What is Eiffel?

And why should I care?

The era of small-scale software is over

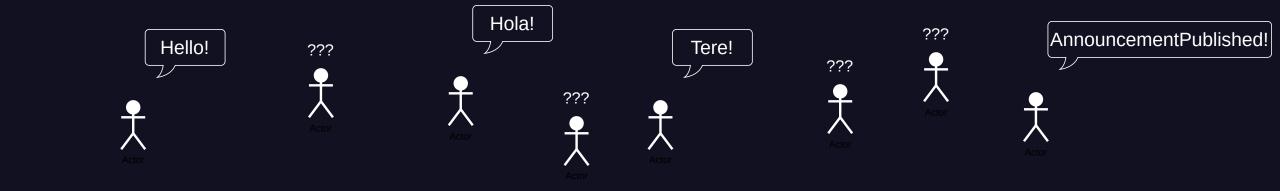
Eiffel Summit 2023.1

What is Eiffel and why should I care?

Erik Sternerson, doWhile / Volvo Cars

In this talk

- What is the purpose of Eiffel?
- What is Eiffel?
- Why should I care?





A common language







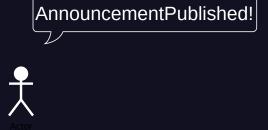














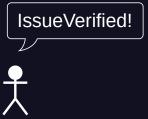
Observability

TestCaseFinished!



ArtifactPublished!





AnnouncementPublished!



Observability answers:

- What have we built?
- What changes are included?
- How did we test the builds?
- What is its quality?
- Are we ready to release?

Interoperability



Interoperability provides:

- I know what just happened
- I know what it happened to
- I know what the outcome was
- I know where to find more information
- I can decide the next action

What IS Eiffel?

The Eiffel crash course:)

Three aspects:

- An event specification
- A set of SDKs and tools
- A community

A defined set of events

Event categories:

- Source Changes
- Packaging
- Verification
- Deployment
- Flows

Event layout



Event layout

Meta: About the event



Event layout meta

- Event type and version
- Identifier (UUID)
- Source
- Security



Event layout

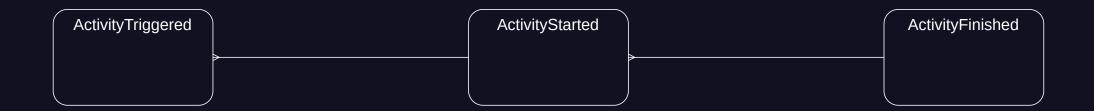
Meta: About the event

Links: Related events

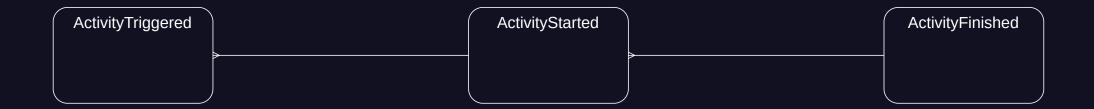
META

LINKS

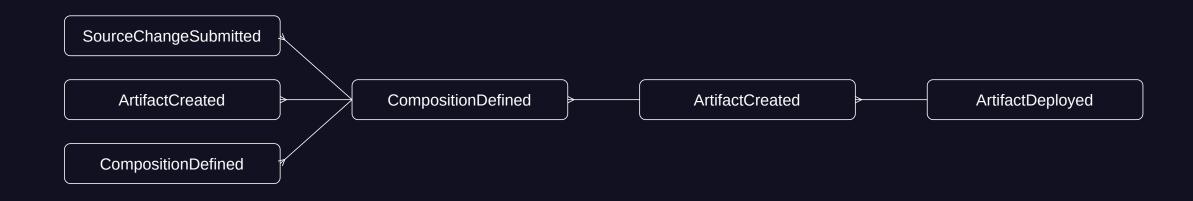
Links



"Same type" / update links



"Different type" / association links



Event layout

Meta: About the message

Links: Related events

Data: About the entity

META

LINKS

DATA

Event data

- Specific to event type
- ActivityTriggered: Name of activity
- ActivityStarted: URL to live logs
- ActivityFinished: Outcome
- Data + Links = Complete picture

Event layout

- Meta: About the message
- Links: Related events
- Data: About the entity
- Custom data: Your stuff!

META

LINKS

DATA (custom data)

```
"meta": {
           "type": "EiffelActivityFinishedEvent",
           "version": "3.3.0",
           "time": 1686484125170,
           "id": "52691e33-6778-4482-b909-2ea98d0071a9"
         "links": [
               "type": "ACTIVITY_EXECUTION" | lebc-2b9518d89e63"
10
11
12
13
         "data": {
14
15
           "outcome": {
             "conclusion": "SUCCESSFUL"
16
           "customData": [{"track": "AY12"}]
18
19
20
```

```
"meta": {
           "type": "EiffelActivityFinishedEvent",
           "version": "3.3.0",
           "time": 1686484125170,
           "id": "52691e33-6778-4482-b909-2ea98d0071a9"
         "links": [
               "type": "ACTIVITY EXECUTION",
10
               "target": "25f4a098-5aa3-4e02-aebc-2b9518d89e63"
11
12
13
         "data": {
14
15
           "outcome": {
             "conclusion": "SUCCESSFUL"
16
           "customData": [{"track": "AY12"}]
18
19
20
```

Why should I care?

Because Eiffel is tried and tested

Used for a long time, often, and in production:

- Started in Ericsson 2012 2.5M+ evs/day
- Open source since 2016 Active community
- Driven by a technical committee (currently Axis and Ericsson)

Tracing and Messaging









What about CDEvents?

CDEvents for Eiffelers

- Started 2021 as part of CDF (LF)
- Lots of Eiffel involvement
- Broader scope, more actors involved
- Incubating, work in progress
- Translation service for Eiffel exists.

CDEvents session tomorrow 10.30

Because Eiffel has a large ecosystem of tools

Because Eiffel continues to evolve

Thank you! Q&A