

Introduction to



Serverless **Workflow**

Today's Speakers



Charles d'Avernas

Neuroglia – Brussels BE

- Specification
- Synapse Runtime
- .NET SDK
- Rust SDK
- ...



Jean-Baptiste Bianchi

Neuroglia – Brussels BE

- Synapse Dashboard
- TypeScript SDK
- VS Code Extension
- Website
- ...



Ricardo Zanini

Red Hat – Toronto CA

- Specification
- Go SDK
- Java SDK
- Website
- ...

Serverless Workflow's Community

Current Active Contributors (alphabetical)



Charles d'Avernas
Neuroglia



J.-B. Bianchi
Neuroglia



Matthias Pichler
Warrify



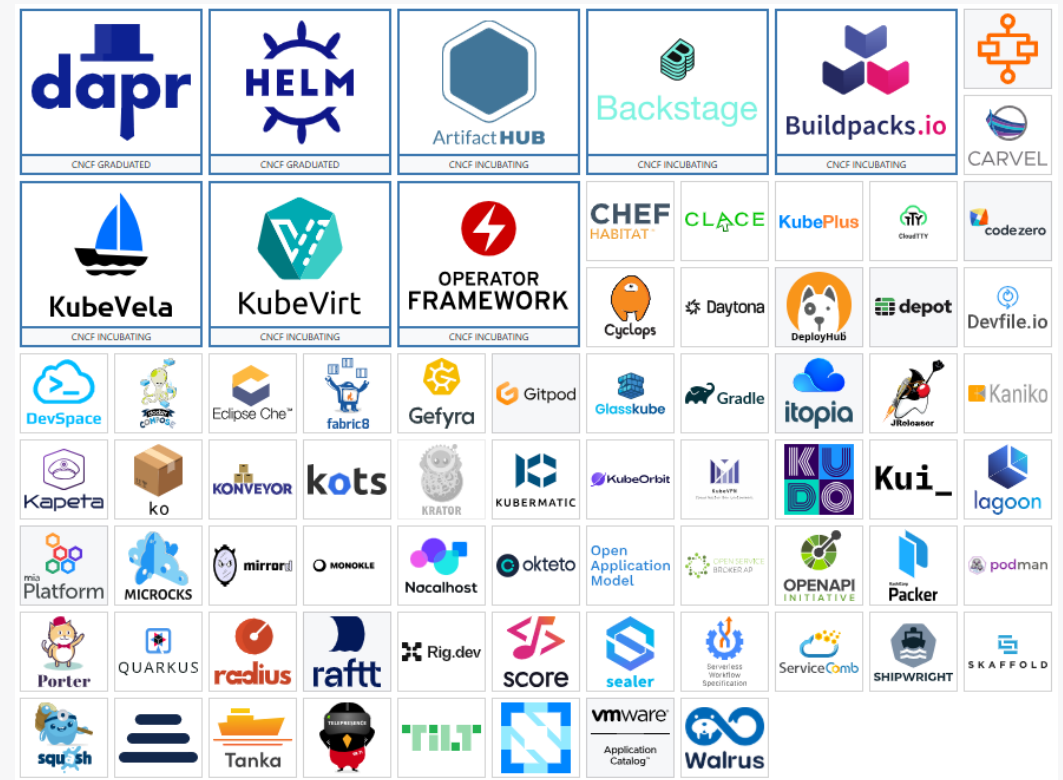
F.J. Tirado Sarti
Red Hat



Ricardo Zanini
Red Hat



Application Definition & Image Build landscape

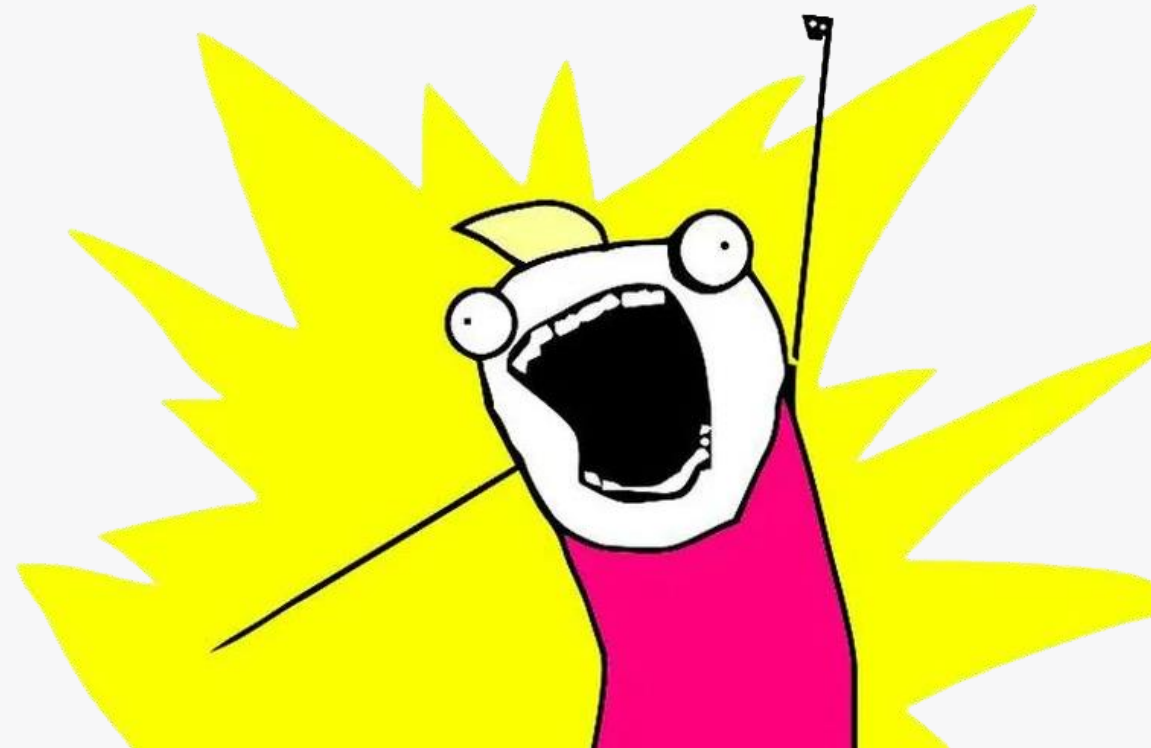


What is Serverless Workflow?

- Vendor-neutral **Specification**
 - Usability
 - Interoperability
 - Extensibility
 - Event-driven
 - Fault-tolerant
- **SDKs**: .NET, Go, Java, PHP, Python, Rust & TypeScript
- **Runtime**: Synapse

Why create Serverless Workflow?

- Prevent vendor-lock
 - Portability
 - Cost management
 - Hybridization
 - Data ownership
 - ...
- Empowers the developers



What are the use-cases?

- Agentic **AI**
- **IoT** Workflows
- Data Processing/**ETL** Pipelines
- **CI/CD** Pipelines
- Application **Integration**
- **Event-Driven** Workflows
- Multi/**Hybrid Cloud** Workflows
- ...

Building Blocks of the Specification

- **Document:** Documents the workflow, its name, version, namespace, tags, etc.
- **Input/Output:** Defines data flowing in and out
- **Schedule:** Specifies execution timing
- **Use:** Includes reusable components like secrets or retry policies
- **Timeout:** Handles workflow timeouts
- **Do:** Outlines the tasks to be executed

The Tasks That Power Automation

- **Call:** call services/functions
- **Do:** group tasks
- **Emit:** emit events
- **For:** iterate
- **Fork:** parallel execution
- **Listen:** listen for events
- **Raise:** raise error
- **Run:** run container, script, workflow
- **Set:** set data
- **Switch:** conditional execution
- **Try:** error handling
- **Wait:** pause execution

And Much More to Discover...

- Runtime Expressions
- Custom Functions
- Extensions
- Flow Directives
- Data Flow
- Lifecycle Events
- External Resources
- Streaming
- ...



<https://github.com/serverlessworkflow/fosdem-2025>

Future of Serverless Workflow

- Reintroduce **Workshops**
- Go, Java, Rust runners/**implementation references**
- Expanding the custom functions & extensions **catalog**
- Graphical **Workflow builder**
- **Migration tool** for v0.8.0 to v1.0.0
- Renaming/**Rebranding**
- ...

Get in touch!

- Star our GitHub repositories

★ <https://github.com/serverlessworkflow/> ★

- Visit our website

🌐 <https://serverlessworkflow.io>

- Join us on Slack

💬 <https://slack.cncf.io/> - #serverless-workflow

Q&A

Thanks for your time



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CLOUD NATIVE
COMPUTING FOUNDATION



NEUROGLIA



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