



Embedded Tools Working Group Next Steps

05.20.20

Embedded Tools Roadmap

N O W

IDENTIFY

Identify the key building blocks for the embedded platform for the future.
Language and Debug features:
indexing, code completion,
breakpoints, peripherals, disassembly

N E X T

INTEGRATE

Work towards standardization so that key building blocks integrate into desktop, cloud & hybrid platforms:
Eclipse CDT, Che & Theia.
Language Servers & Debug Adapters

L A T E R

INNOVATE

Drive the future direction for an industry open source embedded platform that features best in class language and debugger support.

Embedded Tools at Eclipse

During the recent embedded tools webinar 3 strong themes emerged:

1. An immediate need to support the stability and sustainability of the Eclipse CDT project upon which every organization on the call relies upon today
2. Build common assets/shared components for CDT, Eclipse Che and Eclipse Theia based on technologies such as LSP and DAP
3. Create a working group at Eclipse to drive the development of the embedded tools platform for the future, based on the building blocks we have in place with Theia and Che

Stability and Sustainability of Eclipse CDT

- > Highest priority tasks:
 - Release Engineering
 - Currency of the existing Eclipse CDT toolset
 - Documentation, reviews, onboarding
 - Indexer updates for C++14 and C2x
 - First-class clang/LLVM/LLDB support
 - Build
 - Managed build
 - CMake, Meson and other third-party build integration
 - Common Components for CDT and Theia
 - LSP extension for language support
 - DAP

- > Help needed to get this work done (2 year commitment needed):
 - Assign developers within your organization - part time is fine
 - Contribute funding to sponsor developers

CDT & Common Components Signup Table

| CDT Tasks | Sizing Est | Name | Company | FTE PYs * |
|--|------------|------|---------|-----------|
| Release Engineering | 0.25 | | | |
| | | | | |
| Currency of the existing Eclipse CDT toolset | ? | | | |
| Documentation, reviews, onboarding | | | | |
| Indexer updates for C++14 and C2x | | | | |
| First-class clang/LLVM/LLDB support | | | | |
| Build | 2 | | | |
| Managed build | | | | |
| CMake, Meson and other third-party build integration | | | | |
| | | | | |
| Common Components | | | | |
| LSP extension for language support | 4 | | | |
| | | | | |
| DAP | 2 | | | |
| | | | | |

Create an Embedded Tools Working Group

- > Form an Embedded Tools working group to carry forward what we are starting with these meetings:
 - Align companies on an Eclipse Embedded Tools roadmap and coordinate related work on open source projects
 - Define the embedded tools platform for the future based on Theia and Che
 - Create marketing initiatives to drive awareness, developer adoption and grow the embedded tools community at Eclipse
 - Create a Program Plan and Budget to fund marketing initiatives, infrastructure and project work
 - Joint collaboration using vendor neutral governance framework



Discussion



Thank You