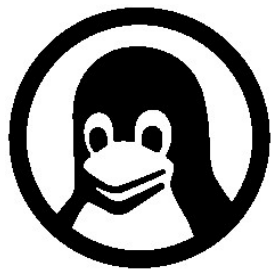




IBM Software Group



IBM DB2 Universal Database - Performance Leader on Linux

August 13, 2003

DB2 Information Management Software



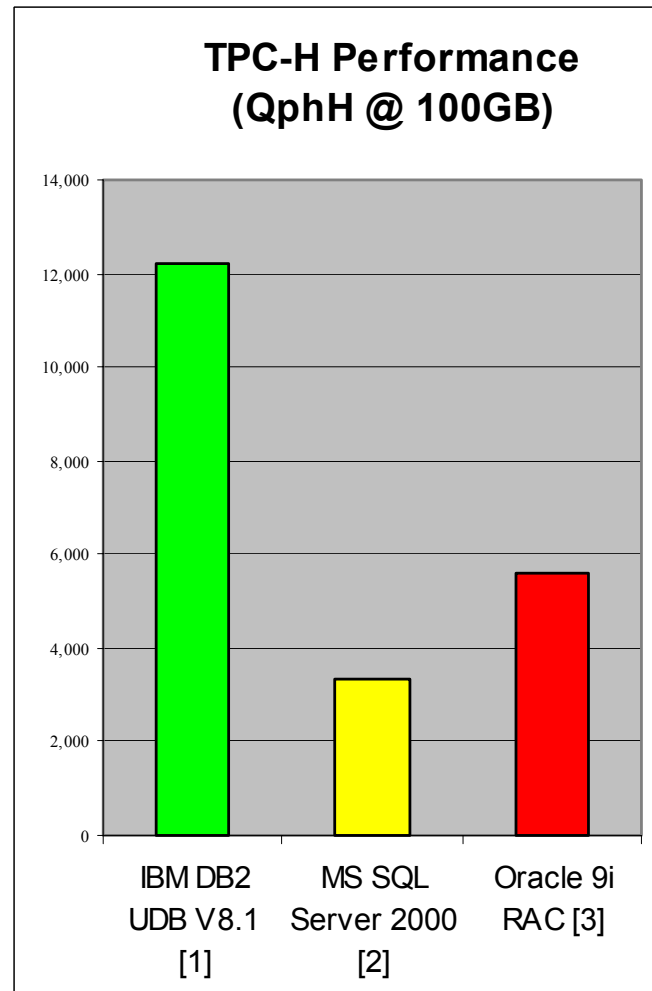
@.business on demand software

Facts about DB2 for Linux Performance Leadership

- ✓ 1st Linux database to publish industry standard DSS benchmark (TPC-H, 2001)
- ✓ 1st 64-bit Linux database to publish DSS benchmark (TPC-H, 2003)
- ✓ 1st database on Linux to publish OLTP application benchmark (SAP SD, 1999)
- ✓ Database with most industry standard benchmarks published on Linux
- ✓ Performance leader for 100GB TPC-H (clustered and non-clustered*)
- ✓ Performance leader for 300GB TPC-H (clustered and non-clustered*)
- ✓ Price/Performance leader for 100GB TPC-H (clustered*)
- ✓ Price/Performance leader for 300GB TPC-H (clustered*)

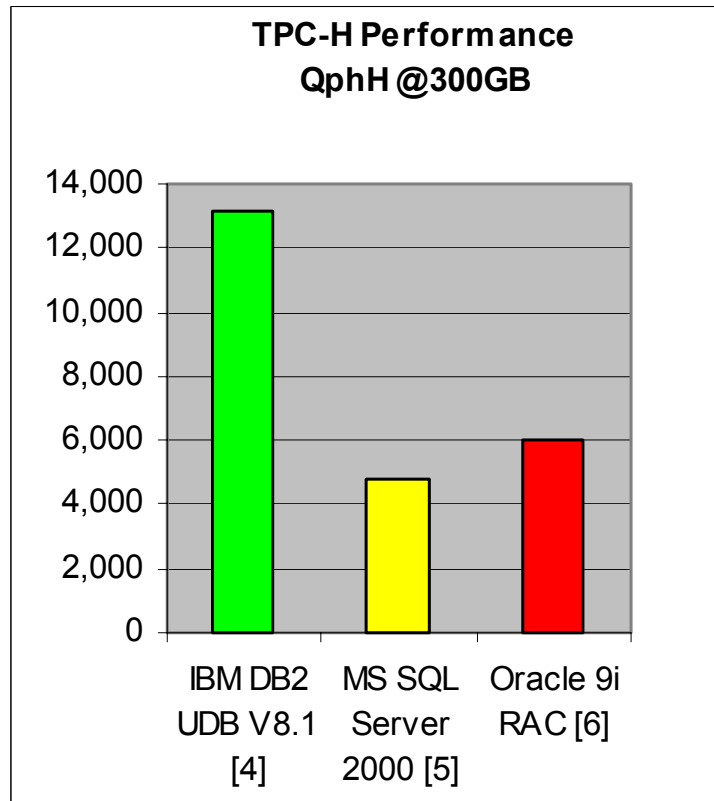
*as of July 30, 2003

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DB2 on Linux delivers more than **double** Oracle's performance

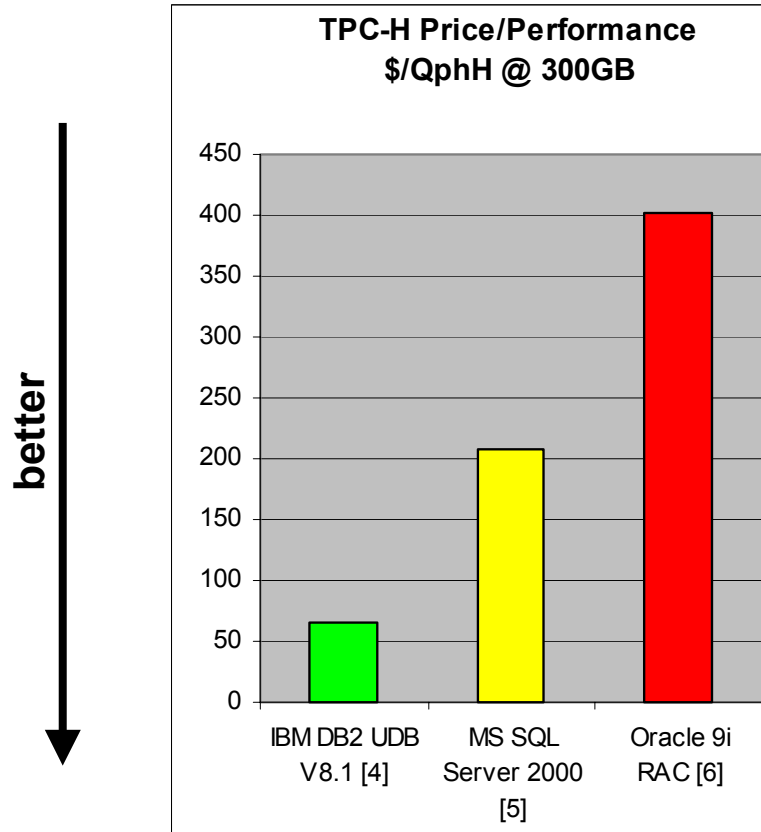
Results current as of August 13, 2003. [1] 12216 QphH@100GB and \$71 per QphH@100GB avail 11/08/03 [2] 3346 QphH@100GB and \$65 per QphH@100GB avail 04/24/03 [3] 5578 QphH@100GB and \$358 per QphH@100GB avail 07/15/02 Withdrawn as of 08/26/03. Visit www.tpc.org for details. TPC-H and QphH are trademarks of the Transaction Processing Performance Council. Oracle, Oracle9i are registered trademarks of the Oracle Corporation. Microsoft is a registered trademark of the Microsoft Corporation. Other company, product or service names may be trademarks or service marks of others.

Even better performance with more data



Results current as of August 13, 2003. [4] 13914 QphH@300GB and \$65 per QphH@300GB avail 11/08/03 [5] 4774 QphH@300GB and \$208 per QphH@300GB avail 03/31/03 [6] 5976 QphH@300GB and \$401 per QphH@300GB avail 06/01/02 Withdrawn as of 08/26/03. TPC-H and QphH are trademarks of the Transaction Processing Performance Council. Oracle, Oracle9i are registered trademarks of the Oracle Corporation. Microsoft is a registered trademark of the Microsoft Corporation. Other company, product or service names may be trademarks or service marks of others.

Take a look at the cost difference!



Results current as of August 13, 2003. [4] 13914 QphH@300GB and \$65 per QphH@300GB avail 11/08/03 [5] 4774 QphH@300GB and \$208 per QphH@300GB avail 03/31/03 [6] 5976 QphH@300GB and \$401 per QphH@300GB avail 06/01/02 Withdrawn as of 08/26/03. Visit www.tpc.org for details. TPC-H and QphH are trademarks of the Transaction Processing Performance Council. Oracle, Oracle9i are registered trademarks of the Oracle Corporation. Microsoft is a registered trademark of the Microsoft Corporation. Other company, product or service names may be trademarks or service marks of others.

TPC-H @ 100GB

Database	IBM DB2 UDB V8.1 [1]	MS SQL Server 2000 [2]	Oracle 9i RAC [3]
Performance (QphH)	12,216	3,346	5,578
Price/Performance (\$/QphH)	71	65	358
Performance (QphH) per CPU	764	418	349
Price/Performance (\$/QphH) per CPU	4.375	8.125	22.375
Operating System	SuSE Linux ES 8	MS Windows 2003 ES	Tru 64 Unix V5.1A
# Processors	16	8	16
Processor Type	Opteron 2Ghz	Xeon MP 2,0Ghz	Alpha 1000 MHz
Total System Cost (\$)	851,953	216,782	1,991,562
Memory	48GB	16GB	128GB
Cluster	Y	N	Y
#Nodes	8	N/A	4

Results current as of August 13, 2003. [1] 12216 QphH@100GB and \$71 per QphH@100GB avail 11/08/03 [2] 3346 QphH@100GB and \$65 per QphH@100GB avail 04/24/03 [3] 5578 QphH@100GB and \$358 per QphH@100GB avail 07/15/02 Withdrawn as of 08/26/03. Visit www.tpc.org for details. TPC-H and QphH are trademarks of the Transaction Processing Performance Council. Oracle, Oracle9i are registered trademarks of the Oracle Corporation. Microsoft is a registered trademark of the Microsoft Corporation. Opteron is a trademark of the AMD Corporation. Xeon is a registered trademark of the Intel Corporation. UNIX is a registered trademark of The Open Group in the United States and other countries. Other company, product or service names may be trademarks or service marks of others.

TPC-H 300GB

Database	IBM DB2 UDB V8.1 [4]	MS SQL Server 2000 [5]	Oracle 9i RAC [6]
Performance (QphH)	13,194	4,774	5,976
Price/Performance (\$/QphH)	65	208	401
Operating System	SuSE Linux ES 8	MS Windows 64-bit	Tru 64 Unix V5.1A
# Processors	16	16	16
Processor Type	Opteron 2Ghz	Itanium 2 1Ghz	Alpha 1000 MHz
Total System Cost (\$)	851,953	988,328	2,390,963
Memory	48GB	64GB	128GB
Cluster	Y	N	Y
#Nodes	8	N/A	4

Results current as of August 13, 2003. [4] 13914 QphH@300GB and \$65 per QphH@300GB avail 11/08/03 [5] 4774 QphH@300GB and \$208 per QphH@300GB avail 03/31/03 [6] 5976 QphH@300GB and \$401 per QphH@300GB avail 06/01/02 Withdrawn as of 08/26/03. Visit www.tpc.org for details. TPC-H and QphH are trademarks of the Transaction Processing Performance Council. Oracle, Oracle9i are registered trademarks of the Oracle Corporation. Microsoft is a registered trademark of the Microsoft Corporation. Opteron is a trademark of the AMD Corporation. Xeon is a registered trademark of the Intel Corporation. UNIX is a registered trademark of The Open Group in the United States and other countries. Other company, product or service names may be trademarks or service marks of others.