



ECLIPSE

Cloud DevTools

Eclipse Cloud DevTools Working Group Community Update

June 29, 2022

Cloud DevTools Mission

Define and build an ecosystem of best-in-class open-source Web and Cloud-based development tools; and to promote and drive the broad adoption of these tools.

Agenda

- Q1, Q2 News
- Project Updates
- SIG Updates
- Open Discussion and Q&A

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= mirror_ob
```

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d back the deselected
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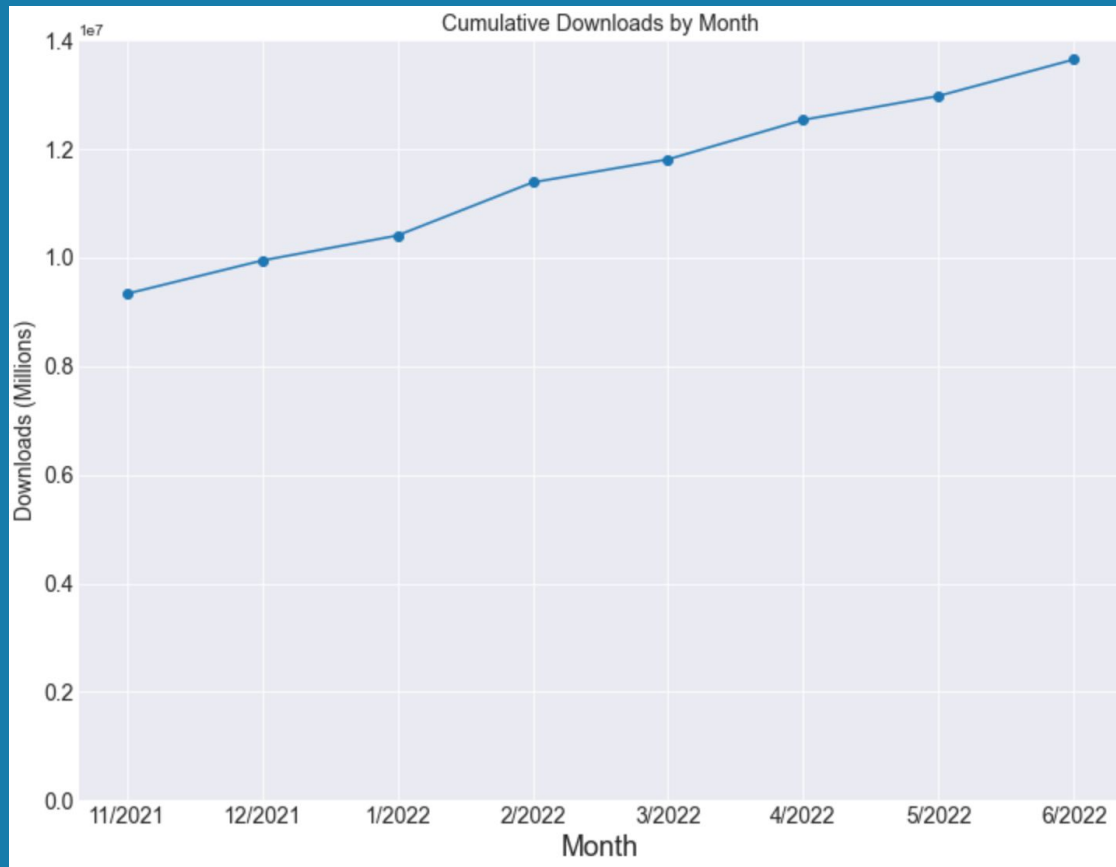
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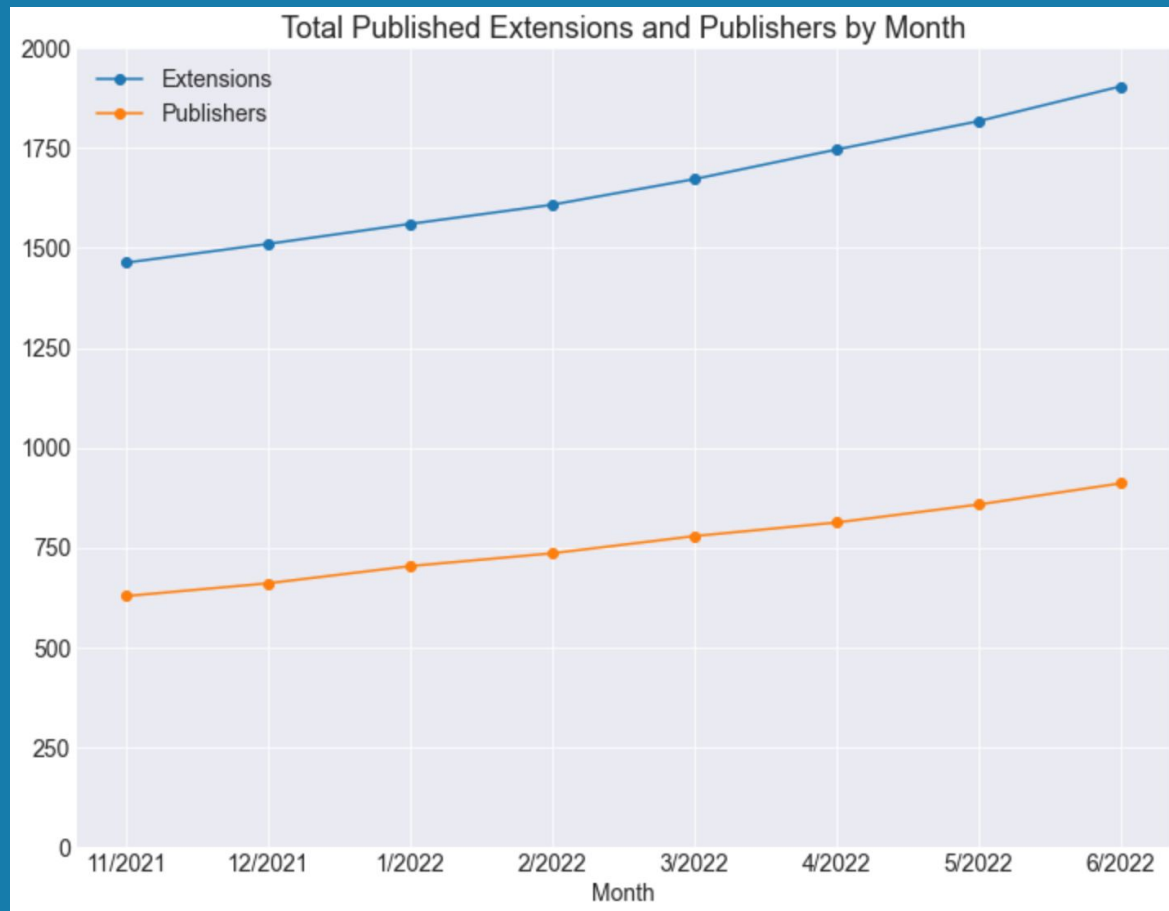
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Operator):
    "mirror to the selected object""
    object.mirror_mirror_x"
    "Mirror X"

context):
    active_object is not None
```

Q1/Q2 News

- > 1600 commits this year enabled the following releases
 - Theia: 1.21 - 1.26 (monthly)
 - Dirigible: 5.12, 6.0
 - JKube: 1.4, 1.5, 1.6, 1.7, 1.8
 - GLSP: 0.9, 1.0
 - Sprotty: 0.9, 0.10, 0.11, 0.12
- Open VSX Registry: 1904 extensions, 911 publishers
- Cloud IDE Day 2022
 - 291 Registrants, 150 live attendees
 - 12 sessions: [YouTube Playlist](#)
- We're in person again at EclipseCon 2022, October 24 - 27
 - We intend a Cloud DevTools Community Day concurrent
- Stay tuned for information on TheiaCon 2022 in November
- Cloud Tool Time is back: [YouTube Playlist](#)
 - [Sign up to present](#)





WORKING GROUP PROJECTS



Eclipse Che

Ilya
Buziuk

[The Kubernetes-Native IDE for Developer Teams](#)



THEIA

Jonas
Helming

[Extensible platform to develop IDE-like products](#)



Open VSX Registry

Aart van
Baren

[Vendor-neutral alternative to the Visual Studio Marketplace](#)



dirigible

[Dirigible](#)

Jordan
Pavlov

Also:



[Sprotty](#)

Miro
Spönemann



[EMF.cloud](#)

Philip
Langer

Embedded SIG



[CDT.cloud](#)



[GLSP](#)

Philip
Langer

Modeling SIG (emerging)

Rob
Moran



[JKube](#)

Sun Tan
Rohan Kumar

Mélanie
Bats

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Helming



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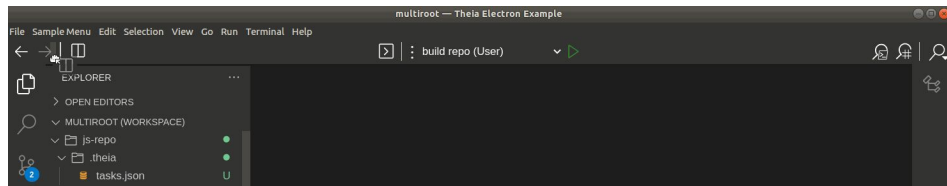
Also:

Embedded SIG

Modeling SIG (emerging)

Theia and Theia Blueprint

- Noteworthy Features:
 - Toolbar
 - Playwright support
 - Performance File API
- Community Updates:
 - Documentation
 - Community Release
 - Regular Release Blogs
 - **Next generation of Eclipse!**
- Upcoming:
 - Detachable Windows
 - Semantic versioning for core API



theia-ide

- Mostly written in TypeScript
- Mature, well-established codebase
- Very large, active development team
- Very well-commented source code
- Stable Y-O-Y development activity
- 116 active contributors

Commit Activity Timeline:



5 year commit count

Updated Jun 14, 2022

more at [Open Hub](#)

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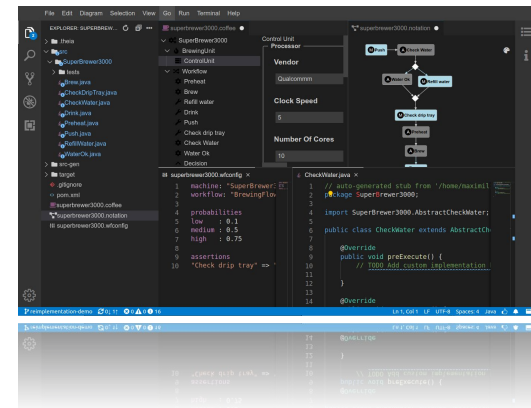
[Vendor-neutral alternative to the Visual Studio Marketplace](#)



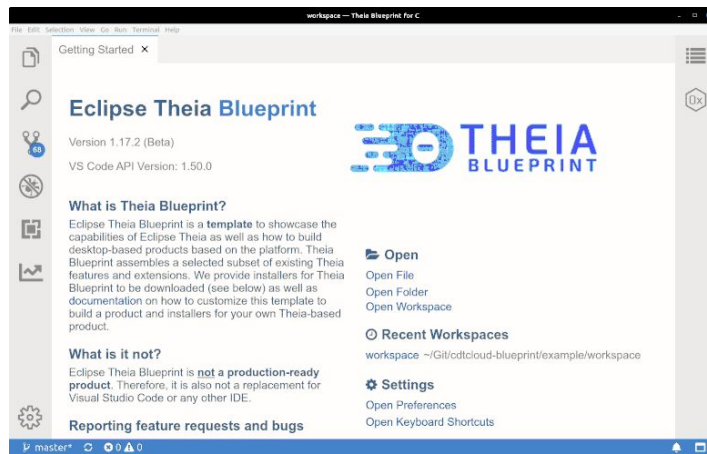
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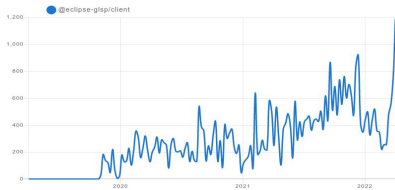


- Model Server
 - V2 Endpoint: Removes leaking of EMF jargon, ...
- Model Server Node
 - Node-based Model Server, ...
- Theia Tree Editor, Theia Property View with JSON Forms, ...
 - Improvements and updates (Theia, etc.)
- Community
 - Very active discussions forum
 - Many new adopters and contributors



- Several new and updated components
 - CDT GDB Debug Adapter
 - CDT Amalgamator
 - TraceCompass.cloud
 - Clangd Contexts
 - ...
- CDT.cloud Blueprint
 - Builds and downloads
 - Welcome page
 - Example project generator
 - ...



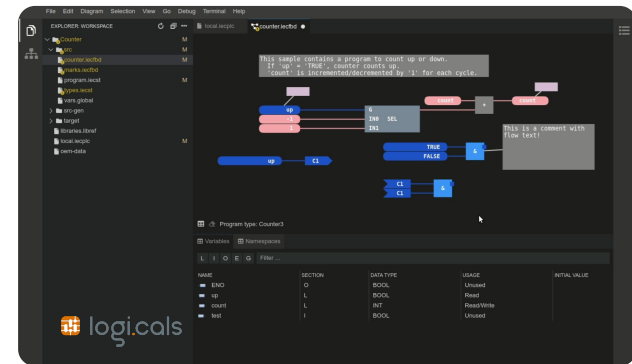
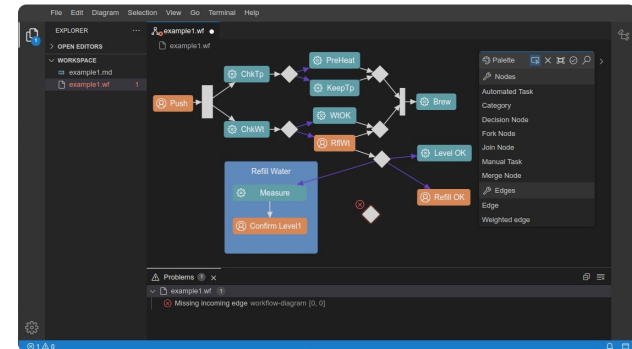


... has a young, but established codebase maintained by a large development team with stable Y-O-Y commits

... took an estimated 16 years of effort (COCOMO model) starting with its first commit in September, 2019 ending with its most recent commit 4 days ago



- 1.0 release approved and left incubation phase
 - Stabilized APIs
 - Extensive documentation
 - Node-based GLSP Server Framework
 - Project templates
 - Theia + EMF + Java
 - Theia + JSON + Node
 - VS Code + JSON + Node
 - ...
 - ... (several features and fixes)
- Many new adopters and contributors



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Aart van Baren



Also:

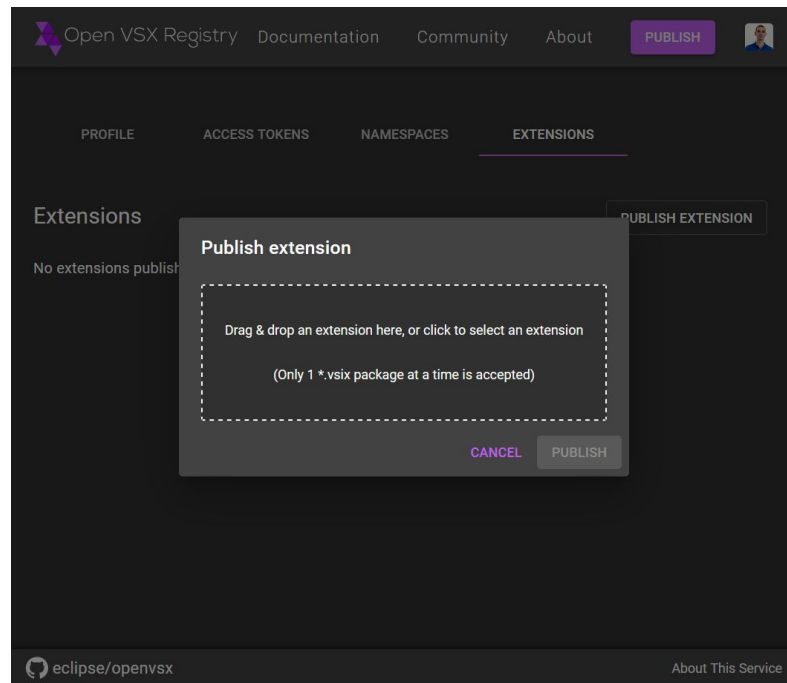
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OPEN VSX REGISTRY



- Current Release
 - Pre-release
 - Target platform
 - resourceUrlTemplate
- Next Release
 - Upstream: /vscode & proxying
 - Publish through WebUI
 - /api/-/query performance
- Upcoming
 - Admin change namespace
 - Fix Open VSX vulnerabilities
- Community
 - More issue & PR contributors



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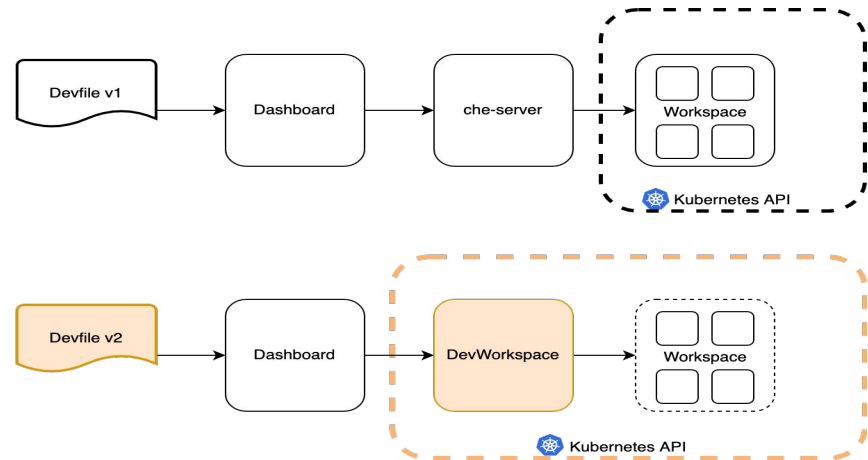


Also:

[Sprouty](#)

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Noteworthy Features:

- Switch to the DevWorkspace Operator as workspace engine
- Pair programming
- Decommissioning Keycloak
- UX / Admin Improvements (configuration of the notification header, Default URL prefix - eclipse-che.<cluster-domain>)



Eclipse Che

- Community Updates:
 - New Website - <https://www.eclipse.org/che/>
 - Eclipse Che Blog - <https://che.eclipseprojects.io/>
 - Cloud IDE Days 2022 - <https://youtu.be/si66CCVAyFE>
 - Newsletter - Eclipse Che Gets a New Dev Environments Engine - <https://newsroom.eclipse.org/eclipse-newsletter/2022/may/eclipse-che-gets-new-dev-environments-engine>



Eclipse Che

- Upcoming:
 - Git zero config with OAuth flow [#20583](#)
 - Better 'Getting Started' experience (repos without devfiles) [#21340](#)
 - Building container images [#20227](#)
 - Addressing technical debt
 - Archiving obsolete repositories
 - Decommissioning PostgreSQL database [#21374](#)

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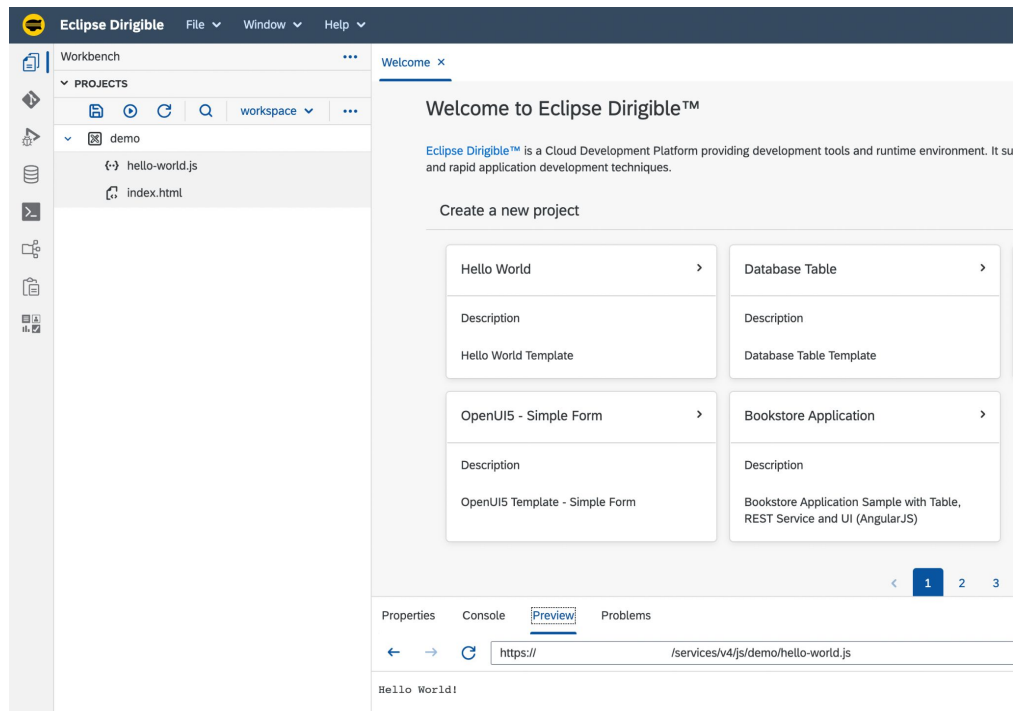
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Eclipse Dirigible

- News & Updates:
 - New Look & Feel
 - ECMAScript Modules Support
 - Monorepo Projects Support
 - Git Enhancements
- Next:
 - TypeScript Support
 - Debugger Enhancements
 - Eclipse Dirigible 7.0
- Community:
 - xsk.io
 - dirigible.io/help
 - dirigible.io/blogs
 - dirigible.io/releases
 - dirigible.io/samples
 - youtube.com/c/dirigibleio



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Sun Tan
Rohan Kumar

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Eclipse JKube

- Noteworthy Features:
 - Gradle plugins graduation (1.8 release)
 - M1 support
 - Fragment resources from multiple environment
 - Tomcat 10 compatibility (JakartaEE)
 - JDK 17 support
 - Helm improvements

Eclipse JKube

- Community Updates:
 - Featured by Gradle
 - Gradle Feb 2022 Newsletter
 - Linkedin
 - GSoC 3 students
 - Talk
 - “Move your Java to Kubernetes” at Java2Days
 - workshop at Valencia JUG

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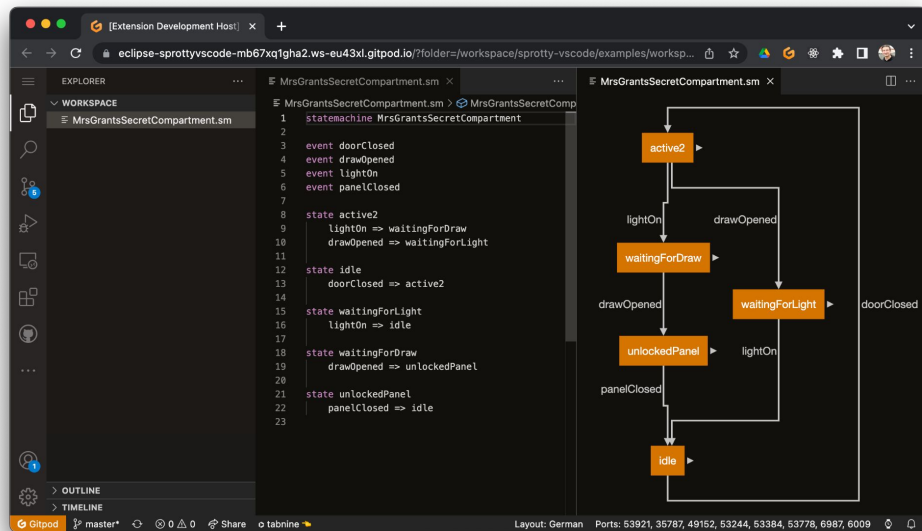
Eclipse Sprotty

Graduation release 1.0

- No target date yet, but we'll get there 😊

sprotty-protocol package

- Common TypeScript code for frontend and backend
- Generate diagrams from Node.js backends
 - Web servers (via websocket)
 - Theia extensions (via JSON-RPC protocol)
 - VS Code extensions (via webview message passing)
 - Language servers (using Langium – langium.org)



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Also:

Embedded SIG

Modeling SIG (emerging)

Rob
Moran

Embedded SIG

- Background
 - Running since April 2021
 - Monthly calls, well attended
- Core representation from
 - Arm, EclipseSource, Ericsson, Renesas, ST
- Interest from other companies in the sector
- Focus
 - Discussing trends and needs around the Theia framework and VS Code
 - Collaboration on initiatives which feed into related projects (e.g. CDT.Cloud)

arm

 EclipseSource



ERICSSON

RENESAS



life.augmented

Embedded SIG

- Previous Initiatives (wins!)
 - Support for multiple windows (into Eclipse Theia)
 - Support for multiple clangd contexts (into Eclipse Theia and CDT.Cloud)
 - Debugging heterogeneous systems - amalgamator (into CDT.Cloud)
 - CDT GDB Adapter (into CDT.Cloud)
 - Trace Compass (into CDT.Cloud)
 - CDT.Cloud Blueprint
 - Standalone SVD Viewer extension
- Current Initiatives
 - Deploying binaries across cloud-connected devices (EclipseSource)
 - Tracking VS Code support of embedded development, Web devices and debug extensions (Arm)

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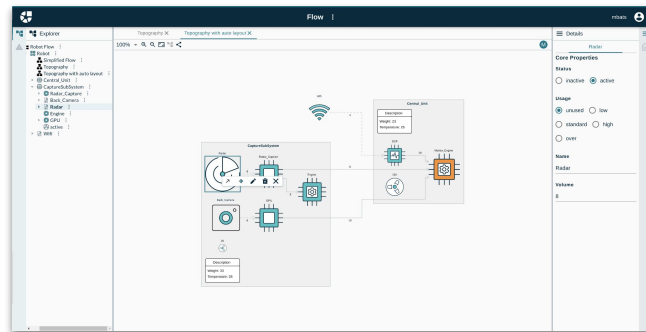
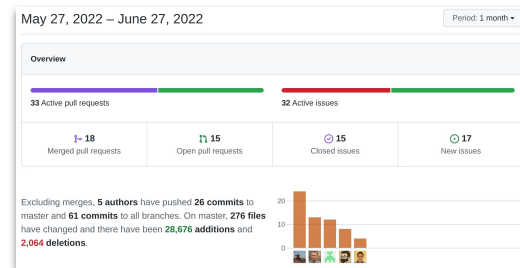
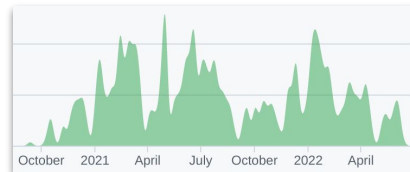
Modeling SIG (emerging)

Mélanie
Bats

Modeling SIG (emerging)

- Create a dedicated **community around web modeling**
 - Discuss with the modeling community actors about the future of modeling
 - Ease contributions/involvements
 - Share and aggregate roadmaps, communicate over a common roadmap
- Develop a set of **common and integrated components**
 - Align technological dependencies/frameworks
 - Align practices to version/distribute components
- Show and **Promote web modeling technologies**

- Make your **engineers** more **efficient**s with **domain specific graphical tools** thanks to Sirius Web
- Same **spirit** as the well established technology Eclipse **Sirius**
- Very **active project** : a new release each 8 weeks
- Classical web stack : Spring, React, JS
- Provides a standard **ready-to-use application**,
- Provides **reusable components** to integrate in an existing one or in a Cloud IDE (VS Code, Theia)



Modeling SIG (emerging)

Need more details? Interested? Join us?

Contact :

melanie.bats@obeo.fr

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THANK YOU!



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Type**Fox**



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Red Hat



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arm