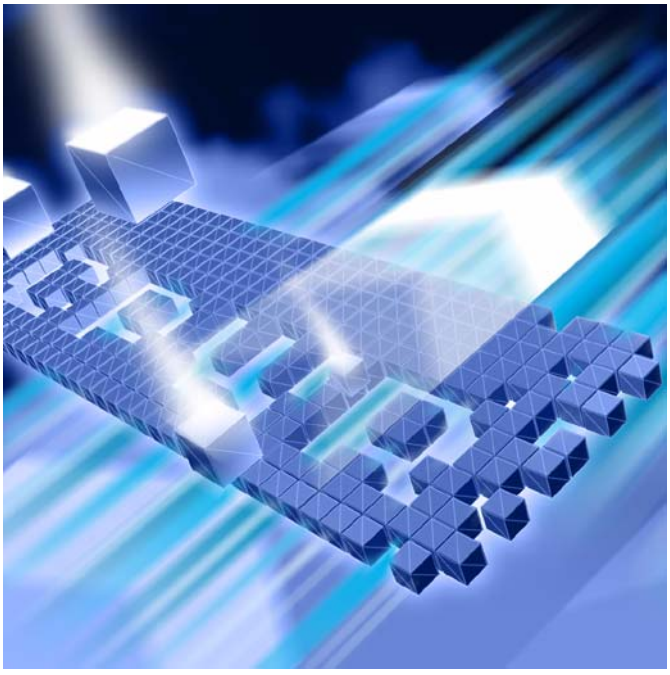

Installing DevPartner®

DevPartner Studio Professional Edition 8.1.1
DevPartner for Visual C++ BoundsChecker Suite 8.1.1

COMPUWARE

Technical support is available from our Technical Support Hotline or via our FrontLine Support Web site.

Technical Support Hotline:
1-888-686-3427

FrontLine Support Web Site:
http://frontline.compuware.com

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US Patent Nos.: 5,987,249, 6,332,213, 6,186,677, 6,314,558, and 6,016,466

December 6, 2006

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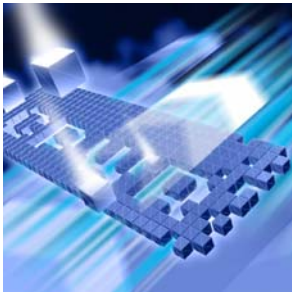

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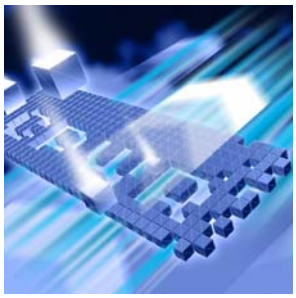

- Who Should Read This Manual
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This manual describes how to install your Compuware® DevPartner Studio® software.

Who Should Read This Manual

This manual is intended for those installing DevPartner in either a single-seat or concurrent use environment.

This manual assumes that you are familiar with the Microsoft Windows interface and the installation of Windows software.

What's New in DevPartner

This section contains information about new and enhanced features in versions 8.1.1 and 8.1 of DevPartner Studio Professional Edition and DevPartner for Visual C++ BoundsChecker Suite.

What's New in DevPartner Version 8.1.1

Version 8.1.1 is a maintenance release of DevPartner Studio Professional Edition and DevPartner for Visual C++ BoundsChecker Suite. It provides the following changes and enhancements:

- Visual Studio 6 integration:
  - The performance analysis and coverage analysis features are now integrated into Visual Studio 6.
  - Two new viewer programs, Performance Analysis Viewer and Coverage Analysis Viewer, allow you to view performance and coverage session files. (For Visual Studio .NET 2003 and 2005 users, these viewers allow you to open performance and coverage session files from Windows Explorer without requiring Visual Studio to open.)
- Project types:
  - DevPartner 8.1.1 supports the Microsoft Visual Studio 2005 Web Application Project type add-in.
  - The project types supported by each DevPartner feature are now documented in the DevPartner Help system and in the *Understanding DevPartner* manual.
- Method List export:
  - You can now export coverage analysis and performance analysis method lists in a CSV output format.
- Licensing:
  - There is now a 30-minute license timeout mechanism for concurrent licenses in an IDE-hosted environment.
  - Use of a single Windows XP Remote Desktop connection is now supported with one concurrent license or one node-locked (named user) license.
  - Distributed License Management (DLM) version 4.1 is included.
  - The Data Export feature is now enabled with a valid DevPartner product license; a separate Data Export license key is no longer required.

Note: The DevPartner license version has not been incremented for this maintenance release. The 8.1.1 release requires an 8.1 license.

- System Comparison:
  - The utility now compares the service startup type for the systems being compared.
  - You can now set the time of the daily automatic snapshot through the System Comparison utility settings file.

- Fault Simulator SE:
  - DevPartner Studio Professional Edition now includes Version 2.0 of DevPartner Fault Simulator SE.

Features Introduced in DevPartner Studio 8.1

Release 8.1 of DevPartner Studio Professional Edition and DevPartner for Visual C++ BoundsChecker Suite provides the following new features and enhancements:

- System Comparison Utility:
  - A new Snapshot API enables an application developer to embed snapshot capability within an end-user's application. Should problems arise after an application is deployed, the end-user can trigger a snapshot to assist in diagnosing the problem.
- Error Detection:
  - Quality and performance have been improved.

In addition, DevPartner Studio Professional Edition includes the following new features:

- Visual Studio Team System Work Item integration:
  - Defects located with DevPartner Studio can be captured and added as Work Items to the Visual Studio Team System defect tracking system.
- Code Review:
  - New rules have been added based on regular expressions to enforce .NET coding guidelines, standards, and best practices.
  - Detailed explanations have been added, explaing how regular expressions work in Code Review rules, using the new rules as examples.
  - New Code Review Exclusions allow you to exclude folders, files, methods, or classes from a review. This enhancement extends the existing ability to exclude specific projects from a review, and allows you to better customize reviews to report only the information you need.
  - New return codes signal your batch process when Code Review errors have been found.

Conventions Used In This Manual

This manual uses the following conventions to present information.

- Screen commands and menu names appear in **bold typeface**. For example:

  Choose **Item Browser** from the **Tools** menu.

- Computer commands and file names appear in `monospace typeface`. For example:

  The *Understanding DevPartner* manual (`Understanding DevPartner.pdf`) describes...

- Variables within computer commands and file names (for which you must supply values appropriate for your installation) appear in *`italic monospace type`*. For example:

  Enter `http://`*`servername`*`/cgi-win/itemview.dll` in the **Destination** field...

For More Information

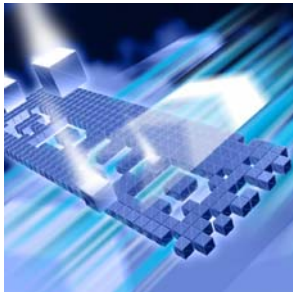
You can use the feature-level online help to learn more about the DevPartner Studio software's functions and procedures.

You can use the following resources to learn more about DevPartner Studio components. Manuals in Adobe Acrobat (`.pdf`) format are available through the InfoCenter option in the `Start/Compuware DevPartner` menu, and are also included on your DevPartner CD.

- Learn about licensing in the *Distributed License Management Licensing Guide*.
- See the manual *Understanding DevPartner* for information about using the DevPartner software with Visual Studio.

Chapter 1

DevPartner Installation



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- Supported Environments
- Receiving Your License File
- New License Server Required for Concurrent Licenses
- DevPartner License Considerations
- Installed Features
- Installation
- Troubleshooting Your DevPartner Installation
- Migrating DevPartner Code Review Custom Rules and User Preferences

This chapter describes system requirements and installation information for your Compuware® DevPartner Studio® software.

System Requirements

All editions of DevPartner 8.1.1 require the following minimum configuration:

Table 1-1. Hardware

Processor	Pentium III, 733 MHz or faster
Memory	512 MB
Available Disk Space	500 MB
Display	1024x768, 16-bit color
Other	CD drive

Table 1-2. Operating Systems

Operating System	Editions	Browser and IIS
Windows XP (SP2) (32-bit only)	Professional, Tablet PC	IE 5.5 IIS 5.1
Windows Server 2003 (SP1) (32-bit only)	Standard, Enterprise, Web	IE 6.0 IIS 6.0

Supported Environments

DevPartner Studio supports the released version of the following environments.

Note: For a comprehensive list of supported languages and project types, refer to Appendix B of the *Understanding DevPartner* manual.

Table 1-3. Visual Studio Integration

Version	Editions	.NET Framework
Visual Studio 2005	Professional Edition, Team Edition for Software Architects, Team Edition for Software Developers, Team Edition for Software Testers, Team Suite (64-bit development is not supported)	.NET Framework 2.0* (Compact Framework is not supported)
Visual Studio .NET 2003	Developer, Professional, Enterprise Architect	.NET Framework 1.1* SP1 (Compact Framework is not supported)
Visual Studio 6 (SP5 or SP6)	All	n/a

* See "Microsoft .NET Framework" on page 3 for additional information.

For information on features installed with each environment, see "Installed Features" on page 6. For a detailed list of all supported Visual Studio technologies, see "Language/Technology Support" in the separate manual *Understanding DevPartner.*

Microsoft .NET Framework

DevPartner requires that the Microsoft .NET Framework 1.1 be installed on the host machine. This framework provides system-level code needed by DevPartner. During set up, DevPartner will check for the Framework on your machine. If it is not found, DevPartner will prompt you to add it during the install.

Microsoft designed the different versions of the .NET Framework to operate with both Visual Studio .NET 2003 and Visual Studio 2005 on a single machine. Therefore, a Framework 1.1 installation will coexist with the Framework 2.0 required for Visual Studio .NET 2005.

Features Not Available in DevPartner 8.0 and Beyond

Support for FailSafe and CodeReview for Visual Basic 6.0 was discontinued in DevPartner 8.0. The instrumentation code is obsolete. We recommend that you remove FailSafe instrumentation from your applications prior to installing DevPartner 8.1.1.

For information on removing instrumentation, refer to your FailSafe documentation.

Receiving Your License File

The DevPartner software requires a license file supplied by Compuware in order to execute beyond a 14-day evaluation period. compuware provides a license file, `license.xml`, for each license of DevPartner that you purchase.

Your license file(s) will arrive by e-mail around the time that your product arrives, and is delivered to the person you designated when you placed your order.

Note: If you purchased DevPartner from a reseller, you can request a license file from the Compuware Web site at `http://frontline.compuware.com/sw/license_default.asp`, or by calling Worldwide License Management at 1-800-538-7822.

At any time you may install the license file that you receive from Compuware by running the License Administration Utility (`C:\Program Files\Common Files\Compuware\LAU4.exe`). Note that you are limited to one 14-day evaluation period.

If your license file has not arrived by the time you would like to install DevPartner, please contact Worldwide License Management:

1-800-538-7822. Outside the USA and Canada, please contact your local Compuware office or agent.

Complete information about installing and managing licenses can be found in *Distributed License Management Licensing Guide*. If you have other Compuware products that use DLM and you choose to store your DevPartner license file in the same folder as those other license files, we recommend that you rename the DevPartner license file to prevent conflicts or accidental merging or replacing of license files.

If you already have a licensed Compuware product and would like to merge the license files, contact Technical Support (1-888-686-3427).

New License Server Required for Concurrent Licenses

DevPartner versions 8.1 and beyond use a new version of Compuware Distributed License Management (DLM 4.0). If you are using concurrent licensing you must use version 4.0 or later of the DLM license server. For more information on license installation, refer to the *Distributed License Management Licensing Guide* on the product CD.

DevPartner License Considerations

All DevPartner products use the Compuware Distributed License Management software to manage software licenses. You should be aware of the following considerations regarding your DevPartner software license:

- DevPartner can run as a 14-day evaluation, or can run with one of three types of permanent license:
  - A locally-installed license, called a node-locked (single-seat) license (does not require a license server installation)
  - A concurrent license stored within a License Manger database on a network server
  - A borrowed concurrent license running on a computer disconnected from a network
- DevPartner supports a 30-minute idle session license timeout policy for concurrent licenses. If a concurrent license is being used for an Integrated Development Environment (IDE)-hosted DevPartner product, the license is returned to the license pool if DevPartner has been idle for 30 minutes. If no DevPartner features have executed for 30 minutes, the license is released.

- For data collection from a remote machine, DevPartner requires the optional DevPartner Remote Server license, as described in "Installation and Licensing for Remote Data Collection".
- Use of DevPartner over a Windows Terminal Services connection uses one concurrent license per user. Node-locked licenses do not support use over a Terminal Services connection.
- Use of DevPartner over a Windows Remote Desktop connection uses one concurrent license or a node-locked license.
- If you purchased DevPartner as part of certain product bundles, such as a Continuous Integrated Testing solution, simultaneous use of all products in the bundle will require only one license.
- DevPartner uses all available license paths to verify license information. If you experience lengthy DevPartner start-up delays, check your license path for invalid entries.

Installation and Licensing for Remote Data Collection

If you run components of your applications on remote computers (servers), you can collect performance, coverage, and memory data from the remote machines and view that data on your user/client machine where you have installed DevPartner. To collect remote data, purchase the optional DevPartner Remote Server license for each remote machine from which you would like to collect remote data, or purchase one or more concurrent Remote Server licenses.

DevPartner Triggering of Firewall Alarms

To collect session data from remote machines, the DevPartner software connects to a previously installed service whenever DevPartner runs, either within Visual Studio or via DPAnalysis.exe. This service listens for interprocess communication traffic at the internet address 0.0.0.0 port 18441. This service connection may trigger some firewall alarms. You can configure your firewall to trust this address to discontinue these alarms. If your firewall is set to maximum security levels, it may prevent DevPartner remote data collection. Reconfigure your firewall to enable data exchange at the address 0.0.0.0 port 18441.

Installed Features

The features installed with DevPartner Studio Professional Edition vary depending on the version of Visual Studio found on the machine on which you are installing, as described in the following table. If multiple Visual Studio environments are found, you can install all applicable features or omit features for a specific environment.

Table 1-4. Installed Features for DevPartner Studio 8.1.1 Professional Edition

Microsoft Visual Basic 6.0	Microsoft Visual C++ 6.0	Microsoft Visual Studio 2003 or 2005
Performance Analysis	Performance Analysis	Performance Analysis
Coverage Analysis	Coverage Analysis	Coverage Analysis
	Error Detection	Error Detection
		Static Code Analysis
		Memory Analysis
		Performance Expert

The features installed with DevPartner for Visual C++ BoundsChecker Suite are listed below.

Table 1-5. Installed Features for DevPartner for Visual C++ BoundsChecker Suite

Microsoft Visual Basic 6.0	Microsoft Visual C++ 6.0	Microsoft Visual Studio 2003 or 2005
Not Supported	Performance Analysis	Performance Analysis
	Coverage Analysis	Coverage Analysis
	Error Detection	Error Detection

Side-by-Side Visual Studio Operation

When the DevPartner installation program encounters both Visual Studio .NET 2003 and Visual Studio 2005 on a target computer, it installs the DevPartner software into both IDEs. This double installation allows you to take advantage of the ability to develop code simultaneously in both environments.

If you install Visual Studio 2005 after DevPartner is installed, you can modify the DevPartner installation using the **Control Panel -> Add or Remove Programs -> Change -> Modify** option to add DevPartner to your new Visual Studio installation.

Installation

This section presents pre-installation information and describes the DevPartner installation procedure.

Before Installation

Before installing DevPartner, note the following:

- If you will be using DevPartner with Microsoft Visual Studio 2005 Team System, install Visual Studio Team Explorer before installing DevPartner Studio.
- If installing via a Remote Desktop on Windows Server 2003, you must use the **change user/install** mode when installing DevPartner software. See the Windows Terminal Services online help topic "To install a program by using the change user command" for detailed instructions.
- You must have a concurrent license for DevPartner in order to install DevPartner in a Terminal Services environment.

Caution: If you are upgrading from a previous version of DevPartner Studio, refer to"Migrating DevPartner Code Review Custom Rules and User Preferences" on page 9 *before* uninstalling your previous version of DevPartner Studio.

To Install DevPartner

1. Log in to an account with Windows administrator ('admin') privileges. You must be logged in with Windows administrator privileges to install and run DevPartner.
2. Disable your virus protection software.

   The DevPartner installation program uses scripts that might trigger warnings from virus protection software. Remember to re-enable virus protection after you install the DevPartner software.

Note: Systems with the Data Execution Prevention (DEP) setting configured as `/NoExecute=Always On` and the CPU's Execute Disable bit enabled might prevent DevPartner from installing.

See article number 875352 in the Microsoft Knowledge Base for a detailed description of the Data Execution Prevention feature.

Note that if this setting is changed back to `AlwaysOn` after installation it will cause the DevPartner Visual Studio package to fail to load into Visual Studio.

3. If you are running a previous version of DevPartner, use the **Add or Remove Programs** option on the **Control Panel** to uninstall your previous version and restart your machine.

4. Insert the DevPartner CD to start the installation. A series of screens will guide you through the installation process.

   The installation program detects Visual Studio .NET 2003, Visual Studio 2005, Visual C++ 6.0, and Visual Basic 6.0 and, by default, installs all features compatible with all environments. To prevent components from being installed, use the Component Selection screen to select the components *not* to be installed.

5. If you are installing DevPartner Professional Edition, after the installation completes you are prompted to install DevPartner Fault Simulator 2.0 SE, which is a demonstration copy of the Fault Simulator 2.0 product. Fault Simulator simulates managed code exceptions, allowing you to test your .NET error handling without leaving Visual Studio.

Troubleshooting Your DevPartner Installation

DevPartner captures a Microsoft Installer (MSI) log of details about the DevPartner installation. You can examine this log to help diagnose installations problems, or provide this log to a customer support engineer should you need to contact Compuware for support. The log is placed in `C:\Documents and Settings\<user>\Local Settings\Temp\Compuware\DPS_install.log`.

In addition to the MSI log, you will need to compile the following information:

a. What software and version are you installing?
b. What is your operating system and service pack?
c. What previous version of the DevPartner software do you have installed?
d. Did you have any problems removing the previous version?
e. Indicate if you will submit an MSI log as an attachment.
f. What error message did you receive during the install?
g. Was the installation from an account with full administrative privileges?
h. Was the installation done locally or remotely? If done remotely what software was used?

i. Did you disable your anti-virus software before the installation?

j. Is your DEP setting configured as `/NoExecute=OptIn`?

Migrating DevPartner Code Review Custom Rules and User Preferences

If you have a previous installation of DevPartner Studio, you need to migrate your custom rules and user preferences database files to DevPartner Studio 8.1.1. This ensures that your changes are not lost during the upgrade. DevPartner provides two utilities that automate this migration process:

- `crupdaterules.exe`: Migrates existing 7.x, 8.0, or 8.1 rules into the 8.1.1 rules database
- `crupdateprefs.exe`: Migrates existing 7.x, 8.0, or 8.1 user settings into the 8.1.1 preferences database

The rule migration utility must be run before the preferences migration utility.

Prior to the Migration

1. Copy the existing `CRRules.dpmdb` and `CRPrefs.dpmdb` files (`CR7Rules.dpmdb` and `CR7Prefs.dpmdb` for DevPartner 7.x) to another location for safe-keeping before you uninstall DevPartner.

   By default, the files are located at `\Program Files\Compuware\DevPartner Studio\CodeReview` (`\CodeReview7 for DevPartner 7.x`). These backup copies will be used in the migration steps below.

2. Uninstall the previous version of DevPartner Studio.

3. Install DevPartner Studio 8.1.1.

4. Copy the new `CRRules.dpmdb` and `CRPrefs.dpmdb` files to a location other than the one used in step 1, so that you do not overwrite the original rules and preferences database files.

Proceed to "Migrating the Rules Database" and/or "Migrating the Preferences Database" to perform the desired migration for .NET.

Migrating the Rules Database

1. Start a DOS session from the console window.
2. At the DOS prompt, change to the directory where you installed DevPartner.

   By default, DevPartner is installed at `\Program Files\Compuware\DevPartner Studio\CodeReview`. This directory also includes the migration utility.
3. From that directory, enter the command: `crupdaterules`

   This command generates a Usage message. For example:

   `crupdaterules [`*`Path to the prior version of the rules database`*`]`

   `For example: crupdaterules C:\MyOldRulesDb\CRRules.dpmdb`

   The command string you use must point to the location of the rules database file being migrated.
4. Enter the appropriate command. For example:

   ```
   crupdaterules "C:\Program Files\Compuware\DevPartner
   Studio\CodeReview\Backup\CRRules.dpmdb"
   ```

   The command should be entered as a single line.

Migrating the Preferences Database

1. Start a DOS session from the console window.
2. At the DOS prompt, change to the directory where you installed DevPartner.

   This is where the migration utility is also located. By default: `\Program Files\Compuware\DevPartner Studio\CodeReview`.
3. From that directory, enter the command: `crupdateprefs ?`.

   This command generates a Usage message. For example:

   ```
   crupdateprefs [Path to the prior version of the preferences
   database]
   ```

   `For example: crupdateprefs C:\MyOldPrefsDb\CRPrefs.dpmdb`

   Note that the command string you use must point to the location of the preferences database file being migrated.
4. Enter the appropriate command. For example:

   ```
   crupdateprefs "C:\MyOldPrefsDb\CRPrefs.dpmdb"
   ```

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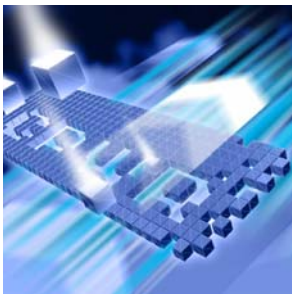

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