Java 1.4.2 Update 2 Release Notes

Java

2004-10-05

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Introduction to Java 1.4.2 Update 2 Release Notes

This release of Java for Mac OS X fixes critical issues with Apple's Java implementation. It features an enhanced version of Sun's Java 2 Platform, Standard Edition Version 1.4.2_05.

What is Java 1.4.2 Update 2?

Java 1.4.2 Update 2 provides improved behavior for applets in Safari and increased stability for desktop Java applications. Java 1.4.2 Update 2 also includes all the improvements from Java 1.4.2 Update 1, including compatibility with Sun's Java 2 Platform Standard Edition, version 1.4.2_05. For general information about Java changes in Java 1.4.2_05, see *Release Notes - Java 2 SDK, Standard Edition Version 1.4.2_05* at http://java.sun.com/j2se/1.4.2/ReleaseNotes.html.

How and Where to Get Java 1.4.2 Update 2

Java 1.4.2 Update 2 is available only for Mac OS X version 10.3.4 (Panther) or later. It is not available for earlier versions of Mac OS X. Java 1.4.2 Update 2 is available through Mac OS X's Software Update and online at http://www.apple.com/downloads/macosx/. Software Update displays this package as a recommended update.

Once you have installed Java 1.4.2 Update 2, the only way to revert back to a previous version of Java is to reinstall Mac OS X version 10.3 (Panther).

Apple does not provide a redistribution license for Java 1.4.2 Update 2. Your customers need to download it directly from Apple's site.

As discussed in "Radar #3783095" (page 11), the developer tools and documentation have not been revised for this release. For the most recent developer tools and documentation, install the Java 1.4.2 Update 1 Developer Tools, available from the Apple Developer Connection at http://connect.apple.com/. It includes developer examples, tools, project templates, and Javadoc API references for both Sun's and Apple's classes. Although optional, this is a recommended update for anyone doing Java development for Mac OS X. You need to download this package to access the Java 1.4.2 documentation.

Who Should Read This Document?

Any developer that currently distributes Java 1.4.2 applications for Mac OS X should read this document since the changes to Java 1.4.2 Update 2 may affect your application. Anyone interested in new Java development (either J2SE or Cocoa Java) should read this document for the most current information on new features and outstanding issues with Java on Mac OS X.

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Organization of This Document

This document contains the following chapters:

- "Resolved Issues" (page 7) highlights a selection of high-visibility bugs that have been addressed in this release. This chapter is broken down by the category where the bug occurs and provides a brief description of what the issue was and how it was resolved.
- "Outstanding Issues" (page 11) presents a selection of high-visibility bugs that you may need to work around with this release. This chapter is broken down by the category where the bug occurs and provides a brief description of what the issue is and often provides a workaround for the issue.

This document also contains a revision history.

If you are just beginning Java development for Mac OS X you can probably just read the "Outstanding Issues" (page 11) chapter. Otherwise it is recommended that Java developers read both chapters.

See Also

The Following Apple Java documentation may be helpful:

- *Java Development Guide for Mac OS X*
- *Java 1.4 System Properties*
- *Java 1.4 Virtual Machine Options*
- Previous Java Release Notes
- *Java on Mac OS X Frequently Asked Questions* (http://developer.apple.com/java/faq/)

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Resolved Issues

This chapter lists high-visibility bugs that have been addressed in this release. It is not a complete listing of all of the bugs addressed. If you still have issues with any of these bugs, please file a new bug at http://bugreport.apple.com/ under the `Java (new bugs)` component, Version `X`. Refer to the bug number indicated below in your new bug if you believe it is the same issue.

Java Applets

Radar #3758881

Improved Safari - Java applet interaction.

Description:

Various applets caused Safari to crash after Java 1.4.2 Update 1 was installed.

Resolution:

Java 1.4.2 Update 2 features improved applet support for Safari, fixing these issues.

Radar #3765512

LiveConnect communication prior to applet initialization.

Description:

If a JavaScript function attempted to communicate with a Java applet via LiveConnect before the applet was initialized, the communication failed.

Resolution:

The communication is now queued and relayed after the applet has been initialized.

Radar #3773466

Applet drag-and-drop interaction.

Description:

When using drag-and-drop in a Java applet, the result of the drop was not always passed correctly to the source.

Resolution:

Drag-and-drop actions in a Java applet now function as expected.

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Java AWT

Radar #3730275

Unprompted window resizing.

Description:

Under certain circumstances, a combination of resizing and minimizing windows would result in a window resizing after it was unminimized.

Resolution:

Under these circumstances, involuntary window resizes no longer occur.

Radar #3773384

JFrame resizing issues.

Description:

Sometimes, `JFrame.setSize()` was ignored and would not resize a JFrame.

Resolution:

JFrames now resize as directed by `JFrame.setSize()`.

Java Events

Radar #3735588

Unnecessary serialization during drag-and-drop.

Description:

During certain drag-and-drop operations, objects were unnecessarily asked to serialize themselves.

Resolution:

Serialization requests are now delayed until the application being dragged over specifically asks for the data. Note that a native application can request the contents of a drag any time the dragged item is over it. Also, arrays of file names are requested to serialize at the beginning of a drag.

Java Text

Radar #3759610

Double-byte character deletion problems.

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Description:

When working with a text field or area that contained double-byte text, you could not delete text that existed in the field or area at its creation.

Resolution:

All double-byte characters within text fields and areas are now editable.

Radar #3768939

Slow double-byte character input.

Description:

Inputting double-byte characters tended to be slow, almost to the point of freezing.

Resolution:

Inputting a double-byte character has been optimized and is now more responsive.

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Outstanding Issues

This chapter provides a listing of bugs that you may need to work around in your Java 1.4.2 code for Mac OS X. Where possible, workarounds are provided.

Java Developer Tools & Documentation

Radar #3783095

Java Developer Tools and Java 1.4.2 Update 2.

Description:

There are no new developer tools or documentation related to Java 1.4.2 Update 2.

Workaround:

The Java 1.4.2 Update 1 Developer Tools are the most current release of Apple's Java developer tools. For the most recent and up-to-date Java tools and documentation, install this package. It is available from the Apple Developer Connection at http://connect.apple.com/.

Radar #3806629

Xcode Java templates and Ant.

Description:

Various Xcode Java templates installed with the Java 1.4.2 Update 1 Developer Tools require that Ant be installed and configured correctly.

Workaround:

The version of Ant included with Xcode 1.5 is properly configured for use with the Java templates that use Ant. Xcode Tools are available from http://connect.apple.com/.

Java Events

Radar #3809752

Drop events and modal dialogs.

Description:

In some drop cases, having a `DropTargetListener` open a modal dialog results in a hang.

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Workaround:

To present a dialog to a user after a drop event, either use a non-modal dialog or use `SwingUtilities.invokeLater()` to show the modal dialog in the next iteration of the event dispatch thread.

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Document Revision History

This table describes the changes to *Java 1.4.2 Update 2 Release Notes*.

Date	Notes
2004-10-05	Added note about reverting to previous versions of Java.
2004-09-23	First version of *Java 1.4.2 Update 2 Release Notes*.

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Document Revision History

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