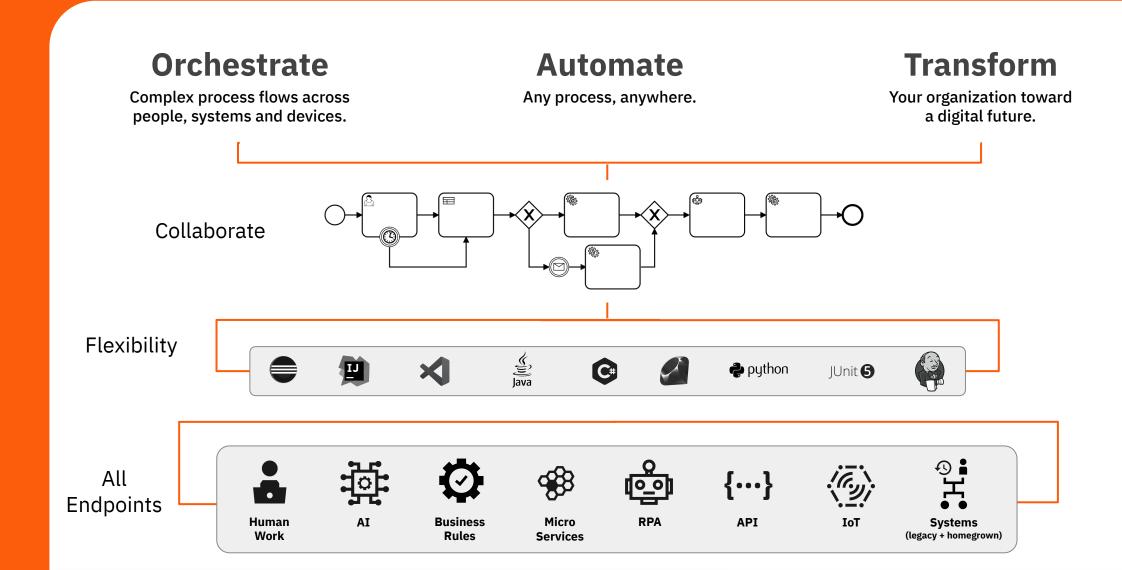
## <u>CAMUNDA</u>

## Camunda

The Universal Process Orchestrator



## Camunda - The Universal Process Orchestrator



## Camunda Platform: The Universal Process Orchestrator



## Design

Developers & business users collaborate to design & deploy processes with Camunda.



#### Modeler

Model & deploy business process diagrams with BPMN & DMN.

Available via web and desktop app.



#### Connectors

Out-of-the-box integrations to easily communicate with popular enterprise applications & protocols.



#### **Integration Framework**

Build & provision your own connectors to any system including home-grown & legacy applications.



Drag & drop creation of forms that power workflows that require human interaction.

**Forms** 

### **Automate**

Enterprise-grade automation platform. Built for today's business complexity, loved by developers.



### Workflow Engine

Next-generation, cloud-native BPMN workflow engine that unlocks unparalleled speed, scale & resilience.



#### **Decision Engine**

Automate decisions in end-to-end business processes via DMN.



#### **Tasklist**

Assign and execute tasks that require human interaction via easy-to-use Forms or via your own apps with the Tasklist API.



#### **Operate**

Real time visibility to monitor, analyze and resolve problems with any process instance.

## **Improve**

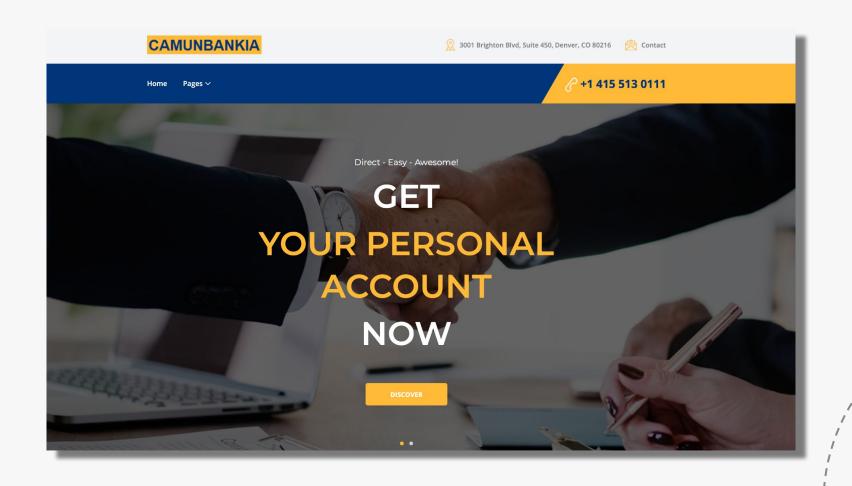
Teams have the insights to fix the highest ROI problems for their business processes.



#### **Optimize**

Get the insights you need to understand and continuously improve your business processes.

## **Demo Scenario**



## Camunda Platform: The Universal Process Orchestrator



## Design

Developers & business users collaborate to design & deploy processes with Camunda.

# Modeler Model & deploy business process diagrams with BPMN & DMN. Available via web and desktop app.



#### Connectors

Out-of-the-box integrations to easily communicate with popular enterprise applications & protocols.



#### **Integration Framework**

Build & provision your own connectors to any system including home-grown & legacy applications.

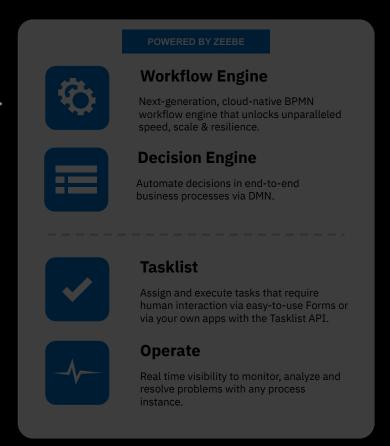


#### Forms

Drag & drop creation of forms that power workflows that require human interaction.

### Automate

Enterprise-grade automation platform. Built for today's business complexity, loved by developers.



## **Improve**

Teams have the insights to fix the highest ROI problems for their business processes.



#### **Optimize**

Get the insights you need to understand and continuously improve your business processes.

## Camunda Platform: The Universal Process Orchestrator



## Design

Developers & business users collaborate to design & deploy processes with Camunda.

# Modeler Model & deploy business process diagrams with BPMN & DMN. Available via web and desktop app.



#### Connector

Out-of-the-box integrations to easily communicate with popular enterprise applications & protocols



#### Integration Framework

Build & provision you own connectors to ar system including home-grown & legac applications



#### Forr

Drag & drop creation of forms that power workflows that require human interaction.

### **Automate**

Enterprise-grade automation platform. Built for today's business complexity, loved by developers.

#### POWERED BY ZEEBE



#### **Workflow Engine**

Next-generation, cloud-native BPMN workflow engine that unlocks unparalleled speed, scale & resilience.



#### **Decision Engine**

Automate decisions in end-to-end business processes via DMN.



#### **Tasklist**

Assign and execute tasks that require human interaction via easy-to-use Forms or via your own apps with the Tasklist API.



#### **Operate**

Real time visibility to monitor, analyze and resolve problems with any process instance.

## **Improve**

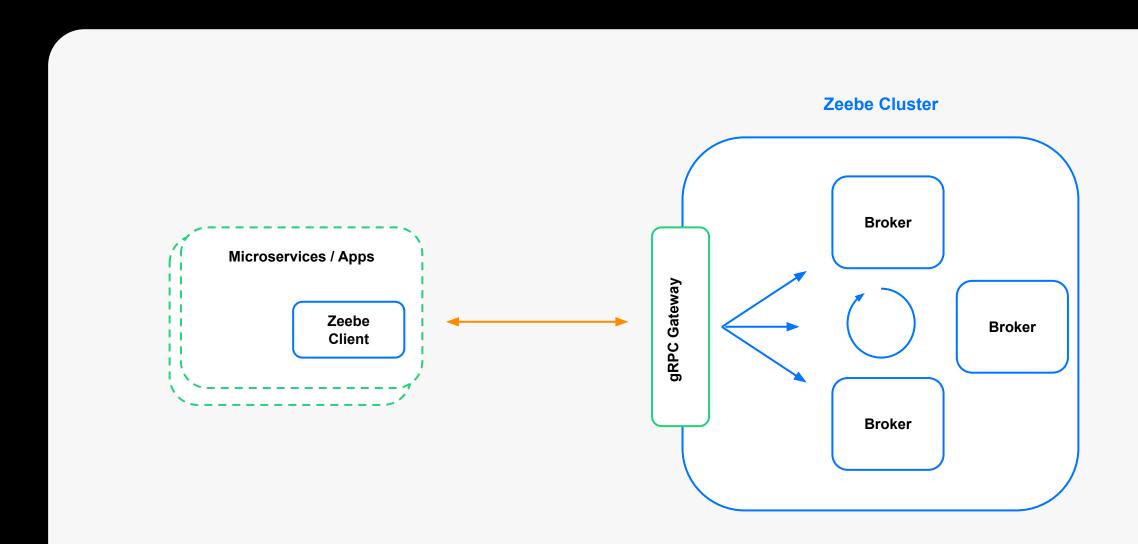
Teams have the insights to fix the highest ROI problems for their business processes.



#### **Optimize**

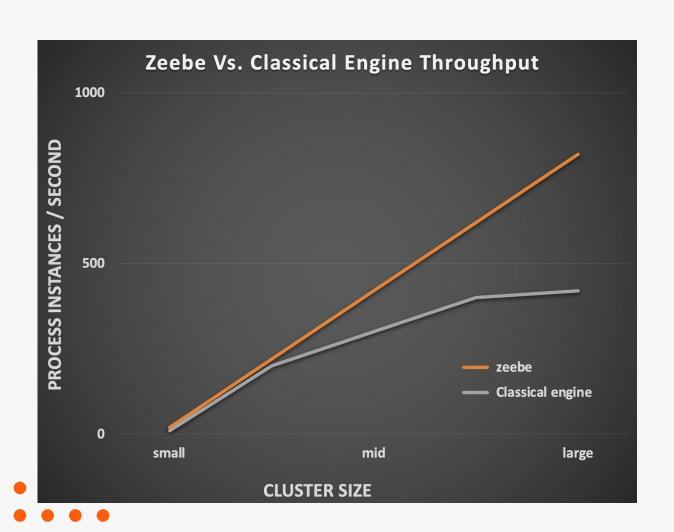
Get the insights you need to understand and continuously improve your business processes.

## Camunda High-Level Architecture



## Performance compared to traditional designs





- Designed to accommodate high throughput use cases out-of-the-box
- No relational database bottleneck
- Linear performance scaling

## Camunda Platform: The Universal Process Orchestrator



## Design

Developers & business users collaborate to design & deploy processes with Camunda.

# Modeler Model & deploy business process diagrams with BPMN & DMN. Available via web and desktop app.



#### Connector

Out-of-the-box integrations to easily communicate with popular enterprise applications & protocols



#### Integration Framework

Build & provision you own connectors to an system including home-grown & legacy

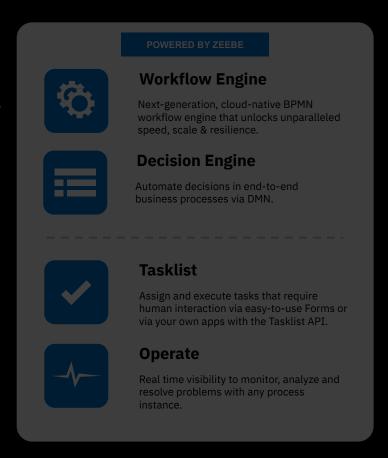


#### Forms

Drag & drop creation of forms that power workflows that require human interaction.

#### Automate

Enterprise-grade automation platform. Built for today's business complexity, loved by developers



## **Improve**

Teams have the insights to fix the highest ROI problems for their business processes.



#### **Optimize**

Get the insights you need to understand and continuously improve your business processes.



Orchestrate across every endpoint.

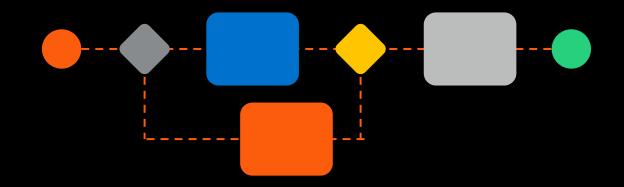
Bring IT and the business together.

Get unparalleled speed, scale and resilience.





# About CAMUNDA



Orchestrate. Automate. Transform.

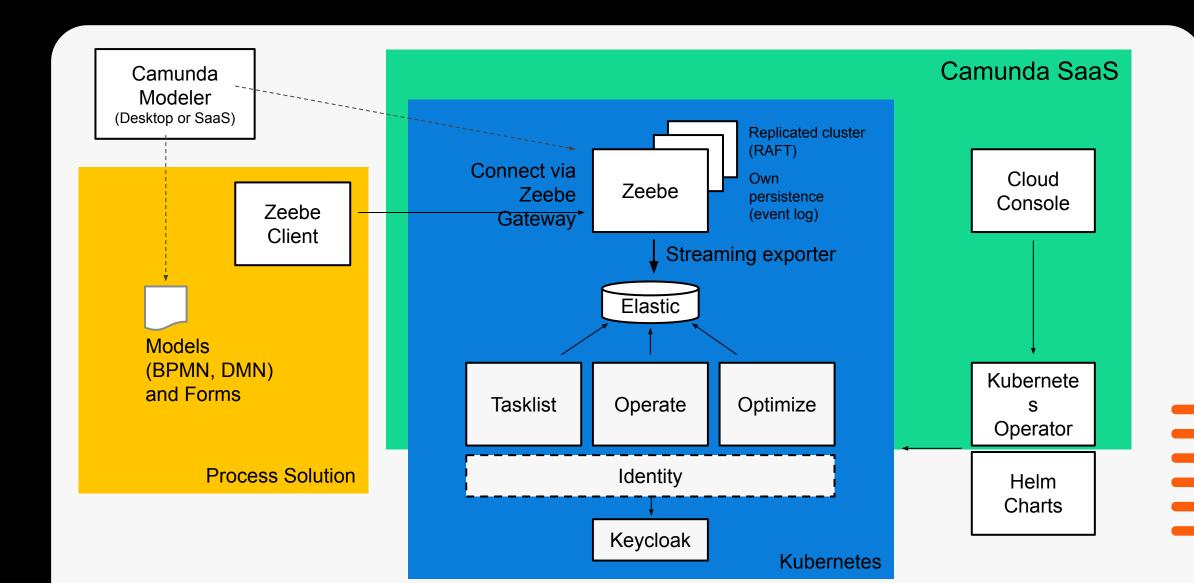
Questions?

## CAMUNDA

## Appendix



## Camunda 8 Components & Architecture C



## **Secure Platform**

C

- Cloud Instance Isolation
- Physical and Logical Access Controls
- Data Encrypted In-flight & At-Rest
- Multi-region Geographic Redundancy,
  - High Availability

- ISO 27001 Certified
- GDPR Compliant
- Regular Penetration Tests
- Formal BCDR plans
- Planned SOC 2 Type 2 Certification

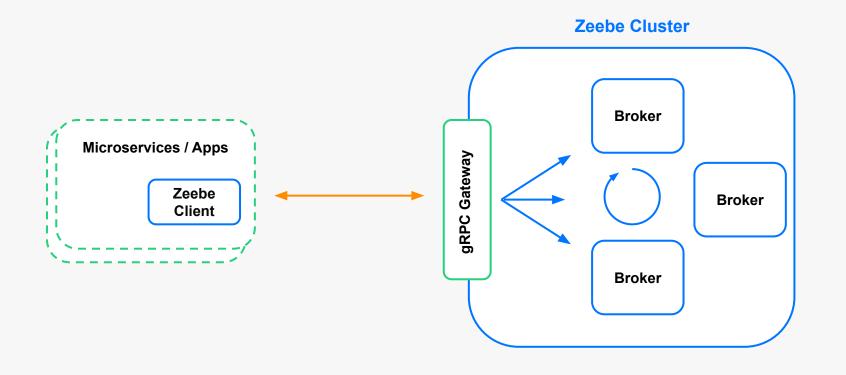
## Data Persistence & System Resilience



- Failover and data replication protocols (Raft) ensure resilience without sacrificing performance
- 99.5% uptime guaranteed for SaaS model
- Can be deployed across multiple data centers

# Camunda Platform 8 Is Built For Microservices



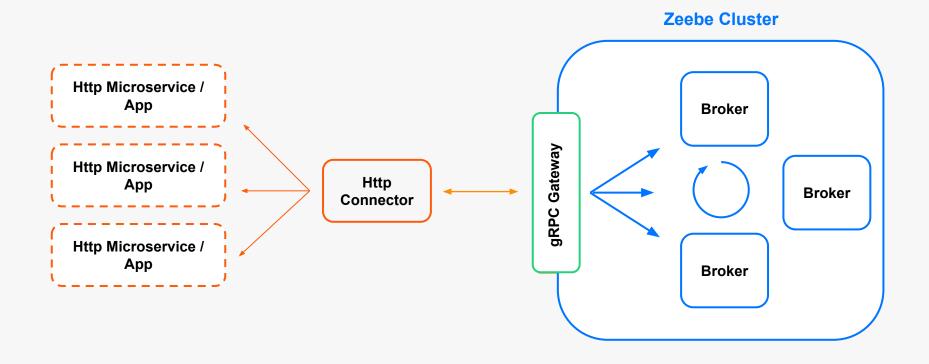


Option 1: Embed Zeebe Client directly into Microservice

List of <u>available clients</u>

# Camunda Platform 8 Is Built For Microservices

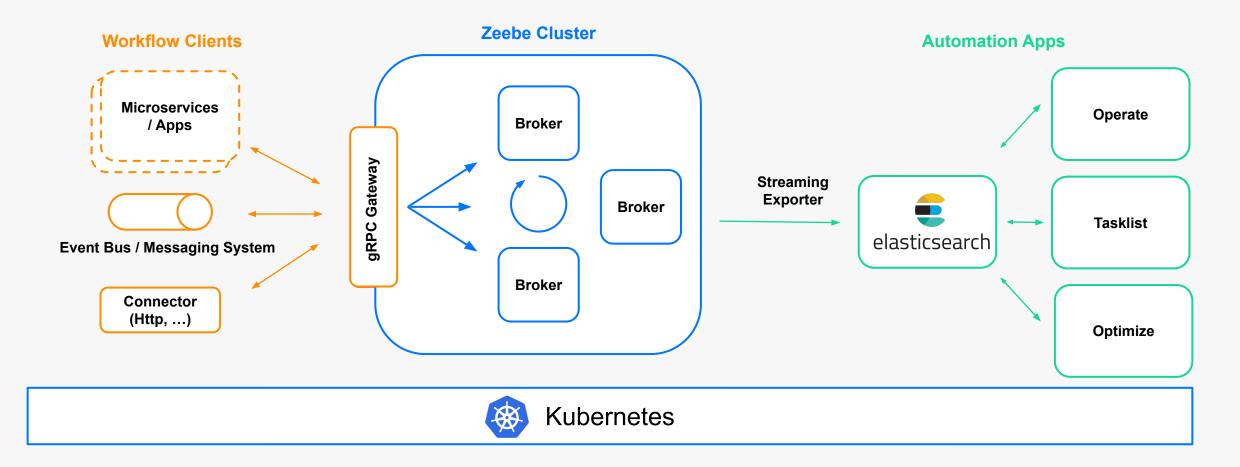




**Option 2**: Use Generic Connector (HTTP, AWS Lambda, ...)

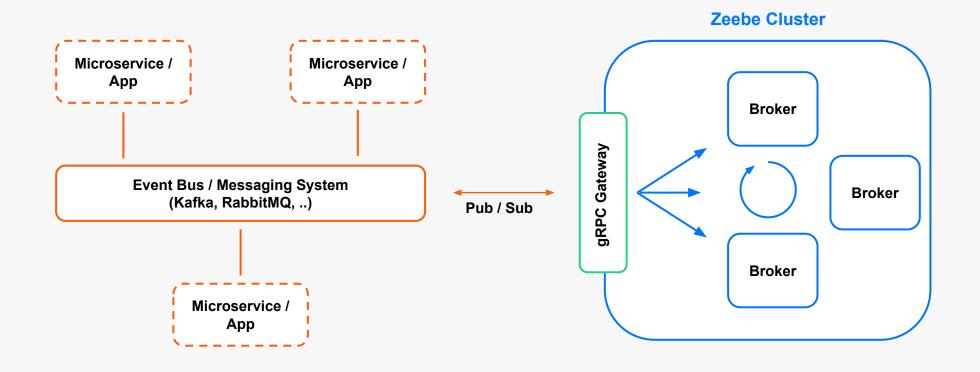
## C

## Architecture: Camunda Platform 8 Cluster



# Camunda Platform 8 Is Built For Microservices



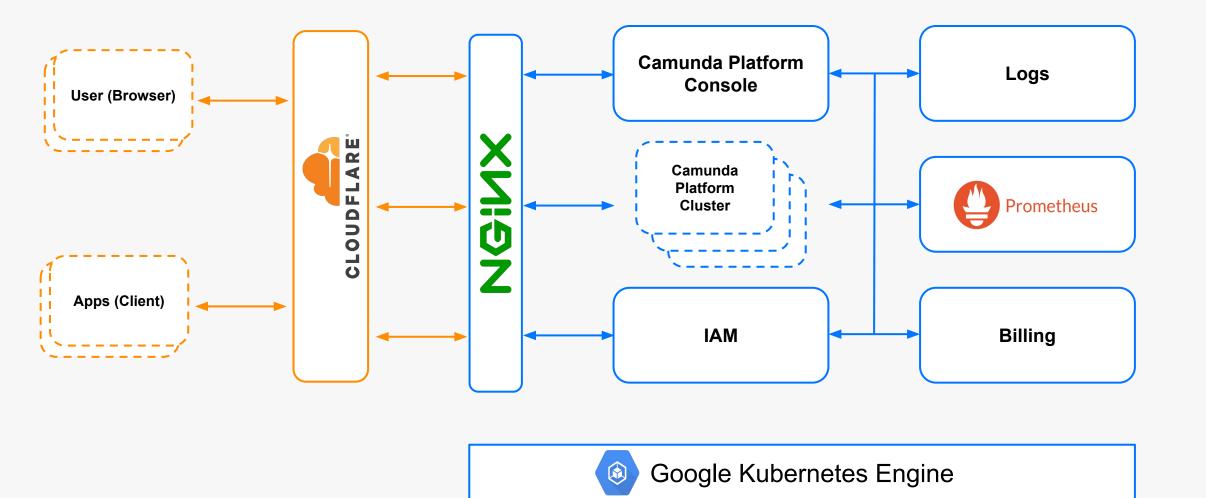


Option 3: Zeebe as State Machine in Event Driven Microservices Architecture

Read more in this **Blogpost** 

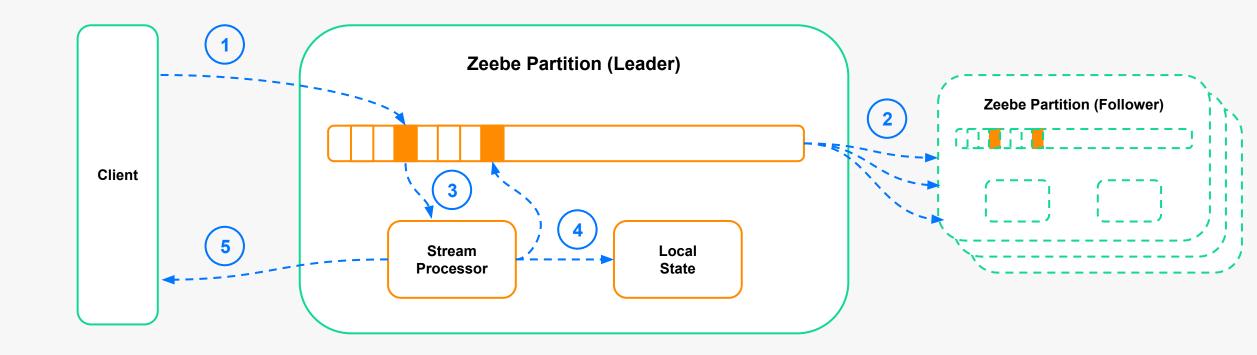
## **Technical Deep Dive: SaaS Architecture**





## Technical Deep Dive: Scaling Zeebe





- 1 Send & Append Command
- 2 Replicate & Commit Command
- 3 Validate & Process Command

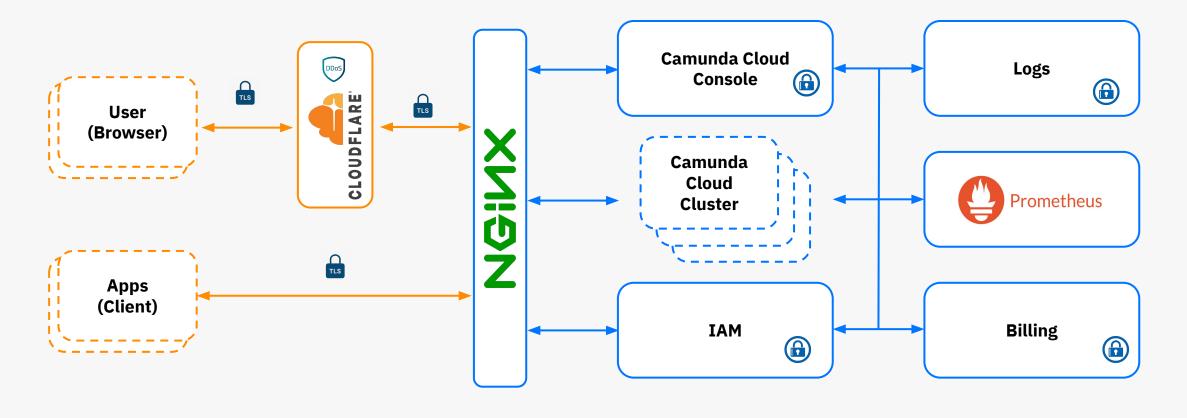
4 Apply to State & Write Event

5 Send Response

## **SaaS Architecture**

All images based on GCP hardened images







**DDOS Protection** 

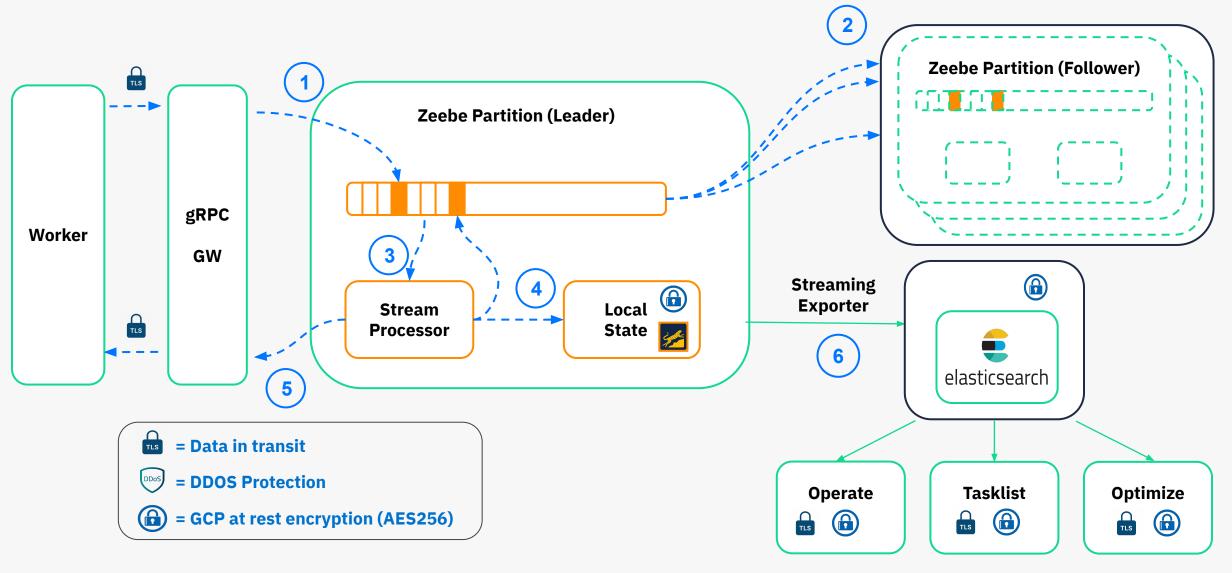
= GCP at rest encryption (AES256)



Google Kubernetes Engine

## **C8 SaaS Data Flow**











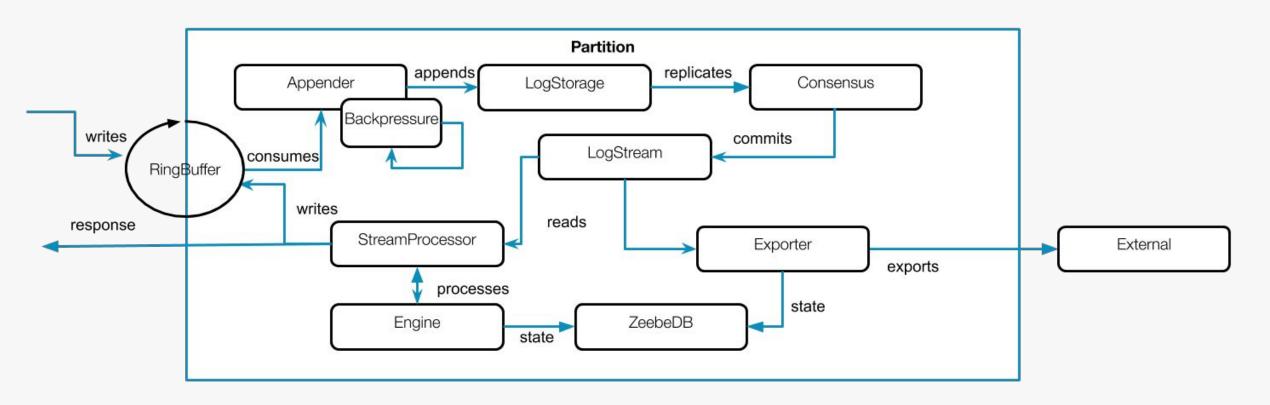




**6**) Stream Export

## C

## **Lifecycle of a Command Zeebe - Partition Components\***

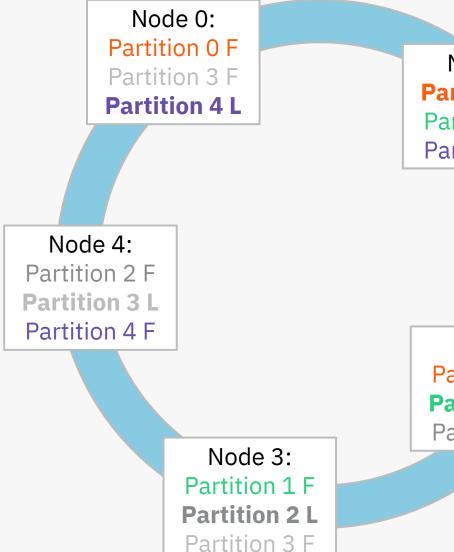


<sup>\*</sup>This reflects only command lifecycle

## Partitions (Shards) and Replication using



Raft



Node 1:
Partition 0 L
Partition 1 F
Partition 4 F

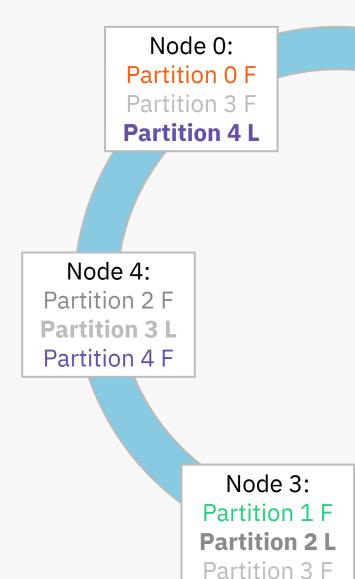
Node 2:
Partition 0 F
Partition 1 L
Partition 2 F

## Example:

- 5 cluster nodes (= Brokers)
- 5 partitions
- replication factor 3
- L = Leader
- F = Follower

## Fail-over though electing a new Leader





Node 1:
Partition 0 L
Partition 1 F
Partition 4 F

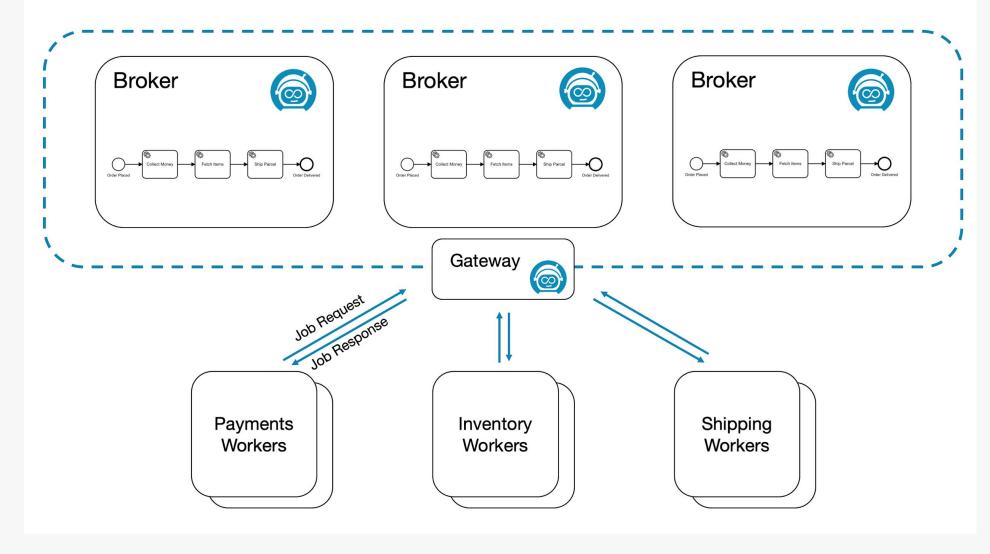
Node 2:
Partition 0 L
Partition 1 L
Partition 2 F

## Example:

- 5 cluster nodes (= Brokers)
- 5 partitions
- replication factor 3
- L = Leader
- F = Follower

## C

## External Services: Requesting Work, Completing Work



## C

## **External Tasks**

