

SQL Databases

	DB2 Universal Database 7.2	Microsoft SQL Server 2000 SP2	MySQL 4.0	Oracle9i Database	Sybase Adaptive Server Enterprise 12.5
Company	IBM Corp.	Microsoft Corp.	MySQL AB	Oracle Corp.	Sybase Inc.
List price	\$20,000 per CPU	\$19,999 per CPU	Free download	\$40,000 per CPU	\$3,995 per server
Server OSs supported	AIX, AS/400, HP-UX, Linux, OS/390, PTX, Solaris, Windows server versions, OS/2	Windows 95 or better	Most Unix versions, OS/2, Windows 95 or better	AIX, HP-UX, Linux, NetWare, Solaris, Tru64, Windows server versions	AIX, HP-UX, IRIX, Linux, Solaris, Tru64, Windows server versions
Client OSs supported	Any with a Java VM	Mac OS 9 or better, most Unix versions, Windows 95 or later	All server OSs listed above, Mac OS 9, OS/2, Windows 95 or later, VMS	Any with a Java VM	All server OSs listed above, Windows 98 or later
ADMINISTRATION					
Wizards for database creation/tables	■ ■	■ ■	□ □	■ ■	■ ■
Wizards for restoring data/database connectivity	■ ■	□ ■	□ □	■ ■	■ ■
Graphical tools for:					
Managing users/indices/stored procedures	■ ■ ■	■ ■ ■	□ □ □	■ ■ ■	■ ■ ■
Database diagramming/viewing results of SQL commands	■ ■	■ ■	□ □	■ ■	■ ■
Design area for changing schema	□	■	□	■	□
Sends messages to DBA on alert thresholds	■	■	□	■	□
Administration tools can run on a Web browser	■	□	■	■	□
Import and export tools for text files/native database formats	■ ■	■ ■	■ □	■ □	■ ■
Administrator can set permissions by table/column/row	■ ■ ■	■ ■ □	■ ■ □	■ ■ ■	■ ■ ■
Administrator can set permissions based on rules	□	□	□	■	■
Accredited by formal security credentials	□	■	□	■	■
Can schedule jobs by time/event/alert	■ ■ ■	■ ■ ■	□ □ □	■ ■ ■	□ ■ □
Static/dynamic Web publishing	■ ■	■ ■	□ □	■ ■	■ ■
SERVER ENGINE					
Can use multiple CPUs for intra-query parallelism	■	■	□	■	■
Can use multiple CPUs on insert/select	■ ■	■ ■	□ □	■ ■	■ ■
Can use multiple CPUs on updates/deletes	■ ■	■ ■	□ □	■ ■	□ □
B-tree/clustered index types	■ ■	■ ■	■ ■	■ ■	■ ■
Bitmap/hash index types	■ □	■ □	□ □	■ ■	□ □
Cost-/rules-/CPU-based optimizers	■ □ ■	■ □ ■	■ ■ ■	■ ■ ■	■ ■ ■
Allows multiple indices per query	■	■	■	■	■
Generates automatic summary tables	■	■	■	■	□
Optimizes queries with query rewrites/operation merging	■ ■	■ ■	■ ■	■ ■	■ ■
Multimedia data types: binary large object (BLOB)/unicode text objects/HTML	■ ■ ■	■ ■ □	■ ■ ■	■ ■ ■	■ ■ ■
Sound/video/images	■ ■ ■	□ □ ■	■ ■ ■	■ ■ ■	■ ■ ■
SCALABILITY AND AVAILABILITY					
Multiserver clustering	■	■ (via Windows)	□	■	■
Client supports automatic failover to standby server	□	■	□	■	■
Partial restore to a particular time	■	■	■	■	■
Creates incremental/full backups	■ ■	■ ■	■ ■	■ ■	■ ■
Restores data at the table-space level	■	■	■	■	■
Dual/circular logging	■ ■	□ □	■ ■	■ ■	□ □
PROGRAMMABILITY					
Stored procedures/Debugger for stored-procedure languages	■ ■	■ ■	□ □	■ ■	■ ■
Can cascade nested triggers	■	■	□	■	■
Multiple triggers per action and row	■	■	□	■	□
Can run Enterprise JavaBeans in the database	■	□	□	■	■
Interface for:					
JDBC/ODBC/RDO	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■
ADO/OLE DB/Perl DBI	■ ■ ■	■ ■ □	■ ■ ■	■ ■ ■	■ ■ ■
Can expose data as Web services	■	□	□	■	□
Can access XML data from Web services via SQL	■	■	□	■	□
QUERY LANGUAGE AND DATABASE DESIGN					
SQL standards	Entry-level SQL 92 and some SQL-99	SQL-92, Level 1	Limited SQL 89 and extensions	SQL-92	Entry-level SQL 99
Viewable SQL-92 catalog schema	□	■	□	■	□
Nested loop/hash/merge join types	■ ■ ■	■ ■ ■	■ □ ■	■ ■ ■	■ □ ■
Semi-join for star queries	■ ■	■	■	■	□
Left/right/full outer joins	■ ■ ■	■ ■ ■	■ ■ □	■ ■ ■	■ ■ ■
Can import/export data in XML	■ ■	■ ■	□ □	■ ■	■ ■
Can query XML data using SQL/XML syntax	■ ■	■ □	□ □	■ ■	■ ■
OLAP support for cube/grouping/moving averages	■ ■ ■	■ ■ ■	□ □ □	■ ■ ■	□ ■ ■