Build a Minimum Viable Platform in ~~2 hours~~ 90 min

AWS + Humanitec Platform Orchestrator + You = 🏁

AWS Day of Containers London 29 Sept 2025

Who are we?

Ben

(Backend Engineering)

Mateusz

(Backend Engineering)

And Can, Kasper, Christoph, ..

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The workshop

- What's a Platform Orchestrator?
- Connecting the Humanitec Orchestrator to your AWS account
- Providing abstractions for developers
- Providing reliable, repeatable, and testable infrastructure
- And mixing in operations, cost (and carbon) control, asset inventory
  - Let's try and mix in the sustainability aims here..
- Not just one live demo, but 20x! Let's cross our fingers..

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Prerequisites

1. You're on the WIFI (hands up) (HubHub Guest / "amazingspace")
2. Who's used Humanitec in the past? (hands up)
3. Who's used EKS or Kubernetes in the past? (hands up)
4. Who's written Terraform?
5. You've got the AWS Workshop Studio link
6. A Google / Gmail account to log into Humanitec with
7. A web browser

If you don't have your own setup, don't worry, pair with someone next to you or just follow along with me.

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Instructions

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1. Set up Workshop Studio
2. Open hosted IDE
3. Create and connect Humanitec account
4. ...

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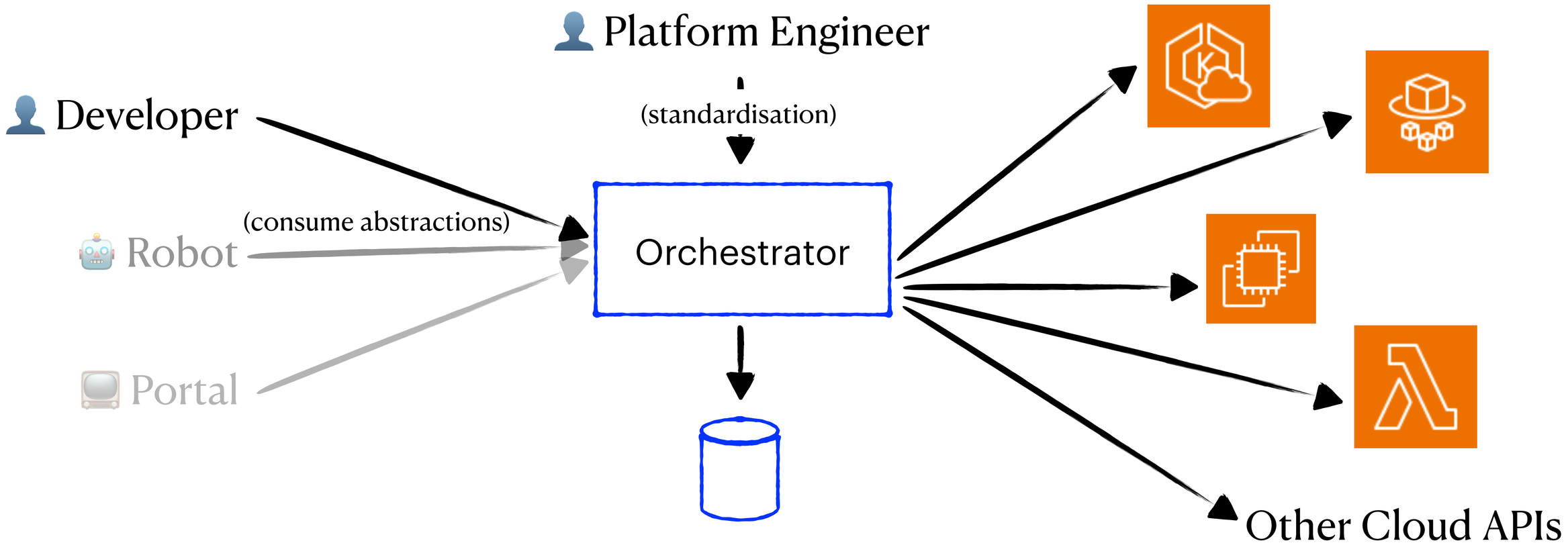
Platform Orchestrator



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Part 0

Getting familiar with the IDE and adjusting up the EKS cluster

(Switch to Web Browser)

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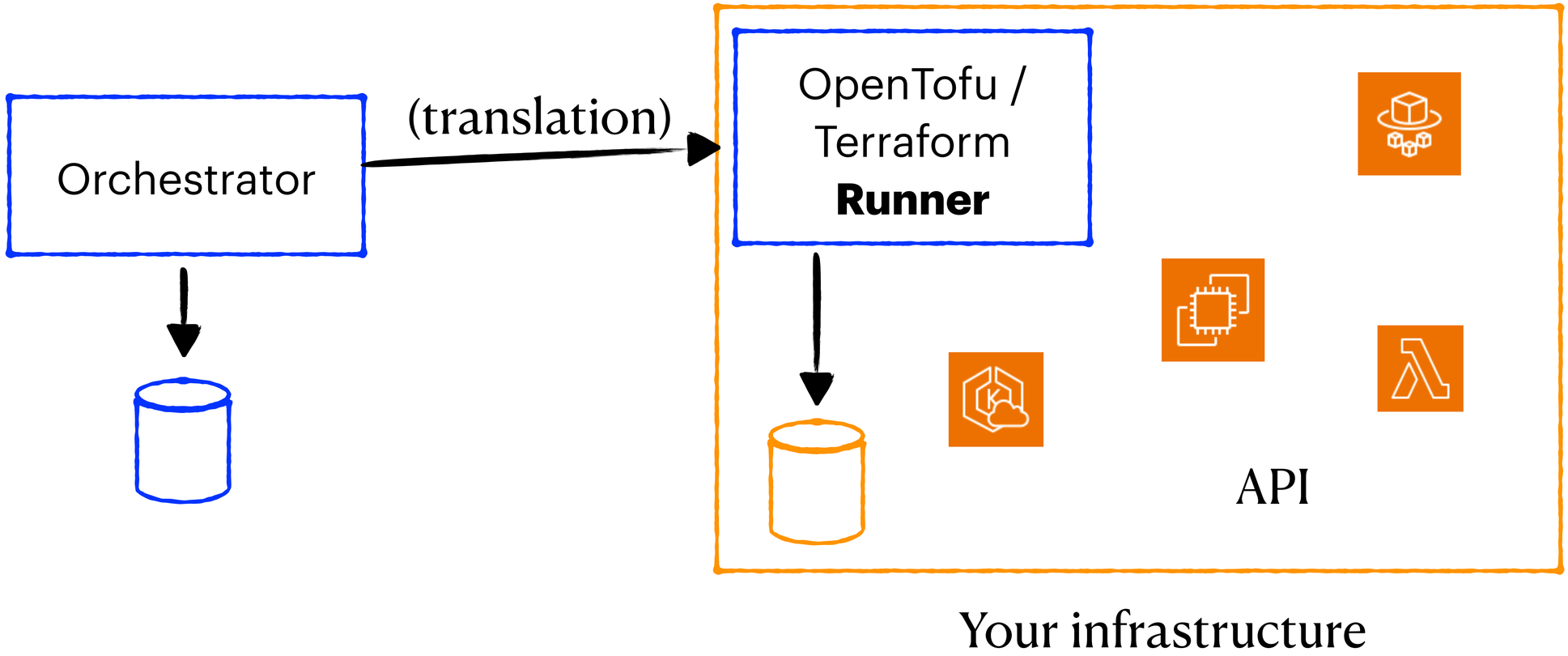
Part 1

Connecting the Orchestrator to your workshop EKS cluster



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Part 1

Connecting the Orchestrator to your workshop EKS cluster

(Switch to Web Browser)

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Part 1

Connecting the Orchestrator to your workshop EKS cluster

- ✅ You've got a Humanitec org
- ✅ You have the hctl CLI set up and configured
- ✅ You have secure web identity set up between Humanitec and EKS
- ✅ Your project can perform deployments using the EKS cluster as an execution platform

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Part 2

Developer abstractions

- Developers deploy software and request resources across many runtimes.
- Kubernetes/CRDs is not enough.
- Developers should ideally not need to know or care about how or where things are happening underneath and should be able to opt-in to "looking inside the box" only when needed.
- Our orchestrator provides two layers of abstraction:
    1. The deterministic manifest of an environment
    2. The Score Workload Specification as a resource

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Part 2

Developer abstractions

(Switch to Web Browser)

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Part 2

Developer abstractions

✅ You deployed an app to EKS with an internet accessible route using NLB

✅ You used a Score file, which didn't specify any particular technologies and can be migrated to other runtimes.

✅ An isolated namespace

✅ You're ready to add some real infrastructure!

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Part 3

Scaling your platform team to support new infrastucture

- Old feedback loop: ticket ops, or manual match request to recipe
- New feedback loop: automate
  - Identify the shapes of what developers need (work backwards!)
  - Setup a repeatable, testable, and destroyable Terraform module
  - Map it to credentials and cloud APIs
  - Setup repeatable rules

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Part 3

Scaling your platform team to support new infrastucture

(Switch to Web Browser)

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Part 3

Scaling your platform team to support new infrastucture

- ✅ A DynamoDB table
- ✅ An AI model
- ✅ Granular security
- ✅ All the metadata you could want

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Part 4

Environmental repeatability

(Switch to Web Browser)

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