

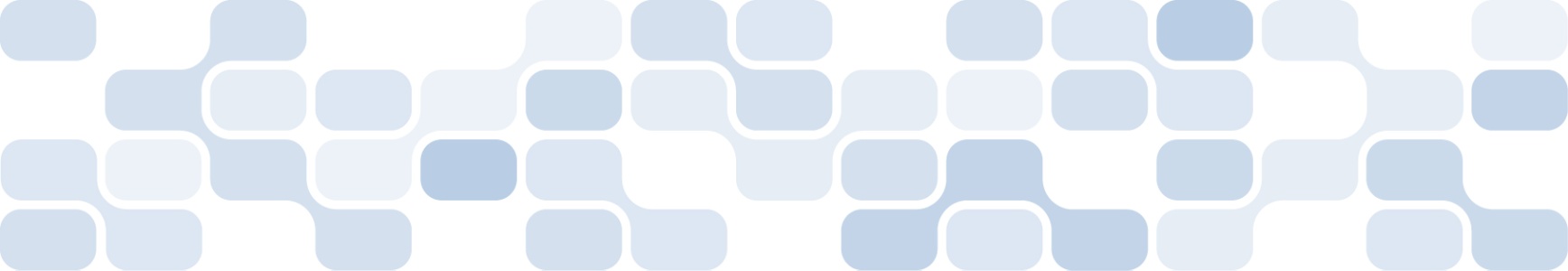
MS_logo_KVisual Studio 2008 Product Comparison

Data Sheet

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For the latest information, please see <http://www.microsoft.com/vstudio>

Note: This product comparison is for illustrative purposes only.



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# General

| Languages Visual Studio provides several programming languages for software development | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **JScript 8.0** is an open implementation of JavaScript for creating active online content for the Web | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Basic 2008** is an evolution of the Visual Basic language that is engineered for productively building type-safe and object-oriented applications | ♦ | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual C# 2008** brings the expressiveness and elegance of C-style languages to enable rapid application development for the .NET Framework | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual C++ 2008** provides a powerful and flexible development environment for creating Microsoft Windows–based and Microsoft .NET–based applications |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Project System Use the Project System to manage items required by your development effort, such as references, data connections, folders, and files | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Auto-Convert Projects** enables you to easily move projects based on the .NET 2.0 Framework to .NET Framework 3.5 |  | ♦ | ♦ |  |  |  |  |  |  |  |  |
| **Multitargeting Support** enables you to target your code to a specific version of the .NET Framework | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Service Reference** adds references to Windows Communication Foundation (WCF) services | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Solution Explorer** provides an organized view of a solution's projects and files | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Solutions** can contain multiple projects that you can open, close, and save together | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Upgrade Wizard** enables you to open a Visual Basic 6.0 project in Visual Basic 2008 and step through the upgrade process |  | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| [**Visual Studio Conversion Wizard**](http://msdn2.microsoft.com/library/60z6y467.aspx)enables you to convert a solution or project to the project file format that is used by this version of Visual Studio | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web References** enable you to use objects and methods provided by a Web service in your code | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Extensibility Visual Studio is a highly-extensible and automatable integrated development environment | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Add-Ins** enable you to create Visual Studio add-ins to extend or automate the functionality of Visual Studio |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Macros and Macros IDE** enable you to create, manipulate, edit, and run macros to automate Visual Studio using Visual Studio’s automation model |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Add-in project template** for creating an Add-in loadable into both the Visual Studio and the Visual Studio Macros IDE |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **VSPackages** enable you to create software modules for extending Visual Studio with UI elements, services, projects, editors, and designers |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Wizards** enable you to extend or automate the functionality of Visual Studio using programs that lead a user through a series of actions to accomplish a complex, repetitive, or difficult task |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| External Tools Visual Studio includes a number of core external tools to aid in developing and debugging your applications | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **.NET Framework Tools** make it easier for you to create, deploy, and manage applications and components that target the .NET Framework (see [.NET Framework Tools](http://msdn2.microsoft.com/en-us/library/d9kh6s92.aspx)) | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ATL/MFC Trace Tool** displays debug trace messages in the ATL and MFC sources |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Create GUID** generates a GUID based on specified criteria |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Dotfuscator Community Edition** enables you to protect your managed application from reverse engineering |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Error Lookup** retrieves a system error message or module error message based on the value entered |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **External Tools dialog box** enables you to add tools to the Tools menu, which you can then launch from within Visual Studio | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Source Control Integration** enables two options: source control solution based on the Source Control Plug-in API (formerly known as the MSSCCI API), or a source control VSPackage |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Spy++** provides a graphical view of the processes, threads, windows, and window messages of a system |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Team Explorer Integration** enables you to install Team Explorer for use with Team Foundation Server, which also requires a Team Foundation Server CAL |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Team Foundation Server CAL** included for accessing Team Foundation Server |  |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Team Foundation Server Workgroup Edition** included when purchasing Visual Studio Team System Editions with an MSDN Premium Subscription |  |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio 2008 Image Library** is a collection of over 1,800 application images and videos you can use to create applications that look visually consistent with Microsoft software |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Command Prompt** opens a command prompt and sets the environment for using Visual Studio 2008 command-line tools |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Environment Options The many settings available enable you customize Visual Studio to better match your development style | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Add-Ins/Macro Security options** enable you to define security settings for running add-ins and macros in Visual Studio |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AutoRecover options** enable you to specify whether or not files are automatically saved periodically while they are open, and whether restore modified files if Visual Studio shuts down unexpectedly | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Documents options** to control the display of documents in Visual Studio and manage external changes to documents and files | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Filtered Options** enables you to simplify the options available to a subset of those available | ♦ | ♦ | ♦ | ♦ |  |  |  |  |  |  |  |
| **Fonts and Colors options** enables you to establish a custom font and color scheme for various user interface elements in Visual Studio, including syntax-specific fonts and colors | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **General options** enable you to specify some basic IDE options, such as document UI, application animations, and file associations | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Import and Export Settings Wizard** enables you to export settings, import settings, or overwrite your settings by using a predefined settings collection | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **International Settings options** enable you to change the default language when you have more than one language version of Visual Studio installed | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Settings** enable you to choose from a number of predefined IDE settings |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Browser options** enable you to sets options for both the internal Web browser and Internet Explorer | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Setup Experience Visual Studio Setup provides a consolidated setup experience | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Express Setup** provides the most streamlined setup experience with a lightweight download and the fewest decisions to make during setup | ♦ | ♦ | ♦ | ♦ |  |  |  |  |  |  |  |
| **Full Setup** provides the most control over which components to install during setup |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Simplified Setup** provides some customization over which components to install during setup |  |  |  |  | ♦ |  |  |  |  |  |  |

| Help System Visual Studio uses MSDN Library for integrated and comprehensive documentation | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Document Explorer** provides a way of interacting with the help topics that are written for various products and technologies | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Dynamic Help window** automatically displays links to Help, training, and other topics, based on the context of what you are doing in Visual Studio | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MSDN Express Library** is an abridged version of the MSDN Library that is specially tailored for the Visual Studio Express products | ♦ | ♦ | ♦ | ♦ | ♦ |  |  |  |  |  |  |
| **MSDN Library** is an essential resource for developers using Microsoft tools, products, and technologies (available as a separate download, but not included with Express or Standard editions) | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MSDN Library Online** provides online access to MSDN Library content | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

# Basic Tools

| Code Editing Tools The ability to write and modify text and code is a core function of Visual Studio 2008 | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Auto Using** to detect when your code is missing a using statement to qualify a data type | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Bookmark window** to display and navigate to bookmarks in your code | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Bookmarks** enable you to mark lines of code and navigate to them | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Class Designer** provides a visual design surface called a class diagram that you can use to work with classes and other types in a project |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Class View** displays the symbols defined, referenced, or called in the application you are developing | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Code Colorization** colorizes code tokens and constructs so they are easier to scan and read | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Code Definition window** is a read-only editor view that displays the definition of a symbol in a code file stored in, or referenced by, the active project |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Code Snippets Manager** to add folders to the folder list that the Code Snippet Picker scans for XML .snippet files | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Code Snippets** provide a way for you to insert ready-made snippets of code into your projects | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Document Outline window** provides an outline view of elements and scripts in the current document | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Find All References** enables you to find every line of code that references a particular class or member | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Generate Method Stub** is an IntelliSense Automatic Code Generation feature that provides an easy way to create a new method declaration when writing a method call | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **IntelliSense** accelerated development by making language references easy to access and use | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Metadata as Source** enables you to view metadata that appears as C# source code in a read-only buffer | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Object Browser** enables you to explore available objects and their members | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Organize Usings** enables you to sort using statements and remove unused usings | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Properties window** enables you to view and change the design-time properties and events of selected objects that are located in editors, designers, and other tools windows | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Property Manager** enables you to modify project settings that are defined in property sheets |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Resource Editors** are specialized environments for creating, modifying, and previewing resources included in a Visual Studio project |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Source Code and Markup Formatting** enables the text editor to format source code and markup on a per language basis | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Surround-With Code Snippets** enable you to wrap selected lines of code a code snippet | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Tag Navigator** represents the element that is currently selected in the document and the hierarchy of parent tags to which it belongs | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Task List window** helps you create and manage a list of programming tasks | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Toolbox** displays icons for items that you can add to the various design surfaces in Visual Studio | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Refactoring Tools Refactoring tools help you improve your code after it has been written by changing its internal structure without changing its external behavior | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Encapsulate Field refactoring** enables you to quickly create a property from an existing field, and then seamlessly update your code with references to the new property |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Extract Interface refactoring** provides an easy way to create a new interface with members that originate from an existing class, struct, or interface |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Extract Method refactoring** provides an easy way to create a new method from a code fragment in an existing member | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Promote Local Variable to Parameter refactoring** provides an easy way to move a variable from a local usage to a method, indexer, or constructor parameter while updating the call sites correctly |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Remove Parameters refactoring** provides an easy way to remove parameters from methods, indexers, or delegates |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Rename refactoring** provides an easy way to rename identifiers for code symbols such as fields, local variables, methods, namespaces, properties, and types | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Reorder Parameters refactoring** provides an easy way to change the order of the parameters for methods, indexers, and delegates |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Debugging Tools Debugging tools in Visual Studio 2008 enable you to observe the run-time behavior of your program and locate logic errors | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Attach to Local Process** enables you to attach the debugger to any process on the local computer |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Attach to Remote Process** enables you to attach the debugger to processes on remote computers that have been set up for remote debugging |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Autos window** displays variables used in the current statement and the previous statement |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Breakpoints** enable you to tell the debugger that an application should break, pause execution, at a certain point | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Breakpoints window** lists all breakpoints currently set in your program and displays their properties |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Call Browser** window enables you to search for function calls, and then browse the search results and easily navigate to the function references in your source code files |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Call Stack window** displays a list of all active procedures or stack frames for the current thread of execution | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Debugger Visualizers** create a dialog box or other interface to displays a variable or object in a meaningful way that is appropriate to its data type (Visual Studio includes four: text, HTML, XML, and dataset) | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Disassembly window** shows assembly code corresponding to the instructions created by the compiler |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Dumps** enable you to save program information for debugging at a later time |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Edit and Continue** is a time-saving feature that enables you to make changes to your code during a debugging session, instead of having to stop, recompile your entire program, and restart the debugging session (32-bit development only) |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Error List window** displays the Errors, Warnings, and Messages produced as you edit and compile code | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Exception Assistant** is a debugging tool that provides details about exceptions when they occur, including the exception message, troubleshooting tips, and a task-oriented list of corrective actions to take | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Find Symbol Results window** lists search results for the Find Symbol tab of the Find and Replace window, the Find All References shortcut menu command in the Object Browser, Class View, or the Code Editor | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Immediate window** enables you to enter expressions to be evaluated or executed by a development language | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Just-In-Time Debugging** launches the Visual Studio debugger automatically when a program, running outside Visual Studio, encounters a fatal error |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Locals window** displays the local variables and their values in the current stack frame | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Managed Debugging** enables you to debug managed applications, or applications written in languages that target the common language runtime, such as Visual Basic, C#, and Managed Extensions for C++ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Memory window** displays large buffers, strings, and other data that do not display well in the Watch or Variables window |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Mini-dumps** contain pertinent data during a crash that show the call stack and symbols, just as if the crash had occurred on the developer's machine while debugging within Visual Studio |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Mixed-Mode Debugging** enables you to debug a mixed-mode application, which is any application that combines native code with managed code (32-bit development only) |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Modules and Symbols window** enables you to load and unload the symbols for a module |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MPI Cluster System Debugging** enables you to debug parallel programs that run on a cluster of computers communicating through the Message Passing Interface (MPI) |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Multithreaded/Multiprocess Debugging** is easier with an improved Threads window and other user interface improvements to make multithreaded debugging easier |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Native Debugging** enables you to debug native applications, which are applications written in C/C++ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **NTSD Command Support** enables you to use the Immediate window for NT Symbolic Debugger (NTSD) commands, which can help with debugging user-mode applications |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Object Test Bench** enables you to create instances of your project's objects for simple object-level testing |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Output window** displays status messages at run time | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Processes window** shows all processes that you have attached to or launched from Visual Studio |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Registers window** enables you to see register values change as your code executes with recently changed values appearing in red |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Remote Debugging** enables debugging of a computer or device from another computer |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Script Debugging** enables you to find and correct errors in scripts written in VBScript or JScript/JavaScript, including supports for debugging of client-side scripts in ASP.NET pages | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SQL-CLR Debugging** enables you to debug various kinds of CLR database objects, including stored procedures, triggers, user-defined scalar functions, user-defined table-valued functions, user-defined aggregates, and user-defined types |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Step-Into Web Services** enables you to attach to a Web service to debug a Web service call |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Symbols Server Support** enables you to automatically download the proper symbols for various Microsoft operating systems, as well as MDAC, IIS, ISA, and the .NET Framework |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Threads window** lists all of the threads for the current process and information about them |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Tracepoints** enable you to create breakpoints with a custom action associated with it |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **T-SQL Debugging** enables you to debug various kinds of T-SQL database objects, including stored procedures, triggers, user-defined functions, and extended stored procedures |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Watch window** displays the values of selected variables or watch expressions and only updates when execution is stopped at a breakpoint or exception | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **XSLT Debugger** enables you to debug a style sheet, to debug an XSLT transformation invoked from another application, and to view XSLT output |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Build and Deployment Tools The tools provided with Visual Studio 2008 enable you to control builds and deploy applications & components | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **CAB Project project template** for creating a CAB project to which files can be added |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ClickOnce deployment** enables you to publish Windows-based applications to a Web server or network file share for simplified installation | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ClickOnce Security Setting** enables you to specify the code access security permissions that your ClickOnce application requires to run |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Compiler Support for Any CPU** enables you to compile your managed application to run on any CPU |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Copy Web Site tool** enables you to copy files between the current Web site and another site | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Database Publishing Wizard** (Publish to provider) enables you to generate scripts for databases and objects inside of databases | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Merge Module Project project template** for creating a Windows Installer Merge Module project to which files can be added |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Pre/Post Build Event Commands** enable you to run scripts, macros, or other actions before or after the compilation process |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Publish Web Site utility** precompiles the pages and code that are in the Web site and writes the compiler output to a folder that you specify |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Setup Project project template** for creating a Windows Installer project to which files can be added |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Setup Wizard project template** for creating a Windows Installer project with the aid of a wizard |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Smart Device CAB Project project template** for creating a CAB project to deploy Pocket PC, Smartphone and other Windows CE-based applications |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Strong Name Signing** enables you to strong-name sign your application, deployment manifests and the assembly, which gives your software components globally unique identities that cannot be spoofed |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Setup Project project template** for creating a Windows Installer web project to which files can be added |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Installer deployment** enables you to create installer packages to be distributed to users, who run the setup file and step through a wizard to install the application |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| 64-Bit Development Visual Studio enables you to create applications that take advantage of 64-bit capabilities and run specifically on Windows 64-bit computers | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **64-Bit Debugging (X64)** enables you to debug 64-bit applications running on Windows 64-bit computers locally or remotely (remote debugging not available in Express and Standard Editions) | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **64-Bit Debugging (IA64)** enables you to debug 64-bit applications running on Windows 64-bit computers remotely |  |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ |
| **64-Bit Visual C++ Tools** in Visual Studio enable you to compile your application to target Windows 64-bit computers |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Compiler Support for 64-Bit Managed Applications** enables you to compile your managed application to target 64-bit versions of the .NET Framework on Windows 64-bit computers when you install Visual Studio on Windows 64-bit computers |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Profiler 64-Bit Support (X64 only)** for both the 64-bit applications that run on Windows 64-bit computers and 32-bit applications that run on WOW64 |  |  |  |  |  |  |  |  | ♦ |  | ♦ |

# Data-Related Tools

| Data Tools Data tools help you build applications that access data, including LINQ, which brings new query capabilities to C# and Visual Basic | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Data Sources window** displays the data sources in your project for creating data-bound controls | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Database Explorer** enables you to open data connections and to log on to servers and explore their databases | ♦ | ♦ | ♦ | ♦ | ♦ |  |  |  |  |  |  |
| **Database Project** project template for direct manipulation of database objects and data |  |  |  |  |  | ♦ | ♦ |  | ♦ | ♦ |  |
| **Dataset Designer** is a set of visual tools for creating and editing typed datasets and the individual items that make up datasets | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Microsoft SQL Server 2005 Compact Edition** is a compact database that can be deployed on desktop computers, notebooks, smart devices, and Tablet PCs |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Object Relational Designer** provides a visual design surface for creating LINQ to SQL entity classes and relationships based on objects in a database | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Query and View Designer** enables you to create views and queries and return results for modification | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Server Explorer** enables you to open data connections and to log on to servers and explore their databases and system services |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SQL Server Express** is a client database platform modeled after Microsoft SQL Server 2005 | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SQL Server Project** project template for creating classes to use in a SQL Server |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SQLMetal** command-line tool can be used during build to generate classes from existing databases for use in LINQ to SQL applications | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| XML Tools Visual Studio 2008 includes a number of tools to help you work with XML documents, schema, and data | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Create XSD Schema from an XML Document** enables you to create XSD schema from an XML document by inferring one from the data in the XML document, converting an external DTD and internal subset, or by converting an inline XDR schema |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **XML Editor** supports XML syntax checking, schema validation and IntelliSense, XML snippets, DTDs, XSD schemas, conversion of DTDs and XDRs schema to XML Schema, and document outlining | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **XSLT Editing Enhancements** in the XML Editor includes syntax coloring, XSLT syntax checking, standalone XSLT debugging, XSLT debugging integrated with the CLR, and script block support |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Reporting Tools Visual Studio 2008 includes tools to help you create reports in your applications | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Crystal Reports Application project template** for creating an application with a Windows user interface and a sample Crystal Report |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Crystal Reports for Visual Studio** includes the ability to create reports, connect them to a CrystalReportViewer control, and interact with reports using the Crystal Reports SDK |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Reports Application project template** for creating an application with a Windows user interface and a Report |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Report Designer** enables you to create robust reports from relational and multidimensional data sources |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Report Wizard** is a tool that enables you to create the client report definitions (.rdlc) files associated with ReportViewer controls |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

# Platform Tools

| Office Development The Visual Studio Tools for Office enable you to write applications that take advantage of functionality in the Microsoft Office system | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Excel 2003 Add-in project template** for creating a managed code add-in for Excel 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Excel 2003 Template project template** for creating managed code extensions behind a new or existing Excel 2007 template |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Excel 2003 Workbook project template** for creating managed code extensions behind a new or existing Excel 2007 workbook |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Excel 2007 Add-in project template** for creating a managed code add-in for Excel 2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Excel 2007 Template project template** for creating managed code extensions behind a new or existing Excel 2007 template |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Excel 2007 Workbook project template** for creating managed code extensions behind a new or existing Excel 2007 workbook |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **InfoPath 2007 Add-in project template** for creating a managed code add-in for InfoPath2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **InfoPath 2007 Form Template project template** for creating managed code extensions behind a new or existing InfoPath form template |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Microsoft Office System 2003 Primary Interop Assemblies** contain type definitions (not implementation) of types defined by Microsoft Office System 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Microsoft Office System Runtime** includes managed assemblies that provide the communication layer between your solution and the Microsoft Office application |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Outlook 2003 Add-in project template** for creating a managed code add-in for Outlook 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Outlook 2007 Add-in project template** for creating a managed code add-in for Outlook 2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **PowerPoint 2003 Add-in project template** for creating a managed code add-in for PowerPoint 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **PowerPoint 2007 Add-in project template** for creating a managed code add-in for PowerPoint 2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Project 2003 Add-in project template** for creating a managed code add-in for Project 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Project 2007 Add-in project template** for creating a managed code add-in for Project 2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Shared Add-in project template** for creating an Add-in loadable into multiple Microsoft Office applications |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SharePoint 2007 Sequential Workflow project template** for creating a SharePoint sequential workflow |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SharePoint 2007 Sequential Workflow project template** for creating a SharePoint sequential workflow |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SharePoint 2007 State Machine Console Application project template** for creating a state machine workflow console application |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SharePoint 2007 State Machine Workflow project template** for creating a SharePoint state machine workflow |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SharePoint 2007 State Machine Workflow project template** for creating a SharePoint state machine workflow |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visio 2003 Add-in project template** for creating a managed code add-in for Visio 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visio 2007 Add-in project template** for creating a managed code add-in for Visio 2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Tools for the Microsoft Office system** help you extend applications in Microsoft Office 2003 and the 2007 Microsoft Office system using Visual Basic and Visual C# |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Word 2003 Add-in project template** for creating a managed code add-in for Word 2003 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Word 2003 Document project template** for creating managed code extensions behind a new or existing Word 2003 document |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Word 2003 Template project template** for creating managed code extensions behind a new or existing Word 2003 template |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Word 2007 Add-in project template** for creating a managed code add-in for Word 2007 |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Word 2007 Document project template** for creating managed code extensions behind a new or existing Word 2007 document |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Word 2007 Template project template** for creating managed code extensions behind a new or existing Word 2007 template |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Smart Device Development Tools and frameworks that help you develop applications for Pocket PC, Smartphone, and other Windows CE .NET-based platforms | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **ATL Smart Device Project project template** for creating Windows Mobile and other Windows CE-based devices that uses the Active Template Library |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Device Emulator** is a desktop application that emulates the behavior of a Windows CE- or Windows Mobile-based hardware platform |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MFC Smart Device ActiveX Control project template** for creating an ActiveX control for Windows Mobile and other Windows CE-based devices that uses the Microsoft Foundation Class Library |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MFC Smart Device Application project template** for creating an application for Windows Mobile and other Windows CE-based devices that uses the Microsoft Foundation Class Library |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MFC Smart Device DLL project template** for creating a dynamic-link library for Windows Mobile and other Windows CE-based devices that uses the Microsoft Foundation Class library |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Smart Device Project project template** for creating Smart Device applications |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Win32 Smart Device Project project template** for creating a Win32 or Console project for Windows Mobile and other Windows CE-based devices |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows CE Remote File Viewer** displays a hierarchical view of the file system on a target device |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows CE Remote Heap Walker** displays information about heap identifiers and flags for each process that is running on a target device and about system memory that a process uses |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows CE Remote Process Walker** displays information associated with each process that is running on a target device |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows CE Remote Registry Editor** displays the registry for a target device and lets you add, delete, and modify registry keys and registry entries |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows CE Remote Spy** displays messages received by windows associated with applications that are running on a target device |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows CE Remote Zoom-in** displays a screen image from a target device |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Mobile 5.0 SDKs for Pocket PC and Smartphone** are required to develop applications for Windows Mobile 5.0 based devices, which are based on Windows CE and .NET Compact Framework |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Mobile 6 Professional and Standard SDKs** include additional emulators and tools that take advantage of features in Windows Mobile 6 (available separately) |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Web & WCF Development Visual Studio 2008 includes enhancements and new features for improved Web development and Windows Communication Foundation development | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Apply Styles window** enables you to create, modify, and apply CSS styles | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET AJAX Server Control Extender project template** for building an ASP.NET AJAX server control extender |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET AJAX Server Control project template** for building an ASP.NET AJAX server control |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET AJAX Support** enables you to quickly create Web pages that include a rich user experience with responsive and familiar user interface (UI) elements | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Crystal Reports Web Site project template** for creating an ASP.NET Web Site with a sample Crystal Report |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Reports Web Site project template** for creating an ASP.NET Web site with a report |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Server Control project template** for creating controls to use in Web applications |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Web Application project template** for creating an application with a Web user interface |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Web Service Application project template** for creating Web services | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Web Site Administration Tool** provides a Web interface for managing the configuration settings of an individual Web site | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Web Site project template** for creating a blank ASP.NET Web site | ♦ |  |  |  |  |  |  |  |  |  |  |
| **Configure Service Reference** dialog box enables you to configure the behavior of WCF services | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **CSS Properties window** shows you the styles that are used by the current selection in a Web page, the order of precedence for the styles, and enables you to add, modify, and create new inline styles | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Direct Style Application toolbar** enables you to apply or remove class-based or ID-based styles, and to create and apply new styles | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Empty Web Site project template** for creating an empty Web site | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Generate Local Resources** creates a local resource files (.resx) for all localizable properties in an ASP.NET Web page and its controls |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Manage Styles window** enables you to move styles from an inline style sheet to an external style sheet, or vice versa | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Markup Validation** works like a spell checker to examine the markup and adds wavy red lines under the elements or attributes that are not valid based on schemas for commonly used browsers and standards | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Table Designer** provides a table editor that allows you to edit HTML tables visually | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WCF Service project template** for creating WCF services | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WCF Service Host** automatically starts to host WCF services locally for debugging without writing extra code or committing to a specific host during development |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WCF Service Library project template** for creating a WCF service class library DLL |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WCF Test Client** enables you to input test parameters, submit that input to a WCF service, and view the response that the service sends back | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Content Accessibility Checker** provides an accessibility validation tool to check HTML markup for conformance to accessibility guidelines | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

| Windows Development Visual Studio 2008 offers several ways to develop Windows-based applications that run locally on Windows computers | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity Designer** enables you to create your own custom workflow activities |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ATL Project project template** for creating a project that uses the Active Template Library |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Class Library project template** for creating a class library DLL |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Console Application project template** for creating a command-line application |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Custom Wizard project template** for creating a custom application wizard |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Empty Project project template** for an empty project for creating a local application |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Empty Workflow Project project template** for creating an empty project for creating a workflow |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Makefile Project project template** for using an external build system |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MFC ActiveX Control project template** for creating an ActiveX control that uses the Microsoft Foundation Class Library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MFC Application project template** for creating an application that uses the Microsoft Foundation Class Library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MFC DLL project template** for creating a dynamic-link library that uses the Microsoft Foundation Class library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Sequential Workflow Console Application project template** for creating a sequential workflow console application |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Sequential Workflow Service Library project template** for creating a sequential workflow exposed as a WCF service |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Sequential Workflow Library project template** for creating a sequential workflow library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **State Machine Workflow Designer** is a visual designer that you can use to create a state machine workflow |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **State Machine Workflow Library project template** for creating a state machine workflow library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **State Machine Workflow Service Library project template** for creating a state machine workflow exposed as a WCF service |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Syndication Service Library project template** for creating a syndication service exposed as a WCF service |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Visual Studio Extensions for Windows Workflow Foundation Designer** is a visual designer that you can use to create a workflow |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Win32 Console Application project template** for creating a Win32 console application |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Win32 Project project template** for creating a Win32 application, console application, DLL, or static library |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Forms Application project template** for creating an application with a Windows user interface |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Forms Control Library project template** for creating controls to use in Windows Forms applications |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Presentation Foundation (WPF) Designer** provides a visual design experience for creating WPF controls and applications with split view designer |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Service project template** for creating Windows services |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Workflow Activity Library project template** for creating a library of activities which can later be reused as building blocks in workflows |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Application project template** for creating a Windows Presentation Foundation client application |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Browser Application project template** for creating a Windows Presentation Foundation browser application |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Custom Control Library project template** for creating a Windows Presentation Foundation custom control library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF User Control Library project template** for creating a Windows Presentation Foundation user control library |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

# Advanced Tools

| Distributed System Design Tools Use the Distributed System Design tools to design, evaluate, and implement application systems | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Application Design** project template to define and connect underlying applications for designing systems |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Application Designer** to visually define service-oriented applications and generate code |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Bind Application** to identify that an application will be deployed on a particular server in the logical datacenter diagram |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Configure Connections to External Databases** on the application diagram to visualize, document, connect them to applications that reference them, and include them as part of an application system design |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Conform .NET Web Service Endpoints to WSDL Files** to conform operation signatures to those described in the WSDL file |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Custom Prototypes** enable you to create custom prototypes from applications, logical servers, zones, and endpoints already defined on their respective diagrams or install those created by other users |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Define Deployment** dialog box to create a deployment diagram using an application diagram, or system diagram |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Deployment Designer** to validate application designs against a target datacenter and identify issues before deployment begins |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Generate Deployment Report** to assist you in creating an installation script from structured XML information in the report |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Implement Application** from application diagrams to create the appropriate project for that application and can include code or class files, configuration files, and any other needed resources |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Logical Datacenter Design** project template to design a logical datacenter for validating system deployment |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Logical Datacenter Designer** to visualize the logical structure of datacenters, specify operational policies and validate applications before deployment |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Reverse Engineer Projects in Existing Solutions** enable you to reverse-engineer projects whose application types can be visualized on an application diagram |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Settings and Constraints Editor** to specify requirements on the hosting environment in the Application Designer, or to specify constraints of the hosting environment in the Logical Datacenter Designer |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Synchronize with Datacenter** to synchronize deployment diagrams with logical datacenter diagrams |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **System Design** project template to define the current system by adding and connecting systems or applications, which enables a top-down design approach |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **System Designer** to compose applications into systems or reusable subsystems and validate the resulting configurations |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Validate Diagram** validates the deployment diagram to find constraint violations between the applications and logical servers |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Version** to assign major and minor versions to diagrams for informational purposes |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Web Service Details** window to review, define, and edit operations and their parameters for Web service provider endpoints on ASP.NET applications |  |  |  |  |  |  | ♦ |  |  |  | ♦ |

| Database Development Tools Use the Database Development tools to create and maintain databases and manage data-driven applications | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Add Database Reference** to refer to an object in another database from a database project |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Advanced Database Tools** to validate SQL syntax, execute database queries and scripts, and examine result sets |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Custom Data Generators** to extend the data generation capabilities of the standard data generators |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Data Compare** to compare the data between two databases that have the same schema |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Data Generation** to fill a test database with test data that is appropriate for the schema of the database but unrelated to the production data |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Database Refactoring** to automatically update references to renamed database schema objects |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Database Schema Build & Deployment Tools** to deploy a new database, or changes to an existing database, from your database project to a database server |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Database Unit Testing** to establish a baseline state for your database and then to verify any subsequent changes you make to database objects |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Offline Database Schema** to make database schema changes in an isolated development environment |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Project Version** to change the database project between SQL Server 2000 and SQL Server 2005 |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **Schema Compare** to compare the schemas of two databases and then decide whether to apply some or all schema objects from the source to the target |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **SQL Server 2000** project template to create a project that represents a Microsoft SQL Server 2000 database schema |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **SQL Server 2000 Wizard** project template to automate creating a SQL Server 2000 database project, optionally importing a schema from a database, and configuring your build settings |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **SQL Server 2005** project template to create a project that represents a Microsoft SQL Server 2005 database schema |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **SQL Server 2005 Wizard** project template to automate creating a SQL Server 2005 database project, optionally importing a schema from a database, and configuring your build settings |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **T-SQL Editor** to modify definitions of database objects such as tables, views, indexes, stored procedures, etc |  |  |  |  |  |  |  | ♦ |  |  | ♦ |

| Code Analysis Tools Use the Code Analysis tools to analyze your source code for potential issues arising from common coding errors | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
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| **Auto-Suppress Generated Code Option** to automatically suppress error messages from generated code, which is especially useful for designer-generated code |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **C/C++ Code Analysis tool** to identify possible defects in C/C++ source code caused by common coding errors, such as buffer overruns, un-initialized memory, null pointer dereference, memory and resource leaks |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Code Analysis Check-In Policy** to requires that code analysis is run prior to check-in (This features requires [Visual Studio Team System 2008 Team Foundation Server](http://msdn2.microsoft.com/en-us/vstudio/products/bb933758.aspx)) |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Code Metrics** to identify complex, difficult to maintain, and error-prone code by measuring class coupling, depth of inheritance, cyclomatic complexity, lines of code, and a maintainability index |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Managed Code Analysis tool** to analyze managed assemblies and reports information about the assemblies, such as violations of the programming and design rules set forth in the Microsoft .NET Framework Design Guidelines |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Spelling Checker with Custom Dictionary Support** to spell-check resource strings as well as class, method, and property names |  |  |  |  |  |  |  |  | ♦ |  | ♦ |

| Code Profiling Tools Use the Code Profiling tools to identify performance bottlenecks in your applications | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Application Verifier** to quickly find subtle programming errors in C++ applications that can be extremely difficult to identify with normal application testing, such as errors caused by heap corruption, incorrect handle and critical section usage |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Compare Reports** enables you to compare a report either by using the Performance Explorer or the /diff on options from the VSPerfReport command |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Compressed Report Files** to generate small compressed report files that open up quickly |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Copy Report View Data to HTML** enables you to copy and paste rich data (tables with headers and values) from the performance reports |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Filtered Analysis** to filter performance reports on timestamp, process, thread, and marks |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Hot Path** to automatically expand the most expensive code path in the call tree and allocation view of the performance report |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Line-Level Sampling** to determine where in the code of a processor-intensive function the processor has to spend most of its time |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Load and Web Test Integration** enable you to create performance sessions for Web and Load tests from Test View and Test Results (requires Development and Test Edition, or Team Suite) |  |  |  |  |  |  |  |  |  |  | ♦ |
| **Portable CPU Counters** decouples some of the performance counters and abstracts common performance counter data |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Profiler Runtime Control** to pause and resume performance data logging to focus data collection on times of interest |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Profiling Tools Report** to view and analyze application performance problems |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Profiling Tools** to detect application performance bottlenecks using lower-overhead sampling for relative performance data, or higher-overhead instrumentation for more exact measurement |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Report Noise Reduction** limits the amount of data in performance reports to help make performance problems more prominent |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Runtime Profiling Control window** displays a list of marks available to add to the performance report |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Stand-Alone Profiler** to analyze application performance in the absence of the Visual Studio development environment |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Windows Communications Foundation Profiler Support** enables profiling of Windows Communications Foundation (WCF) code |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Windows Counter Support** enables the profiler to collect Windows counters during performance sessions |  |  |  |  |  |  |  |  | ♦ |  | ♦ |

| Code Quality Tools Use the Code Quality tools to create and work with test that can help assess the quality of your applications | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Add a Test Result to a Work Item to add test results to a work item** (This features requires [Visual Studio Team System 2008 Team Foundation Server](http://msdn2.microsoft.com/en-us/vstudio/products/bb933758.aspx)) |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Associate a Work Item to a Test to establish a trackable relationship between tests and work items** (This features requires [Visual Studio Team System 2008 Team Foundation Server](http://msdn2.microsoft.com/en-us/vstudio/products/bb933758.aspx)) |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Call a Web Test from a Web Test** enables you to modularize Web tests to compose complex Web tests |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Code Coverage** to measure the effectiveness of tests on a line-by-line or even a block-by-block basis |  |  |  |  |  |  |  |  | ♦ | ♦ | ♦ |
| **Code Coverage Results window to view statistics about the elements tested in a test run** |  |  |  |  |  |  |  |  | ♦ | ♦ | ♦ |
| **Create a Work Item from a Test Result to create a work item directly from a test result, using the Test Results window (This features requires** [Visual Studio Team System 2008 Team Foundation Server](http://msdn2.microsoft.com/en-us/vstudio/products/bb933758.aspx)**)** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Create Private Accessor to regenerate a unit test's private accessors if you modified a private method in the tested code** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Create Unit Tests dialog box to select which items to create unit tests for from a list of namespaces and their contents (methods, properties, etc.)** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Custom Host Adapters** enable you to run tests in an environment other than the default test environment |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Easier Load Test Analysis** enables you to quickly understand load test results |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Generic Tests** to wrap external programs and tests that were not originally developed for use in the Team System testing tools |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Load Modeling** enable you to control the load modeling in load tests that you run |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Load Test Results Repository Management** to more easily access the repository for load test results |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Load Tests** to run a series of Web tests or unit tests, which operate under multiple simulated users over a period of time, for both performance and stress tests (for increased-capacity load testing, see [Visual Studio Team System 2008 Test Load Agent](http://msdn2.microsoft.com/en-us/vstudio/products/bb933756.aspx)) |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Manual Tests** to create tests that are difficult or impossible to automate, such as when the connection between the computer and its power supply is interrupted, or when you want to test for user interface details or behavior, or to refine or examine your test environment at a specific point in the testing process |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Ordered Tests** to execute a series of tests in a particular order and manage that series as a single test |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Publish Test Results to** share results with other team members(This features requires [Visual Studio Team System 2008 Team Foundation Server](http://msdn2.microsoft.com/en-us/vstudio/products/bb933758.aspx)) |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Smart Device Unit Testing** enables you to run unit tests on devices |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test Class Inheritance** to support an inheritance hierarchy for test classes |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test Generation Settings dialog box to** change configuration settings for the current test generation |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test List Editor** to logically group tests and then work with those tests as groups instead of individually for improved test case management |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test Project project template** for creating a project that contains tests |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test Results window to view the results of test runs, and to pause, continue, stop, and re-run test runs** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test Run Configuration Editor dialog box to specify global settings that affect details of how tests are run** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test Runs window to view the status of active, queued, and completed test runs on the local computer or on a set of remote computers** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Test View window to run and edit tests** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Testing Check-In Policy** to require that check-in tests (defined with a test list) are run prior to check-in (This features requires [Visual Studio Team System 2008 Team Foundation Server](http://msdn2.microsoft.com/en-us/vstudio/products/bb933758.aspx)) |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Unit Test Data Binding** enables you to bind a unit test to a data source, including CSV files and XML files, using a wizard |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Unit Testing** to exercise source code by directly calling the methods of a class, passing appropriate parameters, and test the values that are produced against expected values |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **View Test Results Details to view details of the run of an individual test, including error messages** |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Test Data Binding** enables you to use data binding in Web tests |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Web Test Validation Rules** enable you to use Web test results to control Web test program flow |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Web Tests** to test the functionality of Web applications using a series of HTTP requests |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **XML File Converter Utility** to convert Visual Studio 2005 Team Edition for Testers test results files Visual Studio Team System 2008 Test Edition |  |  |  |  |  |  |  |  |  | ♦ | ♦ |

# Appendix

| Item Templates Item templates range in complexity from a single empty file to a multi-file item containing source code files with stub code and more | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vwd.png](http://www.microsoft.com/express/vwd/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vb.png](http://www.microsoft.com/express/vb/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vcs.png](http://www.microsoft.com/express/vcsharp/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.vc.png](http://www.microsoft.com/express/vc/) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.std.png](http://msdn2.microsoft.com/vs2008/products/bb894669.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.pro.png](http://msdn2.microsoft.com/vs2008/products/bb894671.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.arch.png](http://msdn2.microsoft.com/vsts2008/products/bb933749.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.db.png](http://msdn2.microsoft.com/vsts2008/products/bb933747.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.dev.png](http://msdn2.microsoft.com/vsts2008/products/bb933752.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.test.png](http://msdn2.microsoft.com/vsts2008/products/bb933754.aspx) | [http://msdn2.microsoft.com/en-us/vstudio/products/cc159857.suite.png](http://msdn2.microsoft.com/vsts2008/products/bb933735.aspx) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **About Box** creates an About Box form for Windows Forms applications |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Action Pane Control** creates a class for creating an actions pane control using the visual designer |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AJAX Client Behavior** creates an AJAX client behavior for use in AJAX enabled Web applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AJAX Client Control** creates an AJAX client control for use in AJAX enabled Web applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AJAX Client Library** creates a file for creating an AJAX client library for use in AJAX enabled Web applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AJAX Master Page** creates an AJAX enabled Master Page for Web Applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AJAX Web Form** creates an AJAX enabled form for Web Applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **AJAX-enabled WCF Service** creates a service for providing data to an AJAX page | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Application Configuration File** creates a file for storing application configuration and settings values |  |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Application Diagram** creates a diagram for defining and visualizing applications in the solution |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Application Manifest File** creates a collection of settings including User Account Control for Windows applications |  |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **ASP.NET Server Control** creates a class for creating an ASP.NET server control |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Assembly Information File** creates a file containing general assembly information |  |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Bitmap File** creates an empty bitmap file |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Blank Performance Session** creates a blank performance session |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Browser File** creates a file for defining browser definitions | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **C++ File** creates a file containing C++ source code |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Class** creates an empty class definition | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Class Diagram** creates a blank class diagram |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Code File** a blank C# or Visual Basic code file |  |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **COM Class** creates a class that can be exposed to COM |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Component Class** creates a CLR component class |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Configuration file** creates an empty configuration file |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Crystal Report** creates a Crystal Report file that publishes data to a Windows or Web form |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Cursor File** creates an empty cursor file |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Custom Control** creates a class for creating a user-drawn Windows Forms control |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Database Unit Test** creates a database unit test to exercise database objects |  |  |  |  |  |  |  | ♦ |  |  | ♦ |
| **DataSet** creates a DataSet for using data in your application | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Debugger Visualizer** creates a simple debugger visualizer |  |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Dialog** creates a dialog for Windows Forms applications |  | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Explorer Form** creates a skeleton explorer form with a tree view and navigation controls |  | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Frameset** creates an HTML file that hosts multiple HTML pages |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Generic Handler** creates a page for implementing a generic handler | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Generic Test** is an existing program wrapped to function as a test in Visual Studio |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Global Application Class** creates a class for handling Web Application events | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Header File** creates a C++ header file |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **HTML Page** creates a blank HTML file | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Icon File** creates an empty icon file |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Inherited Form** creates a new form based on an existing Windows Form |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Inherited User Control** creates a new control based on an existing Windows Form control |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Installer Class** creates a CLR installer class |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Interface** creates an empty interface definition |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **JScript File** creates a script file containing JScript code | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **LINQ to SQL Classes** creates LINQ to SQL classes mapped to relational objects | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Load Test** creates a load test file |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Local Database Cache** creates a settings file, local database, and dataset for client-server data synchronization |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Local Database** creates an empty SQL Server Compact Edition database for local data |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Logical Datacenter Diagram** creates an empty diagram for defining a logical datacenter |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Login Form** creates a login form for collecting a username and password |  | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Manual Test** creates a Word or text document for capturing manual test instructions |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Master Page** creates a Master Page for Web Applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **MDI Parent Form** creates a skeleton form for a Windows Forms Multiple Document Interface application |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Midl File** creates an Interface Definition Language file |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Module** creates a file for storing groups of functions |  | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Module-Definition File** creates a DLL export definition file |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Nested Master Page** creates a Master Page which inherits from another Master Page |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Ordered Test** creates a test to execute a set of existing tests in an order you specify |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Outlook Form Region** creates a class for creating an Outlook form region |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Performance Wizard** creates a performance session using the wizard |  |  |  |  |  |  |  |  | ♦ |  | ♦ |
| **Property Sheet** creates a Visual C++ project property sheet file |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Registration Script** creates an Active Template Library registration script file |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Report** creates an empty Report file for creating a report using Microsoft reporting technology |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Report Wizard** creates a new report using Report Wizard |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Resource File** creates a file containing Win32 resources |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Resource Template File** creates a file that contains Win32 resource templates |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Resources File** creates a file for storing managed resources |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Ribbon (Visual Designer)** creates a control that provides a visual designer for basic Ribbon customization tasks |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Ribbon (XML)** creates a class for creating basic and advanced Ribbon customizations by using XML |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Service-based Database** creates an empty SQL Server database for service-based data access | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Site Map** creates a file used to create a site map | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Skin File** creates a file used to define an ASP.NET theme | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Splash Screen** creates a form preconfigured for use as a splash screen |  | ♦ |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **SQL Server Database** creates an empty SQL Server database | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Static Discovery File** creates a Web Service static discovery file |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Style Sheet** creates a cascading style sheet used for rich HTML style definitions | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **System Diagram** creates an empty diagram for designing a system containing applications and other systems in the solution |  |  |  |  |  |  | ♦ |  |  |  | ♦ |
| **Test Run Configuration** creates a configuration file with settings about how test runs shall be processed |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Text File** creates a plain text file | ♦ | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Transactional Component** creates a class for creating transactional logic |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Unit Test** creates an empty unit test class declaration |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Unit Test Wizard** uses a code generation wizard to create a unit test |  |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **User Control** creates a reusable Windows Forms control |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WCF Service** creates a class for creating a WCF service | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Configuration File** creates a file used to configure Web Application settings | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Content Form** creates a form for Web Applications that is built from a Master Page |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Form** creates a form for Web Applications | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Service** creates a visually designed class for creating a Web Service | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Web Test** opens Internet Explorer to record a Web test |  |  |  |  |  |  |  |  |  | ♦ | ♦ |
| **Web User Control** creates an ASP.NET server control created using the visual designer | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Form** creates a blank Windows Form |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Script Host** creates a file containing script that is run a Windows program |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **Windows Services** creates a class for creating Windows services |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Custom Control** creates a WPF customer control |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Flow Document** creates a dynamically formatted XAML document |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Page** creates a blank WPF page |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Page Function** creates a WPF page function |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Resource Dictionary** creates a XAML resource dictionary |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF User Control** creates a WPF user control |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **WPF Window** creates a WPF window |  | ♦ | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **XML File** creates a blank XML document | ♦ |  | ♦ |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **XML Schema** creates a file used to define a schema for XML documents |  |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |
| **XSLT File** creates a file used to transform XML documents | ♦ |  |  |  | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ | ♦ |

DCSIMG

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