

A large, semi-transparent silhouette of a person wearing a cap and holding a camera, positioned as if taking a photograph of a large, detailed lens. The lens is the central focus, with various internal components and concentric circles visible. The entire graphic is rendered in shades of olive green and brown.

# ***DBSonar***<sup>TM</sup>

**DBSonar — the ultimate diagnostic and performance tuning tool for IBM Informix databases and applications**

"Capture application SQL bottlenecks by applying the SQL Convergence technology and manage out-grown DB configurations."

**The CIO's pains:**

- High IT/DB operation cost
- Bumpy DB performance
- Application SQL bottleneck
- Unexpected DB downtime
- Long debugging cycles
- Low customer satisfaction

**The objectives of database administration and diagnostics**

IT managers and DBAs face the mission-critical tasks of maintaining high performance, superior efficiency, and non-stop service. Other expectations include:

- Achieving high availability with non-stop OS and RDBMS monitoring
- Overcoming unexpected operational glitches such as DB deadlocks, with minimum system down time
- Identifying application bottlenecks such as incorrect and lengthy SQL statements in a long transaction
- Maintaining database integrity and security regularly
- Planning database volume growth in advance
- Conducting performance tuning with the latest trends accumulated from tracking daily and weekly database operations

**The difficulties of database administration and diagnostics**

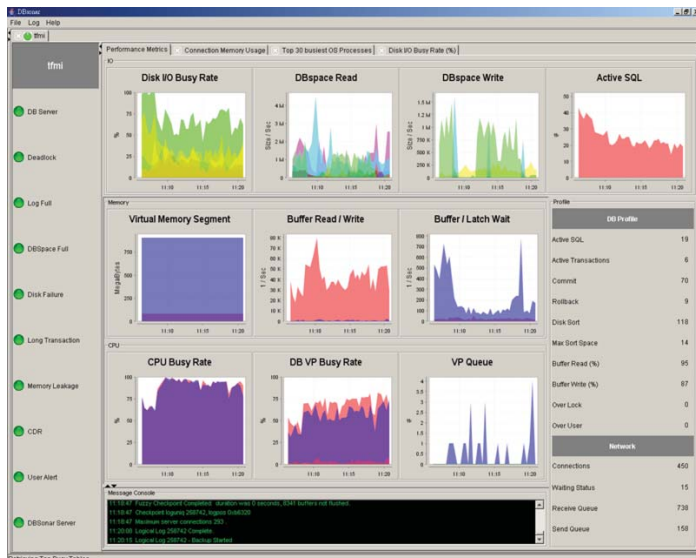
In your enterprise, where all processes are highly dependent on database performance and availability, your DBA is facing constant challenges. The DBA must achieve the highest level of enterprise database efficiency while performing the following tasks:

- Capturing DB deadlocks that block the enterprise database operation
- Identifying the resource-draining SQL statements in applications that slow down the DB from thousands of SQL executions
- Filtering the highly similar SQL statements that need the best optimization to speed up the DB operation in a single shot
- Identifying the busiest DB tables and indexes that need urgent disk and memory allocation
- Obtaining the historical and statistics view of DB operations from the past hour to up to 30 days
- Working with commercial SQL trace tools that provide large quantities of data with very little meaningful information



# The solution for database administration and diagnostics: DBSonar

*DBSonar from Cobrasonic presents an elegant, intuitive, and user-friendly tool to ease the DBA's workload and skillfully identify application and database bottlenecks.*



DBSonar is an ideal database diagnostic and performance tuning tool designed to monitor system and DB parameters, provide fatal event notification, and generate management reports for performance tuning and capacity planning. DBSonar helps you to perform the following tasks:

- **Real-Time Database Performance:** Identify database bottlenecks using a dashboard display of system metrics and locate RDBMS/OS problems such as deadlocks, memory leaks, and more in real time. Capture system problems before they impact your customers.
- **Historical Performance-Based Tuning:** Conduct overall trend analysis using **SQL Convergence technology** and identify resource-intensive SQL patterns from data stored in separate repository databases. Use resource monitoring and tuning suggestions provided through performance reports to extend overall system uptime.

## ASUS Computer Inc.

*"My IT organization has to make sure that more than 110,000 ASUS computers and PC components are produced and shipped every day. DBSonar is instrumental in helping us make this happen. DBSonar enhances the performance, stability, and uptime of the Informix database which is the backbone of our production and delivery process."*

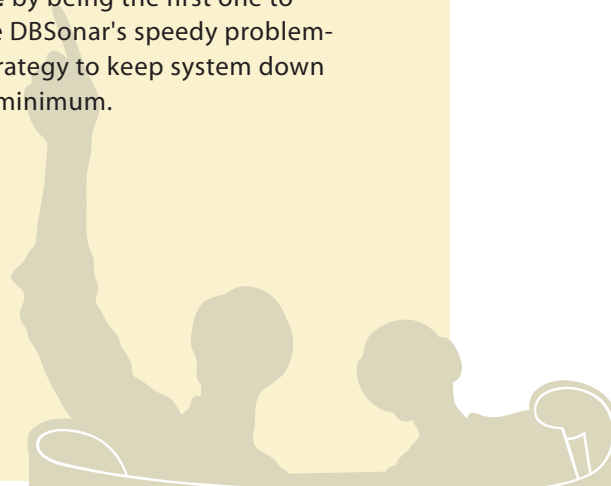
**Roger Lee / CIO ASUS**

ASUS is well known for its high-quality and innovative technology, and is a leading provider of 3C (computers, communications and consumer electronics) total solutions.

# DBSonar customer benefits

**DBSonar** overcomes the drawbacks of commercial SQL tracers that only provide large quantities of diagnostics data. DBSonar extracts the **SQL skeleton** from large amounts of SQL trace data and generates meaningful diagnostic **SQL patterns** through statistical analysis and categorization by using **SQL Convergence technology**.

- Identify resource-draining SQL statements and highly similar SQL patterns that need application optimization.
- Identify busy DB tables and indexes that need urgent RDBMS and OS optimization.
- Get historical DB statistical information from DBSonar repository to exactly identify what happened one hour ago to up to 30 days ago.
- Provide trend analysis for utilization of shared memory, hard disk, CPU and other database resources.
- Reduce the number and duration of unexpected database system outages by correcting DB configuration before the outage occurs.
- Tune enterprise applications by applying DBSonar suggestions and decreasing database application bottlenecks.
- Tweak system settings and Informix parameters by using suggestions from DBSonar trend analysis and management reports.
- Improve enterprise operating efficiency by maximizing DBA productivity and efficiency with DBSonar.
- **Save time** by being the first one to know! Use DBSonar's speedy problem-solving strategy to keep system down time to a minimum.



# DBSonar's salient features and functionality

## SQL Convergence

Sift through vast quantities of SQL statements to extract SQL skeletons. Categorize and summarize the SQL skeletons into SQL patterns using hashing techniques. Use this statistical classification method of **SQL Convergence** to identify bottlenecks from the SQL patterns with ease and speed.

## Data repository

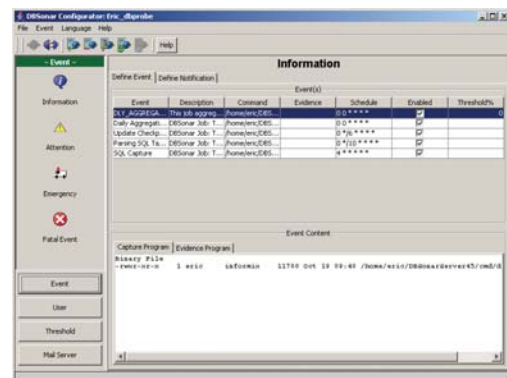
Sample RDBMS and OS data continuously from target database servers and accumulate data snapshots into DBSonar repository databases. In a multi-monitoring environment, store and retrieve historical data from a separate repository database to avoid overloading of target database servers.

## Cross-linked association

While managing database performance, DBAs have to struggle to associate and correlate performance data provided by various monitoring independent utilities. DBSonar overcomes this problem through its built-in **Cross-linked Association** feature that links performance statistics from CPU, memory, disk I/O, DB connections, DB sessions, and SQL statements using the drill-down approach. For instance, DBSonar allows the DBA to track unusual disk I/O output to a specific DB connection/session and then capture the problematic SQL statement that caused the I/O overflow.

## Event alert and Configurator

Get instant notification through E-mail, mobile text messages, and console alerts for any event, anywhere. Acquire additional control, keep tabs on system specific events, configure event severity, and decide who needs to know about those events, all with DBSonar's customized event Configurator.



## Fatal event alert and problem solving

Resolve your problems before they impact end users! With DBSonar as your smoke detector, learn about potential database problems in advance and take preventive measures with scheduled event checking.

## Integrated performance analysis

Assimilate information cross-linked across the OS, database, and application, and use DBSonar's unique real-time graphical display of performance metrics to spot anomalies.



# Bottom line:

Experience the power of continuous database supervision and receive expert information analysis today! Use DBSonar from Cobrasonic to monitor, manage, and fine-tune your database systems and achieve maximum efficiency with minimum effort.

"If you're having Informix performance problems, a new tool - released by a company started by former Informix employees - could help. The new DBSonar management and performance tuning tool combines a drill-down analysis approach for tuning with in-depth real-time monitoring of the Informix Dynamic Server (IDS) engine. It provides key performance indicators for database operations, highlights current database problems, traces performance problems to their root causes, and offers suggested actions. Customizable alerts are delivered via on-screen messages, SMS, or email.

A comprehensive status report of IDS, OS, network, and hardware, plus suggestions for onconfig parameter improvements, supports resource planning. A unique normalization algorithm for SQL statement analysis helps tune application performance without requiring access to the application code. DBSonar offers a customizable trend chart module, a GUI for alert configuration, and easy monitoring of an infinite number of database servers from a single screen through a customizable directory-like structure. Unlike other performance tools, DBSonar doesn't retrieve data from the sysmasters interface; instead it captures all data directly from the shared memory."

By Stuart Litel, DB2 Magazine, Quarter 1, 2006 Vol. 11, Issue 1  
Stuart Litel is CTO of Kazer Inc. and President of the International Informix Users Group.

## System Requirements

### DBSonar Server

- DBSpace: min. 500MB
- File system: 20MB
- Database server: IBM Informix V.7.x, V.9.x and V.10.x
- OS: Solaris 8/9, HP-UX 11i, IBM AIX 4.x/5l, OSF/1, Linux kernel 2.3/2.4

### DBSonar Client

- File system: 100MB
- OS: Windows XP/2000/NT/98 with JVM



### Company Profile

Cobrasonic Software Inc. is the leading provider of enterprise database management solutions. It provides innovative products that empower customers to achieve higher performance, productivity, reliability, availability and security from applications, databases and infrastructure. Our dedicated development team and highly experienced support workforce are continuously focused on enhancing the value of your enterprise IT operations.

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