

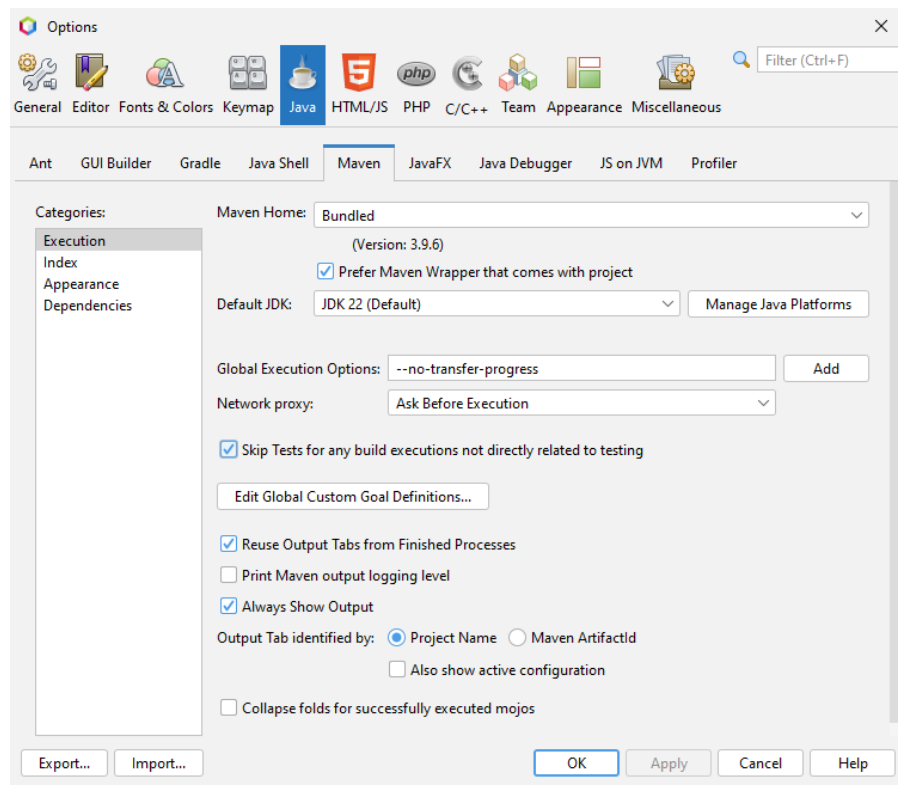
Step-by-Step on Setting up Trinity Development Environment

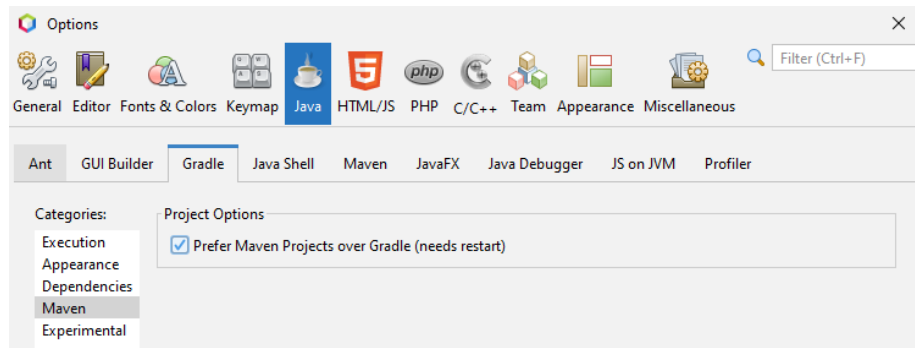
Software

- Java 24+
 - OpenJDK: <https://jdk.java.net/24/>
 - Adoptium: <https://adoptium.net/>
 - Note: Trinity compiles at JDK21 by default.
- Apache Maven
 - Available at: <https://maven.apache.org/download.cgi>
 - Latest Version Tested: 3.9.8
- Git
 - Available at: <https://git-scm.com/downloads>
 - Latest Version Tested: 2.46.0
- Trinity Repository
 - Available at: <https://github.com/trinity-xai/Trinity>
- Apache NetBeans IDE
 - Available at: <https://NetBeans.apache.org/front/main/index.html>
 - Latest Version Tested: Apache NetBeans 26
 - Note: Other IDEs will work, just has been tested on Apache NetBeans and IntelliJ.

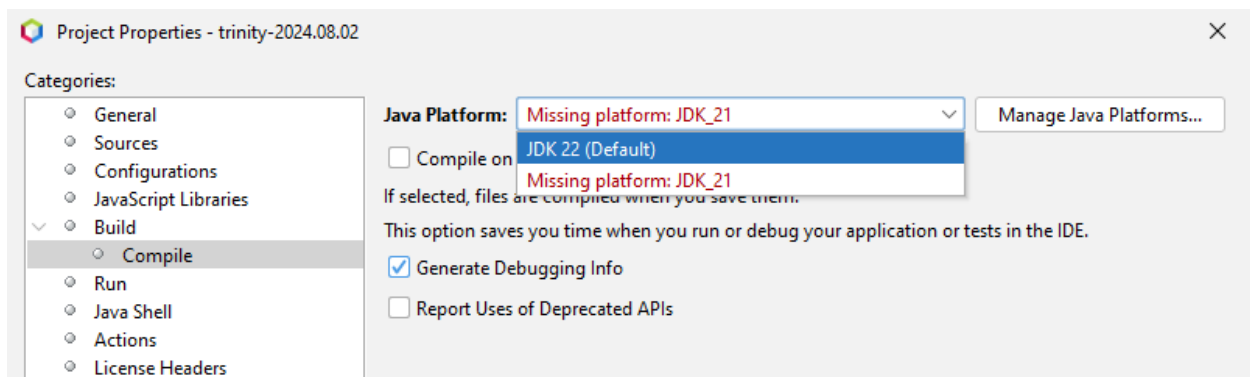
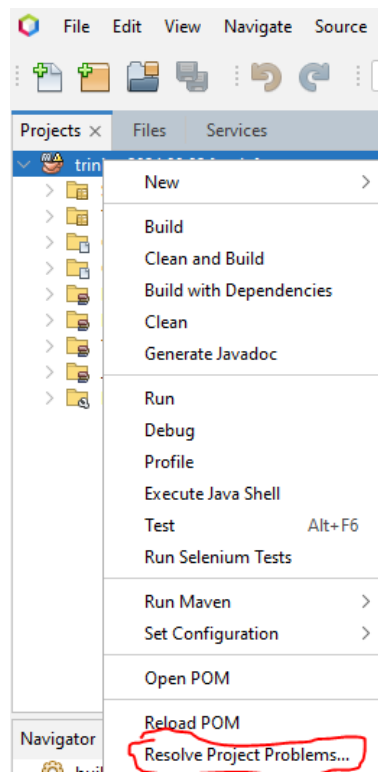
Local Deployment

- Clone the repository to a local directory.
 - Note: The current build requires cloning, as git dependencies are necessary.
- Open CMD, execute “mvn clean install -DskipTests” in the cloned directory.
 - Windows: Run CMD as administrator.
- Open Apache NetBeans (or IDE of choice) and import the project.
- For IntelliJ, add Trinity as a maven project (CMD+Shift+A -> Reload All Maven Projects)
 - Change SDK: File -> Project Structure -> SDK
- For NetBeans, the following settings need to be changed.
 - On the menu-bar, select tools->options
 - In the ‘Java’ menu, Gradle sub-category, Maven. Select “Prefer Maven Projects over Gradle”. Restart if needed.
 - In the ‘Java’ menu, Maven sub-category,
 - select “Skip Tests for any build executions not directly related to testing”.



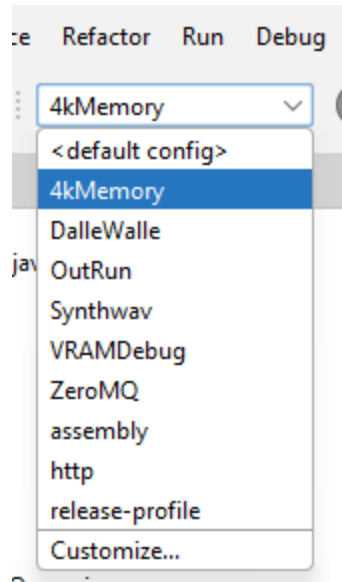


- In case issues are observed, right click on the project and on 'Resolve Project Problems'.



Configurations

Several configurations are available. Functions are marked as follows:



- 4kMemory – Allocates extra VRAM and Heap space to account for 4k monitors
- DalleWalle – Runs Dalle Walle Easter Egg
- OutRun – Starts Trinity with 3D Outrun vaporwave city scene
- Automatically enables Mp3 Jukebox with autoplay
- VRAMDebug – adds additional JavaFX debugging flags at command line to determine VRAM statistics at runtime
- ZeroMQ – automatically enables ZeroMQ listener/subscriber
- Assembly – Generates “Fat” assembly jar
- http – automatically enables HTTP REST receiver
- Release-profile – simple slim compile/build

Known Issues

Q: Cannot pull from Github due to SSL errors

Solution: Pull from Github without SSL certificates then change the git configuration for that directory.

```
git -c http.sslVerify=false clone <path>  
git config http.sslVerify "false"
```

Resource: <https://stackoverflow.com/questions/9008309/how-do-i-set-git-ssl-no-verify-for-specific-repos-only>