DevPartner64™

Installation Guide

Release 1.0.1

Windows® 2000
Windows® XP

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

Technical Support Hotline:
1-800-538-7822

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

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Debugging/Error Detection Solution for Intel® Itanium™

Compuware DevPartner64™ is a suite of debugging tools that support 64-bit platforms. DevPartner64 includes Visual SoftICE® and BoundsChecker64™, two of the best known products for debugging and automated error detection for over a decade.

DevPartner64 provides developers an accelerated application time-to-market and improved application reliability using both Visual SoftICE and BoundsChecker64. Unique to DevPartner64 is the ability to detect errors and debug at a deeper level and with more control than the standard debugging utilities often provided with a compiler.

Visual SoftICE® for 64-Bit Platforms

Visual SoftICE provides developers for the Intel Itanium, Itanium2, and AMD64 processors the first tool in DevPartner64's attack on bugs. One of the few full-system debuggers for application and device drivers available for Windows operating systems, Visual SoftICE includes viewing and controlling capabilities that allow you to easily understand and diagnose the widest variety of Windows software problems.

BoundsChecker64™ on Intel Itanium Architecture

Whether you are porting existing code to the Intel Itanium processor, or writing new 64-bit applications from scratch, it is important that you can automatically identify, diagnose, and analyze errors in your application code. BoundsChecker64 is the second tool in Compuware's approach towards software bugs. BoundsChecker64 is an ideal solution for automated error detection for Windows on Itanium-based systems.

Chapter 1
Installing Visual SoftICE

- ◆ Overview
- ◆ Your Visual SoftICE Serial Number
- ◆ Obtaining a License
- ◆ Installation Choices
- ◆ Quick Installation Instructions
- ◆ Installation Tips
- ◆ Launching DSConfig
- ◆ Removing an Installation

This chapter provides conceptual information and guides you through the quick installation procedure for DevPartner64 Visual SoftICE.

Overview

There are two basic parts of a Visual SoftICE configuration: host and target. Host functionality consists of user-side GUI-intensive programs. Target functionality consists of device drivers that run in kernel mode and Ring-3 services. The user sits at the host machine, from where he or she can control multiple target systems, over TCP/IP, Serial, USB, or 1394 Firewire connections.

Host Machines

Host machines usually provide the development environment. This includes the Microsoft SDK/DDK, the C++ compiler and linker used to compile code, the build tools and batch files required to build the product, and several development aids. The developer, who is in charge of creating an application or driver, sits at the host machine and controls both development and testing from his system.

Target Machines

Target machines run the software to be tested. You do not need to have a full development environment on a target machine. The SDK/DDK, compiler, and linker all reside on the host system. But once the developer has built software that needs to be tested, that software gets loaded on the target machine, and the developer can control the target remotely from his host machine and do the debugging and testing work there.

A Typical Example

A typical sequence of events is:

1   The developer implements new code on the host machine, then compiles, links and builds the code into a new device driver.

2   The developer uploads the device driver executables from the host to the target machine. (Refer to the FPUT command and AutoCopy in the on-line help)

3   The developer installs the driver on the target machine, rebooting it if necessary. (Refer to the STARTSVC, REBOOT, and HBOOT commands)

4   The developer proceeds to debug the target machine from the host.

Your Visual SoftICE Serial Number

The Visual SoftICE software requires that you enter a valid serial number at installation time for the master. Targets do not require a serial number. A serial number is provided by Compuware for each copy of DevPartner64 that you purchase. Visual SoftICE and BoundChecker64 share the same serial number.

Your serial number will be located on the software package, license agreement, registration card, and CD case. Keep at least one copy in a safe place.

Note: If you have lost all copies of your serial number, you will need to call Compuware Customer Support and verify that you purchased the copy of Visual SoftICE, and they will send you out a new package.

Obtaining a License

In order to obtain your license file, you must follow the instructions listed on the yellow paper in your product box. You can also go to www.compuware.com/license to submit your request for a license file. In the meantime, you can install your product as a 14-day evaluation.

Installation Choices

Visual SoftICE has two basic installation choices:

◆ Host
◆ Target

Installing the Host

The host installation installs the host portion of the product alone. That is, this installs the binaries used for interpreting data that is provided by the target machine; it does not install the data collection binaries. An additional installation of target components on at least one other machine is required.

You can install the host by selecting **Visual SoftICE Host** at the AutoRun splash screen.

Installing the Target

The target installation installs only the target portion of the product. That is, this installs the binaries used for collection of data on the target machine. The target machine cannot interpret any data.

You can install a target by selecting one of the following options at the AutoRun splash screen:

◆ **Visual SoftICE Target for x86 Systems**
◆ **Visual SoftICE Target for IA64 Systems**
◆ **Visual SoftICE Target for AMD64 Systems**

Quick Installation Instructions

The following instructions guide you through the process of installing Visual SoftICE:

1 Insert the product CD into your CD-ROM drive.
If you have the autorun feature enabled, Setup runs automatically. If not, open the **Add/Remove Programs** control panel and click **Install**.

2 Select the correct installation for your debugging situation from the splash screen.
For information on how to choose the correct installation type for your debugging situation, refer to "Installation Choices" on page 3.

3 Accept the license agreement.

Note: If this is a target-only installation, skip to step 7.

4 Enter a serial number for the product.
For help on entering the serial number, refer to "Installation Tips" on page 4.

5 Choose a license type.
If you have your license file, select **License File or Server**. If you do not yet have your license file, refer to the section "Obtaining a License" on page 3.

6 Enter the location of the license file.

7 Change the installation directory, if you want, by editing the installation path to point to where you want the files to reside on your machine.

8 Click **Install**. The installer finishes copying files and displays a configuration screen. You can, if you want, close the configuration screen, complete the installation process, and return to finish configuring Visual SoftICE later. Refer to "Launching DSConfig" on page 6.

9 Register your product from the registration screen, or print out the registration form and send it in later.

10 Reboot the machine if prompted.

Installation Tips

The following sections provide tips you may find helpful during installation, if you encounter any problems.

Entering Your Serial Number

Find the product serial number on your registration card or CD envelope. It is a twelve-digit number that includes hyphens. Enter the serial number, grouped exactly as shown, in the hyphen-separated fields provided.

Serial Number Does Not Seem to be Working?

Check that you are installing the correct product and product version. Serial numbers are specific to a particular release of the product. Be certain that you are not trying to use the BoundsChecker64 serial number to install Visual SoftICE.

Installation Problems?

A common cause of installation problems is the presence of "leftover" files from previous installations in your system **temp** directory. If you encounter errors during the installation process, try deleting the contents of your system **temp** directory, then re-installing the product.

Lost Ethernet Connection After Target Installation

This might not be a problem. It might be just a misunderstanding of how the Visual SoftICE network debugging operates. Visual SoftICE uses a dedicated network that becomes the connection for debugging only on targets. If your connection to the debugger is working, but the connection to the Internet is not, then this is normal.

Compuware suggests that the target machine have two network cards: one PCI network card for normal network operation, and another PCI network card for the Visual SoftICE debugger. The other alternative is to use the Virtual NIC (VNIC) driver in addition to the installed connection, for shared use of a single NIC.

Problems Rebooting the Target Machine after Installation

Try connecting with the host ("master" for Visual SoftICE) and check the status of the target to see if it has reached a breakpoint. A major cause of this behavior is the "stop on boot" setting. Once the target is up and running, use DSConfig to check the "stop on boot" setting for the target, and modify it according to your needs.

Launching DSConfig

The DriverStudio Configuration wizard (DSConfig) provides a centralized utility for configuring Visual SoftICE targets. The DSConfig help files, which you can access via the Help button in the DSConfig utility, provide more detailed information on all the configuration options. Complete the following steps to launch DSConfig:

From the System Tray

1   Right-click on the gear-shaped DSConfig icon in the System Tray.

2   Select **Settings** from the pop-up menu.

From the Start Menu

1   Select **Programs** from the **Start** menu.

2   Select **Compuware Visual SoftICE** from the **Programs** menu.

3   Select **Settings** from the sub-menu.

Removing an Installation

Complete the following steps to remove Visual SoftICE.

1   Open **Add/Remove Programs** in the Control Panel (**Start > Settings > Control Panel**).

2   Select **Visual SoftICE.**

3   Click **Remove**.

Chapter 2
Installing BoundsChecker64

◆ Your DevPartner64 Serial Number

◆ Installing BoundsChecker64 for DevPartner64

◆ Notes About the Installation Process

◆ Removing an Installation

This chapter explains how to install and remove BoundsChecker64 for DevPartner64.

Your DevPartner64 Serial Number

The DevPartner64 software requires that you enter a valid serial number at installation. A serial number is provided by Compuware for each copy of DevPartner64 that you purchase. The same serial number is used to install both Visual SoftICE and BoundsChecker64.

Note: You can also install BoundsChecker64 as a 14-day trial version. See step 4 under "Installing BoundsChecker64 for DevPartner64" on page 8.

Your serial number will be located on the software package, license agreement, registration card, and CD case. Keep at least one copy in a safe place.

Note: If you lose all copies of your serial number, you will need to call Compuware Customer Support (1-888-283-9896). Verify that you purchased a copy of DevPartner64, and they will send you a new package.

Installing BoundsChecker64 for DevPartner64

Use the following procedure to install BoundsChecker64 for DevPartner64.

1 If you are running a previous version of BoundsChecker64, uninstall your previous version and restart your machine.

2 Insert the BoundsChecker64 CD and click **Install Compuware BoundsChecker64** to start the installation wizard.

3 Click **Next** on the Welcome screen and read and accept the License Agreement.

4 Enter your name, company information, and serial number on the Customer Information screen and click **Next**.

   To install the 14-day trial version of BoundsChecker64, leave the serial number field of the Customer Information screen blank and click **Next**.

Note: At the end of the 14-day trial period, BoundsChecker64 will no longer start up. Instead, a message will notify you that the trial period has expired. To change from a trial version to a licensed version, uninstall the trial version and reinstall with a valid serial number.

5 On the **Custom Setup** screen, browse for a directory into which to install the suite, or accept the default, and click **Next**.

6 Verify that you have chosen the desired installation and click **Install**.

   A progress meter helps you track the progress of the installation. To halt the installation at any time, click **Cancel**.

7 Click **Finish** on the Installation Complete screen.

Notes About the Installation Process

During the installation, certain portions of the process continue without advancing the progress bar on the installation wizard. If you believe the installation wizard is not responding, please check the Windows task manager before you stop the installation.

Removing an Installation

Complete the following steps to remove BoundsChecker64.

1   Open **Add/Remove Programs** in the Control Panel (**Start** > **Settings** > **Control Panel**).

2   Select **BoundsChecker64**.

3   Click **Remove**.

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