

# Cincom SUPRA® Server SQL

## The High-Performance Relational Database Management System

### Product Overview

SUPRA Server SQL is Cincom's advanced ANSI-compliant relational database management system for the deployment of high-performance, data access applications. SUPRA Server SQL's roots in high-performance mainframe production systems make it the ideal choice for deployment of these applications across a wide range of platforms including IBM mainframes, UNIX, Linux and Windows.

SUPRA Server SQL is the only relational database management system that can meet the goals of high performance and cross-platform integration. SUPRA Server SQL is ideal for the organization that uses a mainframe for its primary database systems and is considering the integration of that system with departmental client/server systems.

In addition, SUPRA Server SQL's support of Microsoft's Open Database Connectivity (ODBC) and Java Database (JDBC) standards makes available a broad range of Windows-based, ODBC- and JDBC-compliant tools and applications for the implementation of client/server production systems.

### Improved Database Access

In SUPRA Server SQL, all database access is SQL-based, including creating and defining schemas, managing data access from within application programs and monitoring database functions. SUPRA Server SQL provides a number of SQL extensions that make it far more usable than ANSI-standard SQL. Some of these extensions implement the advanced relational design, such as statements for creating primary keys and domains and for defining referential integrity constraints. Other SUPRA Server SQL extensions enhance performance and increase programmer productivity.

End-users and programmers who do not know SQL can also use SUPRA Server. For these users, SUPRA Server provides tools that dynamically generate the required SQL statements. End-users can use these tools to query the database, and programmers can use them to prototype the SQL statements they need to include in their programs.

Cincom continues to enhance its SUPRA Server SQL database management product to provide easier database administration, improved operational efficiencies and greater access flexibility.

SUPRA Server SQL is the only relational database management system that can meet the goals of high performance and cross-platform integration. It meets these goals by supporting:

- Extendibility
- Connectivity
- Interoperability
- Portability
- Internationalization
- I/O Optimization
- Query Optimization
- Performance Monitoring
- Stored Procedures
- Replication

SUPRA Server SQL is ideal for the Information Systems organization that uses a mainframe, especially if it is pressed to:

- Continue providing the high performance of mainframe-based enterprise systems.
- Integrate departmental client/server systems.

## Improved Performance and Scalability

### I/O

SUPRA/SQL automatically distributes data across all available external storage devices. This is accomplished by completely separating the physical data distribution algorithm from the logical content of the data pages, guaranteeing that table pages are evenly distributed among the available data spaces.

The Readahead feature greatly speeds up the reading of large tables by using internal "slave" processes to do anticipatory reads of the table pages before the user process, which then does not have to wait for them to be available, needs them. There are many start-up parameters and tuning statistics produced to enable you to optimize this feature in your environment.

### Performance Monitor

The SUPRA Server SQL Performance Monitor provides the data needed to evaluate and tune database performance. Monitor data and statistics are provided for applications, transactions and table activity. Data and statistics are stored in SQL tables to allow querying and the use of reporting tools for analysis and subsequent application tuning.

### Query Optimization

The SUPRA/SQL Optimizer automatically evaluates multiple strategies for query execution and chooses the least-expensive one. Tables are maintained in primary key order. Newly created indexes will be utilized automatically. The Performance Monitor feature can be used to evaluate query performance as well as changes introduced by indexes.

### Stored Procedures

Stored procedure support allows the encapsulation of business logic and enhanced performance. Because stored procedures are executed entirely in the database engine, they remove all or most of client side overhead. Similarly, network overhead and delay is minimized.

### Replication

MultiDbase Synch synchronizes parent/child data in distributed databases. The advantage of MultiDbase Synch is that instead of moving everything (database schema, metadata and user data) to the child to maintain parent/child synchronization, only changed data is moved.

MultiDbase Synch provides the following options:

- Replication, to build transactions equivalent to the log records for forward application to a child read-only distributed relational database manager (DRDM).
- Forward recovery, for database repair for forward application to a child read-only DRDM (or the parent).

## Major Features

- Extensibility – You can add new technologies such as multimedia, object-oriented and new hardware and software to the base technology without disrupting existing applications and operations.
- Connectivity – Any SUPRA Server client can access information either directly or indirectly via a distributed transaction.
- Interoperability – SUPRA Server can coexist with other data managers such as IBM DB2, Oracle, Sybase and others.
- Portability – SUPRA Server provides data management services that are identical across operating platforms. This allows the interchange of hardware without changes in software.
- Internationalization – Users can work in their native language and develop systems that support local requirements.

Hardware	Operating System(s)
HP 9000	HP-UX
HP Integrity	HP-UX
Intel	Red Hat Enterprise Linux
Intel	Windows 7, 8.x, 10, 201x
IBM zSeries	z/VSE, z/OS
IBM pSeries	AIX
Sun SPARC	Solaris



## About Cincom

For more than 50 years, Cincom's software and services have helped thousands of clients worldwide simplify the management of complex business processes.

For more information about Cincom's products and services, call 1-800-2CINCOM (U.S.), 1-513-612-2769

(International), send an email to [info@cincom.com](mailto:info@cincom.com) or visit the company's product website at [supra.cincom.com](http://supra.cincom.com).



World Headquarters • Cincinnati, OH USA • US 1-800-224-6266 • [info@cincom.com](mailto:info@cincom.com) • [cincom.com/contact-us](http://cincom.com/contact-us)

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