

# Crystal Reports 8.5 Developer Edition

## Installing Crystal Reports Run-time Libraries for IBM Rational ClearQuest, v2003.06.00.500.010

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### Overview

This document explains the process of installing the Crystal Reports run-time libraries on ClearQuest Windows client computers.

This document was written and provided by IBM Rational ClearQuest.

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## Introduction

With IBM Rational ClearQuest version 2003.06.00 and later, Crystal Reports must be installed separately from ClearQuest itself.

For ClearQuest Windows clients, you need to install Crystal Reports run-time libraries on each ClearQuest Windows client machine on which you want to run and view reports.

If you install the Japanese edition of Crystal Reports, an additional set of files must be copied so that the Crystal Reports toolbar can be displayed in Japanese.

For the New Rational ClearQuest Web version 2003.06.00.500.010, you need to install Crystal Reports run-time libraries on at least one of the machines running the New ClearQuest Server on a Windows operating system.

This document is made up of two sections. Section One describes how to install the Crystal Reports run-time libraries you need for ClearQuest Windows clients. Section Two describes how to install the Crystal Reports run-time libraries you need for the New Rational ClearQuest Web.

**NOTE**

You must acquire Crystal Reports 8.5 Developer Edition and comply with the terms and conditions of the licensing agreement. The Crystal Reports run-time libraries are not provided with IBM Rational ClearQuest.

## Section One

This section explains the process for installing the Crystal Reports run-time libraries on ClearQuest Windows client machines.

**The process involves the following steps:**

- Acquire Crystal Reports 8.5 Developer's Edition.
- Copy a selected group of files from the Crystal Reports installation media to each "target" machine on which you want to run and view reports from the Rational ClearQuest version 2003.06.00 Windows client software.
- On each target machine, use the regsvr32 command to make selected registry entries.

To install Crystal Reports run-time libraries on target machines that will be running Rational ClearQuest version 2003.06.00 clients, follow these steps:

1. For ClearQuest clients on Windows, acquire the installation media for Crystal Reports 8.5 Developer's Edition.
2. On each machine that will be running the Rational ClearQuest version 2003.06.00 client software (the "target" machines), verify that the following folders exist, or else create them:

\Program Files\Seagate Software\Shared

\Program Files\Seagate Software\Report Designer Component

\Program Files\Seagate Software\Viewers\ActiveXViewer

\System Folder\Crystal

\System Folder\System32

<b>NOTE</b>	The System Folder has a different name in different versions of Windows. For example, on a Windows XP system, the System Folder is Windows, while on Windows 2000 it is named WINNT. Use the folder name appropriate for the target machine.
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- Find the files listed in Table 1 on the Crystal Reports installation media in the folder \ProgramF\SEAGAT~1\Shared, and copy them to the \Program Files\Seagate Software\Shared folder on the target machine.

**Table 1**

File	Location on Media	Location on Target Machine	Registration
CDO32.DLL	\ProgramF\SEAGAT~1\Shared	\PROGRAM FILES\SEAGATE SOFTWARE\SHARED	Yes
PG32CONV.DLL	\ProgramF\SEAGAT~1\Shared	\PROGRAM FILES\SEAGATE SOFTWARE\SHARED	No
RULE1.DFA	\ProgramF\SEAGAT~1\Shared	\PROGRAM FILES\SEAGATE SOFTWARE\SHARED	No
RULE1.LLR	\ProgramF\SEAGAT~1\Shared	\PROGRAM FILES\SEAGATE SOFTWARE\SHARED	No
S2SQLPRS.DLL	\ProgramF\SEAGAT~1\Shared	\PROGRAM FILES\SEAGATE SOFTWARE\SHARED	No
SSCSDK80.DLL	\ProgramF\SEAGAT~1\Shared	\PROGRAM FILES\SEAGATE SOFTWARE\SHARED	No

- Find the file listed in Table 2 on the Crystal Reports installation media in the folder \ProgramF\SEAGAT~1\RDC, and copy it to the \Program Files\Seagate Software\Report Designer Component folder on the target machine.

**Table 2**

File	Location on Media	Location on Target Machine	Registration
CRAXDRT.DLL	\ProgramF\SEAGAT~1\RDC	\PROGRAM FILES\SEAGATE SOFTWARE\REPORT DESIGNER COMPONENT	Yes

- Find the file listed in Table 3 on the Crystal Reports installation media in the folder \ProgramF\SEAGAT~1\Viewers\Active~1\Instal~1, and copy it to the \Program Files\Seagate Software\ActiveXViewer folder on the target machine.

**Table 3**

File	Location on Media	Location on Target Machine	Registration
CRVIEWER.DLL	\ProgramF\SEAGAT~1\Viewers	\PROGRAM FILES\SEAGATE SOFTWARE\VIEWERS\ACTIVEXVIEWER	Yes

	\\Active~1\\Instal~1\	WER	
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6. Find the files listed in Table 4 on the Crystal Reports installation media in the folder \\Windows\\Crystal, and copy them to the \\System Folder\\Crystal folder on the target machine.

**NOTE**

The System Folder has a different name in different versions of Windows. Use the one appropriate for the target machine.

Table 4

File	Location on Media	Location on Target Machine	Registration
CRXLAT32.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2BACT.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2BACT3.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2BBDE.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2BBTRV.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2BXBSE.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2CTBTRV.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2IRACT.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2IRACT3.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2IXBSE.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2LDB2.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2LIFMX.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2LODBC.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2LORA7.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2LSQL.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2LSYB10.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SACL.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SDB2.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SEXSR.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SFS.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SIFMX.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SMAPI.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SMCUBE.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SMSIIS.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SNOTE.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SOLAP.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SOLEDB.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SORA7.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SOUTLK.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SREPL.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SSQL.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SSYB10.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2STRACK.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
P2SWBLG.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U252000.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U25DTS.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U2DAPP.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U2DDISK.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U2DMAPI.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U2DNOTES.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No
U2DPOST.DLL	\\Windows\\Crystal	\\System Folder\\Crystal	No

U2DVIM.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FCR.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FDIF.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FHTML.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FODBC.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FRDEF.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FREC.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FSEPV.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FTEXT.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FWKS.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FWORDW.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2FXLS.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2L2000.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2LCOM.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2LDTS.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2LEXCH.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2LFINRA.DLL	\Windows\Crystal	\System Folder\Crystal	No
U2LSAMP1.DLL	\Windows\Crystal	\System Folder\Crystal	No

7. Find the files listed in Table 5 on the Crystal Reports installation media in the \Windows\System32 folder, and copy them to the \System Folder\SYSTEM32 folder on the target machine.

<b>NOTE</b>	The System Folder has a different name in different versions of Windows. Use the one appropriate for the target machine.
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<b>NOTE</b>	The Crpe32.dll file must be copied from Windows \System32\Instal~1 on the installation media.
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Table 5

File	Location on Media	Location on Target Machine	Registration
CPEAUT32.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	Yes
CRPAIG80.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
CRWRAP32.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
CRYSTL32.OCX	\Windows\SYSTEM32	\System Folder\SYSTEM32	Yes
IMPLODE.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
P2BDAO.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
P2CTDAO.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
P2IRDAO.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
P2SMON.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
P2SODBC.DLL	\Windows\SYSTEM32	\System Folder\SYSTEM32	No
CRPE32.DLL	\Windows\SYSTEM32\Instal~1	\System Folder\SYSTEM32	No

8. On each target machine used for the ClearQuest client software, use the **regsvr32** command to make five registry entries with the full pathname, as follows:

- a. On the **Start** menu, click **Run**.

b. In the Run box, enter the following command and full pathname, and click **OK**.

```
regsvr32 "C:\Program Files\Seagate Software\Report Designer Component\craxdrt.dll"
```

Repeat the previous step with the following entries:

```
regsvr32 "C:\Program Files\Seagate Software\Report Designer Component\craxdrt.dll"
```

```
regsvr32 "C:\Program Files\Seagate Software\Viewers\ActiveXViewer\crviewer.dll"
```

```
regsvr32 "C:\Program Files\Seagate Software\Shared\Cdo32.dll"
```

```
regsvr32 C:\WINNT\system32\Crystl32.OCX
```

```
regsvr32 C:\WINNT\system32\cpeaut32.dll
```

**NOTE**

The system file path will be different with Windows 2000 and Windows XP operating systems. For example, WINNT applies to Windows 2000. Use the appropriate file path for the operating system on the machine.

9. If you install the Japanese edition of Crystal Reports, follow these steps to display the Crystal Reports toolbar in Japanese.

a. Find the files listed in Table 6 on the Crystal Reports installation media and copy them to the location listed for the target machine.

**NOTE**

The System Folder has a different name in different versions of Windows. Use the one appropriate for the target machine.

**Table 6**

File	Location on Media	Location on Target Machine	Registration
U3120JP.dll	\Windows\Crystal	\System Folder\Crystal	No
U31xcJP.dll	\Windows \Crystal	\System Folder \Crystal	No
u3lfrJP.dll	\Windows \Crystal	\System Folder \Crystal	No
u3ls1JP.dll	\Windows \Crystal	\System Folder \Crystal	No
U3520JP.dll	\Windows \Crystal	\System Folder \Crystal	No
P3SMNJP.dll	\Windows \SYSTEM32	\System Folder \SYSTEM32	No
CRPE32~1.DLL	\Windows\System32\INSTAL~1	\System Folder \SYSTEM32	No

b. Rename \System Folder\SYSTEM32\CRPE32~1.DLL to SystemFolder\System32\crpe32\_res\_JP.dll.

## Section Two

This section explains the process for installing the Crystal Reports run-time libraries for the New ClearQuest Server. The run-time libraries are necessary to run and view reports on the New Rational ClearQuest Web clients.

**The process involves the following steps:**

- Acquire Crystal Reports 8.5 Developer's Edition.
- Copy a selected group of files from the Crystal Reports installation media to each "target" machine running the ClearQuest Server on a Windows operating system.
- On each target machine, use the regsvr32 command to make selected registry entries.
- Apply a registry file provided with New ClearQuest Web.
- Add a new value to a registry key.

**To install the Crystal Reports run-time libraries, follow these steps:**

1. 1. Acquire the installation media for Crystal Reports 8.5 Developer's Edition.
2. 2. On each "target" machine (that is running the ClearQuest Server on Windows), verify that the following folders exist, or else create them:

\WINNT\Crystal

\WINNT\System32

3. 3. Find the files listed in Table 1 on the Crystal Reports installation media in the \Windows\Crystal folder, and copy them to the \WINNT\Crystal folder on the target machine.

**Table 1**

File	Location on Media	Location on Target Machine
crxf_pdf.dll	\Windows\Crystal	\WINNT\Crystal
crxf_rtf.dll	\Windows\Crystal	\WINNT\Crystal
Crxlat32.dll	\Windows\Crystal	\WINNT\Crystal
p2bbde.dll	\Windows\Crystal	\WINNT\Crystal
p2bxbse.dll	\Windows\Crystal	\WINNT\Crystal
p2ixbse.dll	\Windows\Crystal	\WINNT\Crystal
P2ldb2.dll	\Windows\Crystal	\WINNT\Crystal
P2LIFMX.dll	\Windows\Crystal	\WINNT\Crystal
p2lodbc.dll	\Windows\Crystal	\WINNT\Crystal
p2lora7.dll	\Windows\Crystal	\WINNT\Crystal
P2lsql.dll	\Windows\Crystal	\WINNT\Crystal
P2lsyb10.dll	\Windows\Crystal	\WINNT\Crystal
p2sacl.dll	\Windows\Crystal	\WINNT\Crystal
p2sexsr.dll	\Windows\Crystal	\WINNT\Crystal
p2sfs.dll	\Windows\Crystal	\WINNT\Crystal
p2sifmx.dll	\Windows\Crystal	\WINNT\Crystal
p2smapi.dll	\Windows\Crystal	\WINNT\Crystal
p2sNote.dll	\Windows\Crystal	\WINNT\Crystal
p2sora7.dll	\Windows\Crystal	\WINNT\Crystal
p2soutlk.dll	\Windows\Crystal	\WINNT\Crystal



p2srepl.dll	\\Windows\Crystal	\\WINNT\Crystal
p2ssql.dll	\\Windows\Crystal	\\WINNT\Crystal
p2ssyb10.dll	\\Windows\Crystal	\\WINNT\Crystal
p2strack.dll	\\Windows\Crystal	\\WINNT\Crystal
u252000.dll	\\Windows\Crystal	\\WINNT\Crystal
u25dts.dll	\\Windows\Crystal	\\WINNT\Crystal
u2dapp.dll	\\Windows\Crystal	\\WINNT\Crystal
u2ddisk.dll	\\Windows\Crystal	\\WINNT\Crystal
u2dmapi.dll	\\Windows\Crystal	\\WINNT\Crystal
u2dnotes.dll	\\Windows\Crystal	\\WINNT\Crystal
u2dpost.dll	\\Windows\Crystal	\\WINNT\Crystal
u2dvim.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fdif.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fhtml.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fodbc.dll	\\Windows\Crystal	\\WINNT\Crystal
u2frdef.dll	\\Windows\Crystal	\\WINNT\Crystal
u2frec.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fsepv.dll	\\Windows\Crystal	\\WINNT\Crystal
u2ftext.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fwks.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fwordw.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fxls.dll	\\Windows\Crystal	\\WINNT\Crystal
u2fxml.dll	\\Windows\Crystal	\\WINNT\Crystal
u2l2000.dll	\\Windows\Crystal	\\WINNT\Crystal
u2lcom.dll	\\Windows\Crystal	\\WINNT\Crystal
u2ldts.dll	\\Windows\Crystal	\\WINNT\Crystal
u2lexch.dll	\\Windows\Crystal	\\WINNT\Crystal
u2lfinra.dll	\\Windows\Crystal	\\WINNT\Crystal
u2lsamp1.dll	\\Windows\Crystal	\\WINNT\Crystal

- Find the files listed in Table 2 on the Crystal Reports installation media in the \\Windows\System32 folder, and copy them to the \\WINNT\System32 folder on the target machine.

Table 2

File	Location on Media	Location on Target Machine
p2bact.dll	\\Windows\Crystal	\\WINNT\System32
p2bact3.dll	\\Windows\Crystal	\\WINNT\System32
p2iract.dll	\\Windows\Crystal	\\WINNT\System32
p2iract3.dll	\\Windows\Crystal	\\WINNT\System32
p2sdb2.dll	\\Windows\Crystal	\\WINNT\System32
cpeaut32.dll	\\Windows\System32	\\WINNT\System32
Crbas14.dll	\\Windows\System32	\\WINNT\System32
CRBAS15.DLL	\\Windows\System32	\\WINNT\System32
CRBAS15R.DLL	\\Windows\System32	\\WINNT\System32
Crdb214.dll	\\Windows\System32	\\WINNT\System32
Crgup14.dll	\\Windows\System32	\\WINNT\System32
CRiadx07.dll	\\Windows\System32	\\WINNT\System32
<sup>1</sup> CRIADX~1.DLL	\\Windows\System32	\\WINNT\System32
Crinf14.dll	\\Windows\System32	\\WINNT\System32
Crinf914.dll	\\Windows\System32	\\WINNT\System32



Cror714.dll	\\Windows\System32	\\WINNT\System32
CROR815.dll	\\Windows\System32	\\WINNT\System32
Crpaig80.dll	\\Windows\System32	\\WINNT\System32
Crsyb14.dll	\\Windows\System32	\\WINNT\System32
Crutl14.dll	\\Windows\System32	\\WINNT\System32
CRUTL15.DLL	\\Windows\System32	\\WINNT\System32
CRUTL15R.DLL	\\Windows\System32	\\WINNT\System32
CRXML15.DLL	\\Windows\System32	\\WINNT\System32
CRXML15R.DLL	\\Windows\System32	\\WINNT\System32
CRXML15S.DLL	\\Windows\System32	\\WINNT\System32
CRxmlx07.dll	\\Windows\System32	\\WINNT\System32
<sup>2</sup> CRXMLX~1.DLL	\\Windows\System32	\\WINNT\System32
Crystl32.OCX	\\Windows\System32	\\WINNT\System32
exlate32.dll	\\Windows\System32	\\WINNT\System32
p2bdao.dll	\\Windows\System32	\\WINNT\System32
p2ctdao.dll	\\Windows\System32	\\WINNT\System32
p2irdao.dll	\\Windows\System32	\\WINNT\System32
p2sevt.dll	\\Windows\System32	\\WINNT\System32
P2smon.dll	\\Windows\System32	\\WINNT\System32
p2sodbc.dll	\\Windows\System32	\\WINNT\System32
Qecr.lic	\\Windows\System32	\\WINNT\System32
crpe32.dll	\\Windows\SYSTEM32\Instal~1	\\WINNT\System32
craxddrt.dll	\\ProgramF\SEAGAT~1\RDC	\\WINNT\System32
craxdrt.dll	\\ProgramF\SEAGAT~1\RDC	\\WINNT\System32
<sup>3</sup> CRDESI~1.DLL	\\ProgramF\SEAGAT~1\RDC	\\WINNT\System32
pg32conv.dll	\\ProgramF\SEAGAT~1\Shared	\\WINNT\System32
sscsdk80.dll	\\ProgramF\SEAGAT~1\Shared	\\WINNT\System32
crviewer.dll	\\ProgramF\SEAGAT~1\Viewers\Active~1\Instal~1	\\WINNT\System32

- <sup>1</sup> The name of the file when deployed on the target machine should be changed to CRIadx07r.dll  
<sup>2</sup> The name of the file when deployed on the target machine should be changed to CRxmlx07r.dll  
<sup>3</sup> The name of the file when deployed on the target machine should be changed to CRDesignerCtrl.DLL

**5.** Use the **regsvr32** command to register the appropriate components:

a. On the **Start** menu, click **Run**.

b. In the Run box, enter the following command and full pathname, and click **OK**.

```
regsvr32 "C:\WINNT\System32\cpeaut32.dll"
```

**6.** Add a new value to a registry key using the following steps:

a. Use a text editor to create a new file. Copy and paste the following text into the file.

```
REGEDIT4
```

```
[HKEY_CLASSES_ROOT\CLSID\{66589880-8F68-11D0-AA69-00A0C9274B91}\InProcServer32]
```

```
@="C:\\WINNT\\System32\\cpeaut32.dll"
```

"ThreadingModel"="Apartment"

b. Save the file with a **.reg** extension, for example in the C:\temp directory, and close the file.

c. Open **Microsoft Explorer** and locate the file. Double click on the file icon and click **Yes** to add the file information to the registry. Click **OK** to confirm the registry change.

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