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IBM Rational Developer for System i, Version 7.1

Highlights

■ *Supports traditional IBM i5/OS operating system development*

■ *Features enhancements to the application diagram, such as new functional zoom capabilities and CL support*

■ *Supports the IBM i5/OS, Version 6.1 operating system*

■ *Includes usability enhancements to the screen designer technology preview, phase 2*

■ *Helps ease application debugging processes*

■ *Helps reduce disk and memory requirements on developers' personal computers*

A new Eclipse-based workstation tool, IBM Rational® Developer for IBM System i™ software is a strategic tool for developing traditional applications based on the IBM i5/OS® operating system. Since the IBM WebSphere® Development Studio Client will no longer be enhanced, IBM recommends that you use the integrated language environment (ILE) compilers in WebSphere Development Studio for System i and Rational Developer for System i for traditional IBM i5/OS development.

Robust legacy functionality

The Rational Developer for System i tool features many of the capabilities previously found only in the WebSphere Development Studio Client Advanced Edition offering, including:

- *An IBM i5/OS program call Java™ Platform 2, Enterprise Edition Connector (J2C).*
- *Single-sign-on functionality for Web applications using enterprise identity mapping (EIM).*

- *Screen designer technology preview, phase 1, which enables developers to visually create 5250 green-screen data description specifications or maps.*
- *Integration with IBM Rational ClearCase® software for System i.*

Enhancements to the application diagram

IBM Rational Developer for System i, Version 7.1 software includes the application diagram functions previously found in the IBM WebSphere Development Studio Client Advanced Edition for System i offering, as well as the following enhancements.

Functional zoom capabilities

The new Rational Developer for System i tool features an application diagram that can graphically show subroutines and subprocedures within source members. When opened, the diagram is designed to show source members, programs and service programs, along with direct (copybooks and bindings) and indirect (procedure and program calls) relationships between them. Now you can expand the source members to see lower-level details and show the call graph for each member within the graphical representation of the source member in the diagram.

Updated program call support

The application diagram has been updated to show program calls for ILE RPG, ILE COBOL and computational linguistics (CL) source members, in addition to bound procedure and subroutine calls.

CL support

Now, using Rational Developer for System i software, you can scan CL source members and add their information to the generated diagram.

Additional enhancements and expanded support

IBM Rational Developer for System i, Version 7.1 software has also been updated in other areas to improve extensibility and usability.

IBM i5/OS Web services and Java tools enhancements

The program call wizard now enables you to generate Program Call Markup Language (PCML) and direct program call Java beans, which use the `ProgramCall` class to invoke the System i program. Using the `ProgramCallDocument` class, PCML program call Java beans can invoke the System i program. The program call beans that you generate are now more extensible, and they support the Secure Socket Layers (SSL) protocol for communication between program call beans and the i5/OS operating system.

Support for the IBM i5/OS, Version 6.1 operating system

Program verifiers, syntax checkers, content assist, editor wizards and outline views have been updated to the i5/OS, Version 6.1 host level.

Screen designer technology preview, phase 2

In addition to providing performance enhancements and several defect fixes, phase 2 of the screen designer technology preview contains a number of usability enhancements, such as:

- *Keyword-specific property pages.*
- *Keyword properties, which can be created when you add a keyword.*
- *A toolbar button that allows you to configure preferences on the design page.*
- *A partial preview page function that includes indicator sets and field values.*
- *Buttons that enable you to control screen size from both the design and the preview pages.*
- *Screen information, which is stored as XML comments within the display file.*

Expanded debug support

Rational Developer for System i, Version 7.1 software includes several new features that make it easy for you to debug your applications. The application now allows you to:

- *Select and debug each RPG thread in the application; view and change variables; and pause a thread.*
- *View and modify RPG varying-length variables.*
- *Show the data item information in COBOL occurs depending on (ODO) arrays quickly and easily.*
- *View and modify decimal floating-points in the ILE C programming language.*

Footprint reduction

The Rational Developer for System i application now reduces the hard disk and main memory requirements on developers' personal computers.

Software requirements

Operating system

IBM Rational Developer for System i supports the following operating systems in 32-bit mode:

- IBM i5/OS, Version 5.3, 5.4 or 6.1 *(Note: Some components need additional program temporary fixes [PTFs], which can be viewed online at: www.ibm.com/software/awdtools/iseries)*

  More information about required System i server PTFs can be found by:

  – Opening the Remote System Explorer perspective if it is not already open by selecting Window > Open Perspective > Other. Select Remote System Explorer. The name of the current perspective is shown in the top left corner of the title bar for the window.

  – Creating a connection to your i5/OS server by expanding New Connection > i5/OS.

  – Expanding your new connection and right-clicking on Objects.

  – Selecting Verify Connection from the menu. This displays a dialog that shows which required PTFs are already installed on the system and which are missing.

  – Compiling RPG, COBOL, C, C++, CL or DDS on the System i server using the Remote System Explorer (RSE). The compilers must be installed on the i5/OS platform.

- Microsoft® Windows® XP Professional with Service Pack 2 or later

- Microsoft Windows 2000 Professional with Service Pack 4

- Microsoft Windows 2000 Server with Service Pack 4

- Microsoft Windows 2000 Advanced Server with Service Pack 4

- Microsoft Windows Server 2003 Standard and Enterprise Editions with Service Pack 1

- Microsoft Windows Vista* Business, Windows Vista Enterprise and Windows Vista Ultimate

Integrated development environment (IDE)

- Eclipse IDE V3.2.2. You can only extend an existing Eclipse IDE of version 3.2.2 with the latest updates from the open source community. In addition, a Java Runtime Environment (JRE) is required from the following Java development kits:

  – IBM 32-bit software development kit (SDK) for Windows Java 2 Technology Edition, Version 5.0, service release 4

  – Java Platform 2, Standard Edition (Java SE 2) 5.0, Update 12 for Microsoft Windows

- Java SE 2 Runtime Environment 6.0 is not supported

- Installing updates: You may need to update your Eclipse implementation to install updates. Refer to the update's release documentation for information on changes to the prerequisite Eclipse version.

(Note: To enable users without administrator privileges to work with Rational Developer for System i on a Windows Vista system, do not install Eclipse inside the Program Files directory [C:\Program Files].)

Web browser

To view the readme files and the installation guide, and to support the Standard Widget Toolkit (SWT) browser widget, you need one of the following:

- Microsoft Internet Explorer 6.0 with Service Pack 1 or later

- Mozilla 1.6 or later**

- Firefox 1.0.x, 1.5, 2.0 or later

Flash player

To view multimedia user assistance, such as tours, tutorials and demonstration viewlets, you need the Adobe® Flash Player, Version 6.0 release 65 or later.

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* *If you are running the Windows Vista operating system, the Samples Gallery and Tutorials Gallery will not support the new high-resolution display setting, "Larger scale (120 dpi) - make text more readable." If you have selected the new high-resolution display option, you must change to a lower-resolution setting; for example, the default 90 dpi setting. The Japanese version of the Windows Vista operating system requires the Mozilla Firefox Web browser; gallery content does not display on other Web browsers.*

** *If you are using the Mozilla browser, you will need version 1.7 or later to run the launchpad.*

Hardware requirements

Processor

- Intel® Pentium® III 800MHz processor minimum; higher recommended

Memory

- 512MB RAM minimum; 1GB RAM recommended

Disk space

- 800MB of disk space is required for product package installation. Additional disk space is required for the resources that you develop.

- Disk space requirements can be reduced or increased depending on the features that you install.

- Additional disk space is required if you download the product package to install this product.

- Microsoft Windows users: Additional disk space is required if you use 32-bit File Allocation Table (FAT32) instead of New Technology File System (NTFS). An additional 500MB of disk space is required in the directory used by the environment variable TEMP.

Resolution

- 1024 × 768 resolution minimum using 256 colors (or higher for best results)

Mouse

- Microsoft mouse or compatible pointing device

Drives

- CD-ROM drive

Note: The program's specifications and operating environment information may be found in documentation accompanying the program, if available (such as read-me files), or in other information published by IBM. Documentation and other program content may be supplied only in the English language.

For more information

To learn more about IBM Rational Developer for System i, Version 7.1 software, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/awdtools/wds400