Java 1.4.1 Update 1 Release Notes

Java

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Contents

About this Document

This document contains information about what's new and covers the resolved and known issues for the Java 1.4.1 Update 1 Release.

What's New

This Java 1.4.1 Update 1 provides improvements and enhancements as detailed below. For information on specific changes in Java 1.4.1, go to http://developer.apple.com/documentation/ReleaseNotes/Java/java141/index.html

- Improved Java applet support for Safari and other web browsers that support the Java Internet Plug-In.
- Improved drawing correct behavior and performance.
- Support for AWT headless mode.
- Changes to Java 1.3.1 that provide support for Oracle 11i client applications on Mac OS X.
- Improved stability, memory usage, and correctness.

Resolved Issues Since Java 1.4.1

The issues discussed here represent specific bugs that have been fixed since the Java 1.4.1 release. This listing is not a complete list of bugs that have been fixed, but a snapshot of issues that might be of interest.

Each issue is broken down as follows:

- A Radar number that Apple uses to track the issue is followed by a brief statement of the issue.
- The Description field provides more details about the issue.
- A Resolution or Workaround field tells you what Apple has done to address the issue or suggests actions that you may need to take.

Java Aqua Look and Feel

Radar #3166127

JOptionPane dialog buttons have mnemonics.

Description:

JOptionPane.showConfirmDialog displays Yes and No with an underscore under the Y and the N. These underscores should not be visible with the Aqua look and Feel.

Resolution:

None.

Java AWT

Radar #3114971

Memory/address space leak when creating & disposing java.awt.Window objects.

Description:

There had been memory and address space leaks noticed when creating and disposing java.awt.Window objects.

Resolution:

This has been fixed.

Radar #3230598

JAWT shouldn't provide a QuickDraw Port.

Description:

JAWT's bindings have been changed to provide the actual Cocoa view for the AWT component being rendered to.

Resolution:

This has been fixed.

Radar #3201008

Failing to draw window grow boxes.

Description:

Grow boxes once again draw in the lower-right. In the previous release they did not.

Resolution:

This has been fixed.

Radar #3216572

Java 1.4.1 must bump mrj.version automatically.

Description:

Make mrj.version property increment automatically.

```
java version "1.4.1_01"

Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.1_01-62)

Java HotSpot(TM) Client VM (build 1.4.1_01-22, mixed mode)

mrj.version is "62".
```

Resolution:

This has been fixed. For long-term cross platform usage, developers should use the java property “java.runtime.version” which in the above case is "1.4.1_01-62". This (along with “os.version”) are the cross platform properties to check.

Radar #3222044

In the Java 1.4.1 release, Java used memory and did not always dispose of that memory.

Description:

Java 1.4.1 Update 1 is much better at recovering used memory. Previous seeds may have crashed during attempts to access stale resources that had been disposed of—that category of crash is fixed in the final release.

Resolution:

This has been fixed.

Java Graphics

Radar #3257398

Need debug code for rendering primitives.

Description:

This new debugging mechanism lets you control which graphics primitives should be rendered and which should not. By default all are rendered. One task this enables is to see how certain graphics primitives affect an application's performance.

Resolution:

This has been fixed.

Java Plugin

Radar #3198591

Problem with putting applet certificate in keystore on Java 1.4.1.

Description:

Self-signed certificates generated in Java 1.1 and earlier can now be stored in the keychain.

Workaround:

This has been fixed.

Java Web Start

Radar #3183878

Web Start-based double-clickables always get 1.3.1.

Description:

Java Web Start applications now work with Java 1.4.1. In the previous release, Java Web Start applications did not add the JVMVersion key in the Java dictionary, so they always used Java 1.3.1.

Resolution:

This has been fixed. If this problem was affecting your applications, you will need to discard and re-create any affected application.

Known Issues

The issues discussed here are known issues with the Mac OS X implementation of Java 1.4.1 Update 1. These issues may or may not be resolved in a future release of Java for Mac OS X.

Each issue is broken down as follows:

- A Radar number that Apple uses to track the issue is followed by a brief statement of the issue.
- The Description field provides more details about the issue.
- The Workaround field may give you additional information about how you can work around that particular issue in your code. If it says, "None," there is at the moment no currently a suggested work around for that particular problem.

Java AWT

Radar #3315279

MRJ OpenDocument events require running applications.

Description:

The deprecated MRJToolkit OpenDocument method does not work if the application has not been launched. If the application is running, then the OpenDocument event will be delivered.

Workaround:

Move to the new com.apple.eawt. See http://developer.apple.com/documentation/Java/Java.html. Click on the link "Java 1.4.1 API Reference: Apple Extensions".

Radar #3326953

java.lang.NumberFormatException when using mrj.version.

Description:

Please note that the system property "mrj.version" returns a String, not a double. For some releases, it may be "3.3.3" or "70". It is not valid to parse the result as a number. It should be compared against a String.

Workaround:

None.

Java Developer Documentation

Radar #3242332

Do not use com.apple.mrj.application.apple.menu.about.name.

Description:

In the Java 1.4.1 Release Notes, `com.apple.mrj.application.apple.menu.about.name` is listed as a Supported System property under "Integration with the native application environment."

Workaround:

Use `CFBundleName` for the "About Menu Name" field in the Properties tab in Jar Bundler. Jar Bundler has been changed to reflect this.

Java Graphics

Radar #3308134

DrawLine for diagonal lines is very thick.

Description:

In an effort to fix a related bug, the default stroke width for lines was made very thick. The result is now lines are always drawn, but they are much thicker than they should be.

Workaround:

This can be addressed programmatically by setting the stroke to a smaller value than the default (0.5).

```
((Graphics2D) g).setStroke( new BasicStroke(strokeWidth) );
```

Alternatively, it can be addressed on the command line with the option:

```
-Dapple.awt.antialiasing=on
```

Neither of these solutions work effectively on systems using 10.2.6 or earlier. If you use the work around of setting line thickness to a smaller value, you may have cases where some lines don't draw at all.

Radar #3253236

Quartz APIs using ATS are not thread-safe.

Description:

Some of the Quartz APIs that use ATS internally are not thread-safe. You can determine if a program crash was caused by this problem if your stack crawl shows two threads in ATS.

Workaround:

None.

Java Plugin

Radar #3195064

Java https security warning dialog has no yes/no/always buttons.

Description:

Occasionally the https/signed applet security warning dialog shows up with an incorrect size.

Workaround:

Press Return to trust the certificate or press Escape to not trust it.

Document Revision History

This table describes the changes to *Java 1.4.1 Update 1 Release Notes*.

Date	Notes
2003-09-01	Released with Java 1.4.1 Update 1 Release.

Document Revision History