

SAP on IBM i

News from the Platform Team

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THE BEST-RUN BUSINESSES RUN SAP



Agenda



1. Platform Team

1. The Mission
2. The Tasks

2. Product Integration

1. Windows Server 2008
2. Performance Benchmarks
3. IBM 64 Bit JVM with IBM i 6.1

3. Product Development

1. SAP Product Deliverables
2. SAP Master Data Management
3. SAP Database Client

4. Product Support

1. Release Intergration
2. SAP Developer Network

Our Mission in IBM Product Integration and SAP Product Development

- Enable, validate and certify the use of **new database and operating system releases** with existing SAP product releases
- Request, integrate and validate features or corrections from IBM to **provide or improve new or existing SAP functions** with generic interfaces and platform-specific implementation
- **Provide new SAP product releases** with IBM i and IBM DB2 for i fully functional and at good quality in time for SAP RampUp
- **Minimize implementation differences** between the various platforms while **preserving the specific administration interface** („look&feel“)
- Utilize platform-specific features to **maximize the value of the SAP implementation with IBM DB2 for i** for the SAP customer



Various Porting Activities in the Platform Team

- **Database** (DDIC, DB Interfaces, DB Clients, DB Server, DB Schemas, DB HA Options, ...)
- **Business Warehouse/Intelligence**
- **ABAP Server** (Compiler & Builds, Runtime environment, various OS abstractions)
- **J2EE Server** (JVM and JDK, Startup Framework, Administration and Configuration Tools, ...)
- **Installation**, System Copy, Platform Migration and Codepage Conversion
- **Upgrade**, Transport, Support Packages, Enhancement Packages
- Administration and **Monitoring Tools** (DBA Tools, CCMS, OS Collector, ...)
- **Quality Assurance** (Function and Performance), Release Integration and Certification
- **Documentation** (Installation and Upgrade Guides, DBA and HA Guides, ...)
- **SAP Development Support**
- **IBM Product Support**
- **System Administration** and Maintenance (SAP Systems, DB, OS, ..., HW)

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Product Integration

Windows Server 2008



**Legend
available on
next slide**

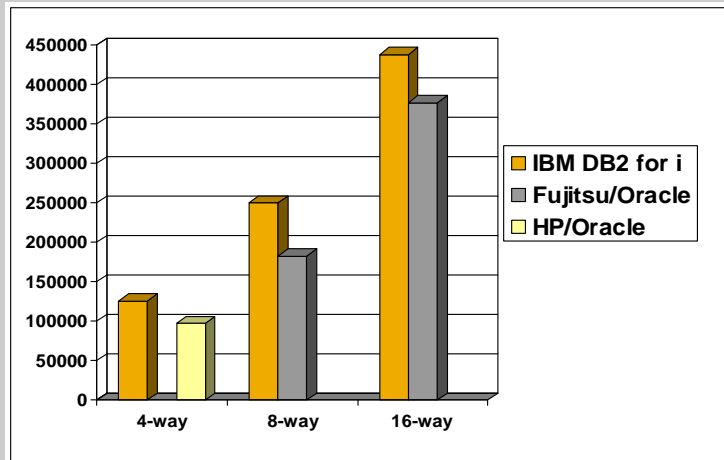
	Windows (*8)					AIX		HP-UX					Solaris		Linux SUSE SLES9, SLES 10, Red Hat EL 4, 5					i5/OS IBM i	z/OS	TRU64
	Server 2003 on IA32 32bit	Server 2003 on IA64 64bit	Server 2003 on x64 64bit	Server 2008 on IA64 64bit	Server 2008 on x64 64bit	5.2, 5.3 64bit	6.1 64bit	11.11 on PA-RISC 64bit	11.23 on PA-RISC 64bit	11.31 on PA-RISC 64bit	11.23 on IA64 64bit	11.31 on IA64 64bit	9, 10 on SPARC 64bit	10 on x64 64bit	IA32 32bit	IA64 64bit	x86_64 64bit	Power 64bit	(No Red Hat EL 4) System z 64bit	V5R3, 5.4, 6.1 64bit	1.6, 1.7, 1.8, 1.9, 1.10 64bit	
Unicode/Non-Unicode	+/+	+/+	+/+	+/+	+/+	+/+	+/+	+/+	+/+	+/+	+/+	+/+	+/+(*16)	-/+	+/+	+/+	+/+	+/+	+/+	+/+	-/-	+/+
Oracle 10.2 (*3)	X	X	X	-	Q2	X	X	X	X	X(*7)	X	X	X	X	X	X	X	X	-	-	-	-
SQL Server 2000 (*12)	X	X	X(*9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SQL Server 2005 (*10)	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SQL Server 2008	-	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DB2 LUW V8	X	X	X	-	-	X	X	X	X	-	X	-	X	-	X	X	X	X	-	-	-	-
DB2 LUW V9.1 (*15)	X	X	X	X	X	X	X	-	X	-	X	X	X	-	X	X	X	X	-	-	-	-
DB2 LUW V9.5 (*15)	-	-	X	X	X	X	X	-	-	-	X	X	X	X	-	-	X	X	-	-	-	-
MaxDB 7.6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
MaxDB 7.7 (*17)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
DB2 for i5/OS V5R3, DB2 for i 5.4, 6.1 (*4)	APP	-	APP	-	APP	-	-	-	-	-	-	-	-	-	-	-	-	APP	-	X	-	-
DB2 for z/OS V8, V9 (*7)	APP (*5)	-	APP	-	APP	APP	APP	-	-	-	-	-	-	-	-	-	APP (*6)	-	APP	-	HA(*1) DB	-

X	Available for DB and APP	APP	Not for DB server. Application server with whole SAP NetWeaver stack only,
P	Planned	DB	Database Server only
	Deprecated (Not recommended for productive use)	HA	High Available Solution only
-	Neither supported nor planned	x64	X64 and x86_64 represent the same hardware

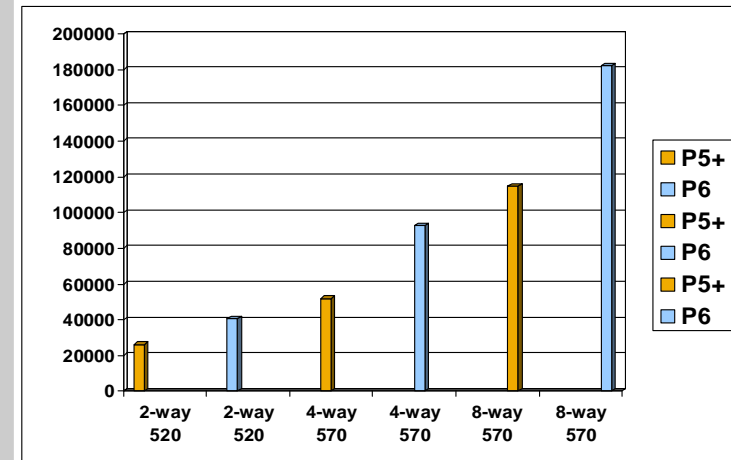


SAP Standard Application Benchmarks – SAP NetWeaver Business Intelligence (see <http://service.sap.com/benchmark>)

sole Platform leadership
in
SAP BI Query Performance



sole Platform certified
for
SAP BI Datamart Benchmark



+ sole Platform certified for SAP BI Mixed Workload („MXL“) Benchmark (4x)

Product Integration

IBM 64-Bit JVM with IBM i 6.1

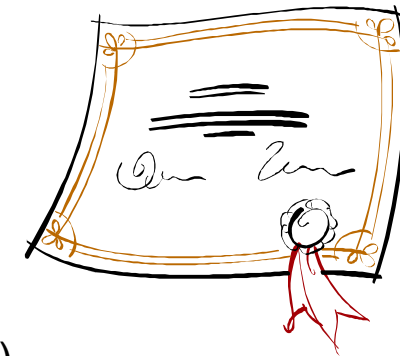


Project Charter

- Provide strategic IBM JVM “IT4J” (64 Bit version) with IBM i 6.1

Project Status

- **IT4J 1.4 certified for SAP** Java workloads based on SAP Netweaver 6.4 and 7.0 with IBM i 6.1 since 12/01/2008



Benefit

- IT4J shows significantly **lower resource consumption** (CPU and RAM)
- IT4J provides a noticeable **performance benefit**
- IT4J enables the utilization of the **Eclipse Memory Analyzer Tool** (MAT)
- IT4J offers **enhanced implicit quality** through common code base with IBM AIX JVM

Rollout and Adoption

- New installations of packages based on SAP Netweaver 6.4 and 7.0 initially delivered 2009 or later utilize **IT4J 1.4** as their **default Java technology on IBM i 6.1**
- We recommend to **switch to IT4J 1.4** if possible (see SAP Note 1161275 for details)
- Most customers running SAP Java Workloads on IBM i 6.1 have successfully adopted IT4J

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SAP NetWeaver 7.1 based

- SAP NetWeaver Process Integration 7.1 EhP1 ✓
- SAP NetWeaver Composition Environment 7.1 EhP1 ✓
- SAP NetWeaver Master Data Management 7.1 ✓

SAP NetWeaver 7.0 (2004s) based

- SAP NetWeaver 7.0 EhP1 SR1 ✓
- SAP Business Suite 7 SR1 (SAP NetWeaver 7.0 EhP1 SR1) ✓
 - SAP ERP 6.0 EhP4
 - SAP CRM 7.0
 - SAP SRM 7.0
 - SAP SCM 7.0
- SAP Solution Manager 7.0 EhP1 ✓



Project Charter

- Provide SAP MDM server components on IBM i

Project Status

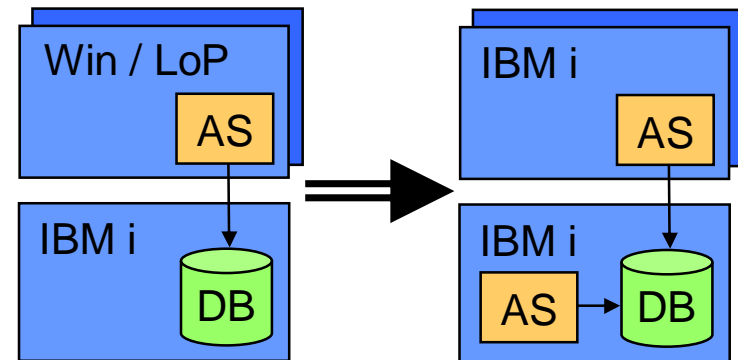
- SAP MDM 7.1 is available on IBM i 6.1 since 05/18/2009 (general availability)

Benefit

- Complex heterogeneous 3-tier system topology from SAP MDM 5.5 not longer required
- Simple homogeneous 2-tier and 3-tier system topology available
- Costly IBM DB2Connect CLI database client replaced by IBM i CLI database client

Rollout and Adoption

- Product available through standard SAP distribution channels
- First customer started installation in close cooperation with SAP on IBM i platform team



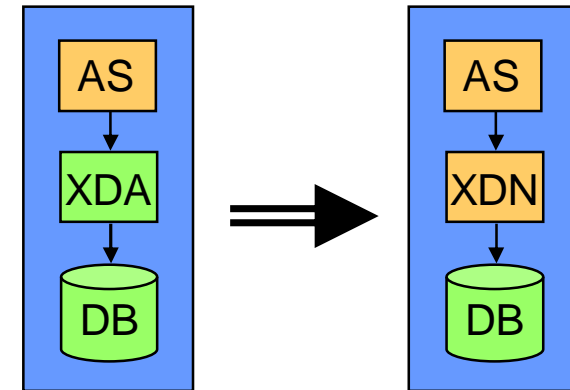


Project Charter

- Enhance database access supportability of SAP NetWeaver AS ABAP with DB2 for IBM i

Project Status

- SAP database client („Direct Drive“) for DB2 for IBM i is available since 06/01/2009



Benefit

- Enhanced diagnostic capabilities through **network statistics** and unified trace option
- Problem analysis and correction completely done from SAP on IBM i platform team
- Enhanced functional capabilities (buffering, 2-tier cancel, connectivity)

Rollout and Adoption

- Available via libdbsl patch through standard SAP distribution channels for SAP Kernel 6.40 and higher with IBM i5/OS V5R3 and higher
- First customer active since 01/2009 in close cooperation with SAP on IBM i platform team
- Activation details will be sent on demand via SAP customer message

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Product Support

Release Integration – SAP Application Maintenance



SAP Technology	SAP Application (Example: SAP ERP)	End of Mainstream Maintenance ¹	End of Extended Maintenance ¹
3.1x	R/3 3.1I	12/2003	12/2006
4.0x	R/3 4.0B	12/2003	12/2006
4.5x	R/3 4.5B	12/2003	12/2006
4.6x	R/3 4.6B	12/2003	12/2006
	R/3 4.6C	12/2006	12/2009 ²
6.20	<u>R/3 Enterprise 4.7</u>	<u>03/2009</u>	<u>03/2012²</u>
6.40	ERP 2004 (5.0)	03/2010	03/2013
7.0x	ERP 6.0 (2005)	12/2015	12/2017

Footnotes:

- 1) SAP Maintenance Information for the individual SAP Product Releases can be found in the SAP Product Availability Matrix „PAM“ (see: <http://service.sap.com/pam>)
- 2) SAP Enterprise Support customers benefit from one additional year of Extended Maintenance (see: <http://service.sap.com/maintenance>)

Product Support

Release Integration – SAP Technology Support



SAP Technology	SAP Kernel	End of Support	IBM i Releases certified ¹
3.1x	3.1I	01/31/2008	V4R2 – V4R5
	3.1I_COM	01/31/2008	V4R3 – V5R2
	3.1I_EXT	tbd	V5R1 – V5R4
4.0x	4.0B	01/31/2008	V4R2 – V4R5
	4.0B_COM	01/31/2008	V4R4 – V5R2
	4.0B_EXT	tbd	V5R1 – V5R4
4.5x	4.5B	01/31/2008	V4R2 – V5R2
	4.5B_EXT	tbd	V5R1 – V5R4
4.6x	4.6D	01/31/2008	V4R4 ² – V5R2
	4.6D_EXT(=4.6D_EX2)	tbd	V5R1 – V6R1
6.x	6.40	tbd	V5R2 – V6R1
	6.40_EX2	tbd	V5R3 – V6R1
7.0x	7.00, 7.01	tbd	V5R3 – V6R1
7.1x	7.10, 7.11	tbd	V5R4 – V6R1

Footnotes:

- 1) New certifications will only be executed if at least one SAP Application Release is still in maintenance
- 2) V4R4 is allowed for EBCDIC implementation only, ASCII implementation requires V4R5 minimum

Product Support

Release Integration – IBM Technology Support



IBM i Release	IBM Availability ¹	SAP Certification	IBM End of Support ¹
V5R1	05/25/2001	06/13/2001	09/30/2005
V5R2	08/30/2002	08/31/2002	04/30/2007
V5R3	06/11/2004	06/11/2004	<u>04/30/2009</u>
V5R4	02/14/2006	02/14/2006	tbd
V6R1	03/21/2008	04/21/2008	tbd

IBM i Upgrade ²	to V5R2	to V5R3	to 5.4	to 6.1
from V5R1	10/01/2005	01/04/2008	-	-
from V5R2	-	01/04/2008	<u>01/05/2010</u>	-
from V5R3	-	-	<u>01/05/2010</u>	tbd
from 5.4	-	-	-	tbd

Footnotes:

- 1) The IBM i release lifecycle information can be found at <http://www-304.ibm.com/jct01004c/systems/support/i/planning/upgrade/suptschedule.html>
- 2) The IBM i release upgrade information can be found at <http://www-304.ibm.com/jct01004c/systems/support/i/planning/software/i5osschedule.html>



Community

- The central community homepage for all supported database systems and operating systems can be found here: <http://www.sdn.sap.com/irj/sdn/dbos>
 - Provides generic platform news e.g. about extended SAP Kernel maintenance
 - Links to all platform specific community homepages
 - Links to valuable platform information like the SAP Product Availability Matrix(es)

- The community homepage for SAP on IBM i is linked to the central information page and can be found here: <http://www.sdn.sap.com/irj/sdn/db4>
 - Provides specific news for SAP on IBM i e.g. the new IBM JVM and increased upgrade performance
 - Provides in-depth information in the knowledge center
 - Links to the „news from development“ BLOG series
 - Links to the SAP on IBM i Forum

Additional Information

SDN Developer Network



DATABASE AND OPERATING SYSTEMS

The **Database and Operating Systems** area on SDN provides forums, blogs, content, and community related to all of the DB and OS platforms that SAP supports. Join us in [SAP on DB2 for Linux, Unix, and Windows](#), [SAP on DB2 for i5/OS](#), [SAP on DB2 for z/OS](#), [SAP on Oracle](#), [SAP on SQL Server](#), [SAP on MaxDB](#), [SAP on Informix](#), [SAP on Windows](#) and [SAP on Linux](#).



EX2 KERNELS: EXTENDED KERNEL MAINTENANCE

We have now released the EX2 kernels for SAP kernels 640 and 46D_EXT. These EX2 kernels are the successors to the 640 and the 46D_EXT kernels. Extended Kernel Maintenance is usually necessary when the database client or the OS compiler on which the original kernels were built runs out of support.

The 640_EX2 kernels are generally available but the 46D_EX2 kernel is only available for customers who have extended maintenance contracts with SAP for the 46D release. For more information, see (SMP login required):

- [SAP Note 1106096: EX2 Kernels: Extended Kernel Maintenance](#)
- [SAP Note 1086956: 46D_EX2 Kernels](#)
- [SAP Note 1058988: 640_EX2 Kernels](#)

08 Jan 2008

FUTURE VERSIONS OF SAP SOLUTIONS ON HP 9000 SERVERS RUNNING HP-UX

Read the letter from Karl-Heinz Hess, Senior Vice President Active Global Support, to customers running SAP software on HP-UX. 28 Jan 2008

MONITORING SYSTEM LANDSCAPES USING THE DBA COCKPIT (PDF 231 KB)

Managing large system landscapes with different database platforms is increasingly becoming the DBA's day-to-day business. SAP now offers the new DBA Cockpit that allows you to monitor all your databases using only one tool. It not only supports all database platforms that are supported by SAP, but it also helps you to configure your database using the system landscape directory (SLD). In addition, the DBA Cockpit provides a new and more uniform user interface for monitoring and administration. 26 Jun 2007

DATABASE AND OPERATING SYSTEMS KNOWLEDGE CENTER

Key Topics

- [Information on Product Availability Matrix - PAMs](#)
- [System Copy and Migration](#)
- [SAP Release Strategy and Planning](#)
- [End of Maintenance Information](#)
- [SAP NetWeaver 2004s SR1 Upgrade](#)
- [DB & OS Media Library](#)
- [Multiple Components in One Database \(MCOB\)](#)

Books

- [The SAP OS/DB Migration Project Guide](#)

Related Areas

- [SAP on DB2 for Linux, UNIX, and Windows \(DB6\)](#)
- [SAP on DB2 for i5/OS \(DB4\)](#)
- [SAP on DB2 for z/OS \(DB2\)](#)
- [SAP on Oracle](#)
- [SAP on Linux](#)
- [SAP on Microsoft Windows](#)
- [SAP on Microsoft SQL Server](#)
- [SAP on MaxDB](#)
- [SAP on Informix](#)

SAP ON DB2 FOR I



INCREASE UPGRADE PERFORMANCE (PDF 123KB)

IBM has published a white paper dealing with upgrade performance of SAP systems on IBM i. The joint IBM/SAP team recently released several improvements in upgrade performance that are now presented in a comprehensive document. 28 Jan 2009



SIMPLIFYING SAP ON I5/OS WITH SINGLE SIGN-ON (PDF 534KB)

Have you ever thought about simplifying administration of user names and passwords in your system landscape? One promising strategy is using Single Sign-On (SSO) to reduce the number of passwords users have to remember. Kolby Hoelzle from the SAP on i5/OS development team in Rochester, Minnesota, has written a whitepaper about this subject. He gives an overview of SSO technology and detailed step-by-step instructions on SSO installation on IBM's i5/OS. 14 Apr 2008



USING ADOBE DOCUMENT SERVICES WITH SAP ON IBM DB2 FOR I5/OS (PDF 146KB)

Currently, Adobe

Document Services are not supported to run natively on IBM i5/OS. This paper provides a description of technical scenarios that show how to include Adobe Document Services in your SAP system landscape.



FEATURED BLOG: INCREASE (NOT ONLY) UPGRADE PERFORMANCE **NEW!**

The recent edition of the [news from development weblog](#) deals with several improvements that can speed up your upgrades. And beside improving upgrade performance they will improve performance in other system administration tasks, too. You can find all issues of this blog series [here](#). 25 May 2009

SAP ON DB2 FOR I5/OS KNOWLEDGE CENTER

Key Topics

- [Installation](#)
- [Database Interface](#)
- [Selected support resources](#)
- [Upgrade](#)

Blogs

- [News from Development](#)

Books

- [Implementing SAP Applications on the IBM System i Platform](#)
- [An Overview of Installing SAP Applications on System i Models](#)
- [SAP NetWeaver Java on IBM i5/OS](#)

Related Areas

- [Database and Operating Systems](#)
- [SAP NetWeaver Platform and Operations](#)
- [Monitoring and Troubleshooting](#)

SAP Documentation in Help Portal

- [Database Administration for IBM DB2 for i](#)
- [SAP Database Guide: IBM DB2 for i](#)

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