# Saperion

**Technical Specifications** 

Version: 8.0.1

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# **Table of Contents**

About Saperion technical specifications	4
End of Life dates	4
Obligations concerning upgrades	4
Recommendations concerning upgrades	4
Compatibility mode	4
Discontinued components and platforms	4
Planned discontinuations	5
Saperion 8.0.1 Specifications	5
Databases	7
Storage	8
Path-based plug-ins	8
Object-based plug-ins	8
Web servers & browsers	10
Oracle Java for Clients and Server	10
.NET Framework	11
Visual C++ redistributable	11
FineReader integration	11
Jadice Viewer	11
Capture & scanner support	11
Signature integrations	11
LDAP support	12
Language support	
Saperion products	14
Saperion ECM ContentLink for Microsoft SharePoint	
Saperion Office Integration	
Saperion E-Mail Lifecycle Management (ELM)	14
Saperion ECM Suite for SAP Solutions	15

### About Saperion technical specifications

The technical specifications in this document are specific to Saperion version 8.0.1.

#### End of Life dates

Saperion Versions	Date
Version 7.5	December 2019 Extended support: December 2020
Version 7.1	June 2014
Version 6	April 2013

### Obligations concerning upgrades

Saperion version 8.0.1 supports only a 64-bit core server. If you are updating from a 32-bit Saperion version to a 64-bit Saperion version, seek assistance from the Professional Services team.

#### Recommendations concerning upgrades

- Updates to version 8.0.1 are only possible from versions 7.5.x and 8.0.0.
- Due to the reworking of the user management structure in version 8.0.1, we strongly recommend planning an update as a project. If your user management system is larger or more complex, it may require manual modification. For further information, see the "Migrate User Management" section of the Update Guide on the Product Documentation portal at docs.hyland.com.

### Compatibility mode

When you update to Saperion version 8.0.1 from a pre-8.0 version, you must update the clients as well as the servers.

### Discontinued components and platforms

Product/ Component	Comment	
All 32-bit Core Servers	Use a 64-bit Java Core Server. Non-Java Core Servers are no longer supported.	
Snowbound applet viewer	Use the Snowbound VirtualViewer HTML5 (default) for the Web Client and SAP	
Signavio Process Modeler	This component is no longer available.	
C/Link for SAP	This component is no longer available.	
Authentidate	This component is no longer available.	
iSaperion	Support for this mobile app is discontinued.	

#### Planned discontinuations

Product/ Component	Comment
UBI	Beginning with version 8.0, use ECM Services for new projects.
Classic Connector	The ECM Services will eventually replace all of the Classic Connector functionality. Currently, some extensions, such as those in Web Client Events or in the Integration Server, may still be easier to implement when the events include the Classic Connector.  Other than these exceptions, use the ECM Services for new projects.
Saperion Web Services	Beginning with version 8.0, use ECM Services for new projects.
Saperion App Services	No longer supported with version 8.0.1.
Business Rules Server	Beginning with version 8.0, use the Integration Server for new projects.

# Saperion 8.0.1 Specifications

For version 8.0.1, the following operating systems are certified to work.

Operating systems	Description
Server	Windows Server 2008 R2 SP1 (Build 7601) for Intel 64/AMD64 (not IA-64) Windows Server 2012 Standard Edition (64-bit) (Build 6.2.9200) Windows Server 2012 R2 Windows Server 2016  Note Saperion is not supported in server clusters unless it is implemented by Professional Services or a qualified partner.
Clients	Windows 7 and 7 SP1, 32-bit, 64-bit in 32-bit mode Windows 8.1. No support for RT. Windows 10

Operating systems	Description		
Virtualization Software	Hyland Software Germany GmbH confirms that we support customers running Saperion software on supported Operating Systems in a VMware virtual machine environment.		
	Hyland Software Germany GmbH provides unqualified support for Hyland Software Germany GmbH software products running in a VMware virtual environment in an identical manner as with Saperion software products running on any other major x86-based systems without initially requiring reproduction of issues on native hardware.		
	Should Hyland Software Germany GmbH suspect that the virtualization layer is the root cause of an incident, the customer will be required to contact the appropriate VMware support provider to resolve the VMware issue.		
	While Hyland Software Germany GmbH products are expected to function properly in a VMware virtual environment, there may be performance implications which can invalidate Saperion software typical sizing and recommendations.		
	Using the Saperion Client on Windows Terminal Server is supported. Hyland Software Germany GmbH products are likewise expected to function properly with Citrix XenDesktop.		
	<b>Note</b> Application virtualization is not supported. Desktop virtualization is supported.		
	To inquire about the availability of supported operating systems, contact Support.		
Cloud	Hyland Software Germany GmbH support customers running Saperion instances on supported Operating Systems on a Cloud environment.		
	Hyland Software Germany GmbH provides unqualified support for Hyland Software Germany GmbH software products running on a Cloud environment in an identical manner as with Saperion software products running on any other supported Windows systems without initially requiring reproduction of issues on native hardware.		
	Should Hyland Software Germany GmbH suspect that the Cloud environment is the root cause of an incident, the customer will be required to contact the appropriate cloud service provider to resolve the issue.		
	While Hyland Software Germany GmbH products are expected to function properly in a Cloud environment, there may be performance implications which can invalidate Saperion software typical sizing and recommendations.		
	To inquire about the availability of supported operating systems, contact Support.		

#### **Databases**

For version 8.0.1 of Saperion ECM, the following databases are certified to work. To inquire about the availability of support for other databases, contact Support.

DBMS	Description
Microsoft SQL	2008 R2 (SP1, SP2) 1,2
Server	2008
	2012 (SP1) <sup>1,2</sup>
	2014
	2016
	2017
Oracle	11g R2 32-bit/64-bit
	12c R2 32-bit/64-bit
	Prerequisites Installation of the desired ODBC driver on all Core Servers. Check the functionality of the ODBC driver with a simple test program before installing Saperion.
	<sup>1</sup> We recommend using MS SQL Server with an isolation level of UNCOMMITTED_READ
	<sup>2</sup> SQL Server Native Client ODBC driver should not be used with fulltext
	<sup>3</sup> To use Oracle 12c with XML files, you must modify them to CLOB. In addition, the MAX_STRING_SIZE instance parameter must be set to STANDARD. See the Setup chapter in the Installation manual for more information.
	Fulltext support
	Fulltext search is supported by use of the database functionality of Oracle DB or Microsoft SQL Server, or by use of the dtSearch Engine Version 7.
	All file types that dtSearch generally supports are listed on the dtSearch support site.
	dtSearch can only be used on Windows and in non-distributed environments.
	ECM Services
	The ECM Services are only supported for MS SQL Server and not Oracle.

### Storage

For version 8.0.1 of Saperion ECM, the following storage systems are supported in a Windows environment.

**Note** Only storage systems that are 100% compatible with the plug-ins listed below can be used with those plug-ins.

### Path-based plug-ins

Storage type	Supported systems	Saperion plug-in
NetApp (CIFS)	NetApp ONTAP/SnapLock and other compatible systems that include an extended date range mechanism for the range 2038 to 2071.	pnetapp.dll
	For more information about the extended date range mechanism, see TR-3738, "SnapLock Record Retention Date Implementation Strategy", on the NetApp website (registration required).	
Isilon (CIFS)	EMC Isilon OneFS and other compatible systems.	psilon.dll
GenericNAS	NAS / Windows file system	pgennas.dll
HCP (REST)	Hitachi Data Systems via HTTP	com.saperion.storage.ConnectorHCP

### Object-based plug-ins

Storage type	Supported systems	Saperion plug-in
CAS (CLIP) EMC Centera CentraStar, EMC Elastic Cloud Storage pcenter		pcentera.dll
S3 (REST)	All S3 compatible systems, such as Amazon S3, NetApp StorageGrid via HTTP/HTTPS	com.saperion.storage.ConnectorS3
IBMCM (REST)	IBM Content Manager via HTTP/HTTPS	com.saperion.storage.ConnectorICM

#### Comparison of storage system vs. records management functions:

Storage system	Storage system vs Records Management Functions	Fixed Retention	Prolongation	Event- based Retention	Litigation Hold	Dispo- sition	Privileged Delete	Electronic Shredding	Duplicate Write
	Governance	х	Х	S	S	х	0		Х
EMC <sup>2</sup> Centera	Governance advanced retention feature	х	х	х	х	х	0	V	Х
	Compliance plus advanced retention feature	х	x	х	х	х	-	V	Х
NetApp SnapLock™	Compliance/Enter- prise	х	х	S	S	S	0	0	0
EMC Isilon	Compliance/Enter- prise	х	Х	S	S	S	0	0	0
Hitachi Content	via HTTP	х	Х	Х	х	S	-	V	-
Platform	via Generic NAS	Х	Х	S	S	S	-	V	-
IBM SSAM/TSM	IBM DR550	х	X	S	S	Х	o	V	-
KOM Networks KOMpliance	KOM Networks KOMpliance	х	х	S	S	S	-		-
Generic NAS		S	S	S	S	s	-		-
Amazon S3		S	S	S	S	s			

Legend: "X" = supported by storage and Saperion

"S" = not supported by storage but simulated by Saperion

"O" = supported by storage but not by Saperion

"V" = supported by storage, independent from Saperion

#### Web servers & browsers

**Note** For version 8.0.1 of Saperion ECM Web Client, the following browsers are certified to work with Saperion.

Operating System	IE¹	Firefox	Chrome	Safari
Windows	10.0, 11.0	31 ESR, 45 ESR, 46, 48, 49	58.0.3029.110	5.1.4
	Note Browsers of other vendors and on other platforms may also work. The ECM Web Client also includes a multi-format viewer supporting annotations. For more information about supported formats, consult the Snowbound Software website.			
	Customers using the additional ViewOne or ViewOne prof viewer from Deaja offered for Version 7 can use this as well.			
	<sup>1</sup> The HTML5 viewer in View.	n the Web Client does no	t work with Internet Explore	r's Compatibility

### Oracle Java for Clients and Server

Specification	Description
Software	Oracle JDK, version 8
	AdoptOpenJDK, version 8
	Note AdoptOpenJDK 8 is only supported with the HotSpot JVM
	JRE Expiration Date
	The Java Runtime Environment (JRE) relies on periodic checks with an Oracle Server to determine whether the JRE is still up-to-date with all available security fixes above the security baseline. If the JRE is unable to contact the Oracle Server, it still behaves as though it is the most recent version with regard to security, until it is expired. For more information about the expiration date, see the Oracle web site for the release notes for your Java version.
	Other Saperion ECM Java Core Server requirements:
	The following Web Application Server can be used as containers:
	Apache Tomcat 64-bit, version 9.0.12.
	Patch levels
	See the current patch level to see with which Java version the patch-level testing was done. Note that only basic functionality and code changes are covered by patch-level testing. Full compatibility cannot be guaranteed.

Specification	Description

#### .NET Framework

To install version 8.0.1 of Saperion ECM, .NET Framework version 3.5 is required.

#### Visual C++ redistributable

To enable Saperion Internal Viewer to render a PDF file to PNG file format, Visual C++ redistributable 2015 is required.

#### FineReader integration

For version 8.0.1 of Saperion ECM, version 10 of FineReader Engine for OCR and Barcode recognition is integrated.

#### Jadice Viewer

Saperion version 8.0.1 includes a trial version of the Jadice Viewer, which can be used in the Web Client to view SAP print lists. If you would like to upgrade to a licensed version, contact Support.

#### Capture & scanner support

The Saperion Rich Client (no Web Client support) connects to scanners through TWAIN or preferably through a native ISIS interface or a Kofax Adrenaline board.

High-quality scanners already have ISIS drivers included; otherwise they are available from Pixel Translations.

To allow connectivity to scanners that do not have an ISIS driver, Pixel Translations and LEADTOOLS provide developer toolkits. Saperion supports Kofax Software VRS and Adrenaline Boards as well. Based on positive feedback, the use of scanners from Kodak, Fujitsu or Canon is recommended, in addition to all certified scanners by Kofax. For more information about LEAD Technologies, check their web site.

The Saperion ECM Release Script for Kofax Capture 10 has been successfully implemented and tested by various partners.

### Signature integrations

The following signature solutions are integrated for use with the 8.0.1 version of Saperion ECM Rich Client.

Vendor	Version	Module
secrypt	3.4.3.5	digiSeal office
	3.4.3.5	digiSeal office pro
	2.2.3.12	digiSeal server for verification

Vendor	Version	Module
	1.0.1.6	digiSeal archive

**Note** For more information about requirements of third-party tools such as card readers, chip cards, algorithms or key lengths, consult the manufacturer's product specifications or the Bundesnetzwerkagentur (BNetzA), as appropriate.

### LDAP support

Specification	Description
Software	For version 8.0.1 of Saperion ECM, synchronization is supported with Microsoft directory service AD DS¹, for Windows Server 2008 R2 2008 and Windows Server 2012.
	<sup>1</sup> Active Directory® Domain Services (AD DS) is required for directory-enabled applications, such as Microsoft® Exchange Server, and for other Windows Server® technologies, such as Group Policy.
	Note
	LDAP is a standard with a wide range of possibilities, and there are many configurations which may not work in combination with the synchronization implementation of Saperion. We therefore recommend scheduling time for a detailed analysis of the requirements for using the synchronization with Saperion. The use of OpenLDAP in projects in particular needs expertise in complex environments. This must be accounted for in your planning. Contact Support for assistance.

## Language support

Specification	Description							
Language	For version 8.0.1 of Saperion ECM, the following languages are supported as shown.							
	Language	User Interface	Workflow Inbox	Manuals (PDF)	Online Help	Standard		
	Arabic	Х	х	-	-	Х		
	English	Х	Х	Х	х	Х		
	German	Х	Х	Х	х	Х		
	Polish	Х	Х	-	-	Х		
	Russian	Х	Х	-	-	X		
	Spanish	Х	Х	-	-	X		
	Turkish	Х	Х	-	-	Х		
	French	Х	Х	-	-	X		
	Italian	Х	Х	-	-	X		
	Legend: - The documentation and online help is in English for all languages other than German.							
	The Workflow Inbox User Interface can be configured individually.							
	Standard: X This language is included with every new version.  Standard: o This language is not standard but is currently available. The delivery with the next version is not guaranteed. If you need this language, contact us.							

### Saperion products

#### Saperion ECM ContentLink for Microsoft SharePoint

Saperion InterServer 2.7.3.0 (20130801) for SharePoint 2010-2016 is currently not supported for Saperion ECM version 8.0.1. SharePoint Online is not supported.

#### Saperion Office Integration

Specification	D	Description				
Software		For version 8.0.1 of Saperion ECM, the following Microsoft Office products are certified to work.				
		Office System	Version	Component	Operating System	
		Microsoft Office (Word, Excel, Powerpoint, Outlook)	2007, 2010 <sup>-2</sup> , 2013 <sup>-3</sup> , 2016, Office 365 Pro Plus only 32-bit	Office Integration 3*1	All client systems as listed above.	
		<sup>*1</sup> The Office Integration is <sup>*2</sup> Mapping only works with <sup>*3</sup> Microsoft Office Professi Business 2013, Microsoft 0	the legacy forms from olonal Plus 2013, Microsoft	der MS Office versions. t Office Professional 2013, M	ficrosoft Office Home and	

### Saperion E-Mail Lifecycle Management (ELM)

For Saperion ECM 8.0.1, the following components are certified to work. For more information, see the ELM Release Notes in the Product Documentation portal at docs.hyland.com.

Operating System	ELM 3 for Notes
Windows Workstation	Notes 8 and higher
Windows Server	Notes 8 and higher

**Note** Saperion 8.0.1 is compatible with ELM 6.6 for Exchange when SAPERION Store Access x64 6.6.72 is installed.

### Saperion ECM Suite for SAP Solutions

For version 8.0.1 of Saperion ECM, the following components are certified for SAP.

Component	Version	Comments	
Saperion ECM DATA Archiving for SAP	1.0	Available from Saperion V7.1 SP1 SAP Certified – BC-ILM 3.0 WEBDAV Storage Interface	
Saperion ECM R/Indexer for SAP	1.0	Available from Saperion V7.1 SP 1  Needs Saperion Java Server (Classic Connector Application) available for SAP ERP 6.0	
Saperion ECM R/Link	-	All operating systems supported by Saperion SAP certified – BC 7.20 Certification	
R/Indexer (Procomp)	5.0.1	Microsoft® Windows	
MDS Extractor	1.0	Independent from Saperion ECM. Microsoft SQL Server Native Client or Oracle 10 or higher is required. A project approval from Saperion is required.	
FastLink	2.1.0.0	All Microsoft Windows operating systems supported by Saperion	
Migration Tool	2.1	SAP ERP 6.0 Supported SAP objects: Incoming documents (FAX / TIF) Outgoing documents (PDF) Drag & Drop Documents as DOC / XLS / TXT / JPG / GIF / BMP / PPT / FAX / TIF Archive files out of SAP ADK (REO data) Printlists (ALF)	
Sap Web Viewer		Saperion version 7.5 SP3 and higher SAP ERP 6.0 and higher (earlier versions on request) Internet Explorer version 11	

Saperion components use RLink and the RFC Interface of SAP. The Saperion components for SAP work properly with all SAP versions that support these interfaces as supported in SAP ERP 6.0.