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Application Note: Telink IDE FAQs

AN-16042800-E1

Ver 1.0.0

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Brief:

This document lists some common problems and solutions for Telink Integrated Development Environment (IDE).

TELINK SEMICONDUCTOR



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Revision History

Version	Major Changes	Date	Author
1.0.0	Initial release	2016/4	L.J.W., Cynthia

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1 Brief Introduction

This document mainly lists some FAQs and solutions for Telink IDE (Eclipse 4.x) on PC, Mac and Linux. Please check both version of OS and Eclipse to apply the solutions.

1.1 Host

- > SDK from Telink
- > Telink IDE



2 Questions and Solutions

In this section, interface of IDE version 1.5 is taken as an example. And the solutions can also apply to IDE version 1.3.

2.1 When CJK name is used as folder or file, the compilation failed since file or path can't be found.

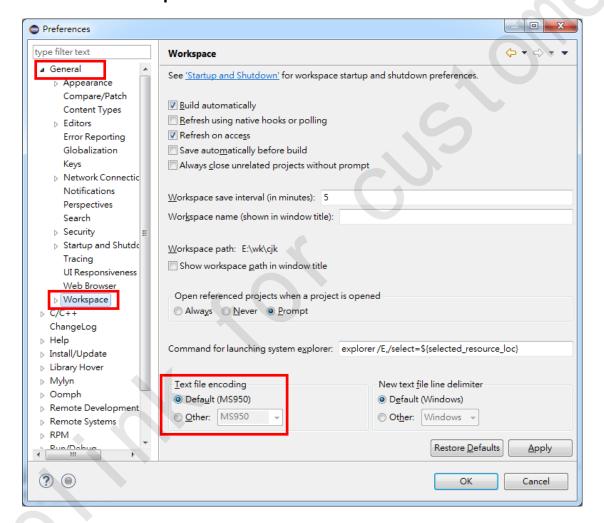


Figure 1 Workspace encode

Solution:

Window -> Preferences -> General -> Workspace

Tick "Other" and select "UTF-8" for the "Text file encoding" option.

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2.2 When the SDK is imported from a very long path, the compilation failed since file or path can't be found.

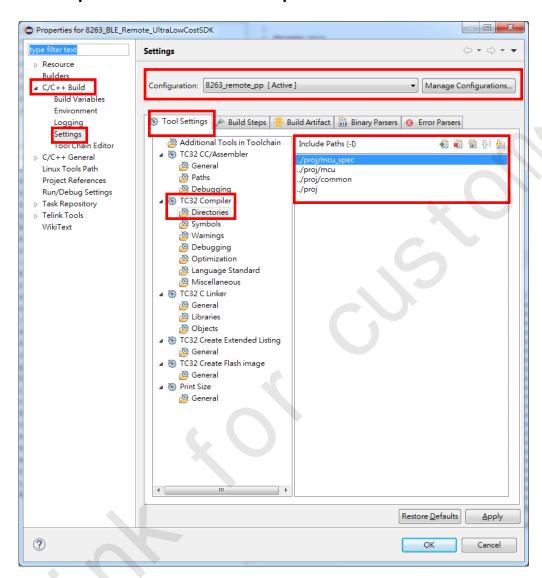


Figure 2 Include /Library path

Solution:

Project -> Properties -> C/C++ Build -> Settings -> Tool Settings -> TC32 Compiler -> Directories

Select the configuration as needed in the "Configuration" combo box or by clicking "Manage Configurations".

Click the icon , add the location of "include" head file for compiler and library path for linker as needed.

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2.3 When the SDK is imported, Eclipse sometimes crashed in Java with error such as "out of memory".

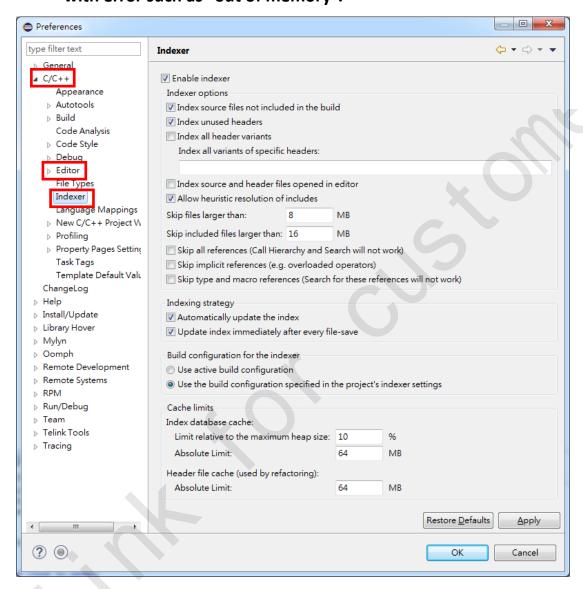


Figure 3 Include /Library path

Solution:

Window -> Preferences -> C/C++ -> Editor -> Indexer

User can disable the indexer (uncheck "Enable indexer" box) or adjust the options to minimize the issues of CDT.

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2.4 When I click on the Eclipse, it took long time to startup.

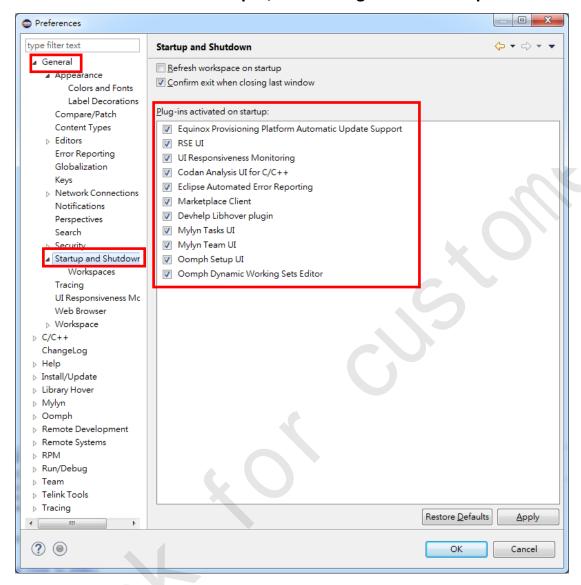


Figure 4 Startup settings

Solution:

Window -> Preferences -> General -> Startup and Shutdown

Double check the plug-ins not in use, and uncheck unnecessary ones.

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2.5 How can I adjust the update site or frequency of checking update?

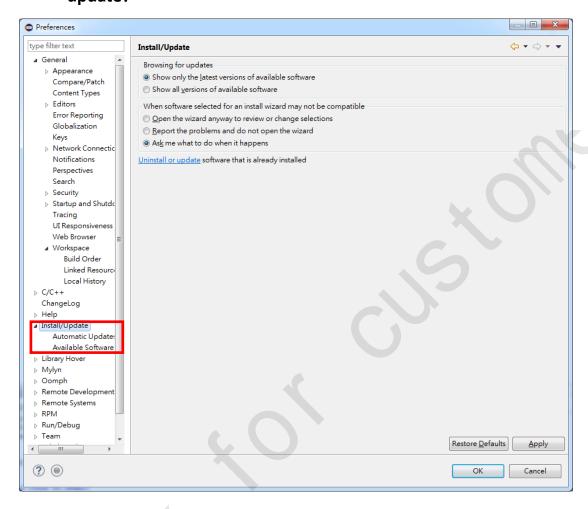


Figure 5 Update settings

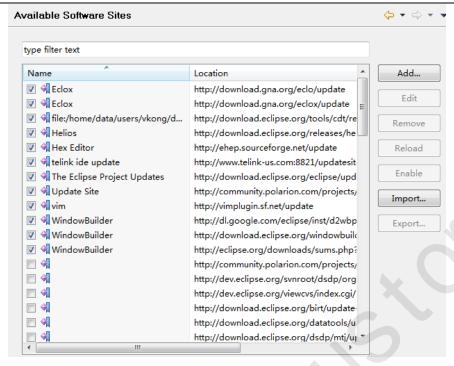
Solution:

Window -> Preferences -> Install/Update -> Available Software Sites

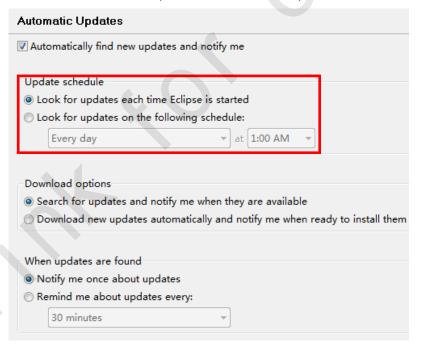
Double check the update sites not in use.

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Window -> Preferences -> Install/Update -> Automatic Updates



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2.6 When I modify header file only, the project won't be rebuilt?

Solution:

Just clean the project twice. Then rebuild all.

2.7 How can I Use Telink SDKs in IDE?

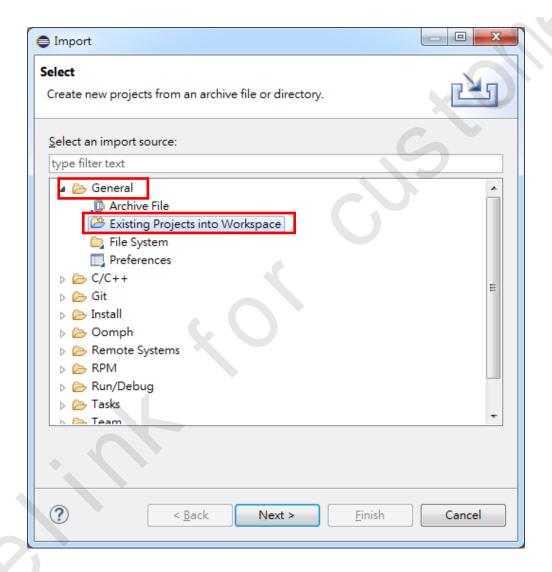


Figure 6 Import projects

Solution:

File -> Import (or right click on the "Project Explorer" window and select "Import").

-> General -> Double click "Existing Projects into Workspace".

Select the root directory to search for existing projects.

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Tick the project(s) under the directory to be imported.

Click "Finish".

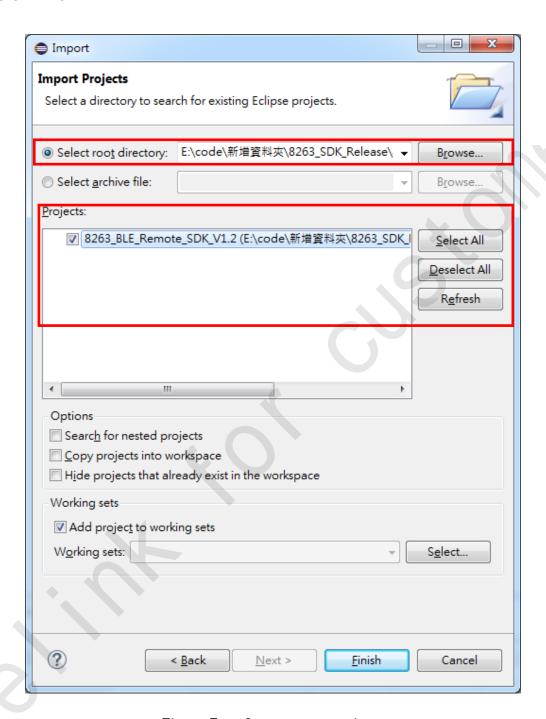


Figure 7 Locate your projects



2.8 How can I setup Java VM for Telink IDE?

Java installation package is available from the website http://www.oracle.com/technetwork/java/javase/downloads/index.html)



Figure 8 Java download

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Solution:

- 1. Download and install the JDK/JRE for your OS with 64 bits support.
- 2. In short cut, append or modify arguments as "C:\TelinkSDKv1.5\msys32\eclipse.exe -vm [location where java vm installed]\jre\bin\server\jvm.dll"
 - e.g. In eclipse.ini [Window/Linux], append or modify arguments as "TelinkSDKv1.5\msys32\eclipse.exe -vm [location where java vm installed]".
- 3. For Mac OS, if you're trying to get the VM that eclipse runs under, then it's the Info.plist you need to modify, and it should be changed in the section that says how to specify the different VMs. In my case, I changed it to run with the 1.6 VM using:

```
<string>-vm</string><string>/System/Library/Java/JavaVirtualMachines/1.6
.0.jdk/Contents/Home/bin/java</string>
```

in the eclipse array of the plist.

If you want to force a specific 1.7 VM, you can use:

```
<string>-vm</string><string>/Library/Java/JavaVirtualMachines/jdk1.7.0_2
5.jdk/Contents/Home/bin/java</string>
```

Note: This is the Eclipse.app/Contents/Info.plist rather than eclipse.ini. This is because of the slightly different way that the Mac launches eclipse from other platforms.

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2.9 How can I exclude file or folder from build?

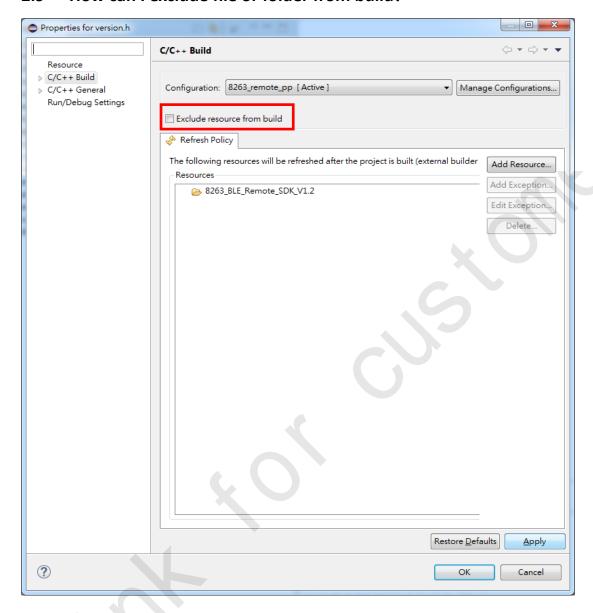


Figure 9 Right click the file or folder

Solution:

Right click on the "Project Explorer" window -> "Properties" -> C/C++ Build.

Per the configuration, toggle the "Exclude resource from build" box.



2.10 How can I search the SDK?

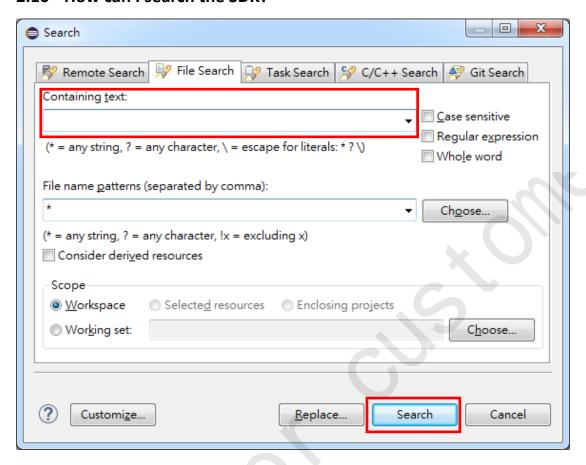


Figure 10 Search dialog

Solution:

- 1. On the main toolbar, click the "Search" icon
- 2. Enter file name in "Containing text" box.
- 3. Press "Ctrl" and "H" keys at the same time (or click "Search" on the window) to start searching.

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2.11 How to disable the "Build Automatically" option?

By default, the Eclipse workbench is configured to build projects automatically. However, for C/C++ development you should disable this option, otherwise your entire project will be rebuilt whenever, for example, you save a change to your makefile or source files.

Click **Project** -> **Build Automatically** and ensure there is no check mark beside the "**Build Automatically**" menu item.

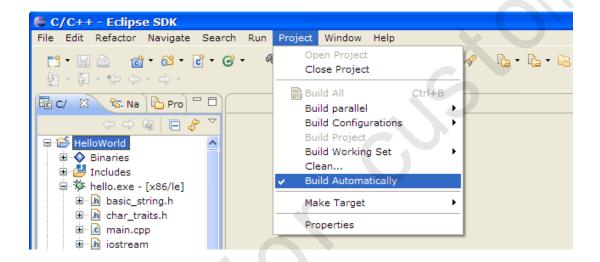


Figure 11 Build Automatically

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2.12 Faster Eclipse Startup

Solution:

Append these into Eclipse.ini after -vmargs. Some of them should be used carefully.

- -Xquickstart
- -Xverify:none
- -Xshareclasses:none
- -Xmn128m
- -Xss2m
- -Xms256m
- -Xmx512m
- -XX:PermSize=128m
- -XX:MaxPermSize=512m
- -XgcPrio:deterministic
- -XX:MaxGCPauseMillis=10 -XX:MaxHeapFreeRatio=70
- -XX:+UseG1GC -Xss2m -XX:+UseParallelGC -XX:+UseParNewGC
- -XX:+CMSConcurrentMTEnabled -XX:ConcGCThreads=2 -XX:ParallelGCThreads=2
- -XX:GCTimeRatio=49 -XX:GCPauseIntervalMillis=1000
- -XX:+UseCMSCompactAtFullCollection -XX:+CMSClassUnloadingEnabled
- -XX:+DoEscapeAnalysis -XX:+UseCompressedOops -XX:+AggressiveOpts
- -XX:+ExplicitGCInvokesConcurrentAndUnloadsClasses -XX:+UseFastAccessorMethods

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2.13 Faster Make with parallel build

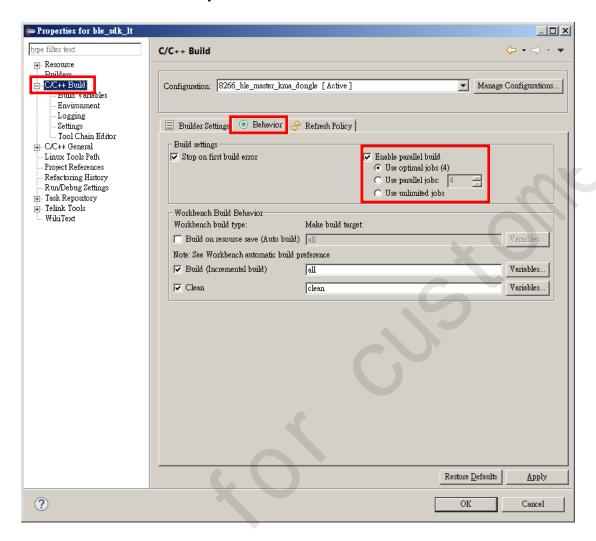


Figure 12 Setup parralle build

Solution:

Project -> Properties -> C/C++ Build -> Behavior -> Tick "Enable parallel build" and select number of jobs according to the CPU cores.

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2.14 Prebuild steps with long path or cjk filename

Solution:

Append these into Eclipse.ini -Dfile.encoding=UTF-8 and use " or "" to quote it.

2.15 Label decoration for exclude files

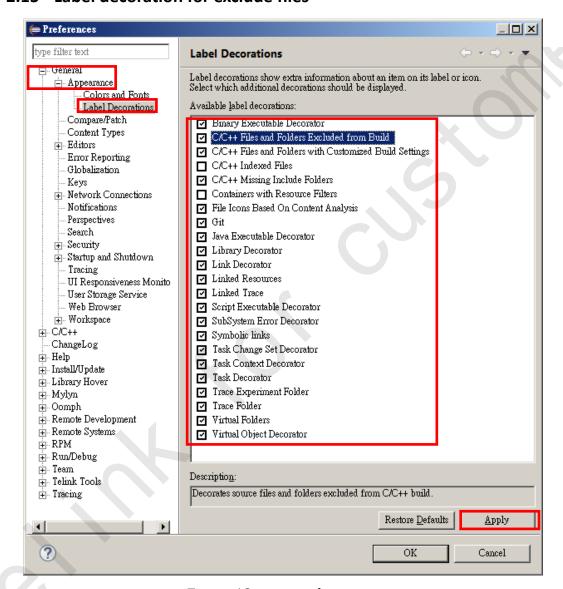


Figure 13 general settings

Solution:

Window -> Preferences -> General -> Appearance -> Label Decorations

Please check/uncheck label decoration items as needed, and click "Apply" to
add/remove the gray out items.

It won't affect the buildup but just highlight folder(s) not in use within IDE.

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