



The Barcelona Developers Conference

2024

@dev_bcn

www.devbcn.com

#devbcn24



The Barcelona Developers' Conference
2024

Serverless Platforms on Kubernetes

DevBcn / KCD Spain 2024

Mauricio Salatino



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



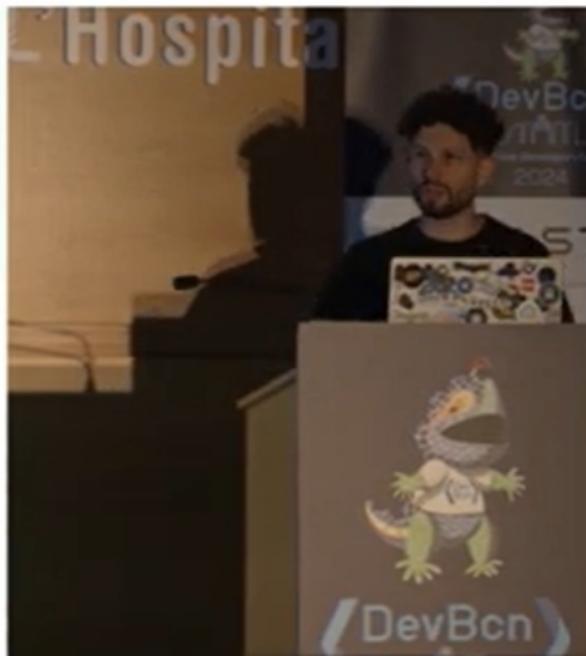
Mauricio Salatino

diagrid.io

- Software Engineer and CNCF Ambassador.
- Author of “**Platform Engineering on Kubernetes**” (Manning).
- @DaprDev @KnativeProject @KeptnProject

salaboy.com

@Salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with Knative, Crossplane, Dapr & KEDA

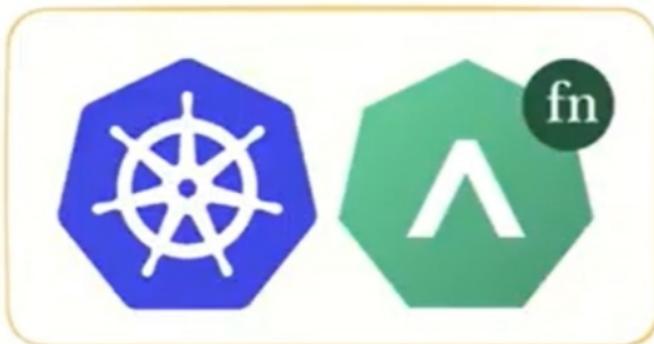


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

Openfunction



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
salaboy@salaboy-MBP kcd-spain-2024 % k get pods
No resources found in default namespace.
salaboy@salaboy-MBP kcd-spain-2024 %
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
Terminal  Edit  Add  View  Window  Help
salaboy@salaboyMBP kcd-spain-2024 % k get pods
No resources found in default namespace.
salaboy@salaboyMBP kcd-spain-2024 % k get ns
NAME          STATUS   AGE
dapr-system   Active   6d1h
default        Active   6d1h
gke-managed-system Active   6d1h
gmp-public    Active   6d1h
gmp-system    Active   6d1h
keda          Active   6d1h
knative-serving Active   6d1h
kube-node-lease Active   6d1h
kube-public    Active   6d1h
kube-system    Active   6d1h
openfunction   Active   6d1h
projectcontour Active   6d1h
rabbitmq-system Active   6d
shipwright-build Active   6d1h
tekton-pipelines Active   6d1h
salaboy@salaboyMBP kcd-spain-2024 %
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



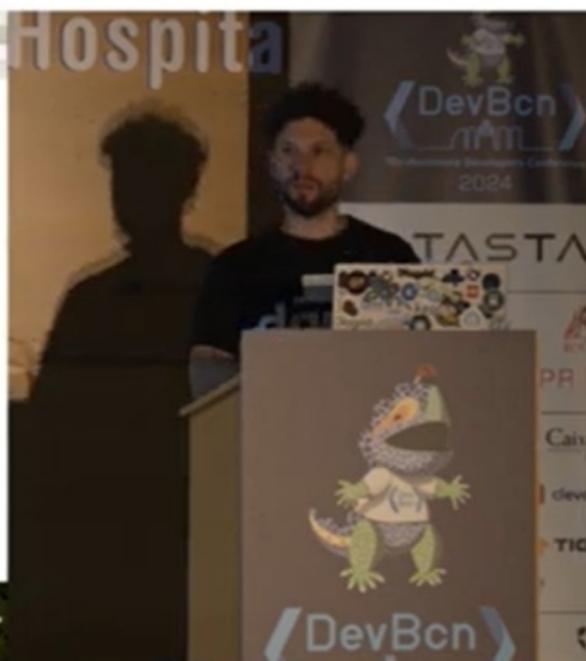
@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

A screenshot of a code editor window titled "kcd-spain-2024". The file is a YAML configuration for a serverless function. It includes sections for "spec", "build", "env", "srcRepo", and "serving". The "srcRepo" section specifies a URL to a GitHub repository and a source subpath. The "serving" section specifies a template and a container named "function".

```
functions > go > ! function.yaml > {} spec > {} build > {} srcRepo > sourceSubPath
  5   spec:
  10     build:
  12       env:
  13         FUNC_NAME: "HelloWorld"
  14         FUNC_CLEAR_SOURCE: "true"
  15         # # Use FUNC_GOPROXY to set the goproxy if failed to fetch
  16         # FUNC_GOPROXY: "https://goproxy.cn"
  17       srcRepo:
  18         url: "https://github.com/salaboy/kcd-spain-2024.git"
  19         sourceSubPath: "functions/go"
  20         revision: "main"
  21     serving:
  22       template:
  23         containers:
  24           - name: function # DO NOT change this
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

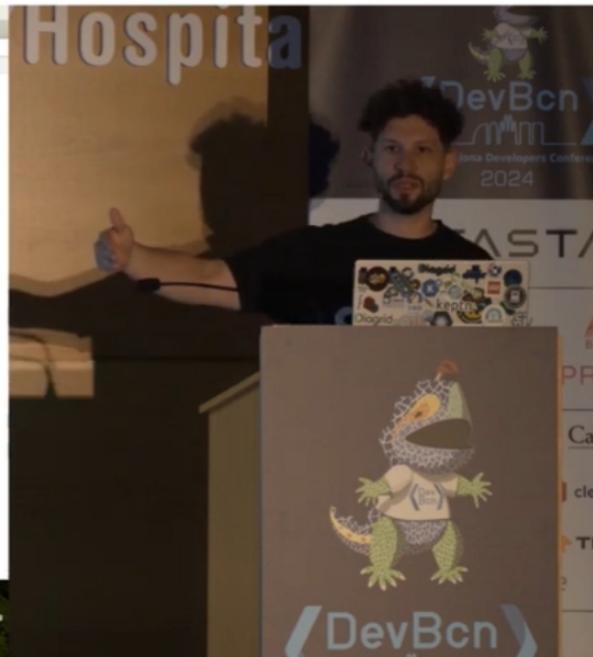


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

A screenshot of a Mac OS X desktop. At the top, there's a menu bar with 'Terminal', 'Shell', 'Edit', 'View', 'Window', and 'Help'. Below the menu is a toolbar with icons for file operations. A terminal window titled 'kcd-spain-2024 — zsh — 112x25' is open, showing the command: `salaboy@salaboyMBP kcd-spain-2024 % k apply -f functions/go/function.yaml`. The response is: `function.core.openfunction.io/function-sample created`. Below the terminal is another window titled 'J:\OpenShift\code\my-folks\java-sdk — zsh'. The desktop background is a presentation slide with a large 'Hospital' logo, a cartoon character, and the DevBcn 2024 logo. The bottom of the screen shows the Mac OS X dock with various application icons.



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

A screenshot of a Mac OS X desktop. At the top, there's a menu bar with 'Terminal', 'Shell', 'Edit', 'View', 'Window', and 'Help'. Below the menu bar are two windows: one titled 'kcd-spain-2024 -- izsh -- 11x25' showing command-line output, and another titled 'JupyterLab on Google Colab' showing a Jupyter notebook interface. The terminal window contains the following command and output:

```
salaboy@salaboyMBP kcd-spain-2024 % k apply -f functions/go/function.yaml
function.core.openshift.io/function-sample created
salaboy@salaboyMBP kcd-spain-2024 % k get function
NAME        BUILDSTATE  SERVINGSTATE  BUILDER      SERVING   ADDRESS    AGE
function-sample  Building          builder-jjfvl
salaboy@salaboyMBP kcd-spain-2024 %
```

The Jupyter notebook slide has a title 'Hospita' and some code snippets.



Mauricio 'Salaboy' Salatino

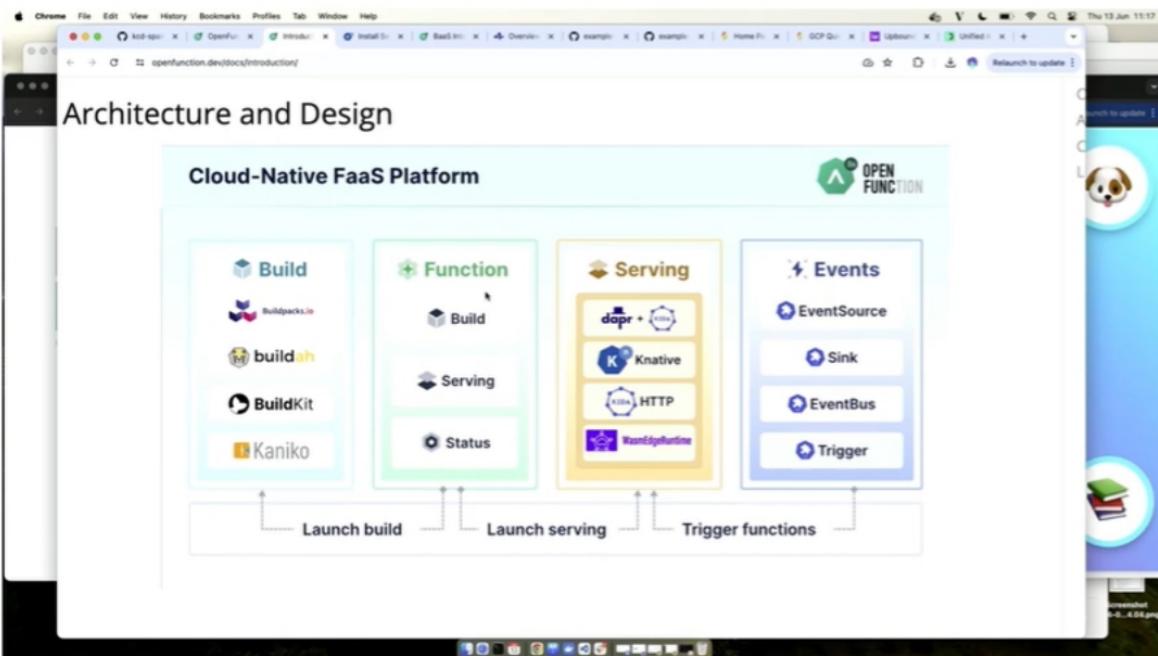
Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

A screenshot of a macOS Terminal window. The command entered is:

```
salaboy@salaboyMBP kcd-spain-2024 % http http://serving-r5vgv-ksvc-7n8s8.default.34.91.134.132.sslip.io/KCDSpain
```

The response output is:

```
HTTP/1.1 200 OK
content-length: 17
content-type: text/plain; charset=utf-8
date: Thu, 13 Jun 2024 09:20:28 GMT
server: envoy
x-envoy-upstream-service-time: 2165

Hello, KCDSpain!
```

Below the terminal window, a portion of a presentation slide is visible, showing tabs for "Launch Data", "Launch Serving", and "Trigger Functions".



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

Openfunction recap

<https://openfunction.dev>

- Great initiative, great abstractions, but
- Does it work for you?
 - Does it provide the right abstraction for you?
 - Are the right tools? (GitHub Actions, GitOps)
- Do you need to learn about all the tools used in the background to use the platform?



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

<https://diagrid.ws/vote-kcd-spain>



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

Demo Architecture



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

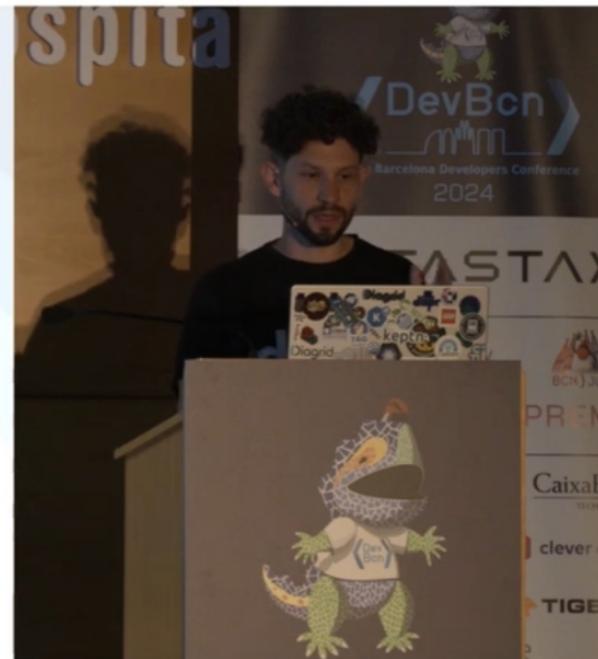


The Barcelona Developers' Conference 2024

Knative Serving



@salaboy



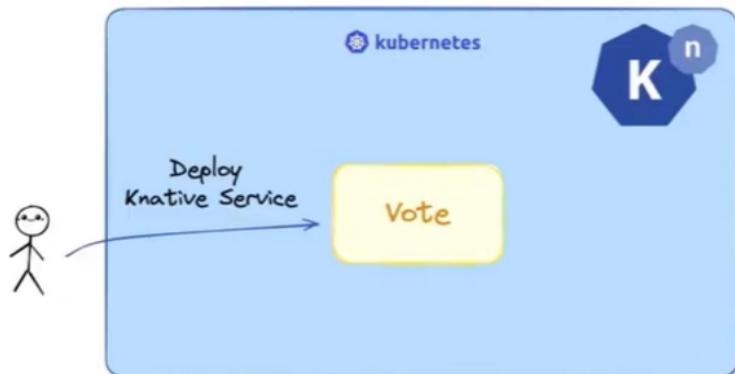
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

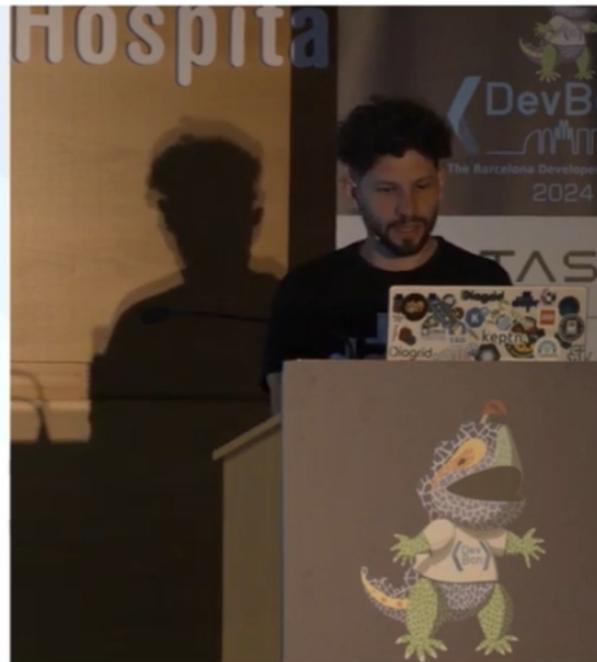


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



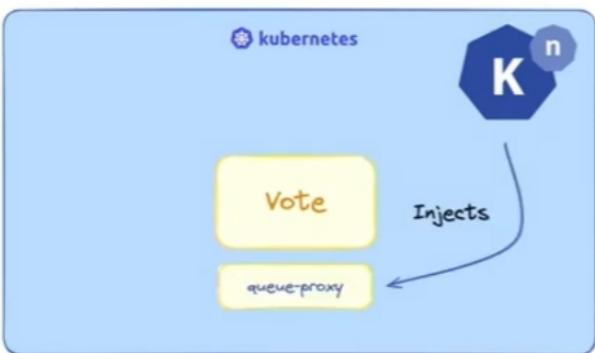
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

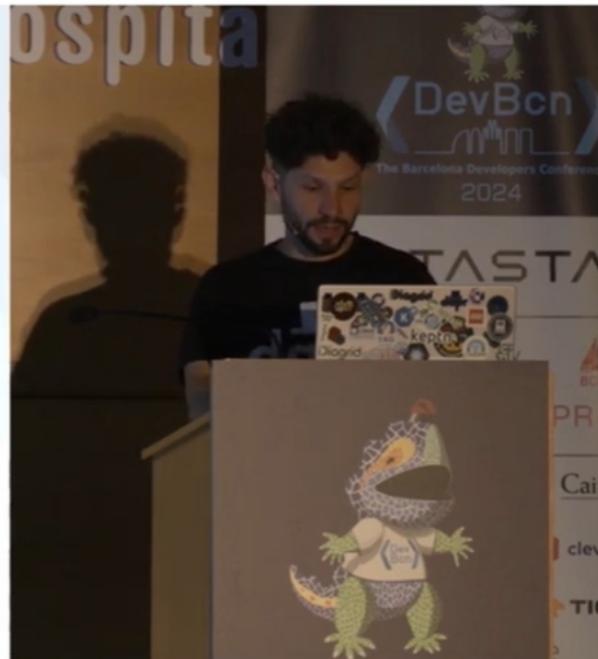


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



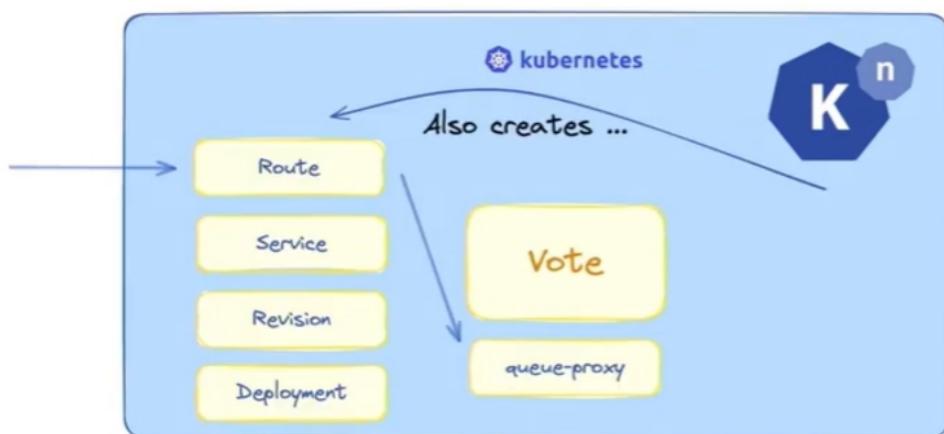
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

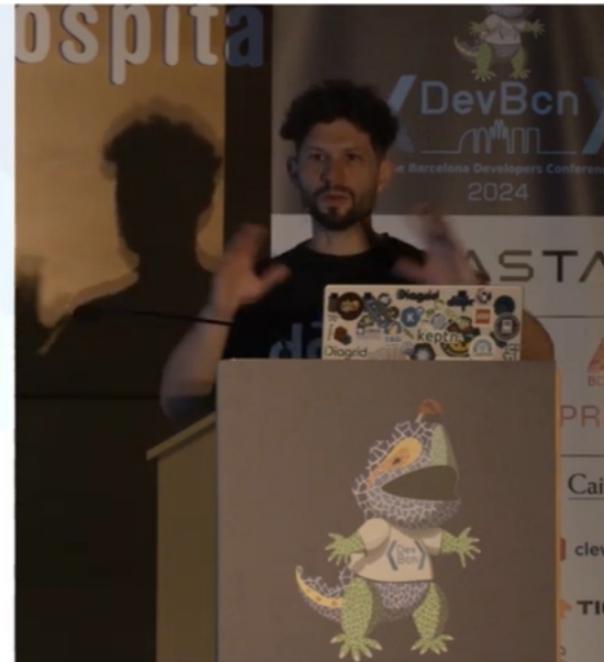


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



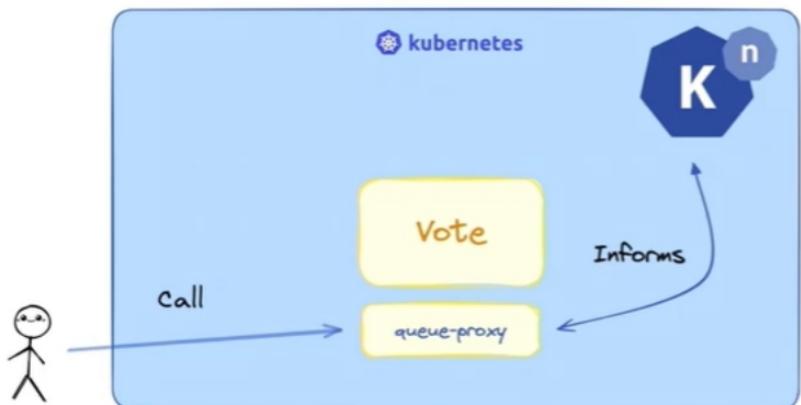
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

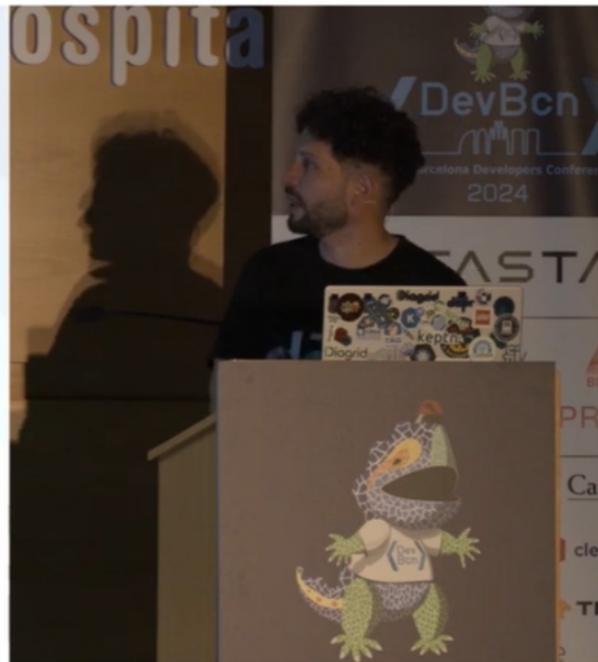


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



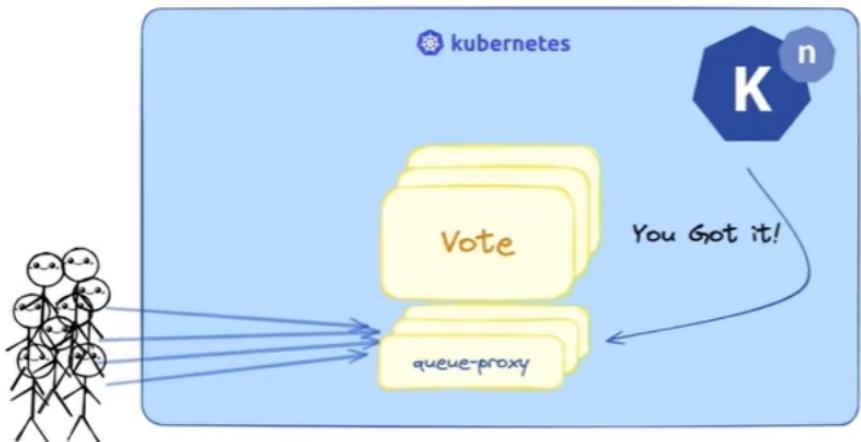
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

How does it works?



@salaboy



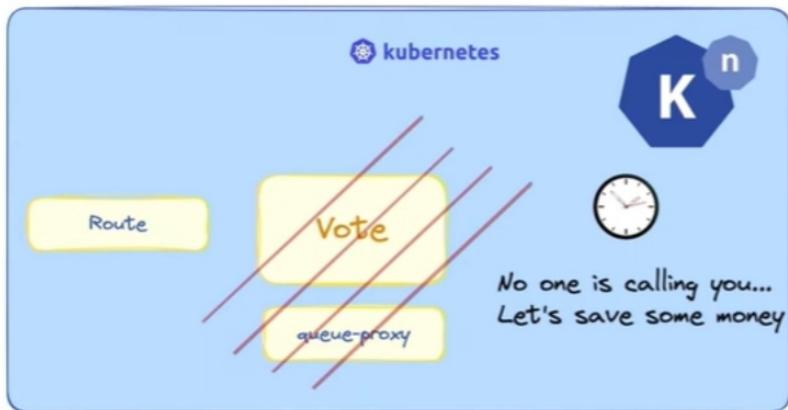
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

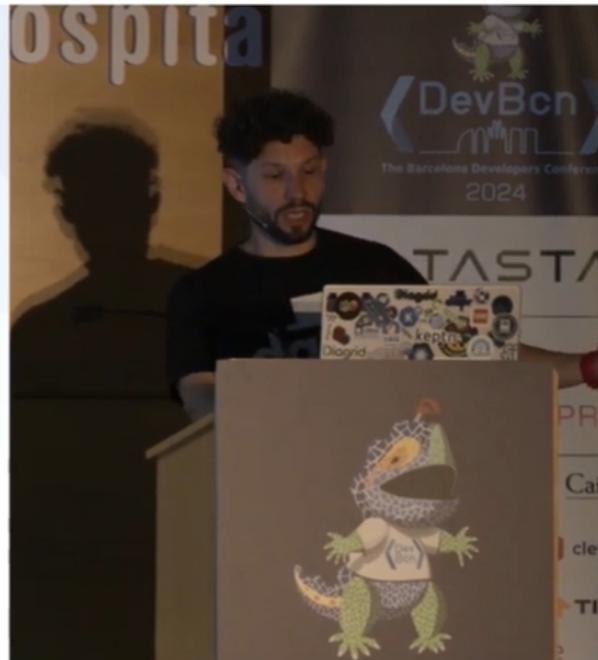


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

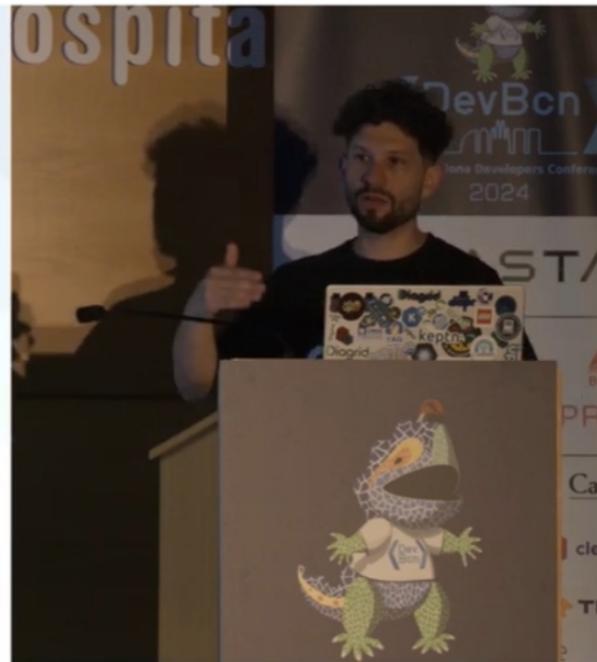


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

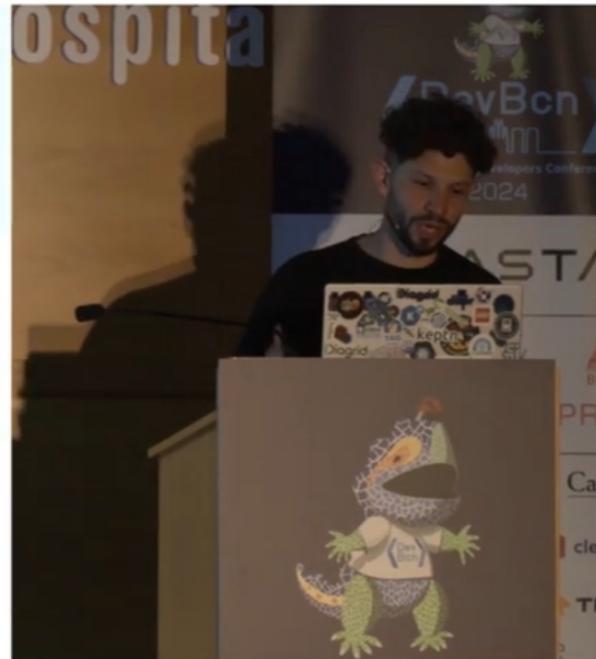


The Barcelona Developers' Conference 2024

Knative

<https://knative.dev>

- From Container to URL
- Simplified interface (Knative Service)
- Autoscaling simplified and Traffic Splitting
- But.. what about:
 - Application concerns such as observability, resiliency and access to infrastructure?



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

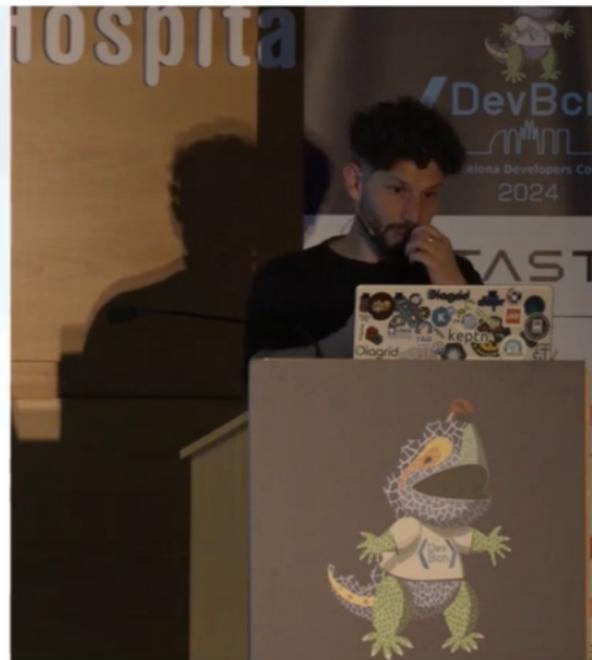


The Barcelona Developers' Conference 2024

Dapr - Distributed Application Runtime



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

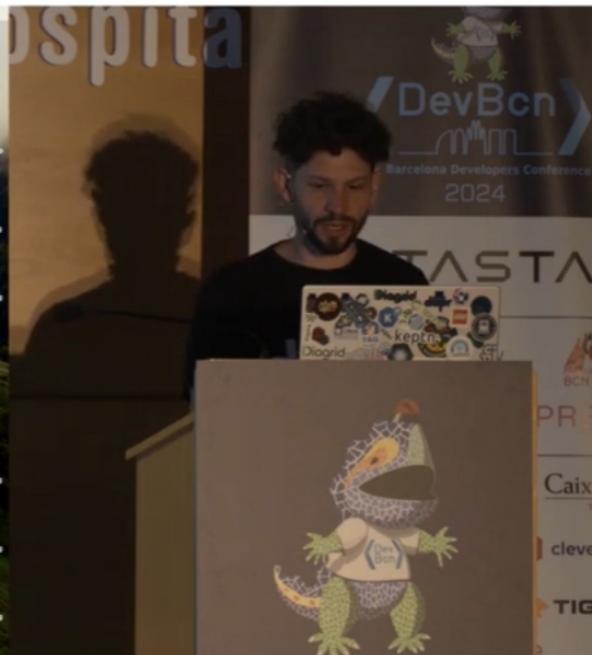


The Barcelona Developers' Conference 2024

A screenshot of a Mac OS X desktop. On the left, a terminal window shows command-line output for Kubernetes services:

```
salaboy@salaboyMBP kcd-spain-2024 % k get ksvc
NAME      URL
echo      http://echo.default.34.32.243.142.sslip.io
result    http://result.default.34.32.243.142.sslip.io
vote      http://vote.default.34.32.243.142.sslip.io
salaboy@salaboyMBP kcd-spain-2024 %
```

On the right, a file browser window shows a folder named "keda-dogs" containing several "Screenshot" files.



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
Kind: Service
Metadata:
  Creation Timestamp: 2024-06-08T10:15:37Z
  Generation: 1
  Resource Version: 5245
  UID: 051b3340-df72-4c75-be3d-ac68d3a8baec
Spec:
  Template:
    Metadata:
      Annotations:
        autoscaling.knative.dev/min-scale: 1
    Creation Timestamp: <nil>
  Spec:
    Container Concurrency: 0
    Containers:
      Env:
        Name: DAPR_HTTP_ENDPOINT
        Value: http://vote-dapr.default.svc.cluster.local:3500
        Name: DAPR_GRPC_ENDPOINT
        Value: http://vote-dapr:default.svc.cluster.local:50001
        Name: DAPR_STATESTORE_NAME
        Value: votes-statestore
        Name: DAPR_PUBSUB_NAME
        Value: pubsub-rabbitmq
        Name: DAPR_TOPIC_NAME
        Value: newVote
        Name: VOTE_PUBSUB
        Value: pubsub-rabbitmq
    Networking:
      Marketplace
      Release Notes
      a
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

Microservices building blocks for cloud and edge

Service-to-service invocation	Publish and subscribe	Workflows	State management	Bindings (input/output)	Actors	Secrets	Configuration	Distributed Lock	Cryptography
Perform direct, secure, service-to-service method calls	Secure, scalable messaging between services	Automate and orchestrate tasks within your application	Create long running, stateless and stateful services	Input and output bindings to external resources, including databases and queues	Encapsulate code and data in reusable actor objects as a common microservices design pattern	Securely access secrets from your application	Access application configuration and be notified of updates	Mutually exclusive access to shared resources	Perform operations for encrypting and decrypting data

Dapr provides distributed system building blocks for you to build microservice applications in a standard way and to deploy to any environment.

Each of these building block APIs is independent, meaning that you can use any number of them in your application.

Thu 13 Jun 11:37

ospita

Homepage GitHub Blog Discord Community v1.13 (latest) English

dapi

DATAST

Dapr Dev Dev Design

@dev_bcn #DEVBCN24



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with Knative, Crossplane, Dapr & KEDA

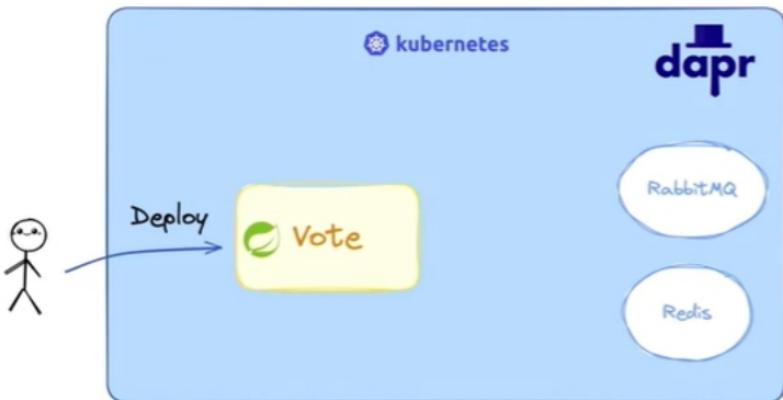


@dev_bcn
#DEVBCN24

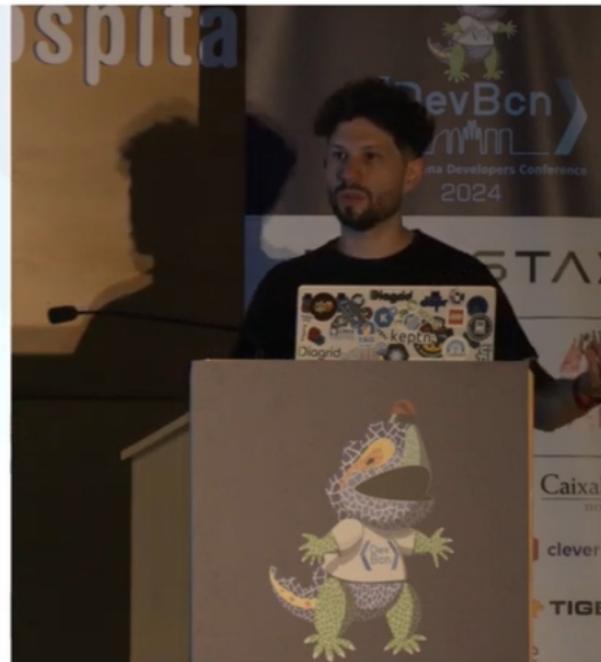


The Barcelona Developers' Conference 2024

How does it works?



@salaboy



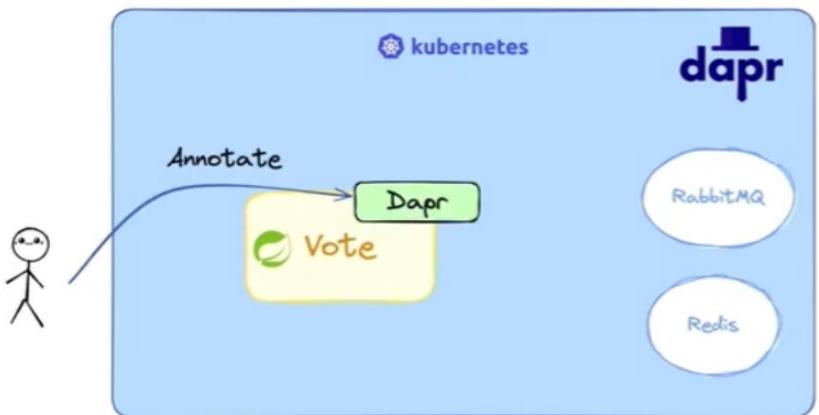
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

How does it works?



@salaboy



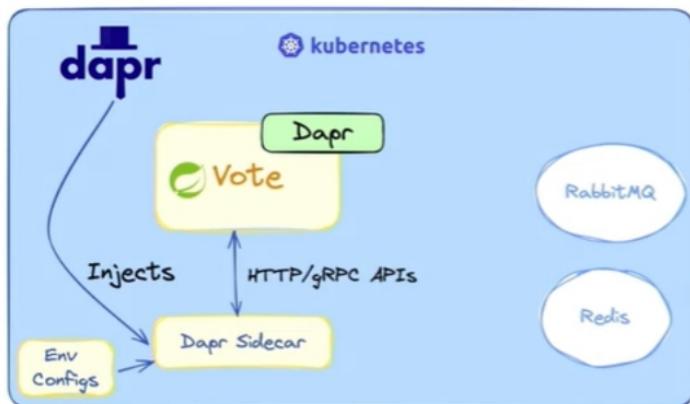
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

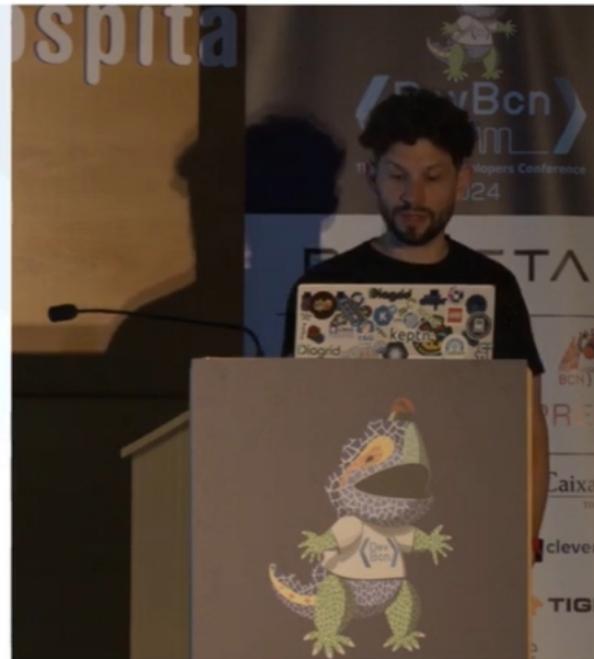


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



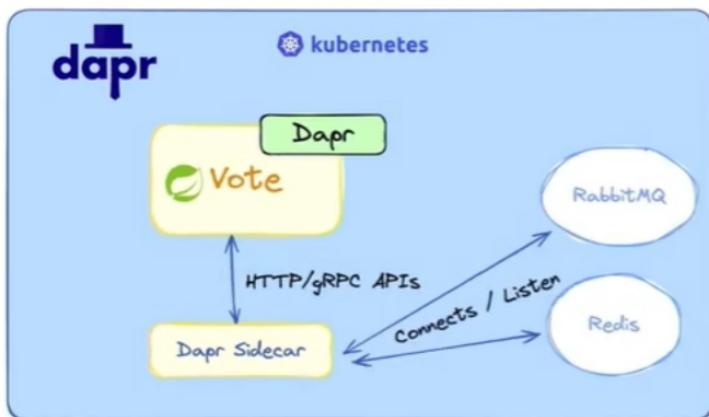
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

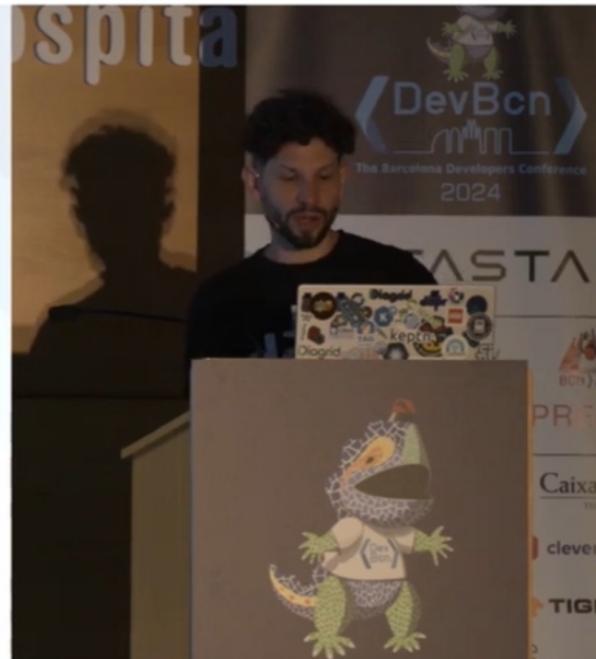


@dev_bcn
#DEVBCN24

How does it works?



@salaboy



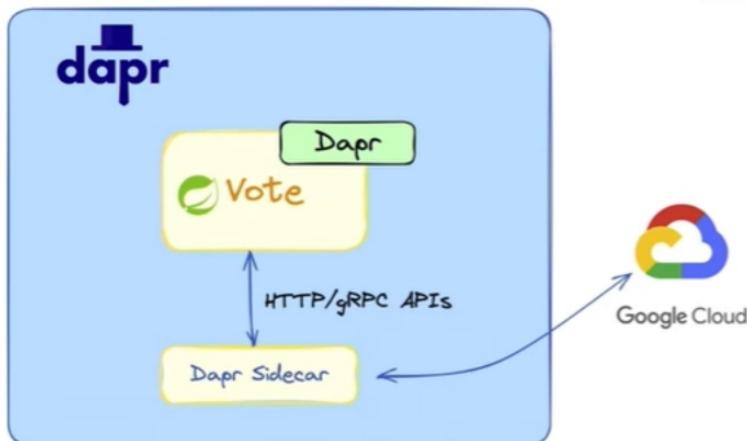
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

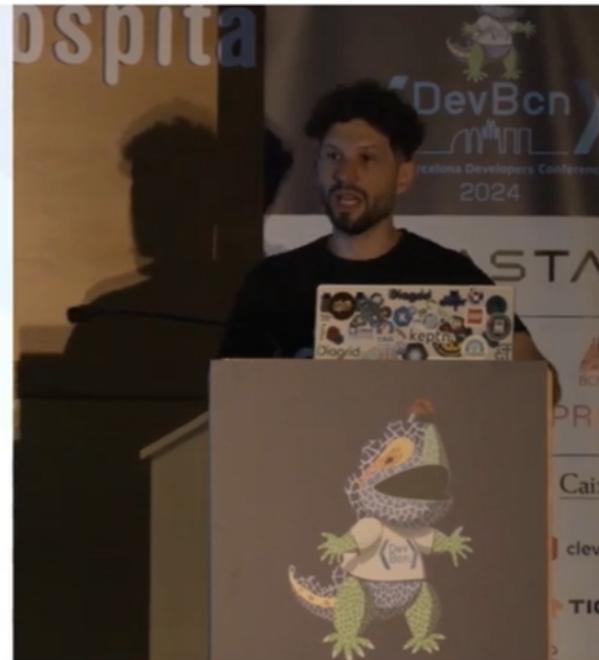


@dev_bcn
#DEVBCN24

But if you can do that.. you can also do this



@salaboy



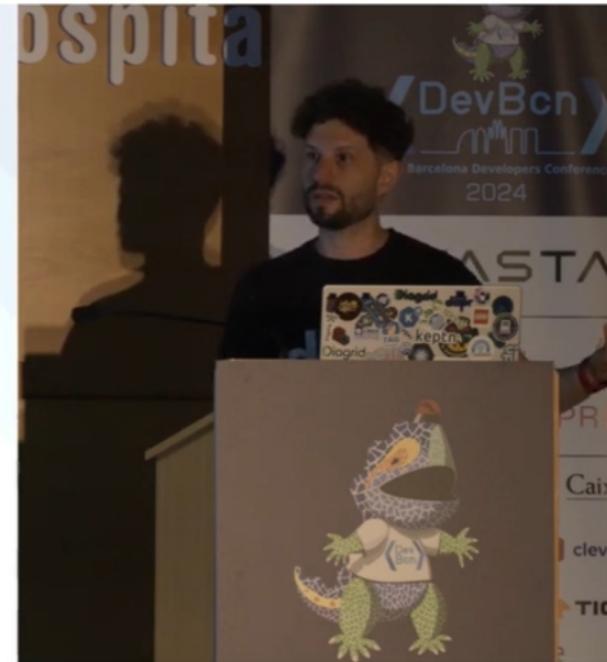
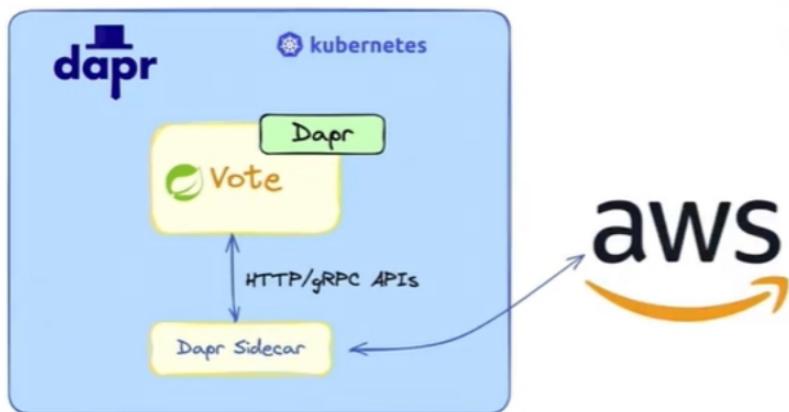
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

But if you can do that.. you can also do this



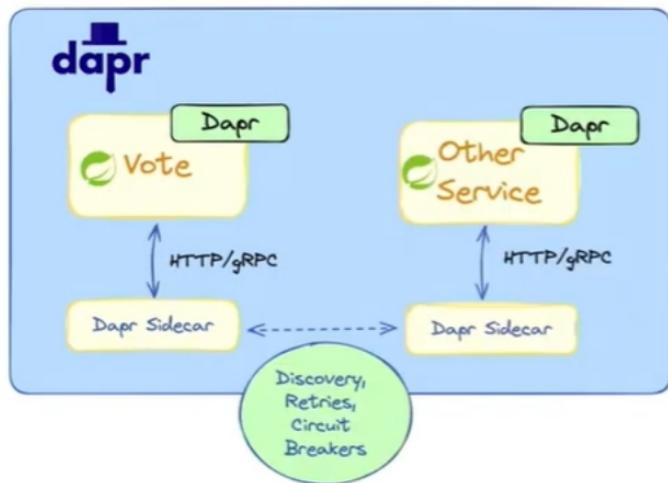
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

How does it works?



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

Dapr recap

<https://dapr.io>

- Application concerns via APIs for developers to use
- Separate infrastructure from application code, supporting different providers
- Help platform teams to provide unified APIs across environments
- But what about provisioning and configuring infrastructure across environments?



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
Terminal Shell Edit View Window Help
Thu 13 Jun 11:44
salaboy@salaboyMBP kcd-spain-2024 % k get component
NAME          AGE
pubsub-rabbitmq 4d23h
results-statestore 4d23h
votes-statestore 4d23h
salaboy@salaboyMBP kcd-spain-2024 % k get pod
NAME           READY   STATUS    RESTARTS   AGE
db-6d9f87bb9b-96rz2  1/1     Running   0          3d2h
echo-00001-deployment-6ff47bdf9d-fg7kn  2/2     Running   0          3d2h
echo-dapr-shared-chart-684bcb5cf7-jn9ld  1/1     Running   4 (3d2h ago) 3d2h
rabbitmq-server-0  1/1     Running   0          3d2h
redis-877bd7544-vz67c  1/1     Running   0          4d23h
result-00001-deployment-57d859654-qsqjr  2/2     Running   0          4d23h
result-dapr-shared-chart-67dbb8ddb4-vvc9c  1/1     Running   4 (3d2h ago) 3d2h
vote-00001-deployment-6b4899d844-szjdl  2/2     Running   0          4d23h
vote-dapr-shared-chart-749dfc74c6-tthf9  1/1     Running   4 (3d2h ago) 3d2h
worker-6db7674f94-kvb8f  1/1     Running   0          3d2h
worker-dapr-shared-chart-55b9fb7584-p8qc8  1/1     Running   0          3d15h
salaboy@salaboyMBP kcd-spain-2024 %
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



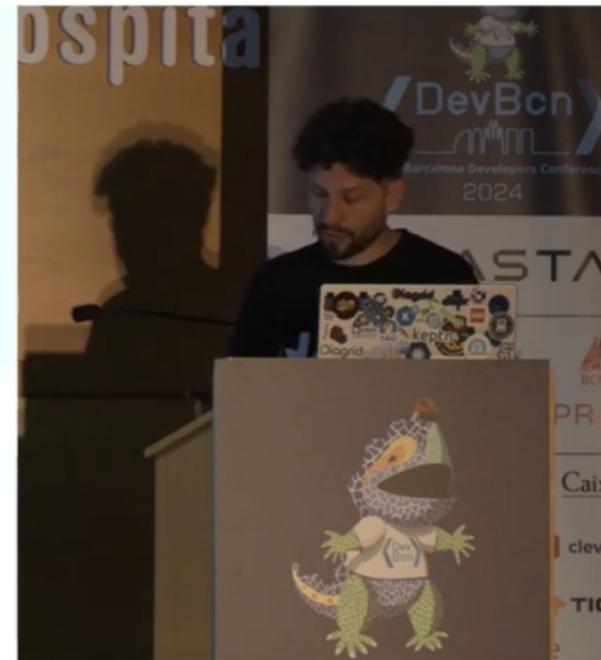
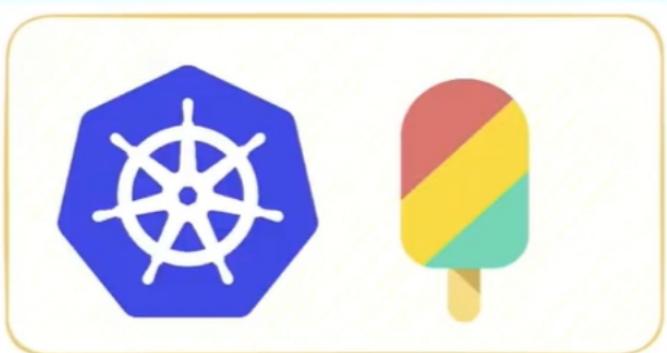
@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

Crossplane

<https://crossplane.io>



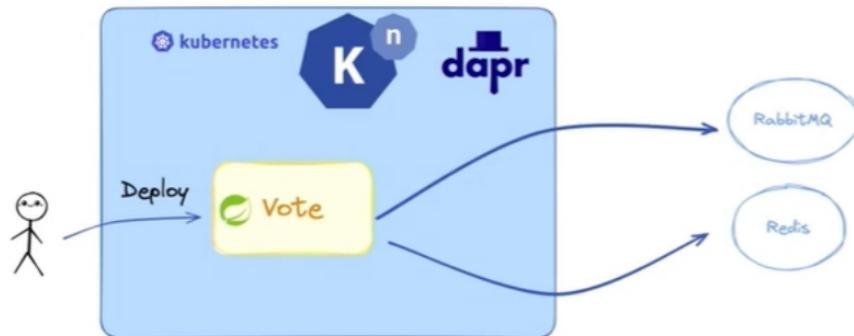
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

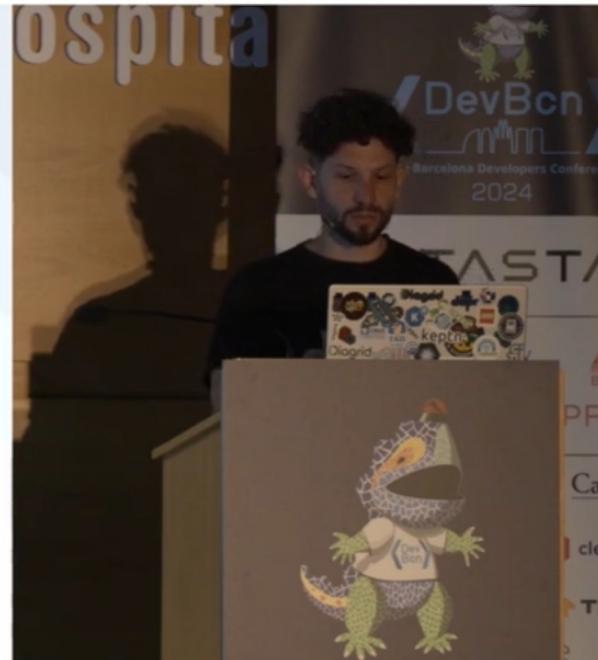


@dev_bcn
#DEVBCN24

So far we had...



@salaboy



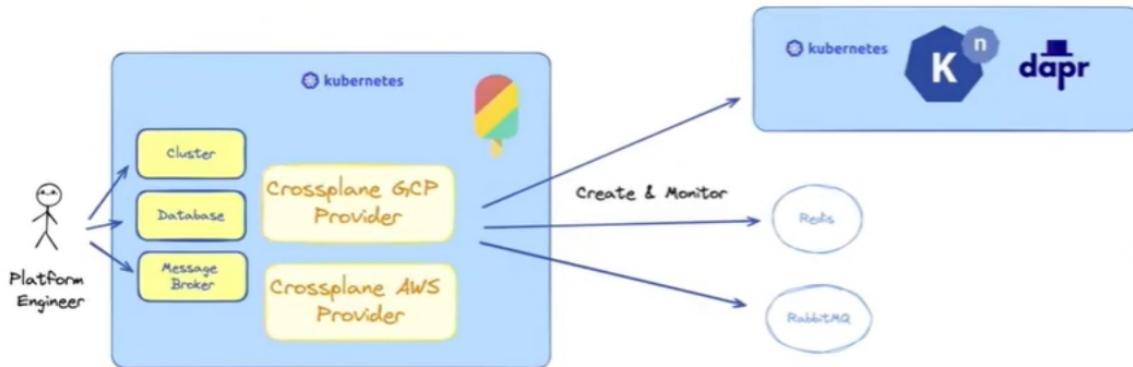
Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

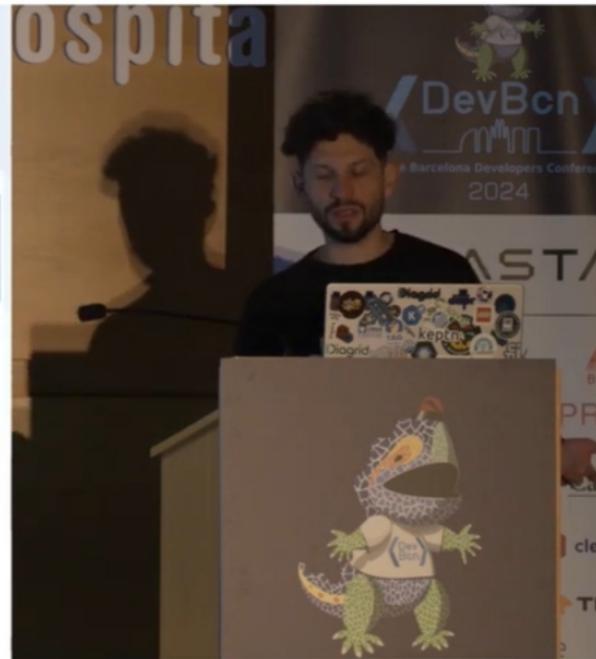


@dev_bcn
#DEVBCN24

But who creates these environments?



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

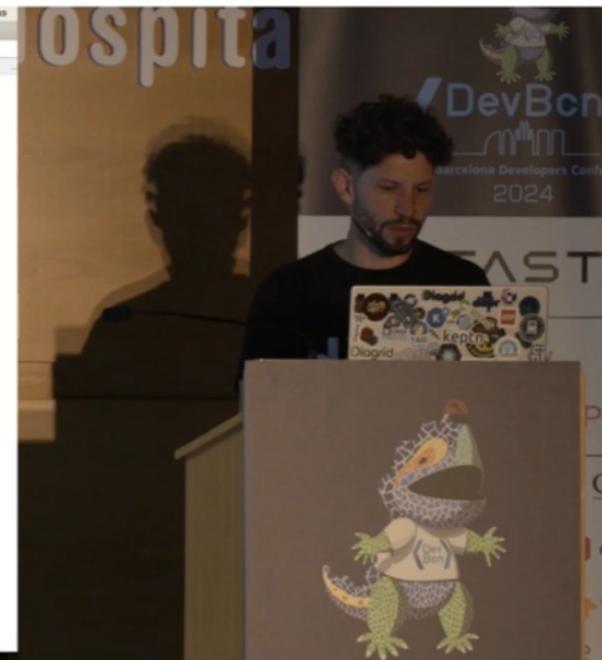


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
salaboy@salaboyMBP kcd-spain-2024 % k get ns
NAME           STATUS  AGE
crossplane-system  Active  44h
dapr-system     Active  4d23h
default         Active  4d23h
gke-managed-system  Active  4d23h
gmp-public      Active  4d23h
gmp-system      Active  4d23h
knative-serving Active  4d23h
kourier-system   Active  4d23h
kube-node-lease  Active  4d23h
kube-public      Active  4d23h
kube-system      Active  4d23h
rabbitmq-system Active  4d23h
salaboy@salaboyMBP kcd-spain-2024 %
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

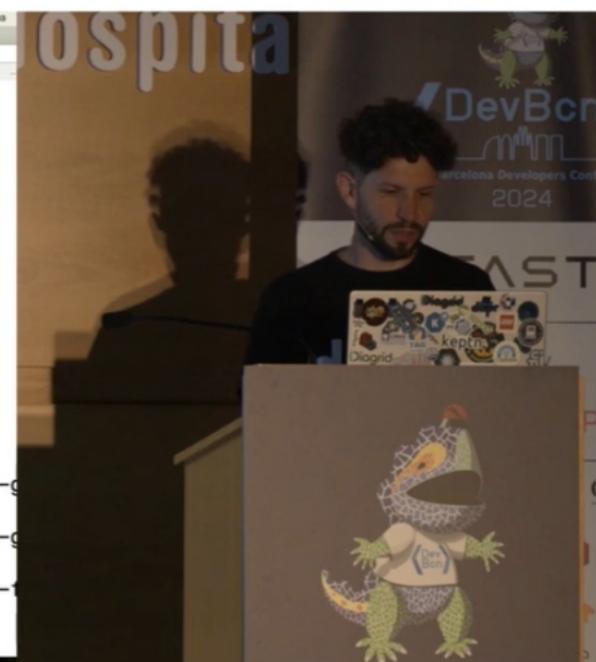


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
Terminal Shell Edit View Window Help
kcd-spain-2024 ~ zsh ~ 86x23
crossplane-system Active 44h
dapr-system Active 4d23h
default Active 4d23h
gke-managed-system Active 4d23h
gmp-public Active 4d23h
gmp-system Active 4d23h
knative-serving Active 4d23h
kourier-system Active 4d23h
kube-node-lease Active 4d23h
kube-public Active 4d23h
kube-system Active 4d23h
rabbitmq-system Active 4d23h
salaboy@salaboyMBP kcd-spain-2024 % k get providers
NAME INSTALLED HEALTHY PACKAGE
provider-gcp-sql AGE True True xpkg.upbound.io/upbound/provider-gcp-sql:v1.2.0
cp-sql:v1.2.0 41h
provider-gcp-storage cp-storage:v0.41.0 AGE True True xpkg.upbound.io/upbound/provider-gcp-storage:v0.41.0
upbound-provider-family-gcp family-gcp:v1.2.0 AGE True True xpkg.upbound.io/upbound/provider-gcp:v1.2.0
salaboy@salaboyMBP kcd-spain-2024 %
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

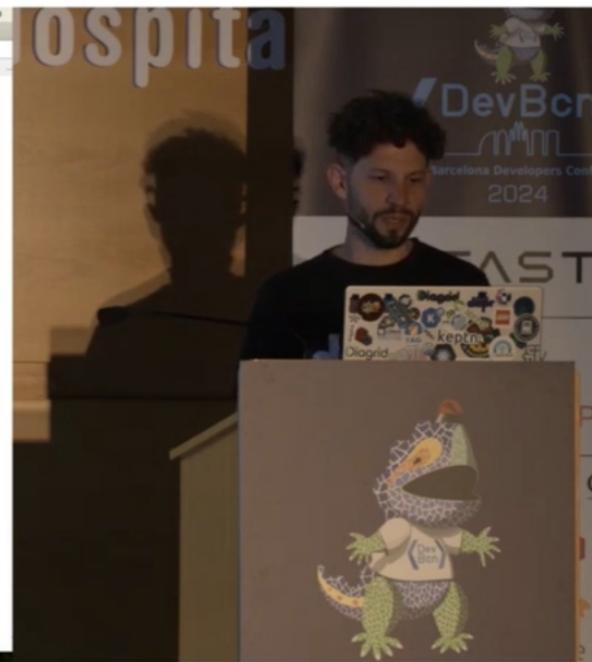


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
salaboy@salaboyMBP kcd-spain-2024 % cat crossplane-gcp/db.yaml
apiVersion: sql.gcp.upbound.io/v1beta1
kind: DatabaseInstance
metadata:
  generateName: crossplane-db-
  labels:
    docs.crossplane.io/example: provider-gcp
spec:
  forProvider:
    databaseVersion: POSTGRES_15
    region: us-east1
    rootPasswordSecretRef:
      namespace: default
      key: password
      name: db-password
  settings:
    - availabilityType: REGIONAL
      tier: db-custom-1-3840
      backupConfiguration:
        - enabled: true
          binaryLogEnabled: false
      ipConfiguration:
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

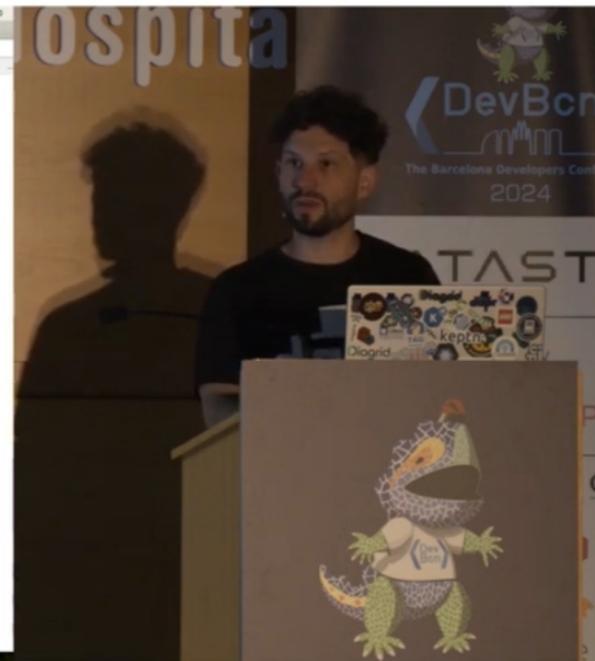


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

```
Terminal Shell View Window Help
Thu 13 Jun 11:50
-: kcd-spain-2024.k8s
kcd-spain-2024 -- > sh - 86x22
name: default
salaboy@salaboyMBP kcd-spain-2024 % k create -f crossplane-gcp/db.yaml
databaseinstance.sql.gcp.upbound.io/crossplane-db-26hbg created
salaboy@salaboyMBP kcd-spain-2024 %
```



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

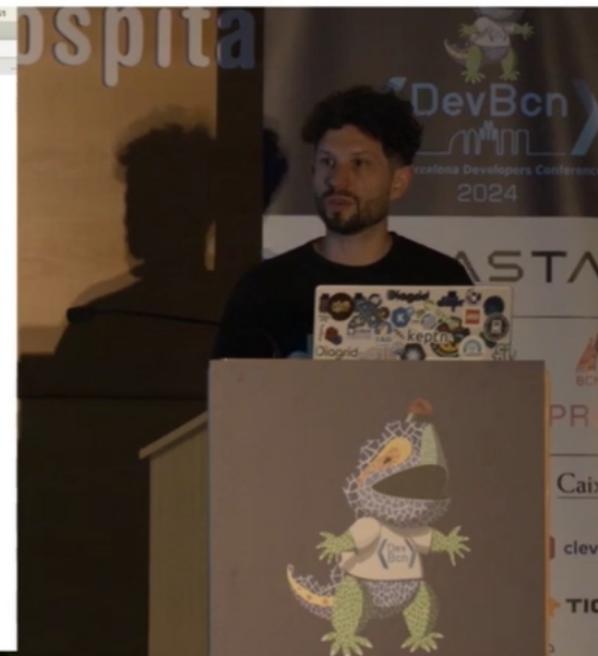


@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

The screenshot shows the Google Cloud Platform Cloud SQL Overview page. The instance 'crossplane-db-26hb' is listed under PRIMARY INSTANCE. The status bar indicates 'Instance is being created. This may take a few minutes. While this operation is running, you may continue to view information about the instance.' A chart titled 'CPU utilization' shows no data available for the selected time frame. Below the chart, there's a section for connecting to the instance with a public IP address of 34.74.285.238 and a connection name of 'strong-harbor-338418:us-east1:crossplane-db-26hb'. Configuration details include 1 vCPU, 3.75 GB Memory, and 10 GB SSD storage. Enterprise edition is listed as UPGRADE.

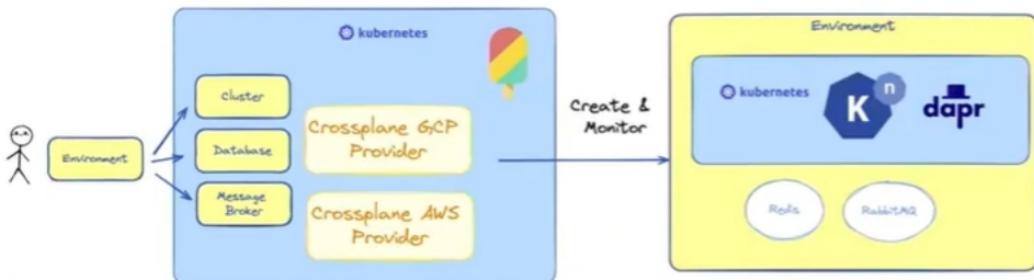


Mauricio 'Salaboy' Salatino
Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

Compositions



@salaboy



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

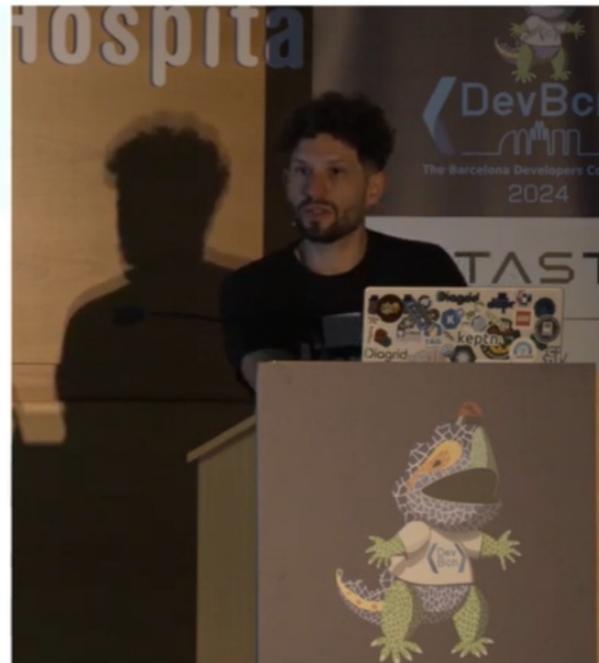


@dev_bcn
#DEVBCN24

Crossplane recap

<https://crossplane.io>

- Manage cloud resources declaratively as Kubernetes resources
- Compose higher-level abstractions to simplify usage and cover domain-specific scenarios
- Distribute and share abstractions across teams



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24



If you are in this journey...

Learn about the companies behind these projects

- Knative Serving
 - Is being shipped as part of Red Hat Openshift and VMware Tanzu
 - Google Cloud Run expose the Knative Serving interface



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24

If you are in this journey...

Learn about the companies behind these projects

- Dapr (<https://diagrid.io>)
 - Run as a managed service on Azure Container Apps, this means that you have the Dapr APIs available for your containers
 - Diagrid offers two products
 - Diagrid's Conductor to manage and operate Dapr at scale on your Kubernetes clusters
 - Diagrid's Catalyst managed service that you can use from any Cloud Provider, including your on-prem setups.



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA

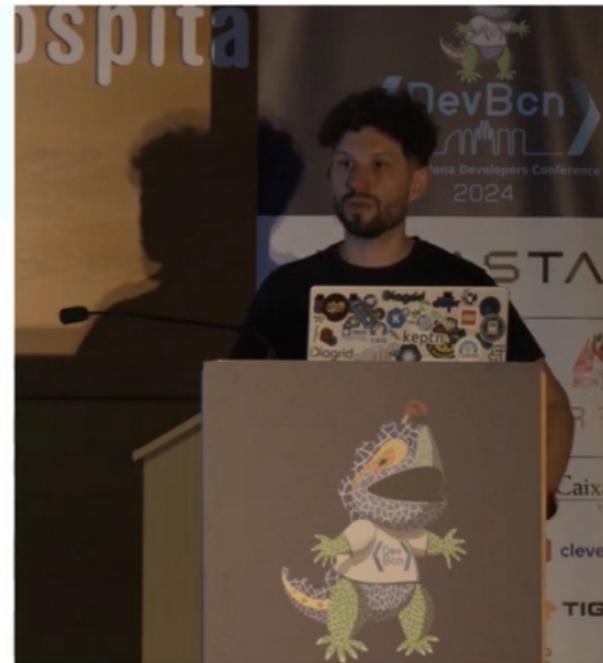


@dev_bcn
#DEVBCN24

If you are in this journey...

Learn about the companies behind these projects

- Crossplane (<https://www.upbound.io/>)
 - Upbound runs a managed platform, so you don't need to install and manage Crossplane
 - Upbound Cloud can be run on your compute, so you have full control on your Crossplane instances



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



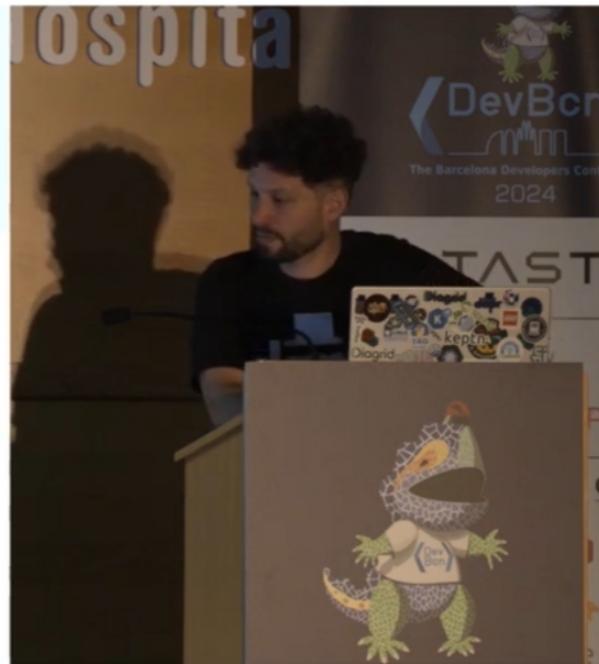
@dev_bcn
#DEVBCN24



The Barcelona Developers' Conference 2024

Sum up

- Building Platforms is hard
- Focus on having the right abstractions
- Prioritise enabling teams to do their work
- Don't do it alone! Talk to other companies



Mauricio 'Salaboy' Salatino

Unleashing the Power of Serverless on Kubernetes with
Knative, Crossplane, Dapr & KEDA



@dev_bcn
#DEVBCN24