You've accurately pinpointed a classic issue that arises when mixing Java-based applications (like Maple) with mixed screen orientations and anti-aliasing. Here's a breakdown of the problem and potential troubleshooting steps, keeping in mind the complexities of Java's graphics rendering:

#### Understanding the Problem:

#### • Java and Graphics Rendering:

- Java's graphics rendering relies heavily on the underlying operating system's graphics libraries (e.g., Direct2D on Windows, Quartz on macOS).
- When screen rotations are involved, the operating system must handle transformations and scaling, which can introduce inconsistencies, especially with anti-aliasing.
- Java's handling of high DPI and multi-monitor setups has historically been problematic, leading to rendering artifacts.

#### • Anti-Aliasing and Screen Rotation:

- Anti-aliasing smooths out jagged edges in text and graphics, but it requires precise pixel manipulation.
- When a screen is rotated, the pixel grid changes, and the anti-aliasing algorithms may not handle the transformation optimally, resulting in blurry or distorted text.

#### • Maple's Java Foundation:

- Maple, being a Java application, inherits the limitations and quirks of Java's graphics rendering.
- This means that any issues related to screen rotation and anti-aliasing in Java will likely manifest in Maple as well.

# Troubleshooting Steps:

#### 1. Java Runtime Environment (JRE) Updates:

- Ensure you have the latest version of the JRE that Maple is using. Newer JRE versions often include improvements to graphics rendering and multi-monitor support.
- It is possible that Maple uses an embedded JRE, in that case, you will have to wait for a Maple update.

#### 2. Operating System Graphics Drivers:

- Update your graphics card drivers to the latest version. Outdated drivers can cause rendering problems.
- Ensure that the operating system itself is updated.

# 3. Maple's Graphics Settings:

• Check Maple's preferences or options for any graphics-related settings. Look

for options related to anti-aliasing, font rendering, or hardware acceleration.

- Try disabling hardware acceleration inside of Maple.
- Try disabling anti-aliasing inside of Maple.

# 4. Operating System Scaling and Display Settings:

- Experiment with different display scaling settings in your operating system. Inconsistent scaling across multiple monitors can cause rendering issues.
- Ensure that all monitors have the same scaling setting.
- Ensure that the rotated display has the same scaling as the non rotated displays.
- Try different screen resolutions.

# 5. Java Command-Line Options:

- You can try modifying Java's command-line options to influence its graphics rendering.
- Some potentially relevant options include:
  - -Dsun.java2d.opengl=true (Enables OpenGL rendering)
  - -Dsun.java2d.d3d=true (Enables Direct3D rendering on Windows)
  - -Dsun.java2d.noddraw=true (Disables DirectDraw on Windows)
  - -Dsun.java2d.dpiaware=true (Enables DPI awareness)
- How you apply those options depends on how Maple is designed. If maple has a shortcut, you can try to edit the shortcut, and add those lines to the target field of the shortcut.
- Be aware that these options can have unintended consequences, so test them carefully.

# 6. External Display Management Software:

• Some third-party display management tools can provide more granular control over display settings, which might help resolve the issue.

# 7. Report the Issue to Maplesoft:

- Since the problem is specific to Maple, report the issue to Maplesoft's support team. They may be aware of the issue or have a workaround.
- Provide them with detailed information about your system, including the operating system, graphics card, monitor setup, and Maple version.

# 8. Java version check:

• Check what java version Maple is using. If it is a very old version, that is likely the root of the problem.

# Key Considerations:

- The exact solution may depend on your specific hardware and software configuration.
- Java's graphics rendering can be complex, and there may not be a single,

universal fix.

• Keep in mind that rotated displays will always represent a more complex situation for graphics rendering.

By systematically working through these troubleshooting steps, you should be able to narrow down the cause of the issue and find a suitable solution.