

Software Requirements for Running SAP on System z

Version 1.3

Document ID: WP101498

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Table of Contents

Table of Contents	2
Abstract	3
Contacts	3
Overview	3
Required Software	4
System z as the database server	4
Linux on System z as the application server	5
AIX on Power Systems as the application server	5
Optional Software	6
Linux on System z as the application server	6
AIX on Power Systems as the application server	7
SAP instance cloning	8
Enhanced automation, job scheduling, & productivity tools	8
Emerging tools (not yet best practice)	8
Summary	9
Revision log	9
Notices	9
Trademarks	10
Feedback	10
Acknowledgements	10

Abstract

This document lists the required and the optional software sales teams should consider when implementing SAP® on System z®. This document covers the database and application software running on System z. It also covers application software running on Power Systems®. It does not list software running on other supported application server platforms such as System x®, or x86 platforms from other vendors.

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Pricing is performed through standard methods.

Overview

Customers choosing to implement SAP products on IBM's premier continuous availability platform should consider both required software and optional software.

Required software includes software necessary to run the SAP database on System z. This covers the underlying operating system and supporting tools (eg. z/OS), the database and its utilities (eg. DB2 for System z), and the Distributed Relational Database Architecture (DRDA) software which allows the database to be accessed by application servers (eg. DB2 Connect).

Customers may choose to run their application servers on System z, Power Systems, or System x/x86. For these customers, required software also includes the application server operating systems (eg. Linux for System z and AIX). System x/x86 WinTel and LinTel software are not yet included.

Optional software includes software which supplements or enhances tools bundled with SAP; or which enhances the underlying z/OS, z/VM, DB2, DB2 Connect, Linux, or AIX for System z and Power Systems products.

SAP certifies specific products for the operating system, the database, and the DRDA. Other products in these three certified categories should not be used with SAP.

Products not listed here may also work with SAP, provided they are not replacements for z/OS, DB2 for System z, DB2 Utilities, or DB2 Connect. More information may be obtained from SAP's Product Availability Matrix <http://service.sap.com/pam>. A valid SAP login ID will be required.

Software Requirements for Running SAP on System z
Techdocs Document ID: WP101498

Required Software

Software Product	Part #	Required	Comments
System z as the database server			
z/OS 1.8, 1.9, or 1.10 with the following components configured:	5694-A01	YES	Required for running database on System z
UNIX System Services		YES	z/OS base component
DFSMS		YES	z/OS base component
DFSMSrmm		YES	z/OS base component included with DFSMS
DFSMShsm		YES (see comment)	Automated DASD storage management, including space management for low and inactive data. Required for DB2 v8 and DB2 v9 BACKUP SYSTEM utility.
TCP/IP		YES	z/OS base component
Language Environment (aka LE370)		YES	z/OS base component
JES2 or JES3		YES	z/OS base component
z/OS RMF (Resource Management Facility) or compatible		YES	Or compatible product that supports the Sysplex Data Services (ERBDSQRY, ERBDSREC, ERB2XDGS, ERB3XDRS) such as CMF.
z/OS Security Server (RACF v2.2 or higher) or compatible		YES (see comment)	Or compatible product such as ACF2 or Top Secret
DB2 for z/OS v8 or v9			
The following FMIDs must be installed and activated:		YES	Required for running database on System z
DFSORT		YES	Included in DB2 v8+ for DB2's use only.
v8	5625-DB2	YES	
v8 Management Client Package	JDB881D	included	DB2 Management Client Package to administer DB2 for z/OS and for stored procedures. Formerly known as Control Center for DB2 for z/OS. Includes z/OS Enablement and HDAS810-DB2 Admin Server (DAS).
-- or --			
v9	5635-DB2	YES	
v9 Management Client Package	JDB991D	included	DB2 Management Client Package to administer DB2 for z/OS and for stored procedures. Formerly known as Control Center for DB2 for z/OS. Includes z/OS Enablement and HDAS910-DB2 Admin Server (DAS).

Software Requirements for Running SAP on System z
Techdocs Document ID: WP101498

Software Product	Part #	Required	Comments
DB2 Utilities Suite for z/OS v8 or v9		YES	Required for running database on System z
v8	5655-K61	YES	
-- or --			
v9	5655-N97	YES	
DB2 Connect at one of the following levels:	5648-A70	YES	Required for running database on System z
v8.1, FixPak 10 or higher for use with DB2 for z/OS v8 or v9		YES	Please review SAP OSS Note 81737 for latest FixPak and Special Build Information
-- or --		or	
DB2 Connect v9 or v9.5 CLI (Thin Client)		YES	Please review SAP OSS Note 81737 for latest FixPak and Special Build Information - IBM Data Server Driver for ODBC and CLI - IBM Data Server Driver for JDBC and SQLJ
Linux on System z as the application server			
Linux on System z			Required for running application server on System z
SLES 10 SP2 (glibc 2.4-31.54, kernel 2.6.16.60-0.21-default)		YES if using IFL's as SAP app server	Also required is the saplocales package for SLES 10 which is available as an attachment to SAP note 171356.
-- or --			
RHEL 5 (glibc-2.5-12, kernel 2.6.18-8.1.3.el5)		YES if using IFL's as SAP app server	Also required is the saplocales package for RHEL 5 which is available as an attachment to SAP note 171356.
AIX on Power Systems as the application server			
AIX 6.1 Standard Edition, with the following components configured:		YES if using Power Systems as SAP app server	Required for running application server
JFS2			AIX base component
TCP/IP			AIX base component
Language Environment			AIX base component

Optional Software

Capability	Software Product	Part #	Comments
<i>Linux on System z as the application server</i>			Highly desirable, but not required.
Virtualization	z/VM 5.4	5741-A05	Virtualization hypervisor for running Linux on System z application servers as virtual guests.
Performance monitoring	IBM Performance Toolkit for VM	5741-A05 S0111PT	Realtime performance monitoring and performance data collection.
Performance monitoring	Tivoli Omegamon XE for z/VM and Linux	5608-A61	Event monitoring (requires 5741-A05 S0111PT if z/VM Control Program is to be monitored).
Data management	Tivoli Storage Manager	5698-A25	Individual file level backups from Linux file systems (full volume backups handled by DFdss). -or- equivalent network backup function such as Netbackup.

Software Requirements for Running SAP on System z
Techdocs Document ID: WP101498

Capability	Software Product	Part #	Comments
<i>AIX on Power Systems as the application server</i>			Highly desirable, but not required.
Virtualization	PowerVM Standard Edition		Provides capability for shared processor logical partitions (micro-partitions) and virtual I/O.
Virtualization	PowerVM Enterprise Edition		Provides Features of PowerVM Standard Edition plus Live Partition Mobility and Active Memory Sharing.
Systems Management	AIX 6.1 Enterprise Edition		Includes AIX 6.1 plus IBM Tivoli Application Dependency Discovery Manager (TADDM), IBM Tivoli Monitoring, IBM Usage and Accounting Manager Virtualization Edition for Power Systems, and PowerVM Workload Partitions Manager for AIX.
Data management	Tivoli Storage Manager		Individual file level backups from AIX file systems (full volume backups handled by DFdss) -or- equivalent network backup function such as Netbackup.
High Availability	PowerHA		If running SAP Central Services on AIX (SCS or ASCS), PowerHA provides automated high availability clustering.
-- Or --			
High Availability	Tivoli System Automation for Multi-Platforms (SAMP)		If running SAP Central Services on AIX (SCS or ASCS), SAMP provides automated high availability clustering.

Software Requirements for Running SAP on System z
Techdocs Document ID: WP101498

Capability	Software Product	Part #	Comments
SAP instance cloning			Highly desirable, but not required.
Database Cloning	DB2 Cloning Tool for z/OS	5655-S91	
Enhanced automation, job scheduling, & productivity tools			Highly desirable, but not required.
Monitoring, automation	Tivoli Netview for z/OS (5697-ENV)	5697-ENV	
Automation	Tivoli Systems Automation for z/OS V3	5698-SA3	
Job scheduling	Tivoli Workload Scheduler for z/OS or similar products like OPS MVS	5698-A17	Job scheduling is a required system component. Customer may optionally extend to include integration with SAP job scheduling through additional Tivoli components.
DB2 monitor	Omegamon XE for DB2 Performance Expert on z/OS (5655-CXE)	5655-CXE	Component of DB2 Performance Toolkit
DB2 monitor	DB2 Performance Toolkit for z/OS SAP Edition V2 (incl DB2 Perf Expert (5655-Q07) and DB2 Query Monitor for z/OS)	5697-M32	
DB2 monitor	DB2 Admin Tool V7.2	5697-L90	
DB2 monitor	DB2 Recovery Expert V2.1	5697-N92	
Emerging tools (not yet best practice)			
Automation	Tivoli Systems Automation for Multiplatforms	52P0-387 ATX26LL	Precanned policy templates are included for starting, stopping, and monitoring SAP environments.
Security	IBM RACF Security Server feature for z/VM 5.4	5741-A05 S0111PL	Eliminate plain text passwords for Linux guests in VM directory. Also provides auditing protection for customers with high security requirements. Includes an LDAP server.
Data management	IBM Directory Maintenance for z/VM (DirMaint)	5741-A05 S0111PH	A z/VM user directory maintenance facility.

Summary

Software listed above, and follow-on versions of these products are supported by SAP.

For an up to date listing of required maintenance on System z see SAP Note 81737.

For questions concerning this list and other products contact your IOT NA SAP on System z Sales Manager (for the US and Canada) or the Global SAP on System z Engagement Manager. You can also send an email to the IBM SAP International Competency Center at isicc@de.ibm.com or infoservice@de.ibm.com.

Revision log

V1.0 added Techdocs publication number, and Techdocs URL.

V1.1 added www URL.

V1.2 Added AIX software, changed trademark references from TM to ®, and changed footers.

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Feedback

Please send comments or suggestions for changes to mardis@us.ibm.com.

Acknowledgements

The author would like to thank all the many contributors and reviewers from the Global SAP on System z Engagement team, the IOT NA SAP on System z FTSS team, and the SAP on System z Sales team. The author would like to especially recognize the significant contribution of Albert Rodi, Patrick O. Downs, Louis Lamprinakos, Phil Barton, and Mike Sheets.