

RECRYSTALLIZE PRO

Web Wizard for Crystal Reports

Getting Started

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Quick Start for ASP.NET (recommended)

• Ensure that IIS and ASP.NET are enabled on your server. Steps vary for different Windows versions. In Windows 2008, go to Server Manager, Roles to add the Web Server (IIS) Role if it is not already installed. Under Web Server (IIS), find ASP.NET in Role Services. Add the ASP.NET Role Service if it is not already installed.

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File Action View Help						
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		ovides a reliable, manager	able, and scalable web application initia	su detare.		
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	Role Servi	ice	Status		Remove Role Services	
	👆 🕌 Web	b Server	Installed			
	👗 o	ommon HTTP Features	Installed			
	l 🎽	Static Content	Installed			
	l 🏚	Default Document	Installed			
		Directory Browsing	Installed			
		HTTP Bodiraction	Installed			
		WebDAV Publishing	Not installed			
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		ASP.NET	Installed			
		.NET Extensibility	Installed			
		ASP	Installed			
		CGI	Not installed			
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		ISAPI Filters	Installed			
		Server Side Includes	Not installed			
	Н 👗 Н	lealth and Diagnostics	Installed			
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- Ensure that the Microsoft .NET Framework version 2.0 or later is installed on the web server. Version 4.0 or later is recommended.
 - To see which versions of the .NET Framework are installed, click Start (or Start, Run) and enter the folder location below. Numbered folders within the Framework folder indicate which versions of the .NET Framework are installed.

%systemroot%\Microsoft.NET\Framework

• If the required .NET Framework version is not installed, use Windows Update or the Microsoft web site to download and install.

- Install ReCrystallize Pro on your Windows PC or server with the IIS web server.
- If using a 64-bit version of Windows, ensure the Application Pool that will handle the report web pages is set to allow 32-bit applications. Steps vary with different Windows versions. In Windows 2008, go to Start, Administrative Tools, Internet Information Services (IIS) Manager. Under Application Pools select the Application Pool (DefaultAppPool is used by default, but you may assign another Application Pool by creating a new application in IIS Management). Under Advanced Settings, find Enable 32-Bit Applications and set the value to True.
 - Your can check to see if your version of Windows is 32-bit or 64-bit under My Computer, Properties or by going to System in Control Panel.



- If you plan to use both ASP.NET on and classic ASP with ReCrystallize on the sameserver, the ASP.NET and classic ASP web pages must be assigned to separate Application Pools to prevent conflicts between the Crystal Reports versions.
- If you will use the "Dynamic" option in ReCrystallize Pro to run reports with live data, install any database client software (e.g. Oracle client) and configure any ODBC System DSNs that may be needed by your reports.

- If your reports access your database through ODBC, create a System DSN with the same name and configuration as the one used to design the reports. (User DSNs are not available to the web publishing service.)
- If you are using a 64-bit version of Windows with a 32-bit version of Crystal Reports runtime (this is common), configure the ODBC connections using the 32-bit ODBC Data Source Administrator at C:\Windows\SysWOW64\odbcad32.exe.
- If your reports use a SQL Server database, configure the ODBC System DSN to use TCP/IP (not named pipes) and SQL Authentication (not NT Authentication).
- If your reports use an Oracle database, install and configure the Oracle client software on the web server.
- Run the ReCrystallize Pro wizard to create web pages to run your reports.



• Select the option to use ASP.NET.

 If you are using the ReCrystallize Pro trial version, select the "Static" option to display data that is saved in the .rpt file. To save data in the .rpt file, select the "Save Data with Report" option in the Crystal Reports file menu, refresh the report data, and save the report.

The ReCrystallize Pro trial version will allow you to select the "Dynamic" option to display live data from your database, but will not create Dynamic web pages at the end of the process. Purchase a ReCrystallize Pro license at <u>www.recrystallize.com</u> to activate the trial version in place and unlock the full capability to view reports with live data. Your ReCrystallize Pro purchase is covered by a 30-day money-back guarantee to make purchasing risk-free, so you can verify that live data works correctly in your environment and receive technical support if needed.

👹 ReCrystalliz	e Pro Web Wizard for Crystal Reports
RECRYSTALLIZE	 Would you like this report to use saved data or retrieve fresh data? Static - always use data that was saved with the report. Static reports provide the quickest reponse time. Use a static report when the information in the report changes infrequently and will not differ depending on the user, date, or other factors. Dynamic - retrieve fresh data each time the report is run. Dynamic reports retrieve new information from the data source each time the report is run. Use a dynamic report if the information in the report changes frequently or will vary by user, date, or other factors. Automatic - retrieve fresh data every and the information is retrieved from the data source each time the report is run. The provide the temport is report or the provide the temport is report. Automatic reports combine the benefits of Static and Dynamic reports. New information is retrieved from the data source as needed when the report is requested. This information is saved and used to provide quick response until it expires.
About	<u>C</u> ancel < <u>B</u> ack

• In most cases, the values on the Database screen should not be changed except to provide a database password if required. (The Database screen is not displayed when using the Static option.)

👹 ReCrystallize	e Pro Web Wizard for Crystal Repor	ts 🗖 🗖 💌 💌
TALLIZE	Database details are used o cases, these values should n password if required. Please Query	n the web server to refresh report data. In most ot be changed except to provide a database enter information for table 1 of 1,
ΥS	Server / ODBC data source:	ConnectionName
	Database / Table:	
ΣE(User Name:	username
	Password:	password
	 Set only the username and Set the same values for al Prompt for the username and Set the username and pase 	d password which are the same for all tables. I tables in this report and its subreports. and password with the Crystal Reports viewer. ssword provided for web server authentication.
About	<u>C</u> ancel	< <u>B</u> ack <u>N</u> ext > Finish

• If using the Dynamic option, continue through the wizard for each parameter value required by the report. (Parameter screens will not be displayed when using the Static option.)

👹 ReCrystallize	e Pro Web Wizard for Crystal Reports
IZE	Parameter 1 of 1 named "Author ID" is a String field.
	How would you like this parameter to be supplied?
TA	This parameter uses a Range value.
RECRYS	 Use the Crystal Reports .NET viewer to prompt for this value. Automatically compute the value when the report is run. Prompt the user for the value with the following message:
	Please enter the Author ID:
A Shake	Build a list of options from values in the database.
	C Always use the following value:
About	Cancel < Back Next > Finish

Select a report viewer option. The Crystal Reports .NET viewer is recommended in most cases.
 Alternately, you may download the file directly as a PDF document, an Excel spreadsheet, or another type of file.



• Select display and behavior options for the report viewer.

👹 ReCrystallize	e Pro Web Wizard for Crystal Reports
RECRYSTALLIZE	Image: Show Toolbar Image: Show Toolbar Image: Show Toolbar Image: Print button Image: Print butt
	 Parameter prompt on refresh Allow Drill-down Pop-up menu Viewer windew berder (beeder
	✓ Newer window bolder / needer Height Width Zoom ✓ Preview / subreport tabs 100% ▼ 100% ▼ 100% ▼
About	Cancel < Back Next > Finish

👹 ReCrystallize	Pro Web Wizard for Crystal Reports
YSTALLIZE	When you click the Finish button, ReCrystallize Pro will create the web pages needed to run your report. The web pages will be saved in the same directory as your report file.
RECR	To view your report, enter the file name below into your web browser's address bar using the format http://yourwebserver/yourdirectory/
	SalesByAuthor-parameters.aspx
	Thanks for using ReCrystallize Pro! We welcome your comments and suggestions. Please visit us at www.recrystallize.com.
About	E <u>x</u> it < <u>B</u> ack <u>N</u> ext > Finish

• Click Finish and note the start page indicated on the Finish screen.

- Copy the web page files and the Crystal Reports .rpt file to your web server.
- Open your web browser to the start page for your report, for example

http://server/folder/report-static.aspx or http://server/folder/report-parameters.aspx

Double-clicking to open the file from Windows Explorer will not allow the file to be processed by the IIS web server. The address when viewing reports in the browser must begin with http:// or https://. Addresses that begin with file:// or a drive letter such as C: are not correct and will not properly display the report.

Quick Start for classic ASP

• Ensure that IIS and ASP are enabled on your server. Steps vary for different Windows versions. In Windows 2008, go to Server Manager, Roles to add the Web Server (IIS) Role if it is not already installed. In Windows 2008, go to Server Manager, Roles, Web Server (IIS) and see Role Services to find ASP. Add the ASP Role Service if it is not already installed.



- Install ReCrystallize Pro on your Windows PC or server with the IIS web server.
- If using a 64-bit version of Windows, ensure the Application Pool that will handle the report web pages is set to allow 32-bit applications. For Windows 2008, go to Start, Administrative Tools, Internet Information Services (IIS) Manager. Under Application Pools select the Application Pool (DefaultAppPool is used by default, but you may assign another Application Pool by creating a new application). Under Advanced Settings, find Enable 32-Bit Applications and set the value to True.
 - You can check to see if your version of Windows is 32-bit or 64-bit under My Computer, Properties or by going to System in Control Panel.

📲 Internet Information Services (1)	(5) Manager				_ 8 ×
O Image: Organization (Control of the second se	4 Application Poo	bls			🖸 🐼 🖾 👔 I 🕑 👻
File View Help					
Connections	A		- 1		Actions
Connections	Ap Ad This page lets worker proceed Filter: Name A Classic .N DefaultA; MSD class	Vanced Settings	Y2.0 True Integrated DefaultAppPool 1000 True 0 NoAction 5 False 4294967295 ApplicationPoolIdentity 20 False 1 True 90 30 90	ted with	Actions Actions Actions Add Application Pool Set Application Pool Tasks Application Pool Tasks Start Start Chit Application Pool Basic Settings Recycling Advanced Settings Rename Remove View Applications Help Online Help
۲ ۲	Features View	Startun Time Limit (seconde) Enable 32-Bit Applications [enable32BitAppOnWin64] If set to true I system, the worker process(es) serving t (Windows on Windows64) mode. Process Content View	for an application pool on a 64-bit operating he application pool will be in WOW64 es in WOW64 mode are 32-bit processes OK Cancel		
Ready	1 mm 1 = 0				•
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- If you will use the "Dynamic" option in ReCrystallize Pro to run reports with live data, install on your server any database client software (e.g. Oracle client) and configure any ODBC System DSNs that may be needed by your reports.
 - If your reports access your database through ODBC, create a System DSN with the same name and configuration as the one used to design the reports. (User DSNs are not available to the web publishing service.)
 - If you are using a 64-bit version of Windows with a 32-bit version of Crystal Reports runtime (this is common), configure the ODBC connections using the 32-bit ODBC Data Source Administrator at C:\Windows\SysWOW64\odbcad32.exe.
 - If your reports use a SQL Server database, configure the ODBC System DSN to use TCP/IP (not named pipes) and SQL Authentication (not NT Authentication).
 - If your reports use an Oracle database, install and configure the Oracle client software on the web server.
 - Run the ReCrystallize Pro wizard to create web pages for your reports.
 - Select the option to use ASP with the Crystal Report Designer Component (RDC).
 - If you are using the ReCrystallize Pro trial version, select the "Static" option to display data that is saved in the .rpt file. To save data in the .rpt file, select the "Save Data with Report" option in the Crystal Reports file menu, refresh the report data, and save the report.

The ReCrystallize Pro trial version will allow you to select the "Dynamic" option to display live data from your database, but will not create Dynamic web pages at the end of the process. Purchase a ReCrystallize Pro license at <u>www.recrystallize.com</u> to activate the trial version in place and unlock the full capability to view reports with live data. Your ReCrystallize Pro purchase is covered by a 30-day money-back guarantee to make purchasing risk-free, so you can verify that live data works correctly in your environment and receive technical support if needed.

- In most cases, the values on the Database screen should not be changed except to provide a database password if required. (The Database screen is not displayed when using the Static option.)
- If using the Dynamic option, continue through the wizard for each parameter value required by the report. (Parameter screens will not be displayed when using the Static option.)
- Select a report viewer option. The Java viewer is recommended for compatibility with most web browsers. Alternately, you may download the file directly as a PDF document, an Excel spreadsheet, or another type of file.
- Click Finish and note the start page indicated on the Finish screen.
- Copy the web pages and the Crystal Reports .rpt file to your web site.

• Open your web browser to the start page for your report, for example

http://server/folder/report-static.asp or http://server/folder/report-parameters.htm

Double-clicking to open the file from Windows Explorer will not allow the file to be processed correctly by IIS. The address when viewing reports in the browser must begin with http:// or https://. Addresses that begin with file:// or a drive letter such as C: are not correct and will not properly display the report.

System Requirements

Workstation or server requirements

• Workstation: Windows XP, Vista, 7, 8, 8.1, or 10 – Professional, Business, or Ultimate Editions with the IIS feature installed may be used to serve reports for testing.

Server: Windows Server 2003, 2008, 2008 R2, or 2012

- 1 GB free disk space
- 4 GB RAM recommended

Web server requirements for serving reports

- 2 or more processor cores recommended
- On 64-bit versions of Windows, the IIS Application Pool used to serve reports must be set to allow 32-bit applications. 64-bit support for serving reports is available upon request.
- For Dynamic reports that use live data, any database client software (e.g. Oracle client) and/or ODBC connections using System DSNs that may be needed by the reports must be configured on the web server.
- Installing a printer using the same driver and printer name as on the machine used to create the reports (.rpt files) is recommended to ensure proper support for non-standard paper sizes and other layout characteristics when viewing reports in the web browser.

ASP.NET requirements

- Microsoft .NET Framework version 2.0 or later, ersion 4.0 or later recommended
- ASP.NET must be enabled in IIS when using ASP.NET.

Classic ASP requirements

• ASP must be enabled in IIS when using classic ASP.

Crystal Reports Licensing Requirements

For classic ASP only, Crystal Reports licensing requires you to own a Crystal Reports XI R2 Developer Edition license.

Crystal Reports XI R2 Developer Edition licenses are available at a cost of \$595 USD at <u>http://www.recrystallize.com/merchant/crystal-reports/crystal-reports-11.htm</u>

Where to Buy

ReCrystallize Pro and Crystal Reports may be purchased using a credit card at our secure web site at the links below.

ReCrystallize.com LLC can also accept purchase orders, PayPal payments, and bank wire transfers; please email <u>sales@recrystallize.com</u> or see <u>http://www.recrystallize.com/merchant/howtobuy.htm</u> for more information.

http://www.recrystallize.com/merchant/details.htm

http://www.recrystallize.com/merchant/products.htm

ReCrystallize Pro is covered by a 30-day money-back guarantee for risk-free purchasing of the fully licensed version with all capabilities including live data.

Using ReCrystallize Pro

Selecting your report file

Select the Crystal Report file that you wish to publish on the web. ReCrystallize Pro works with .rpt files created in Crystal Reports versions 7, 8.0 8.5, 9, 10, XI, XI R2, 2008, 2011, and 2013..

Please select a Crystal Report file.				X	
🕞 🕞 🗢 🕌 « wwwroot 🕨 crystal_reports	▼ 4	Search crysto	al_reports	Q	
Organize 🔻 New folder			•		
Name	Date modified	Туре	Siz	e	
🔊 My Crystal Report.rpt	11/10/2000 2:28 PM	Crystal Reports		103 KB	
File <u>n</u> ame: My Crystal Rep	oort.rpt 👻	Crystal Report	ts (*.rpt)	•	
		Open	-	Cancel	
					÷

Choosing a method to process the report

ReCrystallize Pro offers three different approaches for running your Crystal Reports on the web. Some options may be unavailable depending on your version of Crystal Reports you are using.

👹 ReCrystalliz	e Pro Web Wizard for Crystal Reports			
LIZE	Use Crystal Reports version 2011 - components on the web server.			
F	• Use ASP.NET with the Crystal Reports .NET Runtime			
CRYST /	This option creates ASP.NET web pages that work with the Crystal Reports .NET runtime on the web server. This is the most current and widely compatible method. The web server uses .NET to process the reports, but no .NET or other add-ons are required to view reports on client computers. The Crystal Reports .NET web viewer works with most web browsers and operating systems, including many mobile devices that have full web browsers.			
Ш	O Use ASP with the Crystal Report Designer Component			
	This option creates "Classic" Active Server Pages that work with the Crystal COM based Report Designer Component (RDC) on the web server. The Crystal Reports ActiveX and Java web viewers are available with this option.			
	This option creates "Classic" Active Server Pages that work with the Crystal Report Application Server (RAS) on the web server. The Report Application Server was included as a separate installation with Crystal Reports versions 9 and 10.			
About	<u>C</u> ancel < <u>B</u> ack <u>N</u> ext > Finish			

ASP.NET with the Crystal Reports .NET Runtime (recommended)

Select "**Use ASP.NET with the Crystal Reports .NET Runtime**" to create web pages that use ASP.NET and Crystal Reports .NET components to process the report on the web server. ASP.NET is the most current method and is recommended in most cases. This method uses the Crystal Reports .NET web viewer which will work with most web browsers and operating systems including many mobile devices that have full web browsers such as iPhone, iPad, and Android phones and tablets. ASP.NET also allows downloading reports directly as PDF, Excel, RTF and other formats.

ASP with the Crystal Report Designer Component

Select "**ASP with the Crystal Report Designer Component**" to create web pages that use classic ASP with the COMbased Report Designer Component to process the report on the web server. This option is no longer recommended in most cases, but is available if you prefer to use classic ASP or the same report viewers available with previous versions of ReCystallize Pro. The ActiveX and Java web viewers are available with classic ASP, along with support for download reports directly to PDF, Excel, RTF and other formats.

ASP with the Report Application Server / Crystal Enterprise Embedded

Select "Use ASP with the Crystal Report Application Server" to create web pages that use classic ASP with the Report Application Server / Crystal Enterprise Embedded to process the report on the web server. This option remains available

for customers who used it with previous ReCrystallize Pro versions, but is no longer supported and is not recommended in most cases. This method requires installation of the Report Application Server or Crystal Enterprise Embedded on the web server. The Report Application Server / Crystal Enterprise Embedded was included as a separate installation with Crystal Reports versions 9 and 10.

- 8 х ReCrystallize Pro Web Wizard for Crystal Reports Would you like this report to use saved data or retrieve fresh data? RECRYSTALLIZE Static - always use data that was saved with the report. Static reports provide the guickest reponse time. Use a static report when the information in the report changes infrequently and will not differ depending on the user, date, or other factors. Dynamic - retrieve fresh data each time the report is run. Dynamic reports retrieve new information from the data source each time the report is run. Use a dynamic report if the information in the report changes frequently or will vary by user, date, or other factors. C Automatic - retrieve fresh data every 24 hours. Automatic reports combine the benefits of Static and Dynamic reports. New information is retrieved from the data source as needed when the report is requested. This information is saved and used to provide quick response until it expires. About Cancel < Back Next >

Choosing a Static, Dynamic, or Automatic report

At this step, you may choose whether your report will use information that was saved with the report at design time or retrieve fresh data from your database at run time.

Select the "Static" option if you are publishing a report such as an annual financial report where the information does not change frequently and everyone who views the report will see the same information. Because the required data is saved with the report file, there is no need to access your database when the report is requested and the report can be rendered more quickly. To prepare a report (.rpt file) that will be used with the Static option, open the report in the Crystal Reports designer, refresh the report data , select "Save Data with Report" in the File menu, and then save the report.

Select the "Dynamic" option if you are publishing a report that contains data that changes frequently, uses parameters to control the data that is included in the report, or shows different data depending on the user's identity.

The "Automatic" option provides the same benefits of the "Dynamic" option while improving report responsiveness and decreasing database access. The first time an Automatic report is requested with specific parameters, data is retrieved from the database and the report is presented to the user; at the same time, the report and data are saved to the web server file system. If the same report is requested again within the specified number of hours, it can be quickly retrieved from the web server file system without querying the database. If the specified number of hours as elapsed, the report is refreshed from the database. This method can greatly improve performance while still providing current data. This option is ideal for improving the performance of reports where the data changes daily or hourly.

The Automatic option is not currently supported, but may be reinstated in a future release.

Setting your data source

(for Dynamic and Automatic reports)

👹 ReCrystallize	e Pro Web Wizard for Crystal Reports
TALLIZE	Database details are used on the web server to refresh report data. In most cases, these values should not be changed except to provide a database password if required. Please enter information for table 1 of 1, Query
ΥS	Server / ODBC data source: ConnectionName
	Database / Table:
SE(User Name: username
	Password: password
	 Set only the username and password which are the same for all tables. Set the same values for all tables in this report and its subreports. Prompt for the username and password with the Crystal Reports viewer. Set the username and password provided for web server authentication.
About	Cancel < Back Next > Finish

In order for the web server to connect to your database and retrieve fresh data for your report, ReCrystallize Pro includes details about how to access your data source within the web pages it creates. The database connection details including the password are used securely on the web server to access the database. Neither the connection details nor the login credentials provided on this screen are ever transmitted through the network to the client web browser, so the database connection details cannot be intercepted or observed by third parties or users who are viewing reports.

Using connection properties stored in the .rpt file, ReCrystallize Pro will correctly pre-fill the database connection details to log in to access the database that was used to create the report in the Crystal Reports designer. The exception is the password field; because the password is not stored in the .rpt file, it is never pre-filled. If the database requires a password, it should be entered on this screen.

The pre-filled database connection details will be correct for the data source with which the report was designed. It is normal in some cases for one or more fields to be left blank. For Oracle databases, the Database/Table field is normally blank and should not be filled in. Changing the pre-filled values is not recommended, except to provide a password if one is required by your database.

ReCrystallize Pro can independently set and override database connection details for each table that is used in the report and its subreports. You may change the pre-filled values in order to point the report to a different database, provided that it has an identical structure as the original database (for example, moving from a development database to a production database). Use caution in making any changes since any incorrect changes will cause the report to fail. If your report fails to run correctly on the web after changing this information, try again using the default pre-filled values. "Set only the username and password which are the same for all tables" will allow the web pages to log in to the database using the simplest method available without changing any connection details. Selecting this option is recommended if it is available because it is least likely to introduce any errors into the database connection process. This option may not be selectable if ReCrystallize Pro determines that it likely to produce incorrect results for the specific report file.

"Set the same values for all tables in this report and its subreports" will cause the web pages to set the connection details for all tables in the report and its subreports so they will use the same values provided on this screen for the first table. Selecting this option can save time by skipping additional database connection screens when a report has numerous tables that all use the same connection and login details. If ReCrystallize Pro determines that using this option is likely to produce incorrect results, it will not be selectable.

"Prompt for the username and password with the Crystal Reports viewer" will cause the Crystal Reports .NET Viewer to prompt each user viewing the report for the database username and password. The database connection details will not be pre-set in the web pages. This option is not recommended in most cases, but could be useful in cases where each web user viewing the report has a unique account login in the database and can access information under the unique database account.

"Set the username and password provided for web server authentication" will cause the web pages to attempt to log in to the database using the same username and password that each web user supplies during web server authentication. This option is not recommended in most cases, but could be useful in cases where each web user viewing the report has a unique account login in the database and can access information under the unique database account. For this option to work correctly, the IIS web server must be set to require Basic Authentication which prompts the web user for a username and password.

Setting your report parameters

(for Dynamic and Automatic reports)

For each parameter used in your report, ReCrystallize Pro offers options to control how the parameter value will be set.

For some parameter types, ReCrystallize Pro can automatically set the parameter to a specified value. For example, you may wish to always set a Date parameter to the current date.

ReCrystallize Pro can prompt the user to select a value using a message you supply. You may provide a list of default values or build a list of current value options from the database.

For parameter values that do not change, you may specify a constant value that will always be used to set the parameter.

👹 ReCrystallize	Pro Web Wizard for Crystal Reports
ZE	Parameter 1 of 1 named "Author ID" is a String field.
	How would you like this parameter to be supplied?
STA .	🗖 This parameter uses a Range value.
RYS	C Use the Crystal Reports .NET viewer to prompt for this value.
Ч	C Automatically compute the value when the report is run.
С С	• Prompt the user for the value with the following message:
	Please enter the Author ID:
- Aller	Build a list of options from values in the database.
	 Always use the following value:
About	Lancel < Back Next > Finish

If the parameter was set in Crystal Reports to require a Range value, such as a date range, check the box labeled "**This parameter uses a Range value**."

The option "**Use the Crystal Reports .NET viewer to prompt for this value**" will be available if you are using ASP.NET. If this option is selected, the Crystal Reports .NET Viewer will prompt the web user to set the parameter value. The prompts will appear similar to parameter prompts in the Crystal Reports designer and will use the prompting text that was entered when designing the report. Select this option to utilize dynamic and cascading parameters configured during report design in Crystal Reports. Selecting this option will require selection of the Crystal Reports .NET Viewer later in the ReCrystallize Pro wizard. This option will not work correctly if an immediate file download (PDF, Excel, and so on) is selected instead of the interactive .NET viewer but it will allow exporting of these file types using the .NET viewer toolbar.

The option "**Automatically compute the value when the report is run**" is available for some parameter types. It will cause ReCrystallize Pro to calculate a value for the parameter each time the report is executed. For example, it can automatically set a date parameter to the current date or the first day of the month.

When "**Prompt the user for the value with the following message**" is selected, ReCrystallize Pro will create a simple web form to prompt for parameter values. The web form will be part of a separate parameters web page that will act as the starting page to view the report. The web form may include text entry fields, checkboxes, radio buttons, or listboxes; you can select input elements appropriate for each parameter. Users viewing the report will first select or enter values for each parameter on the parameters page and then submit the parameters form to view the report.

A sample parameter selection web page created by ReCrystallize Pro.



Your Web Page Title

Please enter the two-letter State abbreviat	tion:
Please select the month and year:	July 💽 1999 💌
Would you like to include all details?	 Include all details. Show summary only.
View Report	t

The parameter web page that ReCrystallize Pro creates may be customized using software that can edit ASP and ASP.NET or using a text editor.

You may bypass the parameter web page by passing parameter values on the URL (HTTP GET), or sending the values from your own form to the dynamic.asp page (POST). Using this technique, you can call ReCrystallize Pro web pages from you own application or web site without disrupting the user experience. Examine the form fields on the parameter web page that ReCrystallize Pro creates to determine the expected field names and values for each parameter. See

http://www.recrystallize.com/merchant/supportfaq/supportfaq0024.htm

for additional details and examples.

This example shows a String parameter that will use a text input field with the default value "Austria".

👹 ReCrystallize	e Pro Web Wizard for Crystal Reports
ZE	Parameter 1 of 2 named "Countries" is a String field.
	How would you like this parameter to be supplied?
TA	🗖 This parameter uses a Range value.
RYS	C Use the Crystal Reports .NET viewer to prompt for this value.
U U	○ Automatically compute the value when the report is run.
С С	Prompt the user for the value with the following message:
	Enter Countries:
de use	Build a list of options from values in the database.
	C Always use the following value:
About	<u>Cancel</u> < <u>B</u> ack <u>N</u> ext > Finish

👹 ReCrystallize	Pro Web Wizard for Crystal Reports
RECRYSTALLIZE	 Provide a text input field for "Countries". Limit input length to 20 ÷ characters. Default to Austria Echo * to hide input (for passwords or other sensitive information). Provide a list of options and default to the option selected below. Present the list of options as Option buttons a dropdown list a scrolling listbox checkboxes.
About	<u>C</u> ancel < <u>B</u> ack <u>N</u> ext > Finish

👹 ReCrystallize	Pro Web Wizard for Crystal Reports	
RECRYSTALLIZE	 Provide a text input field for "Countries" Limit input length to 20 - characters. Default to Austria Echo * to hide input (for passwords or Provide a list of options and default to to Switzerland 	r other sensitive information). he option selected below. Present the list of options as
	Austria England Allow multiple values. Convert to	C option buttons C a dropdown list C a scrolling listbox C <u>checkboxes</u>
About	<u>C</u> ancel < <u>B</u> ack	Next > Finish

This example shows the same parameter using checkboxes to allow the user to select one or more values.

In this example, ReCrystallize Pro will provide drop-down selections from which the user may choose the month, date, and year values. The default value will be set to the previous day.

👹 ReCrystalliz	e Pro Web Wizard for Crystal Reports
LIZE	How will the user select a value for "Date of Sale" ? Use drop-down selections.
RECRYSTALI	 Select Month, Date, and Year from list. Select Month and Year from list (set to first day of selected month). Select Year from list (set to first day of selected year). Based on the current date when the report is run, default the selection to the current period.
	 O Use text input. □ Default to 5/1/2011 □ Allow multiple values.
About	<u>C</u> ancel < <u>B</u> ack <u>N</u> ext > Finish

If the "Use text input" option is selected, ReCrystallize Pro will provide a text input field where the user can enter a date value as text. Valid date text formats include "5/1/2011", "1-May-2011", and "May 1, 2011".

Prompting for parameters using value options from your database

(for Dynamic or Automatic reports)

When using ASP.NET with the Crystal Reports .NET viewer, selecting "Use the Crystal Reports .NET viewer to prompt for this value." will support dynamic and cascading parameters as configured in the Crystal Reports designer.

If "**Prompt the user for the value with the following message**" and "**Build a list of options from values in the database**" are selected, ReCrystallize Pro will construct the parameter prompt using values retrieved from the database each time the report is viewed. This option may be desirable if you are using classic ASP, using ASP.NET with another viewer option such as direct PDF download, or if you prefer to have greater control and customization of how the parameter prompt is presented.

You may select one column in a table for the display value and another column for the actual parameter value that will be passed to the report. For example, in a table of products that contained both a product name and UPC code, you could select the column "ProductName" to be displayed for the user while passing the value from the column "UPCcode" to the parameter.

👹 ReCrystallize	Pro Web Wizard for Crystal Reports
ZE	Parameter 1 of 1 named "Author ID" is a String field.
	How would you like this parameter to be supplied?
)TA	🗖 This parameter uses a Range value.
375	O Use the Crystal Reports .NET viewer to prompt for this value.
U U U	O Automatically compute the value when the report is run.
С С	Prompt the user for the value with the following message:
	Please select the name of the Author:
di selah	Build a list of options from values in the database.
	 Always use the following value:
About	Canad C Pack Novt > Evide

👹 ReCrystallize Pro Web Wizard for Cryst	al Reports
Address Contract	Please select the database column that contains values for "Author ID". In the list of options, show values from au_hame Sort the list of options. Sort the list of options. Allow selection of multiple values. Present the list of options using Option buttons. C a drop-down list S a scrolling listbox C checkboxes
About <u>C</u> ancel	< <u>B</u> ack <u>N</u> ext > Finish



Sales by Author

Please select the author's last name.	Bennet Blotchet-Halls Carson DeFrance del Castillo Dull Green Grieene Gringlesby Hunter
Show Publisher Information	
View Report	

Setting a Record Selection Formula

ReCrystallize Pro provides an option for setting the report's Record Selection Formula. The Record Selection Formula acts as a filter to determine which records from the database are included in your report. This option is recommended for advanced users only. In many cases, a better approach is to create the Record Selection Formula in the Crystal Reports designer and include one or more parameter values in the formula; data in the report can then be filtered by setting the parameter values.

If you wish to set a Record Selection Formula, enter the formula on this screen using the same formula syntax required in the Crystal Reports designer. ReCrystallize Pro does not perform syntax checking for the Record Selection Formula, so you must ensure that the formula you enter is correct or an error will result when viewing the report. The Record Selection Formula entered on this screen will completely replace the existing Record Selection Formula in the report. To add a condition to the report's existing Record Selection Formula instead of replacing it, select "Append this formula to the report's existing selection formula."

👹 ReCrystallize	e Pro Web Wizard for Crystal Reports
RECRYSTALLIZE	If you require the report's Record Selection Formula to be set at run time, enter a selection formula below using Crystal formula language syntax. Syntax checking is not performed, so incorrect syntax may cause an error when the report is viewed. Set the selection formula below when the report is viewed. Set the selection formula below when the report is viewed. Append this formula to the report's existing selection formula. {Customer.State}="CA" And {Orders.OrderAmount}>2500.00
About	Cancel < Back Next > Finish

Choosing a report viewer and viewer options for ASP.NET

The Crystal Reports .NET Report Viewer will display reports properly in most web browsers, including many mobile devices that include full web browsers such as iPhone, iPad, and Android-based devices. Unlike older viewer controls used with classic ASP, the .NET Report Viewer does not require any client-side code to be downloaded or installed. The .NET Report includes a toolbar for printing the report and exporting (saving) the report to formats including PDF, Excel, and RTF.

Instead of viewing the report in the .Net Report Viewer, it may be immediately exported and transferred to the browser in several file formats including PDF, Excel, and RTF. The "Do not view file in browser" option will cause the file to be downloaded and saved rather than opened for viewing within the web browser; this option may not be effective in all cases due to differences in web browser and browser add-in configurations.

The "**Send to server printer**" option will print the report directly to a printer that is configured on the web server instead of opening the report for viewing in the browser. When using this option, enter the printer name precisely as it appears in Devices and Printers or the Printers folder on the web server.

👹 ReCrystallize	Pro Web Wizard for Crystal Reports	
RECRYSTALLIZE	Web Page Title Sales by Author Open in a new browser window. Page-on-Demand Viewer • NET Report Viewer • ActiveX Viewer (Internet Explorer only) • ActiveX Plug-in • Jaya Plug-in • HTML Frames • HTML • Interactive Viewer (HTML) • Automatically gelect viewer • Send to server printer.	 Refresh every 5 minutes. File Download Adobe Acrobat (PDF) Comma Separated Values (CSV) HTML File (HTM) Microsoft Excel (XLS) Microsoft Excel - Data Only (XLS) Microsoft Word (DOC) Rich Text Format - Editable (RTF) Rich I ext Format (RTF) Text (TXT) Do not view file in browser.
About	<u>C</u> ancel < <u>B</u> ack	Next > Finish

The Crystal Reports .NET Viewer Options screen allows you to control which toolbar options available when viewing the report and to control some behaviors of the .NET Report Viewer.

By default, the Crystal Reports .NET Viewer exports reports to PDF format for printing. When the "**Use ActiveX printing if supported**" option is selected, the PDF export step will be bypassed so that the printing process is similar to a native Windows application. A web browser that supports ActiveX, such as Internet Explorer or Mozilla Firefox running on Windows, must be used for this option to be effective. The web browser may prompt the user for approval to download and install an ActiveX control or may block installation of the ActiveX control depending on the browser's security settings. When using a web browser that does not support ActiveX, the report will be exported to PDF for printing.

👹 ReCrystallize	Pro Web Wizard for Crystal Reports
RECRYSTALLIZE	Crystal Reports .NET Viewer Options Show Toolbar Export button Print button Print button Parameters panel toggle button Group Tree toggle button Page Navigation controls Drill Up button Stop button Stop button Refresh button
	 □ Parameter prompt on refresh □ Allow Drill-down □ Pop-up menu □ Viewer window border / header □ Viewer window border / header □ Height □ Width □ Zoom
	Preview / subreport tabs ■ Preview background edge 100% ▼ 100% ▼ 100% ▼
About	Cancel < Back Finish

Choosing a report viewer and viewer options for classic ASP

When using classic ASP, ReCrystallize Pro provides several viewer page-on-demand viewer options for displaying the report in the web browser. The Java viewer is recommended for greatest compatibility with different browsers and operating systems. In addition to the page-on-demand viewer options, reports may be immediately exported and transferred to the browser in several file formats including PDF, Excel, and RTF. Available viewer options and file download formats vary depending on the version of Crystal Reports.

👹 ReCrystallize	e Pro Web Wizard for Crystal Reports
ECRYSTALLIZE	Web Page Title Open in a new browser window. Refresh every 5 minutes. Page-on-Demand Viewer Adobe Acrobat (PDF) ActiveX Viewer (Internet Explorer only) ActiveX Plug-in Java Viewer Java Viewer Adobe Acrobat (PDF) Microsoft Excel (XLS) Microsoft Excel (XLS)
E C	C Java Plug-in C Microsoft Excell-Data Only (XLS) C HTML Frames C Microsoft Word (DDC) C HTML C Rich Text Format - Editable (RTF) C Interactive Viewer (HTML) C Rich Iext Format (RTF) C Automatically select viewer C Text (TXT) Do not view file in browser.
	Prompt the <u>u</u> ser: Please select a report viewer: Send to server printer. Send to client printer.
About	Cancel < Back Next > Finish

- ActiveX Viewer –The ActiveX viewer may be used if your reports will be viewed using only Internet Explorer running on Windows. It provides the best user experience on Internet Explorer and the most faithful reproduction of the report's layout. If you need to support Internet Explorer on Windows along with other browsers, consider using the Java viewer or the "Automatically select viewer" option.
 - ActiveX works with Internet Explorer only.
 - The ActiveX viewer requires a one-time download of the ActiveX control to each client PC. The download will occur automatically the first time it is needed. A manual setup file is also available for pre-installation of the ActiveX viewer.
 - Recent versions of Internet Explorer may prompt for user approval up to three times when the ActiveX control is initially downloaded and installed. The ActiveX viewer may not install automatically when using Internet Explorer 9 or later, requiring pre-installation or manual installation to load properly.
- ActiveX Plug-in (Crystal Reports 8.x and 9.0 only) Similar to the ActiveX viewer, the ActiveX Plug-in works with older versions of Internet Explorer and Netscape Navigator on Windows. Downloading and installing the plug-in before use is recommended. The ActiveX Plug-in is no longer supported and is not recommended for modern browsers.

- Java Viewer The Java viewer is recommended to support multiple browsers and operating systems while
 providing a consistent user experience. The Java viewer works with Internet Explorer, Firefox, Safari, Opera and
 most other browsers on most operating systems. Like the ActiveX viewer, the Java viewer faithfully reproduces
 the page layout of reports. Unlike the ActiveX viewer, the Java viewer may require a download each time it is
 used which can slow down report viewing over low-bandwidth connections. The Java viewer automatically
 downloads on demand, but may prompt the user for permission to run or to access the computer's printer.
- Java Plug-in Similar to the Java viewer, the Java Plug-in works with some older versions of Microsoft Internet Explorer, Netscape Navigator, and other browsers using the Sun Java Virtual Machine which must be downloaded and installed prior to use. The Java Plug-in is no longer supported and is not recommended for modern browsers.
- HTML with Frames The HTML with Frames option uses an HTML frameset for group tree and navigation controls. Some report formatting may be lost. When printing, each report page must be printed separately using the browser's print function. HTML is not available with the Report Application Server / Crystal Enterprise Embedded; use the Interactive Viewer instead.
- HTML The HTML viewer option renders the reports using standard HTML. Some report formatting may be lost. When printing, each report page must be printed separately using the browser's print function.
- Interactive Viewer The Interactive Viewer is available when using the Report Application Server / Crystal Enterprise Embedded. It is a pure HTML viewer that does not require download or installation of controls or applets. Printing an entire report is accomplished through export to PDF, which will preserve report formatting and layout for printing.

The Viewer Options screen allows you to control which toolbar options are available when viewing the report and to control some behaviors of the report viewer. Available options vary depending on which viewer is selected.

🕌 ReCrystallize Pro Web Wizard for Crystal Reports	
RECRYSTALLIZE	Java Viewer Options Show Toolbar Export button Print button Print button Parameters panel toggle button Group Tree toggle button Page Navigation controls Drill Up button Stop button Stop button Refresh button
	 Parameter prompt on refresh Allow Drill-down Pop-up menu Viewer window border / header Preview / subreport tabs Preview background edge Show Group Tree. Open links in new window or tab. Use ActiveX printing if supported. Height 100% 100%
About	<u>C</u> ancel < <u>B</u> ack <u>N</u> ext > Finish

Creating the web pages for your report

When you click the finish button, ReCrystallize Pro will produce the web pages for viewing your report. The web page files will be located in the same directory as your report (.rpt file). Open the page displayed in the text box to begin viewing the report. You may copy the name of the web page to the clipboard by clicking the copy button located next to the text box on this screen.



Moving the files to your web site

To view your report on the web, move the .rpt file and all of the files that ReCrystallize Pro created into a folder within the web site folder located your web server. If your report is based on a Crystal query file, also move the query file to the web site. The default web site is usually located on the server at C:\inetpub\wwwroot.

About the web.config file created for ASP.NET

ReCrystallize Pro creates a web.config file along with each set of ASP.NET web pages. The web.config file includes the minimal configuration settings necessary for the web application to display your reports. The web.config file is not unique for each report; it is common to all report web pages that use the same Crystal Reports version.

The recommended best practice is to place one copy of the web.config file at the root of the web site or at the top of the folder structure within the web site that houses the ReCrystallize Pro web pages and reports. It is permissible to include copies of the web.config file in multiple folders that are at the same level within the web site. However, the web.config file must not be included at different levels within nested folders or an error will result.

Example of recommended best practice placement of the web.config file:

c:\inetpub\wwwroot\reports

web.config

c:\inetpub\wwwroot\reports\financials

financialreport-parameters.aspx

financialreport.aspx

financialreport.aspx.vb

financialreport.rpt

c:\inetpub\wwwroot\reports\sales

salesreport-parameters.aspx

salesreport.aspx

salesreport.aspx.vb

salesreport.rpt

c:\inetpub\wwwroot\reports\salesbyregion

salesreportbyregion-parameters.aspx

salesreportbyregion.aspx

salesreportbyregion.aspx.vb

salesreportbyregion.rpt

c:\inetpub\wwwroot\reports\hr

hrreport-parameters.aspx

hrreport.aspx

hrreport.aspx.vb

hrreport.rpt

Example of acceptable placement of the web.config file:

c:\inetpub\wwwroot\reports

c:\inetpub\wwwroot\reports\financials

web.config

financialreport-parameters.aspx

financialreport.aspx

financialreport.aspx.vb

financialreport.rpt

c:\inetpub\wwwroot\reports\sales

web.config

salesreport-parameters.aspx

salesreport.aspx

salesreport.aspx.vb

salesreport.rpt

c:\inetpub\wwwroot\reports\salesbyregion

salesreportbyregion-parameters.aspx

salesreportbyregion.aspx

salesreportbyregion.aspx.vb

salesreportbyregion.rpt

c:\inetpub\wwwroot\reports\hr

web.config

hrreport-parameters.aspx

hrreport.aspx

hrreport.aspx.vb

hrreport.rpt

Example of incorrect placement of the web.config file which will result in an error:

c:\inetpub\wwwroot\reports

c:\inetpub\wwwroot\reports\financials

web.config

financialreport-parameters.aspx

financialreport.aspx

financialreport.aspx.vb

financialreport.rpt

c:\inetpub\wwwroot\reports\sales

web.config

salesreport-parameters.aspx

salesreport.aspx

salesreport.aspx.vb

salesreport.rpt

c:\inetpub\wwwroot\reports\salesbyregion

web.config

salesreportbyregion-parameters.aspx

salesreportbyregion.aspx

salesreportbyregion.aspx.vb

salesreportbyregion.rpt

c:\inetpub\wwwroot\reports\hr

web.config

hrreport-parameters.aspx

hrreport.aspx

hrreport.aspx.vb

hrreport.rpt

Using your web browser to run/view your report

After you click Finish, ReCrystallize Pro will indicate which file you should use to begin running your report. Clicking the copy button next to the filename will copy the filename to the Windows clipboard.

To view the report, enter the address of the file into the web browser address bar in the form of an Internet URL. For example,

http://yourserver/yourdirectory/yourreport-parameters.asp

Do not double-click the file in Windows Explorer or enter the address as a file location such as

file://C:\Inetpub\wwwroot\yourdirectory\yourreport-parameters.aspx

because opening the web page as a file will not allow the web pages to be processed by the IIS web server.

Troubleshooting Resources

Check the ReCrystallize Pro support Frequently Asked Questions at

http://www.recrystallize.com/merchant/supportfaq.htm

for solutions to common issues.

Appendix A: End User License Agreement

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