

BusinessObjects Enterprise XI 3.1 for Windows

Supported Platforms

Overview

This document lists specific platforms and configurations for the BusinessObjects Enterprise XI 3.1 for Windows.

Contents

INTRODUCTION	3
PRODUCTS	3
<i>Desktop</i>	3
<i>Server</i>	4
LANGUAGES	4
SUPPORTED OPERATING SYSTEMS	5
<i>Desktop Products</i>	5
<i>Server Products</i>	5
BusinessObjects and Microsoft Critical Patches.....	5
MINIMUM SCREEN RESOLUTION	6
MINIMUM HARDWARE REQUIREMENTS FOR BUSINESSOBJECTS ENTERPRISE XI 3.1	6
SUPPORTED APPLICATION SERVERS	7
Application Server Incremental Release Support Policy	7
JDK Version Support Policy	7
Specific Patches Required for Oracle Application Server	7
Supported HTTP Servers	8
SUPPORTED PORTAL SERVERS	8
Portal Server Minor Release Support Policy	8
SUPPORTED BROWSERS	9
SVG and Flash support for Dashboard and Analytics	9
DATA SOURCE MIDDLEWARE SUPPORT	9
ODBC DSN SUPPORT	10
CMS DATABASE (REPOSITORY) & AUDIT DATABASES	10

- DASHBOARD AND ANALYTICS REPOSITORY DATABASES 11**
- SUPPORTED DATA SOURCES FOR SET ARCHITECT, SET ANALYZER AND SET ANALYSIS 12**
- WEB INTELLIGENCE, DESKTOP INTELLIGENCE, DASHBOARD AND ANALYTICS DATA SOURCES 13**
- SOURCE AND DATA MODEL VERSIONS FOR UNIVERSE BUILDER 16**
- SUPPORTED DATA SOURCES FOR CRYSTAL REPORTS 18**
- CRYSTAL REPORTS REPORTING DATA SOURCES SUPPORTED FOR SCHEDULING ONLY 22**
 - Scheduled and on demand reporting..... 22
 - Generic ODBC, OLEDB and JDBC: Limitation 23
- OLAP CONNECTIVITY FOR VOYAGER..... 23**
- SUPPORT FOR SAP APPLICATION SERVERS 24**
- OTHER TOOLS 24**
 - Reverse Proxy Servers 24
 - LDAP Directory 24
 - Active Directory 25
 - Access Management 25
 - Office 25
 - Admin Platform 25
 - Product/Language Support on Citrix..... 25
 - Reader..... 25
 - .NET Framework..... 25
- FILE TRANSFER PROTOCOL (FTP) REQUIREMENTS 26**
- FINDING MORE INFORMATION 26**

Introduction

This document contains information specific to platforms and configurations for the BusinessObjects Enterprise XI 3.1 release. For the latest information on updates to this document, please visit Business Objects Articles at: <https://www.sdn.sap.com/irj/sdn/businessobjects-articles>.

NOTE

Anything that is highlighted using red font indicates that it is an update, addition or correction made after the original release of this document.

Products

Desktop

- BusinessObjects™ Desktop Intelligence XI
- **BusinessObjects™ Web Intelligence Rich Client XI**
- BusinessObjects™ Enterprise XI (Win32 clients)
- BusinessObjects™ Live Office XI (2)
- BusinessObjects™ Set Architect XI
- BusinessObjects™ Set Analyzer XI
- Crystal Reports® Designer 2008
- Universe Builder BusinessObjects™ Data Integrator plug-in
- Universe Builder CWM OLAP plug-in
- Universe Builder CWM Relational plug-in
- Universe Builder DB2 Cube Views plug-in
- Universe Builder DB2 Data Warehouse Center plug-in
- Universe Builder Oracle Data Warehouse plug-in
- Universe Builder Oracle OLAP plug-in
- Query as a Web Service (client tool) (1) (2)

(1) Query as a Web Service is available in English only.

(2) .Net Framework 2.0 is a necessary minimum requirement.

Server

- BusinessObjects™ Enterprise XI
 - BusinessObjects™ Performance Manager XI
 - BusinessObjects™ Predictive Analysis XI
 - BusinessObjects™ Process Analysis XI
 - BusinessObjects™ Set Analysis XI (server components)
 - BusinessObjects™ Voyager XI
 - BusinessObjects™ Web Intelligence XI
 - Crystal Reports® 2008 (server components)
 - Dashboard Builder
 - Encyclopedia
 - Process Tracker (1)
- (1) Process Tracker is installed separately. Note that BusinessObjects Enterprise Premium XI 3.1 includes Process Tracker.

Languages

- Chinese Simplified
 - Chinese Traditional
 - Danish
 - Dutch
 - English (1)
 - French
 - German
 - Italian
 - Japanese
 - Korean
 - Norwegian
 - Polish
 - Portuguese (Brazil)
 - Spanish
 - Swedish
 - Russian
 - Thai
- (1) BusinessObjects Set Architect and Set Analyzer is supported in English only.

Supported Operating Systems

Desktop Products

- Windows XP SP2 Professional
- Windows Vista (1)
- Windows Vista SP1 (1)
- Windows Server 2003 SP1 (1) (2)
- Windows Server 2003 SP2 (1) (2)
- Windows Server 2003 R2 (1) (2)
- Windows Server 2008 (1) (2)

(1) 32-bit and 64-bit O/S editions supported

(2) Data Center Edition, Enterprise Edition, Standard Edition , Web Edition

Server Products

- Windows Server 2003 SP1 (1) (2)
- Windows Server 2003 SP2 (1) (2)
- Windows Server 2003 R2 (1) (2)
- Windows Server 2008 (1) (2)

(1) 32-bit and 64-bit O/S editions supported

(2) Data Center Edition, Enterprise Edition, Standard Edition , Web Edition

BusinessObjects and Microsoft Critical Patches

BusinessObjects supports the install of all Microsoft critical patches for the operating systems listed above.

Minimum Screen Resolution

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

Minimum Hardware Requirements for BusinessObjects Enterprise XI 3.1

- 2.0 GHz Pentium 4-class processor
- 2 GB RAM
- 5.6 GB hard disk space for BusinessObjects Enterprise for complete install
- 6.75 GB hard drive for BusinessObjects Enterprise patch install
- 2 GB for hard drive for BusinessObjects Enterprise Client patch install
- 400 MB hard drive for BusinessObjects Live Office patch install
- 0.2 GB hard disk space for BusinessObjects Process Tracker

Note 1:

- BusinessObjects Enterprise software is supported running on 32-bit versions of Windows running on x86 and x64 CPUs made by AMD and Intel.
- BusinessObjects Enterprise software is supported running on 64-bit versions of Windows running on x64 CPUs made by AMD and Intel.

Note 2: Additional languages can be installed in BusinessObjects Enterprise via Language Pack Install. On average, an additional 0.3 GB hard disk space is required per language install.

Supported Application Servers

Application Servers	JDK
JBoss 4.0.4	JDK 1.5.0_xx
Microsoft IIS 7.0 (3)	N/A
Microsoft IIS 6.0 (3)	N/A
Oracle Application Server 10gR3 (10.1.3) (1)	JDK 1.5.0_xx
SAP Web Application Server 7 (2)	JDK 1.4.2_xx
Tomcat 5.5	JDK 1.5.0_xx
WebLogic 9.2 MP2	JDK 1.5.0_xx JRockit 5.0+
WebLogic 10	JDK 1.5.0_xx JRockit 5.0+
WebSphere Application Server 6.1.0.7	JDK 1.5.0_xx
WebSphere Application Server Community Edition 2.0	JDK 1.5.0_xx

(1) Please see release notes on the minimum version supported for Dashboard and Analytics.

(2) Not supported for Web Services.

(3) Not supported for Dashboard Builder

Note: Native 64-bit Java Application Servers are supported.

Application Server Incremental Release Support Policy

Specified application servers versions have been successfully tested by Business Objects. Incremental releases of the specified versions defined by the last number in the application server name will be supported as they are made available, but may not have been tested by Business Objects. Exceptions in support will be documented.

JDK Version Support Policy

JDK major versions are specified to ensure the use of correct version when there are multiple choices provided by the vendor. Business Objects tests and supports any _xx release installed with a given application server.

Specific Patches Required for Oracle Application Server

See release notes for exact patch level support.

Supported HTTP Servers

Any supported by Application Server vendor.

Supported Portal Servers

- Microsoft SharePoint Portal Server 2003 (32-bit editions only) (1) (2)
- Microsoft Windows SharePoint Services (WSS 2.0) 2003 (32-bit only) (1) (2)
- Microsoft SharePoint Portal Server 2007 (32-bit editions only) (1) (2)
- Microsoft Windows SharePoint Services (WSS 3.0) 2007 (32-bit only) (1) (2)
- Oracle Portal Server 10g R3 (10.1.4) (JSR 168)
- WebLogic Portal Server 9.2.x (JSR168)
- WebLogic Portal Server 10.0.x (JSR168)
- WebSphere Portal 6.0.x.x (JSR 168)

(1) Portal Integration Kit for SharePoint supports 32-bit SharePoint running on either 32-bit or 64-bit Windows Servers provided SharePoint itself supports the operating system.

(2) Danish, Thai & Norwegian languages are not supported

Portal Server Minor Release Support Policy

Specified portal servers versions have been successfully tested by Business Objects. Minor/incremental releases of the specified versions defined by the last number (or two in the case of Websphere) in the portal server version number will be supported as they are made available, but all may not have been tested by BO. Exceptions in support will be documented.

Supported Browsers

Browser OS	Browser	JVM
Apple Mac OS X	Firefox 3.0	Apple 1.5.0_xx Apple 1.6.0_xx
	Firefox 2.0	Apple 1.5.0_xx Apple 1.6.0_xx
	Safari 3.0	Apple 1.5.0_xx Apple 1.6.0_xx
Microsoft Windows	Firefox 3.0	Sun 1.5.0_xx Sun 1.6.0_02+
	Firefox 2.0	Sun 1.5.0_xx Sun 1.6.0_02+
	IE 6.0 SP2	Sun 1.5.0_xx Sun 1.6.0_02+
	IE 7.0	Sun 1.5.0_xx Sun 1.6.0_02+

SVG and Flash support for Dashboard and Analytics

- SVG is not supported by Dashboard and Analytics for Firefox.
- SVG version 3.0.3 and above supported for Internet Explorer.
- Flash version 7 and above supported for Internet Explorer and Firefox.

Data Source Middleware Support

BusinessObjects Enterprise Suite products that are compiled as 32-bit native binary are designed to use 32-bit data source middleware connectivity. Unless otherwise specified in the PAR, 64-bit middleware connectivity is not supported. Conversely, native 64-bit offerings of BusinessObjects Enterprise Suite products are designed to exclusively use 64-bit data source middleware connectivity.

ODBC DSN Support

BusinessObjects products use 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

CMS Database (Repository) & Audit Databases

Provider Name	Data Connector
IBM DB2/UDB for NT/Unix/Linux 8.2	DB2 Client 8.2 (3)
IBM DB2/UDB for NT/Unix/Linux 9.1	DB2 Client 9.1
IBM DB2/UDB for NT/Unix/Linux 9.5	DB2 Client 9.5
MS SQL Server 2000 SP4	Microsoft ODBC MDAC 2.8
MS SQL Server 2005 RTM/SP1/SP2	Microsoft ODBC MDAC 2.8
	Microsoft ODBC SNAC (Native Client)
MS SQL Server 2008	Microsoft ODBC MDAC 2.8
	Microsoft ODBC SNAC (Native Client)
MySQL AB 5.0	MySQL C-API
Oracle 11g R1 (11.1)	Oracle Net Client 10.2 (1) (2)
Oracle 10g R1 (10.1)	Oracle Net Client 10.1 (1)
Oracle 10g R2 (10.2)	Oracle Net Client 10.2 (1)
Oracle 9.2	Oracle Net Client 9.2
Sybase Adaptive Server Enterprise 15	Sybase Open Client 15

- (1) Oracle Real Application Cluster (RAC) is supported.
- (2) For more information about support of Oracle 11g R1 with Oracle Net Client 10.2, please refer to the Release Notes.
- (3) Please refer to SAP Note 1473992.

Dashboard and Analytics Repository Databases

Provider Name	Data Connector
IBM DB2/UDB for NT/Unix/Linux 8.2	DB2 Client 8.2
IBM DB2/UDB for NT/Unix/Linux 9.1	DB2 Client 9.1
IBM DB2/UDB for NT/Unix/Linux 9.5	DB2 Client 9.5
IBM DB2/UDB for zSeries 7	DB2 Client 8.1
	DB2 ODBC Client 8.1
IBM DB2/UDB for zSeries 8	DB2 Client 8.2
MS SQL Server 2000 SP4	Microsoft ODBC MDAC 2.8
	Microsoft OLEDB MDAC 2.8
MS SQL Server 2005 RTM/SP1/SP2	Microsoft ODBC MDAC 2.8
	Microsoft ODBC SNAC (Native Client)
	Microsoft OLEDB MDAC 2.8
	Microsoft OLEDB SNAC (Native Client)
MS SQL Server 2008	Microsoft ODBC MDAC 2.8
	Microsoft ODBC SNC (SQL Native Client)
	Microsoft OLEDB MDAC 2.8
	Microsoft OLEDB SNC (SQL Native Client)
NCR Teradata V2R6	NCR Teradata ODBC 3.05 (TTU 8.1)
NCR Teradata V2R6.1	NCR Teradata ODBC 3.06 (TTU 8.2)
NCR Teradata V2R6.2	NCR Teradata ODBC 3.06 (TTU 8.2)
Teradata V12.0	Teradata ODBC TU 12.00.00.1
	Teradata JDBC TTU 12.00.00.1
Oracle 11g R1 (11.1)	Oracle Net Client 11.1 (1)
Oracle 10g R1 (10.1)	Oracle Net Client 10.1 (1)
Oracle 10g R2 (10.2)	Oracle Net Client 10.2 (1)
Oracle 9.2	Oracle Net Client 9.2
Sybase Adaptive Server Enterprise 12.5	Sybase Open Client 12.5
Sybase Adaptive Server Enterprise 15	Sybase Open Client 15

(1) Oracle Real Application Cluster (RAC) is supported.

Supported Data Sources for Set Architect, Set Analyzer and Set Analysis

Provider Name	Data Connector
IBM DB2/UDB for NT/Unix/Linux 8.2	DB2 Client 8.1
	DB2 Client 8.2
IBM DB2/UDB for NT/Unix/Linux 9.1	DB2 Client 8.1
	DB2 Client 9.1 (2) (3)
IBM DB2/UDB for NT/Unix/Linux 9.5	DB2 Client 9.5
MS SQL Server 2000 SP4	Microsoft ODBC MDAC 2.8
	Microsoft OLEDB MDAC 2.8
MS SQL Server 2005 RTM/SP1/SP2	Microsoft ODBC MDAC 2.8
	Microsoft ODBC SNAC (native client)
	Microsoft OLEDB MDAC 2.8
	Microsoft OLEDB SNAC (native client)
MS SQL Server 2008	Microsoft ODBC MDAC 2.8
	Microsoft ODBC SNAC (Native Client)
	Microsoft OLEDB MDAC 2.8
	Microsoft OLEDB SNAC (Native Client)
NCR Teradata V2R6	NCR Teradata ODBC 3.05 (TTU 8.1)
NCR Teradata V2R6.1	NCR Teradata ODBC 3.06 (TTU 8.2)
NCR Teradata V2R6.2	NCR Teradata ODBC 3.06 (TTU 8.2)
Netezza NPS Server 2.5	Netezza ODBC 2.5 (1)
Netezza NPS Server 3.0	Netezza ODBC 3.0 (1)
Oracle 9.2	Oracle Net Client 9.2
Oracle 10g R1 (10.1)	Oracle Net Client 10.1 (4)
Oracle 10g R2 (10.2)	Oracle Net Client 10.2 (4)
Oracle 11g R1 (11.1)	Oracle Net Client 11.1 (4)
Teradata V12.0	Teradata ODBC TTU 12.00.00.1
Sybase Adaptive Server Enterprise 12.5	Sybase Open Client 12.5
Sybase Adaptive Server Enterprise 12.5.1	Sybase Open Client 12.5.1
Sybase Adaptive Server Enterprise 15	Sybase Open Client 15 (2)

Please see release notes for Oracle and DB2 connectivity for this product.

- (1) Not supported for Set Analyzer.
- (2) Supported for Set Analysis.
- (3) Supported for Set Analyzer.
- (4) Oracle Real Application Cluster (RAC) is supported.

Web Intelligence, Desktop Intelligence, Dashboard and Analytics Data Sources

Provider Name	Data Connector	Unicode Support
OLAP (1)		
Hyperion Essbase Server 7.1.x	Hyperion Essbase API 7.1.x	
Hyperion System 9	Hyperion Essbase client 9.0	
	Hyperion Essbase client 9.2	
	Hyperion Essbase client 9.3	
Microsoft SQL Server Analysis Services 2000 SP4	MS SQL Server OLAP Client 2000 SP4	
Microsoft SQL Server Analysis Services 2005 SP1	Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider SP1	
Microsoft SQL Server Analysis Services 2005 SP2	Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider SP2	
Microsoft SQL Server Analysis Services 2008	Microsoft SQL Server 2008 Analysis Services 10.0 OLE DB	
RDBMS		
Generic JDBC Data Sources	Java 1.5 (5)	
Generic ODBC Data Sources	ODBC	
BusinessObjects Data Federator 3.0 (XI R2)	ODBC for Data Federator (2)	
BusinessObjects Data Federator 3.5 (XI R2)	ODBC for Data Federator (2)	
	Data Federator JDBC driver v3.5 (2) (5)	
HP Neoview 2.2	HP Neoview ODBC Driver 2.2 (4)	Yes
HP Neoview 2.3.1	HP Neoview ODBC Driver 2.3.1 (4)	Yes
IBM DB2/UDB for iSeries 5.3	DB2 Client 8.2	
	IBM iSeries Access (ODBC) 5.3	
IBM DB2/UDB for iSeries 5.4	DB2 Connect 9.1	
	IBM iSeries Access (ODBC) 5.4	
IBM DB2/UDB for NT/Unix/Linux 8.2	DB2 Client 8.2	Yes
	DB2 Universal JDBC Driver (5)	Yes
IBM DB2/UDB for NT/Unix/Linux 9.1	DB2 Client 9.1	Yes
	DB2 Universal JDBC Driver (5)	Yes
IBM DB2/UDB for NT/Unix/Linux 9.5	DB2 Client 9.5	Yes
	DB2 Universal JDBC Driver (5)	Yes
IBM DB2/UDB for zSeries 7	DB2 Client 8.1 (3)	

Provider Name	Data Connector	Unicode Support
	DB2 ODBC Client 8.1 (3)	
IBM DB2/UDB for zSeries 8	DB2 Client 8.2 (3)	
IBM Informix Dynamic Server 10.0	IBM Informix ODBC SDK 2.90	
IBM Informix Dynamic Server 7.31	IBM Informix ODBC SDK 2.81	
IBM Informix Dynamic Server 9.4	IBM Informix ODBC SDK 2.90	
IBM Informix XPS 8.40	IBM Informix ODBC SDK 2.81	
IBM Informix XPS 8.50	IBM Informix ODBC SDK 2.90	
IBM Red Brick Decision Server 6.3	IBM Red Brick ODBC 5	
Ingres 2006	Ingres ODBC 3.5 (7)	Yes
Microsoft Excel 2007	Microsoft ODBC MDAC 2.8	
Microsoft Access 2003	Microsoft ODBC MDAC 2.8 (2)	
Microsoft Access 2007	Microsoft ODBC MDAC 2.8 (2)	
Microsoft SQL Server 2000 SP4	Microsoft ODBC MDAC 2.8	Yes
	Microsoft OLEDB MDAC 2.8	Yes
Microsoft SQL Server 2005 RTM/SP1/SP2	JDBC SQL Server 2005 (2) (5)	Yes
	Microsoft ODBC MDAC 2.8	Yes
	Microsoft ODBC SNAC (native client)	Yes
	Microsoft OLEDB MDAC 2.8	Yes
	Microsoft OLEDB SNAC (native client)	Yes
Microsoft SQL Server 2008	Microsoft ODBC SNAC (native client)	Yes
	Microsoft OLEDB SNAC (native client)	Yes
MySQL AB 5.0	MySQL AB ODBC 3.51.12	
	MySQL AB JDBC 5.0 (2) (5)	
NCR Teradata V2R6	NCR Teradata ODBC 3.05 (TTU 8.1)	Yes
NCR Teradata V2R6.1	NCR Teradata ODBC 3.06 (TTU 8.2)	Yes
	NCR Teradata JDBC 3.04 (TTU 8.2) (2) (5)	Yes

NCR Teradata V2R6.2	NCR Teradata ODBC 3.06 (TTU 8.2)	Yes
	NCR Teradata JDBC 3.04 (TTU 8.2) (2) (5)	Yes
Teradata V12.0	Teradata ODBC Driver TTU 12.00.00.1	Yes
	Teradata JDBC Driver TTU 12.00.00.1) (2) (5)	Yes
Netezza NPS Server 2.5	NCR Teradata ODBC 3.04 (TTU 8.2) (2) (5)	Yes
Netezza NPS Server 3.0	Netezza ODBC 3.0 (2)	Yes
Netezza NPS Server 3.1	Netezza ODBC 3.1 (2)	Yes
	Netezza JDBC Access (5)	Yes
Netezza NPS Server 4.0	Netezza ODBC 4.0	Yes
	Netezza JDBC Access	Yes
Oracle 11g R1	Oracle Net Client 11g R1 (6)	Yes
	Oracle JDBC 11g R1 (11.1.0.6) (5) (6)	Yes
Oracle 10g R1 (10.1)	Oracle Net Client 10.1 (6)	Yes
	Oracle JDBC 10g R1 (10.1.0.3) (5) (6)	Yes
Oracle 10g R2 (10.2)	Oracle Net Client 10.2 (6)	Yes
	Oracle JDBC 10g R2 (10.2.0.1) (5) (6)	Yes
Oracle 9.2	Oracle Net Client 9.2	Yes
	Oracle JDBC 9i (9.2.0.5) (5)	Yes
Progress OpenEdge 10.1B	OpenEdge 10.1B ODBC (2)	
	OpenEdge 10.1B JDBC (2) (5)	
SFDC Framework	OpenAccess ODBC driver for SFDC	
Sybase Adaptive Server Enterprise 12.5	Sybase Open Client 12.5	
	jConnect JDBC driver 6.05 (2) (5)	
Sybase Adaptive Server Enterprise 15	Sybase Open Client 15	
	jConnect JDBC driver 6.05 (2) (5)	
Sybase Adaptive Server IQ 12.6	Sybase ODBC 9 for Adaptive Server IQ 12.6	

Sybase Adaptive Server IQ 12.7	Sybase ODBC 9 for Adaptive Server IQ 12.7	
Sybase SQL Anywhere (ASA) 10	Sybase ODBC 9 for Adaptive Server IQ 12.7 (2)	
	Sybase SQL Anywhere ODBC Driver 10 (2)	

- (1) OLAP connectivity is NOT supported by Desktop Intelligence. Dashboard and Analytics supports OLAP data sources for Query on Universe on Windows.
- (2) Connectivity not supported for Dashboard and Analytics.
- (3) Connectivity not supported for Performance Manager. Other Dashboard and Analytics products are supported.
- (4) Connectivity not supported for Predictive Analysis.
- (5) Connectivity not supported for Desktop Intelligence.
- (6) Oracle Real Application Cluster (RAC) is supported.
- (7) Supported through Generic ODBC layer.

Source and Data Model Versions for Universe Builder

Meta Data Model	Database	Middleware
Universe Builder BusinessObjects Data Integrator Plug-in		
CWM from BusinessObjects Data Integrator 6.X/XI/XIR2	N/A	N/A
Universe Builder CWM OLAP Plug-in		
CWM OLAP 1.0	N/A	N/A
CWM OLAP 1.1	N/A	N/A
Universe Builder CWM Relational Plug-in		
CWM 1.0	N/A	N/A
CWM 1.1	N/A	N/A
Universe Builder DB2 Cube Views Plug-in		
IBM DB2 Cube Views 8.1	IBM DB2/UDB for NT/Unix 8.1	DB2 Client 8.1
Universe Builder DB2 Data Warehouse Center Plug-in		
CWM from DB2 Data Warehouse Center 8.X	N/A	N/A
Universe Builder Oracle Data Warehouse Plug-in		
OLAP/Relational CWM from Oracle Warehouse Builder 10g	N/A	N/A
OLAP/Relational CWM from Oracle Warehouse Builder 9i	N/A	N/A

Meta Data Model	Database	Middleware
Universe Builder Oracle OLAP Plug-in		
Oracle Option OLAP 10.2.0.2.0	Oracle 10gR2 (10.2.0.2.0) (2)	Oracle Net Client 10.2
Oracle Option OLAP 10.1.0.1	Oracle 10g R1 (10.1.0.1)	Oracle Net Client 10.1
Oracle Option OLAP 10.1.0.2	Oracle 10g R1 (10.1.0.2)	Oracle Net Client 10.1
Oracle Option OLAP 10.1.0.3	Oracle 10g R1 (10.1.0.3)	Oracle Net Client 10.1
Oracle Option OLAP 10.1.0.4	Oracle 10g R1 (10.1.0.4) (1)	Oracle Net Client 10.1
Oracle Option OLAP 9.2.0.5	Oracle 9.2	Oracle Net Client 9.2

Remark: When the Database & Middleware are not applicable (N/A), the source is an XML file compliant with the metadata format.

- (1) Oracle database server requires Patch 4504204
- (2) The following Oracle patches are required on the server OLAP 10.2.0.2.0:

Patch 4722589: Description SQL VIEW JOINING TWO ACTIVE CATALOG TABLE FUNCTION VIEWS NOT WORKING

Patch 4429146: Description INCORRECT LIMIT GENERATED ON TABLE FUNCTION WHEN LABEL CLAUSE USED IN LIMITMAP

Failure to properly install the Oracle patches will cause Universe Builder to fail. In addition, Oracle Cubes created in earlier versions must be migrated thru analytical Workspace Manager for cubes to be functional.

Supported Data Sources for Crystal Reports

Provider Name	Data Connector	Unicode Support
OLAP		
Hyperion Essbase Server 7.1.x	Hyperion Essbase API 7.1.x	Yes
Hyperion System 9	Hyperion Essbase client 9.0	
	Hyperion Essbase client 9.2	
	Hyperion Essbase client 9.3	
Microsoft SQL Server Analysis Services 2000 SP4	Microsoft SQL Server 2000 Analysis Services 8.0 OLE DB Provider SP4	
Microsoft SQL Server Analysis Services 2005 SP1	Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider SP1	
Microsoft SQL Server Analysis Services 2005 SP2	Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider SP2	
Microsoft SQL Server Analysis Services 2008	Microsoft SQL Server 2008 Analysis Services 10.0 OLE DB Provider	
RDBMS		
Generic JDBC Data Sources	Java 1.5	Yes
Generic ODBC Data Sources	ODBC	Yes
Generic OLEDB Data Sources	OLEDB	Yes
HP NeoView 2.2	HP NeoView ODBC 2.2	Yes
HP Neoview 2.3.1	HP Neoview ODBC 2.3.1	Yes
IBM DB2/UDB for iSeries 5.3	DB2 Client 8.2	Yes
	IBM iSeries Access (ODBC) 5.3	Yes
	DB2 JDBC Universal Driver	Yes
	IBM iSeries Access (OLEDB) 5.3	Yes
	DataDirect ODBC 5.3 (3)	Yes
IBM DB2/UDB for iSeries 5.4	DB2 Connect 9.1	
	IBM iSeries Access (ODBC) 5.4	
	DB2 Universal JDBC Driver	
	DataDirect ODBC 5.3 (3)	Yes
IBM DB2/UDB for NT/Unix/Linux 8.2	DB2 Client 8.2	Yes
	DB2 JDBC 8.2	Yes
	DB2 OLEDB 8.2	Yes
	DataDirect ODBC 5.3 (3)	Yes
IBM DB2/UDB for NT/Unix/Linux 9.1 (1)	DB2 Client 9.1	Yes
	DB2 JDBC 9.1	Yes
	DB2 OLEDB 9.1	Yes

Provider Name	Data Connector	Unicode Support
	DataDirect ODBC 5.3 (3)	Yes
IBM DB2/UDB for NT/Unix/Linux 9.5	DB2 Client 9.5	
	DB2 Universal JDBC Driver	Yes
	DB2 OLEDB 9.5	Yes
	DataDirect ODBC 5.3 (1)	Yes
IBM DB2/UDB for zSeries 7	DB2 Client 8.1	Yes
	DB2 ODBC Client 8.1	Yes
	DataDirect ODBC 5.3 (3)	Yes
IBM/DB2/UDB for zSeries 8	DB2 Client 8.2	Yes
	DB2 Universal JDBC Driver (5)	Yes
	DataDirect ODBC 5.3 (3)	Yes
IBM Informix Dynamic Server 10.0	IBM Informix ODBC SDK 2.90	Yes
	DataDirect ODBC 5.3 (3)	Yes
IBM Informix Dynamic Server 9.4	IBM Informix ODBC SDK 2.90	Yes
	DataDirect ODBC 5.3 (3)	Yes
Ingres 2006	Ingres ODBC 3.5	Yes
Microsoft Access 2003	DAO 3.6	Yes
	Microsoft ODBC MDAC 2.8	Yes
	Microsoft OLEDB MDAC 2.8	Yes
Microsoft Access 2007	2007 Office System Driver: ODBC	Yes
	2007 Office System Driver: OLEDB	Yes
Microsoft SQL Server 2000 SP4	JDBC SQL Server 2000	Yes
	Microsoft ODBC MDAC 2.8	Yes
	Microsoft OLEDB MDAC 2.8	Yes
	DataDirect ODBC 5.3 (3)	Yes
Microsoft SQL Server 2005 RTM/SP1/SP2	JDBC SQL Server 2005	Yes
	Microsoft ODBC MDAC 2.8	Yes
	Microsoft ODBC SNAC (Native Client)	Yes
	Microsoft OLEDB MDAC 2.8	Yes
	Microsoft OLEDB SNAC (Native Client)	Yes
	DataDirect ODBC 5.3 (3)	Yes

Microsoft SQL Server 2008	JDBC SQL Server 2008	Yes
	Microsoft ODBC MDAC 2.8	Yes
	Microsoft ODBC SNAC (Native Client)	Yes
	Microsoft OLEDB MDAC 2.8	Yes
	Microsoft OLEDB SNAC (Native Client)	Yes
	DataDirect ODBC 5.3 (3)	Yes
MySQL AB 5.0	MySQL AB ODBC 3.51.12	Yes
	MySQL AB JDBC 5.0	Yes
NCR Teradata V2R6	NCR Teradata ODBC 3.05 (TTU 8.1)	Yes
NCR Teradata V2R6.1	NCR Teradata ODBC 3.06 (TTU 8.2)	Yes
	NCR Teradata JDBC 3.04 (TTU 8.2)	
NCR Teradata V2R6.2	NCR Teradata ODBC 3.06 (TTU 8.2)	Yes
	NCR Teradata JDBC 3.04 (TTU 8.2)	
Teradata V12.0	Teradata ODBC TTU 12.00.00.01	Yes
	Teradata JDBC TTU 12.00.00.01	Yes
Netezza NPS Server 2.5	Netezza ODBC 2.5	Yes
Netezza NPS Server 3.0	Netezza ODBC 3.0	Yes
Netezza NPS Server 3.1	Netezza ODBC 3.1	Yes
	Netezza JDBC Access	
Netezza NPS Server 4.0	Netezza ODBC 4.01	Yes
	Netezza JDBC Access	
Oracle 11g R1 (11.1)	JDBC Oracle 11G R1 (4)	Yes
	ODBC Oracle 11G R1 (4)	Yes
	OLEDB Oracle 11G R1 (4)	Yes
	Oracle Net Client 11G R1 (4)	Yes
	DataDirect ODBC 5.3 (3) (4)	Yes
Oracle 10g R1 (10.1)	JDBC Oracle 10.1 (4)	Yes
	ODBC Oracle 10.1 (4)	Yes
	OLEDB Oracle 10.1 (4)	Yes
	Oracle Net Client 10.1 (4)	Yes
	DataDirect ODBC 5.3 (3) (4)	Yes
Oracle 10g R2 (10.2)	JDBC Oracle 10.2 (4)	Yes
	ODBC Oracle 10.2 (4)	Yes
	OLEDB Oracle 10.2 (4)	Yes
	Oracle Net Client 10.2 (4)	Yes
	DataDirect ODBC 5.3 (3) (4)	Yes
Oracle 9.2	JDBC Oracle 9.2	Yes
	ODBC Oracle 9.2	Yes
	OLEDB Oracle 9.2	Yes
	Oracle Net Client 9.2	Yes
	DataDirect ODBC 5.3 (3)	Yes
Progress OpenEdge 10.0B	OpenEdge SQL 10.0B ODBC	Yes
	OpenEdge SQL 10.0B JDBC	Yes
PostgreSQL 8.2	PostgreSQL 8.2 ODBC	Yes
	PostgreSQL 8.2 JDBC	Yes

Sybase Adaptive Server Enterprise 12.5	JDBC Sybase 12.5	Yes
	ODBC Sybase 12.5	Yes
	Sybase Open Client 12.5	
	DataDirect ODBC 5.3 (3)	Yes
Sybase Adaptive Server Enterprise 15	Sybase Open Client 15	
Technology		
ADO. NET	MS .NET Framework 1.0	Yes
	MS .NET Framework 1.1	Yes
	MS .NET Framework 2.0	Yes
COM	N/A	Yes
Microsoft Excel 2000	DAO 3.6	Yes
	ODBC	Yes
	OLEDB	Yes
Microsoft Excel 2003	DAO 3.6	Yes
	ODBC	Yes
	OLEDB	Yes
Microsoft Excel 2007 (2)	ODBC	
	OLEDB	
Microsoft Exchange 2000	Crystal Reports Outlook/Exchange driver	
Microsoft Exchange 2003	Crystal Reports Outlook/Exchange driver	Yes
Field Definitions	N/A	Yes
Java Bean	JDK 1.5	Yes
Salesforce.com	Crystal Reports Salesforce.com driver	Yes
XML	JDK 1.5	Yes

- (1) IBM DB2 v9.1 requires a minimum of Windows 2003 SP1 to be the Operating System for Windows deployments.
- (2) DAO technology cannot be used to access the Microsoft Office 2007 file formats: Microsoft Access 2007 .accdb, Microsoft Excel 2007 .xlsx (XML) and .xlsb (Binary). These file formats are supported via ODBC and OLEDB.
- (3) DataDirect drivers for Crystal Reports are available from Business Objects. See the Crystal Reports Start Page for download details.
- (4) Oracle Real Application Cluster (RAC) is supported.
- (5) Supported for all operating systems listed in the Supported Operating Systems section, except Linux (Red Hat/SUSE).

Crystal Reports Reporting Data Sources Supported for Scheduling Only

Provider Name	Data Connector	Unicode Support
RDBMS		
IBM Informix Dynamic Server 10.0	IDS Client 10.0	
IBM Informix Dynamic Server 9.4	IDS Client 9.4	
Technology		
ACT 6	ACT 6	
Borland Database Engine 5.1	BDE 5.1	
Microsoft Exchange 5.5	Crystal Reports Outlook/Exchange driver	
File System	N/A	Yes
Lotus Notes 6	ODBC Lotus Notes 6	Yes
Lotus Notes 7	ODBC Lotus Notes 7	Yes
Microsoft IIS Log	N/A	
Microsoft Outlook 2000	Microsoft Office 2000	
Microsoft Outlook 2003	Microsoft Office 2003	
Microsoft Outlook 2007	Microsoft Office 2007	
NT Event Log	N/A	
Pervasive SQL 2000	ODBC Pervasive 2000	Yes
	Pervasive SQL Client 2000	
Pervasive SQL 8	ODBC Pervasive 8	Yes
Salesforce.com	Crystal Reports Salesforce.com driver	Yes
Text	ODBC	Yes
Web Log	N/A	
Xbase	N/A	

Scheduled and on demand reporting

Schedule only indicates that the data connectivity is assumed to be single-threaded. Customers are recommended to use these with

scheduled Crystal Reports instances; as concurrent on-demand reports will be handled serially.

Other connectivity are assumed to be multi-threaded and suitable to be used for both scheduled and on-demand Crystal Reports instances as concurrent on-demand reports will be handled in parallel.

Generic ODBC, OLEDB and JDBC: Limitation

(OLEDB and JDBC Supported for Crystal Reports Only)

(ODBC Supported for Crystal Reports, Desktop Intelligence and Web Intelligence Only)

Database server, Client and ODBC/JDBC/OLEDB driver used must support multiple threads.

Generic JDBC: 3rd Party JDBC Type 4-compliant drivers may potentially have issues as not all combinations have been tested, but are supported for *relational database access* as a general rule.

Generic ODBC: 3rd Party ODBC Level 2-compliant Drivers may potentially have issues as not all combinations have been tested yet, but are supported as a general rule.

OLAP Connectivity for Voyager

Provider Name	Data Connector
EPM MDX Connector	BusinessObjects EPM Profitability MDX Connector
Hyperion Essbase Server 7.1.x	Hyperion Essbase API 7.1.x
Hyperion System 9	Hyperion Essbase client 9.0
	Hyperion Essbase client 9.2
	Hyperion Essbase client 9.3
MS SQL Server Analysis Services 2000 SP4	Microsoft SQL Server 2000 Analysis Services 8.0 OLE DB Provider SP4
MS SQL Server Analysis Services 2005 SP1	Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider SP1
MS SQL Server Analysis Services 2005 SP2	Microsoft SQL Server 2005 Analysis Services 9.0 OLE DB Provider SP2
MS SQL Server Analysis Services 2008	Microsoft SQL Server 2008 Analysis Services 10.0 OLE DB Provider

Note: BusinessObjects Voyager now has added connectivity support to the BusinessObjects Profitability application on Windows only. Refer to release notes for more details.

Support for SAP Application Servers

BusinessObjects XI Integration for SAP Solutions must be installed in order to use an SAP application server as a data source. For the latest information on SAP platforms required by BusinessObjects XI Integration for SAP Solutions, please visit the support area of the website: <https://www.sdn.sap.com/irj/sdn/businessobjects-articles>. The following list of products is applicable to SAP application server support:

- Crystal Reports (OLAP and Relational)
- Dashboard Builder (OLAP)
- Live Office (OLAP and Relational)
- QaaWS (OLAP)
- Voyager (OLAP)
- Web Intelligence (OLAP)

Other Tools

Reverse Proxy Servers

- Apache HTTP Server 2.2
- WebSEAL 6.0 (from IBM Tivoli Access Manager)
- Microsoft Internet Security and Acceleration (ISA) Server 2006

LDAP Directory

- IBM Tivoli Directory Server 5.2
- IBM Tivoli Directory Server 6.0
- IBM Tivoli Directory Server 6.1
- Lotus Domino Directory 6.0.2
- Lotus Domino Directory 6.5.3
- Microsoft Active Directory Application Mode 2003 (ADAM)
- Microsoft Active Directory Application Mode 2003 (ADAM) SP1
- Microsoft Active Directory Application Mode 2008 (ADAM)
- Novell eDirectory 8.7.3
- Novell eDirectory 8.8
- Oracle Internet Directory 10gR3 (10.1.3)
- Sun Java System Directory Server 5.2
- Sun Java System Directory Server Enterprise 6.0

Active Directory

- Microsoft Active Directory 2000
- Microsoft Active Directory 2003
- Microsoft Active Directory 2008

Access Management

- eTrust (Netegrity) Siteminder 6.0
- eTrust (Computer Associates) Siteminder 12.0

Office

- Microsoft Office 2007 SP1
- Microsoft Office 2003 SP3
- Microsoft Office XP SP3
- Microsoft Office XP SP2

Admin Platform

- Citrix Presentation Server 4

Product/Language Support on Citrix

- Citrix is supported for BusinessObjects desktop products only.
- Citrix is not supported for Chinese and Korean.

Reader

- Acrobat Reader 7.x
- Acrobat Reader 8.1.2
- Acrobat Reader 9.0

.NET Framework

- .NET 1.1
- .NET 2.0
- .NET 3.0
- .NET 3.5

File Transfer Protocol (FTP) Requirements

The following are the guidelines that must be supported by any FTP Server being used in conjunction with BusinessObjects Enterprise as a scheduling destination.

- FTP server needs to support using “./” as a directory
- FTP server needs to support specifying a directory with a trailing “/”
- FTP server needs to support filenames that are 20+ characters (if destination file names are generated randomly by BusinessObjects Enterprise.)
- FTP server needs to support specifying file names starting with a “~” character (if destination file names are generated randomly by BusinessObjects Enterprise.)

Finding More Information

For more information and resources, refer to the product documentation and visit the support area of the web site at: <http://help.sap.com>

© 2008 SAP Business Objects. All rights reserved. Business Objects owns the following U.S. patents, which may cover products that are offered and licensed by Business Objects: 5,295,243; 5,339,390; 5,555,403; 5,590,250; 5,619,632; 5,632,009; 5,857,205; 5,880,742; 5,883,635; 6,085,202; 6,108,698; 6,247,008; 6,289,352; 6,300,957; 6,377,259; 6,490,593; 6,578,027; 6,581,068; 6,628,312; 6,654,761; 6,768,986; 6,772,409; 6,831,668; 6,882,998; 6,892,189; 6,901,555; 7,089,238; 7,107,266; 7,139,766; 7,178,099; 7,181,435; 7,181,440; 7,194,465; 7,222,130; 7,299,419; 7,320,122 and 7,356,779.

Business Objects and the Business Objects logo, BusinessObjects, Business Objects Crystal Vision, Business Process On Demand, BusinessQuery, Cartesis, Crystal Analysis, Crystal Applications, Crystal Decisions, Crystal Enterprise, Crystal Insider, Crystal Reports, Crystal Vision, Desktop Intelligence, Inxight, the Inxight Logo, LinguistX, Star Tree, Table Lens, ThingFinder, Timewall, Let There Be Light, Metify, NSite, Rapid Marts, RapidMarts, the Spectrum Design, Web Intelligence, Workmail and Xcelsius are trademarks or registered trademarks in the United States and/or other countries of Business Objects and/or affiliated companies. Business Objects is an SAP company. SAP is the trademark or registered trademark of SAP AG in Germany and in several other countries. All other names mentioned herein may be trademarks of their respective owners.