

# Crystal Reports for Visual Studio .NET

## Troubleshooting Error Messages Related to the Keycodev2.dll

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### Overview

This document discusses how to troubleshoot error messages related to the Keycodev2.dll for the version of Crystal Reports that comes bundled with Microsoft Visual Studio .NET. Solutions are discussed for both development and deployment computers.

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## Introduction

Error messages related to the Keycodev2.dll file can appear in your application when Crystal Reports for Visual Studio .NET

- does not have access to Keycodev2.dll
- does not have access to registry keys related to Keycodev2.dll
- or does not recognize the product keycode stored in the registry.

This document discusses the most common causes for these error messages that can occur on development or deployment computers.

## Determining your Version of Crystal Reports

The Crystal Reports version referenced in your Visual Studio .NET project is an important piece of information for troubleshooting.

To check the project references, select each Crystal assembly in the **Solution Explorer**. In the **Properties** window, there is a **Version** property. This property will display the assembly version. The value will be one of the following:

Crystal Reports Version	Assembly Version
Crystal Reports bundled with Visual Studio .NET 2002	9.1.3300
Crystal Reports bundled with Visual Studio .NET 2003	9.1.5000
Crystal Reports 9	9.2.3300
Crystal Reports 10	10.0.3300

<b>NOTE</b>	This document only applies to the versions of Crystal Reports which come bundled with Visual Studio .NET. Solutions discussed in this document do not apply to applications developed with full versions of Crystal Reports installed on a Visual Studio .NET development environment.
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## Troubleshooting Error Messages on the Development Computer

This section discusses sources of Keycodev2.dll error messages on the development computer. These solutions also apply to deployment environments where Visual Studio .NET is installed on the deployment computer.

## Error Message: “Invalid Keycode”

This error message appears when Crystal Reports version 8.x registration and keycode values are used to register Crystal Reports for Visual Studio .NET. Crystal Reports version 8.x values are invalid for the Crystal Reports for Visual Studio .NET product.

Registering your Crystal Reports for Visual Studio .NET product on the Business Objects support website at <http://support.businessobjects.com> will provide a specific keycode and registration number for your product.

To resolve this error message, go to <http://support.businessobjects.com/search/> and search for **crnet\_keycodefix.zip**.

Once you have downloaded this file, open the readme.txt file in Notepad and follow the instructions. The instructions must be outlined in a text file due to the format of the keycode.

<b>NOTE</b>	Ensure that Notepad is used to view the readme.txt file contained in the <b>crnet_keycodefix.zip</b> file. Other text editors may not accurately represent the contents of the file and cause this solution to fail.
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<b>CAUTION</b>	The solution for this issue differs between Visual Studio .NET 2002 and Visual Studio .NET 2003. Be sure you are implementing the correct solution for your environment, as outlined in the readme.txt file.
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## Error Message: “Cannot find keycodev2.dll or invalid keycode”

This solution applies only to Visual Studio .NET web applications.

This error message appears because the **ASPNET** account does not have rights to the following registry keys:

- HKEY\_CLASSES\_ROOT\Interface\{4A4D268A-DF9B-4FC1-8301-D9FEEEF69F9C}
- HKEY\_CLASSES\_ROOT\TypeLib\{8D43D0B9-C14E-4577-9E67-A9A1EEF82302}

To resolve this error message, give the **ASPNET** account **Read** rights to these two registry keys.

If you have configured the ASP.NET worker process (aspnet\_wp.exe) to run under the **System** account, then the **System** account must have the rights to these keys.

To give the **ASPNET** account read rights to a registry key perform the following steps:

1. Open the 32-bit Registry Editor by going to **Start**, click **Run**, then type "regedt32". For Windows XP computers, type "regedit" instead of "regedt32". Click **OK**.
2. Go to the **HKEY\_CLASSES\_ROOT** section and expand the **Interface** key.
3. Select the {4A4D268A-DF9B-4FC1-8301-D9FEEEF69F9C} key.
4. Click the **Security** menu and then click **Permissions....** (When using regedit in Windows XP, click the **Edit** menu then click **Permissions....**)
5. In the **Permissions** dialog box, add the **ASPNET** account from the local computer and give this account **Read** rights.
6. In the **HKEY\_CLASSES\_ROOT** section, select the **TypeLib** key. Repeat steps 3 to 5 above, using the {8D43D0B9-C14E-4577-9E67-A9A1EEF82302} key.

In order to have access to these registry keys, Keycodev2.dll must be registered. To register Keycodev2.dll, go to **Start**, click **Run** , then type:

**Regsvr32 "C:\Program Files\Common Files\Crystal Decisions\1.0\bin\Keycodev2.dll"**

The path to Keycodev2.dll is the same for Visual Studio .NET 2002 and Visual Studio .NET 2003.

If the file fails to register, download the Dependency Walker utility from <http://www.dependencywalker.com/>. This utility will list all the Keycodev2.dll dependency files and should indicate what files are missing or outdated.

<b>CAUTION</b>	Dependency Walker is a third-party tool. Business Objects cannot be held responsible for issues arising from the use of Dependency Walker on your computer.
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<b>NOTE</b>	Win9x operating systems such as Windows 98 and Windows ME are not supported platforms for IIS, so the above solution may not apply.
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## Troubleshooting Error Messages on the Deployment Computer

This section discusses sources of Keycodev2.dll error messages on the deployment computer. Solutions listed for the development computer may also apply to this environment.

The recommended method for deploying Crystal Reports in a Visual Studio .NET application is to distribute the Crystal Reports runtime files using Merge Modules in a Microsoft Windows Installer (MSI) based setup package. For more information on deploying Visual Studio .NET applications with Crystal Reports, go to <http://support.businessobjects.com/search/> and search for **crnet\_deployment.pdf**.

### Error Message: “Invalid keycode or keycodev2.dll is not registered”

This error message appears when the Crqe.dll file is not registered.

The Crqe.dll file must be registered for Crystal Reports for Visual Studio .NET to function correctly in a Windows application. To register Crqe.dll, go to **Start**, click **Run**, and type:

```
Regsvr32 "C:\Program Files\Common Files\Crystal  
Decisions\1.0\bin\Crqe.dll"
```

The path to Crqe.dll is the same for Visual Studio .NET 2002 and Visual Studio .NET 2003.

If the file fails to register, download the Dependency Walker utility from <http://www.dependencywalker.com/>. This utility will list all the Crqe.dll dependency files and should indicate what files are missing or outdated.

<b>CAUTION</b>	Dependency Walker is a third-party tool. Business Objects cannot be held responsible for issues arising from the use of Dependency Walker on your computer.
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### Error Message: “Invalid or missing Keycodev2.dll”

This error message appears because the license key in the licensing merge module is missing or incorrect.

The licensing merge module requires a license key to be entered so that it can configure the deployment computer. When this merge module is added to a setup project, the **Properties** window exposes a property

called **License Key**. This property can be found by expanding the **(MergeModuleProperties)** property.

The licensing merge module is named as follows:

Version of Crystal Reports	Licensing Merge Module Name
Crystal Reports bundled with Visual Studio .NET 2002	RegWiz.msm
Crystal Reports bundled with Visual Studio .NET 2003	Crystal_RegWiz2003.msm

After registering Crystal Reports for Visual Studio .NET, an email containing a registration number and unique keycode is sent to you. Copy the keycode into the **License Key** property of the merge module, and then build the setup project.

Ensure that you are adding the correct keycode. The license key is the unique 19-character product keycode. The license key is not your 10-digit registration number. Do not enter your registration number into the **License Key** property of the licensing merge module.

<b>NOTE</b>	For deployment and packaging tools that do not support configurable merge modules, a merge module de-compiler such as Orca is used to add the license key prior to deployment.
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<b>CAUTION</b>	Business Objects cannot be held responsible for issues arising from the use of a merge module de-compiler on your computer.
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## Additional Information

### Crystal Assemblies

All of the Crystal assemblies in a project must be the same version in order to function properly. Refer to the section of this document titled [Determining your Version of Crystal Reports](#) for information on checking your project references.

Also ensure that you are distributing the appropriate runtime files for the version of Crystal Reports referenced in your project. For more information on deploying Visual Studio .NET applications with Crystal Reports, go to <http://support.businessobjects.com/search/> and search for **crnet\_deployment.pdf**.

The Crystal assemblies need to be installed into the Global Assembly Cache (GAC). If they are not located in **C:\WINDOWS\Assembly** or **C:\WINNT\Assembly**, use **gacutil.exe**, a command-line Microsoft utility included with Visual Studio .NET, to install them.

## Permissions and Installation

Install the application on the deployment computer using an account with administrative rights to permit the registration of DLLs and creation of registry keys. Without these, Crystal Reports for Visual Studio .NET will not function correctly.

Install the application “For Everyone” by an Administrator if users without administrative rights will be using the application.

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