

ELLAROSE

Oracle Performance Management



How to Guide

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Where to Find Information on SQL Operations:

The screenshot shows the 'SQL' menu in the Enterprise Manager interface. The menu is expanded, displaying the following options:

- Historical Performance(SQLStat)
- Real Time Performance
- SQL Topology
- System Topology

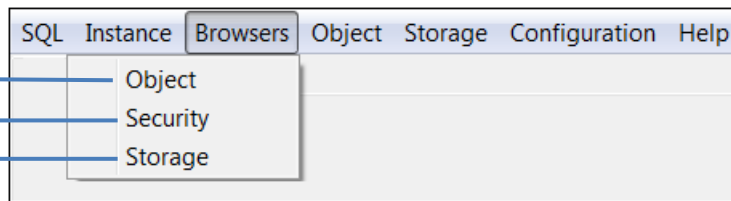
Menu Option	Features
System Topology	<ul style="list-style-type: none"> • Process and Session Volumes • PGA Consumption • I/O Activity • CPU Consumption • REDO and UNDO Activity • Buffer Cache Activity • Flash Cache Activity
SQL Topology	<p>Top SQL sorted by any of the following:</p> <ul style="list-style-type: none"> • SQL ID • Execution Count • Elapsed Time • CPU Time • Sorts • Rows Processed • Disk I/O • I/O Wait • Cluster Wait • Application Wait • Concurrent Wait
Real Time Performance	<ul style="list-style-type: none"> • Real time view of all SQL operations • Drill down on active SQL wait events • SQL Text and execution plan for active SQL • Current locks and blocking locks
Historical Performance (SQLStat)	<ul style="list-style-type: none"> • Topology of individual SQL execution statistics • Timeline of performance statistics for various SQL execution metrics such as: <ul style="list-style-type: none"> ➤ Elapsed Time ➤ CPU Time ➤ Executions ➤ Rows Processed ➤ I/O Wait ➤ Disk Reads ➤ Physical Read Requests ➤ Physical Read Bytes ➤ Sorts ➤ Direct Writes ➤ Physical Write Requests ➤ Physical Write Bytes ➤ Parse Calls ➤ Loads ➤ Invalidations ➤ Buffer Gets ➤ Fetches ➤ End of Fetch Counts ➤ Application Time ➤ Concurrent Time ➤ Cluster Time ➤ EXADATA(I/O Offload Eligible Bytes) ➤ EXADATA(I/O Interconnect Bytes) ➤ EXADATA(Optimized Physical Reads) ➤ EXADATA(Cell Uncompressed Bytes) ➤ EXADATA(I/O Offload Return Bytes) • Topology of individual SQL wait events(Count and Time)

Where to Find Information on Instance Activity:

SQL	Instance	Browsers	Object	Storage	Configuration	Help
	Wait Events					
	Latching					
	Buffer Cache Content					
	SGA Hit Ratios					
	Advisors					
	Health Check					
	Parameter History					

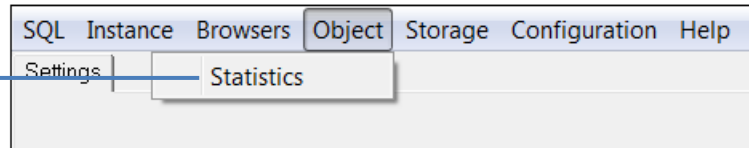
Menu Option	Features
Parameter History	Chronological account of all database parameter changes
Health Check	50 point database check covering the following items: <ul style="list-style-type: none"> • Indexes not used for the last 60 days • Execution plan flip-flops • Long Operations • Hard Parses • Failed Parses • PL/SQL CPU Consumption • Top Wait Events • Objects responsible for Buffer Busy Waits • Objects responsible for Row Lock Waits • Objects responsible for Transaction Slot Waits • Objects contributing to Top Physical I/O • Queries contributing to Top Physical I/O • Queries contributing to Top Logical I/O • Queries contributing to Top Memory Consumption • Queries contributing to Top CPU Consumption • Queries contributing to Top Elapsed Time • REDO Performance (Log Buffer Waits) • REDO Performance (Log Buffer Latching) • REDO Performance (Log Wait Times) • REDO Performance (Log Switch Frequency) • Unusable Indexes • Invalid Objects • Disabled Constraints • Non SYS/SYSTEM Objects stored in System Tablespace • Missing Statistics • Stale Statistics • Row Chaining • Orphaned Synonyms • Tablespace Space Check • Extent Space Check • Orphaned Tablespaces(I.E: Tablespaces not listed as default tablespace for any user) • Active Restore Points • TEMP Space Usage • UNDO Space Usage • Database File Count • Data Dictionary Hit Ratio • Library Cache Hit Ratio • Shared Pool Hit Ratio • Buffer Cache Hit Ratio • PGA Effectiveness • Disk Sorts • Top Latches • Memory Resize Operations • Result Cache Usage and Statistics • Control File Multiplexing • Control File Retention • REDO Log Multiplexing • UNDO Usage and Statistics • ASM Diskgroup Performance Statistics
Advisors	Performance related advice from all database advisors
SGA Hit Ratios	Real Time and Historical statistics on SGA Hit Ratios
Buffer Cache Content	Current content for all regions of the database buffer cache
Latching	Real-Time monitoring of all database latching events
Wait Events	Real Time and Historical statistics for all database wait events

Where to Find Metadata Information on Objects, Security and Storage:



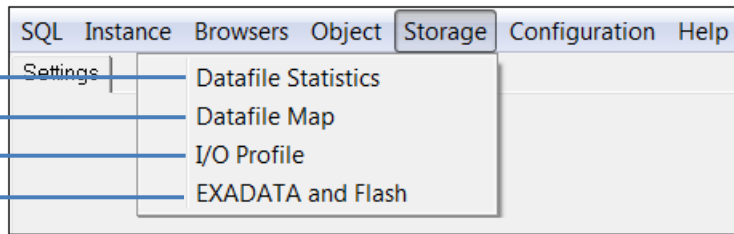
Menu Option	Features
Storage	<ul style="list-style-type: none">• Tablespace Configuration• Datafiles Configuration• Tablespace Growth Statistics
Security	<ul style="list-style-type: none">• Database Users• Database Roles• Database Profiles• Tablespace Quotas
Object	<ul style="list-style-type: none">• Table Information• Index Information• View Information• Synonym Information• Directory Information• Job Information• Sequence Information• Function Information• Procedure Information• Package Information• Program Information

Where to Find Object Performance Statistics:



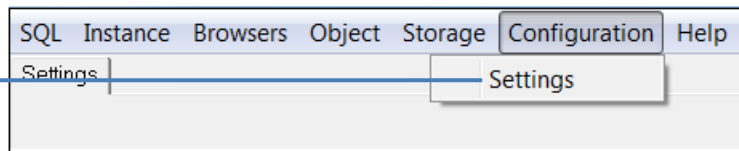
Menu Option	Features
Statistics	<ul style="list-style-type: none">• Physical Reads• Physical Reads(Direct)• Physical Writes• Physical Writes(Direct)• Logical Reads• Row Lock Waits• Chain Row Excess• Buffer Busy Waits• ITL Waits• Global Cache Buffer Busy Waits• Growth Statistics

Where to Find Storage Performance Statistics:



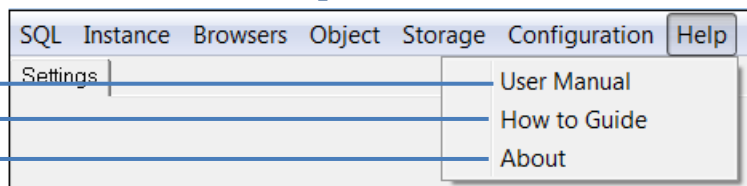
Menu Option	Features
EXADATA and Flash	Timeline of performance statistics for EXADATA and Flash events
I/O Profile	<p>Timeline of database wide I/O statistics categorised by:</p> <ul style="list-style-type: none"> • ARCH • Arc Manager • Buffer Cache Reads • DBWR • Data Pump • Direct Reads • Direct Writes • In Memory Populate • LGWR • Others <p>Metrics covered for I/O categorise:</p> <ul style="list-style-type: none"> • Small Reads(MB) • Small Read Requests • Large Reads(MB) • Large Read Requests • Small Writes(MB) • Small Write Requests • Large Writes(MB) • Large Write Requests • Number of Waits • Wait Time
Datafile Map	Mapping of all extents\blocks within a datafile
Datafile Statistics	<p>Timeline of datafile performance statistics showing the following metrics:</p> <ul style="list-style-type: none"> • Read Operations(Count) • Write Operations(Count) • Read Operations Time(Total) • Write Operations time(Total) • Read Operations Time(Average) • Write Operations Time(Average)

Where to Find ELLAROSE application setup parameters:



Menu Option	Features
Settings	<ul style="list-style-type: none">• Database Connection Parameters(SID,User>Password)• Source of Performance Metrics(Statspack or AWR)• Metadata File Location• Timers for:<ul style="list-style-type: none">➤ Default interval for real time data acquisition➤ Default interval for real time latch event acquisition➤ Default interval for real time CBC latch event acquisition• Export location for Comma Separated Value files

Where to Find Help on ELLAROSE:



Menu Option	Features
About	ELLAROSE Version and License Banner
How to Guide	Quick cheat sheet for all ELLAROSE functionality(This Document)
User Manual	User Manual for ELLAROSE