 MaxGauge

Manage Database System Availability and Performance with Maximum Efficiency

Optimize Database Performance

As IT advances and mobile environments become ubiquitous, massive volumes of data are generated daily. Stable database operations, the foundation of all IT environments, are now essential. Build a unified monitoring framework and prevent or minimize incidents through real time performance management.

Why MaxGauge Stands Out

25 Years of Proven Expertise,
The Standard in DB Performance Management

MaxGauge monitors single or multiple DB environments in real time, rapidly diagnoses bottlenecks, and prevents incidents through proactive performance management. Detect early warning signs in complex DB environments and visually identify bottlenecks between applications and databases for immediate response.

Global Standard

Exem continues to grow alongside 1,000+ customers across 29 countries worldwide from Database and Full Stack Monitoring to Cloud, AI, and Big Data.

Countries

29 +

Customers
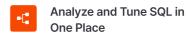
1,000 +

Product Highlights

Manage Complex Databases in a Single View

Monitor performance metrics, real time sessions, resources, and performance trends in one place. View all database information your way and respond to incidents instantly.

Pinpoint Performance Degradation Causes

Access per-second data and time-range trend graphs for all metrics during performance incidents. Identify and resolve problematic processes and queries faster.

Analyze and Tune SQL in One Place

Track SQL performance by date, metric, and instance. Examine daily changes and performance details for specific SQL statements to dramatically improve tuning accuracy and efficiency.

Resolve Issues Faster with Proactive Monitoring

Detect database anomalies quickly with custom alerts per metric, automatic degradation detection, and scheduled report delivery.

Real Time Monitoring

Gain intuitive access to real time data through powerful, user centric UX, even in complex DB environments. Detect and respond to incidents faster.

1 Single View

Monitor single DB status with precision in one screen

- Track CPU and memory usage in real time
- Analyze performance metrics and SQL execution details (single DB)
- Analyze time based performance trends with real time alerts (single DB)

2 Trend View

Unified monitoring for multi-DB status at a glance

- Compare resource usage across multiple DBs in real time
- Analyze performance metrics and SQL execution details (multi DB)
- Analyze time based performance trends with real time alerts (multi DB)

3 RAC View

Professional monitoring for RAC cluster performance

- Monitor Global Lock contention between nodes
- Track workload distribution by node in real time
- Analyze time based performance trends with real time alerts and latency monitoring

4 EXA View

Monitor all Exadata components at a glance. Visualize resources by layer (DB, Network, Cell Server) in real time. Quickly diagnose Smart Scan efficiency and SQL resource usage.
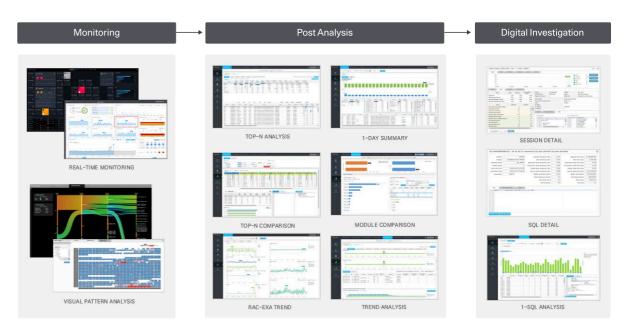
5 Datapath View

Analyze Elapsed Time, Schema, Program, and SQL proportions bidirectionally across multiple databases (or multiple dates for a single database) with an intuitive UI.

6 Top Down Approach

Cross-analyze key metrics (Elapsed Time, Schema, Program, SQL) by DB or date. Pinpoint performance degradation causes rapidly from System to Session to SQL.

Monitoring	Post Analysis	Digital Investigation

REAL-TIME MONITORING

VISUAL PATTERN ANALYSIS

TOP-N ANALYSIS

1-DAY SUMMARY

TOP-N COMPARISON

MODULE COMPARISON

RAC-EXA TREND

TREND ANALYSIS

SESSION DETAIL

SQL DETAIL

1-SQL ANALYSIS

Integrated Performance Analysis

Systematically diagnose performance degradation timing and root causes through diverse analysis functions. Access specialized analysis capabilities including Trend analysis, comparison analysis, execution plan tracking, and RAC-Exadata diagnostics.

1 Trend Analysis

Rapidly detect anomalies in peak periods based on metrics and Wait Events

- Explore peak causes with 1-DAY Summary
- Deep dive analysis based on per-second granularity
- Query SQL and sessions by condition
- Review performance and parameter change history

2 Power Comparison

Compare degraded periods with normal periods to identify incident causes
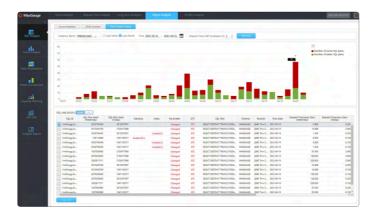
- Analyze Top SQL ranking changes versus baseline date
- Compare performance changes by module/ program
- Analyze peak time differences versus same historical period
- Compare metrics across RAC nodes for selected dates

3 Plan Change History

Identify SQL execution plan change points and analyze causes and performance impact
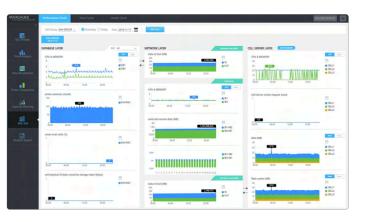
- Query Plan change history
- Compare before/after performance
- Compare performance across Plans: execution time, workload, CPU
- Analyze change factors: Index, Statistics, etc.

4 RAC-EXA Analysis

Analyze Exadata and RAC performance data to precisely diagnose bottlenecks and performance by node, cell, and layer

- Query metrics history for Database, Cell Network, Cell Server layers
- Compare key resources by RAC node: CPU, memory, session, I/O
- Track Exadata specific metric changes: Smart Scan, Flash Cache
- Identify performance imbalances and abnormal patterns across nodes and cells

Analysis Report

Auto generate reports summarizing daily, weekly, and monthly performance trends. Visualize SQL bottleneck periods and resource anomaly points by time to quickly identify issues and share via reports.

5 Daily & Long-Term Report

Precisely analyze daily and periodic performance trends based on all metrics and Top-N data
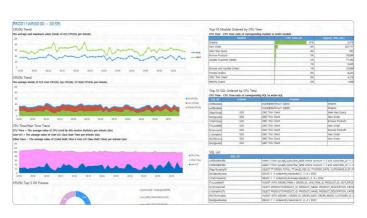
- Provide daily/weekly/monthly/yearly performance summary reports
- Support automated report delivery and multi format downloads

6 Hotspot Report

Deep dive reports analyzing resource usage and bottlenecks at performance incident concentration points

- Detailed analysis by Top N SQL and user session
- Identify high density performance issues centered on peak points
- Provide detailed SQL and session queries for accurate root cause identification

Dashboard

Supporting custom user dashboards as well as commercial and open-source DBMS, enabling rapid incident detection and response even in complex environments.

- Unified monitoring for heterogeneous databases (MSSQL, Oracle, PostgreSQL, etc.)
- Configure custom dashboards by user role and business purpose
- Visualize real time metrics, alert status, and resource flows at a glance
- Flexibly organize and save views by business unit, system, or instance group

Extended Support for Commercial and Open Source DBMS

Broad support for major commercial and open-source DBMS (SQL Server, MySQL, PostgreSQL, MariaDB, Tibero, Altibase, etc.) enables unified monitoring and analysis even in complex environments with mixed database types.

Architecture
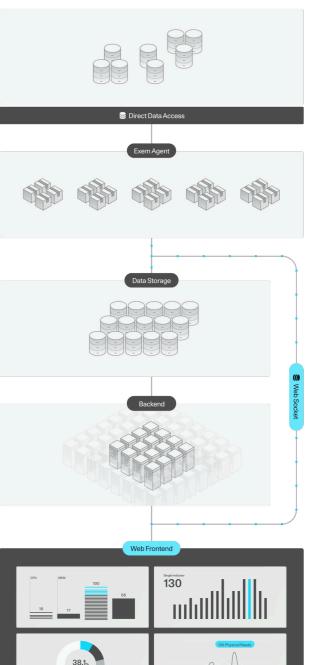
1 Data Collection

- Deploy lightweight agents on DB servers
- Support 12 DBMS types including Oracle, SQL Server, MySQL
- Collect performance data with minimal overhead

2 Data Storage & Processing

- Store and manage per-second performance data in time series format
- Support long term historical data retention and real time queries
- Real time streaming architecture based on Web Socket

3 Presentation

- Web based access via Chrome browser
- Customizable widget configuration
- Role based access control and IP range restrictions

Platform Specs

ORACLE

Web Browser

Browser: Chrome 98 or higher (recommended)
Resolution: 1920×1200 (recommended)

Monitored DB

ORACLE Version: Oracle 9i or higher (including RAC / Exadata)
PLATFORM: SunOS 5.6+, HP-UX 11.0+ (ITANIUM HPUX11.23), IBM-AIX 4.3+, Compaq Tru64 v5.1+, Redhat Enterprise Linux 6.0+ (CentOS6+), Windows 2003 Server+

MaxGauge Collection Server

OS: Windows 2008+ (Build 6.0+), 32/64bit (recommended), Linux
DB: Oracle Enterprise 10g+, 11gR2 (recommended)
DB 2: PostgreSQL v15.12
CPU: 8Core (recommended) / 4Core (minimum)
RAM: 16GB (recommended) / 8GB (minimum)
DISK: Varies by customer Session Data
JAVA: 1.8+

SQL Server

Web Browser

Browser: Chrome 98 or higher (recommended)
Resolution: 1920×1200 (recommended)

Monitored DB

DB Version: SQL Server 2008+
OS: Windows Server 2008+ (Build 6.0+), Redhat Enterprise Linux 7.0+ (CentOS7+) 64bit

MaxGauge Collection Server

OS: Windows Server 2008+ (Build 6.0+) 32/64bit (recommended), Redhat Enterprise Linux 7.0+ (CentOS7+) 64bit
DB: SQL Server 2008+
CPU: 8Core (recommended) / 4Core (minimum)
RAM: 16GB (recommended) / 8GB (minimum)
Disk: Varies by customer Session Data

DB2/Tibero/Altibase

Web Browser

Browser: Chrome 98 or higher (recommended)
Resolution: 1920×1200 (recommended)

Monitored DB

DB2 Version: DB2 10.5+
Tibero Version: Tibero 5+
Altibase Version: Altibase 5.5+

MaxGauge Collection Server

OS: Windows 2008+ (Build 6.0+), 32/64bit (recommended), Linux
DB: PostgreSQL v15.12
CPU: 8Core (recommended) / 4Core (minimum)
RAM: 16GB (recommended) / 8GB (minimum)
DISK: Varies by customer Session Data
JAVA: 1.8+

MySQL / MariaDB

Web Browser

Browser: Chrome 98 or higher (recommended)
Resolution: 1920×1200 (recommended)

Monitored DB

DB Version: MySQL 5.6+, MariaDB 10.0+
OS: Windows Server 2008+ (Build 6.0+), Redhat Enterprise Linux 6.0+ (CentOS6+) 64bit

MaxGauge Collection Server

OS: Windows Server 2008+ (Build 6.0+) 64bit, Redhat Enterprise Linux 6.0+ (CentOS6+) 64bit
DB: MySQL 5.7+ official version
CPU: 8Core (recommended) / 4Core (minimum)
RAM: 16GB (recommended) / 8GB (minimum)
Disk: Varies by customer Session Data

MongoDB

Web Browser

Browser: Chrome 98 or higher (recommended)
Resolution: 1920×1200 (recommended)

Monitored DB

DB Version: MongoDB v3.2+
OS: Redhat Enterprise Linux 7.0+ (CentOS 7+), 64bit

MaxGauge Collection Server

OS: Redhat Enterprise Linux 7.0+ (CentOS 7+), 64bit
DB: PostgreSQL v15.12
CPU: 16Core+ (recommended) / 8Core+ (minimum)
RAM: 32GB+ (recommended) / 16GB+ (minimum)
Disk: Varies by customer Session Data

SAP HANA DB

Web Browser

Browser: Chrome 98 or higher (recommended)
Resolution: 1920×1200 (recommended)

Monitored DB

DB Version : SAP HANA 2.0 (On-premise)

MaxGauge Collection Server

OS: Redhat Enterprise Linux 7.0+ (CentOS 7+), 64bit
DB: PostgreSQL v15.12
CPU: 8Core+ (recommended) / 4Core+ (minimum)
RAM: 32GB+ (recommended) / 16GB+ (minimum)
Disk: Varies by customer Session Data

Supported Databases

ORACLE · IBM DB2 · MariaDB Foundation · Microsoft SQL Server · Tmax Tibero · MySQL · ALTIBASE · mongoDB · PostgreSQL · SAP HANA · Redis · CUBRID

Data Everywhere,
Make it Matter

exem