IBM FileNet System Monitor 4.0.1.5

IBM

FSM Hardware & Software Requirements

Before using this information and the product it supports, read the information in "Notices" at the end of this document.

Contents

Introduction

This document details the hardware and software requirements for IBM® FileNet® System Monitor.

The purpose of this document is to provide guidance to IBM personnel, partners and customers guidance regarding hardware and software support for IBM FileNet System Monitor (FSM) 4.0.1 Fixpack 5.

The contents of this document should not be taken as a commitment, and are subject to change. This document will be updated periodically to reflect any changes to the expected list of supported platforms.

Support relative to previous IBM FSM releases

Because the platform support matrix for the release differs substantially from previous FSM releases, review this document carefully to understand whether platforms supported in previous releases of FSM are supported with this release.

Associated documentation

Refer to the following requirements and compatibility documents for related information about other IBM FileNet products:

- *IBM FileNet P8 Hardware and Software Requirements*

Access IBM FileNet documentation, compatibility matrices, and fix packs

To access documentation, compatibility matrices, and fix packs for IBM FileNet products:

1. Navigate to the Product Documentation for FileNet P8 Platform support page.

   http://www-1.ibm.com/support/docview.wss?rs=3247&uid=swg27010422.

2. Select a PDF or a Doc Link, whichever is appropriate.

Contact customer support

For information about contacting customer support:

1. Navigate to the FileNet Product Family support page:

   http://www-01.ibm.com/software/data/content-management/filenet-product-family/support.html.

2. Click **IBM FileNet Support Communications**, or search for a particular support topic under "Enter search terms".

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Requirements for FSM Server Platforms

IBM FSM Server Installation Pre-requisites

FSM servers require the following software to be installed on the server system:

- Apache 2 (or IIS on Windows 2003 server, if used instead of Apache)

- JAVA SDK/JRE 1.5 or 1.6

- PHP 5.2.x

- Perl 5 or higher (on Windows-based FSM servers installed during FSM installation, pre-requisite on UNIX and Linux systems)

- RDBMS system (or database client) with JDBC driver

- gawk (HP-UX only)

NOTE: Bash shell is also required by Window systems, but this is provided during FSM

server installation.

IBM FSM Server Hardware Requirements

Each FSM server has the following minimum system requirements:

- 1 CPU (for example P4 with min. 2 GHz) or comparable CPU on other hardware platforms

- 1 GByte RAM (2 GByte recommended)

- 5 GByte disk space

Static IP Address for FSM Server

The FSM server must have a static IP address. It is not possible to use a machine that has a DHCP address only. For network performance reasons, the server and all clients should be added to the DNS. IPv6 is not supported with this FSM release. IPv6 must be deactivated on FSM servers.

Webserver

Apache

It is recommended that you install Apache 2 as described in the FSM Installation Guide

Internet Information Server (IIS)

IIS version 6 is delivered with the Windows 2003 Server operating system. To use IIS as an alternate web server to Apache, activate it from the "Configure server" wizard (under administrative tools).
The same applies to IIS version 7 on Windows 2008 systems.

PHP

It is recommended that you install PHP 5.2.x as described in the FSM Installation Guide.

Database

Note: If the IBM FSM server is installed on a 64 Bit system a 32 Bit Java JRE is required for the IBM FSM server database connection.

Additionally IBM FSM requires a installed database client (runtime client) locally installed on the IBM FSM server.

DB2

FSM supports the following list of DB2 versions as a local or remote database. The appropriate DB2 JDBC Driver, delivered with DB2 database server, is required.

	FSM Server 4.0.1
DB2 8.2 Enterprise Server	✔
DB2 9.1 Enterprise Server	✔
DB2 9.1 Express-C	✔
DB2 9.5 Enterprise Server	✔
DB2 9.5 Express-C	✔
DB2 9.7 Enterprise Server	✔
DB2 9.7 Express-C	✔

MSSQL

FSM supports MSSQL 2000, MSSQL Server 2005 and MSSQL Server 2008 as local or remote DB.

Since IBM FSM 4.0.1 FP2 on FSM servers Java jre versioo 6 is recommended. The following table is based on Java JRE version 6.

	Microsoft SQL Server 2000	Microsoft SQL Server 2005	Microsoft SQL Server 2008
FSM 4.0.1 FP5	MSSQL 2005 JDBC Driver version 2.0 and 3.0	MSSQL 2005 JDBC Driver version 2.0 and 3.0	MSSQL 2005 JDBC Driver version 3.0

Note: If the recommended Java JRE version 6 is used the file *sqljdbc.jar* must not be found in the IBM FSM server JAVA classpath settings, only the file *sqljdbc4.jar* has to be present. If you decide to use Java JRE version 5 on the IBM FSM server the file *sqljdbc.jar* must not be found in the IBM FSM server JAVA classpath settings, only the file *sqljdbc.jar* has to be present.

MySQL

FSM 4.0.1 supports MySQL 5.0x as local or remote DB. The latest MySQL JDBC driver for MySQL 5.0x is required, if MySQL is used as FSM DB.

Note: MySQL version 6 is not supported as FSM database system.

IBM FSM Server Operating System / Database Support Matrix

	DB2 (Local)	DB2 (Remote)	MS SQL (Local)	MS SQL (Remote)	MySQL (Local)	MySQL (Remote)
Microsoft Windows	✓	✓	✓	✓	✓	✓
Linux					✓	✓
Solaris					✓	✓
AIX	✓	✓			✓	✓
HP					✓	✓

Note: If the IBM FSM server is installed on a 64 Bit system a 32 Bit Java JRE is required for the IBM FSM server database connection.

IBM FSM Server Operating System Support

	Hardware	FSM Server 4.0.1
Microsoft Windows XP Professional SP2 & SP3	x86	✓
Microsoft Windows 2000 (32-Bit)	x86	✓
Microsoft Windows 2003 – (32- and 64 Bit)	x86	✓
Microsoft Windows 2008 – (32- and 64 Bit)	X86	✓
Sun Solaris 8	SPARC	✓
Sun Solaris 9 (32- and 64-Bit)	SPARC	✓
Sun Solaris 10 (32- and 64-Bit)	SPARC	✓
AIX 5.2 (32- and 64-Bit)	RS6000	✓
AIX 5.3 (32- and 64-Bit)	RS6000	✓
AIX 6.1 (64-Bit)	RS6000	✓
HP UX 11i (11.11)	HP9000	✓

	Hardware	FSM Server 4.0.1
RedHat Linux AS 4.0 (32-Bit)	x86	✓
RedHat Linux AS 5.0 (32- and 64 Bit)	x86	✓
Suse Linux Enterprise Server 9 (32- and 64 Bit)	x86	✓
Suse Linux Enterprise Server 10 (32- and 64Bit)	x86	✓

NOTE: Windows 2003 support also includes Windows 2003 R2 support.

LDAP Support

FSM 4.0.1 supports user authentication based on the following LDAP systems:

	FSM Server 4.0.1
Microsoft ADS	✓
Sun Directory Server 5.2 and 5.3	✓
Novell eDirectory 8.8	✓
IBM Tivoli Directory Server 6.x	✓
Microsoft ADAM	✓

Requirements for Monitored Client Platforms

Monitored Client Installation Pre-requisites

Client systems monitored by FSM require the following pre-requisite software:

- perl 4 or higher

- gawk (HP-UX only, if no nawk is available on the system)

NOTE: The UNIX-like win-bash shell is also required by Window systems, but this is provided during FSM client installation.

IBM FSM Client Operating System Support

	Hardware	FSM Client 4.0.1
Microsoft Windows XP Professional	x86	✓
Microsoft Windows Vista (32- and 64 Bit)	x86	✓
Microsoft Windows 2000 (32-Bit)	x86	✓
Microsoft Windows 2003 – (32- and 64-Bit)	x86	✓
Microsoft Windows 2008 – (32- and 64-Bit)	x86	✓
Sun Solaris 8	SPARC	✓
Sun Solaris 9 (32- and 64-Bit)	SPARC	✓
Sun Solaris 10 (32- and 64-Bit)	SPARC	✓
AIX 4.3.3 (32 Bit)	RS6000	✓
AIX 5.1 (32- and 64-Bit)	RS6000	✓
AIX 5.2 (32- and 64-Bit)	RS6000	✓
AIX 5.3 (32- and 64-Bit)	RS6000	✓
AIX 6.1 (32- and 64 Bit)	RS6000	✓
HP UX 10.20 (32 Bit)	HP9000	✓

	Hardware	FSM Client 4.0.1
HP UX 11.23	HP Itanium	✓
HP UX 11i (11.11)	HP9000	✓
Sun Solaris 10 x86	x86 Intel System	✓
Linux PPC	IBM PPC Platform	✓
RedHat Linux AS 4.0 and 5.0 (32- and 64-Bit)	x86	✓
Suse Linux Enterprise Server 9 (32-Bit)	x86	✓
Suse Linux Enterprise Server 10 (32-and 64-Bit)	x86	✓

NOTES

- AIX 4.3.3 requires manual modification on FSM Server prior to installation. See IBM FSM installation guide for further information.

- Windows 2003 support also includes Windows 2003 R2 support

- HP UX 10.20 requires manual modification on FSM Server prior to installation. See IBM FSM installation guide for further information.

- HP UX 11.23 (Itanium) is supported only as managed system/client

Supported FileNet P8 managed platforms and versions

IBM FSM supports the following IBM FileNet P8 operating system platform.

- AIX 5.1/5L, 5.2, 5.3 and 6.1 (only older FileNet P8 versions support AIX 5.1/5L)
- Solaris >= 8 (only SPARC and Ultra-SPARC systems, non Intel-based systems)
- HP-UX 11.x (PA-RISC only)
- HP-UX 11.23 (Itanium)
- Windows 2000, 2003, 2003 R2, and 2008 (Intel x86 platform, 32 and 64 Bit)
- Linux x86 platform (32 and 64 Bit)

The following table lists all supported FileNet P8 platforms, Database systems and versions as well as UDC (Universal database Client) support combinations:

P8 Component	Supported version	Supported platform	Supported DB / UDC
Content Engine	2.01 - 3.5x	Windows x86 (32 Bit)	MSSQL 2000 and Oracle 8.1x, 9.2x, UDC support for MSSQL 2000 and Oracle 9.2.x
Content Engine (CEMP)	4.0x, 4.5, 4.5.1	Windows x86 (32 and 64 Bit), AIX, HP-UX (PA-Risc and Itanium), Solaris and Linux x86 (32 and 64 Bit)	MSSQL 2000, MSSQL 2005, MSSQL 2008, Oracle 9.2x, 10g and 11g, and DB2 8.1, 8.2, 9.1, 9.5, 9.7, UDC support for all listed RDBMS
Process Engine (PE)	2.01 - 3.5x	Windows x86 (32 Bit only), AIX, HP-UX and Solaris	MSSQL 2000, Oracle 8.1x, 9.2x, DB2 8.1, 8.2, 9.1, 9.5, 9.7, no UDC support (RDBMS client is required by PE 2.x and 3.a anyway)
Process Engine (PE)	4.0x, 4.5, 4.5.1	Windows x86 (32 and 64 Bit), AIX, HP-UX (PA-Risc and Itanium) and Solaris	MSSQL 2000, MSSQL 2005, MSSQL 2008, Oracle 9, 10g and 11g, and DB2 8.1, 9.1, 9.5, 9.7. UDC support for MSSQL based PE 4.0x and 4.5x systems only
Application Engine (AE) containing Component Manager	2.01 - 4.0x	Windows x86 (32 and 64 Bit), AIX, HP-UX (PA-Risc and Itanium), Solaris and Linux	N/A
Process Analyzer (PA)	3.5.x, 4.0.x, 4.5, 4.5.1	Windows x86 (32 Bit and 64 Bit for version 4.x)	MSSQL 2000, :SSQL 2005 and ;SSQL 2008, Oracle 9.2x, 10g and 11g, and DB2 8.1, 8.2, 9.1, 9.5, 9.7. UDC support for all listed RDBMS systems through Standard monitors
Rendition Engine	2.01 - 3.5x	Windows x86 (32 Bit only)	N/A
Content Federation Services (CFS-IS)	3.5x	Windows x86 (32 Bit only)	N/A
IBM Content Collector (ICC)	2.1, 2.1.1	Windows x86 (32 Bit and 64 Bit)	MSSQL Server, Oracle 9.2x, 10g and 11g, and DB2 9.1, 9.5, 9.7. UDC support for all listed RDBMS systems.\n\nNote: Lotus Notes is not supported as storage system
Email Manager	3.5, 3.6, 3.7, 4.0, 4.0.1	Windows x86 (32 Bit and	MSSQL Server, Oracle

P8 Component	Supported version	Supported platform	Supported DB / UDC
and 4.0.2		64 Bit for EM version 4.x)	9.2x, 10g and 11g, and DB2 9.1, 9.5, 9.7. UDC support for all listed RDBMS systems.
Records Crawler	3.5x, 4.0, 4.0.1, 4.0.2	Windows x86 (32 Bit and 64 Bit for RC version 4.x)	MSSQL Server, Oracle 9.2x, 10g and 11g, and DB2 9.1, 9.5, 9.7. UDC support for all listed RDBMS systems.
Records Manager (monitor based on JMX)	3.5x, 4.0x, 4.5, 4.5.1	Windows x86, AIX, HP-UX and Solaris	N/A
General IBM FileNet Application Monitoring based on JMX (BAM, ACSAP, etc)	N/A	Windows x86 (32 and 64 Bit), AIX, HP-UX (PA-Risc and Itanium), Solaris and Linux x86 (32 and 64 Bit)	N/A
eProcess Services	5.0, 5.1 and 5.2	Windows x86 (32 and 64 Bit), AIX, HP-UX (PA-Risc and Itanium), Solaris	MSSQL Server, Oracle 9.2x, 10g and 11g, and DB2 8.1, 8.2, 9.1, 9.5, 9.7. UDC support for MSSQL based eProcess

Supported FileNet IM (Image Manager) platforms and versions

IBM FSM supports FileNet Image Manager (IM) management on the following operating systems:

- AIX 4.3.3, AIX 5.1/5L, 5.2, 5.3 and 6.1
- Solaris >= 2.5 (only SPARC and UltraSPARC systems, non Intel-based systems)
- HP-UX 10.20 (limited support, no Oracle DB reader and Java components), HP-UX 11.x (PA-RISC
- and Itanium)
- Windows 2000, Windows 2003 and Windows 2008 (only Intel x86, 32 and 64 Bit)

Supported FileNet IM versions are 3.4x, 3.5x, 3.6, 3.6.1, 3.6.2, 3.6.3 ESE, and 4.0 SP1 - SP5, 4.1, 4.1.1, 4.1.2.

The following Storage Devices are supported with the SDS NLS and Integral SDS monitoring component:

- CSAR (EMC Centera),
- SSAR (NetApp Snaplock)
- ISAR (IBM TSM DR550).

The following Image Manager related products are supported with IBM FSM:

- Supported ImageImport version is 3.x
- Supported ServerLink version is 4.0
- Supported FileNet Print version is 4.4 on Windows systems. See FileNet Capture support for more details

Supported Capture components and platforms and versions

IBM FSM supports the following operating systems for Capture monitoring:

- Windows 2000, Windows 2003 (only Intel x86 based systems)

Supported Capture components and versions are

- Capture Professional 5.0 and 5.1 on supported Windows platforms
- FileNet Print 4.4 on Windows systems
- Remote Capture Services (RCS) 1.0 on Windows 2003.

   Note RCS 1.0 only supports MSSQL Server 2000 and MSSQL 2005 as database. UDC support for MSSQL based RCS databases

Supported FileNet CS server platforms and versions

IBM FSM supports the following operating systems for IBM FileNet Content Services (CS) monitoring:

- Solaris >= 2.8/8 (only SPARC and UltraSPARC systems, non Intel-based systems)
- HP-UX 10.20 (limited support, no Oracle DB reader and Java components), HP-UX 11.x (PA-RISC only)
- Windows 2000, Windows 2003 (only Intel x86 based systems)

Supported FileNet CS versions are 5.1 (only Windows), 5.2 (only Windows), 5.3, 5.4 and 5.5 (all platforms)

Supported IBM Content Manager platforms and versions

The following table lists the supported IBM Information Management Content Manager Software products and versions on the supported OS platforms.

	Supported version	Supported platform	Supported DB / UDC
IBM Content Manager (CM8)	8.3, 8.4, 8.4.1, 8.4.2	Windows x86 systems, AIX, Solaris, HP-UX, Linux (Intel x86)	Oracle 9.2x, 10g and 11g and DB2 8.2, 9.1, 9.5 and 9.7 UDC support for all listed RDBMS systems. Note: If the Library Server database is configured using UDC manual adjustments of the logctlsrv.conf and the cala_env.sh is required to support analyzation of the CM Systemlog database tables. Note: IBM Content Manager 8.4.2 now contains Listener metrics that can be monitored by FSM. Please note that this requires FSM Listener configuration for all CM 8.4.2 servers where

	Supported version	Supported platform	Supported DB / UDC
			Listener metrics should be monitored.
IBM Content Manager OnDemand	8.3, 8.4 and 8.4.1	Windows x86 systems, AIX, Solaris, HP-UX, Linux (Intel x86)	MSSQL, Oracle 9.2x, 10g and 11g, and DB2 8.2, 9.1, 9.5, 9.7. UDC support for all listed RDBMS systems.
IBM Common Store (Base Components)	8.3	Windows x86 systems	N/A
Information Integrator Content Edition (IICE)	8.4, 8.4.1	Windows x86 systems, AIX, HP-UX, Solaris and Linux (Intel x86). Supported as standalone or as deployed Web Application on ORACLE Bea Weblogic and IBM WebSphere.	N/A
Information Integrator for Content (II4C)	8.4, 8.4.1	Windows x86 systems, AIX, HP-UX, Solaris and Linux (Intel x86). Note: II4C RMI Status monitor is part of FSM_ADDON monitor collection.	N/A

Monitoring: Supported Web Application Servers

The following table shows all supported J2EE Web Application Servers that can be monitored using the FSM JMX monitoring capabilities:

	Hardware	FSM Client 4.0.1
IBM WebSphere 7.0	All supported clients platforms	✔
IBM WebSphere 6.1x	All supported clients platforms	✔
IBM WebSphere 6.0x	All supported clients platforms	✔
IBM WebSphere 5.1x	All supported clients platforms	✔
BEA Weblogic version 10.0	All supported clients platforms	✔
BEA Weblogic version 9.x	All supported clients platforms	✔
BEA Weblogic version 8.x	All supported clients platforms	✔
JBoss 5.0	All supported clients platforms	✔
JBoss 4.x	All supported clients platforms	✔
JSR 160 compatible J2EE Servers – only generic JMX monitoring, no integrated P8 4.x support	All supported clients platforms	✔

Web Client Environment

Browser Support

The following browser and platform combinations that are supported for use with the IBM FSM console:

	Internet Explorer 6.x	Internet Explorer 7.0	Internet Explorer 8.0	Mozilla Firefox 1.5x	Mozilla Firefox 2.x	Mozilla Firefox 3.0.x or later
Microsoft Windows XP SP2 or newer	✓	✓	✓	✓	✓	✓
Microsoft Windows Vista	✓	✓	✓		✓	✓
Microsoft Windows 2000 SP4 or newer	✓	✓	✓	✓	✓	✓
Microsoft Windows 2003 and 2003 R2	✓	✓	✓		✓	✓
Microsoft Windows 2008	✓	✓	✓		✓	✓
Microsoft Windows 7	✓	✓	✓		✓	✓
Supported Linux Releases				✓	✓	✓
Supported UNIX systems				✓	✓	✓

Java Runtime Engine (JRE)

JRE 1.5 or 1.6 (6) is required only for administrative desktops running FSM configuration GUI's.

CALA V2S Editor platform support

The CALA V2S Editor is available for the following platforms:

- AIX 4.3.3, 5.1, 5.2 and 5.3
- Solaris 2.5, 2.6, 2.7, 8, 9 and 10 (only SPARC and Ultra-SPARC systems)
- Windows 2000, Windows 2003, Windows 2003 R2, Windows XP Professional (Intel x86 systems, 32 Bit only)
- HP-UX 11.0 and 11.11 (PA-RISC only)

Support for HP OpenView OVO Event Forwarding

FSM supports forwarding of events to HP OpenView OVO (OpenView Operations). Currently Event Forwarding is only supported from HP-UX and Windows based IBM FSM servers running the following HP OVO agent:

- HP OpenView OVO 8.x HTTPS Agent

The related Install Guide chapter describes the installation and configuration steps on the FSM server.

NOTE It is recommended to install at least the following HP OpenView Operations Server patch (or a newer version):

- PHSS_34604 for HP-UX PA
- PHSS_34603 for HP-UX IT

- ITOSOL_00507 for Solaris

Collocation and third-party interoperability

Assuming a system is adequately sized, and unless stated otherwise by either IBM or a

Third-party vendor, IBM does not require that its product run in isolation of other IBM

or third-party components. From a IBM perspective, exceptions to the aforementioned

policy are listed below. For third-party components, the appropriate vendors support

documentation should be reviewed to assure functionality and support.

Unless otherwise stated, the term *collocation* refers to the same server instance.

Partitioned or virtualized servers are considered stand-alone server instances.

IBM Collocation Support Information

The FSM server cannot be collocated on servers running IBM FileNet or IBM CM8 software that will be
monitored with FSM client.

Third-party Support Information

When the version number is designated with an *x*, it can be assumed that for all

Third-party components, service packs and patches will be supported when they are

made generally available by the vendor assuming that the service pack or patch in

question is designated as being forward-compatible by the vendor. If the version number

in this document does not include an *x*, it should be assumed that the specific

version listed is the minimum version required, and patches and fixes can be applied if

they are designated as being forward-compatible.

Server Virtualization Technologies

Support statement

http://www-01.ibm.com/support/docview.wss?&uid=wws1e333ce0912f7b152852571f60074d175

Unless otherwise noted, FileNet P8 does support deployments in a virtualized environment. Virtualization technologies are designed to be transparent to the software that they host, and not require special effort from the software vendors for their use. Testing in the IBM labs has found that while this is largely true, systems deployed in a virtualized environment might have issues related to performance and communication with peripheral devices, and other hardware components.

With regard to performance, running in a virtualized environment is likely to result in increased CPU utilization, or other hardware resource consumption. Because of this increase, system workload capacity might be reduced, and transaction response times might increase.

To that end, assuming that the virtualized machine is configured per FileNet P8 requirements, IBM supports deployments of all FileNet P8 products, unless otherwise noted, in a virtualized environment. However, in a virtualized environment, IBM might not be able to resolve issues related to system performance or issues that IBM suspects are related to communication with peripheral devices, and other hardware components, such as network cards and disk controllers.

In the event that IBM determines a particular issue is specific to virtualization technologies (such as performance or communication with peripheral and hardware components), IBM might require that the customer reproduce the issue in a non-virtualized configuration. Due to the nature of virtualization technologies, IBM cannot guarantee resolutions to issues that are caused because a deployment is virtualized.

Additionally, it is the customer's responsibility to ensure that other associated third-party software is supported to run in the given virtualized environment such as application servers, databases, and operating systems by the original vendor of that software.

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