SAP BusinessObjects BI Platform 4.2 Supported Platforms (PAM)

Initial Publication: Nov 6, 2015 Last Update: Jan 25, 2017

Applicability: BI 4.2 RTM - BI 4.2 SP03



Table of Contents

Supported Platforms

- 3. Server Components by Operating System
- Desktop Clients by Operating System
- 5. Mobile Clients supported with this release
- 6. Language Support by Product
- Browser Support by Operating System
- 8. Application Server Support by Operating System (1 of 2)
- 9. Application Server Support by Operating System (2 of 2)
- 10. IIS Support by Operating System (IOMS only)
- 11. Portal Server Support by Operating System
- 12. CMS + Audit Repository Support by Operating System
- 13. Directory Server (LDAP) Support by Operating System
- 14. Other Technology Support by Operating System (1 of 2)
- 15. Other Technology Support by Operating System (2 of 2)
- 16. Virtualization Technology Support
- 17. SAP BusinessObjects Analysis, edition for OLAP Data Access
- 18. SAP BW Support by Product
- 19. SAP HANA Support by Product
- 20. Data Access Support by Operating Systems
- Data Services and Information Steward

Appendix

- Minimum Hardware + Operating System Patch Requirements
- Supported Locales

This document is also applicable to Edge BI 4.2 and Crystal Server 2016.

For Edge BI 4.2 and Crystal Server 2016:

Only Windows and Linux operating systems are supported.

For Crystal Server 2016:

 The following components are not supported with Crystal Server 2016: Web Intelligence, Analysis, edition for OLAP, SAP BW integration.

For BI 4.2 Maintenance Strategy document: <u>click here</u>

How to read the tables in this document

A checkmark means supported with BI 4.2 and above SPX+ means supported with BI 4.2 SPX

BI 4.2 SPX and above SPX

"-" means not supported



Server Components by Operating System

		Windo	ws (*1)			Lir	nux		Al	Χ	Solaris	
	Server 2008 R2 x64	Server 2012	Server 2012 R2	Server 2016	Suse SLES 11 x86_64	Suse SLES 12 x86_64	Red Hat EL 6 x86_64	Red Hat EL 7 x86_64	AIX 6 .1 Power (*4)	AIX 7.1 Power	Solaris 10 SPARC	Solaris 11 SPARC
64-bit BusinessObjects BI Server Products	SP1				(*2)	(*2)	Update 2 (*2)		TL5			
SAP BusinessObjects BI platform	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓
SAP BusinessObjects Analysis, edition for OLAP	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓
SAP BusinessObjects Explorer	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓
SAP BusinessObjects Web Intelligence	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓
SAP Crystal Reports for Enterprise	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓
SAP Crystal Reports 2016	✓	✓	✓	SP03+	✓	✓	✓	✓	√(*3)	√(*3)	✓	✓
SAP BusinessObjects Dashboards	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓
Mobile Server	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	✓	✓

- SAP BusinessObjects BI server components only support 64-bit operating systems. This is not a complete list of platform/connectivity services
- (*1) Data Center Edition, Enterprise Edition, Standard Edition, Web Edition.
- (*2) Minor versions of RHEL 6 / 7 and SPs of SLES 11 /12 above the minimum supported versions listed on this slide are supported by reference. Refer to Page 27 of this document for more information about minimum OS patch requirements for Linux.
- (*3) Use IBM XL C++ Runtime 11 or 12. A known issue with XL C++ Runtime 13 is being investigated, see SAP Note 2313172 for details.
- (*4) End of support for AIX 6.1 is on 30/04/2017. Please refer vendor's documentation for more information.

Desktop Clients and Operating System

	V	Vindows Se	erver			Windo	ows Desktop		М	ac	
	Server 2008 R2	Server 2012	Server 2012 R2	Server 2016	Windows 7 SP1	Windows 8	Windows 8.1	Windows 10	Mac OS X 10.9	Mac OS X 10.10	Mac OS X 10.11
32-bit BusinessObjects BI Desktop Clients	SP1				SP1						
SAP BusinessObjects BI Client Tools	✓	✓	✓	SP03+	✓	✓	✓	✓	-	-	-
SAP BusinessObjects Live Office	✓	✓	✓	SP03+	✓	✓	✓	✓	-	-	-
SAP BusinessObjects Web Intelligence Rich Client	✓	✓	✓	SP03+	✓	✓	✓	✓	-	-	-
SAP Crystal Reports for Enterprise	✓	✓	✓	SP03+	✓	✓	✓	✓	-	-	-
SAP Crystal Reports 2016	✓	✓	✓	SP03+	✓	✓	✓	✓	-	-	-
SAP Crystal Reports Viewer 2016	✓	✓	✓	SP03+	✓	✓	✓	✓	✓	✓	SP03+
SAP Crystal Presentation Design 2016	✓	✓	✓	SP03+	✓	√	✓	✓	-	-	-
SAP BusinessObjects Dashboards(*1)	✓	✓	✓	SP03+	✓	✓	✓	✓	-	-	-

BusinessObjects BI Desktop Clients are 32-bit and can be used in 64-bit operating systems.

Touch screen interactions are not supported.

(*1) Important note about viewing Dashboards in BI Widgets under Windows 8.x: http://service.sap.com/sap/support/notes/1895395

Mobile Clients supported with this release

Please refer to the SAP BusinessObjects Mobile Clients Supported Platforms (PAM).

Please note that BI Platform content is only supported on-device through Mobile BI where applicable. For example, BI platform content is not supported directly in Safari on iPad or Chrome on Android, only through the Mobile BI apps on these platforms.

Language Support by Products

UI: The user interface for all BI 4.2 products is localized into the languages listed below.

Data: Data stored in Unicode format can be accessed and displayed in all products and is not restricted to the languages below.

BusinessObjects Enterprise Products	English	French	German	Japanese	Spanish	S Chinese	Italian	Dutch	Russian	Korean	T Chinese (*1)	Portuguese	Swedish	Polish	Danish	Norwegian	Finnish	Thai	Czech	Hungarian	Slovakian	Turkish	Romanian	Slovenian	Ukrainian (***)(*4)	Kazakh (***)(*4)	Arabic (***)	Hebrew (***)
BusinessObjects BI Server Products	√	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Limited, see below SP03+	below	Limited, see below	Limited, see below
BusinessObjects BI Desktop Products	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	√	✓	Limited, see below SP03+	see below	Limited, see below	Limited, see below

• (*1) Traditional Chinese is not supported by Platform Search

(***) Arabic, Hebrew, Ukrainian and Kazakh Support

BI launch pad (*2) (*3)

BI workspaces (viewing only) (*3)

Crystal Reports Web Viewer (*3)

Web Intelligence

- -Web Intelligence Rich Internet Application (Java Applet) (*3)
- -Web Intelligence Rich Client

Analysis, edition for OLAP (*3)

- (*2) BI platform plug-in components that can be accessed through the BI launch pad are not all supported in Arabic. Supported BI platform plug-in components are listed separately in this table.
- (*3) For those browser-based components that support Arabic, support is limited to Internet Explorer and Firefox.
- (*4) Ukrainian and Kazakh is not supported in Universe design tool.

Browser Support by Operating System

		Windows Server				Windows Desktop			Mac OS		
		Server 2008 SP2 x64	Server 2008 R2 SP1 x64	Server 2012 X64	Server 2012 R2	Windows 7 SP1	Windows 8.1	Windows 10 (*7)	Mac OS X 10.9	Mac OS X 10.10	Mac OS X 10.11
Web Browser	Java	01 <u>2</u> 70 1	112 01 1 70 1	7.01		G		(, ,	10.0	10.10	
Microsoft IE 10 desktop version ^(*1) (*9)	Oracle JRE 7, 8 ^(*6)	-	-	✓	-	-	-	-	-	-	-
Microsoft IE 11 desktop version(*1) (*9)	Oracle JRE 7, 8 ^(*6)	-	✓	-	✓	✓	✓	✓	-	-	-
Mozilla Firefox ESR 45.x(*2) (*5)(*10)	Oracle JRE 7, 8(*6)	✓	✓	✓	✓	✓	✓	✓	-	-	-
Google Chrome ^{(*3)(*8)}	Oracle JRE 7, 8(*6)	✓	✓	✓	✓	✓	✓	✓	-	-	-
Safari 7 ^(*4)	Oracle JRE 7(*4), 8(*6)	-	-	-	-	-	-	-	✓	-	-
Safari 8 ^(*4)	Oracle JRE 7(*4), 8(*6)	-	-	-	-	-	-	-	-	✓	-
Safari 9 ^(*4)	Oracle JRE 7(*4), 8(*6)	-	-	-	-	-	-	-	-	-	SP03+

Only 32-bit browsers are supported, except for Safari on OS X, which is only available as a 64-bit browser. In the case of IE10 and IE11, this means "Enhanced Protected Mode" (64-bit content processes) is not supported; the IE 10 application itself (the "Manager" process) is always 64-bit on 64-bit systems and this is supported.

Touch screen interactions are not supported.

- (*1) Analysis edition for OLAP and BI LaunchPad on SAP NW Portal (SAPNote 2056982) do not support Compatibility View in IE10 or IE11] [KBA: 2106260 In IE11 can't select a cascaded prompt value SAPBI WEBI]
- (*2) For more information about Firefox Extended Support Releases (ESR): http://www.mozilla.org/en-US/firefox/organizations/faq/
- (*3) The current version of Google Chrome is supported based on testing with earlier versions of Chrome during development. Although SAP will work to maintain compatibility with Google Chrome, please be aware that issues may be introduced if and when Google makes significant changes to Chrome between rapid-releases.
- · (*4) The Web Intelligence Java Applet (Rich Internet Application) is supported on Mac OS X. For details see SAP Note 1906633
- (*5) For information regarding limited browser support on Linux, please refer to <u>SAP Note 1910135</u>.
- (*6) Crystal Reports Java Applet viewer will be deprecated soon, also note it will not launch in Chrome version 45 onwards due to removal of NPAPI support in Chrome. Use the Crystal Reports DHTML ("Web") viewer instead.
- (*7) Edge (Spartan) browser on Windows 10 is not supported.
- (*8) From Chrome version 45 onwards, NPAPI is not supported, Web Intelligence Java Applet will not launch, refer to SAP Note 2196748 and 2156305 for details.
- (*9) Beginning January 12, 2016, Microsoft will support the most current version of Internet Explorer available for a supported operating system. Only the current version of IE will receive technical supports and security updates. Please refer SAP KBA
- (*10) Mozilla will phase out NPAPI support by the end of 2016, except for Flash Player.

Java Application Server Support by Operating System [1/2]

The platforms on this slide are supportule please refer to the Web Application De		servers. For more information,	Windows Server	Linux	AIX	Solaris
See next slide for footnotes 1-2 and ex	xplanations on ho	w to read the table.	Oracle/Sun JDK	Oracle/Sun JDK	IBM Java	Oracle/Sun JDK
Application Server (*2)	Version	Java Version				
	7.3, 7.31 SP4+	SAP JVM 6.1 (*2)	✓	✓	✓	✓
SAP NetWeaver Java Application Server	7.40 SP2+	SAP JVM 6.1 (*2)	✓	✓	✓	✓
	7.50 SP3+	SAP JVM 8 (*2)	SP03+	SP03+	SP03+	SP03+
Apache Tomcat (*6)	7.0	Java 7, Java 8, SAP JVM 8	✓	✓	✓	✓
	8.0	Java 7, Java 8, SAP JVM 8	✓	✓	✓	✓
	10.3.5	Java 6	✓	✓	✓	✓
Oragla Wahl agia Carvar	10.3.5	JRockit 6.0	✓	✓	-	✓
Oracle WebLogic Server	10.2.6	Java 7	✓	✓	✓	✓
	10.3.6	JRockit 6.0	✓	✓	-	✓
	7.0.0.11	Java 6 (*1)	✓	✓	✓	✓
IBM WebSphere Application Server	8.5 (*3) (*4)	Java 7 (*1)	✓	✓	✓	✓
	8.5.5 (*3) (*4)	Java 7 (*1)	✓	✓	✓	✓
JBoss EAP(*5)	6.4	Java 8	✓	✓	-	✓

^(*1 - *2) See next page.

Note: Any HTTP server supported by the application server vendor can be used with the supported application server

^(*3) Support for the WebSphere On Demand Router is described in SAP Note 1869511.

^(*4) The WAS Liberty Profile is not supported.

^(*5) To use JBOSS with Mobile Server refer SAP Note 2207211. BOE 4.x SOAP Web Services (dswsbobje) deployment on JBoss Application Server refer SCN.

^(*6) Apache Tomcat, a free open-source third-party web application server, is not an SAP product. SAP recommends you contact a qualified third-party vendor or consultant for performance tuning, security related issues and load balancer configurations (see KBA 2280098).

Java Application Server Support by Operating System [2/2]

The table below describes how to read the SDK version dependency for each Operating System.

For example: When an application server is noted as supported with Java 8, and the operating system notes that it is a Oracle JDK, it means that this is Oracle JDK 8 release. Similar for IBM Java.

	Oracle/Sun JDK	IBM Java
Java 6	Oracle JDK 6	IBM Java 6
Java 7	Oracle JDK 7	IBM Java 7
Java 8	Oracle JDK 8	IBM Java 8

- Only Java Application Server utilizing 64-bit JDK's are supported
- (*1) IBM WebSphere is supported with IBM Java SDK when applicable
- (*2) SAP NetWeaver is supported with SAP JVM on all supported operating systems

IIS Support by Operating System (IOMS only)

IIS is supported for Integration option for Microsoft SharePoint (IOMS) only.

		Windows Server 2008 R2	Windows Server 2012	Windows Server 2012 R2
Application Server	Version			
	7.5	✓	-	-
IIS(*1)	8	-	✓	-
	8.5	-	-	✓

• (*1) IIS is not supported on Windows server 2016

Portal Server Support by Operating System

D	\\\-\\\-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Windows Server	Linux	AIX	Solaris
Portal Server	Version	_			
	7.0	✓	✓	✓	✓
	7.3	✓	✓	✓	✓
SAP Netweaver Enterprise Portal	7.31 SP4+	✓	✓	✓	✓
	7.40 SP2+	✓	✓	✓	✓
	7.50 SP3+	SP03+	SP03+	SP03+	SP03+
	10.3.4	✓	✓	✓	✓
Oracle WebLogic Portal	10.3.5	✓	✓	✓	✓
	10.3.6	✓	✓	✓	✓
IBM Websphere Portal (*3)	7.0	✓	✓	✓	✓
IBM Websphere Portal	8.0	✓	✓	✓	✓
Minnes of Oberes Deint (#4)	2010 (*2)	✓	-	-	-
Microsoft SharePoint (*1)	2013	✓	-	-	-

^{• (*1)} Integration option for Microsoft SharePoint only

^{• (*2) .}NET 3.5 SP1

^{• (*3)} IBM Websphere Portal 7.0 has reached end of life. Please refer vendor's documentation for more information.

CMS + Audit Repository Support by Operating System

(*3) Only 64-bit database conne	ctor middlewa	re is supported	Windows Server ^(*8)	Linux ^(*8)	AIX ^(*8)	Solaris ^(*8)
Provider Name	Version	Database Connector (*3)				
	9.7	DB2 Client 9.7	✓	✓	✓	(*5)
IBM DB2 for Linux, UNIX, and Windows (*4)	10.1	DB2 Client 10.1	✓	✓	✓	(*5)
	10.5	DB2 Client 10.5	✓	✓	✓	(*5)
IDM DD2 Workgroup Edition	9.7	DB2 Client 9.7	✓	✓	✓	(*5)
IBM DB2 Workgroup Edition	10.5	DB2 Client 10.5	✓	✓	✓	(*5)
	2008 R2	Microsoft ODBC driver for SQL Server (WDAC 6)	✓	-	-	-
Microsoft SQL Server	2012	Microsoft SQL Server Native Client 11	✓	-	-	-
	2014	Microsoft SQL Server Native Client 11	✓	-	-	-
MySQL AB	5.6	MySQL C-API	✓	✓	✓	(*6)
	11gR1 ^(*9)	Oracle Net Client 11g R1	✓	✓	✓	✓
Oracle (*2)	11gR2	Oracle Net Client 11g R2	✓	✓	✓	✓
	12c	Oracle Net Client 12c	✓	✓	✓	✓
	SPS07		✓	✓	✓	✓
	SPS08		✓	✓	✓	✓
SAP HANA	SPS09 ^(*7)		✓	✓	✓	✓
OAF HANA	SPS10		✓	✓	✓	✓
	SPS11		✓	✓	✓	✓
	SPS12		SP03+	SP03+	SP03+	SP03+
	15.5 ^(*10)	Sybase Open Client 15.5	✓	✓	✓	✓
Sybase Adaptive Server Enterprise	15.7	Sybase Open Client 15.7	✓	✓	✓	✓
	16	Sybase Open Client 16	✓	✓	✓	✓
Sybase SQL Anywhere (*1)	16	Sybase SQL Anywhere ODBC Driver 16	✓	✓	✓	✓

- (*1) Bundled on all supported platforms.
- (*2) Oracle Real Application Cluster is supported.
- (*4) IBM DB2 for LUW v9.7 support requires fixpak 1 (or newer). HADR is supported with DB2 for LUW v9.7 and v10.1.
- (*5) IBM DB2 is not supported with Solaris 11.

- (*6) MySQL AB 5.6 is not supported with Solaris 11.
- (*7) Use HANA Revision 92 and above for SPS09. Refer SAP Note 2021789 for HANA revision details
- (*8) Operating system on which the BI platform is installed.
- (*9) Oracle11gR1 has reached end of life Please refer vendor's documentation for more information.
- (*10) Sybase Adaptive Server Enterprise 15.5 has reached end of life. Please refer vendor's

Directory Server (LDAP) Support by Operating System

	Windows	Linux	AIX	Solaris
Directory Server (LDAP)				
IBM Tivoli Directory Server 6.3	✓	✓	✓	✓
IBM Tivoli Directory Server 6.4	SP03+	SP03+	SP03+	SP03+
Microsoft Active Directory 2008 R2	✓	✓	✓	✓
Microsoft Active Directory 2012 and 2012 R2 ^(*2)	✓	✓	✓	✓
Novell eDirectory 8.8	✓	✓	✓	✓
Oracle Internet Directory 10gR3 (*3)	✓	✓	✓	✓
Oracle Internet Directory 11gR1 and 11gR2(*1)	✓	✓	✓	✓
Sun Java System Directory Server Enterprise 6.3	✓	✓	✓	✓
ODSEE 11	✓	✓	✓	✓

- (*1) Oracle Internet Directory 11gR2 is supported by reference to 11gR1
- (*2) Active Directory 2012 R2 is supported by reference to 2012
- (*3) Oracle Internet Directory 10gR3 has reached end of life. Please refer vendor's documentation for more information.

Other Technology Support by Operating System [1/2]

		Windows	Mac OS
Technology	Technology Version		
Adobe Reader	Adobe Reader 11	✓	✓
Adobe Readel	Adobe Reader 15	✓	✓
	Adobe Flash Player 14	✓	✓
Adobe Flash Player	Adobe Flash Player 15/16	✓	✓
	Adobe Flash Player 17	✓	✓
	Microsoft Office 2010 SP1+	✓	-
N4:2*222ft Office (*1) (*2)(*4)(*5)	Microsoft Office 2013	✓	-
Microsoft Office (*1) (*2)(*4)(*5)	Microsoft Office 2016	SP03+	
	Office 365 (*3)	✓	-

- (*1) Only 32-bit versions of Microsoft Office are supported
- (*2) SPs of Microsoft Office that are higher than the minimum listed SPs are supported by reference
- (*3) No support for integrating with Office 365 cloud offerings as such. Office 365 support is only for the version of Microsoft Office being supported
- (*4) MS Excel 64bit is supported on Dashboard 4.2
- (*5) MS Office 64 bit is supported on Live Office 4.2 SP03

Other Technology Support by Operating System [2/2]

		Windows	Linux	AIX	Solaris
Technology	Technology Version				
Microsoft	Microsoft Active Directory 2008 R2 (including LDS support)	✓	-	-	-
Active Directory	Microsoft Active Directory 2012 / 2012 R2 (including LDS support)(*2)	✓	-	-	-
	.NET Framework 3.5 SP1	✓	-	-	-
Microsoft .NET Framework	.NET Framework 4.0 (*1)(*4)	✓	-	-	-
MICIOSOIT.NET FTAITIEWOIK	.NET Framework 4.5 (*4)	✓	-	-	-
	.NET Framework 4.5.2	SP03+			
Computer Associates Access Management	eTrust Siteminder 12.0	✓	✓	✓	✓
CARCIII	SAP GUI 7.30	✓	-	-	-
SAP GUI	SAP GUI 7.40 (*3)	✓	-	-	-

- (*1) Compatible support with respect to .NET 3.5 SP1
- (*2) Active Directory 2012 R2 is supported by reference to 2012
- (*3) Recommended minimum supported SAP GUI 7.4 version is SAP GUI 7.4 Patch 2 . Refer SAP Note 2163607 and SAP note 2063021 for more details.
- (*4) .NET Framework 4.0 and .NET Framework 4.5 has ended life. Please refer to vendor's documentation for more information.

	Reverse Proxy			
	Apache HTTP Server 2.2 and 2.4			
WebSEAL 6				
	Microsoft Internet Security and Acceleration (ISA) Server 2006 (*1)			

(*1) Not supported for Mobile Server

Virtualization Technology Support

Server Virtualization

Refer to the SAP Note 1492000 for the general statement on virtualization technology support, and related notes for virtualization support on operating systems supported in this release

Desktop Virtualization

Refer to the table below	Windows	
Desktop Virtualization		
Citrix	XenApp 6.0 and 6.5(*1) [Windows Server 2008 R2]	✓
	XenApp 7.5 [Windows Server 2012]	✓
	XenApp 7.6 [Windows Server 2016]	SP03+
Microsoft	Remote Desktop Services	✓
IVIIGIUSUIT	Hyper V	SAP Note 1492000

^{• (*1)} XenApp 6.5 is supported by reference to XenApp 6.0

Cloud Infrastructure Support

SAP Business Intelligence 4.2 solutions can be deployed on cloud infrastructure for productive and non-productive purposes.

The following cloud infrastructure offerings are certified for deployment:

Cloud Infrastructure Offering	Additional Notes (for supported combinations, client/server components)
SAP HANA Enterprise Cloud (HEC)	
Amazon Web Services (AWS)	SAP Note 1656099
Microsoft Azure Cloud	SAP Note 2145537
IBM SoftLayer Cloud	SAP Note 2279688
Alibaba Cloud (JuShiTa variant)	SAP Note 2314398

SAP BusinessObjects Analysis, edition for OLAP **OLAP Server Support by Operating System**

			Windows	AIX	Linux	Solaris
Provider Name	Version	Connectivity				
SAP BW	See SAP BW slide	BICS	✓	✓	✓	✓
	2008 R2	XMLA	✓	✓	✓	✓
Microsoft SQL Server Analysis Services	2012	XMLA	✓	✓	✓	✓
	2014	XMLA	✓	✓	✓	✓
SAR Rusings Objects Financial Consolidation	V7.5	XMLA	✓	✓	✓	✓
SAP BusinessObjects Financial Consolidation	v10	XMLA	✓	✓	✓	✓
SAP BusinessObjects Planning and Consolidation for Microsoft	7.5 SP5	XMLA	✓	✓	✓	✓
form	v10	XMLA	✓	✓	✓	✓
SAP BusinessObjects Planning and Consolidation for NetWeaver	v10	BICS	✓	✓	✓	✓
CAR During an Ohio ata Danfitahilita and Coat Managamant	7.5 SP12	XMLA	✓	✓	✓	✓
SAP BusinessObjects Profitability and Cost Management	v10	XMLA	✓	✓	✓	✓
Teradata	v14.10	XMLA	✓	✓	✓	✓
reradata	v15	XMLA	✓	✓	✓	✓
Oracle Essbase	v11	JAPI	✓	✓	✓	✓
Oracle OLAP	v11.1.0.7 +	XMLA	✓	✓	✓	✓

SAP BW Minimum version per product (*6)- overview

Please refer to SAP Note 1869560, for details on the level of support for BEx guery elements, and typical BEx guery functionality for all BI client tools.

Product	Connectivity	BW 7.01 SPS 06+	BW 7.01 SPS 08+	BW 7.02 SPS 02+	BW 7.30 SPS 03+	BW 7.31 SPS 04+	BW 7.40 SPS 02+	BW 7.50 SPS 01+	BW 7.50 SPS 02+	BW 7.50 SPS 03+
Web Intelligence	BICS	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crystal Reports for Enterprise	(Dimensional Transient	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dashboards	Universe)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Web Intelligence	UNV OLAP	✓	✓	✓	✓	✓	✓	✓	✓	✓
Live Office	UNV OLAP	✓	✓	✓	✓	✓	✓	✓	✓	✓
Web Intelligence		✓	✓	✓	✓	✓	✓	✓	✓	✓
Crystal Reports Enterprise		✓	✓	✓	✓	✓	✓	✓	✓	✓
Dashboards	Multi source universe (Relational)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Explorer	(**************************************	✓	✓	✓	✓	✓	✓	✓	✓	✓
Live Office		✓	✓	✓	✓	✓	✓	✓	✓	✓
Analysis, edition for OLAP (*1)		✓	✓	✓	✓	✓	✓	✓	✓	✓
Analysis, edition for Microsoft Office (*2)	BICS (Direct to BEx)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)	(*5)
Dashboards	BICS (NW BI Java)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Explorer	BWA (*4)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Crystal Reports for Enterprise	Direct to Data (D2D)	-	-	-	-	-	-	-	-	-
Crystal Reports 2016	Direct BW Connection	✓	✓	✓	✓	✓	✓	✓	✓	✓
BEx Web Applications (*3)	(Integrated with BI 4)	-	✓	✓	✓	✓	✓	✓	✓	✓

^{• (*1)} Analysis, edition for OLAP additionally supports BW 7.0 SPS23+

^{• (*2)} Analysis, edition for Microsoft Office standalone (not used with BI 4) supports any BW release as of 7.0 (no specific SP needed)

^{• (*3)} Please consult SAP notes 1541365 and 1476156

^{• (*4)} Explorer supports BWA Version 7.20, rev 19 and above

^{• (*5)} Use Analysis, edition for MSFT Office 2.2 version or higher with BI 4.2. Refer to the Analysis, edition for MSFT Office PAM for details

^{• (*6)} We support latest BW version with all supported BI 4.2 versions

SAP S/4HANA Minimum version per product - overview

Product	Connectivity	S/4HANA 1511 FPS1	S/4HANA 1511 FPS2
Web Intelligence		✓	SP03+
Crystal Reports for Enterprise	BICS (Dimensional	✓	SP03+
Dashboards	Transient Universe)	✓	SP03+
Live Office		✓	SP03+
Analysis, edition for OLAP	BICS (Direct to BEx)	✓	SP03+

SAP HANA Support per product - overview

Product	Connectivity	HANA SPS07(*5)	HANA SPS08(*5)	HANA SPS09	HANA SPS10 (*6)	HANA SPS11	HANA SPS12
Web Intelligence		✓	✓	✓	✓	✓	✓
Crystal Reports for Enterprise	UNX	✓	✓	✓	✓	✓	✓
Dashboards	(Relational Universe)	✓	✓	✓	✓	✓	✓
Live Office (*3)		✓	✓	✓	✓	✓	✓
Explorer	Direct Connection (JDBC) UNX (Relational Universe)	√	√	√	√	√	√
Crystal Reports 2016	Direct Connection	✓	√	✓	✓	✓	✓
Crystal Reports for Enterprise	Direct to Data	√	√	√ (*4)	√	√	√
Analysis Edition for OLAP	Direct Connection	✓	✓	√ (*2)	✓	✓	✓
Analysis Edition for Microsoft Office(*1)(*7)	(BICS)	✓	✓	✓	✓	✓	✓

- (*1) Please refer to the Analysis, Edition for Microsoft Office PAM for details.
- (*2) If you are connecting to HANA SP09, AOLAP needs a workaround (refer SAPNote 2095297
- (*3) Range prompts not supported for relational UNX created on HANA
- (*4) Refer to SAPNote2181019 for limitations on Crystal Reports for Enterprise on SAP HANA SPS09.
- (*5) "Web Intelligence HANA Direct Access" and "Web Intelligence HANA Online" do not support SAP HANA SPS08 and previous versions. Refer SAP Note 2210945 for details.
- (*6) if you are connecting to HANA SPS10, it's recommended to use revision 102 and above, for the fix on SAML authentication from BIP to HANA.
- (*7) Use Analysis, edition for MSFT Office 2.2 version or higher with BI 4.2.
- (*8) All the currently supported BI 4.2 SPx support the latest HANA SPS, since HANA is backward compatible.

Data Access

Suggested way to view find needed information: select Operating system + filter on Sources for your choice of data access.

Semantic Layer & Connection Server – Data Sources

- •Please consult the file Semantic Laver Datasources
- Notes:
- •UNICODE is supported for all data sources, unless otherwise indicate in the Note of the attached file

Crystal Reports for Enterprise – Direct to Data (D2D) Sources

- •Please consult the file CR Enterprise D2D Data Access
- •Notes:
- •Crystal report for enterprise is a 32-bit application and need 32-bit database driver on client. To administer 32-bit ODBC DSNs on 64-bit versions of Windows, run the 32-bit ODBC Administrator, located here: C:\Windows\SysWOW64\odbcad32.exe
- •Crystal reports for enterprise requires the 64-bit ODBC driver on server. To administer 64-bit ODBC DSNs on 64-bit versions of windows, run the 64-bit ODBC Administrator, located here: C:\Windows\System32\odbcad32.exe

Crystal Reports 2016 – Enterprise Data Sources

- •Please consult the file CR 2016 Data Access
- •Notes:
- •Cristal Reports is offered as a 32-bit native binary. It requires 32-bit data source middleware connectivity on all operating systems.
- •Crystal Reports uses the 32-bit ODBC registry on all versions of Windows. To administer 32-bit ODBC DSNs on 64-bit versions of Windows, run the 32-bit ODBC Administrator, located here: C:\Windows\SysWOW64\odbcad32.exe

Data Services and Information Steward

Please refer to **SAP note 1740516** for information regarding the compatibility of Data Services and Information Steward

Appendix



Minimum HW and OS Patch Requirements - Windows

Minimum Screen Resolution

Screen resolution of [1024] x [768] is recommended

Minimum Server Hardware Requirements

For Evaluation Purposes:

CPU performance of at least 8000 SAPS

16 GB RAM minimum

For Deployment:

Please refer to the BI4 Sizing Companion Guide, located at www.sap.com/bisizing and also your SAP representative.

- For more information on SAPS, see the SAP Sizing portal: http://service.sap.com/sizing and also the SAP benchmarked vendor hardware list: http://www.sap.com/solutions/benchmark/sd2tier.epx
- If deploying to virtualized hardware, it is strongly recommended that the memory and CPU(s) be reserved for each virtual machine that is running the BI services.

Minimum Client Hardware Requirements

Dual Core CPU 2 GB RAM

Recommended Disk Space Requirements

SAP BusinessObjects BI (client installer):

- 3.5 GB for default installation with English language only installed
- 7.5 GB for default installation with all languages installed

SAP BusinessObjects BI (server installer):

- 11 GB for default installation with English language only installed
- 14 GB for default installation with all languages installed

Minimum OS Patch Requirements: Its strongly recommended that systems are updated with the latest Microsoft Updates and all the required components are present, See <u>SAP Note 1902990</u> for details.

Minimum HW Requirements - Linux

Minimum Server Hardware Requirements

For Evaluation Purposes:

CPU performance of at least 8000 SAPS

For single user, 16 GB RAM minimum

For Deployment:

Please refer to the BI4 Sizing Companion Guide, located at www.sap.com/bisizing and also your SAP representative.

- For more information on SAPS, see the SAP Sizing portal: http://service.sap.com/sizing and also the SAP benchmarked vendor hardware list: http://www.sap.com/solutions/benchmark/sd2tier.epx
- If deploying to virtualized hardware, it is strongly recommended that the memory and CPU(s) be reserved for each virtual machine that is running the BI services.

Note: Compiled binaries of SAP BusinessObjects BI software is supported on versions of the Linux operating system running on CPUs made by AMD or Intel.

Recommended Disk Space Requirements

SAP BusinessObjects BI (server installer):

- 14 GB for default installation with English language only installed
- 16 GB for default installation with all languages installed

Minimum OS Patch Requirements - Linux

Minimum Patch Level for SUSE Linux Enterprise Server 11

No additional components required outside the SLES 11 RTM install.

Minimum Patch Level for SUSE Linux Enterprise Server 12

No additional components required outside the SLES 12 RTM install.

Minimum Patch Level for Red Hat Enterprise Linux 6

Required Red Hat 6 operating system install plus: Red Hat Enterprise Linux 6 Update 2

Required components for Red Hat Enterprise Linux 6

glibc-2.12-1.7-el6.i686 and libstdc++-4.4.4-13.el6.i686

Required components for Red Hat Enterprise Linux 7

compat-libstdc++-33-3.2.3-72.el7.i686 compat-libstdc++-33-3.2.3-72.el7.x86_64

All OS versions: Higher patches beyond the specified minimum patch level may be used.

Supported Locales - Linux

Language	UNIX Locale
Czech	cs_CZ.utf8
Danish	da_DK.utf8
Dutch	nl_NL.utf8
English	en_US.utf8
Finnish	fi_FI.utf8
French	fr_FR.utf8
German	de_DE.utf8
Hebrew	he_IL.utf-8
Hungarian	hu_HU.utf8
Italian	it_IT.utf8
Japanese	ja_JP.utf8
Korean	ko_KR.utf8
Norwegian	no_NO.utf8
Polish	pl_PL.utf8
Portuguese	pt_BR.utf8
Romanian	ro_RO.utf8
Russian	ru_RU.utf8
Slovakian	sk_SK.utf8
Slovenian	SI_SI.utf8
Spanish	es_ES.utf8
Swedish	sv_SE.utf8
Simplified Chinese	zh_CN.utf8
Traditional Chinana	zh_TW.utf8
Traditional Chinese	zh_HK.utf8
Thai	th_TH.utf8
Turkish	tr_TR.utf8

Minimum HW Requirements - AIX

Minimum Hardware Requirements

For Evaluation Purposes:

CPU performance of at least 8000 SAPS

16 GB RAM minimum

For Deployment:

Please refer to the BI4 Sizing Companion Guide, located at www.sap.com/bisizing and also your SAP representative.

- For more information on SAPS, see the SAP Sizing portal: http://service.sap.com/sizing and also the SAP benchmarked vendor hardware list: http://www.sap.com/solutions/benchmark/sd2tier.epx
- If deploying to virtualized hardware, it is strongly recommended that the memory and CPU(s) be reserved for each virtual machine that is running the BI services.

Recommended Disk Space Requirements

SAP BusinessObjects BI (server installer):

- 13 GB for default installation with English language only installed
- 15 GB for default installation with all languages installed

Minimum OS Patch Requirements - AIX

Minimum Patch Level for AIX 6.1

Required AIX 6.1 operating system install plus:

Technology Level 5

IBM C++ Runtime Environment Components for AIX => xIC.aix61.rte 10.1.0.3

Minimum Patch Level for AIX 7.1

Required AIX 7.1 operating system install plus:

Technology Level 1 SP2

IBM C++ Runtime Environment Components for AIX => xIC.aix61.rte 11.1.0.2

All OS versions: Higher patches beyond the specified minimum patch level may be used, but they may not be officially tested by SAP.

Supported Locales - AIX

Language	UNIX Locale
Czech	CS_CZ.UTF-8
Danish	DA_DK.UTF-8
Dutch	NL_NL.UTF-8
English	EN_US.UTF-8
Finnish	FI_FI.UTF-8
French	FR_FR.UTF-8
German	DE_DE.UTF-8
Hebrew	he_IL.utf-8
Hungarian	HU_HU.UTF-8
Italian	IT_IT.UTF-8
Japanese	JA_JP.UTF-8
Korean	KO_KR.UTF-8
Norwegian	NO_NO.UTF-8
Polish	PL_PL.UTF-8
Portuguese	PT_BR.UTF-8
Romanian	RO_RO.UTF-8
Russian	RU_RU.UTF-8
Slovakian	SK_SK.UTF-8
Slovenian	SL_SI.UTF-8
Spanish	ES_ES.UTF-8
Swedish	SV_SE.UTF-8
Simplified Chinese	ZH_CN.UTF-8
Traditional Chinasa	ZH_TW.UTF-8
Traditional Chinese	ZH_HK.UTF-8
Thai	TH_TH.UTF-8
Turkish	TR_TR.UTF-8

Minimum HW and Patch Requirements - Solaris

Minimum Server Hardware Requirements

For Evaluation Purposes:

CPU performance of at least 8000 SAPS

16 GB RAM minimum

For Deployment:

Please refer to the BI4 Sizing Companion Guide, located at www.sap.com/bisizing and also your SAP representative.

- For more information on SAPS, see the SAP Sizing portal: http://service.sap.com/sizing and also the SAP benchmarked vendor hardware list: http://www.sap.com/solutions/benchmark/sd2tier.epx
- If deploying to virtualized hardware, it is strongly recommended that the memory and CPU(s) be reserved for each virtual machine that is running the BI services.

Minimum Patch Level for Solaris 10

Required Solaris 10 operating system install (Solaris 10 8/2007 release).

No additional components required.

Higher patches beyond the specified minimum patch requirement may be used.

Minimum Patch Level for Solaris 11

Required Solaris 11 operating system install (Solaris 11 11/11)

Please refer to the BI Platform install guide for the list of required packages for Solaris 11

Recommended Disk Space Requirements

SAP BusinessObjects BI (server installer):

- 13 GB for default installation with English language only installed
- 15 GB for default installation with all languages installed

Supported Locales - Solaris

Language	UNIX Locale
Czech	cs_CZ.UTF-8
Danish	da_DK.UTF-8
Dutch	nl_NL.UTF-8
English	en_US.UTF-8
Finnish	fi_FI.UTF-8
French	fr_FR.UTF-8
German	de_DE.UTF-8
Hebrew	he_IL.utf-8
Hungarian	hu_HU.UTF-8
Italian	it_IT.UTF-8
Japanese	ja_JP.UTF-8
Korean	ko_KR.UTF-8@dict
Norwegian	nb_NO.UTF-8
Polish	pl_PL.UTF-8
Portuguese	pt_BR.UTF-8
Romanian	ro_RO.UTF-8
Russian	ru_RU.UTF-8
Slovakian	sk_SK.UTF-8
Slovenian	sl_SI.UTF-8
Spanish	es_ES.UTF-8
Swedish	sv_SE.UTF-8
Simplified Chinese	zh_CN.UTF-8@pinyin
Traditional Chinese	zh_CN.UTF-8@radical
Traditional Chinese	zh_CN.UTF-8@stroke
Thai	zh_TW.UTF-8@pinyin
Turkish	zh_TW.UTF-8@radical

© 2016 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. Please see http://global12.sap.com/corporate-en/legal/copyright/index.epx for additional trademark information and notices.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.

National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP SE or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP SE or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.