

IBM® DB2® Performance Benchmark Results

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TPC-C

- **16 Nov 2010 [IBM System x and DB2 achieve more than 2.3 million transactions per minute on TPC-C benchmark—setting industry milestone for x86-64 performance](#)**
IBM® System x3850 X5 with MAX5 and DB2 delivers highest x86-64 performance score ever achieved on TPC-C benchmark (2,308,099 tpmC, \$ 0.64 USD / tpmC, available 05/20/2011.) See result [link](#).
- **17 Aug 2010 [IBM Breaks Double Digit Performance Barrier With 10 Million Transactions Per Minute](#)**
A cluster of three IBM Power 780 (each with Power 7, 3.86 GHz, 8 processors, 64 cores) with IBM DB2 9.7 is the first result to break 10 million tpmC (10,366,254 tpmC, \$1.38 USD / tpmC, available 10/13/2010.) See result [link](#).
- **13 Apr 2010 [Eight-Core POWER7 System Boosts Transaction-Processing Performance to Slash Licensing Costs More Than 80%](#)**
An 8-core IBM Power 780 (Power 7, 4.14 GHz, 2 processors, 8 cores) with IBM DB2 9.5 is the first server to deliver more than 1.2 million tpmC on only eight cores. (1,200,011 tpmC, \$0.69 USD / tpmC, available 10/13/2010.) See result [link](#).
- **19 Aug 2008 [DB2 9.5 first to break the barrier of 1 million transactions per minute on TPC-C for x86-64](#)**
IBM System x3950 M2 with DB2 9.5 and Red Hat Linux® 5.2 sets world record for x86-64 performance by delivering more than 1.2 million tpmC (1,200,632 tpmC, \$1.99 USD / tpmC, available 12.10/2008). See result [link](#).
- **10 Jun 2008 [DB2 9.5 Sets New World Record Performance for 64-core Power6 Processors](#)**
A 64-core IBM Power 595 (Power 6, 5 GHz, 32 processors, 128 threads) with IBM DB2 9.5 is the best 64-core system (6,085,166 tpmC, \$2.81/tpmC, available 12/10/08). See result [link](#).
- **21 May 2007 [DB2 9 And Power6 Processors Sets New World Record Performance](#)**

A 16-core IBM Power 570 (Power 6, 4.7 GHz, 8 processors, 32 threads) with IBM DB2® Enterprise 9 is the best 16-core system (1,616,162 tpmC, \$3.54/tpmC, available 11/21/07) and tops all 32-core systems. See result [link](#).

TPC-H

- **15 Oct 2007 [DB2 Warehouse 9.5 leads 10 TB benchmark](#)**

A 128-core (32-node 4-core) IBM Power 570 cluster (Power 6, 4.7 GHz, 64 processors, 128 cores, 256 threads) with DB2 9.5 is the best overall system at 10TB (343,551 QphH@10000GB, 32.89\$/QphH, configuration available 04/15/08) and tops all other vendors' systems. See result [link](#).

SAP 2-Tier SAP Sales and Distribution (SD) Standard Application Benchmark

- **16 Nov 2010 [IBM Again Shatters World Record on Two-Tier SAP Sales and Distribution \(SD\) Standard Application Benchmark](#)**

IBM today announced that a 256-core Power® 795 system with DB2® nearly doubled last month's record to achieve the highest result ever published on the two-tier SAP® Sales and Distribution (SD) standard application benchmark with a result of 126,063 SAP SD benchmark users, running IBM DB2 9.7, AIX 7.1, SAP EHP 4 for SAP ERP 6.0 (Unicode). SAP certification number [2010046](#).

- **17 Oct 2010 [IBM BladeCenter HX5 and DB2 9.7 deliver leadership 4-processor result on Windows on two-tier SAP SD standard application benchmark](#)**

IBM BladeCenter HX5 and DB2 9.7 set world record result of 10,500 SAP SD benchmark users on Intel Xeon X7560 processor (Nehalem EX) running Microsoft® Windows® Server 2008 Enterprise x64 Edition, SAP EHP 4 for SAP ERP 6.0 (Unicode) (4 processors, 32 cores, 64 threads). SAP certification number [2010051](#).

- **17 Oct 2010 [IBM System x3755 M3 and DB2 9.7 deliver leadership 4-processor and 48-core result on Windows on two-tier SAP SD standard application benchmark](#)**

IBM System x 3755 M3 and DB2 9.7 deliver leadership result on Windows with a result of 8,888 SAP SD benchmark users on AMD Opteron Model 6176 SE processors running Microsoft® Windows® Server 2008 Enterprise Edition, SAP EHP 4 for SAP ERP 6.0 (Unicode) (4 processors, 48 cores). SAP certification number [2010053](#)

- **11 Oct 2010 [IBM posts world-record result on Windows on two-tier SAP SD standard application benchmark](#)**

IBM System x 3850 X5 and DB2 9.7 deliver world-record result on Windows with a result of 19,700 SAP SD benchmark users on Intel Xeon X7560 processor (Nehalem EX) running Microsoft® Windows® Server 2008 Enterprise Edition, SAP EHP 4 for SAP ERP 6.0 (Unicode) (8 processors, 64 cores, 128 threads). SAP certification number [2010044](#).

- **16 Jun 2010 [DB2 9.7 and IBM System x3650 M3 post best 2-processor result](#)**

IBM System x3650 M3 set world record result of 5100 SAP SD benchmark users with DB2 9.7 and Intel Xeon X5680 processor (Westmere) running Microsoft® Windows® Server 2008 Enterprise Edition, SAP EHP 4 for SAP ERP 6.0 (Unicode) (2 processors, 12 cores, 24 threads). SAP certification number [2010025](#)

- 07 Apr 2010 [DB2 9.7 and IBM Power 780 post best overall result and best 8-processor/64-core result on AIX](#)**

The 64-core IBM Power 780 Express (8 processor chips / 64 cores / 256 threads) achieved the best overall and best 64-core two-tier SAP SD Standard Application Benchmark result with 37,000 SD users running IBM DB2 9.7, AIX 6.1 , SAP EHP 4 for SAP ERP 6.0 (Unicode) SAP certification number [2010013](#).
- 30 Mar 2010 [DB2 9.7 and IBM System x 3850 X5 post best 4-processor/32-core result on Windows](#)**

IBM System x3850 X5 set world record result of 10,450 SAP SD benchmark users with DB2 9.7 and Intel Xeon X7500 processor (Nehalem EX) running Microsoft® Windows® Server 2008 Enterprise x64 Edition, SAP EHP 4 for SAP ERP 6.0 (Unicode) (4 processors, 32 cores, 64 threads). SAP certification number [2010012](#) .
- 08 Feb 2010 [DB2 9.7 and IBM Power 750 post best 4-processor/32-core result on AIX](#)**

The 32-core IBM Power 750 Express (4 processor chips / 32 cores / 128 threads) achieved the best 32-core two-tier SAP SD Standard Application Benchmark result with 15,600 SD users running IBM DB2 9.7, AIX 6.1 , SAP EHP 4 for SAP ERP 6.0 (Unicode) SAP certification number [2010004](#).
- 30 Mar 2009 [DB2 9.5 and IBM x3650 M2 post best 2-processor result](#)**

IBM System x3650 M2 set world record result of 5100 SAP SD benchmark users with DB2 9.5 and Intel Xeon X5570 processor (Nehalem EP) running Windows Server 2003 Data Center Edition, SAP ECC Release 6.0. (2 processors, 8 cores, 16 threads). SAP certification number [2008079](#).
- 19 Dec 2008 [DB2 9.5 posts new results using Xen 3.10](#)**

IBM System x3850 M2 and DB2 9.5 delivers virtualization result of 4400 SAP SD benchmark users with DB2 9.5 and Intel Xeon X7460 processor (Dunnington) on Xen 3.1.0, Red Hat Enterprise Linux 5.2, and SAP ECC Release 6.0. (4 processors, 24 cores, 24 threads). SAP certification number [2008077](#). See [paper](#).
- 02 Dec 2008 [DB2 9.5 posts best 4-processor result on Windows](#)**

IBM System x3850 M2 set world record result of 5300 SAP SD benchmark users with DB2 9.5 and Intel Xeon X7460 processor (Dunnington) running Windows Server 2003 Data Center Edition, SAP ECC Release 6.0. (4 processors, 24 cores, 24 threads). SAP certification number [2008067](#).
- 18 Nov 2008 [DB2 9.5 posts best 4-processor result on Linux](#)**

IBM System x3850 M2 set world record 4-processor result of 5156 SAP SD benchmark users with DB2 9.5 and Intel Xeon X7460 processor (Dunnington) running Linux RHEL 5.2, SAP ECC Release 6.0. (4 processors, 24 cores, 24 threads). SAP certification number [2008066](#). See [paper](#).
- 29 Aug 2008 DB2 9.5 posts leadership 32 core result on AIX**

The 32-core IBM Power 570 (Power 6, 4.2 GHz, 16 processors/32 cores/64 threads) achieved the best 32-core two-tier SAP SD Standard Application Benchmark result of 14,432 SAP SD benchmark users running IBM DB2 Enterprise 9.5 database software, AIX 6.1, SAP ECC Release 6.0. . SAP certification number [2008057](#).
- 24 Mar 2008 DB2 9.5 posts leadership 64 core result on AIX**

The 64-core IBM Power 595 (Power 6, 5 GHz, 32 processors/64 cores/128 threads) achieved the best 64-core two-tier SAP SD Standard Application Benchmark result of 35,400 SAP SD

benchmark users running IBM DB2 Enterprise 9.5 database software, AIX 6.1, SAP ECC Release 6.0. . SAP certification number [2008019](#).

- **24 Apr 2007 DB2 9.5 posts leadership 16 core result on AIX**

The 16-core IBM Power 570 (Power 6, 4.7 GHz, 8 processor chips/16 cores/32 threads) achieved the best 16-core two-tier SAP SD Standard Application Benchmark result with 8,000 SAP SD benchmark users running IBM DB2 9, AIX 5L V5.3, SAP ECC Release 6.0. SAP Certification number [2007039](#).

SAP 3-Tier SAP Sales and Distribution (SD) Standard Application

- **22 Jan 2008 DB2 9.5 posts leadership 4-core result on AIX**

DB2 9.5 on the 4 core IBM Power 550 (Power 6, 4.2 GHz, 2 processors / 4 cores / 8 threads) achieved the best 4-core three tier SAP SD Standard Application benchmark result of 32,000 SAP SD benchmark users, running AIX 5L V5.3, ECC Release: 6.0. SAP Certification number [2008001](#).

- **11 May 2005 DB2 8.2.2 posts best three tier SAP SD Standard Application Benchmark result**

DB2 8.2.2 on the 32 core IBM eServer 595 (Power 5, 1.9 GHz) achieved the best three-tier SAP SD Standard Application Benchmark result of 168,300 benchmark users running, AIX 5L V5.3, ECC Release: 6.0. SAP Certification number [2005021](#).

SAP Transaction Banking (TRBK) Standard SAP for Banking Application

- **26 Jul 2007 DB2 9 posts top SAP TRBK Benchmark result**

DB2 on the 4 core IBM System p 570 (Power 5+, 2.2 GHz, 2 processors / 4 cores / 8 threads) achieves the best three-tier SAP TRBK Benchmark result for Day Processing (Number of postings to bank accounts: 15,519,000) and Night Processing (Number of balanced accounts: 7,429,000) running AIX 5L V5.3. SAP Deposits Management 4.0. SAP Certification number [2007050](#).

SPECjEnterprise2010

- **25 Aug 2010 DB2 9.7 and WebSphere Application Server V7 delivers leadership multi-node result 2x higher than previous one**

A result of 15,829.86 EjOPS was delivered as the industry's highest multi-node result for SPECjEnterprise2010 using WebSphere Application Server V7 on IBM BladeCenter HS22 and DB2 9.7 on IBM System x3850 X5 that is 2x the previous highest multi-node result of 7903.16 EjOPS, also by DB2 and WebSphere Application Server (see [new result](#) and [old result](#)).

- **16 Jul 2010 POWER7 delivers leadership single-node result with DB2 9.7 and WebSphere V7**

The first POWER7 result of 7172.93 EjOPS was achieved with WebSphere Application Server V7 on IBM Power 750 Express and DB2 9.7 on IBM BladeCenter PS702 Express. See result [link](#).

- **Apr 2010 WebSphere V7 JPA feature pack 2.0 provides leadership single-node results on Intel processors**
 - 5140.53 EjOPS WebSphere Application Server V7 on IBM System x3850 X5 and DB2 9.7 on IBM System x3850 X5. See [press release](#) and result [link](#).
 - 1813.37 EjOPS WebSphere Application Server V7 on IBM System x3650 M2 and DB2 9.7 on IBM System x3850 X5. See [press release](#) result [link](#).
 - 2752.06 EjOPS WebSphere Application Server V7 on IBM System x HS22 and DB2 9.7 on IBM System x3850 X5. See [press release](#) result [link](#).
- **30 Mar 2010 [DB2 9.7 and WebSphere Application Server V7 delivers leadership single-node result](#)**
A result of 3,110.30 EjOPS was achieved with WebSphere Application Server V7 running on the IBM System x3850 X5 and DB2 9.7 on the IBM System x3850 M2. See result [link](#).
- **30 Mar 2010 [DB2 9.7 and WebSphere Application Server V7 delivers leadership single-node result](#)**
A result of 1599.51 EjOPS was achieved with WebSphere Application Server V7 running on the IBM BladeCenter HS22 and DB2 9.7 on the IBM System x3650 M2. See result [link](#).
- **07 Jan 2010 [DB2 9.7 and WebSphere Application Server V7 delivers first multi-node result for SPECjEnterprise2010](#)**
A result of 7,903.16 EjOPS was delivered as the industry's first multi-node result for SPECjEnterprise2010 using WebSphere Application Server V7 on IBM BladeCenter HS22 and DB2 9.7 on IBM System x3850 M2. See [press release](#) and result [link](#).
- **07 Jan 2010 [DB2 9.7 and WebSphere Application Server V7 delivers first single-node result for SPECjEnterprise2010](#)**
A result of 1013.40 EjOPS was delivered as the industry's first single-node result for SPECjEnterprise2010 using WebSphere Application Server V7 on IBM System x3650 M2 and DB2 9.7 on IBM System x3850 M2. See result [link](#).

SPECjAppServer2004

- **16 Dec 2008 [DB2 9.5 leads SPECjAppServer2004 with WebSphere Application Server V7](#)**
DB2 9.5 with 64 core IBM pSeries p5 595 as database server and WebSphere Application Server V7 on IBM xSeries BladeCenter HS21 (22,634.13 SPECjAppServer2004 JOPS@Standard)
- **30 Jan 2008 [DB2 9.5 leads SPECjAppServer2004 with WebSphere Application Server 6.1](#)**
DB2 9.5 with 40 core IBM pSeries p5 595 595 as database server and WebSphere 6.1 Application Server with EJB3 Feature Pack on IBM System pSeries Blade Center (14,004.42 SPECjAppServer2004 JOPS@Standard)
- **19 Jul 2007 [DB2 9 leads SPECjAppServer2004 with BEA WebLogic Server 10.0](#)**
DB2 9 leads SPECjAppServer2004 with 48-cores Sun Fire E6900 as the database server and BEA WebLogic Server 10.0 as the application servers on a Sun Blade 6000 (8,253.21 SPECjAppSerer2004 JOPS@Standard)

TPoX - Transaction Processing over XML

- **Apr 2010** [Intel and IBM redefine the limits of Data Warehousing](#)
DB2 9.7 demonstrates performance with a 10 TB XML data warehouse using Intel Xeon 7540 EX processors (Nehalem EX with 4 sockets/32 cores) and IBM Storage DS8700 on Linux RHEL 5.4. Article also includes a TPoX OLTP result with Nehalem EX server achieving 14,000 TPoX transactions per second with 1 TB XML data on Linux SLES 10 SP2.
- **Aug 2009** [Using DB2 pureXML and BladeCenter JS43 Server for high-performance transaction processing](#)
DB2 9.7 with 8 core IBM pSeries Blade Center JS43 achieved 4107 TPoX transactions per second (246 420 transactions per minute, 14.7 million transactions per hour) with 1 TB XML data using the TPoX 2.0 workload.
- **Jun 2009** [Intel and IBM Collaborate to boost performance and power consumption](#)
DB2 9.7 with Intel Xeon 5570 processors (Nehalem EP with 2 sockets/8 cores) achieved 5139 TPoX transaction per second (308,384 transactions per minutes) running Linux SLES 10 SP2 with 1 TB XML data using the TPoX 1.2 workload.
- **Oct 2008** [Taming a Terabyte of XML data](#)
DB2 9.5 with Intel Xeon 7460 processors (4 sockets/24 cores) achieved 6,763 TPoX transaction per second (405,804 transaction per minute) running Linux SLES 10 SP1 with 1 TB XML data. See [slides](#).
- See <http://tpox.sourceforge.net/tpoxresults.htm> for additional TPoX results.