V$ Dynamic Performance Views

Table Name	Description
V$SYSSTAT	A table containing a collection of general database performance statistics.
V$SESSION	Contains one row per connected session.
V$SESSTAT	Contains the statistics from V$SYSSTAT for each session.
V$PROCESS	Contains one row per server process dedicated server, shared server, background, process and so on.
VSQL, VSQL_PLAN, V$SQL_PLAN_STATISTICS	Contains details of cached SQL
V$SYSTEM_EVENT	Records totals of waits since database startup.
V$SESSION_EVENT	Records totals of waits for individual sessions.

Wait interface alone has never given complete picture of Oracle Performance.

The time model accurately records total elapsed time, CPU time, and time spend on various interesting activities that involve both CPU and wait times.

V$SYS_TIME_MODEL for time model data across whole database and

V$SESS_TIME_MODEL for time model for individual session.

The following query provides the high-level summary of the waits experienced in a database:

SQL> *SELECT wait_class, event, total_waits AS waits,*

ROUND(time_waited_micro / 1000, 2) AS total_ms,

*ROUND(time_waited_micro * 100 / SUM(time_waited_micro) OVER (), 2) AS pct_time,*

ROUND((time_waited_micro / total_waits) / 1000, 2) AS avg_ms

FROM V$SYSTEM_EVENT

WHERE wait_class <> 'Idle'

ORDER BY time_waited_micro DESC;

SQL with wait interfaces and time model joined together.

```
> SELECT wait_class, event, total_waits AS waits,

ROUND(time_waited_micro / 1000, 2) AS total_ms,

ROUND(time_waited_micro * 100 / SUM(time_waited_micro) OVER (), 2) AS pct_time,

ROUND((time_waited_micro / total_waits) / 1000, 2) AS avg_ms

FROM V$SYSTEM_EVENT

WHERE wait_class <> 'Idle'

UNION

SELECT stat_name, NULL, VALUE

FROM V$SYS_TIME_MODEL

WHERE stat_name IN ('DB CPU', 'background cpu time')

ORDER BY 3 DESC;
```