

Rational software

IBM Rational PurifyPlus

Highlights

- Pinpoints hard-to-find bugs
- Highlights performance bottlenecks
- Identifies untested code
- Instruments an entire application or only selected modules
- Supports Microsoft Windows, UNIX and Linux environments
- Is integrated directly as part of Microsoft Visual Studio .NET
- Supports Java, all managed Visual Studio .NET languages, Visual C/C++, Visual Basic and ANSI C/C++
- Works with or without source code

IBM Rational® PurifyPlus™ software is a complete set of run-time analysis tools designed for improving application reliability and performance. The PurifyPlus software combines memory error and memory leak detection, application performance profiling, and code coverage analysis into a single, complete package. Together, these functions help developers ensure the highest reliability and performance of their software from its very first release. (Developers also have the option of using IBM Rational Purify® software, which can be purchased separately, for a dedicated memory error and memory leak detection tool set. The PurifyPlus solution adds performance profiling and code coverage analysis capabilities.)

Do more in your IDE

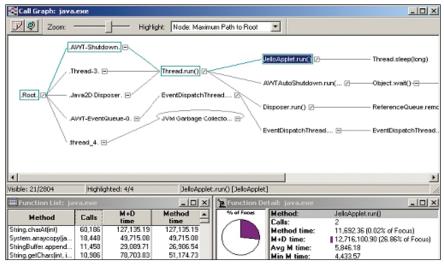
With the PurifyPlus software, a developer using Microsoft® Visual Studio .NET software can do more in an integrated development environment (IDE). The PurifyPlus software has its own menu and analysis results that appear in the IDE user interface.

This allows you to easily analyze your code as it is being created—no more switching back and forth between different tools. Because it has its own stand-alone user interface, the PurifyPlus software also supports developers using other IDEs.

Develop high-quality code faster

PurifyPlus software allows you to instrument your entire application or select only portions of it. Selective instrumentation analyzes only the modules that you want considered. This provides greater flexibility for creating the test environment and makes the data collection part of run-time analysis much easier and more productive.

Many developers value run-time analysis but are concerned that the effort will slow down their development. The PurifyPlus solution doesn't get in your way. Special instrumentation technology allows you to analyze your executables directly—no recompilation is necessary. And PurifyPlus software does this for all of the major programming languages, eliminating the need to use multiple tools from different vendors (see the product feature matrix).



The PurifyPlus object reference graph shows the objects that reference, and are referenced by, the current object.

IBM Rational software provides runtime analysis supporting the widest range of development platforms and languages. The PurifyPlus software is your single solution for developing high-quality code, faster.

Make developing on a team easier

PurifyPlus software integrates with IBM Rational ClearQuest® software so that you can instantly create defect reports upon finding bugs in

your code. These products are conveniently packaged with IBM Rational Suite® software, giving you a single, integrated solution for all your team development needs.

And so you'll never have to go it alone, the IBM developerWorks® service acts as your online extended development community. The developerWorks service provides white papers, discussion forums and a wealth of other

technical resources made accessible through a special online customer Web site. It also provides convenient Web-based training so that you need not leave your work environment. With the developerWorks service, you'll never have to start a project from a blank slate.

Only IBM Rational software combines run-time analysis tools with integrated lifecycle support and an extended developer community.

Rational software makes working on a development team easier, helping you develop fast, reliable code.

To learn more

For more information on IBM Rational PurifyPlus software, visit:

ibm.com/software/awdtools/ purifyplus

Product feature matrix

Feature	PurifyPlus Enterprise Edition ¹	PurifyPlus for Windows®	PurifyPlus for Linux [®] and UNIX [®]	Purify for Windows	Purify for Linux and UNIX
Memory corruption detection	C/C++	C/C++	C/C++	C/C++	C/C++
Memory leak detection	C/C++, Java [™] , managed Microsoft Visual Studio .NET (MSVS .NET)	C/C++, Java, managed MSVS .NET	C/C++, Java ²	C/C++, Java, managed MSVS .NET	C/C++
Performance profiling	C/C++, Java, managed MSVS .NET, Microsoft Visual Basic 6 (MSVB6)	C/C++, Java, managed MSVS .NET, MSVB6	C/C++, Java ²	N/A	N/A
Code coverage analysis	C/C++, Java, managed MSVS .NET, MSVB6	C/C++, Java, managed MSVS .NET, MSVB6	C/C++, Java ²	N/A	N/A

¹ PurifyPlus Enterprise Edition software is a bundling of PurifyPlus for Windows and PurifyPlus for Linux and UNIX software.

² Java support is available for the Microsoft Windows and Sun Microsystems Solaris SPARC operating environments only.

IBM Rational PurifyPlus features and benefits

Feature	Description	Benefit
Memory corruption and memory	Automatically pinpoints hard-to-find bugs	Improve application reliability
leak detection		Save time debugging
Application performance profiling	Highlights application performance	Improve application performance
	bottlenecks	Identify the most important code to optimize
Code coverage analysis	Identifies untested code	Avoid users being the first to exercise functionality
Unique instrumentation techniques	Instruments at the byte-code or object-code level	Eliminate the need for recompilation to analyze your code
		Analyze every component, even those without source code
Server-side Java support	Works with your Web or application server to analyze JavaServer Pages (JSP), servlet, Enterprise Java Beans (EJB) and Java 2 Platform, Enterprise Edition (Java EE) code	Improve reliability and performance of server code and client applications
Runs directly inside MSVS .NET or as a stand-alone tool	Installs and operates directly within MSVS .NET 2002 and MSVS .NET 2003	Eliminate switching back and forth between different tools with different user interfaces
		Provide a more cohesive, more productive development experience
		Test and analyze your code as it is being created
		Extend your development experience to include run-time analysis
		Gain flexibility in performing run-time analysis because of stand-alone operation
Comprehensive programming language support	Supports C/C++, Java, managed .NET languages (including MSVB .NET and C#), and MSVB6	Get everything you need in one run-time analysis tool for all your application development
Selective instrumentation	Allows you select which modules of an application to analyze	Test only the modules you want without having to instrument the whole application
		Choose only the components for which you are responsible
		Create the test environment with greater flexibility
		Simplify the data collection part of runtime analysis



IBM Rational PurifyPlus system requirements

Operating system	Software
Microsoft Windows 32-bit x86 platforms	Languages and compilers
Windows 2000Windows XP	 Microsoft Visual C++ 6.0 and Visual Basic 6.0 with Visual Studio 6.0 Sp4, Sp5 or Sp6
Windows 2003 Server	 Microsoft Visual C++ 6.0 processor pack
	 Microsoft Visual C++ (unmanaged), C++ .NET, ASP .NET, Visual Basic .NET, C#, J# with Visual Studio .NET 2002, 2003 or 2005
	• 32-bit Java with IBM or Sun JVM 1.4.2 or 5.0
Sun Solaris SPARC platforms	Languages and compilers
Solaris 8Solaris 9	 C/C++ with Sun compiler versions 5.3 through 5.8
• Solaris 10	• C/C++ with gcc/g++ 2.95; 3.0 through 3.4; or 4.1
	(32-bit and 64-bit support for memory error and leak detection and performance profiling; 32-bit support for code coverage)
	32-bit Java with IBM or Sun JVM 1.4.2 or 5.0
Sun Solaris x64 platforms	Languages and compilers
• Solaris 10 6/06	 C/C++ with Sun Studio 11 (V5.8)
	 C/C++ with gcc/g++ 3.4
	(64-bit support only)
HP-UX PA-RISC platforms	Languages and compilers
HP-UX 11.0HP-UX 11i (11.11)	• C/C++ with HP aCC 3.31, 3.33, 3.34, 3.37, 3.39, 3.45, 3.50, 3.52, 3.55, 3.56, 3.60, 3.63 or 3.65 (32-bit and 64-bit)
• HP-UX 11i v2 (11.23)	 C/C++ with gcc/g++ 2.95; 3.0 through 3.4; or 4.0 (32-bit only)
IBM AIX® platforms	Languages and compilers
AIX 5L [™] V5.1	• C/C++ with IBM Visual Age C++ 6.0 and XL C/C++
• AIX 5L V5.2	7.0 or 8.0
• AIX 5L V5.3	(32-bit and 64-bit support)
Linux x86/x64 platforms	Languages and compilers
Linux x86/x64 platforms Red Hat Enterprise Linux AS/ES/WS 3 U5 through U8 (32-bit only)	Languages and compilers • C/C++ with gcc/g++ 3.2 through 3.4; 4.0; or 4.1
Red Hat Enterprise Linux AS/ES/WS 3	• C/C++ with gcc/g++ 3.2 through
 Red Hat Enterprise Linux AS/ES/WS 3 U5 through U8 (32-bit only) Red Hat Enterprise Linux AS/ES/WS 	 C/C++ with gcc/g++ 3.2 through 3.4; 4.0; or 4.1 (32-bit support on Red Hat Enterprise Linux 3; 32-bit and

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IBM Corporation Software Group Route 100 Somers, NY 10589 U.S.A.

Produced in the United States of America 06-07

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Note: IBM Rational PurifyPlus software is regularly updated to support new development environments. This table reflects support in the 7.0.0.0 release as of May 2007. Check the IBM Rational support Web site for product updates and release notes with more details.