

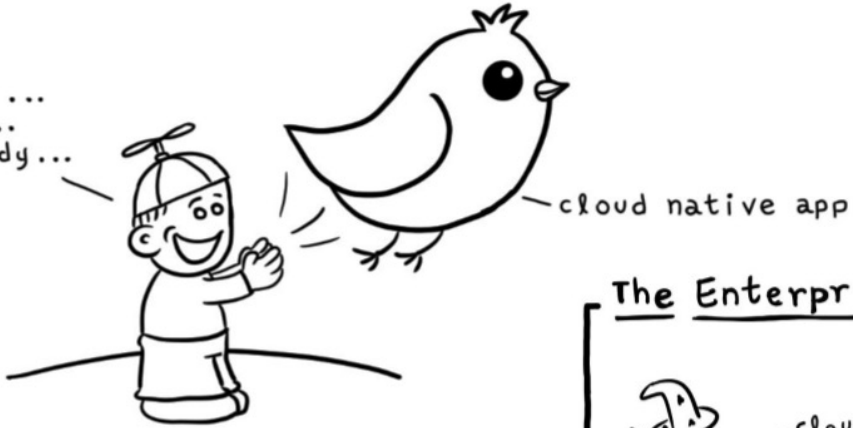
# Containers and Cloud Native

Technical workshop THREE  
Service Mesh  
Starting at 10am CST

WELCOME

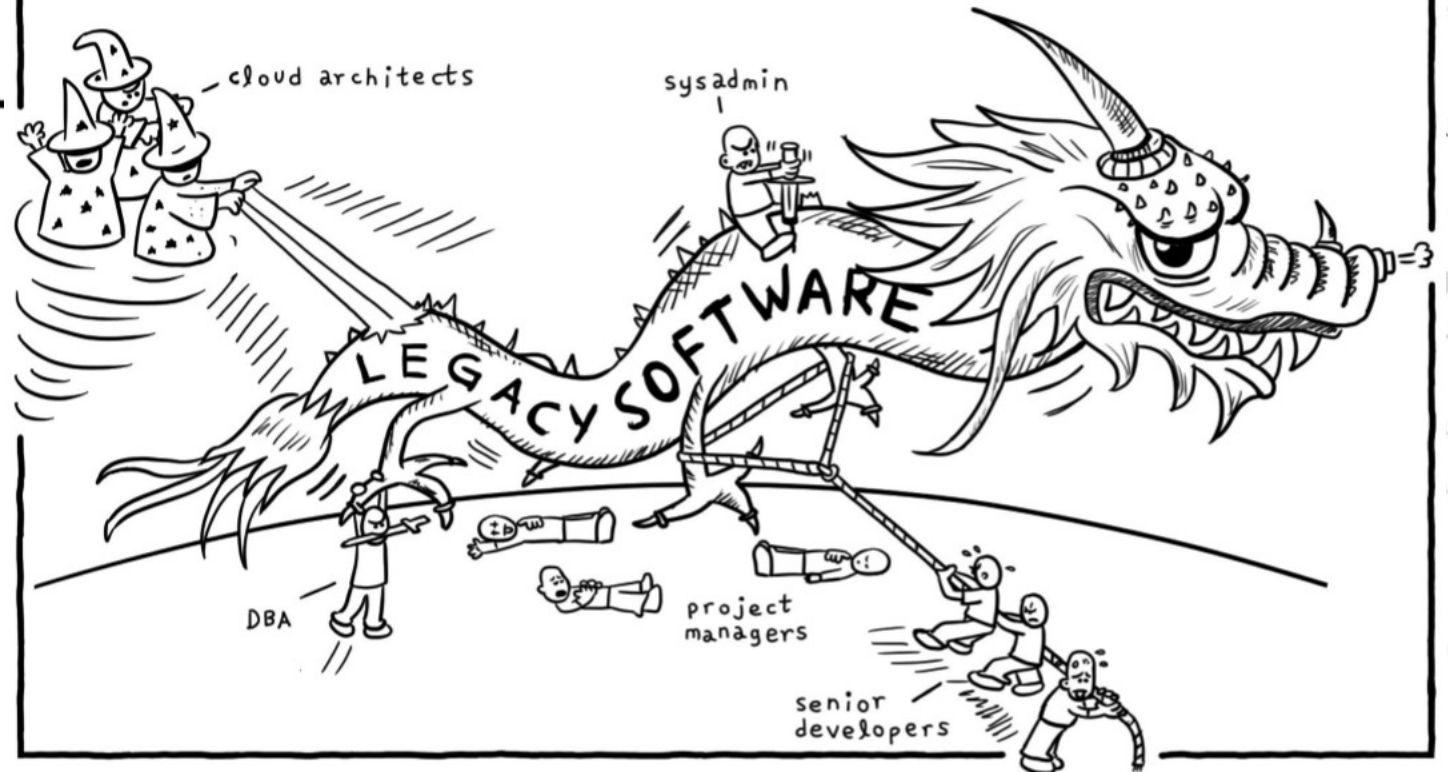
# Startups Journey to Cloud

rails scaffold...  
heroku deploy...  
fly little buddy...



Daniel Stori {turnoff.us}  
Thanks to Michael Tharrington

# The Enterprise Journey to Cloud



# WORKSHOP AGENDA

- 2pm start. 180mins Duration. Recorded event.



|       |    |                                     |
|-------|----|-------------------------------------|
| 10:00 | 01 | Company Introduction                |
| 10:15 | 02 | Introduction to Cloud Native series |
| 10:30 | 03 | Commence Workshop THREE             |
| 12:45 | 04 | Conclusions and Wrap-up             |
| 1:00  | 05 | Close                               |



Who Is Crossvale?

# WHAT, WHERE, HOW AND WHEN

- Offices in UK, Spain and US



## How we Engage

- Discovery calls
- Assessments
- PoC
- SoW

Contact:

**Mike Kohorst**

**[mkohorst@Crossvale.com](mailto:mkohorst@Crossvale.com)**

Crossvale is your fastest  
route to your business  
success



## Who Is Crossvale?

Crossvale supports customers in rethinking **Digital Transformation**.

Our team provides expertise in every area to meet the needs of your **Modernization** initiative

We are **Hybrid** heavy



DAY ZERO

DAY ONE

DAY TWO

## Engage More – Instruct Less

Learn

What's your big vision

Understand

Where are you today

Assess

What are your capability gaps

Design

Modernization Reference  
Architecture

Implement

Pick your implementation path

Maintain

We support what you build

Grow

Partner for success



CROSSVALE™

## Automation

# Rethink Repetitive Tasks

**Automation Enables Strategic Thinking at the Speed of Business**

Low-Level repetitive Business and IT tasks are cost organizations large amounts of shareholder value!

## Hybrid Cloud

# Rethink Where IT is Running

**Hybrid Cloud Enables IT to Run at the Speed of Business**

A lack of a modern hybrid cloud strategy limits organization's ability to think innovatively, which enables disruptors to take market share.

## SDLC Modernization

# Rethink Development Processes

**Modern SDLC Enables IT to Develop at the Speed of Business**

Legacy SDLC processes cost organizations known and unknown revenue opportunities. When IT is not able to deliver at the speed of Business



# RED HAT PARTNER OF THE YEAR



- ▶ 2018 – Red Hat Application Platform Partner of the Year.
- ▶ 2019 – Red Hat Application Platform Partner of the Year.
- ▶ 2020 – Red Hat Leading Edge Partner of the Year.
- ▶ 2021 – Red Hat Customer solution Partner of the Year
- ▶ 2021 – Crossvale EMEA – Red Hat Container Platform Specialist



# EVENTS

- 3<sup>rd</sup> December — 01 — Quarkus: Introduction and Key Benefits
- 14<sup>th</sup> December — 02 — PART 4 - Scale to Zero: Event-driven Architecture with Serverless

[crossvale.com/events](https://crossvale.com/events)



# CONTAINER & CLOUD NATIVE ROADSHOW

DEBUGGING, MONITORING AND CONTINUOUS DELIVERY



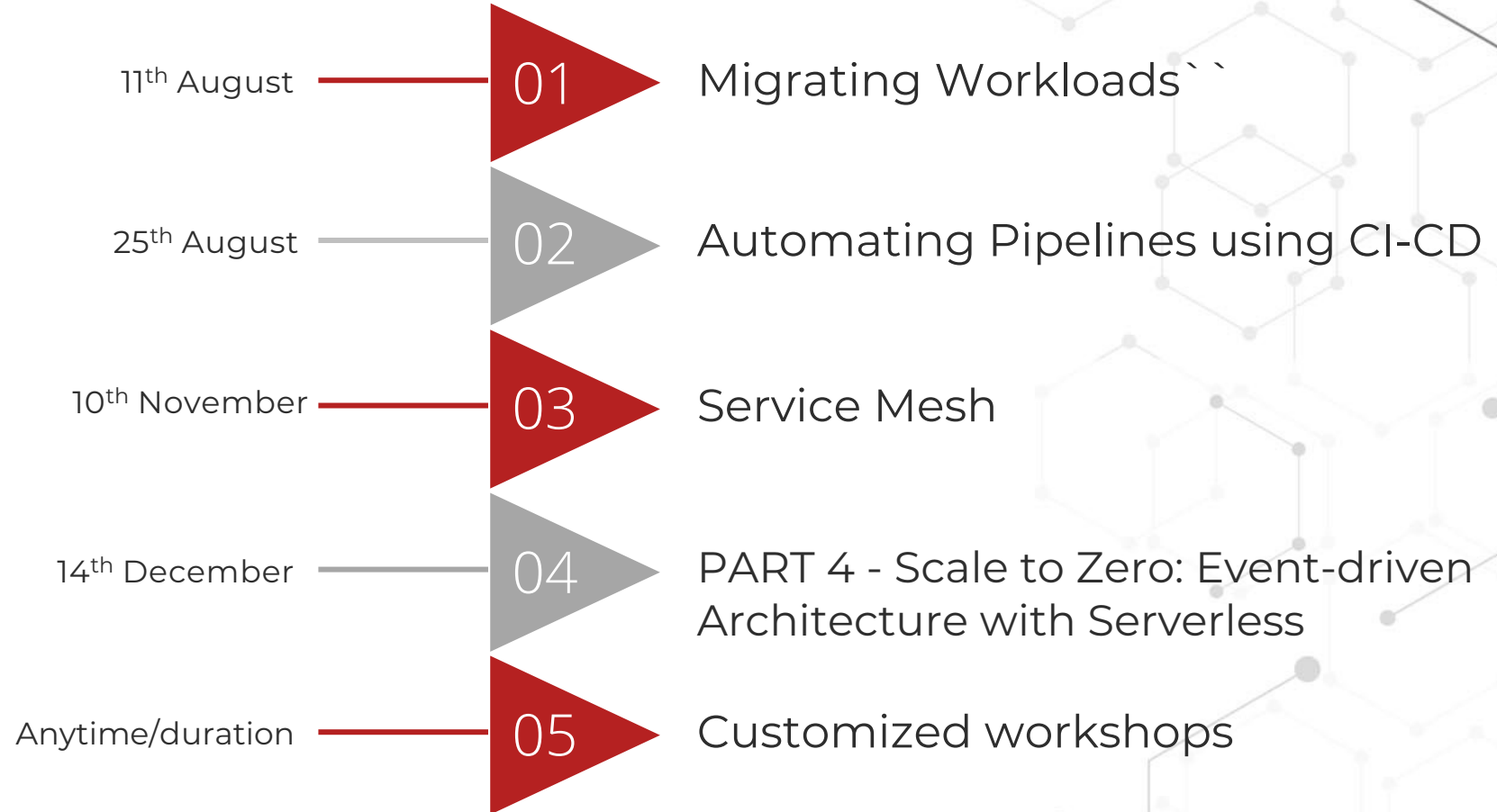
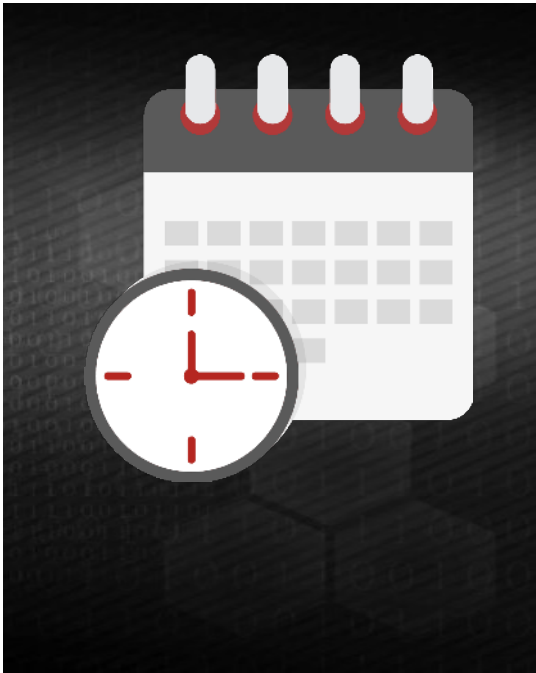
August 25, 2021 10:00 AM – 1:00 PM  
(GMT-05:00) Central Time (US & Canada)

**2<sup>ND</sup> WORKSHOP**  
in this  
**OPENSIFT SERIES**  
presented by  
**CROSSVALE**



# WORKSHOP SERIES

- 10am start. 180mins Duration. Recorded event.



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# A NEW INNOVATION MODEL IS REQUIRED TO KEEP PACE WITH BUSINESS CHANGE

## Cloud Native Development

Applications adopting the principles of DevSecOps CI/CD practices to create (Micro)Services packaged as Containers orchestrated by Platforms running on top of Cloud infrastructure

DevOps  
[process]

Lean, collaborative and fully automated software delivery lifecycle

(Micro)Services and APIs  
[architecture]

Loosely-coupled, modular apps are easier to build, deploy, update and change.

Containers and orchestration  
[platform]

Write once, run anywhere. High density modular applications with containers. Fault tolerant by design and advance application deployments.

# THE PATH TO CLOUD-NATIVE APPS

## A DIGITAL DARWINISM

RE-ORG TO  
DEVOPS

SELF-SERVICE  
ON-DEMAND  
INFRA

AUTOMATION

CONTINUOUS  
DELIVERY

ADVANCED  
DEPLOYMENT  
TECHNIQUES

MICROSERVICES  
.....  
FAST  
MONOLITH

# RED HAT CLOUD-NATIVE DEV PLATFORM

Our vision is to simplify the creation of cloud-native services and serverless functions with a rich set of components and tools to match the **workloads** of modern cloud native apps.

Automate Kubernetes application operations with DevOps in mind

 Red Hat  
OpenShift 4

Cloud-native middleware applications services and service mesh

RED HAT®  
MIDDLEWARE

Tools and standard processes to increase developer productivity on Kubernetes

RED HAT®  
CODEREADY



# BUILDING NEXT-GEN APPLICATIONS

## OpenShift Service Mesh

Integrated Service Mesh for enhanced security and network segmentation of microservices applications. Combines Istio, Kiali (UI), and Jaeger (Tracing) projects.

## OpenShift Serverless

Integrated serverless, enabling scale-to-zero FaaS services and event sources - built on the Knative framework.

Support for Azure Functions

Integrated with Camel-k for rich set of initial event sources: HTTP, Kafka, AMQP

OPENSIFT  
SERVERLESS

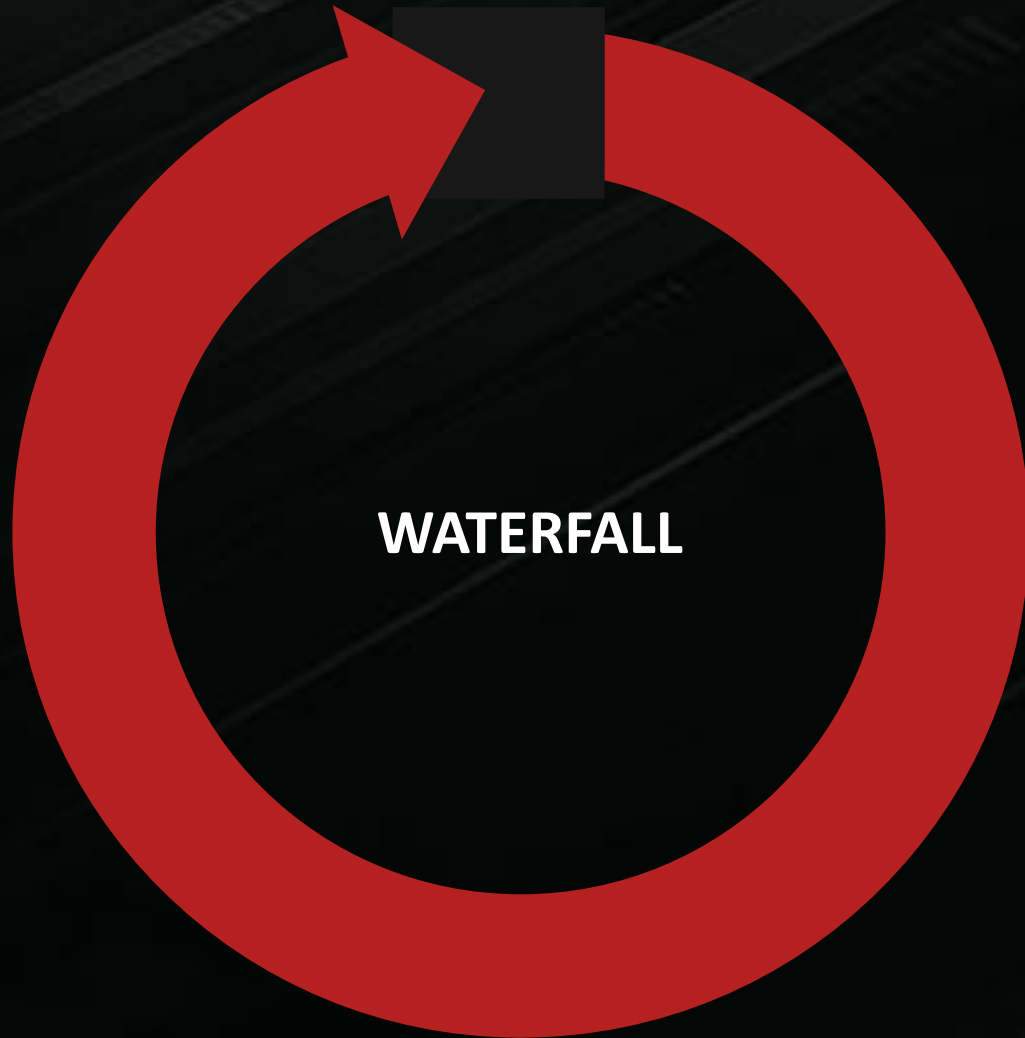


OPENSIFT  
SERVICE MESH



**Red Hat**  
**OpenShift 4**





**WATERFALL**



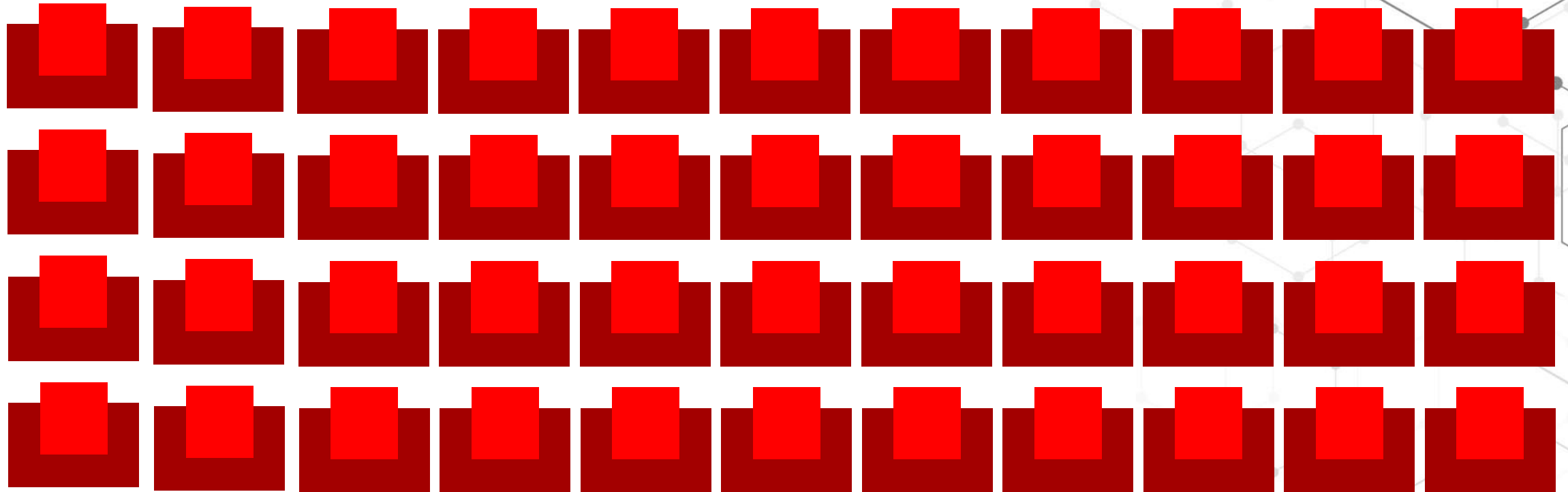
**AGILE,  
INCREMENTAL,  
ITERATIVE**

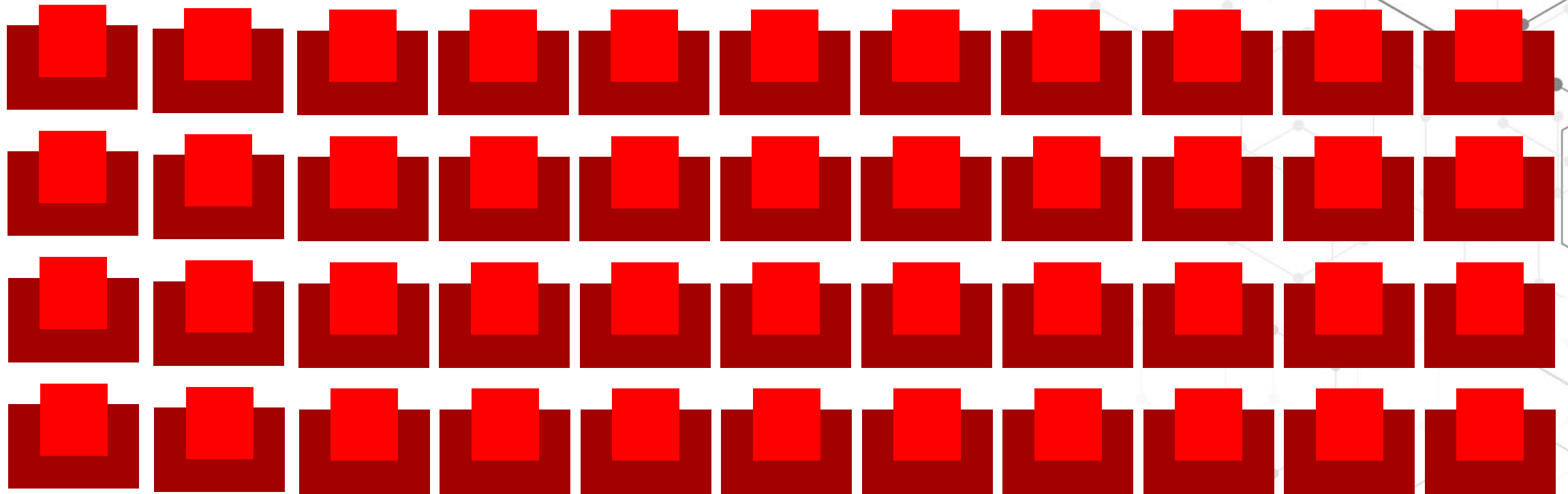
# KEY TO INCREMENTAL: THE CONTAINER

**WORKLOAD**

**CONTAINER**

# DOING CONTAINERS AT SCALE IS HARD





**PLATFORM**

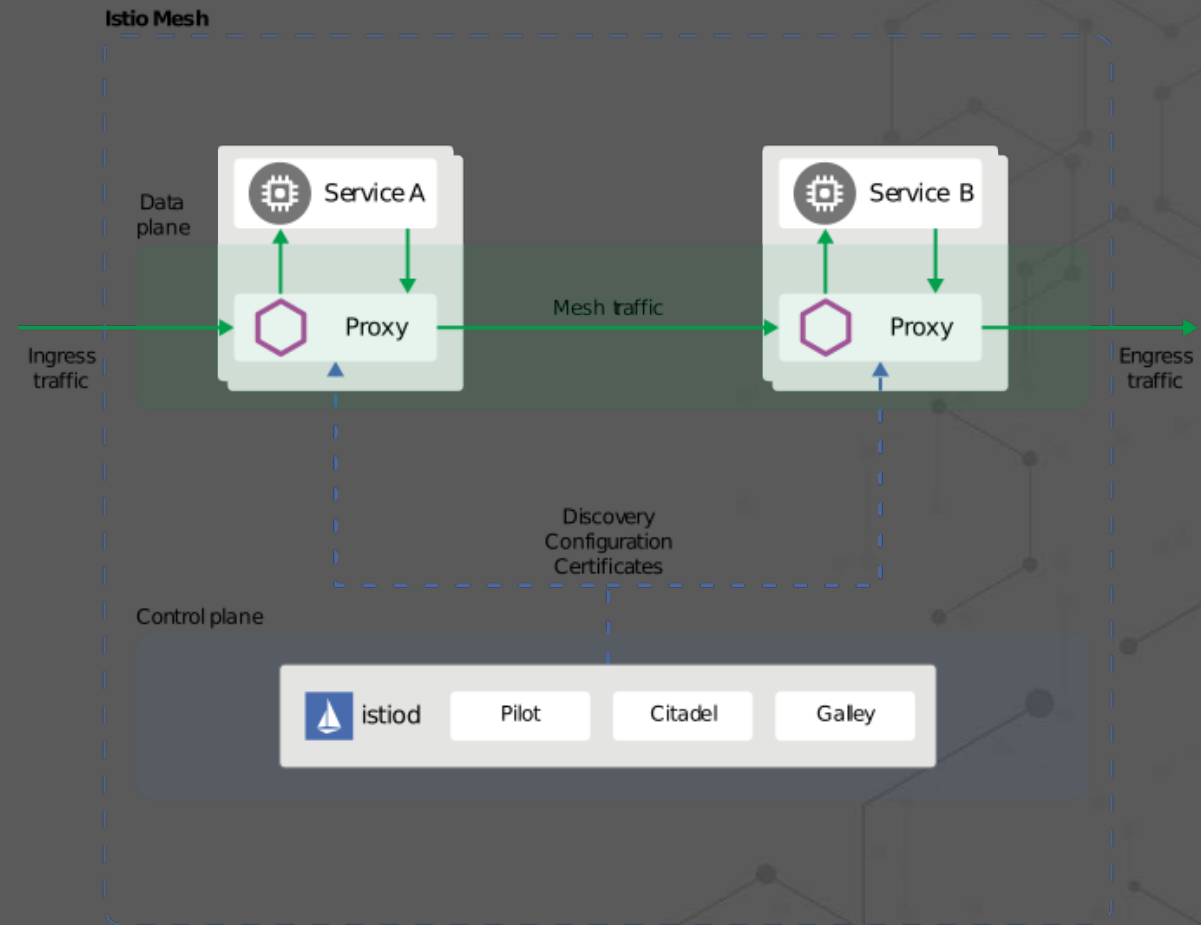
# OPENSIFT TOOLS

- ▶ Opensift provides tools to overcome the Microservice Architecture challenges
  - ▶ Deployment (Jenkins and Tekton Pipelines)
  - ▶ Monitoring (Prometheus and Grafana)
  - ▶ Tracing (Jaeger)
  - ▶ Service Mesh (Istio)

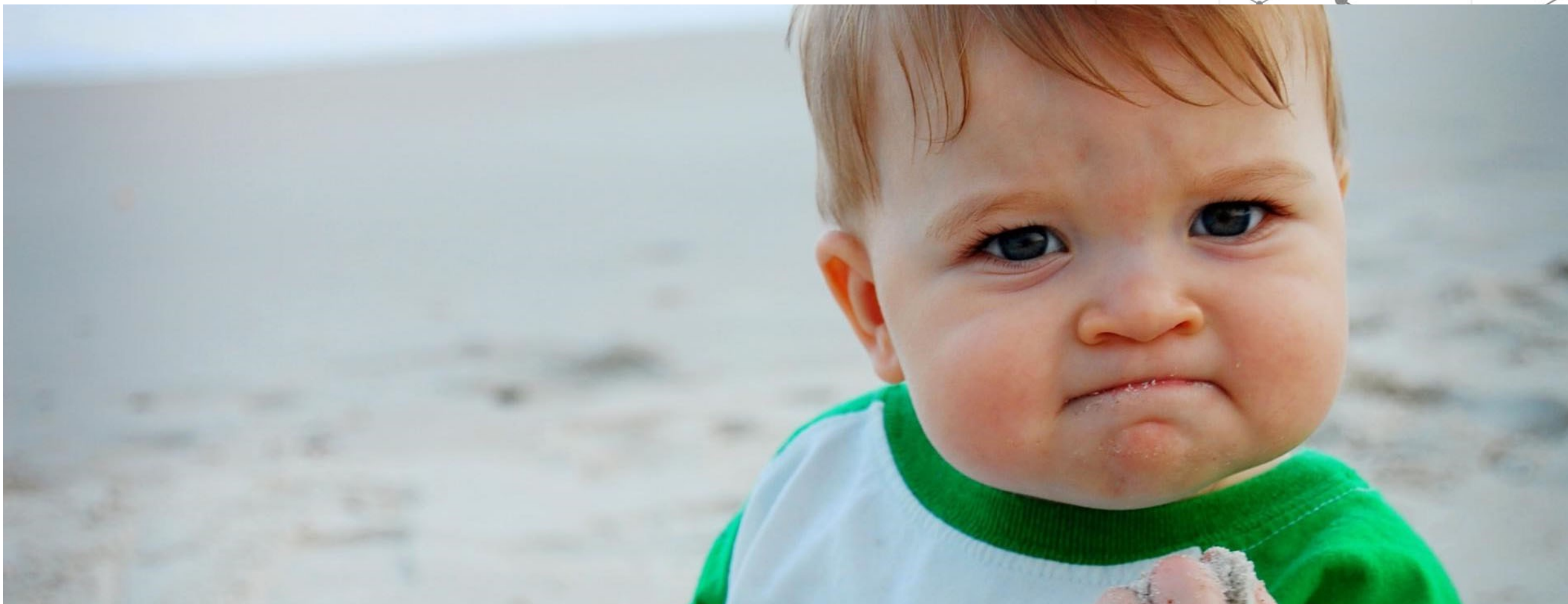


# WORKSHOP LAB-ISTIO

- ▶ Traffic Management
- ▶ Observability
- ▶ Policy Enforcement
- ▶ Service Identity and Security

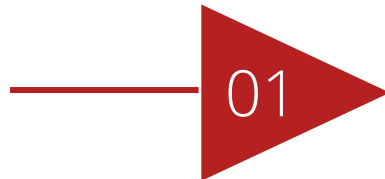


LET'S DO THIS!



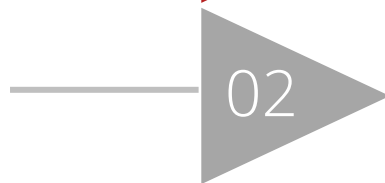
# EVENTS

3<sup>rd</sup> December



Quarkus: Introduction and Key Benefits

14<sup>th</sup> December



PART 4 - Scale to Zero: Event-driven Architecture with Serverless

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