Crystal Reports Server 2008 V1 for Windows - Supported Platforms



Applies to:

Crystal Reports Server 2008 V1 for Windows.

For more information, visit the **Business Objects homepage**.

Company: SAP

Created on: 24 August 2009

Table of Contents

Introduction	3
Products	3
Desktop	3
Server	3
Languages	3
Supported Operating Systems	4
Desktop Products	
Server Products	4
SAP BusinessObjects and Microsoft Critical Patches	4
Minimum Screen Resolution	4
Minimum Hardware Requirements for Crystal Reports Server 2008 V1	4
Supported Application Servers	5
Application Server Incremental Release Support Policy	
JDK Version Support Policy	
Supported HTTP Servers	6
Supported Portal Servers	6
Portal Server Minor Release Support Policy	6
Supported Browsers	6
SVG and Flash support for Dashboard and Analytics	
Data Source Middleware Support	
ODBC DSN Support	7
CMS Database (Repository) & Audit Databases	7
Supported Data Sources for Crystal Reports	8
Crystal Reports Reporting Data Sources Supported for Scheduling Only	13
Scheduled and on demand reporting	
Generic ODBC, OLEDB and JDBC: Limitation	
Support for Integration Option for Microsoft SharePoint software	14
Other Tools	14
Reverse Proxy Servers	14
LDAP Directory	14
Active Directory	
Access Management	15
Office	15
Admin Platform	15
Product/Language Support on Citrix	15
Reader	15
.NET Framework	15
VMWare ESX Support	15
File Transfer Protocol (FTP) Requirements	15
Finding More Information	16
Copyright	17

Introduction

This document contains information specific to platforms and configurations for the Crystal Reports Server 2008 V1 release.

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

- Crystal Reports Server 2008 V1 Client Tools(Win32 clients)
- SAP BusinessObjects[™] Live Office (1)
- Crystal Reports® Designer 2008 v1
- (1) .Net Framework 2.0 is a necessary minimum requirement.

Server

Crystal Reports Server 2008 V1 (Server Components)

Languages

- Chinese Simplified
- Chinese Traditional
- Danish
- Dutch
- English
- French
- German
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese (Brazil)
- Spanish
- Swedish
- Russian
- Thai

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(No Native 64 bit support, only 64 bit compatibility mode)
- (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(No Native 64 bit support, only 64 bit compatibility mode)
- (2) Data Center Edition, Enterprise Edition, Standard Edition, Web Edition

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 Crystal Reports Server 2008 V1

- 2.0 GHz Pentium 4-class processor
- 2 GB RAM

 5.6 GB hard disk space for Crystal Reports Server 2008 V1 for complete install excluding Data Services

Note:

Crystal Reports Server 2008 V1 software is supported running on 32-bit versions of Windows running on x86 and x64 CPUs made by AMD and Intel.

Crystal Reports Server 2008 V1 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: Additional languages can be installed in Crystal Reports Server 2008 V1 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
Tomcat 5.5	JDK 1.5.0_xx
JBoss 4.0.4	JDK 1.5.0_xx
Microsoft IIS 7.0	NA
Microsoft IIS 6.0	NA
Oracle Application Server 10gR3 (10.1.3) (1)	JDK 1.5.0_xx
SAP Web Application Server 7 (2)	JDK 1.4.2_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.

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

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

Browser OS	Browser	JVM
	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

Crystal Reports Server 2008 V1Suite 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
	Microsoft ODBC MDAC 2.8
MS SQL Server 2005 RTM/SP1/SP2	Microsoft ODBC SNAC (Native Client)

SAP COMMUNITY NETWORK

SDN - sdn.sap.com | BPX - bpx.sap.com | BOC - boc.sap.com

Provider Name	Data Connector
	Microsoft ODBC MDAC 2.8
MS SQL Server 2008	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.

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 Essbase client 9.0	
Hyperion System 9	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

Provider Name	Data Connector	Unicode Support
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
	DB2 Client 8.2	Yes
	IBM iSeries Access (ODBC) 5.3	Yes
IBM DB2/UDB for iSeries 5.3	DB2 JDBC Universal Driver	Yes
	IBM iSeries Access (OLEDB) 5.3	Yes
	DataDirect ODBC 5.3 (3)	Yes
	DB2 Connect 9.1	
	IBM iSeries Access (ODBC) 5.4	
IBM DB2/UDB for iSeries 5.4	DB2 Universal JDBC Driver	
	DataDirect ODBC 5.3 (3)	Yes
	DB2 Client 8.2	Yes
	DB2 JDBC 8.2	Yes
IBM DB2/UDB for NT/Unix/Linux 8.2	DB2 OLEDB 8.2	Yes
	DataDirect ODBC 5.3 (3)	Yes
	DB2 Client 9.1	Yes
IBM DB2/UDB for NT/Unix/Linux 9.1	DB2 JDBC 9.1	Yes
(1)	DB2 OLEDB 9.1	Yes
	DataDirect ODBC 5.3 (3)	Yes
	DB2 Client 9.5	
IDM DDG/IDD (NT/II : //: 0.5	DB2 Universal JDBC Driver	Yes
IBM DB2/UDB for NT/Unix/Linux 9.5	DB2 OLEDB 9.5	Yes
	DataDirect ODBC 5.3 (1)	Yes
	DB2 Client 8.1	Yes
IBM DB2/UDB for zSeries 7	DB2 ODBC Client 8.1	Yes
	DataDirect ODBC 5.3 (3)	Yes
	DB2 Client 8.2	Yes
IBM/DB2/UDB for zSeries 8	DB2 Universal JDBC Driver (5)	Yes
	DataDirect ODBC 5.3 (3)	Yes
IDMI () D () C () C	IBM Informix ODBC SDK 2.90	Yes
IBM Informix Dynamic Server 10.0	DataDirect ODBC 5.3 (3)	Yes
IBM Informix Dynamic Server 9.4	IBM Informix ODBC SDK 2.90	Yes

Provider Name	Data Connector	Unicode Support
	DataDirect ODBC 5.3 (3)	Yes
Ingres 2006	Ingres ODBC 3.5	Yes
	DAO 3.6	Yes
Microsoft Access 2003	Microsoft ODBC MDAC 2.8	Yes
	Microsoft OLEDB MDAC 2.8	Yes
Missout Assess 0007	2007 Office System Driver: ODBC	Yes
Microsoft Access 2007	2007 Office System Driver: OLEDB	Yes
	JDBC SQL Server 2000	Yes
M'((00) 00000 0D4	Microsoft ODBC MDAC 2.8	Yes
Microsoft SQL Server 2000 SP4	Microsoft OLEDB MDAC 2.8	Yes
	DataDirect ODBC 5.3 (3)	Yes
	JDBC SQL Server 2005	Yes
	Microsoft ODBC MDAC 2.8	Yes
Microsoft SQL Server 2005	Microsoft ODBC SNAC (Native Client)	Yes
RTM/SP1/SP2	Microsoft OLEDB MDAC 2.8	Yes
	Microsoft OLEDB SNAC (Native Client)	Yes
	DataDirect ODBC 5.3 (3)	Yes
	JDBC SQL Server 2008	Yes
	Microsoft ODBC MDAC 2.8	Yes
	Microsoft ODBC SNAC (Native Client)	Yes
Microsoft SQL Server 2008	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
WIYOUL AD J.U	MySQL AB JDBC 5.0	Yes
NCR Teradata V2R6	NCR Teradata ODBC 3.05 (TTU 8.1)	Yes
NCP Torodoto VOP6 4	NCR Teradata ODBC 3.06 (TTU 8.2)	Yes
NCR Teradata V2R6.1	NCR Teradata JDBC 3.04 (TTU 8.2)	
NCD Torodota VODC 0	NCR Teradata ODBC 3.06 (TTU 8.2)	Yes
NCR Teradata V2R6.2	NCR Teradata JDBC 3.04 (TTU 8.2)	
Teradata V12.0	Teradata ODBC TTU 12.00.00.01	Yes

Provider Name	Data Connector	Unicode Support
	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
Nata a NDO Osas as 0.4	Netezza ODBC 3.1	Yes
Netezza NPS Server 3.1	Netezza JDBC Access	
Natarra NDC Carray 4.0	Netezza ODBC 4.01	Yes
Netezza NPS Server 4.0	Netezza JDBC Access	
	JDBC Oracle 11G R1 (4)	Yes
	ODBC Oracle 11G R1 (4)	Yes
Oracle 11g R1 (11.1)	OLEDB Oracle 11G R1 (4)	Yes
	Oracle Net Client 11G R1 (4)	Yes
	DataDirect ODBC 5.3 (3) (4)	Yes
	JDBC Oracle 10.1 (4)	Yes
	ODBC Oracle 10.1 (4)	Yes
Oracle 10g R1 (10.1)	OLEDB Oracle 10.1 (4)	Yes
	Oracle Net Client 10.1 (4)	Yes
	DataDirect ODBC 5.3 (3) (4)	Yes
	JDBC Oracle 10.2 (4)	Yes
	ODBC Oracle 10.2 (4)	Yes
Oracle 10g R2 (10.2)	OLEDB Oracle 10.2 (4)	Yes
	Oracle Net Client 10.2 (4)	Yes
	DataDirect ODBC 5.3 (3) (4)	Yes
	JDBC Oracle 9.2	Yes
	ODBC Oracle 9.2	Yes
Oracle 9.2	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	
Deateur COL 0.0	PostgreSQL 8.2 ODBC	Yes
PostgreSQL 8.2	PostgreSQL 8.2 JDBC	Yes
	JDBC Sybase 12.5	Yes
Sybase Adaptive Server Enterprise	ODBC Sybase 12.5	Yes
12.5	Sybase Open Client 12.5	
	DataDirect ODBC 5.3 (3)	Yes
Sybase Adaptive Server Enterprise 15	Sybase Open Client 15	

Provider Name	Data Connector	Unicode Support
Technology		
	MS .NET Framework 1.0	Yes
ADO. NET	MS .NET Framework 1.1	Yes
	MS .NET Framework 2.0	Yes
COM	N/A	Yes
	DAO 3.6	Yes
Microsoft Excel 2000	ODBC	Yes
	OLEDB	Yes
	DAO 3.6	Yes
Microsoft Excel 2003	ODBC	Yes
	OLEDB	Yes
Microsoft Excel 2007 (2)	ODBC	
WICOSOIT EXCELEDOT (2)	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
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	
	ODBC Pervasive 2000	Yes
Pervasive SQL 2000	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 ondemand 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.

Support for Integration Option for Microsoft SharePoint software

For the latest information on platforms required by Integration Option for Microsoft SharePoint software, please visit the support area of the website.

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 Crystal Reports Server 2008 V1 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

VMWare ESX Support

For more information on VMWare ESX Support, please refer the Statement of Support for VMWare ESX Server.

File Transfer Protocol (FTP) Requirements

The following are the guidelines that must be supported by any FTP Server being used in conjunction with Crystal Reports Server 2008 V1as 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 Crystal Reports Server 2008 V1.)
- FTP server needs to support specifying file names starting with a "~" character (if destination file names are generated randomly by Crystal Reports Server 2008 V1.)

SDN - sdn.sap.com | BPX - bpx.sap.com | BOC - boc.sap.com © 2009 SAP AG 15

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

SAP COMMUNITY NETWORK SDN - sdn.sap.co

© 2009 SAP AG

16

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 p5, System p5, System x, 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.

SAP COMMUNITY NETWORK