



OpenJDK: Desktop Libraries

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Desktop Java™

- Technologies to create rich client applications and applets that are fast, secure, and portable.

GUI components Imaging Printing
Desktop Integration Color Management
Graphics Text Rendering Sound
Accessibility Support Pluggable Look and Feel

What will be in the OpenJDK?

Problem: some part of Sun's JDK sources were developed using 3rd party code.
Sun needs permission to open them.

Sun's JDK

GUI components Imaging Printing
Desktop Integration Color Management
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Accessibility Support Pluggable Look and Feel

OpenJDK

Our approach for first code drop

- Replace encumbered pieces with open source alternatives
- Provide binary bits for missing crucial pieces as temporary solution
- Drop some proprietary stuff (when we have no choice)

Important notes:

- Will first code drop be “usable”? **YES, we hope so.**
- Will it work exactly the same as Sun's JDK? **NO**
- How large is the planned overlap between OpenJDK and Sun JDK sources?
Most of the code will be exactly the same.

Details (It is work in progress!)

- Replacement open source libraries
 - > Little CMS as color management library (done!)
 - > Freetype as text rasterizer
 - Likely will not make into the first code drop
 - > Library for anti-aliased rendering of 2D geometry.
 - Pisces (ME rasterizer) is the main candidate
 - **Know better candidate? Please suggest!**
- Will not be included into OpenJDK
 - > Motif toolkit (not default anyway)
 - Swing Motif LAF is still available
 - > **Lucida fonts**
 - Coverage of Thai, Arabic, etc. will need to leverage platform fonts.
 - How to ensure consistency across platforms?
 - > ??

Where community can help?

- **Priority:** Clear encumbrances
 - > Find replacements for encumbered pieces
 - > Make sure there is no missing functionality
 - > Improve performance & quality
- Long run (just brainstorming):
 - > Linux specific ideas
 - Better desktop integration
 - > Help with cross platform projects
 - Startup, footprint, performance, robustness
- **We welcome other contributions!**

Getting started

- Desktop area on the OpenJDK website
 - > To be open
 - > **Lists of starter bugs**
- JavaDesktop.org
 - > Gathering place for members of the Java platform's graphical user interface community
 - > Hosts many related open source projects
 - > Technical articles, blogs and discussions by Sun's engineers and independent developers
- SwingLabs
 - > Place to start working on developing UI components