

Crystal Reports support of 64-bit Operating Systems



Applies to:

Crystal Reports and 64-bit versions of Microsoft Windows 2003 Server and Microsoft Windows 2008 Server. Note that only Crystal Reports Basic for Visual Studio 2008 (version 10.5) and Crystal Reports 2008, SP 0 +, (version 12.1.x) are supported on Windows 2008 Server.

Summary

Currently, there are only two versions of Crystal Reports are with native 64-bit runtime (Crystal Reports 10.5 and Crystal Reports 10.2). Crystal Reports XI Release 2 (version 11.5) and Crystal Reports 2008 (version 12.1.x) support 64-bit operating systems, but in a 32-bit mode only.

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Created on: 16 April 2009

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Introduction

When considering the topic of which versions of Crystal Reports (CR) support 64-bit operating systems, a distinction must be made between 64-bit operating systems and 64-bit runtime support.

64-Bit Runtime Support

Currently, the only versions of Crystal Reports are with native 64-bit runtime are

- Crystal Reports for Visual Studio .NET 2005 (version 10.2)
- Crystal Reports basic for Visual Studio .NET 2008 (version 10.5).

These versions are included with the respective versions of Visual Studio .NET and ship 64-bit MSI and MSM files for deployment on 64-bit operating systems. For download locations of the MSI and MSM files see the Wiki [Crystal Reports for Visual Studio .NET Runtime Distribution - Versions 9.1 to 12.0](#).

Note that versions of Crystal Reports which are included with Visual Studio .NET contain a limited set of functionality in database connectivity and export formats.

64-bit Operating System support

The table below describes which version of 32-bit Crystal Reports supports which versions of a 64-bit operating system (OS).

Version of Crystal Reports	Version of Operating System			
	XP 64	Vista 64	W2K3 64	W2K8 64
CR XI release 2 (11.5.x)	Y	Y	Y	N
CR 2008 (CR 12.x)	Y	Y	Y	Y
CR for Visual Studio .NET 2005 (10.2)	Y	Y	Y	N
CR basic for Visual Studio .NET 2008 (10.5)	Y	Y	Y	Y

Note that full versions of Crystal Reports older than 11.5 are not supported on 64-bit operating systems.

Possible Error Messages

The following is not an exhaustive list of all possible error messages when working with Crystal Reports and 64-bit operating systems. However the section [Discussion and Troubleshooting](#) should be consulted for other error messages when working with 64-bit operating systems and Crystal Reports.

- "An error has occurred while attempting to load the Crystal Reports runtime. Either the Crystal Reports registry key permissions are insufficient or the Crystal Reports runtime is not installed correctly."
- "Please install the appropriate Crystal Reports redistributable (CRRedist*.msi) containing the correct version of the Crystal Reports runtime (x86, x64 or Itanium) required..."
- "The type initializer for 'CrystalDecisions.CrystalReports.Engine.ReportDocument' threw an exception."

- Method 'ISCREditableRTFExportFormatOptions_reserved5' on type 'CrystalDecisions.ReportAppServer.ReportDefModel.EditableRTFExportFormatOptionsClass' from assembly 'CrystalDecisions.ReportAppServer.ReportDefModel, Version=11.0.3300.0, Culture=neutral, PublicKeyToken=692fba5521e1304' is overriding a method that has been overridden

Discussion and Troubleshooting

When running Crystal Reports in 32-bit mode on 64-bit OS, any third party database clients and web servers must also run in 32-bit mode. Conversely, to run a 64-bit Crystal Reports on a 64-bit operating system, any third party database clients and web servers must also run in 64-bit mode. This includes the ODBC administrator.

To prepare 32-bit Crystal Reports to run on a 64-bit OS, you must ensure that the project is compiled in 32-bit mode.

To run 32-bit versions of Crystal Reports on a 64-bit Microsoft Windows 2003, once the application and Crystal Reports runtime has been deployed, the following configurations may need to be performed:

1. Run Internet Information Services (IIS) in 32-bit mode by running the following line in a command window:

```
Cscript %SystemDrive%\inetpub\AdminScripts\adsutil.vbs setw3svc/AppPools/Enable32bitAppOnWin64 1
```

Note: Leave the command window open because it will be needed again

The last number in the above line is to set 32-bit to **True**. See the Microsoft Knowledge Base article [894435](#).

2. Restart the IIS service. Type the following in the command window: "net stop w3svc /y & net start w3svc". The NET STOP and NET START commands to force IIS services to re-read the registry.
3. Navigate to the Windows folder in the command window. Locate the **Microsoft.Net\Framework\v2.0.50727** folder.
4. Run the **aspnet_regiis -i** command. This will register the 32-bit .NET subsystem.
5. Open IIS Manager (inetmgr) and ensure that your application is able to use ASP .NET framework version 2.0.x.

Note that the above will require all applications to run in 32-bit mode only. If there are other applications running on the IIS server that must run in 64-bit mode, then the 32-bit Crystal Reports project should be installed on another server.

Crystal Reports and Microsoft Windows 2008 Server

Unlike Windows 2003 Server, using Windows 2008 Server it is possible to run IIS 7 in both 32-bit and 64-bit modes concurrently. Win 2008 Server has a setting on the Application Pool to use 32- or 64-bit mode, thus there is [no need to run command line statements](#).

Possible error messages specific to WIN 2008 Server

"NullReferenceException: Object reference not set to an instance of an object."

"BOBJ is undefined."

Images and charts are replaced with a red X in the .NET webform DHTML viewer when viewed using IIS 7 on Windows 2008 server.

Discussion and Troubleshooting

NullReferenceException will typically appear if a 32-bit application is run in a 64-bit mode. Ensure that if you are using 32-bit Crystal Reports, your Windows 2003 Server is running in a 32-bit mode. If using Windows 2008 Server, the Application Pool is set to use 32-bit mode.

To resolve the **BOBJ is Undefined** error on WIN 2008 Server, change the Application Pool to run in Classic mode as follows:

1. In IIS Manager, select the **Application Pool** and **Basic Settings**.
2. Under **Managed Pipeline Mode** change from **Integrated Mode** to **Classic Mode**.

Note that there are other causes of the error, and the above solution is specific to Crystal Reports XI Release 2 running in a 32-bit mode on a 64-bit WIN 2008 Server. For other possible solutions to the **BOBJ is Undefined** error, search SAP BusinessObjects [notes](#).

The issue of red X in the .NET webform DHTML viewer is due to the Application Pool being run in the Integrated Pipeline mode. IIS 7 supports two modes, Classic and Integrated. In Classic mode, images and charts are managed using <httpHandlers> which are placed in the <system.web> section in the applications **web.config** file. In Integrated mode on IIS 7, the <system.webServer> section is used to define <handlers> for the **crystalImageHandler**. This section may be missing if the application is being migrated from an earlier version of IIS.

To resolve the issue of a missing **crystalImageHandler** section, run the application pool in the Classic pipeline mode and ensure the **crystalImageHandler** is defined in the <system.web> section of the application's **web.config** file (in Classic mode the <system.webServer> section is ignored). Below is an example for a Crystal Reports 2008 web application:

```
<system.web>
<httpHandlers>
  <add verb="GET"
    path="CrystalImageHandler.aspx"
    type="CrystalDecisions.Web.CrystalImageHandler, CrystalDecisions.Web,
Version=12.0.2000.0, Culture=neutral,
PublicKeyToken=692fbea5521e1304"/></httpHandlers>
</system.web>
```

If it is necessary to use the Integrated pipeline mode for your application pool, then ensure that handlers are defined in the <system.webServer> section of your application's **web.config** file. Below is an example for a Crystal Reports 2008 web application:

```
<system.webServer>
<handlers>
  <add name="CrystalImageHandler.aspx_GET"
    verb="GET" path="CrystalImageHandler.aspx"
    type="CrystalDecisions.Web.CrystalImageHandler, CrystalDecisions.Web,
Version=12.0.2000.0, Culture=neutral, PublicKeyToken=692fbea5521e1304"
    preCondition="integratedMode"/>
</handlers>
<validation validateIntegratedModeConfiguration="false"/>
</system.webServer>
```

Note that there are other causes of the red X in the .NET webform DHTML viewer. These are discussed at length in the articles [Crystal Report Viewers in Visual Studio .NET – Dynamic Images](#) and [Crystal Report Viewers in Visual Studio .NET – Toolbar Images](#).

Related Content

Notes

- [1220501](#)
- [1219393](#)
- [1267418](#)
- [1268716](#)
- [1198522](#)
- [1184965](#)

Articles

[Crystal Reports® 2008 with Service Pack 1](#)

[Crystal Reports XI Release 2 – Service Pack 5](#)

[Crystal Reports Support on Vista](#)

Wikis

[Crystal Reports for Visual Studio .NET Runtime Distribution - Versions 9.1 to 12.0](#)

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