Session Manager

Choose from the following topics.

Click on ...	to ...
Concept 1	learn about the Session Manager tool
Concept 2: Locks	read a description of various lock types
Procedure	follow instructions about managing database sessions
Elements 1	read a description of the “Session Manager” screen elements
Elements 2: Detail	read a description of the “Session Manager: Detail” screen elements

Session Manager: Concept 1

The Session Manager is used to administer database sessions. Users with the DBA privilege can view basic information on all connected database sessions, for example, session ID, username, status, machine name and program name.

More detailed information available through the Session Manager includes SQL statements or locks held by the session.

Session

A session is a specific connection of a user to an Oracle instance via a user process. A session lasts from the time the user connects until the time the user disconnects, or exits the database application.

SID

SID is the abbreviation for session identification.

Status

Status can be busy or idle. If a SQL statement is currently being processed, status is considered to be busy.

SQL Statement

A SQL statement is a specific instance of a valid SQL command. A statement partially consists of SQL reserved words, which have special meaning in SQL and cannot be used for any other purpose. All operations performed on the information in an Oracle database are executed using SQL statements.

Lock Information

Oracle uses locks to control concurrent access to data. Locks are mechanisms intended to prevent destructive interaction between users accessing Oracle data. Locks are used to achieve consistency and integrity in the database. For a description of lock types, see the Session Manager: Concept 2: Locks section of this documentation.

Session Manager: Concept 2: Locks

The following locks are obtained by user applications. Any process which is blocking others is

likely to be holding one of these locks.

User Lock Type	Description
RW	Row wait enqueue lock
TM	DML enqueue lock
TX	Transaction enqueue lock
UL	User supplied lock

The following system locks are held for extremely short periods of time.

System Lock Type	Description
BL	Buffer hash table instance lock
CF	Cross-instance function invocation instance lock
CI	Control file schema global enqueue lock
CS	Control file schema global enqueue lock
DF	Data file instance lock
DM	Mount / startup db primary / secondary instance lock
DR	Distributed recovery process lock
DX	Distributed transaction entry lock
FI	SGA open-file information lock
FS	File set lock
IR	Instance recovery serialization global enqueue lock
IV	Library cache invalidation instance lock
LA…LP	Library cache lock instance lock (A…P = namespace)
LS	Log start / lock switch enqueue lock
MB	Master buffer hash table instance lock
MM	Mount definition global enqueue lock
MR	Media recovery lock
PA…PZ	Library cache pin instance lock (A…Z = namespace)
QA…QZ	Row cache instance lock (A…Z = cache)
RE	USE_ROW_ENQUEUES enforcement lock
RT	Redo thread global enqueue lock
SC	System commit number instance lock
SH	System commit number high water mark enqueue lock
SN	Sequence number instance lock
SQ	Sequence number enqueue lock
ST	Space transaction enqueue lock
SV	Sequence number value lock
TA	Generic enqueue lock
TD	DDL enqueue lock
TE	Extend-segment enqueue lock
TS	Temporary segment enqueue lock (ID2 = 0)
TS	New block allocation enqueue lock (ID2 = 1)
TT	Temporary table enqueue lock
UN	User name lock
WL	Being-written redo log instance lock
WS	Write-atomic-log-switch global enqueue lock

Session Manager: Screen Elements 1

The elements of the initial “Session Manager” screen are listed below, along with a description of their functions.

Screen Element	Type	Description
Select	Radio Boxes	Selects one session.

Session ID	Text	Indicates session identifier.
Username	Text	Indicates Oracle username.
Status	Text	Indicates status of session.
Machine Name	Text	Indicates operating machine name of session.
Program Name	Text	Indicates operating system program name of session.
More Information	Button	Generates another screen listing SQL statement and lock information for the selected session.
Disconnect	Button	Disconnects selected session.
Refresh View	Button	Regenerates the list of connected sessions.

Session Manager: Procedure

Perform the following steps to manage database sessions.

1. Select one of the radio boxes next to the session you would like to disconnect or view in greater detail.
2. Use the following table to determine your next action.

Select …	if you want to …
More Information	display session attributes, including the SQL statement and lock information. This will send you to another screen.
Disconnect	disconnect the selected session.
Refresh View	regenerate the list of connected sessions.

Session Manager: Screen Elements 2: Detail

The Session Information table elements of the “Session Manager: Detail” screen are described below.

Table Element	Description
Session ID	Indicates the session identifier.
Serial #	Indicates the session serial number, which is used to uniquely identify a session’s objects.
Username	Indicates the Oracle username.
User #	Indicates the Oracle user identifier.
Status	Returns a “busy” reading when a SQL statement is being executed.
Server	Indicates the server type: DEDICATED, SHARED, PSEUDO, or NONE.
Machine Name	Indicates the client machine name.
OS User	Indicates the operating system client username.
Process ID	Indicates the operating system client process identifier.
Terminal	Indicates the operating system client terminal name.
Program Name	Indicates the operating system program name.
SQL Statement	Shows the text of the SQL statement being executed by the current session.
Resource Type	Indicates the type of user or system lock.
Lock Mode	Indicates the current lock mode: 1 (null), 2 (row share), 3 (row exclusive), 4 (share), 5 (share row exclusive), 6 (exclusive).
Resource ID1	Indicates the first resource identifier.
Resource ID2	Indicates the second resource identifier.