

RS/6000 Systems Support Lotus Notes Release 4

Lotus Notes® Release 4 is supported on the RISC System/6000 (RS/6000) family of workstations and servers running the advanced AIX operating system.

Lotus Notes is already the world's leading messaging and groupware product. The increased capacity for users provided by Release 4 will require larger Notes servers. Release 4 will also have the ability to run more critical business applications on Notes than ever before. The IBM RS/6000 provides the blend of scalability, manageability, and availability necessary for such an enterprise solution.

The RS/6000 family ranges from workstations to high-performance servers supporting a comprehensive array of system and network management software to ease the complexity and cost of administering enterprise server environments. In addition, the RS/6000 can be configured to provide the high availability required for mission-critical Notes applications.

The following are ways in which the RS/6000 can be used to provide a true enterprise environment for Lotus Notes Release 4 users:

Scalability

- ◆ A wide choice in capacity of RS/6000 systems allows users to match system price/performance to their Notes needs.
- ◆ High-end uniprocessor, symmetric multiprocessor, and Scalable POWERparallel™ (SP) systems models provide room for future growth of Notes systems.
- ◆ As users grow their systems, they retain their Notes software investments, since the same AIX operating system runs across the entire RS/6000 line.

Manageability

- ◆ The processing power of the RS/6000 can be used to consolidate—on a single RS/6000 server—a Notes workload that was previously distributed across multiple servers, making it easier and more cost-effective to manage.

- ◆ If multiple servers are desired to segregate Notes workload, the systems and network management software of the IBM SystemView® family helps Notes users to more easily administer this network of systems.

- ◆ Users can leverage both scenarios by combining multiple individual Notes servers within an IBM RS/6000 SP complex, providing a single-system image for systems management while retaining the availability and workload balancing benefits of individual servers.

Availability

- ◆ RS/6000 Notes servers can be configured in clusters using IBM High Availability Cluster Multiprocessor (HACMP) software to ensure that if one system fails, its work is taken over by another, without incurring the added expense of fully redundant hardware.
- ◆ HACMP clusters can even be used within an SP complex to provide a high-availability environment for one of the SP servers.
- ◆ Availability also means providing connectivity to Notes clients existing on PCs in various LAN environments.
- ◆ The RS/6000 supports a wide range of PC/LAN hardware and software connectivity options to tie an RS/6000 Notes Release 4 server in with existing clients.
- ◆ To make Notes applications available to an even wider audience, the Lotus InterNotes™ Web Publisher can be used in conjunction with World Wide Web (WWW) server products, such as the IBM Internet Connection Server for AIX, to allow Internet access to Notes and Notes databases.

For More Information

See the following Internet home pages:

IBM Home Page	http://www.ibm.com
IBM RS/6000 Home Page	http://www.rs6000.ibm.com
IBM Lotus Home Page	http://www.lotus.com

Call the IBM Fax Information Service to receive facsimiles of IBM product press releases. Simply dial 1-800-IBM-4FAX and

- ◆ The RS/6000 can also provide links between Notes applications and existing applications, such as those based on DB2® and CICS™ for example, using optional software products.



TPC-D—For Comparing Performance of Decision-Support Systems

IBM has published the first audited results of the new TPC-D industry-standard benchmark. This benchmark is a suite of real world, business-oriented database queries and updates that are designed to simulate decision-support operations on a computer system.

Benchmarks are tests used to gauge the performance of a computer system and enable comparisons between different systems. Benchmarks can be created to evaluate how well a computer system will perform specific tasks or functions. The TPC-D benchmark was established in April of 1995 by the Transaction Processing Performance Council, an independent benchmark standards body. It focuses on how systems examine large volumes of data and perform complex analyses to provide answers to critical business questions. This technique is commonly referred to as decision support, since it is useful in guiding business decisions to gain a competitive advantage.

These initial TPC-D benchmarks were run on an IBM RISC System/6000 (RS/6000) Scalable POWERparallel (SP) System using the IBM DB2 Parallel Edition database and IBM 7133 Serial Storage Architecture (SSA) disk storage devices. This combination provides a high-performance, scalable platform for decision-support applications.

The extensive processing power made available by the RS/6000 SP today supports advanced analysis techniques such as data mining, in addition to classic decision support, to gain maximum value from enterprise data. The RS/6000 SP system is a member of the RS/6000 family of RISC-based workstations and servers running AIX.

DB2 Parallel Edition for AIX is designed to run complex queries on very large databases, enabling decision-support and data mining applications. DB2 Parallel Edition takes full advantage of the RS/6000 SP's architecture where each processor has its own operating system, internal memory, and disk. DB2 Parallel Edition performance increases in a near linear fashion as data is distributed incrementally across the RS/6000 SP's multiple processors. As a result, as more data is acquired, query response times can be maintained by adding processor nodes to the RS/6000 SP.

Decision-support systems typically involve large quantities of data. The IBM 7133 SSA disk subsystem improves throughput and availability of database applications involving large numbers of queries against massive data stores. Performance features include dual-path connectivity running 80 MB/sec per loop, four times faster than SCSI-2-based storage. AIX mirroring techniques combine with the SSA design to ensure high availability. SSA keeps critical data flowing to customers and users with redundant data paths to preclude any single point of failure.

These benchmark results, based on the initial threshold of 100 GB of data, were reported for the TPC-D's four requisite components:

- ◆ QppD@100 GB = 207.01 (TPC-D Power metric)
- ◆ QthD@100 GB = 84.58 (TPC-D Throughput metric)
- ◆ Price/Performance = \$33,640.49 per QphD@100 GB (TPC-D price/performance metric)
- ◆ Availability Date = present

Additional TPC-D benchmark tests with significantly more data are planned. The TPC-D results, along with other important characteristics such as reliability and availability, will provide data to compare various decision-support systems and their capabilities.



IBM Solution Developer Program

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