.21 V$CONTROLFILE_RECORD_SECTION

The V$CONTROLFILE_RECORD_SECTION DPT (new to ORACLE8) provides data on all record sections in the controlfile. This DPT can be vital to documenting the controlfile for rebuilding purposes. This DPT is new for ORACLE8. The TYPE column has the following possible values:

DATABASE

REDO THREAD

REDO LOG

DATAFILE

FILENAME

TABLESPACE

LOG HISTORY

OFFLINE RANGE

ARCHIVED LOG

BACKUP SET

BACKUP PIECE

BACKUP DATAFILE

BACKUP REDOLOG

DATAFILE COPY

BACKUP CORRUPTION

COPY CORRUPTION

DELETED OBJECT

```
Contents of the DPT V$CONTROLFILE_RECORD_SECTION

 Name                            Null?    Type
 ------------------------------- -------- ----
 TYPE                                     VARCHAR2(17)
 RECORD_SIZE                              NUMBER
 RECORDS_TOTAL                            NUMBER
 RECORDS_USED                             NUMBER
 FIRST_INDEX                              NUMBER
 LAST_INDEX                               NUMBER
 LAST_RECID                               NUMBER
```

<B>1.22 V$COPY_CORRUPTION

The V$COPY_CORRUPTION DPT relates the data from the control file about datafile copy corruptions. This is a subset of the V$CONTROLFILE_RECORD_SECTION DPT. This DPT is new for ORACLE8.

```
Contents of the DPT V$COPY_CORRUPTION

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 COPY_RECID                               NUMBER
 COPY_STAMP                               NUMBER
 FILE#                                    NUMBER
 BLOCK#                                   NUMBER
 BLOCKS                                   NUMBER
 CORRUPTION_CHANGE#                       NUMBER
 MARKED_CORRUPT                           VARCHAR2(3)
```

<B>1.23 V$DATABASE

The V$DATABASE DPT contains information from the controlfile. The CONTROLFILE_TYPE column has the following possible entries:

CONTROLFILE_TYPE	Meaning
CURRENT	Controlfile is current

STANDBY	Database is in standby mode
BACKUP/CREATED	Database is being recovered using a backup or created control file

The OPEN_RESETLOGS columns has the possible values NOT ALLOWED, ALLOWED or REQUIRED and indicates whether the next database open allows or requires the resetlogs option. This DPT is also a good source to retrieve the database name if it is required for report headers.

```
Contents of the DPT V$DATABASE

 Name                            Null?    Type
 ------------------------------- -------- ----
 DBID                                     NUMBER
 NAME                                     VARCHAR2(9)
 CREATED                                  DATE
 RESETLOGS_CHANGE#                        NUMBER
 RESETLOGS_TIME                           DATE
 LOG_MODE                                 VARCHAR2(12)
 CHECKPOINT_CHANGE#                       NUMBER
 ARCHIVE_CHANGE#                          NUMBER
 CONTROLFILE_TYPE                         VARCHAR2(7)
 CONTROLFILE_CREATED                      DATE
 CONTROLFILE_SEQUENCE#                    NUMBER
 CONTROLFILE_CHANGE#                      NUMBER
 CONTROLFILE_TIME                         DATE
 OPEN_RESETLOGS                           VARCHAR2(11)
```

<B>1.24 V$DATAFILE

The V$DATAFILE DPT contains information from the control file about the datafiles for the instance. The V$DATAFILE_HEADER is a companion DPT with informaiton from the datafile header. The STATUS value has the following possible values:

OFFLINE

ONLINE

SYSTEM

RECOVER

SYSOFF (an offline SYSTEM tablespace datafile)

The ENABLED column has the following possible values:

ENABLED Contents	Meaning
DISABLED	No SQL access allowed
READ ONLY	No SQL updates allowed
READ WRITE	Full access allowed
UNKNOWN	Indicates the file is corrupted

Contents of the DPT V$DATAFILE

Name	Null?	Type
FILE#		NUMBER
CREATION_CHANGE#		NUMBER
CREATION_TIME		DATE
TS#		NUMBER
RFILE#		NUMBER
STATUS		VARCHAR2(7)
ENABLED		VARCHAR2(10)
CHECKPOINT_CHANGE#		NUMBER
CHECKPOINT_TIME		DATE
UNRECOVERABLE_CHANGE#		NUMBER
UNRECOVERABLE_TIME		DATE
LAST_CHANGE#		NUMBER
LAST_TIME		DATE
OFFLINE_CHANGE#		NUMBER
ONLINE_CHANGE#		NUMBER
ONLINE_TIME		DATE
BYTES		NUMBER
BLOCKS		NUMBER
CREATE_BYTES		NUMBER
BLOCK_SIZE		NUMBER
NAME		VARCHAR2(513)

<B>1.25 V$DATAFILE_COPY

The V$DATAFILE_COPY DPT contains information about datafile copy status from the controlfile. This is used with the Oracle Recovery Manager. If ONLINE_FUZZY is set to YES this is a copy taken using an operating system utility after a crash or offline immediate or an invalid copy taken with the datafile in an open, non-backup condition. BACKUP_FUZZY is set to yes if

this is a hot backup file (BEGIN BACKUP was used against the tablespace this file belonged to before the backup was taken). This DPT is new for ORACLE8.

```
Contents of the DPT V$DATAFILE_COPY

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 NAME                                     VARCHAR2(513)
 TAG                                      VARCHAR2(32)
 FILE#                                    NUMBER
 RFILE#                                   NUMBER
 CREATION_CHANGE#                         NUMBER
 CREATION_TIME                            DATE
 RESETLOGS_CHANGE#                        NUMBER
 RESETLOGS_TIME                           DATE
 INCREMENTAL_LEVEL                        NUMBER
 CHECKPOINT_CHANGE#                       NUMBER
 CHECKPOINT_TIME                          DATE
 ABSOLUTE_FUZZY_CHANGE#                   NUMBER
 RECOVERY_FUZZY_CHANGE#                   NUMBER
 RECOVERY_FUZZY_TIME                      DATE
 ONLINE_FUZZY                             VARCHAR2(3)
 BACKUP_FUZZY                             VARCHAR2(3)
 MARKED_CORRUPT                           NUMBER
 MEDIA_CORRUPT                            NUMBER
 LOGICALLY_CORRUPT                        NUMBER
 BLOCKS                                   NUMBER
 BLOCK_SIZE                               NUMBER
 OLDEST_OFFLINE_RANGE                     NUMBER
 DELETED                                  VARCHAR2(3)
 COMPLETION_TIME                          DATE
```

<B>1.26 V$DATAFILE_HEADER

The V$DATAFILE_HEADER DPT contains data from the datafile headers for each datafile in the database. This DPT is new for ORACLE8

```
Contents of the DPT V$DATAFILE_HEADER

 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 STATUS                                   VARCHAR2(7)
 ERROR                                    VARCHAR2(18)
 RECOVER                                  VARCHAR2(3)
 FUZZY                                    VARCHAR2(3)
```

```
 CREATION_CHANGE#                          NUMBER
 CREATION_TIME                             DATE
 TABLESPACE_NAME                           VARCHAR2(30)
 TS#                                       NUMBER
 RFILE#                                    NUMBER
 RESETLOGS_CHANGE#                         NUMBER
 RESETLOGS_TIME                            DATE
 CHECKPOINT_CHANGE#                        NUMBER
 CHECKPOINT_TIME                           DATE
 CHECKPOINT_COUNT                          NUMBER
 BYTES                                     NUMBER
 BLOCKS                                    NUMBER
 NAME                                      VARCHAR2(513)
```

<B>1.27 V$DBFILE

The V$DBFILE lists all datafiles that make up the database. This view will probably be dropped in the future, use V$DATAFILE instead.

```
Contents of the DPT V$DBFILE

 Name                           Null?    Type
 ------------------------------ -------- ----
 FILE#                                   NUMBER
 NAME                                    VARCHAR2(513)
```

<B>1.28 V$DBLINK

The V$DBLINK DPT describes all open database links. Thi means that the database link must be participating in a transaction (IN_TRANSACTION=YES). The link's transaction must be committed or rolled back before the link can be closed.

```
Contents of the DPT V$DBLINK

 Name                           Null?    Type
 ------------------------------ -------- ----
 DB_LINK                                 VARCHAR2(128)
 OWNER_ID                                NUMBER
 LOGGED_ON                               VARCHAR2(3)
 HETEROGENEOUS                           VARCHAR2(3)
 PROTOCOL                                VARCHAR2(6)
 OPEN_CURSORS                            NUMBER
 IN_TRANSACTION                          VARCHAR2(3)
```

```
 UPDATE_SENT                                VARCHAR2(3)
 COMMIT_POINT_STRENGTH                      NUMBER
```

<B>1.29 V$DB_OBJECT_CACHE

The V$DB_OBJECT_CACHE DPT contains inforamtion about database objects that are cached in the library cache. Objects which can be cached include tables, indexes, clusters, synonyms, PL/SQL functions, procedures and packages. With release 7.3 triggers can also be cached.

```
Contents of the DPT V$DB_OBJECT_CACHE

 Name                           Null?    Type
 ------------------------------ -------- ----
 OWNER                                   VARCHAR2(64)
 NAME                                    VARCHAR2(1000)
 DB_LINK                                 VARCHAR2(64)
 NAMESPACE                               VARCHAR2(15)
 TYPE                                    VARCHAR2(14)
 SHARABLE_MEM                            NUMBER
 LOADS                                   NUMBER
 EXECUTIONS                              NUMBER
 LOCKS                                   NUMBER
 PINS                                    NUMBER
 KEPT                                    VARCHAR2(3)
```

<B>1.30 V$DB_PIPES

The V$DB_PIPES DPT displays data about pipes that are currently being used by this database. The pipes are created and maintained by the DBMS_PIPES package.

```
Contents of the DPT  V$DB_PIPES

 Name                           Null?    Type
 ------------------------------ -------- ----
 OWNERID                                 NUMBER
 NAME                                    VARCHAR2(1000)
 TYPE                                    VARCHAR2(7)
 SIZE                                    NUMBER
```

<B>1.31 V$DELETED_OBJECT

The V$DELETED_OBJECT DPT contains information about deleted objects of concern to the Oracle Recovery Manager. Objects cataloged include arived logs, datafile copies and backup pieces. This DPT is new for ORACLE8.

```
Contents of the DPT V$DELETED_OBJECT

 Name                           Null?    Type
 ------------------------------ -------- ----
 RECID                                   NUMBER
 STAMP                                   NUMBER
 TYPE                                    VARCHAR2(13)
 OBJECT_RECID                            NUMBER
 OBJECT_STAMP                            NUMBER
```

<B>1.32 V$DISPATCHER

The V$DISPATCHER DPT contains information about the dispatcher processes for the Multi-Threaded Server option. The STATUS column has the following meanings:

Status	Meaning
WAIT	Process is idle
SEND	Sending a message connection
RECEIVE	Receiving a message
CONNECT	Establishing a connection
DISCONNECT	Handling a disconnect request
BREAK	Handling a break
OUTBOUND	Establishing an outbound connection

```
Contents of the DPT V$DISPATCHER

 Name                           Null?    Type
 ------------------------------ -------- ----
 NAME                                    VARCHAR2(5)
 NETWORK                                 VARCHAR2(128)
```

```
 PADDR                                             RAW(4)
 STATUS                                            VARCHAR2(16)
 ACCEPT                                            VARCHAR2(3)
 MESSAGES                                          NUMBER
 BYTES                                             NUMBER
 BREAKS                                            NUMBER
 OWNED                                             NUMBER
 CREATED                                           NUMBER
 IDLE                                              NUMBER
 BUSY                                              NUMBER
 LISTENER                                          NUMBER
```

<B>1.33 V$ENABLEDPRIVS

The V$ENABLEDPRIVS DPT has a list of all enabled privileges (by privilege number) in the database.

```
Contents of the DPT V$ENABLEDPRIVS

 Name                            Null?    Type
 ------------------------------- -------- ----
 PRIV_NUMBER                              NUMBER
```

<B>1.34 V$EVENT_NAME

The V$EVENT_NAME DPT contains information about system wait events.

```
Contents of the DPT V$EVENT_NAME

 Name                            Null?    Type
 ------------------------------- -------- ----
 EVENT#                                   NUMBER
 NAME                                     VARCHAR2(64)
 PARAMETER1                               VARCHAR2(64)
 PARAMETER2                               VARCHAR2(64)
 PARAMETER3                               VARCHAR2(64)
```

<B>1.35 V$EXECUTION

The V$EXECUTION DPT

```
Contents of the DPT V$EXECUTION
```

```
 Name                            Null?    Type
 ------------------------------- -------- ----
 PID                                      NUMBER
 DEPTH                                    NUMBER
 FUNCTION                                 VARCHAR2(10)
 TYPE                                     VARCHAR2(7)
 NVALS                                    NUMBER
 VAL1                                     NUMBER
 VAL2                                     NUMBER
 SEQH                                     NUMBER
 SEQL                                     NUMBER
```

<B>1.36 V$EXECUTION_LOCATION

```
Contents of the DPT V$EXECUTION_LOCATION
```

```
 Name                            Null?    Type
 ------------------------------- -------- ----
 SID                                      NUMBER
 SERIAL#                                  NUMBER
 OBJECT_NODE                              VARCHAR2(20)
 ELAPSED_TIME                             NUMBER
```

<B>1.37 V$FALSE_PING

The V$FALSE_PING DPT is installed by the parallel server option installation file catparr.sql. The V$FALSE_PING DPT contains information about buffers that may be getting false pings. A false ping is defined as when a buffer is pinged more than 100 times that are protected by the same lock as another buffer that pinged more than 100 times. To resolve a false ping situation remap the buffers to GC_FILES_TO_LOCKS. The STATUS column can have the following values:

Value	Meaning
FREE	Not currently in use
XCUR	Current Exclusive Lock
SCUR	Current Shared lock
CR	Consistant Read

READ Being read from disk

MREC In Media recovery mode

IREC In instance recovery mode

The KIND column can have the following values: TABLE, CLUSTER, INDEX or UNDO (rollback segment)

```
Contents of DPT V$FALSE_PING

 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 BLOCK#                                   NUMBER
 STATUS                                   VARCHAR2(4)
 XNC                                      NUMBER
 FORCED_READS                             NUMBER
 FORCED_WRITES                            NUMBER
 NAME                                     VARCHAR2(30)
 PARTITION_NAME                           VARCHAR2(30)
 KIND                                     VARCHAR2(15)
 OWNER#                                   NUMBER
 LOCK_ELEMENT_ADDR                        RAW(4)
 LOCK_ELEMENT_NAME                        NUMBER
 LOCK_ELEMENT_CLASS                       NUMBER
```

<B>1.38 V$FILESTAT

The V$FILESTAT DPT contains information on database file IO statistics. To enable time keeping in the READTIM and WRITETIM columns the TIMED_STATISTICS initialization parameter must be set to TRUE.

```
Contents of the DPT V$FILESTAT

 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 PHYRDS                                   NUMBER
 PHYWRTS                                  NUMBER
 PHYBLKRD                                 NUMBER
 PHYBLKWRT                                NUMBER
 READTIM                                  NUMBER
 WRITETIM                                 NUMBER
```

<B>1.39 V$FIXED_TABLE

The V$FIXED_TABLE DPT contains information about all of the DPTs, views and derived tables in the database. It lacks a description column which would make it very useful, as it is, it reiterates data that can be pulled from DBA_TABLES and other sources.

```
Contents of the DPT V$FIXED_TABLE
 Name                           Null?    Type
 ------------------------------ -------- ----
 NAME                                    VARCHAR2(30)
 OBJECT_ID                               NUMBER
 TYPE                                    VARCHAR2(5)
 TABLE_NUM                               NUMBER
```

<B>1.40 V$FIXED_VIEW_DEFINITION

The V$FIXED_VIEW_DEFINITION DPT is probably one of the more useful DPTs as far as fpr documentation purposes. This DPT contains the view names and full definitions for all of the GV$ views in ORACLE8 and all of the V$ views in ORACLE7. It is about the only source for this information and also can help map out the K and X$ table structures that everything else is pinned upon.

```
Contents of the DPT V$FIXED_VIEW_DEFINITION

 Name                           Null?    Type
 ------------------------------ -------- ----
 VIEW_NAME                               VARCHAR2(30)
 VIEW_DEFINITION                         VARCHAR2(4000)
```

<B>1.41 V$GLOBAL_TRANSACTION

The V$GLOBAL_TRANSACTION DPT is a distributed option view and contains data on globally distributed transactions.

```
Contents of the DPT V$GLOBAL_TRANSACTION

 Name                            Null?    Type
 ------------------------------- -------- ----
 FORMATID                                 NUMBER
 GLOBALID                                 RAW(64)
 BRANCHID                                 RAW(64)
 BRANCHES                                 NUMBER
 REFCOUNT                                 NUMBER
 PREPARECOUNT                             NUMBER
 STATE                                    VARCHAR2(18)
 FLAGS                                    NUMBER
 COUPLING                                 VARCHAR2(15)
```

<B>1.42 V$INDEXED_FIXED_COLUMN

The V$INDEXED_FIXED_COLUMN DPT contains information on the GV (V$) table columns that are indexed. This information can help you write more efficient queries against these tables.

```
Contents of the DPT V$INDEXED_FIXED_COLUMN
 Name                            Null?    Type
 ------------------------------- -------- ----
 TABLE_NAME                               VARCHAR2(30)
 INDEX_NUMBER                             NUMBER
 COLUMN_NAME                              VARCHAR2(30)
 COLUMN_POSITION                          NUMBER
```

<B>1.43 V$INSTANCE

The V$INSTANCE DPT has been expanded for ORACLE* and is incompatible with previous versions. The DPT contains instance specific data. One nice add on was the HOST_NAME field which provides the name of the computer system upon which the instance resides. This can help with report headers and such in situations where multiple instances have the same name and reside on different computers. The startup time has been placed into a standard date field instead some

julian day and second like was in earlier versions. The complete status of the instance can be ascertained from V$INSTANCE.

```
Contents of the DPT V$INSTANCE

 Name                            Null?    Type
 ------------------------------- -------- ----
 INSTANCE_NUMBER                          NUMBER
 INSTANCE_NAME                            VARCHAR2(16)
 HOST_NAME                                VARCHAR2(64)
 VERSION                                  VARCHAR2(17)
 STARTUP_TIME                             DATE
 STATUS                                   VARCHAR2(7)
 PARALLEL                                 VARCHAR2(3)
 THREAD#                                  NUMBER
 ARCHIVER                                 VARCHAR2(7)
 LOG_SWITCH_WAIT                          VARCHAR2(11)
 LOGINS                                   VARCHAR2(10)
 SHUTDOWN_PENDING                         VARCHAR2(3)
```

<B>1.44 V$LATCH

The V$LATCH DPT contains statistics on the non-parent latches and summary statistics for the parent latches (parent latches hold totals for all children).

```
Contents of the DPT V$LATCH

 Name                            Null?    Type
 ------------------------------- -------- ----
 ADDR                                     RAW(4)
 LATCH#                                   NUMBER
 LEVEL#                                   NUMBER
 NAME                                     VARCHAR2(64)
 GETS                                     NUMBER
 MISSES                                   NUMBER
 SLEEPS                                   NUMBER
 IMMEDIATE_GETS                           NUMBER
 IMMEDIATE_MISSES                         NUMBER
 WAITERS_WOKEN                            NUMBER
 WAITS_HOLDING_LATCH                      NUMBER
 SPIN_GETS                                NUMBER
 SLEEP1                                   NUMBER
 SLEEP2                                   NUMBER
 SLEEP3                                   NUMBER
 SLEEP4                                   NUMBER
 SLEEP5                                   NUMBER
 SLEEP6                                   NUMBER
 SLEEP7                                   NUMBER
```

```
 SLEEP8                                            NUMBER
 SLEEP9                                            NUMBER
 SLEEP10                                           NUMBER
 SLEEP11                                           NUMBER
```

<B>1.45 V$LATCHHOLDER

The V$LATCHHOLDER DPT contains information about current latch holders. The LADDR column should map to the V$LATCH DPT column ADDR.

```
Contents of the DPT V$LATCHHOLDER

 Name                            Null?    Type
 ------------------------------- -------- ----
 PID                                      NUMBER
 SID                                      NUMBER
 LADDR                                    RAW(4)
 NAME                                     VARCHAR2(64)
```

<B>1.46 V$LATCHNAME

The V$LATCHNAME DPT contains the mapping from a LATCH# to a LATCHNAME.

```
Contents of the DPT V$LATCHNAME

 Name                            Null?    Type
 ------------------------------- -------- ----
 LATCH#                                   NUMBER
 NAME                                     VARCHAR2(64)
```

<B>1.47 V$LATCH_CHILDREN

The V$LATCH_CHILDREN DPT contains information to map child latches back to the V$LATCH parent latches. All statistics from children latches are rolled back up into the V$LATCH table. Child latches have the same parent if their LATCH#s match. This DPT was introduced in 7.3.

Contents of the DPT V$LATCH_CHILDREN

Name	Null?	Type
ADDR		RAW(4)
LATCH#		NUMBER
CHILD#		NUMBER
LEVEL#		NUMBER
NAME		VARCHAR2(64)
GETS		NUMBER
MISSES		NUMBER
SLEEPS		NUMBER
IMMEDIATE_GETS		NUMBER
IMMEDIATE_MISSES		NUMBER
WAITERS_WOKEN		NUMBER
WAITS_HOLDING_LATCH		NUMBER
SPIN_GETS		NUMBER
SLEEP1		NUMBER
SLEEP2		NUMBER
SLEEP3		NUMBER
SLEEP4		NUMBER
SLEEP5		NUMBER
SLEEP6		NUMBER
SLEEP7		NUMBER
SLEEP8		NUMBER
SLEEP9		NUMBER
SLEEP10		NUMBER
SLEEP11		NUMBER

<B>1.48 V$LATCH_MISSES

The V$LATCH_MISSES DPT contains statistics on missed latches (Failed attempts to acquire a latch).

Contents of the DPT V$LATCH_MISSES

Name	Null?	Type
PARENT_NAME		VARCHAR2(50)
WHERE		VARCHAR2(64)
NWFAIL_COUNT		NUMBER
SLEEP_COUNT		NUMBER

<B>1.49 V$LATCH_PARENT

The V$LATCH_PARENT DPT contains statistics that deal with parent latches only (no child statistics included) the column mapping is identical to V$LATCH.

```
Contents of the DPT V$LATCH_PARENT

 Name                            Null?    Type
 ------------------------------- -------- ----
 ADDR                                     RAW(4)
 LATCH#                                   NUMBER
 LEVEL#                                   NUMBER
 NAME                                     VARCHAR2(64)
 GETS                                     NUMBER
 MISSES                                   NUMBER
 SLEEPS                                   NUMBER
 IMMEDIATE_GETS                           NUMBER
 IMMEDIATE_MISSES                         NUMBER
 WAITERS_WOKEN                            NUMBER
 WAITS_HOLDING_LATCH                      NUMBER
 SPIN_GETS                                NUMBER
 SLEEP1                                   NUMBER
 SLEEP2                                   NUMBER
 SLEEP3                                   NUMBER
 SLEEP4                                   NUMBER
 SLEEP5                                   NUMBER
 SLEEP6                                   NUMBER
 SLEEP7                                   NUMBER
 SLEEP8                                   NUMBER
 SLEEP9                                   NUMBER
 SLEEP10                                  NUMBER
 SLEEP11                                  NUMBER
```

<B>1.50 V$LIBRARYCACHE

The V$LIBRARYCACHE DPT contains statistics pertaining to the library caches in the shared pool. You will see this DPT used in the monitoring and tuning sections to follow.

```
Contents of the DPT V$LIBRARYCACHE

 Name                            Null?    Type
 ------------------------------- -------- ----
 NAMESPACE                                VARCHAR2(15)
 GETS                                     NUMBER
 GETHITS                                  NUMBER
 GETHITRATIO                              NUMBER
 PINS                                     NUMBER
 PINHITS                                  NUMBER
 PINHITRATIO                              NUMBER
 RELOADS                                  NUMBER
```

```
 INVALIDATIONS                                  NUMBER
 DLM_LOCK_REQUESTS                              NUMBER
 DLM_PIN_REQUESTS                               NUMBER
 DLM_PIN_RELEASES                               NUMBER
 DLM_INVALIDATION_REQUESTS                      NUMBER
 DLM_INVALIDATIONS                              NUMBER
```

<B>1.51 V$LICENSE

The V$LICENSE DPT contains the current setpoints for license related initialization parameters and tracks related system statistics.

```
Contents of the DPT V$LICENSE

 Name                            Null?    Type
 ------------------------------- -------- ----
 SESSIONS_MAX                             NUMBER
 SESSIONS_WARNING                         NUMBER
 SESSIONS_CURRENT                         NUMBER
 SESSIONS_HIGHWATER                       NUMBER
 USERS_MAX                                NUMBER
```

<B>1.52 V$LOADCSTAT

The V$LOADCSTAT DPT is used by SQLLOADER to track loading statistics, however, since it is only valid during a load and you can’t select against it while it is being updated it is totally useless to the DBA. You will always get “no rows selected” as a return from a select against this table.

```
Contents of the DPT V$LOADCSTAT

 Name                            Null?    Type
 ------------------------------- -------- ----
 READ                                     NUMBER
 REJECTED                                 NUMBER
 TDISCARD                                 NUMBER
 NDISCARD                                 NUMBER
```

<B>1.53 V$LOADPSTAT

The V$LOADPSTAT DPT is used when SQLLOADER loads into a partitioned table, however, see the comment for LOADCSTAT above.

```
Contents of the DPT V$LOADPSTAT

 Name                           Null?    Type
 ------------------------------ -------- ----
 TABNAME                                 VARCHAR2(31)
 PARTNAME                                VARCHAR2(31)
 LOADED                                  NUMBER
```

<B>1.54 V$LOADTSTAT

The V$LOADTSATAT DPT is used by SQLLOADER. See commnets for V$LOADCSTAT.

```
Contents of the DPT V$LOADTSTAT

 Name                           Null?    Type
 ------------------------------ -------- ----
 LOADED                                  NUMBER
 REJECTED                                NUMBER
 FAILWHEN                                NUMBER
 ALLNULL                                 NUMBER
 LEFT2SKIP                               NUMBER
 PTNLOADED                               NUMBER
```

<B>1.55 V$LOCK

The V$LOCK DPT contains information about the locks currently held and outstanding requests for a lock or latch. The TYPE column has the following possible entries:

TYPE	Meaning
BL	Buffer Hash Table Instance lock
CI	Cross-instance function invocation instance lock
CU	Cursor bind lock

DF	Data File instance lock
DL	Direct Loader parallel index create lock
DM	Mount/start db primary/secondary instance lock
DR	Distributed recovery lock
IN	Instance Number lock
JQ	Job Queue lock
KK	Thread Kick lock
LA..LP	Library Cache lock instance lock (A..P = namespace)
MM	Mount definiton global enqueue lock
MR	Media Recovery lock
NA..NZ	Library cache pin instance lock (A..Z = Namespace)
PF	Password file lock
PI,PS	Parallel operation locks
PR	Process startup lock
QA..QZ	RO cache instance lock (A..Z = cache)
RT	Redo Thread lock
SC	System commit number instance lock
SM	SMON Lock
SN	Sequence number instance lock
SS	Sort Segment Locks
SV	Sequence Number Value lock
TA	Generic Enqueue lock
UN	User Name Lock
US	Undo Segment DDL lock
TX	Transaction Lock
TM	DML Lock
UL	PL/SQL User lock

DX	Distributed transacton lock
CF	Control file lock
IS	Instance State lock
FS	File Set lock
IR	Instance recovery Lock
ST	Disk Space Transaction lock
TS	Temporary Segment lock (if ID2=0) New Block Allocation enqueue (ID2=1)
IV	Library Cache Invalidation lock
LS	Log Start or Switch lock
RW	Row Wait lock
SQ	Sequence Number lock
TE	Table Extension lock
TT	Temporary Table lock
WL	Being-written redo log instance lock

The LMODE column contains a numeric code that translates into the mode of the lock:

LMODE	Meaning
0	None
1	Null
2	Row-S (SS)
3	Row-X (SX)
4	Share
5	S/Row-X (SSX)
6	Exclusive

The REQUEST column has a numeric code that translates to the mode that theprocess requesting the lock wants the lock to assume. The values are the same as for the LMODE column.

Contents of the DPT V$LOCK

Name	Null?	Type
ADDR		RAW(4)
KADDR		RAW(4)
SID		NUMBER
TYPE		VARCHAR2(2)
ID1		NUMBER
ID2		NUMBER
LMODE		NUMBER
REQUEST		NUMBER
CTIME		NUMBER
BLOCK		NUMBER

<B>1.56 V$LOCKS_WITH_COLLISIONS

The V$LOCKS_WITH_COLLISIONS DPT is a parallel server DPT that lists all locks that experience collisions in distributed transactions.

Contents of the DPT V$LOCKS_WITH_COLLISIONS

Name	Null?	Type
LOCK_ELEMENT_ADDR		RAW(4)

<B>1.57 V$LOCK_ACTIVITY

The V$LOCK_ACTIVITY DPT is a parallel server DPT. The V$LOCK_ACTIVTY DPT contains the lock operation acivity for this instance. Each row corresponds to a type of operation.

Contents of the DPT V$LOCK_ACTIVITY

Name	Null?	Type
FROM_VAL		VARCHAR2(4)
TO_VAL		VARCHAR2(4)
ACTION_VAL		VARCHAR2(51)

```
 COUNTER                                   NUMBER
```

<B>1.58 V$LOCK_ELEMENT

The V$LOCK_ELEMENT DPT contains information about PCM locks for the parallel server.

```
Contents of the DPT V$LOCK_ELEMENT

 Name                            Null?    Type
 ------------------------------- -------- ----
 LOCK_ELEMENT_ADDR                        RAW(4)
 INDX                                     NUMBER
 CLASS                                    NUMBER
 LOCK_ELEMENT_NAME                        NUMBER
 MODE_HELD                                NUMBER
 BLOCK_COUNT                              NUMBER
 RELEASING                                NUMBER
 ACQUIRING                                NUMBER
 INVALID                                  NUMBER
 FLAGS                                    NUMBER
```

<B>1.59 V$LOCKED_OBJECT

The V$LOCKED_OBJECT view lists all locks held by every transaction in the instance. This DPT was introduced in 7.3.

```
Contents of the DPT V$LOCKED_OBJECT

 Name                            Null?    Type
 ------------------------------- -------- ----
 XIDUSN                                   NUMBER
 XIDSLOT                                  NUMBER
 XIDSQN                                   NUMBER
 OBJECT_ID                                NUMBER
 SESSION_ID                               NUMBER
 ORACLE_USERNAME                          VARCHAR2(30)
 OS_USER_NAME                             VARCHAR2(15)
 PROCESS                                  VARCHAR2(9)
 LOCKED_MODE                              NUMBER
```

<B>1.60 V$LOG

The V$LOG DPT contains information from the control file about redo log groups and threads.

The STATUS column can have the following values:

Status	Meaning
UNUSED	The log (group) has never been written to. This means the log was just added, or it is just after a RESETLOGS operation.
CURRENT	This log (group) is currently being written to.
ACTIVE	This indicates the log (group) is active, but is not the current group. This means it is probably being archived, or is being used for block recovery.
CLEARING	This indicates the log is being recreated after an ALTER DATABASE CLEAR LOGFILE commnad. After the command completes the groups status will be UNUSED.
CLEARING_CURRENT	This indicates the group is being cleared of a closed thread. If there is a failure during this process, the group may stay in this state.
INACTIVE	This indicates the log is ready for use and is no longer needed for instance recovery. It may be in use for media recovery.

```
Contents of the DPT V$LOG

 Name                            Null?    Type
 ------------------------------- -------- ----
 GROUP#                                   NUMBER
 THREAD#                                  NUMBER
 SEQUENCE#                                NUMBER
 BYTES                                    NUMBER
 MEMBERS                                  NUMBER
 ARCHIVED                                 VARCHAR2(3)
 STATUS                                   VARCHAR2(16)
 FIRST_CHANGE#                            NUMBER
 FIRST_TIME                               DATE
```

<B>1.61 V$LOGFILE

The V$LOGFILE DPT contains information about redo log physical files. The MEMBER column actually contains the file name for the log. The STATUS column can be INVALID (file is inaccessible), STALE (file's contents are incomplete), DELETED (file is no longer used) or null, meaning the file is in use.

```
Contents of the DPT V$LOGFILE

 Name                            Null?    Type
 ------------------------------- -------- ----
 GROUP#                                   NUMBER
 STATUS                                   VARCHAR2(7)
 MEMBER                                   VARCHAR2(513)
```

<B>1.62 V$LOGHIST and V$LOG_HISTORY

The V$LOGHIST DPT is an older version of the V$LOG_HISTORY DPT and is included for historical compatibility, don't use it, use the new version instead. The difference between the two is that V$LOG_HISTORY contains RECID and STAMP which ties the data back to the controlfile entries and the NEXT_CHANGE# column takes the place of the SWITCH_CHANGE# column.

```
Contents of the DPT V$LOGHIST

 Name                            Null?    Type
 ------------------------------- -------- ----
 THREAD#                                  NUMBER
 SEQUENCE#                                NUMBER
 FIRST_CHANGE#                            NUMBER
 FIRST_TIME                               DATE
 SWITCH_CHANGE#                           NUMBER

Contents of the DPT V$LOG_HISTORY

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 THREAD#                                  NUMBER
 SEQUENCE#                                NUMBER
 FIRST_CHANGE#                            NUMBER
 FIRST_TIME                               DATE
 NEXT_CHANGE#                             NUMBER
```

<B>1.63 V$MLS_PARAMETERS

The V$MLS_PARAMETERS DPT contains information about the Trusted Oracle MLS server-specific initialization parameters.

Contents of the DPT V$MLS_PARAMETERS

Name	Null?	Type
NUM		NUMBER
NAME		VARCHAR2(64)
TYPE		NUMBER
VALUE		VARCHAR2(512)
ISDEFAULT		VARCHAR2(9)
ISSES_MODIFIABLE		VARCHAR2(5)
ISSYS_MODIFIABLE		VARCHAR2(9)
ISMODIFIED		VARCHAR2(10)
ISADJUSTED		VARCHAR2(5)
DESCRIPTION		VARCHAR2(64)

<B>1.64 V$MTS

The V$MTS DPT contains information for tuning the multi-threaded server. If the MAXIMUM_CONNECTIONS value is the maximum number of connections that each dispatcher can handle on your system. The value for MAXIMUM_CONNECTIONS is determined at startup time using NET8 or SQL*Net constants and other port-specific information.

Contents of the DPT V$MTS

Name	Null?	Type
MAXIMUM_CONNECTIONS		NUMBER
SERVERS_STARTED		NUMBER
SERVERS_TERMINATED		NUMBER
SERVERS_HIGHWATER		NUMBER

<B>1.65 V$MYSTAT

The V$MYSTAT DPT contains statistics for the current session. The STATISTIC# ties to the statistic name in the V$STATNAME DPT.

```
Contents of the DPT V$MYSTAT

 Name                           Null?    Type
 ------------------------------ -------- ----
 SID                                     NUMBER
 STATISTIC#                              NUMBER
 VALUE                                   NUMBER
```

<B>1.66 V$NLS_PARAMETERS

The V$NLS_PARAMETERS DPT contains the values for the National Language System parameters for the instance. The possible parameters for the PARAMETER name are:

NLS_LANGUAGE

NLS_SORT

NLS_TERRITORY

NLS_CHARACTERSET

NLS_CURRENCY

NLS_IOS_CURRENCY

NLS_NUMERIC_CHARACTERS

NLS_DATE_FORMAT

NLS_DATE_LANGUAGE

```
Contents of the DPT V$NLS_PARAMETERS

 Name                           Null?    Type
 ------------------------------ -------- ----
 PARAMETER                               VARCHAR2(64)
 VALUE                                   VARCHAR2(64)
```

<B>1.67 V$NLS_VALID_VALUES

The V$NLS_VALID_VALUES DPT contains all valid values for the NLS parameters.

```
Contents of the DPT V$NLS_VALID_VALUES

 Name                            Null?    Type
 ------------------------------- -------- ----
 PARAMETER                                VARCHAR2(64)
 VALUE                                    VARCHAR2(64)
```

<B>1.68 V$OBJECT_DEPENDENCY

The V$OBJECT_DEPENDENCY DPT is used to determine object dependencies. The rows contain information on objects dependent on items in the shared pool. When used with V$SESSION and V$SQL it can be used to determine what objects are being used by a current user. The TO_ADDRESS and TO_HASH values can be used to look up more information on objects depended in the V$DB_OBJECT_CACHE DPT.

```
Contents of the DPT V$OBJECT_DEPENDENCY

 Name                            Null?    Type
 ------------------------------- -------- ----
 FROM_ADDRESS                             RAW(4)
 FROM_HASH                                NUMBER
 TO_OWNER                                 VARCHAR2(64)
 TO_NAME                                  VARCHAR2(1000)
 TO_ADDRESS                               RAW(4)
 TO_HASH                                  NUMBER
 TO_TYPE                                  NUMBER
```

<B>1.69 V$OFFLINE_RANGE

The V$OFFLINE_RANGE DPT contains information about datafiles that are offline. An offline range record is created for a datafile when its tablespace is altered to OFFLINE NORMAL or READ ONLY and then altered back to ONLINE or READ-WRITE. Note that no offline range record is created if the individual datafile is altered offline or offline immediate.

```
Contents of the DPT V$OFFLINE_RANGE

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECID                                    NUMBER
 STAMP                                    NUMBER
 FILE#                                    NUMBER
 OFFLINE_CHANGE#                          NUMBER
 ONLINE_CHANGE#                           NUMBER
 ONLINE_TIME                              DATE
```

<B>1.70 V$OPEN_CURSOR

The V$OPEN_CURSOR DPT contains a row for each cursor that each session currently has open. The first sixty characters of the cursor are displayed in the SQL_TXT column.

```
Contents of the DPT V$OPEN_CURSOR

 Name                            Null?    Type
 ------------------------------- -------- ----
 SADDR                                    RAW(4)
 SID                                      NUMBER
 USER_NAME                                VARCHAR2(30)
 ADDRESS                                  RAW(4)
 HASH_VALUE                               NUMBER
 SQL_TEXT                                 VARCHAR2(60)
```

<B>1.71 V$OPTION

The V$OPTION DPT contains a list of the options that are installed on the server. If the VALUE column contains the value TRUE the option is installed.

```
Contents of the DPT V$OPTION

 Name                            Null?    Type
 ------------------------------- -------- ----
 PARAMETER                                VARCHAR2(64)
 VALUE                                    VARCHAR2(64)
```

<B>1.72 V$PARAMETER

The V$PARAMETER DPT contains the name, default an current values, the description and other vital data about the system initialization parameters. The ISSES_MODIFABLE column identifies those parameters that can be altered via the ALTER SESSION command and the ISSYS_MODIFIABLE column identifies those parameters that can be modified using the ALTER SYSTEM command.

```
Contents of the DPT V$PARAMETER

 Name                            Null?    Type
 ------------------------------- -------- ----
 NUM                                      NUMBER
 NAME                                     VARCHAR2(64)
 TYPE                                     NUMBER
 VALUE                                    VARCHAR2(512)
 ISDEFAULT                                VARCHAR2(9)
 ISSES_MODIFIABLE                         VARCHAR2(5)
 ISSYS_MODIFIABLE                         VARCHAR2(9)
 ISMODIFIED                               VARCHAR2(10)
 ISADJUSTED                               VARCHAR2(5)
 DESCRIPTION                              VARCHAR2(64)
```

<B>1.73 V$PING

The V$PING DPT is created via the catparr.sql script and is used to document blocks that have been pinged at least once. This DPT is nearly identical to the V$CACHE DPT.The rows in this table correspond to the headers for each block in the SGA of the current instance. The STATUS and KIND columns have the same range of value as the STATUS and KIND columns in the V$CACHE DPT.

```
Contents of the DPT V$PING

 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 BLOCK#                                   NUMBER
 CLASS#                                   NUMBER
 STATUS                                   VARCHAR2(4)
 XNC                                      NUMBER
 FORCED_READS                             NUMBER
```

```
FORCED_WRITES                                  NUMBER
NAME                                           VARCHAR2(30)
PARTITION_NAME                                 VARCHAR2(30)
KIND                                           VARCHAR2(15)
OWNER#                                         NUMBER
LOCK_ELEMENT_ADDR                              RAW(4)
LOCK_ELEMENT_NAME                              NUMBER
```

<B>1.74 V$PQ_SESSTAT

The V$PQ_SESSTAT DPT contains statistics for the parallel query option. The rows are populated after each query or parallel operation and can be queried at that time.

The STATISTIC column has the following possible values:

Statistic	Meaning
Queries Parallelized	Number of operations parallelized
DML Parallelized	Number of DML operations run in parallel
DFO Trees	Number of DFO objects (Data Flow Operator)
Server Threads	Number of parallel servers used
Allocation Height	Number of servers per instance
Allocation Width	Number of instances used
Local Msgs Sent	Number of intra-instance messages sent (internal)
Distr Msgs Sent	Number of inter-instance messages sent (external)
Local Msgs Recv’d	Number of intra-instance messages received
Distr Msgs Recv’d	Number of inter-instance messages received

```
Contents of the DPT V$PQ_SESSTAT

 Name                            Null?    Type
 ------------------------------- -------- ----
 STATISTIC                                VARCHAR2(30)
 LAST_QUERY                               NUMBER
 SESSION_TOTAL                            NUMBER
```

<B>1.75 V$PQ_SLAVE

The V$PQ_SLAVE DPT lists statistics for all active Parallel Query slaves (servers) on an instance. Status is either BUSY or IDLE.

```
Contents of the DPT V$PQ_SLAVE

 Name                            Null?    Type
 ------------------------------- -------- ----
 SLAVE_NAME                               VARCHAR2(4)
 STATUS                                   VARCHAR2(4)
 SESSIONS                                 NUMBER
 IDLE_TIME_CUR                            NUMBER
 BUSY_TIME_CUR                            NUMBER
 CPU_SECS_CUR                             NUMBER
 MSGS_SENT_CUR                            NUMBER
 MSGS_RCVD_CUR                            NUMBER
 IDLE_TIME_TOTAL                          NUMBER
 BUSY_TIME_TOTAL                          NUMBER
 CPU_SECS_TOTAL                           NUMBER
 MSGS_SENT_TOTAL                          NUMBER
 MSGS_RCVD_TOTAL                          NUMBER
```

<B>1.76 V$PQ_SYSSTAT

The V$PQ_SYSSTAT DPT contains system wide statistics for the parallel query servers. The STATISTIC column has the following values:

Statistic	Meaning
Servers Busy	Number of busy servers on this instance
Servers Idle	Number of idle servers on this instance
Servers Highwater	Number of active servers on this instance that have taken part in at least one operation
Server Sessions	Total number of operations executed in all servers in this instance.
Servers Started	Total number of servers that have been started on this instance
Servers Shutdown	Total number of servers that were shutdown on this instance

Servers Cleaned Up Number of server processes that had to be cleaned up after they died.

Queries InitiatedNumber of queries initiated on this instance.

DML Initiated Number of DML operations initiated on this server.

DFO Trees Total number of DFO trees executed on this instance.

Local Msgs Sent Number of intra-instance messages sent (internal)

Distr Msgs Sent Number of inter-instance messages sent (external)

Local Msgs Recv'd Number of intra-instance messages received

Distr Msgs Recv'd Number of inter-instance messages received

```
Contents of the DPT  V$PQ_SYSSTAT
 Name                            Null?    Type
 ------------------------------- -------- ----
 STATISTIC                                VARCHAR2(30)
 VALUE                                    NUMBER
```

<B>1.77 V$PQ_TQSTAT

The V$PQ_TQSTAT DPT contains statistics on parallel query operations. The statistics are compiled as the queries operation and are removed at the end of the session. The DPT shows the Query Tree rows processed through each query. You can use this DPT to determine if your query plans are skewed. The SERVER_TYPE has the possible values producer, consumer or ranger. This DPT was introduced in 7.3.

```
Contents of the DPT V$PQ_TQSTAT

 Name                            Null?    Type
 ------------------------------- -------- ----
 DFO_NUMBER                               NUMBER
 TQ_ID                                    NUMBER
 SERVER_TYPE                              VARCHAR2(10)
 NUM_ROWS                                 NUMBER
 BYTES                                    NUMBER
 OPEN_TIME                                NUMBER
 AVG_LATENCY                              NUMBER
 WAITS                                    NUMBER
 TIMEOUTS                                 NUMBER
 PROCESS                                  VARCHAR2(10)
```

```
 INSTANCE                                  NUMBER
```

<B>1.78 V$PROCESS

The V$PROCESS DPT contains information about all curently active processes. The USERNAME will have a “T” appended to its value if the connection is a two-task network connection. LATCHWAIT is the address of the latch the process is waiting for (if any) and LATCHSPIN is the address of the latch the process is being spn on (if any).

```
Contents of the DPT V$PROCESS

 Name                            Null?    Type
 ------------------------------- -------- ----
 ADDR                                     RAW(4)
 PID                                      NUMBER
 SPID                                     VARCHAR2(9)
 USERNAME                                 VARCHAR2(15)
 SERIAL#                                  NUMBER
 TERMINAL                                 VARCHAR2(16)
 PROGRAM                                  VARCHAR2(64)
 BACKGROUND                               VARCHAR2(1)
 LATCHWAIT                                VARCHAR2(8)
 LATCHSPIN                                VARCHAR2(8)
```

<B>1.79 V$PWFILE_USERS

The V$PWFILE_USERS DPT contains data on users that have been granted either SYSDBA or SYSOPER privileges as derived from the password file.

```
Contents of the DPT V$PWFILE_USERS

 Name                            Null?    Type
 ------------------------------- -------- ----
 USERNAME                                 VARCHAR2(30)
 SYSDBA                                   VARCHAR2(5)
 SYSOPER                                  VARCHAR2(5)
```

<B>1.80 V$QUEUE

The V$QUEUE DPT contains data about multi-threaded message queues. The TYPE column can have the value COMMON (processed by servers). OUTBOUND (used by remote servers) or DISPATCHER.

Contents of the DPT V$QUEUE

Name	Null?	Type
PADDR		RAW(4)
TYPE		VARCHAR2(10)
QUEUED		NUMBER
WAIT		NUMBER
TOTALQ		NUMBER

<B>1.81 V$RECOVERY_FILE_STATUS

The V$RECOVERY_FILE_STATUS DPT is populated by the recovery command. The DPT contains one row for each datafile being recovered. The STATUS column contains the status f each listed file and can contain IN RECOVERY, CURRENT or NOT RECOVERED. This DPT was introduced in 7.3.

Contents of the DPT V$RECOVERY_FILE_STATUS

Name	Null?	Type
FILENUM		NUMBER
FILENAME		VARCHAR2(513)
STATUS		VARCHAR2(13)

<B>1.82 V$RECOVERY_LOG

The V$RECOVERY_LOG DPT contains information about archived redo logs that are required for recovery. Note that this table is available with the instance mounted but not open so log data can be retrieved even without the database in full operation. The information is derived from the V$LOG_HISTORY DPT.

Contents of the DPT V$RECOVERY_LOG

Name	Null?	Type
THREAD#		NUMBER
SEQUENCE#		NUMBER
TIME		DATE
ARCHIVE_NAME		VARCHAR2(513)

<B>1.83 V$RECOVERY_STATUS

The V$RECOVERY_STATUS DPT contains the statistics for the current recovery process. This DPT was introduced in 7.3. The PREVIOUS_LOG_STATUS column has the following possible values:

RELEASE

WRONG NAME

MISSING NAME

UNNEEDED NAME

NONE

The REASON column has the following possible values:

NEED LOG

LOG REUSED

THREAD DISABLED

The TIME_NEEDED column will contain the value “1/1/88” if the time is unknown or no log is needed.

```
Contents of the DPT V$RECOVERY_STATUS

 Name                            Null?    Type
 ------------------------------- -------- ----
 RECOVERY_CHECKPOINT                      DATE
 THREAD                                   NUMBER
 SEQUENCE_NEEDED                          NUMBER
 SCN_NEEDED                               VARCHAR2(16)
 TIME_NEEDED                              DATE
 PREVIOUS_LOG_NAME                        VARCHAR2(513)
 PREVIOUS_LOG_STATUS                      VARCHAR2(13)
 REASON                                   VARCHAR2(13)
```

<B>1.84 V$RECOVER_FILE

The V$RECOVER_FILE DPT contains the status of all files for the current instance that need media recovery. Remember, all V$ DPTs (or GV$) needed for recovery are available even if the instacne is only in a mounted but not open state. The ONLINE column has one of two possible values, ONLINE or OFFLINE. The ERROR column contains the reason why the file needs recovery, it will be NULL if no reason is known and OFFLINE NORMAL if no recovery is needed.

```
Contents of the DPT V$RECOVER_FILE

 Name                            Null?    Type
 ------------------------------- -------- ----
 FILE#                                    NUMBER
 ONLINE                                   VARCHAR2(7)
 ERROR                                    VARCHAR2(18)
 CHANGE#                                  NUMBER
 TIME                                     DATE
```

<B>1.85 V$REQDIST

The V$REQDIST DPT contains the statistics for the histogram of the Multi-Threaded Server (MTS) dispatcher request times divided into 12 buckets (time ranges). The bucket range grows exponentially as a function of the bucket number.

```
Contents of the DPT V$REQDIST

 Name                           Null?    Type
 ------------------------------ -------- ----
 BUCKET                                  NUMBER
 COUNT                                   NUMBER
```

<B>1.86 V$RESOURCE

The V$RESOURCE DPT contains information about resources, what resource aren't exactly clear but the TYPE column seems to have several possible values, RT or MR with MR representing a tablespace datafile type object. For both a 7.3 and an 8.0.2 database there was only 1 RT (I assume the current redo log identifier) entry and the MR entry count corresponded to the datafile count, on a 7.2.3 instance there was a JQ entry I hazard to say corresponds to job queues and a UL (User lock) entry (MR corresponded to datafles once again). The ID1 column corresponds to the datafile number from the FILE$ table and at least in my instances the ID2 column was blank except when the JQ entry was populated then ID1 was 0 and ID2 was 1 corresponding to the 0 and 1 values of my two job queue processes. The RAW(4) ADDR column doesn't seem to correspond to any other RAW(4) column in the other DPTs unless these entries correspond to lock values on these resources although I could not find a correlation between the two sets of addresses.

```
Contents of the DPT V$RESOURCE

 Name                           Null?    Type
 ------------------------------ -------- ----
 ADDR                                    RAW(4)
 TYPE                                    VARCHAR2(2)
 ID1                                     NUMBER
 ID2                                     NUMBER
```

<B>1.87 V$ROLLNAME

The V$ROLLNAME DPT contains the names of the online rollback segments and is only valid when the database is mounted and open.

```
Contents of the DPT V$ROLLNAME

 Name                           Null?    Type
 ------------------------------ -------- ----
 USN                                     NUMBER
 NAME                           NOT NULL VARCHAR2(30)
```

<B>1.88 V$ROLLSTAT

The V$ROLLSTAT DPT contains rollback segment statistics and can only be accessed with the database mounted and open. The STATUS column can have the values ONLINE, OFFLINE, OFFLINE PENDING, UNAVAILABLE, IN_USE, AVAILABLE. The USN number provides a reference back to the V$ROLLNAME DPT, a reference that was missing in early V7 releases.

```
Contents of the DPT V$ROLLSTAT

 Name                           Null?    Type
 ------------------------------ -------- ----
 USN                                     NUMBER
 EXTENTS                                 NUMBER
 RSSIZE                                  NUMBER
 WRITES                                  NUMBER
 XACTS                                   NUMBER
 GETS                                    NUMBER
 WAITS                                   NUMBER
 OPTSIZE                                 NUMBER
 HWMSIZE                                 NUMBER
 SHRINKS                                 NUMBER
 WRAPS                                   NUMBER
 EXTENDS                                 NUMBER
 AVESHRINK                               NUMBER
 AVEACTIVE                               NUMBER
 STATUS                                  VARCHAR2(15)
 CUREXT                                  NUMBER
 CURBLK                                  NUMBER
```

<B>1.89 V$ROWCACHE

The V$ROWCACHE DPT contains statistics on the data dictionary caches. Each row contains statistics for one data dictionary cache. The PARAMETER value contains the name of the cache for which the statistics apply. For those of you who can remember Oracle version 6, these are the

DC_ caches (all 23) that we all knew and loved. Used to be we had to tune each of these caches via its own initialization parameter, now this activity is automated and controlled inside the shared pool. The V$ROWCACHE DPT should still be monitored and if statistics warrent, increase the shared pool size if any of the caches exhibit poor performance.

```
Contents of the DPT V$ROWCACHE

 Name                           Null?    Type
 ------------------------------ -------- ----
 CACHE#                                  NUMBER
 TYPE                                    VARCHAR2(11)
 SUBORDINATE#                            NUMBER
 PARAMETER                               VARCHAR2(32)
 COUNT                                   NUMBER
 USAGE                                   NUMBER
 FIXED                                   NUMBER
 GETS                                    NUMBER
 GETMISSES                               NUMBER
 SCANS                                   NUMBER
 SCANMISSES                              NUMBER
 SCANCOMPLETES                           NUMBER
 MODIFICATIONS                           NUMBER
 FLUSHES                                 NUMBER
 DLM_REQUESTS                            NUMBER
 DLM_CONFLICTS                           NUMBER
 DLM_RELEASES                            NUMBER
```

<B>1.90 V$SESSION

The V$SESSION DPT contains one row for each active session. The DPT contains session state information such as current SQL hash address, lock status,type of SQLNET or system connection and schema related data. This DPT is handy for finding out who is logged in since it stores OSUSER, ORACLE USER and MACHINE and TERMINAL data for each process. If you (or your developers) make use of the DBMS_APPLICATION_INFO package, useful information about execution module and application status can also be retrieved from this DPT. To determine the last command issued query the AUDIT_ACTIONS XX$ table with the value from the COMMAND column.

Contents of the DPT V$SESSION

Name	Null?	Type
SADDR		RAW(4)
SID		NUMBER
SERIAL#		NUMBER
AUDSID		NUMBER
PADDR		RAW(4)
USER#		NUMBER
USERNAME		VARCHAR2(30)
COMMAND		NUMBER
TADDR		VARCHAR2(8)
LOCKWAIT		VARCHAR2(8)
STATUS		VARCHAR2(8)
SERVER		VARCHAR2(9)
SCHEMA#		NUMBER
SCHEMANAME		VARCHAR2(30)
OSUSER		VARCHAR2(15)
PROCESS		VARCHAR2(9)
MACHINE		VARCHAR2(64)
TERMINAL		VARCHAR2(16)
PROGRAM		VARCHAR2(64)
TYPE		VARCHAR2(10)
SQL_ADDRESS		RAW(4)
SQL_HASH_VALUE		NUMBER
PREV_SQL_ADDR		RAW(4)
PREV_HASH_VALUE		NUMBER
MODULE		VARCHAR2(48)
MODULE_HASH		NUMBER
ACTION		VARCHAR2(32)
ACTION_HASH		NUMBER
CLIENT_INFO		VARCHAR2(64)
FIXED_TABLE_SEQUENCE		NUMBER
ROW_WAIT_OBJ#		NUMBER
ROW_WAIT_FILE#		NUMBER
ROW_WAIT_BLOCK#		NUMBER
ROW_WAIT_ROW#		NUMBER
LOGON_TIME		DATE
LAST_CALL_ET		NUMBER
PDML_ENABLED		VARCHAR2(3)
FAILOVER_TYPE		VARCHAR2(13)
FAILOVER_METHOD		VARCHAR2(10)
FAILED_OVER		VARCHAR2(3)

<B>1.91 V$SESSION_CONNECT_INFO

The V$SESSION_CONNECT_INFO DPT contains information about network connections for the current session. The AUTHENTICATION_TYPE has the following possible values:

OS, PROTOCOL or NETWORK.

```
Contents of the DPT V$SESSION_CONNECT_INFO

 Name                           Null?    Type
 ------------------------------ -------- ----
 SID                                     NUMBER
 AUTHENTICATION_TYPE                     VARCHAR2(15)
 OSUSER                                  VARCHAR2(30)
 NETWORK_SERVICE_BANNER                  VARCHAR2(4000)
```

<B>1.92 V$SESSION_CURSOR_CACHE

The V$SESSION_CURSOR_CACHE DPT contains information on cursor usage for the current session. This DPT can provide valuable tuning data for a developer who monitors it during application testing. Its values only pertain to the current session.

```
Contents of the DPT V$SESSION_CURSOR_CACHE

 Name                           Null?    Type
 ------------------------------ -------- ----
 MAXIMUM                                 NUMBER
 COUNT                                   NUMBER
 OPENED_ONCE                             NUMBER
 OPEN                                    NUMBER
 OPENS                                   NUMBER
 HITS                                    NUMBER
 HIT_RATIO                               NUMBER
```

<B>1.93 V$SESSION_EVENT

The V$SESSION_EVENT DPT contains information on all events that instance SIDs are waiting on. The TIME_WAITED and AVERAGE_WAIT columns may not be populated on your instance unless the TIMED_STATISTICS value is set to TRUE. Setting TIMED_STATISTICS to TRUE will have a slight negative effect on performance, you probably won't even notice it.

```
Contents of the DPT V$SESSION_EVENT
```

```
 Name                           Null?    Type
 ------------------------------ -------- ----
 SID                                     NUMBER
 EVENT                                   VARCHAR2(64)
 TOTAL_WAITS                             NUMBER
 TOTAL_TIMEOUTS                          NUMBER
 TIME_WAITED                             NUMBER
 AVERAGE_WAIT                            NUMBER
```

<B>1.94 V$SESSION_LONGOPS

The V$SESSION_LONGOPS DPT is used to monitor certain long running transactions such as hash cluster creation, backup and recovery. The columns SOFAR and TOTALWORK give the jobs completion point.

```
Contents of the DPT V$SESSION_LONGOPS
```

```
 Name                           Null?    Type
 ------------------------------ -------- ----
 SID                                     NUMBER
 SERIAL#                                 NUMBER
 COMPNAM                                 VARCHAR2(30)
 OBJID                                   NUMBER
 CONTEXT                                 NUMBER
 STEPID                                  NUMBER
 MSG                                     VARCHAR2(512)
 STEPSOFAR                               NUMBER
 STEPTOTAL                               NUMBER
 SOFAR                                   NUMBER
 TOTALWORK                               NUMBER
```

<B>1.95 V$SESSION_OBJECT_CACHE

The V$SESSION_OBJECT_CACHE DPT contains object cache statistics for the current session. The HIT_RATIO is the ratio of HITS/PINS and the TRUE_HIT_RATIO is the ratio of TRUE_HITS/PINS. A TRUE_HIT is when the object is in the the cache and is valid, a HIT can occur on an invalid object that must be reloaded.

```
Contents of the DPT V$SESSION_OBJECT_CACHE
```

```
 Name                           Null?    Type
```

```
 ------------------------------ -------- ----
 PINS                                    NUMBER
 HITS                                    NUMBER
 TRUE_HITS                               NUMBER
 HIT_RATIO                               NUMBER
 TRUE_HIT_RATIO                          NUMBER
 OBJECT_REFRESHES                        NUMBER
 CACHE_REFRESHES                         NUMBER
 OBJECT_FLUSHES                          NUMBER
 CACHE_FLUSHES                           NUMBER
 CACHE_SHRINKS                           NUMBER
 CACHED_OBJECTS                          NUMBER
 PINNED_OBJECTS                          NUMBER
 CACHE_SIZE                              NUMBER
 OPTIMAL_SIZE                            NUMBER
 MAXIMUM_SIZE                            NUMBER
```

<B>1.96 V$SESSION_WAIT

The V$SESSION_WAIT DPT lists the resources or evnets for which the active sessions are waiting. P1=P1RAW (hex), P2=P2RAW (hex), P3=P#RAW(hex). To get valid WAIT_TIME values your platform must support fast timing or the TIMED_STATISTICS initialization parameter must be set to TRUE. The STATE column interprets the value of WAIT_TIME and describes the state of the current or most recent wait. The STATE table can have the values:

State	Meaning
(0)WAITING	The session is currently waiting
(-2)WAITED UNKNOWN TIME	Duration of last wait is unknown
(-1)WAITED SHORT TIME	Last wait <1/100th second
(>0) WAITED KNOWN TIME	WAIT_TIME=duration of last visit

```
Contents of the DPT V$SESSION_WAIT

 Name                           Null?    Type
 ------------------------------ -------- ----
 SID                                     NUMBER
 SEQ#                                    NUMBER
 EVENT                                   VARCHAR2(64)
 P1TEXT                                  VARCHAR2(64)
 P1                                      NUMBER
 P1RAW                                   RAW(4)
```

```
 P2TEXT                                            VARCHAR2(64)
 P2                                                NUMBER
 P2RAW                                             RAW(4)
 P3TEXT                                            VARCHAR2(64)
 P3                                                NUMBER
 P3RAW                                             RAW(4)
 WAIT_TIME                                         NUMBER
 SECONDS_IN_WAIT                                   NUMBER
 STATE                                             VARCHAR2(19)
```

<B>1.97 V$SESSTAT

The V$SESSTAT contains the statistics for current user sessions. The STATISTIC# column maps back to the V$STATNAME DPT.

```
Contents of the DPT V$SESSTAT

 Name                            Null?    Type
 ------------------------------- -------- ----
 SID                                      NUMBER
 STATISTIC#                               NUMBER
 VALUE                                    NUMBER
```

<B>1.98 V$SESS_IO

The V$SESS_IO DPT contains I/O statistics for each session.

```
Contents of the DPT V$SESS_IO
 Name                            Null?    Type
 ------------------------------- -------- ----
 SID                                      NUMBER
 BLOCK_GETS                               NUMBER
 CONSISTENT_GETS                          NUMBER
 PHYSICAL_READS                           NUMBER
 BLOCK_CHANGES                            NUMBER
 CONSISTENT_CHANGES                       NUMBER
```

<B>1.99 V$SGA

The V$SGA DPT contains summary information about the space utilization in the SGA. There is one entry for each SGA component group. The VALUE column corresponds to the amount of bytes assigned to that component group.

```
Contents of the DPT V$SGA

 Name                            Null?    Type
 ------------------------------- -------- ----
 NAME                                     VARCHAR2(20)
 VALUE                                    NUMBER
```

<B>1.100 V$SGASTAT

The V$SGASTAT DPT contains summary information about the space utilization in the SGA. There is one entry for each SGA component. The VALUE column corresponds to the amount of bytes assigned to that component. POOL describes the group within the SGA that the component belongs with. The POOL name should be that same as the collective NAME in the V$SGA DPT.

```
Contents of the DPT V$SGASTAT
 Name                            Null?    Type
 ------------------------------- -------- ----
 POOL                                     VARCHAR2(11)
 NAME                                     VARCHAR2(26)
 BYTES                                    NUMBER
```

<B>1.101 V$SHARED_POOL_RESERVED

The V$SHARED_POOL_RESERVED DPT tracks space usage of the shared pool as it relates to the initialization parameter SHARED_POOL_RESERVED_SIZE, if this parameter is not set then the following columns are invalid:

FREE_SPACE

AVG_FREE_SIZE

FREE_COUNT

MAX_FREE_SIZE

USED_SPACE

AVG_USED_SIZE

USED_COUNT

MAX_USED_SIZE

REQUESTS

REQUEST_MISSES

LAST_MISS_SIZE

MAX_MISS_SIZE

The following columns are valid irregardless of the SHARED_POOL_RESERVED_SIZE parameter and they deal with the ORA-04031 errors.

REQUEST_FAILURES	Number of times a 4031 was received
LAST_FAILURE_SIZE	Request size of last failed request
ABORTED_REQUEST_THRESHOLD	Minimum size of a equest which signals a 4031 without flushing objects
ABORTED_REQUESTS	Number of requests that signalled a 4031 without flushing objects (size > ABORTED_REQUEST_THRESHOLD)
LAST_ABORTED_SIZE	Last size of the request that returned a 4031 without flushing objects from the LRU list.

```
Contents of the DPT V$SHARED_POOL_RESERVED

 Name                           Null?    Type
 ------------------------------ -------- ----
```

```
FREE_SPACE                                NUMBER
AVG_FREE_SIZE                             NUMBER
FREE_COUNT                                NUMBER
MAX_FREE_SIZE                             NUMBER
USED_SPACE                                NUMBER
AVG_USED_SIZE                             NUMBER
USED_COUNT                                NUMBER
MAX_USED_SIZE                             NUMBER
REQUESTS                                  NUMBER
REQUEST_MISSES                            NUMBER
LAST_MISS_SIZE                            NUMBER
MAX_MISS_SIZE                             NUMBER
REQUEST_FAILURES                          NUMBER
LAST_FAILURE_SIZE                         NUMBER
ABORTED_REQUEST_THRESHOLD                 NUMBER
ABORTED_REQUESTS                          NUMBER
LAST_ABORTED_SIZE                         NUMBER
```

<B>1.102 V$SHARED_SERVER

The V$SHARED_SERVER DPT contains information on the shared server processes. the STATUS columns has the following possible values:

EXEC	Executing SQL
WAIT (ENQ)	Waiting for a lock
WAIT(SEND)	Waiting to send data to user
WAIT(COMMON)	Idle, waiting for a user request
WAIT(RESET)	Waiting for a circuit to reset after a break
QUIT	Terminating

```
Contents of the DPT V$SHARED_SERVER

 Name                            Null?    Type
 ------------------------------- -------- ----
 NAME                                     VARCHAR2(5)
 PADDR                                    RAW(4)
 STATUS                                   VARCHAR2(16)
 MESSAGES                                 NUMBER
 BYTES                                    NUMBER
 BREAKS                                   NUMBER
 CIRCUIT                                  RAW(4)
 IDLE                                     NUMBER
 BUSY                                     NUMBER
```

```
 REQUESTS                                  NUMBER
```

<B>1.103 V$SORT_SEGMENT

The V$SORT_SEGMENT DPT contains information on virtually every sort segment in the instance. This is an ORACLE8 DPT.

Contents of the DPT V$SORT_SEGMENT

```
 Name                           Null?    Type
 ------------------------------ -------- ----
 TABLESPACE_NAME                         VARCHAR2(31)
 SEGMENT_FILE                            NUMBER
 SEGMENT_BLOCK                           NUMBER
 EXTENT_SIZE                             NUMBER
 CURRENT_USERS                           NUMBER
 TOTAL_EXTENTS                           NUMBER
 TOTAL_BLOCKS                            NUMBER
 USED_EXTENTS                            NUMBER
 USED_BLOCKS                             NUMBER
 FREE_EXTENTS                            NUMBER
 FREE_BLOCKS                             NUMBER
 ADDED_EXTENTS                           NUMBER
 EXTENT_HITS                             NUMBER
 FREED_EXTENTS                           NUMBER
 FREE_REQUESTS                           NUMBER
 MAX_SIZE                                NUMBER
 MAX_BLOCKS                              NUMBER
 MAX_USED_SIZE                           NUMBER
 MAX_USED_BLOCKS                         NUMBER
 MAX_SORT_SIZE                           NUMBER
 MAX_SORT_BLOCKS                         NUMBER
 RELATIVE_FNO                            NUMBER
```

<B>1.104 V$SORT_USAGE

The DPT V$SORT_USAGE contains information on sort usage by user. This DPT is new in ORACLE8.

Contents of the DPT V$SORT_USAGE

```
 Name                           Null?    Type
 ------------------------------ -------- ----
 USER                                    VARCHAR2(30)
 SESSION_ADDR                            RAW(4)
```

```
SESSION_NUM                                    NUMBER
SQLADDR                                        RAW(4)
SQLHASH                                        NUMBER
TABLESPACE                                     VARCHAR2(31)
CONTENTS                                       VARCHAR2(9)
SEGFILE#                                       NUMBER
SEGBLK#                                        NUMBER
EXTENTS                                        NUMBER
BLOCKS                                         NUMBER
SEGRFNO#                                       NUMBER
```

<B>1.105 V$SQL

The V$SQL DPT contains statistics on the shared SQL area. This DPT contains one row for each SQL statement in the shared pool (no grouping). The SQL_TEXTarea stores up to the first 1000 characters of the SQL statement. In order to see more than 80 you must use the SET LONG SQLPLUS command and I suggest using a COLUMN command to format the text with the WORD_WRAPPED option.

```
Contents of the DPT V$SQL

 Name                            Null?    Type
 ------------------------------- -------- ----
 SQL_TEXT                                 VARCHAR2(1000)
 SHARABLE_MEM                             NUMBER
 PERSISTENT_MEM                           NUMBER
 RUNTIME_MEM                              NUMBER
 SORTS                                    NUMBER
 LOADED_VERSIONS                          NUMBER
 OPEN_VERSIONS                            NUMBER
 USERS_OPENING                            NUMBER
 EXECUTIONS                               NUMBER
 USERS_EXECUTING                          NUMBER
 LOADS                                    NUMBER
 FIRST_LOAD_TIME                          VARCHAR2(19)
 INVALIDATIONS                            NUMBER
 PARSE_CALLS                              NUMBER
 DISK_READS                               NUMBER
 BUFFER_GETS                              NUMBER
 ROWS_PROCESSED                           NUMBER
 COMMAND_TYPE                             NUMBER
 OPTIMIZER_MODE                           VARCHAR2(10)
 OPTIMIZER_COST                           NUMBER
 PARSING_USER_ID                          NUMBER
 PARSING_SCHEMA_ID                        NUMBER
 KEPT_VERSIONS                            NUMBER
 ADDRESS                                  RAW(4)
 TYPE_CHK_HEAP                            RAW(4)
```

```
HASH_VALUE                                NUMBER
CHILD_NUMBER                              NUMBER
MODULE                                    VARCHAR2(64)
MODULE_HASH                               NUMBER
ACTION                                    VARCHAR2(64)
ACTION_HASH                               NUMBER
SERIALIZABLE_ABORTS                       NUMBER
```

<B>1.106 V$SQLAREA

The V$SQLAREA DPT contains data about the shared memory area and stores one row of statistics per SQL statement. The contents are about SQL strings in memory, parsed, ready to be executed. See the information about SQL_TEXT in the V$SQL DPT section.

```
Contents of the DPT V$SQLAREA

 Name                            Null?    Type
 ------------------------------- -------- ----
 SQL_TEXT                                 VARCHAR2(1000)
 SHARABLE_MEM                             NUMBER
 PERSISTENT_MEM                           NUMBER
 RUNTIME_MEM                              NUMBER
 SORTS                                    NUMBER
 VERSION_COUNT                            NUMBER
 LOADED_VERSIONS                          NUMBER
 OPEN_VERSIONS                            NUMBER
 USERS_OPENING                            NUMBER
 EXECUTIONS                               NUMBER
 USERS_EXECUTING                          NUMBER
 LOADS                                    NUMBER
 FIRST_LOAD_TIME                          VARCHAR2(19)
 INVALIDATIONS                            NUMBER
 PARSE_CALLS                              NUMBER
 DISK_READS                               NUMBER
 BUFFER_GETS                              NUMBER
 ROWS_PROCESSED                           NUMBER
 COMMAND_TYPE                             NUMBER
 OPTIMIZER_MODE                           VARCHAR2(25)
 PARSING_USER_ID                          NUMBER
 PARSING_SCHEMA_ID                        NUMBER
 KEPT_VERSIONS                            NUMBER
 ADDRESS                                  RAW(4)
 HASH_VALUE                               NUMBER
 MODULE                                   VARCHAR2(64)
 MODULE_HASH                              NUMBER
 ACTION                                   VARCHAR2(64)
 ACTION_HASH                              NUMBER
 SERIALIZABLE_ABORTS                      NUMBER
```

<B>1.107 V$SQLTEXT and V$SQL_TEXT_WITH_NEWLINES

The V$SQLTEXT DPT contains the full text of the SQL statements that are referenced in the V$SQL and V$SQLAREA DPTs. The ADDRESS and HASH_VALUE map back to the V$SQLAREA DPT. Order data returns from this DPT via the PIECE column. The V$SQL_TEXT_WITH_NEWLINES DPT is identcal to the V$SQLTEXT DPT except no newlines or tabs are replaced with spaces as they are in the V$SQLTEXT DPT.

```
Contents of the DPT V$SQLTEXT

 Name                           Null?    Type
 ------------------------------ -------- ----
 ADDRESS                                 RAW(4)
 HASH_VALUE                              NUMBER
 COMMAND_TYPE                            NUMBER
 PIECE                                   NUMBER
 SQL_TEXT                                VARCHAR2(64)

Contents of the DPT V$SQLTEXT_WITH_NEWLINES

 Name                           Null?    Type
 ------------------------------ -------- ----
 ADDRESS                                 RAW(4)
 HASH_VALUE                              NUMBER
 COMMAND_TYPE                            NUMBER
 PIECE                                   NUMBER
 SQL_TEXT                                VARCHAR2(64)
```

<B>1.108 V$SQL_BIND_DATA

The V$SQL_BIND_AREA DPT contains the actual bind data sent by the client for each distinct bind variable for each cursor owned by the session querying this DPT if the data is available in the server memory. This DPT was introduced in 7.3.

```
Contents of the DPT V$SQL_BIND_DATA

 Name                           Null?    Type
 ------------------------------ -------- ----
 CURSOR_NUM                              NUMBER
 POSITION                                NUMBER
```

```
 DATATYPE                                  NUMBER
 SHARED_MAX_LEN                            NUMBER
 PRIVATE_MAX_LEN                           NUMBER
 ARRAY_SIZE                                NUMBER
 PRECISION                                 NUMBER
 SCALE                                     NUMBER
 SHARED_FLAG                               NUMBER
 SHARED_FLAG2                              NUMBER
 BUF_ADDRESS                               RAW(4)
 BUF_LENGTH                                NUMBER
 VAL_LENGTH                                NUMBER
 BUF_FLAG                                  NUMBER
 INDICATOR                                 NUMBER
 VALUE                                     VARCHAR2(4000)
```

<B>1.109 V$SQL_BIND_METADATA

The V$SQL_BIND_METADATA DPT contains data on all metadata provided by the client for each distinct bind variable in each cursor. This DPT was introduced in 7.3.

```
Contents of the DPT V$SQL_BIND_METADATA(7.3)

 Name                            Null?    Type
 ------------------------------- -------- ----
 ADDRESS                                  RAW(4)
 POSITION                                 NUMBER
 DATATYPE                                 NUMBER
 MAX_LENGTH                               NUMBER
 ARRAY_LEN                                NUMBER
 BIND_NAME                                VARCHAR2(30)
```

<B>1.110 V$SQL_CURSOR

The V$SQL_CURSOR DPT contains debugging information for each cursor associated with the session querying this DPT. This DPT was introduced in 7.3.

```
Contents of the DPT V$SQL_CURSOR

 Name                            Null?    Type
 ------------------------------- -------- ----
 CURNO                                    NUMBER
 FLAG                                     NUMBER
 STATUS                                   VARCHAR2(9)
 PARENT_HANDLE                            RAW(4)
```

```
 PARENT_LOCK                                RAW(4)
 CHILD_LOCK                                 RAW(4)
 CHILD_PIN                                  RAW(4)
 PERS_HEAP_MEM                              NUMBER
 WORK_HEAP_MEM                              NUMBER
 BIND_VARS                                  NUMBER
 DEFINE_VARS                                NUMBER
 BIND_MEM_LOC                               VARCHAR2(64)
 INST_FLAG                                  VARCHAR2(64)
 INST_FLAG2                                 VARCHAR2(64)
```

<B>1.111 V$SQL_SHARED_MEMORY

The V$SQL_SHARED_MEMORY DPT contains data on the shared pool SQL area. See the comments on the SQL_TEXT in the V$SQL section. This DPT was added in version 7.3.

```
Contents of the DPT V$SQL_SHARED_MEMORY

 Name                           Null?    Type
 ------------------------------ -------- ----
 SQL_TEXT                                VARCHAR2(1000)
 HASH_VALUE                              NUMBER
 HEAP_DESC                               RAW(4)
 STRUCTURE                               VARCHAR2(16)
 FUNCTION                                VARCHAR2(16)
 COMMENT                                 VARCHAR2(16)
 CHUNK_PTR                               RAW(4)
 CHUNK_SIZE                              NUMBER
 ALLOC_CLASS                             VARCHAR2(8)
 CHUNK_TYPE                              NUMBER
 SUBHEAP_DESC                            RAW(4)
```

<B>1.112 V$STATNAME

The V$STATNAME DPT contains the names for all statistics used in V$SESSTAT, V$SYSSTAT and other statistic related DPTs.

```
Contents of the DPT V$STATNAME

 Name                           Null?    Type
 ------------------------------ -------- ----
 STATISTIC#                              NUMBER
 NAME                                    VARCHAR2(64)
 CLASS                                   NUMBER
```

<B>1.113 V$SUBCACHE

The V$SUBCACHE DPT contains information about te sub-caches currently in the library shared-memory area. The DPT walks the library area and stores a row for each loaded subcache for each library cache object. This DPT is new with ORACLE8.

```
Contents of the DPT V$SUBCACHE

 Name                           Null?    Type
 ------------------------------ -------- ----
 OWNER_NAME                              VARCHAR2(64)
 NAME                                    VARCHAR2(1000)
 TYPE                                    NUMBER
 HEAP_NUM                                NUMBER
 CACHE_ID                                NUMBER
 CACHE_CNT                               NUMBER
 HEAP_SZ                                 NUMBER
 HEAP_ALOC                               NUMBER
 HEAP_USED                               NUMBER
```

<B>1.114 V$SYSSTAT

The V$SYSSTAT DPT contains system wide statistical information. The DPT stores several types of statistics:

Class	Type Statistic
1	User
2	Redo
4	Enqueue
8	Cache
16	OS
32	Parallel Server
64	SQL
128	Debug

Contents of the DPT V$SYSSTAT

Name	Null?	Type
STATISTIC#		NUMBER
NAME		VARCHAR2(64)
CLASS		NUMBER
VALUE		NUMBER

<B>1.115 V$SYSTEM_CURSOR_CACHE

The V$SYSTEM_CURSOR_CACHE DPT contains information similar to the V$SESSION_CURSOR_CACHE DPT but the data provided is system wide cummulative information.

Contents of the DPT V$SYSTEM_CURSOR_CACHE

Name	Null?	Type
OPENS		NUMBER
HITS		NUMBER
HIT_RATIO		NUMBER

<B>1.116 V$SYSTEM_EVENT

The V$SYSTEM_EVENT DPT contains total waits information concerning system event waits. If your platform doesn’t support fast timing, be sure the TIMED_STATISTICS initialization parameter is set to TRUE or the TIME_WAITED and AVERAGE_WAIT columns will be zero.

Contents of the DPT V$SYSTEM_EVENT

Name	Null?	Type
EVENT		VARCHAR2(64)
TOTAL_WAITS		NUMBER
TOTAL_TIMEOUTS		NUMBER
TIME_WAITED		NUMBER
AVERAGE_WAIT		NUMBER

<B>1.117 V$SYSTEM_PARAMETER

The V$SYSTEM_PARAMETER DPT contains information on system parameters. This DPT looks identical to V$PARAMETER. Both contain 152 entries on my 7.3.2 platform. Both contain identical columns. Oracle may be preparing to eliminate the V$PARAMETER table in favor of this more standardly named DPT. This DPT was introduced in 7.3.

```
Contents of the DPT V$SYSTEM_PARAMETER

 Name                           Null?    Type
 ------------------------------ -------- ----
 NUM                                     NUMBER
 NAME                                    VARCHAR2(64)
 TYPE                                    NUMBER
 VALUE                                   VARCHAR2(512)
 ISDEFAULT                               VARCHAR2(9)
 ISSES_MODIFIABLE                        VARCHAR2(5)
 ISSYS_MODIFIABLE                        VARCHAR2(9)
 ISMODIFIED                              VARCHAR2(8)
 ISADJUSTED                              VARCHAR2(5)
 DESCRIPTION                             VARCHAR2(64)
```

<B>1.118 V$TABLESPACE

The V$TABLESPACE DPT contains information about the tablespaces from the controlfile. This allows viewing of tablespace number (TS#) and NAME with the database in a mounted but not open condition. This DPT was added in ORACLE8.

```
Contents of the DPT V$TABLESPACE

 Name                           Null?    Type
 ------------------------------ -------- ----
 TS#                                     NUMBER
 NAME                                    VARCHAR2(30)
```

<B>1.119 V$THREAD

The V$THREAD DPT contains information about redo log threads from the control file. Threads can have a STATUS value of OPEN or CLOSED. The ENABLED column also give data on redo thread status with possible values being DISABLED, (enabled) PRIVATE or (enabled) PUBLIC.

Contents of the DPT V$THREAD

Name	Null?	Type
THREAD#		NUMBER
STATUS		VARCHAR2(6)
ENABLED		VARCHAR2(8)
GROUPS		NUMBER
INSTANCE		VARCHAR2(16)
OPEN_TIME		DATE
CURRENT_GROUP#		NUMBER
SEQUENCE#		NUMBER
CHECKPOINT_CHANGE#		NUMBER
CHECKPOINT_TIME		DATE
ENABLE_CHANGE#		NUMBER
ENABLE_TIME		DATE
DISABLE_CHANGE#		NUMBER
DISABLE_TIME		DATE

<B>1.120 V$TIMER

The V$TIMER DPT stores elapsed time in hundreths of seconds. This DPT is used for timing purposes from within procedures, functions and packages. Roughly every 497 days this value wraps back to zero so at any time if you are doing delta times, you could end up with a negative value.

Contents of the DPT V$TIMER

Name	Null?	Type
HSECS		NUMBER

<B>1.121 V$TRANSACTION

The V$TRANSACTION DPT contains information about te active transactions on the system. The PTX column tracks if the transaction is a parallel transaction (YES - it is parallel). This DPT has been significantly extended for ORACLE8.

```
Contents of the DPT V$TRANSACTION

 Name                            Null?    Type
 ------------------------------- -------- ----
 ADDR                                     RAW(4)
 XIDUSN                                   NUMBER
 XIDSLOT                                  NUMBER
 XIDSQN                                   NUMBER
 UBAFIL                                   NUMBER
 UBABLK                                   NUMBER
 UBASQN                                   NUMBER
 UBAREC                                   NUMBER
 STATUS                                   VARCHAR2(16)
 START_TIME                               VARCHAR2(20)
 START_SCNB                               NUMBER
 START_SCNW                               NUMBER
 START_UEXT                               NUMBER
 START_UBAFIL                             NUMBER
 START_UBABLK                             NUMBER
 START_UBASQN                             NUMBER
 START_UBAREC                             NUMBER
 SES_ADDR                                 RAW(4)
 FLAG                                     NUMBER
 SPACE                                    VARCHAR2(3)
 RECURSIVE                                VARCHAR2(3)
 NOUNDO                                   VARCHAR2(3)
 PTX                                      VARCHAR2(3)
 PRV_XIDUSN                               NUMBER
 PRV_XIDSLT                               NUMBER
 PRV_XIDSQN                               NUMBER
 PTX_XIDUSN                               NUMBER
 PTX_XIDSLT                               NUMBER
 PTX_XIDSQN                               NUMBER
 DSCN-B                                   NUMBER
 DSCN-W                                   NUMBER
 USED_UBLK                                NUMBER
 USED_UREC                                NUMBER
 LOG_IO                                   NUMBER
 PHY_IO                                   NUMBER
 CR_GET                                   NUMBER
 CR_CHANGE                                NUMBER
```

<B>1.122 V$TYPE_SIZE

The V$TYPE_SIZE DPT contains static information on the various Oracle type sizes used in object size calculations. If a constant is referenced in a size calculation, it is probably stored in this table. For 7.2 and 7.3 there are 35 constants, in ORACLE8 there are 37.

```
Contents of the DPT V$TYPE_SIZE

 Name                           Null?    Type
 ------------------------------ -------- ----
 COMPONENT                               VARCHAR2(8)
 TYPE                                    VARCHAR2(8)
 DESCRIPTION                             VARCHAR2(32)
 SIZE                                    NUMBER
```

<B>1.123 V$VERSION

The V$VERSION DPT contains version information for all components of he Oracle server. The DPT has one line for each component.

```
Contents of the DPT V$VERSION

 Name                           Null?    Type
 ------------------------------ -------- ----
 BANNER                                  VARCHAR2(64)
```

<B>1.124 V$WAITSTAT

The V$WAITSTAT DPT contains statistics for various block contention statistics.

```
Contents of the DPT V$WAITSTAT

 Name                           Null?    Type
 ------------------------------ -------- ----
 CLASS                                   VARCHAR2(18)
 COUNT                                   NUMBER
 TIME                                    NUMBER
```

<B>1.125 V$_LOCK

The V$_LOCK DPT contains information on all locks in the database. The lock addresses and MODE are stored for all locks.

```
Contents of the DPT V$_LOCK

 Name                            Null?    Type
 ------------------------------- -------- ----
 LADDR                                    RAW(4)
 KADDR                                    RAW(4)
 SADDR                                    RAW(4)
 RADDR                                    RAW(4)
 LMODE                                    NUMBER
 REQUEST                                  NUMBER
 CTIME                                    NUMBER
 BLOCK                                    NUMBER
```