BEA WebLogic Java Adapter for Mainframe

Release Notes

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BEA WebLogic Java Adapter for Mainframe Release Notes

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BEA WebLogic Java Adapter for Mainframe Release Version: 4.2
Date: July 2001

This document provides the latest release information about the WebLogic Java Adapter for Mainframe product, hereafter referred to as JAM.

The following information is provided in this document:

- "About WebLogic Java Adapter for Mainframe"

- "Supported Platforms"

- "Additional Software"

- "Miscellaneous Issues"

- "Where to Get Product Documentation"

- "Contacting BEA Customer Support"

About WebLogic Java Adapter for Mainframe

JAM is a set of software components that provide seamless bidirectional interactions between Java applications running on a WebLogic Server platform and either Customer Information Control System (CICS) applications or Information Management System (IMS) applications running on a mainframe. With CICS, the Java application request/response operations interact using Distributed Program Links (DPLs). With IMS, the Java application request/response operations interact using implicit Application Program-to-Program Communication (APPC) support.

The JAM software components include the following:

- JAM Gateway (JCRMGW)

- Communictions Resource Manager (CRM)

- JAM Plug-in for WebLogic Process Integrator, a component of WebLogic Integration

- eGen COBOL Code Generator

- CRM Monitor

- JAM Administration Servlet

The JAM gateway and CRM are runtime components that provide the bidirectional interaction. The eGen COBOL Code Generator is a development tool that is used for application development and data transformation from existing mainframe applications. The CRM Monitor and JAM Administration Servlet are administration utilities. The JAM Plug-in for WebLogic Process Integrator is used for workflow processing with the mainframe.

New Product Features

The following new features are available in Version 4.2 of the WebLogic Java Adapter for Mainframe:

- Support for WebLogic Server clustering

- JAM Plug-in for integration with WebLogic Process Integrator

- Reorganized documentation set for easier use

Product Packaging

The box containing the JAM product includes the following:

- Product software CD-ROM

- Documentation CD-ROM

- BEA Systems, Inc. Support Guide, Registration Card, and License

- *BEA WebLogic Java Adapter for Mainframe Release Notes*

- *BEA WebLogic Java Adapter for Mainframe Installation Guide*

Supported Platforms

The following sections list the supported platforms for each of the JAM components respectively.

Supported Platforms for JAM Gateway

Table 1 lists the supported platforms for the JAM gateway.

Table 1 JAM Gateway Supported Platforms

Platform
AIX 4.3.3

Table 1 JAM Gateway Supported Platforms

Platform
HP-UX 11.00
Windows NT 4.0 Server, Service Pack 5
Solaris 7
Solaris 8

Supported Platforms for JAM Plug-in for WebLogic Process Integrator

Table 2 lists the supported platforms for the JAM Plug-in for WebLogic Process Integrator.

Table 2 JAM Plug-in Supported Platforms

Platform
HP-UX 11.00
Windows NT 4.0 Server, Service Pack 5
Solaris 7
Solaris 8

Supported Platforms and Required Stacks for CRM

Table 3 lists the supported platforms and required stacks for CRM.

Table 3 CRM Supported Platforms and Required Stack

Platform	Stack
Windows NT 4.0 Server, Service Pack 5	IBM Communications Server 6.0 for Windows NT
OS/390 UNIX 2.8	VTAM
OS/390 UNIX 2.9	VTAM
OS/390 UNIX 2.10	VTAM
OS/390 MVS 2.8	VTAM
OS/390 MVS 2.9	VTAM
OS/390 MVS 2.10	VTAM
Solaris 7	DCL SNAP-IX 6.2 or DCL SNAP-IX 7.0

Stack-Related Issues

This section includes known stack issues that remain open with the current release of the software.

- IBM OS/390 V2.8

  APARS required to run the CRM on OS/390:

  - PQ28223, PQ28224 (General)
  - UW69304 (APAR for Security)

Supported Mainframe Software

Table 4 shows a list of the IBM Host software for the remote mainframe application that is supported by JAM.

Table 4 Supported IBM Host Software

Vendor
IMS 6.1
IMS 7.1
CICS TS 1.2
CICS TS 1.3

Additional Software

JAM requires the following additional software:

- WebLogic Server 6.0, Service Pack 2

Note: The JAM Plug-in for WebLogic Process Integrator is not supported for AIX because Service Pack 2 is not available for AIX 4.3.3.

- Java Virtual Machine (JVM), Version 1.3

- Supported third-party Systems Network Architecture (SNA) stack if the CRM is not installed on a mainframe

- EJB 2.0 if you are using WebLogic Process Integrator with JAM

- WebLogic Integration Version 2.0 if you are using WebLogic Process Integrator and WebLogic XML/Non-XML Translator with JAM

Note: WebLogic Process Integrator and WebLogic XML/Non-XML Translator are both components of BEA WebLogic Integration 2.0.

Miscellaneous Issues

The following sections describe some of the miscellaneous issues you may need to consider before you install JAM. Refer to the *BEA WebLogic Java Adapter for Mainframe Installation Guide* for more detailed information about installing or upgrading JAM.

Known Limitations

The following table describes known problems for the current release of the software. A Case or CR (Change Request) number is listed for each problem. Refer to this number to conveniently track the solution as the problems are resolved. Please contact BEA Customer Support for assistance in tracking the unresolved problems. For contact information, see "Contacting BEA Customer Support."

1	CR041342	**An EJB that returns a null from its dispatch method causes a NullPointerException to be returned.**
	Problem	Data flows for some function calls cannot return data to the application, but JAM does not allow an INBOUND service to complete its function call without actually returning data.
	Platform	All
	Workaround	None
2	CR047656	**JAM gateway boots with invalid configuration parameters.**
	Problem	When the JAM gateway boots with multiple syntax errors in the JAM configuration file, gateway requests are processed with unpredictable results.
	Platform	All
	Workaround	Verify that there are no errors in the JAM configuration file. Use the Configuration Checker utility to check for syntax errors.

Fixed Problems

This section describes known problems from the prior release of JAM that have been fixed with the current release of the software. The following table lists a Case or CR (Change Request) number for each problem.

1	CR041615	**IMS : Abnormal termination of CRM.**
	Problem	When attempting to invoke a service connecting to IMS, setting the FUNCTION parameter to "DPL" in the Remote Services section of the `jcrmgw` configuration file is invalid and causes the CRM to terminate.
	Platform	All
2	CR044482	**Add FUNCTION=APPC as an option in the JC_REMOTE_SERVICES section of the jcrmgw.cfg file.**
	Problem	When configuring an IMS remote service in the jcrmgw.cfg file, the FUNCTION parameter is confusing. There is an option for DPL (CICS program linkage) and another for DTP (CICS-specific), but no option for APPC.
	Platform	All
3	CR044848	**After a period of normal processing, an unexpected timeout occurs and the CRM shuts down.**
	Problem	Sporadic storage corruption caused the CRM to fail.
	Platform	OS/390
4	CR046080	**Java system traces for multiple threads are interleaved into a single data dump.**
	Problem	When using a program that is invoked twice from two different threads, the trace reflects two different Service Input data headers and the data from each trace is interleaved.
	Platform	All
5	CR046103	**Message response time is much slower than expected.**
	Problem	Response times for messages increased linearly to the message size.

	Platform	All	
6	**CR046271**	**CRM abends on startup with a segmentation fault.**	
	Problem	Incompatibilities between the CRM and OS/390 C runtime library cause the CRM to terminate.	
	Platform	OS/390	
7	**CR047468**	**JAM gateway terminates when an unidentified service is called.**	
	Problem	When using the callService() method on an undefined service, a Null Pointer exception occurs and the gateway terminates.	
	Platform	All	
8	**CR050202**	**CRM abends during initialization.**	
	Problem	When the CRM encounters a port already in use, under certain circumstances it abends instead of displaying the appropriate error message.	
	Platform	All	

Where to Get Product Documentation

Documentation for this product is available from the following locations:

- On the BEA corporate Web site. From the BEA Home page at http://www.bea.com, click on Product Documentation or go directly to the "e-docs" Product Documentation page at http://e-docs.bea.com.

- On the WebLogic Java Adapter for Mainframe Online Documentation CD. The documentation CD includes Web-browsable HTML and easy-to-print Adobe Acrobat PDF documentation for this product.

  To access the PDFs, open the WebLogic Java Adapter for Mainframe documentation Home page, click the PDF files button and select the document you want to view or print. If you do not have the Adobe Acrobat Reader, you can get it for free from the Adobe Web site at http://www.adobe.com.

Using the WebLogic Java Adapter for Mainframe Online Documentation

You can install the HTML files on your server or client, or leave them on the CD. If you copy the files to your system, you should maintain the directory structure that was provided on the CD. However, you can move that directory structure to any location. The files are located on the CDROM in the `doc/wlsjam/v41` directory. Note the filename path to the directory where you install them on your server or client.

The Online Documentation CD includes a Java search applet to help you find WebLogic Java Adapter for Mainframe topics in the documentation. To use the search capabilities, your browser must have Java support enabled. For information on limitations of the search capabilities, see "Documentation CD Search Applet Limitations."

To view the documentation, you need a Web browser that supports HTML 3.0 features including tables and frames. Netscape Navigator 4.0 or later or Microsoft Internet Explorer 4.0 or later are recommended. When you install the HTML files, they will be located in a directory on your system. You should keep the HTML files that are contained within a directory together. However, you can move that directory to any location.

Note: It is recommended that you locate the HTML browser and the HTML files on the same client or server device.

Accessing the Documentation

To begin viewing the online documentation, use one of the following methods to open the HTML file in a Web browser:

Use the following path to access the document from the CD.

Listing 1   Accessing Online Documentation from a CD

```
<cdrom>/doc/wlsjam/v42/index.htm
```

Use the following path to access the document installed to a Web server.

Listing 2   Accessing Online Documentation from a Web Server

```
http://(directory path to WebLogic Java Adapter for Mainframe HTML
files)/index.htm
```

On UNIX systems, you may need to mount the CD before you are able to access the
index.htm page. For mounting instructions on UNIX platforms, refer to the
installation instructions in the WebLogic Java Adapter for Mainframe Online
Documentation CD-ROM.

Using the Documentation Home Page

When you open the index.htm file, the WebLogic Java Adapter for Mainframe
Documentation Home Page displays on your Web browser. This display serves as your
entry point to many online sources of information. It contains the following important
features:

- Banner containing the name and version of the product

- Home key colored gold to signify you are located at the home destination for
  product documentation

- Search key used to launch the documentation search engine

- Contact key used to display Documentation Support and Customer Support
  information

- PDF key used to access a PDF version of the product documentation

  If you do not have Adobe Acrobat Reader to read PDF files, there is a hot link to
  the Adobe Systems Incorporated Web site so you can acquire the Adobe Acrobat
  Reader.

- Topics list containing links to product documentation

Printing the PDF File

You must have the Adobe Acrobat Reader to view and print the PDF file. If you do not have this reader, you can obtain it free of charge from the Adobe Systems Incorporated home site at www.adobe.com. (Please note that the WebLogic Java Adapter for Mainframe Documentation PDF page contains a hot link to this site.)

Printing from the Web Browser

You can print a copy of this document, one file at a time, from the Web browser. Before you print, make sure that the topic you want is displayed and *selected* in your browser. (To select a topic, click anywhere inside the frame you want to print. If your browser offers a Print Preview feature, you can use the feature to verify the topic you are about to print.)

Documentation CD Search Applet Limitations

The Online Documentation CD includes a Java search applet to help you find WebLogic Java Adapter for Mainframe topics. The following sections describe current limitations with the search applet.

Special Characters

The search applet does not find strings containing some special characters, such as slashes(/) and/or dollar signs ($). The Java search applet does find strings containing underscores (_) and periods (.). Attempts to search for strings with unsupported special characters result in a "No matches" message.

Microsoft Windows NT 4.0 SP3, Java Applets, and True Color

On Microsoft Windows NT 4.0 systems running Service Pack 3 (SP3), browser links to HTML pages containing Java applications hang if the system's Display Properties are set to `True Color`. This Microsoft Windows NT SP3 bug is a known problem and has a Microsoft support article, patch, and workaround. The problem might affect your

initial ability to use the Java search applet on a Microsoft Windows NT 4.0 system. However, you can work around this problem by assigning another value to the color palette, such as `16777216 Colors` or `65536 Colors`.

For more information about the problem and the Microsoft patch, see the Microsoft support article titled "Java Applets Cause IE 3.02 to Stop Responding w/ SP3." It is posted at the Microsoft Web site (`www.microsoft.com`) as article ID number Q168748 [winnt]. To access this article, use the following URL:

```
http://support.microsoft.com/support/kb/articles/q168/7/48.asp?FR
=0
```

Note: You may not be able to access this article without providing online profile information to the Microsoft Web site.

Although this article discusses the problem as it occurs in Microsoft Internet Explorer 3.02, it is relevant in this context because the same problem occurs in other browsers on the Microsoft Windows NT 4.0 SP3 platform. Read the article carefully, however, before applying the patch to an Windows NT 4.0 SP3 system.

UNC Path Names

The Java search applet uses a pre-compiled search database of topics. Because of the way the search database is built, you must adhere to one of the following options to use the documentation CD search feature:

■ Use the CD on a local CD reader.

■ Map a network drive to a remote, shared device that contains the CD or a copy of the CD's content; in your browser, use the network drive to find and open the `index.htm` file in the CD's top documentation directory.

■ Copy the CD's content to a local drive on your system.

■ Copy the CD's content to a Web server on your corporate Intranet. Make sure that `index.htm` is the default file name used by the Web server software. The Online Documentation CD contains a file called `index.htm`, which <is the home page> <or> <creates the framework> for the online documentation. The path name for this file on the CDs is `\doc\<product>\<version>\index.htm`.

If your Web server software does not allow you to use a file named `index.htm`, make a copy of `index.htm` and rename the copy with the default file name you

must use, such as `default.htm`. Keep both the original `index.htm` file and your renamed copy of it in the same directory.

You cannot use the search applet if you have accessed the CD or a copy of its content through a Universal Naming Convention (UNC) path. For example, UNC paths are used by the Windows NT Network Neighborhood. The search applet does not interpret relative paths to the matched target `*.htm` pages because the UNC path is added to the beginning of each link. To use the documentation CD search feature, please use one of the four recommended methods listed earlier in this section.

Only the search applet's results list is affected by this UNC limitation. You can use UNC paths, such as accessing the documentation CD on a Network Neighborhood system's shared CD device, for all other relative hyperlinks on the CD.

Additional CD Search Tip

The search applet returns a list of HTML files that contain the search keyword(s) you enter. When you double click an entry in the search results list, the applet displays the target HTML file. To get the name of the book containing this HTML file, click the [TOP] hyperlink. The book's title page (which shows the name of the book) is displayed. You can then click the Back button in the browser to return to the HTML file that was originally displayed.

Browser Version and Platform Limitations for the Search Applet

Testing has shown that the Java search applet performs well on:

- Microsoft Windows NT 4.0 systems running Netscape 4.x, or Microsoft Internet Explorer 4.x

- Microsoft Windows 95 systems running Netscape 4.x, or Microsoft Internet Explorer 4.x

- Microsoft Windows 98 systems running Netscape 4.x, or Microsoft Internet Explorer 4.x

- Sun Solaris systems running Netscape 4.x, or Microsoft Internet Explorer 4.x

Note: These browser recommendations are the minimum version level required for the Search Applet. Browser support for WebLogic Server is higher than the browser support referenced here. Refer to your WebLogic Server documentation for more information about WebLogic Server browser support.

Browser Error on UNIX Platforms

On some UNIX platforms, you may encounter a browser error message similar to the following:

```
Unable to start a java applet: Can't find 'java40.jar' in your
CLASSPATH. Read the release notes and install 'java40.jar' properly
before restarting.
```

If the search applet does not work on your UNIX platform, try using the latest Netscape browser for the platform and add the Netscape Java Archive (JAR) file to your CLASSPATH environment variable. The path to the JAR file is in the directory in which you installed Netscape. For example:

```
CLASSPATH=mytools/netscape/communicator/program/java/classes/java
40.jar
```

After you revise the CLASSPATH variable, exit Netscape and then restart Netscape in the updated environment. When you access the search page, the search feature should work properly.

Contacting BEA Customer Support

Your feedback on the BEA WebLogic Java Adapter for Mainframe documentation is important to us. Send us e-mail at **docsupport@bea.com** if you have questions or comments. Your comments will be reviewed directly by the BEA professionals who create and update the WebLogic Java Adapter for Mainframe documentation.

In your e-mail message, please indicate that you are using the documentation for the BEA WebLogic Java Adapter for Mainframe 4.1 release.

If you have any questions about this version of BEA WebLogic Java Adapter for Mainframe, or if you have problems installing and running BEA WebLogic Java Adapter for Mainframe, contact BEA Customer Support through BEA WebSupport at **www.bea.com**. You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number

- Your company name and company address

- Your machine type and authorization codes

- The name and version of the product you are using

- A description of the problem and the content of pertinent error messages