

Applies to:

SAP Crystal Reports
SAP Crystal Reports for Visual Studio
SAP Crystal Reports for Eclipse
SAP Crystal Dashboard Design
SAP Crystal Presentation Design
SAP Crystal Server, SAP Crystal Reports Server

Summary

This document summarizes licensing for most products in the SAP Crystal solutions portfolio.

Authors: Daniel Haver, Blair Wheadon

Company: SAP

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Author Bio

Daniel Haver is a Solution Manager at SAP. His team works with the solutions offered through distributors, resellers, and the SAP online store.

Table of Contents

Introduction	3
SAP Crystal Reports	3
Usage with Terminal Servers	3
Upgrades	3
Training	3
Screenshots	3
Embedded SAP Crystal Dashboard Design Models	3
OEM Products	4
Application Redistribution	4
Definitions	4
SAP Crystal Reports 2013 and SAP Crystal Reports 2011	4
SAP Crystal Reports 2008, SAP Crystal Reports for Eclipse, and SAP Crystal Reports for Visual Studio	4
Crystal Reports XI Release 2	5
SAP Crystal Reports included with Visual Studio 2008	5
SAP Crystal Reports for Eclipse Embedded Designer	6
Report Creation API (RCAPI)	6
RDC Embeddable Report Designer	6
Licensing Responsibility	6
How to Get an OEM Contract	6
SAP Crystal Dashboard Design and SAP Crystal Presentation Design	7
Feature and License Comparison	7
Data Connections	9
Live Data Connections and Licensing	10
Redistribution Rights	10
Special Editions	10
SAP Crystal Server	11
NUL and CAL License Types Compared	11
Feature Availability by License Type	12
Publishing	12
Licensing Programs	13
Volume Licensing	13
Academic Licensing	13
Appendix 1: Product Name Changes	14
Appendix 2: Identifying Workstations with Crystal Reports Installed	15
Appendix 3: List of RDC Report Creation API Calls	16
Copyright	20

Introduction

This document provides a summary of major aspects of Crystal solutions licensing. It does not replace the End User License Agreement. This is not a legal document. While every effort is made to ensure this is an accurate summary, any errors or omissions in this whitepaper will be resolved by using the language in the appropriate End User License Agreement and Software Use Rights document.

SAP Crystal Reports

This section applies to the paid Crystal Reports design tool and the free Crystal Reports for Visual Studio and Crystal Reports for Eclipse products. All Crystal Reports products use a named user license. This means that every individual that has access to Crystal Reports requires a license. For example, two individuals that share workstations with a single install count as two named user licenses.

Usage with Terminal Servers

SAP Crystal Reports can be accessed through Citrix terminal servers or Microsoft Remote Desktop, but the number of named user licenses purchased must equal the number of individuals that have access to the software. Client applications that are accessed via terminal servers are considered server applications for the purposes of determining redistribution rights.

Upgrades

Discounted upgrade pricing is available for customers that upgrade from:

- Older versions of Crystal Reports
- SAP Crystal Reports for Eclipse (with registered copies)
- SAP Crystal Reports for Visual Studio (with registered copies)

After upgrading your license, the same named user can continue to use the old version. The old license is not transferrable to another individual.

Training

Workstations that are used exclusively for training purposes can use the new Training Workstation License included in SAP Crystal Reports 2008 SP2 or later that allows a workstation to be licensed for training purposes for the same price as a named user.

Screenshots

SAP Crystal Reports customers can take screenshots and redistribute them in any document or media provided they are not used in commercial training material or for-profit training material.

Embedded SAP Crystal Dashboard Design Models

Embedding Flash models in Crystal Reports does not require the viewing license as long as the model retrieves its data directly from the report. If the model retrieves its data using any other method (such as through a web service), then that will trigger the viewing license.

Embedding Dashboard Design models in a Crystal Reports is not a substitute for a proper dashboard.

OEM Products

In this scenario, you buy a product that includes or bundles Crystal Reports. This is what is known as an OEM relationship where SAP sells (or OEM's) the Crystal Reports designer to other software companies, who in turn bundle the designer with their software and sell it to end users. Crystal Reports in this scenario can only be used with data from the application it came with, and cannot be used as a general purpose reporting tool.

Application Redistribution

This section describes the rules that govern redistribution of software that embeds the Crystal Reports runtime engine, embeddable report designer, or uses the Report Creation APIs.

Definitions

Client Application	The runtime engine is installed on the client machine. All report processing is local to that machine.
Server Application	The runtime engine is integrated in a way that allows more than one user to access the engine either directly or indirectly. Client applications installed using Windows terminal servers (like Citrix or Microsoft Remote Desktop) are considered server applications.
Commercial Hosting Service	When money changes hands in exchange for application access, then a server application is considered part of a commercial hosting service and will require an OEM contract. This is not a new restriction. It appears as restriction against 'service bureau' usage in licenses prior to Crystal Reports 2008 SP2. We modernized the language in Crystal Reports 2008 SP2 to refer to the more common 'commercial hosting service'.

SAP Crystal Reports 2013 and SAP Crystal Reports 2011

SAP Crystal Reports 2013 and SAP Crystal Reports 2011 do not include a runtime engine. Customers are directed to use the free SAP Crystal Reports for Visual Studio, or SAP Crystal Reports for Eclipse products for embedding reports into applications.

SAP Crystal Reports 2008, SAP Crystal Reports for Eclipse, and SAP Crystal Reports for Visual Studio

This section applies to:

- .Net applications that include Crystal Reports 2008 for Visual Studio runtime engine.
- .Net applications that include the Crystal Reports for Visual Studio runtime engine
- Java applications that include the Crystal Reports for Eclipse runtime engine.

Application Type / Application Use	Client Applications	Server Application	Commercial Hosting Service
Internal business purposes*	Free	Free	Requires an OEM contract
Resold to 3 rd parties (redistributed)	Free	Requires the application developer to acquire a copy of Crystal Report for each 3 rd party deployment (installation) or an OEM contract.	Requires an OEM contract

*Applications that are used for internal business purposes can be accessed by both internal and external users with no additional licensing requirements. If there is a fee for external access, the application is considered a commercial hosting service and would require an OEM contract for any redistribution.

Crystal Reports XI Release 2

This section applies to redistribution rules for the COM (RDC), .Net, and Java (JRC) runtime engines included in Crystal Reports XI Release 2.

Application Type / Deployment Location	Client Application	Server Application	Commercial Hosting Service
Internal Deployment	Free	Free	Requires an OEM contract
External Deployment	Free if the application does not use the RDC RAPI or does not embed the RDC Embeddable Designer. Otherwise it's considered a server application.	Requires the application developer to acquire a copy of Crystal Reports Developer edition for each 3 rd party deployment (installation) or an OEM contract.	Requires an OEM contract

SAP Crystal Reports included with Visual Studio 2008

This section defines rules that govern redistribution of software that embeds the Crystal Reports runtime engine in the free version of Crystal Reports included with Visual Studio 2008 and prior. This product is only included in Visual Studio Professional Edition and higher.

Application Type / Used By	Client Application	Server Application	Commercial Hosting Service
Internal Deployment	Free	Free	Requires OEM contract
External Deployment	Free	Registration required here	Requires OEM contract

SAP Crystal Reports for Eclipse Embedded Designer

The Crystal Reports for Eclipse product includes an embedded designer that can be extracted from Eclipse and embedded into an RCP application. Redistributing applications that embed this report designer requires an OEM contract.

Report Creation API (RCAPI)

Crystal Reports XI Release 2 includes a set of APIs called the Report Creation APIs. These APIs allow for programmatic report creation and modification and are listed at the end of this document. RCAPI calls are always accessible, but there are limits on how applications that use the RCAPI can be redistributed.

RDC Embeddable Report Designer

This is a basic version of the Crystal Reports designer that can be embedded into client applications. Applications that include the embeddable designer are treated as RCAPI applications for the purposes of licensing.

Licensing Responsibility

It is the responsibility of the developer to ensure their application is properly licensed before redistributing it. Developers cannot distribute applications on the assumption that the application user will acquire the proper licenses.

How to Get an OEM Contract

Please contact our OEM sales team at oem_sales@sap.com.

SAP Crystal Dashboard Design and SAP Crystal Presentation Design

This section covers the 2013, 2011, and 2008 versions of SAP Crystal Presentation Design, SAP Crystal Dashboard Design, and SAP BusinessObjects Dashboards

Feature and License Comparison

	SAP Crystal Presentation Design	SAP Crystal Dashboard Design, personal edition	SAP Crystal Dashboard Design, departmental edition	SAP BusinessObjects Dashboards (formerly Xcelsius Enterprise)
Basic data presentation components	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Export to Adobe PDF and Microsoft Office PowerPoint	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dashboard components		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Live, refreshable data connections per model*		Two connections	Unlimited	Unlimited
Export to Web, Adobe AIR, Adobe Flash		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Connectivity to Adobe LiveCycle Data Services			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IBM Websphere, Microsoft SharePoint, and Microsoft SQL Server Reporting Services integration			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

	SAP Crystal Presentation Design	SAP Crystal Dashboard Design, personal edition	SAP Crystal Dashboard Design, departmental edition	SAP BusinessObjects Dashboards (formerly Xcelsius Enterprise)
Data Connectivity	None – static data only	Web Service XML Data Flash Variables Crystal Reports FS Command External Interface	Personal edition plus: Web Service XML Data Portal Data LCDS (Live Cycle Data Services) Live Office	Departmental edition plus: Query as a Web Service SAP NetWeaver BW
BI Platform Connectivity			SAP Crystal Reports Server 2008 SAP Crystal Server 2013 & 2011	SAP BusinessObjects XI 3.X SAP BusinessObjects BI 4.X SAP BusinessObjects Edge Series
Viewing License required for dashboards with live data connections			SAP Crystal Dashboard Viewing option	SAP BusinessObjects Interactive Viewing license
Limitations	This is a desktop presentation tool, and has no ability to connect to live data	A maximum of two web service and XML connections are supported in any given model. See the section called 'Data Connections' for more information.	<ul style="list-style-type: none"> Maximum of 100 named users can view a dashboard with live data connections. <ul style="list-style-type: none"> Cannot connect to SAP applications like SAP BusinessSuite or SAP All in One – except for SAP BusinessOne. Cannot be used with SAP BusinessObjects Enterprise or SAP Edge BI 	None

Data Connections

The personal edition supports a maximum of two web service connections from any model. Once the limit of two web service connections is reached, you cannot add additional connections in the Data Manager. The 'Web Service Connection' option is greyed out as shown below:

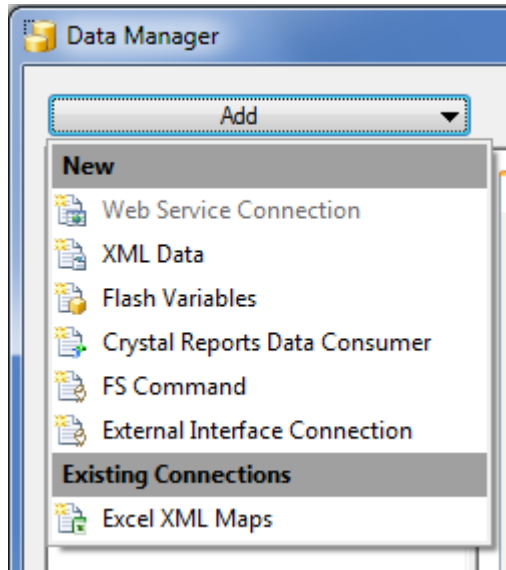


Figure 1: Data Manager in a model with 2 Web Service Connections

A web service connection is defined as a single method on a web service. Calling two separate methods on the same web service counts as two connections. The maximum number of connections supported in the personal and departmental editions, for each connection type:

Data connection in the personal edition	Maximum Connections per Model in personal edition	Maximum Connections per Model in departmental edition	Maximum Connections per Model in SAP BusinessObjects Dashboards
Web Service Connection	two	Unlimited	Unlimited
XML Data	two	Unlimited	Unlimited
Flash Variables	one	one	one
Crystal Reports Data Consumer	one	one	one
FS Command	Unlimited	Unlimited	Unlimited
External Interface Connection	Unlimited	Unlimited	Unlimited
Portal Data		one	one
Adobe Live Cycle Data Services (LCDS) for data push		Unlimited	Unlimited
Live Office		one	one
Query as a Web Service			Unlimited
SAP Netweaver BW			Unlimited

Live Data Connections and Licensing

A dashboard is considered to have a live data connection if it has any ability to refresh its data. This includes refreshing data through a data connection, publishing, pushing, or otherwise changing data in a generated SWF file. This includes batch update utilities that update data in a SWF file. Dashboards created by SAP Crystal Dashboard Design, departmental edition and SAP BusinessObjects Dashboards that have a live data connection require a viewing license.

Redistribution Rights

A 'self-contained' dashboards that has no external data connections can be freely redistributed, internally and externally, and in commercial applications. A dashboard with a live data connection can only be used for internal business purposes, and cannot be redistributed in any sale or lease. The paid creation or modification of a dashboard by a 3rd party is not considered redistribution and is allowed.

The commercial redistribution of dashboards with live data connections requires an OEM contract. Please contact our OEM sales team at oem_sales@sap.com.

Special Editions

The SAP Crystal Presentation Design, student edition is only available for use by full time or part time students in a secondary or post-secondary institution.

The SAP Crystal Presentation Design, enterprise edition is an enterprise wide license that licenses all employees and contractors of the corporate entity that holds the license. This license does not extend beyond corporate entities, for example to other subsidiary companies.

SAP Crystal Server

This section covers SAP Crystal Server 2013, SAP Crystal Server 2011, and SAP Crystal Reports Server 2008.

NUL and CAL License Types Compared

SAP Crystal Server supports combinations of Named User License (NUL) and Concurrent Access License (CAL). This table describes the benefits and drawbacks of each license type.

	NUL	CAL
Benefits	<p>Guaranteed access to the system.</p> <p>Ideal for heavy users, or users that must have access to the system (for example, quarter end reporting).</p>	<p>Flexibility – allows for a pool of access that can be used to grant logins.</p> <p>Ideal for casual, infrequent users.</p>
Drawbacks	<p>Every potential user must have a license.</p> <p>Not ideal for extranet deployments.</p>	<p>Once the pool of CAL licenses is consumed, no more CAL users can connect. This can be an issue when not enough CALs are configured.</p> <p>If the user doesn't explicitly logout, CALs can be retained in the system for a period of time.</p> <p>CALs are based on sessions, not users. If one user logs in to the BI Workbench (InfoView), Live Office, and Sharepoint at the same time, then they consume three CALs, not one. This can result in CALs being consumed faster than expected.</p>

For many customers, a combination of CAL and NUL licenses is appropriate depending on the mix of user types. CALs are best for casual reporting users, while NULs are best for managers, executives, and analysts need dedicated access.

SAP Crystal Server supports a maximum of 100 NUL and 250 CAL on a single server. Both NUL and CAL licenses can be combined in any way, up to these maximums. Licenses are offered in the license sizes defined in the next section. When adding new licenses to an existing system, the new licenses are additive. The total number of licenses available for a single deployment is the sum of the licenses in all installed key codes.

Feature Availability by License Type

Most features are supported in both NUL and CAL licenses. However some features are only available in one license type, as shown in this table:

Feature	Concurrent Access (CAL)	Named User (NUL)
License Sizes	5, 10, 20, 250	5, 50
Maximum Size	250	100
SAP Crystal Reports viewing	Included	Included
SAP Crystal Dashboard viewing	Not available	Included
SAP Lumira Integration	Not available	Included in SAP Crystal Server 2013, 2011 SP4+
SAP BusinessObjects Explorer	Not available	Included in SAP Crystal Server 2013 & 2011
Delivery of Content to Mobile Devices	No available	Available as an add-on
BI Workspaces (Dashboard Builder)	Not available	Included
Data Driven Publishing (see Publishing section below)	5 CAL can publish to 100 recipients 10 CAL can publish to 250 recipients 20 CAL can publish to 1,000 recipients 250 CAL can publish to unlimited recipients	Available as an add-on
SAP Crystal Reports Viewing	Included in both CAL and NUL	
Sharepoint Portal Integration Kit	Included in both CAL and NUL	
.NET and Java APIs	Included in both CAL and NUL	
Live Office	Included in both CAL and NUL	
All Other Features	Included in both CAL and NUL	

Publishing

Publishing is limited to a maximum number of recipients in a single publishing run. By default, publishing is only available with CAL key codes. You can add publishing to a NUL system by using the publishing add-on that can add support for publishing to 5,000 recipients in a single publishing run. This publishing add-on adds additional recipients to the existing recipients that are already configured for a deployment. For example, if you have a 5 CAL deployment, and add the publishing add-on, then you can publish to a total of 5,100 recipients in a single publishing run.

Licensing Programs

Volume Licensing

We offer a volume discount program based on the number of units purchased per transaction. The discount level is based on the total number of units of SAP Crystal Reports, SAP Crystal Dashboard Design, and SAP Crystal Presentation Design products (all versions, either upgrade or full product) that are purchased in a single transaction. Contact your local reseller for additional information.

Academic Licensing

Through the SAP University Alliances program, SAP Crystal Reports and other software is available to post-secondary institutions for use in programs leading to a degree, or for research purposes.

For more information visit the [SAP University Alliances Community Network site](#) or contact ua-support@sap.com.

Appendix 1: Product Name Changes

In mid-2010, some product names changed as we introduced the SAP Crystal portfolio. Legacy products older than the 2008 version continue with their existing names.

Old Name	New Name
Crystal Reports Server 2008	SAP Crystal Reports Server 2008
Crystal Reports 2008	SAP Crystal Reports 2008
Crystal Reports Developer Advantage	Option no longer available
Crystal Reports for Eclipse	SAP Crystal Reports version for Eclipse
Xcelsius Engage	SAP Crystal Dashboard Design, personal edition
Xcelsius Present	SAP Crystal Presentation Design
Xcelsius Engage Server	No new name – product is no longer available

In addition, with the 2011 release, SAP Crystal Reports Server is renamed to SAP Crystal Server to emphasize the positioning as an entry level BI solution. The 2013 release maintains the existing naming structure.

Appendix 2: Identifying Workstations with Crystal Reports Installed

Workstations with a version of Crystal Reports installed will have the following keys in the registry. You can use these keys with an automated software inventory tool to count the number of licenses in use.

Version and Edition	Registry Key
2011	HKEY_LOCAL_MACHINE\SOFTWARE\SAP BusinessObjects\Suite XI 4.0\Crystal Reports
2008 Crystal Reports 2008 has a single edition.	HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 12.0\Crystal Reports\Version
XI Release 2 Developer Edition	HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 11.5\Crystal Reports\Keycodes\CR Dev
XI Release 2 Professional Edition	HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 11.5\Crystal Reports\Keycodes\CR Pro
XI Release 2 Standard Edition	HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 11.5\Crystal Reports\Keycodes\CR Std

Appendix 3: List of RDC Report Creation API Calls

Any RDC application that uses these properties, events, or methods are considered RCAP API applications for the purposes of licensing.

Object Name	Method(s), Property(ies) and Event(s)
Application	Method - NewReport
CrossTabGroup	Properties - BackColor - Condition - EnableSuppressLabel -EnableSuppress-Subtotal -Field -SortDirection -SpecifiedGroups
CrossTabGroups	Methods -Add -Delete
CrossTabObject	Properties -ColumnGrandTotalColor -ColumnGroups -EnableKeepColumnsTogether -EnableRepeatRowLabels -EnableShowCellMargins -EnableShowGrid -EnableSuppressColumnGrandTotals -EnableSuppressEmptyColumns -EnableSuppressEmptyRows -EnableSuppressRowGrandTotals -RowGrandTotalColor -RowGroups -SummaryFields
Database	Methods -ConvertData -BaseDriver Properties -Links
DatabaseTables	Methods -Add -Delete Properties - AddStoredProcedure
FieldDefinitions	Methods -Add -Delete
FormulaFieldDefinitions	Methods -Add

	-Delete
GraphObject	Methods -ConditionFields -CrossTabObject -EnableForEachRecord -EnableSummarizeValues -SpecifiedGroups -SummaryFields
ObjectSummaryFieldDefinitions	Methods -Add -Delete
ParameterFieldDefinitions	Methods -Add -Delete
Report	Property -ReportAlerts Method -DeleteGroup Event -FieldMapping
ReportAlert	Properties -AlertInstances -ConditionFormula -Defaultmessage -IsEnabled -MessageFormula -Name -Parent
ReportAlertInstance	Properties -AlertMessage -Parent
ReportAlertInstances	Properties -Count -Item -Parent
ReportAlerts	Properties -Count -Item Methods -Add -Delete
RunningTotalFieldDefinition	Properties -EvaluateCondition -EvaluateConditionField -EvaluateConditionFormula -EvaluateGroupNumber -HierarchicalSummaryType -ResetCondition

	<ul style="list-style-type: none"> -ResetConditionField -ResetConditionFormula -ResetGroupNumber -SecondarySummarizedField -SummarizedField -SummaryOperationParameter -SummaryType Methods <ul style="list-style-type: none"> -SetEvaluateConditionField -SetNoEvaluateCondition -SetNoResetCondition -SetResetConditionField -SetSecondarySummarizedField -SetSummarizedField
RunningTotalFieldDefinitions	Methods <ul style="list-style-type: none"> -Add -Delete
Section	Methods <ul style="list-style-type: none"> -AddBlobFieldObject -AddBoxObject -AddCrossTabObject -AddFieldObject -AddGraphObject -AddLineObject -AddPictureObject -AddSpecialVarFieldObject -AddSubreportObject -AddSummaryFieldObject -AddTextObject -AddUnboundFieldObject -DeleteObject -ImportSubreport
Sections	Methods <ul style="list-style-type: none"> -Add -Delete
SQLExpressionFieldDefinitions	Methods <ul style="list-style-type: none"> -Add -Delete
SubreportLink	Properties <ul style="list-style-type: none"> -MainReportField -Parent -SubreportField
SubreportLinks	Methods <ul style="list-style-type: none"> -Add -Delete
SubreportObject	Property <ul style="list-style-type: none"> -Links Method

	-ReImportSubreport
SummaryFieldDefinition	Methods -HierarchicalSummaryType -SetSecondarySummarizedField -SetSummarizedField
SummaryFieldDefinitions	Methods -Add -Delete
TableLinks	Methods -Add -Delete

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