Installing DevPartner

DevPartner Studio Professional Edition 8.0
DevPartner for Visual C++ BoundsChecker Suite 8.0

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

This document and the product referenced in it are subject to the following legends:

Access is limited to authorized users. Use of this product is subject to the terms and conditions of the user's License Agreement with Compuware Corporation.

© 2005 Compuware Corporation. All rights reserved. Unpublished - rights reserved under the Copyright Laws of the United States.

U.S. GOVERNMENT RIGHTS

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in Compuware Corporation license agreement and as provided in DFARS 227.7202-1(a) and 227.7202-3(a) (1995), DFARS 252.227-7013(c)(1)(ii)(OCT 1988), FAR 12.212(a) (1995), FAR 52.227-19, or FAR 52.227-14 (ALT III), as applicable. Compuware Corporation.

This product contains confidential information and trade secrets of Compuware Corporation. Use, disclosure, or reproduction is prohibited without the prior express written permission of Compuware Corporation.

DevPartner Studio and BoundsChecker are trademarks or registered trademarks of Compuware Corporation.

Adobe Acrobat® Reader copyright © 1987-2005 Adobe Systems Incorporated. All rights reserved. Adobe, Acrobat, and Acrobat Reader are trademarks of Adobe Systems Incorporated.

All other company or product names are trademarks of their respective owners.

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

October 14, 2005

Contents

Preface

Who Should Read This Manual v
What's New in DevPartner Studio 8.0 v
Conventions Used In This Manual vi
For More Information vii

Chapter 1

DevPartner Installation

System Requirements 1
- Supported Environments 2
- Microsoft .NET Framework 2
- Features Not Available in DevPartner 8.0 2

Receiving Your License File 2
New License Server Required for Concurrent Licenses 3
DevPartner License Considerations 3
- Installation and Licensing for Remote Data Collection 4
- DevPartner Triggering of Firewall Alarms 5

Installed Features 5
- Side-by-Side Visual Studio Operation 6

Installation 6
Troubleshooting Your DevPartner Installation 7
Migrating DevPartner Code Review 7.x Custom Rules and User Preferences 8
- Prior to the Migration 8
- Migrating the Rules Database 8
- Migrating the Preferences Database 9

Index 11

Preface

- Who Should Read This Manual
- What's New in DevPartner Studio 8.0
- Conventions Used In This Manual
- For More Information

This manual describes how to install your Compuware® DevPartner Studio® software, including the Professional Edition, Enterprise Edition, and Visual C++ BoundsChecker Suite.

Who Should Read This Manual

This manual is intended for single-seat users, and system administrators, who will be installing (for concurrent licensees) the DevPartner software.

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

What's New in DevPartner Studio 8.0

Release 8.0 of DevPartner Studio provides the following new features and enhancements:

DevPartner Studio 8.0 Professional Edition

- Full support for the analysis of applications developed using Microsoft Visual Studio 2005
- Integration into the Visual Studio 2005 IDE
- Performance Expert feature, combining CPU profiling with analysis of memory, disk and network I/O

- Enhanced analysis of Web Service SOAP listener code, including transactions sent and received, time spent, and overall response time
- Export Performance and Code Coverage data to common formats including XML (licensed separately)
- DevPartner Fault Simulator SE, providing the ability to simulate a selection of .NET Framework error conditions to test error handling code
- System Comparison Utility to identify differences in system environments as an aid to problem diagnosis

DevPartner for Visual C++ BoundsChecker Suite 8.0

- Full support for the analysis of C/C++ applications developed using Microsoft Visual Studio .NET 2003 and Visual Studio 2005
- Integration into the Visual Studio .NET 2003 and Visual Studio 2005 IDE
- Export Performance and Code Coverage data to common formats including XML (licensed separately)
- System Comparison Utility to identify differences in system environments as an aid to problem diagnosis

Conventions Used In This Manual

This book 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 Compuware DevPartner program group, and are also included on your DevPartner CD.

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

Chapter 1

DevPartner Installation

System Requirements

DevPartner (all editions) 8.0 requires the following minimum configuration:

- Pentium III 733 MHz
- 512 MB total system memory
- 500 MB of free disk space
- 1024 x 768 graphics, 16-bit color
- CD or DVD drive

DevPartner requires the following on your system before installation:

- Microsoft Internet Explorer 5.5 or higher
- Microsoft .NET Framework 1.1 (see "Microsoft .NET Framework" on page 2 for additional information)
- Microsoft Windows
  - Windows 2000 Professional- Service Pack 4
  - Windows 2000 Server - Service Pack 4
  - Windows 2000 Advanced Server - Service Pack 4
  - Windows XP Professional - Service Pack 1a (32 bit)
  - Windows XP Tablet PC - Service Pack 1a (32 bit)
  - Windows Server 2003 (32 bit)
  - IIS 5.0 for Windows 2000 and XP
  - IIS 5.1 for Windows XP
  - IIS 6.0 for Windows Server 2003

Note: The non-localized version of DevPartner has been tested with English, French, German, Japanese, Simplified Chinese, Traditional Chinese, and Korean versions of Microsoft Windows with English language IDEs.

- If you are using a concurrent license, you must have access to a Distributed License Management (DLM) 4.0 License Server.

Supported Environments

DevPartner supports the following environments. For a detailed list of all supported Visual Studio technologies, see "Language/Technology Support" in the separate manual *Understanding DevPartner.*

- Microsoft Visual Studio .NET 2003 and Visual Studio 2005, including side-by-side operation
- Microsoft Visual C++ 6.0 Service Pack 5
- Microsoft Visual Basic 6.0

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

FailSafe and CodeReview for Visual Basic 6.0 are no longer available in DevPartner. The instrumentation code is obsolete in the latest version of DevPartner. We recommend that you remove FailSafe instrumentation from your applications prior to installing DevPartner.

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. A license file, `license.xml`, is provided by Compuware 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 License Installation Guide*. If you have other Compuware products that use DLM 4.0 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 8.0 uses a new version of Compuware Distributed License Management (DLM 4.0). If you are using concurrent licensing you must use the DLM 4.0 license server. For more information on license installation, refer to the *Distributed License Management License Installation 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:

- The DevPartner software can run as a 14-day evaluation, or one of three types of permanent license:
  - A locally-installed license, called a **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

- The DevPartner software uses all license paths entered during installation 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

DevPartner lets you capture performance, coverage, and memory analysis data from any supported component of your application executing on your single user/client machine. This capability is available as part of your DevPartner installation.

As you develop and test distributed applications, you may elect to run components of these applications on remote computers (servers). You can collect the same 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 Server license for each remote machine from which you would like to collect remote data, or purchase one or more concurrent Server licenses.

Note: You can collect only one type of analysis data at a time. Use DevPartner to choose between performance, coverage, or memory analysis.

Use the following table to choose a licensing method for your particular remote data collection needs.

Table 1-1. Remote Data Collection Licensing

Data Collection for:	License Required:
Single System	DevPartner Studio or DevPartner for Visual C++
Distributed Systems: User/Client Machine	DevPartner Studio or DevPartner for Visual C++
Distributed Systems: Remote Machine(s)	DevPartner Studio Server

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 8.0 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 1-2. Installed Features for DevPartner Studio 8.0 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 1-3. 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

Use the following procedure to install DevPartner.

Caution: If you are upgrading from a previous version of DevPartner Studio (7.*x*), refer to"Migrating DevPartner Code Review 7.x Custom Rules and User Preferences" on page 8 *before* uninstalling your previous version of DevPartner Studio.

Required: You must have Windows administrator ('admin') privileges to install and run DevPartner. On Windows Server 2003, you must use the **change user/install** mode when installing DevPartner software via a Remote Desktop. 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.

To Install DevPartner

1. 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.

2. 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.

3. Insert the DevPartner CD to start the installation.

4. Click **Install Compuware DevPartner Studio** on the Setup screen.
5. On the Installation screen, choose **Install DevPartner Studio**.
6. DevPartner checks your system for prerequisite software. Select **Install Missing Items** to install missing prerequisites.
7. Once the prerequisites are installed, a series of screens will guide you through the installation process.

   The installation program detects Visual Studio .NET 2003 and Visual Studio 2005, Visual C++ 6.0, and Visual Basic 6.0 on a computer and, by default, installs all features compatible with all environments.

   On the Component Selection screen, select the components NOT to be installed.

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?

Migrating DevPartner Code Review 7.x Custom Rules and User Preferences

If you have a previous installation of DevPartner Studio 7.x, you need to migrate your custom rules and user preferences database files to DevPartner Studio 8.0. 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 rules into the 8.0 rules database
- `crupdateprefs.exe`: Migrates existing 7.x user settings into the 8.0 preferences database

Prior to the Migration

1. Copy the existing `CR7Rules.dpmdb` and `CR7Prefs.dpmdb` files to another location for safe-keeping before you uninstall DevPartner.

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

2. Uninstall the previous version of DevPartner Studio.

3. Install DevPartner Studio 8.0.

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:

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

```
For example: crupdaterules C:\MyOldRulesDb\CR7Rules.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\CR7Rules.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:

```
Usage:
crupdateprefs [Path to the prior version of the preferences
database]
For example: crupdateprefs C:\MyOldPrefsDb\CR7Prefs.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\CR7Prefs.dpmdb"
```

Index

Symbols

.NET Framework 1

A

Administrator privilege 6

B

BoundsChecker Suite 5

C

CodeReview 2
CR7Prefs.dpmdb 8
CR7Rules.dpmdb 8
cr7updateprefs 8, 9
cr7updaterules 8

D

DevPartner
- features tied to IDE 5
- installation pre-requisite 6
- installing 6
- migrate custom rules 8
- migrate custom user preferences 9
- upgrading 6

DevPartner for Visual C++ 5

F

FailSafe 2
features
- new v

following 6

I

install 6
instrumentation 2

L

license file
- getting technical support 3
- installing 3
- obtaining 2

M

manuals vii
multiple IDEs 5

N

new features v

P

Previous version of DevPartner 6

R

Remote Desktop 6
requirements
- system 1

S

scripts
- virus protection interference 6

system requirements 1

T

Terminal Services 6

U

upgrading 6

V

virus protection 6
Visual Studio 2005, installed after DevPartner 6

W

Windows
    languages supported 1