

SAP BusinessObjects Edge BI 3.1, version with Data Management for Windows – Supported Platforms



Applies to:

SAP BusinessObjects Edge BI 3.1, version with data management for Windows

Summary

Supported Platforms Documented for SAP BusinessObjects Edge BI 3.1

Company: SAP

Created on: 13 March 2009

Table of Contents

| | |
|---|----|
| Introduction | 4 |
| Products..... | 4 |
| Desktop | 4 |
| Server..... | 4 |
| Languages | 4 |
| Supported Operating Systems..... | 5 |
| Desktop Products..... | 5 |
| Server Products | 5 |
| SAP BusinessObjects and Microsoft Critical Patches | 6 |
| Minimum Screen Resolution | 6 |
| Minimum Hardware Requirements for SAP BusinessObjects Edge BI 3.1, version with data management (excluding Data Services 3.1 SP1) | 6 |
| Minimum Hardware Requirements for SAP BusinessObjects Data Services XI 3.1 SP1 components | 6 |
| Data Services Designer | 6 |
| Data Services Job Server | 7 |
| Data Services Access Server..... | 7 |
| Data Services Management Console..... | 7 |
| Data Services Address Server | 7 |
| Disk Space Requirements for Referential Data..... | 8 |
| Supported Application Servers | 10 |
| Application Server Incremental Release Support Policy | 10 |
| JDK Version Support Policy | 10 |
| Supported HTTP Servers..... | 10 |
| Supported Portal Servers..... | 10 |
| Portal Server Minor Release Support Policy | 10 |
| Supported Browsers (excluding Data Services 3.1 SP1) | 11 |
| SVG and Flash support for Dashboard and Analytics | 11 |
| Supported Browsers for Data Services 3.1 SP1 | 11 |
| Data Source Middleware Support | 11 |
| ODBC DSN Support..... | 11 |
| CMS Database (Repository) & Audit Databases | 12 |
| Dashboard and Analytics Repository Databases | 12 |
| Web Intelligence, Desktop Intelligence, Dashboard and Analytics Data Sources..... | 14 |
| Source and Data Model Versions for Universe Builder | 17 |
| Supported Data Sources for Crystal Reports | 19 |
| Crystal Reports Reporting Data Sources Supported for Scheduling Only | 23 |
| Scheduled and on demand reporting..... | 24 |
| Generic ODBC, OLEDB and JDBC: Limitation | 24 |
| OLAP Connectivity for Voyager | 25 |
| Application Connectivity for Data Services 3.1 SP1 | 25 |
| Database Connectivity Supported by Data Services 3.1 SP1 | 27 |
| Database Middleware Support..... | 29 |
| Technology Connectivity | 29 |

| | |
|--|----|
| Message Client Library Support..... | 29 |
| Files Connectivity | 29 |
| Support for SAP Application Servers | 30 |
| Support for PeopleSoft Enterprise | 30 |
| Support for JD Edwards EnterpriseOne..... | 30 |
| Support for Oracle E-Business Suite | 30 |
| Support for Siebel | 30 |
| Support for Polestar XI 3.1..... | 30 |
| Reverse Proxy Servers | 30 |
| LDAP Directory | 31 |
| Active Directory | 31 |
| Access Management..... | 31 |
| Office..... | 31 |
| Admin Platform..... | 31 |
| Product/Language Support on Citrix..... | 31 |
| Reader | 31 |
| .NET Framework | 32 |
| Simple Network Management Protocol (1) | 32 |
| File Transfer Protocol (FTP) Requirements..... | 32 |
| Finding More Information | 33 |
| Copyright..... | 34 |

Introduction

This document contains information specific to platforms and configurations for the SAP BusinessObjects Edge BI 3.1, version with data management 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

- SAP BusinessObjects™ Edge 3.1 Client Tools(Win32 clients)
- Data Services 3.1 SP1 (Client Components) (1)
- SAP BusinessObjects™ Live Office (3)
- 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) (3)

(1) Available in English only.

(2) Not supported on Windows Vista and Windows 64-bit O/S.

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

Server

- SAP BusinessObjects™ Edge 3.1 (Server Components)
- Data Services 3.1 SP1

Languages

- Chinese Simplified
- Chinese Traditional
- Danish
- Dutch
- English (1)

- French
- German
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese (Brazil)
- Spanish
- Swedish
- Russian
- Thai

(1) Data Services 3.1 SP1 is supported in English only.

Supported Operating Systems

Desktop Products

- Windows XP SP2 Professional
- Windows Vista (1) (3)
- Windows Vista SP1 (1) (3)
- Windows Server 2003 SP1 (1) (2)
- Windows Server 2003 SP2 (1) (2)
- Windows Server 2003 R2 (1) (2)
- Windows Server 2008 (1) (2) (3)

(1) 32-bit and 64-bit O/S editions supported (No Native 64 bit support, only 64 bit compatibility mode)

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

(3) Data Services 3.1 SP1 is not supported

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) (3)

(1) 32-bit and 64-bit O/S editions supported (No Native 64 bit support, only 64 bit compatibility mode)

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

(3) Data Services 3.1 SP1 is not supported

SAP BusinessObjects and Microsoft Critical Patches

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

Specified Windows versions have been successfully tested by Business Objects. The compatible service pack releases of the specified versions will be supported as they are made available, but may not have been tested by Business Objects. Exceptions in support will be documented

Minimum Screen Resolution

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

Minimum Hardware Requirements for SAP BusinessObjects Edge BI 3.1, version with data management (excluding Data Services 3.1 SP1)

- 2.0 GHz Pentium 4-class processor
- 2 GB RAM
- 5.6 GB hard disk space for SAP BusinessObjects Edge BI 3.1, version with data management for complete install excluding Data Services 3.1 SP1

Note 1:

SAP BusinessObjects Edge BI 3.1, version with data management software is supported running on 32-bit versions of Windows running on x86 and x64 CPUs made by AMD and Intel.

SAP BusinessObjects Edge BI 3.1, version with data management software is supported running on 64-bit versions of Windows running on x64 CPUs made by AMD and Intel if it can reference the 32-bit operating system libraries as well as the 32-bit database and application client libraries.

Note 2:

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

Minimum Hardware Requirements for SAP BusinessObjects Data Services XI 3.1 SP1 components

Windows support is limited strictly to AMD/Intel chipsets. SAP BusinessObjects Data Services 3.1 SP1 software for Windows is not warranted or supported for use on other chipsets.

- SAP BusinessObjects Data Services 3.1 SP1 is supported running on 32-bit versions of Windows running on x86 and x64 CPUs made by AMD and Intel.
- SAP BusinessObjects Data Services 3.1 SP1 is supported running on 64-bit versions of Windows running on x64 CPUs made by AMD and Intel if it can reference the 32-bit operating system libraries as well as the 32-bit database and application client libraries.

Data Services Designer

- Pentium processor with a minimum of 512 MB RAM (1 GB recommended) and 2GB free disk space
- Screen resolution of 1024 x 768 pixels with 16-bit or 65536 colors recommended (minimum 256 colors)
- Operating system paging file with a minimum setting of 1GB (2 GB recommended)

Data Services Job Server

- Pentium processor (dual processor with minimum 1 GHz recommended) with a minimum of 1GB RAM (2 GB recommended) RAM and 2 GB free disk space
- 2 GB virtual memory
- Recommended minimum pageable cache directory size: 2GB

Data Services Access Server

- Pentium processor (dual processor with minimum 1 GHz recommended) with at least 512 MB RAM (1 GB recommended)
- 1 GB virtual memory (recommended 2GB)

Data Services Management Console

- Pentium processor with at least 512 MB RAM (1 GB recommended) and 150MB free disk space

Data Services Address Server

- Pentium processor (minimum dual core 2GHz) with a minimum of 1GB (2GB recommended) free RAM
- 1 GB free disk space (plus additional disk space for referential data, 2.71 to 9.34 GB)
- Address Server and referential data should be installed on a local disk drive (not a network drive) for best performance

Disk Space Requirements for Referential Data

| Referential Data | Drive Space | Comments |
|---|-------------|--|
| U.S. Directory | 810 MB | |
| U.S. Z4 Change | 209 MB | |
| U.S. eLOT | 494 MB | |
| U.S. Centroid Geo (2006-2007) - TeleAtlas | 708 MB | |
| U.S. Address Geo - Teleatlas | 4.4 GB | |
| U.S. Centroid Geo – Navteq | 3.2 GB | |
| U.S. Address Geo - Navteq | 620 MB | |
| Canada Address Directory | 42.6 MB | |
| Australia Address Directory | 203 MB | |
| Japan (Native Script) Address Directory | 22 MB | This is the directory for the addressing engine which handles native Japanese writing systems. |
| Other International (All World) - Minimum | 2.71 GB | This is minimum directory requirements for the Global Address Cleanse transform (ga_country.dir, ga_loc12_gen.dir, ga_loc12_gen_nogit.dir, ga_loc34_gen.dir, ga_region_gen.dir). |
| Other International (All World) - Maximum | 9.37 GB | There are many other countries and all are purchased individually. This is the space if all are purchased. |

Repository Space Requirements for Data Cleansing Packages

| Language | Pre-Install Package (MB) | Oracle Repository Space (MB) | SQL Server Repository Space (MB) | DB2 Repository Space (MB) | MySQL Repository Space (MB) |
|------------|--------------------------|------------------------------|----------------------------------|---------------------------|-----------------------------|
| Arabic | 28 | 45 | 145 | 30 | 45 |
| Benelux | 250 | 280 | 213 | 210 | 285 |
| English | 355 | 590 | 2020 | 450 | 600 |
| Danish | 45 | 55 | 38 | 35 | 55 |
| Dutch | 97 | 110 | 325 | 75 | 110 |
| French | 80 | 85 | 250 | 60 | 80 |
| German | 160 | 370 | 313 | 275 | 360 |
| Italian | 65 | 75 | 235 | 55 | 75 |
| Portuguese | 75 | 85 | 285 | 60 | 80 |
| Spanish | 160 | 185 | 600 | 130 | 180 |
| Swedish | 25 | 30 | 25 | 30 | 30 |
| Swiss | 410 | 380 | 445 | N/A* | 455 |

*: the Swiss Cleansing Package is not supported on DB2. See Known Issue ADAPT01136144.

Temporary Disk Space for Data Cleansing Package Installation (1)

| Language | Oracle (MB) | SQL Server (MB) | DB2 (MB) | MySQL (MB) |
|------------|-------------|-----------------|----------|------------|
| Arabic | 75 | 28 | 478 | 26 |
| Benelux | 489 | 360 | 2700 | 173 |
| English | 1100 | 420 | 6920 | 390 |
| Danish | 83 | 61 | 500 | 29 |
| Dutch | 181 | 69 | 972 | 64 |
| French | 143 | 54 | 781 | 50 |
| German | 695 | 500 | 4160 | 421 |
| Italian | 141 | 52 | 895 | 390 |
| Portuguese | 125 | 48 | 771 | 44 |
| Spanish | 316 | 120 | 1920 | 111 |
| Swedish | 45 | 35 | 265 | 20 |
| Swiss | 933 | 675 | 5440 | 326 |

- (1) This space is only needed temporarily during installation within the %LINK_DIR%/DataQuality/datacleanse/ directory. They will be deleted at the end of the installation process.

Supported Application Servers

| Application Servers | JDK |
|---------------------|--------------|
| Tomcat 5.5 | JDK 1.5.0_xx |

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.

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 SAP BusinessObjects. Exceptions in support will be documented.

Supported Browsers (excluding Data Services 3.1 SP1)

| 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.

Supported Browsers for Data Services 3.1 SP1

| Browser OS | Browser | Plug-In |
|------------|---------------------------|-----------------------------|
| Windows | Internet Explorer 6.0 SP2 | Macromedia Flash Player 7.0 |
| | Internet Explorer 7.0 | Macromedia Flash Player 7.0 |

Data Source Middleware Support

SAP BusinessObjects Edge BI 3.1, version with data management 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 SUPPORTED PLATFORMS, 64-bit middleware connectivity is not supported.

ODBC DSN Support

SAP 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 |
| 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.

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) |

| Provider Name | Data Connector |
|--|---|
| 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.

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 | |

| Provider Name | Data Connector | Unicode Support |
|--|--|-----------------|
| | DB2 Universal JDBC Driver (5) | |
| IBM DB2/UDB for zSeries 7 | DB2 Client 8.1 (3) | |
| | 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 6 | |
| 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 JDBC 1.2 for SQL Server 2005 (2) (5) | Yes |
| | 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 |

| Provider Name | Data Connector | Unicode Support |
|--|--|-----------------|
| | 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 JDBC 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 | |

| Provider Name | Data Connector | Unicode Support |
|--------------------------------|---|-----------------|
| | 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 |

| Meta Data Model | Database | Middleware |
|---|-------------------------------|------------------------|
| 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 |
| 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.O:

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 |

| Provider Name | Data Connector | Unicode Support |
|---------------------------------------|-------------------------------------|------------------------|
| 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 |
| | 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 |

| Provider Name | Data Connector | Unicode Support |
|---------------------------|--------------------------------------|-----------------|
| | 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 |

| Provider Name | Data Connector | Unicode Support |
|--|---|------------------------|
| 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 | |
| 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 |

| Provider Name | Data Connector | Unicode Support |
|-------------------|----------------|-----------------|
| Field Definitions | N/A | Yes |
| Java Bean | JDK 1.5 | 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 |
|----------------------------------|---|-----------------|
| <i>RDBMS</i> | | |
| IBM Informix Dynamic Server 10.0 | IDS Client 10.0 | |
| IBM Informix Dynamic Server 9.4 | IDS Client 9.4 | |
| <i>Technology</i> | | |
| 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 | |

| Provider Name | Data Connector | Unicode Support |
|--------------------|---------------------------|-----------------|
| NT Event Log | N/A | |
| Pervasive SQL 2000 | ODBC Pervasive 2000 | Yes |
| | Pervasive SQL Client 2000 | |
| Pervasive SQL 8 | ODBC Pervasive 8 | 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 |

Application Connectivity for Data Services 3.1 SP1

| Data Source | Version | Client | Source | Target |
|---------------------------------|------------|---|--------|--------|
| JD Edwards ⁽¹⁾ | B7.33 | N/A | x | x |
| JD Edwards World ⁽¹⁾ | A7.1 | N/A | x | x |
| Oracle E-Business Suite | 11i | N/A | x | x |
| | Release 12 | N/A | x | x |
| PeopleTools ⁽²⁾ | 8.0 | N/A | x | x |
| | 8.1 | N/A | x | x |
| | 8.4 | N/A | x | x |
| Salesforce.com | 12.0 | AppExchange API for Enterprise version 12.0 | x | x |
| SAP BW | 3.1c | SAP GUI Client 4.0a | x | x |
| | 3.5 | SAP GUI Client 4.0a | x | x |
| SAP BI ⁽³⁾ | 7.0 | SAP GUI Client 6.40 | x | x |
| SAP R/3 via ABAP | 3.1i | SAP GUI Client 4.0a | x | |
| | 4.6 | SAP GUI Client 4.0a | x | |
| | 4.7 | SAP GUI Client 4.0a | x | |
| SAP ERP via ABAP | ECC 5.0 | SAP GUI Client 6.40 | x | |

| | | | | |
|-----------------------|---------|---------------------|---|---|
| | ECC 6.0 | SAP GUI Client 6.40 | x | |
| SAP R/3 via BAPI | 3.1i | SAP GUI Client 4.0a | x | x |
| | 4.6 | SAP GUI Client 4.0a | x | x |
| | 4.7 | SAP GUI Client 4.0a | x | x |
| SAP ERP via BAPI | ECC 5.0 | SAP GUI Client 6.40 | x | x |
| | ECC 6.0 | SAP GUI Client 6.40 | x | x |
| SAP R/3 via IDOC | 3.1i | SAP GUI Client 4.0a | x | x |
| | 4.6 | SAP GUI Client 4.0a | x | x |
| | 4.7 | SAP GUI Client 4.0a | x | x |
| SAP ERP via IDOC | ECC 5.0 | SAP GUI Client 6.40 | x | x |
| | ECC 6.0 | SAP GUI Client 6.40 | x | x |
| Siebel ⁽⁴⁾ | 7.5.2 | NA | x | x |
| | 7.7 | NA | x | x |

(1) Data Services 3.1 SP1 with JD Edwards Applications

If the Data Services server is on Windows, JDE One World is only supported with source database Microsoft SQL Server, Oracle, and DB2 on AS/400.

If the Data Services server is on Windows, and JDE World is using DB2 on AS/400, connection must be made through iSeries Access.

(2) Data Services 3.1 SP1 with Data Services with PeopleTools

PeopleSoft 8 support is implemented for Oracle only. The version of the Oracle client connecting to the underlying PeopleSoft database must be supported by Data Services.

(3) Data Services 3.1 SP1 with SAP BI

SAP BI 7.0 is supported only when BI 7.0 is configured in BW 3.5 emulation mode. Support for native BI 7.0 objects is not provided. Please check for updates in the Supported Platform documentation.

(4) Data Services 3.1 SP1 with Siebel

Siebel support is implemented for Microsoft SQL Server, DB2, and Oracle only. The version of the database client connecting to the underlying Siebel database must be supported by Data Services.

Database Connectivity Supported by Data Services 3.1 SP1

| Data Source ⁽¹⁾ | Version | Client | Repo | Source | Target |
|---|---------------------------|------------------------------------|------|--------|--------|
| ODBC to Generic Data Sources ⁽²⁾ | n/a | DataDirect ODBC Driver V5.2 | | x | x |
| | n/a | DataDirect ODBC Driver V5.3 | | x | x |
| | n/a | SQL Anywhere 9.0.1 | | x | x |
| HP NeoView | 2.2 | HP Neoview ODBC 2.2 | | x | x |
| | 2.3 | HP Neoview ODBC 2.3 | | x | x |
| IBM DB2/UDB for iSeries | 5.2 | IBM iSeries Access (ODBC) 5. | | x | x |
| | 5.2 | DB2 Connect Enterprise Edition 8.2 | | x | x |
| | 5.3 | IBM ISeries Access (ODBC) 5.3 | | x | x |
| | 5.3 | DB2 Connect Enterprise Edition 8.2 | | x | x |
| | 5.4 | IBM ISeries Access (ODBC) 5.4 | | x | x |
| IBM DB2/UDB for Windows/UNIX/Linux | 8.2 | DB2 Connect Enterprise Edition 8.2 | x | x | x |
| | 8.2 | DB2 Connect Personal Edition 8.2 | x | x | x |
| | 9.1 | DB2 Connect Enterprise Edition 9.1 | x | x | x |
| | 9.1 | DB2 Connect Personal Edition 9.1 | x | x | x |
| | 9.5 | DB2 Connect Personal Edition 9.5 | x | x | x |
| | 9.5 | DB2 Connect Enterprise Edition 9.5 | x | x | x |
| IBM DB2/UDB for zSeries | 7.1.1 | DB2 Connect Enterprise Edition 8.2 | | x | x |
| Informix IDS | 7.3.1 | Informix Client 2.90 | | x | x |
| | 9.4 | Informix Client 2.90 | | x | x |
| | 10 | Informix Client 2.90 | | x | x |
| Ingres | 2006 Enterprise Release 2 | Ingres ODBC driver 3.5 | | x | x |
| Microsoft SQL Server | 2000 SP4 | MS SQL Server Client 2000 | x | x | x |
| | 2005 | MS SQL Server Client 2005 | x | x | x |
| | 2005 SP1 | MS SQL Server Client 2005 | x | x | x |
| | 2005 SP2 | MS SQL Server Client 2005 | x | x | x |
| MySQL | 4.1 | MySQL ODBC Connector 3.51.10 | | x | x |
| | 5.0 | MySQL ODBC Connector 3.51.23 | x | x | x |
| | 5.0 | MySQL ODBC Connector 3.51.24 | x | x | x |
| | 5.0 | MySQL ODBC Connector 3.51.25 | x | x | x |
| Netezza ⁽³⁾ | NPS 3.1.4 | Netezza ODBC driver 3.1.4 | | x | x |
| | NPS 4.0 | Netezza ODBC driver 4.0 | | x | x |
| | NPS 4.5 | Netezza ODBC driver 4.5 | | x | x |
| Oracle | 9.2 | Oracle Net Client 9.2 | x | x | x |

| | | | | | |
|--|---------------|---|---|---|---|
| | 10g R1 (10.1) | Oracle Net Client 10.1 | x | x | x |
| | 10g R2 (10.2) | Oracle Net Client 10.1 | x | x | x |
| | 11g | Oracle Net Client 11 | x | x | x |
| Sybase Adaptive Server Enterprise ⁽⁴⁾ | 12.5 | Sybase Open Client 12.5 | x | x | x |
| | 15.0 | Sybase Open Client 15.0 | x | x | x |
| Sybase Adaptive Server IQ ⁽⁵⁾ | 12.6 | Sybase ODBC 9 for Adaptive Server IQ 12.6 | | x | x |
| | 12.7 | Sybase ODBC 9 for Adaptive Server IQ 12.7 | | x | x |
| Teradata ⁽⁶⁾ | V2R6 | Teradata ODBC 3.04 | | x | x |
| | V2R6.1 | Teradata ODBC 3.05 | | x | x |
| | V2R6.2 | Teradata ODBC 3.05 | | x | x |
| | 12.0 | Teradata ODBC 12.0 | | x | x |

- 1) Rapid Marts are only supported when the Data Services 3.1 SP1 repository is:
 - DB2
 - Oracle
 - SQL Server
- 2) 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.
- 3) Netezza connectivity is not supported to Windows 64-bit servers due to limitations in the Netezza client.
- 4) Sybase Adaptive Server Enterprise is not supported as a repository for the cleansing packages.
- 5) Sybase IQ version 12.6 requires ESD 4.
- 6) The following apply to Data Services 3.1 SP1 support of Teradata as a source and/or target:
The versions of Teradata TTU client supported include:

| Teradata server version | Client version | ODBC driver |
|-------------------------|-----------------|--------------|
| V2R6 | TTU 8.0 | 03.04.00 |
| V2R6.1 | TTU 8.1 | 03.05.00 |
| V2R6.2 | TTU 8.2 | 03.06.00 |
| 12.0 | TTU 12.0 | 12.00 |

Teradata support requires the following TTU patches:

On Windows:

- cliv2.04.08.00.01.exe
- tbd5000.05.00.00.01.exe
- psl5000.05.00.00.01.exe
- pdtc5000.05.00.00.01.exe

- npaxsmo.01.03.01.00.exe
- npaxsmo.01.03.00.02.exe
- npaxsmo.01.03.00.01.exe

Database Middleware Support

Interoperability combinations between 32-bit / 64-bit releases of database client / server will be supported, so long as vendor compatibility between client middleware and server is guaranteed.

Technology Connectivity

| Data Source | Version | Client | Source | Target |
|----------------------|---------------------|--------|--------|--------|
| Data Federator XI R2 | 11.6.2 | N/A | x | |
| | 11.7 | N/A | x | |
| HTTP/HTTPS | 1.0 | N/A | x | x |
| | 1.1 | N/A | x | x |
| JMS | J2EE 1.0 compatible | N/A | x | x |
| SOAP ⁽¹⁾ | 1.1 | N/A | x | x |
| WSDL ⁽¹⁾ | 1.1 | N/A | x | x |

(1) Data Services 3.1 SP1 uses Apache Axis version 1.4 for its Web Services support. Axis version 1.4 provides support for WSDL version 1.1 and SOAP version 1.1 with the exception of the Axis servlet engine.

Message Client Library Support

| Message Client Library Support | | Compiler Version |
|--------------------------------|------------------|--|
| C++ API | Windows (32-bit) | Visual Studio 2003 version 7.1 |
| | Linux (32-bit) | g++ : gcc version 3.4.4 20050721 (Red Hat 3.4.4-2) |
| JAVA API | JDK 1.5.0.xx | JAVA version 5.0 |

Files Connectivity

| Data Source | Version | Client | Source | Target |
|--|---------|--------|--------|--------|
| Text files (delimited and fixed width) | N/A | N/A | x | x |

| | | | | |
|--------------------|--------------------|-----|---|---|
| COBOL | ANSI 85 | N/A | x | |
| Excel | 97, 2000, XP, 2003 | N/A | x | |
| XML ⁽¹⁾ | 1.0 | N/A | x | x |

(1) Data Services 3.1 SP1 supports XML Schema version 1.0 as defined by W3c.org.

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://service.sap.com/bosap-support> .

Support for PeopleSoft Enterprise

BusinessObjects XI Integration for PeopleSoft Enterprise must be installed in order to use a PeopleSoft Enterprise as a data source. For the latest information on platforms required by BusinessObjects XI Integration for PeopleSoft Enterprise, please visit the support area of the website: <https://service.sap.com/bosap-support> .

Support for JD Edwards EnterpriseOne

BusinessObjects XI Integration for JD Edwards EnterpriseOne must be installed in order to use a JD Edwards EnterpriseOne as a data source. For the latest information on platforms required by BusinessObjects XI Integration for JD Edwards EnterpriseOne, please visit the support area of the website: <https://service.sap.com/bosap-support>

Support for Oracle E-Business Suite

BusinessObjects XI Integration for Oracle E-Business Suite must be installed in order to use Oracle E-Business Suite as a data source. For the latest information on platforms required by BusinessObjects XI Integration for Oracle E-Business Suite, please visit the support area of the website: <https://service.sap.com/bosap-support>

Support for Siebel

BusinessObjects XI Integration for Siebel must be installed in order to use Siebel as a data source. For the latest information on platforms required by BusinessObjects XI Integration for Siebel, please visit the support area of the website: <https://service.sap.com/bosap-support>

Support for Polestar XI 3.1

For the latest information on platforms required by BusinessObjects Polestar XI 3.1 please visit the support area of the website: <https://service.sap.com/bosap-support>

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 SAP 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

Simple Network Management Protocol (1)

- SNMP version 1
- SNMP version 2c
- SNMP version 3 (except encryption)

(1) Supported by Data Services 3.1 SP1

File Transfer Protocol (FTP) Requirements

The following are the guidelines that must be supported by any FTP Server being used in conjunction with SAP BusinessObjects Edge BI 3.1, version with data management 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 SAP BusinessObjects Edge BI 3.1, version with data management.)
- FTP server needs to support specifying file names starting with a “~” character (if destination file names are generated randomly by SAP BusinessObjects Edge BI 3.1, version with data management.)

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>

Copyright

© Copyright 2009 SAP AG. 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 AG. The information contained herein may be changed without prior notice.

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

Microsoft, Windows, Excel, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, System i, System i5, System p, System p5, System x, System z, System z10, System z9, z10, z9, iSeries, pSeries, xSeries, zSeries, eServer, z/VM, z/OS, i5/OS, S/390, OS/390, OS/400, AS/400, S/390 Parallel Enterprise Server, PowerVM, Power Architecture, POWER6+, POWER6, POWER5+, POWER5, POWER, OpenPower, PowerPC, BatchPipes, BladeCenter, System Storage, GPFS, HACMP, RETAIN, DB2 Connect, RACF, Redbooks, OS/2, Parallel Sysplex, MVS/ESA, AIX, Intelligent Miner, WebSphere, Netfinity, Tivoli and Informix are trademarks or registered trademarks of IBM Corporation.

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.

Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects S.A. in the United States and in other countries. Business Objects is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group 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.