WebSphere® IBM WebSphere Real Time for AIX on 32-bit POWER

IBM®

Version 2

Quick Start Guide

Product Overview

IBM® WebSphere® Real Time for AIX® on 32-bit POWER® (WebSphere Real Time) is an extension to the IBM Runtime Environment and Software Development Kit for Java™ with Metronome garbage collection and ahead-of-time compilation.

The benefits of the real-time environment are that Java applications run with a greater degree of predictability than with the standard Java Virtual Machine (JVM) and provide a consistent timing behavior for your Java application. Metronome garbage collection occurs at regular intervals and helps remove any unexpected peaks of background activity while an application runs. In addition, Just-in-Time (JIT) compilation can be replaced with Ahead-of-Time (AOT) compilation to remove unpredictable background activity when your application is run.

If you have previously precompiled code, you need to rebuild that code for use with this version of WebSphere Real Time.

1 Step 1: Access your software

The Installation file is `ibm-wrt32-2.0.aix.tar.gz`.

Before you start, read the `readmeFirst.aix32.txt` file for the latest information about WebSphere Real Time.

To access the documentation open `startHere.aix32.htm` in the `docs` directory.

2 Step 2: Evaluate your hardware and system configuration

WebSphere Real Time runs on AIX 5.3S (AIX 5.3 TL 10 + SP 2) with APAR IZ55195, and on AIX 6.1F (AIX 6.1 TL 3 + SP 2) with APARs IZ55195 and IZ54013. The latest service details and resources can be found here: http://www.ibm.com/developerworks/java/jdk/aix/service.html. To test whether WebSphere Real Time is supported on a specific System p® system, at the system prompt type:

lscfg -p | fgrep Architecture

You should receive the reply:

Model Architecture: chrp

A minimum of 512 MB of physical memory is required for simple applications. For good performance, more complex applications require a larger memory configuration.

3 Step 3: Review the base architecture and the installation steps

1. To install the SDK, follow the instructions in the `readmeFirst.aix32.txt` file.
2. To test your installation:
   a. At a shell prompt, enter `java -Xgcpolicy:metronome -version` This command returns messages like the following if the installation was successful:

```
java version "1.6.0"
Java(TM) SE Runtime Environment (build pap3260srtsr3-20100211_01(SR3))
IBM J9 VM (build 2.5, JRE 1.6.0 IBM J9 real-time 2.5 AIX ppc-32 jvmap32srt60sr2-20091214_49398 (JIT enabled, AOT en
J9VM - 20090629_038050
JIT  - r10_20090625_2031
GC   - 20090616_AA)
JCL  - 20090624_01
```

Note: The dates in the version information will be different from those shown. The format of the date string is: *yyyymmdd*, followed possibly by additional information specific to the component.

In the docs directory, the documentation is provided in the following formats:

- `com.ibm.softrt.aix32.doc.jar` for use with Eclipse Help System version 3.1.1 or later, or Eclipse SDK version 3.1.2 or later.
- `com.ibm.softrt.aix32.doc.zip` for use with Eclipse Help System version 3.0.1 or earlier.
- `softrt_aix32.pdf` is the WebSphere Real Time User Guide for use with the Adobe® Acrobat Reader.

To use the information center on your local machine, install the Eclipse Help system:

1. Installing the Eclipse Help System. Download the latest version of the Eclipse Help System from http://www.alphaworks.ibm.com/tech/iehs/download.
2. Select the installation file that is appropriate for your operating system.
3. Create a directory where you plan to install the Eclipse Help System. This directory is referred to as *<iehs_dir>* in the rest of this document.
4. Unpack the file into, for example, `/opt/`*<iehs_dir>* or `C:\`*<iehs_dir>* directory depending on your operating system. Unpacking creates a directory called `/opt/`*<iehs_dir>*`/ibm_help` on Linux® or `C:\`*<iehs_dir>*`\ IBM_Help_301_Win\ibm_help` on Windows®.
5. Add the WebSphere Real Time information center to your Eclipse Help System:
   - For Eclipse Help System version 3.1.1 and later: Copy `com.ibm.sortrt.aix32.doc.jar` into the `/opt/`*<iehs_dir>*`/ibm_help/eclipse/plugins` directory.
   - For Eclipse Help System version 3.0.1 and earlier: Extract the files from `com.ibm.softrt.aix32.doc.zip` into the `/opt/`*<iehs_dir>*`/ibm_help/eclipse/plugins` directory.
6. To start the Eclipse Help System, change directory to the `/opt/`*<iehs_dir>*`/ibm_help` directory and enter the command `help_start`