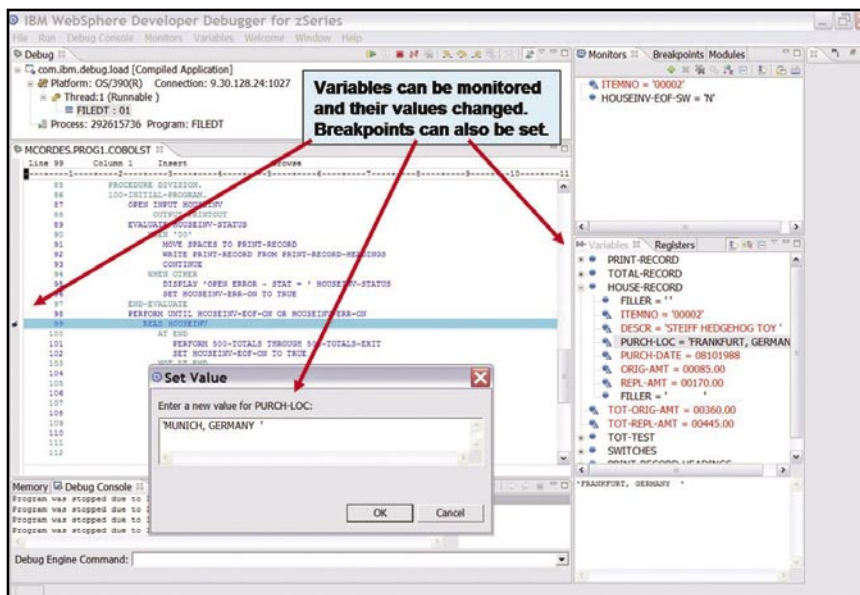**IBM**

WebSphere® software

IBM WebSphere Developer Debugger for zSeries, Version 6.0.1

Highlights

- **Takes advantage of the robust debug function of Debug Tool and Debug Tool Utilities and Advanced Functions with a workstation-based interface**

- **Enables you to examine, monitor and control the processing of application programs written in many programming languages and numerous implementation environments**

- **Allows you to interactively debug an application as it runs**

- **Enables you to perform seamless debugging of mixed-language applications**

- **Provides the ability to make adjustments to applications while debugging**

- **Displays programs with color-coded highlighting of syntax**

- **Allows you to display, monitor and alter program variables**

To address your organization's business goals, your IT staff is challenged to deliver function-rich applications quickly. Regardless of whether it was designed to perform routine or critical tasks, the underlying code that drives your applications is probably highly complex. Programmers have to work quickly to meet demand, with minimal errors — even adapting code on the fly as your business needs evolve. To effectively build and service applications, you need robust, easy-to-use tools to compile, test and debug your applications.

IBM WebSphere® Developer Debugger for zSeries, Version 6.0.1 is an affordably priced subset of IBM WebSphere Developer for zSeries functions that is designed to provide a workstation-based graphical interface to IBM Debug Tool and IBM Debug Tool Utilities and Advanced Functions. This product is specifically designed for IBM @server® zSeries® developers who do not require the full-function WebSphere Developer for zSeries product.

WebSphere Developer Debugger for zSeries works with Debug Tool and Debug Tool Utilities and Advanced Functions to provide increased productivity for mainframe developers.

Examine, monitor and control the implementation of zSeries application programs

IBM WebSphere Developer Debugger for zSeries, Version 6.0.1 provides Eclipse technology-based interactive source-level debugging capabilities that enable you to debug compiled zSeries applications. Its program debugging, testing and analyzing capabilities also integrate with IBM Debug Tool for z/OS, Version 6.1 and IBM Debug Tool Utilities and Advanced Functions, Version 6.1 to help you examine, monitor and control the processing of application programs written in COBOL, PL/I, C, C++ and Assembler on IBM z/OS® systems.

Debug applications in a variety of environments

WebSphere Developer Debugger for zSeries enables you to debug applications that run in the following environments:

- *IBM CICS®*
- *IBM IMS™*
- *IBM DB2®*
- *IBM WebSphere Application Server*
- *Time Sharing Option (TSO)*
- *Job Entry Subsystem (JES) and batch*
- *UNIX® System Services (USS)*

Take advantage of robust debugging functions

WebSphere Developer Debugger for zSeries provides a robust, easy-to-use workstation-based interface with unique functions provided by Debug Tool or Debug Tool Utilities and Advanced Functions. You can implement a broad range of capabilities needed for debugging applications running remotely.

Remote debug program processing

WebSphere Developer Debugger for zSeries displays source code that is accessed from various locations, including the compiled side file. It provides functions to control program processing, such as:

- *Resume processing.*
- *Suspend processing.*
- *Step into procedures.*
- *Step over procedures.*

Remote debug breakpoints

WebSphere Developer Debugger for zSeries provides several different ways of stopping program processing, such as:

- *Set and clear breakpoints at a specific line.*
- *Set and clear breakpoints for an error or warning-level error that is based on IBM Language Environment® severities.*
- *Run to a breakpoint.*

WebSphere Developer for zSeries

Bridges mainframe and client-server development
• By delivering end-to-end integrated processes running across platforms • By providing shared developer repositories and tooling framework
Enables deployment to WebSphere Application Server, CICS, IMS, DB2 and batch environments
• By providing cross-platform development • By delivering a workstation-based development tool • By offering a workstation-based mainframe application-analysis tool
Enables you to develop SOA composite applications that combine Web services, Web applications and traditional applications
• COBOL, PL/I, Enterprise Generation Language (EGL) (Fourth Generation Language [4GL]) • Java™, Java 2 Platform, Enterprise Edition (J2EE), Web Service Description Language (WSDL), Java beans, XML adapters • Portlets and complex user interfaces • Service flow modeler for CICS and IBM WebSphere Host Access Transformation Services (HATS)

WebSphere Developer for zSeries is a full-function tool for traditional and distributed application development. To learn more, visit **ibm.com**/software/awdtools/devzseries.

Remote debug viewing and manipulation of data items

You can use WebSphere Developer Debugger for zSeries to observe variable values while programs are running. A range of ways to perform this function are provided, such as:

- *Viewing variable values and changing them as you step through the code.*
- *Viewing variable values in the context of a larger area of storage.*
- *Viewing static fields and constants.*

The product's distributed design enables you to debug programs running remotely on other systems available with TCP/IP access to or from your workstation.

Extensive remote debug functions

With this debugger, developers can control the implementation of programs by setting compiled language-specific breakpoints, suspending implementation, stepping through code, and examining and changing the contents of variables. The debugger operates from a component of the Eclipse workbench, and contains views and functionality specific to debugging compiled language applications. With the Eclipse technology-based views, you can monitor variables, expressions, registers, memory and application modules. Functionality that is geared specifically to debugging compiled language applications includes:

- *Viewing source in the editor*
- *Choosing from multiple breakpoint types, such as line, entry, address, watch and load*
- *Specifying exception types at which the debugger should stop program control, such as run, step into and step over a procedure*
- *Monitoring and updating storage, memory maps, registers, variables and expressions*

Support for compiled language-debug functionality varies depending on the language, environment and platform on which you are debugging.

Remote debug conditional watch breakpoint

The watch breakpoint function enables you to specify a condition so that WebSphere Developer Debugger for zSeries can "watch" for a particular number of bytes and an expression that can be resolved to an address. You can also add a simple expression (for example, in COBOL `Var1=10`). WebSphere Developer Debugger for zSeries stops at the breakpoint only when the condition you've specified is evaluated to be true.

Remote debug step and breakpoint log message support

To help you determine the reason control is returned to you during a session, the remote debug function shows log messages in the command window when control is returned after WebSphere Developer Debugger for zSeries hits a breakpoint.

Access to Debug Tool, Version 6.1 and Debug Tool Utilities and Advanced Functions, Version 6.1 capabilities

Debug Tool Utilities and Advanced Functions, Version 6.1 is a separate, optional product that builds on the function in Debug Tool, Version 6.1, providing even more debugging capability for z/OS and IBM OS/390® applications. When you purchase Debug Tool Utilities and Advanced Functions, Version 6.1, Debug Tool, Version 6.1 is also included.

Designed to enable faster debugging of your applications

WebSphere Developer Debugger for zSeries provides an easy-to-use debugging interface that can help you save time in setup and during the development cycle. The familiarity of the WebSphere Developer Debugger for zSeries interface for developers of composite and Web applications also enables faster debugging by providing access to the variety of information available in multiple views. With WebSphere Developer Debugger for zSeries, you can take advantage of a robust debugging tool that integrates easily with other zSeries functions. And as your needs evolve, you can quickly and efficiently migrate to the composite applicaton-development capabilities of the full-function WebSphere Developer for zSeries product.

For more information

To learn more about IBM WebSphere Developer Debugger for zSeries, Version 6.0.1, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/awdtools/debugtool

or

ibm.com/software/awdtools/devzseries

To join the Global WebSphere Community, visit:

www.websphere.org

IBM WebSphere Developer Debugger for zSeries, Version 6.0.1 at a glance

Hardware requirements

- Processor: Intel® Pentium® III at 800MHz required; faster recommended
- RAM: 512MB required; 1GB or more recommended
- Video Graphics Array (VGA) display: 1024x768 minimum
- Disk space: 100MB minimum; 200MB maximum (based on Microsoft® Windows NT® File System) [NTFS], depending on the optional features selected for installation; additional space required for the resources that you develop

Software requirements

- Operating systems (one of the following)
  - Microsoft Windows® XP Professional with Service Pack (SP) 1 or later
  - Windows 2000 Professional with SP3 or later
  - Windows 2000 Server with SP3 or later
  - Windows 2000 Advanced Server with SP3 or later
  - Microsoft Server 2003 Standard
  - Microsoft Server 2003 Enterprise
- TCP/IP installed and configured
- Microsoft Internet Explorer, Version 5.5 with SP1 or later

Corequisites

- Debug Tool Utilities and Advanced Functions for z/OS, Version 6.1 or later (includes Debug Tool for z/OS, Version 6.1) (must be installed on the host to support remote debugging of programs from WebSphere Developer Debugger for zSeries)

Note: The above corequisite product is required to support specific features of WebSphere Developer Debugger for zSeries. The workstation client can be successfully installed without this corequisite; however, the stated requisite must be installed and operational at run time for the corresponding feature to work as designed.