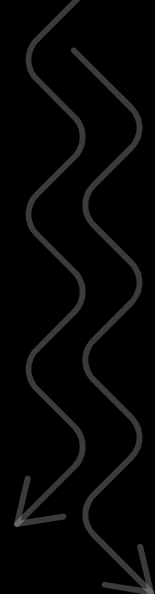


# Camunda Case Management System using Microapp Architecture



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**CAMUNDA**  
**CON 2024**

# Agenda

- Microapp Architecture
- Process Orchestration
- Hybrid Approach
- Live Demo 🙌

# What is Microapp Architecture ?



- Independent, small applications serving specific functions

## Definitions:

- Micro-Frontend = Frontend for specific use
- Micro-Backend/Service = Backend for specific use
- Microapp Architecture = Connect multiple Micro-Frontends and Micro-Services

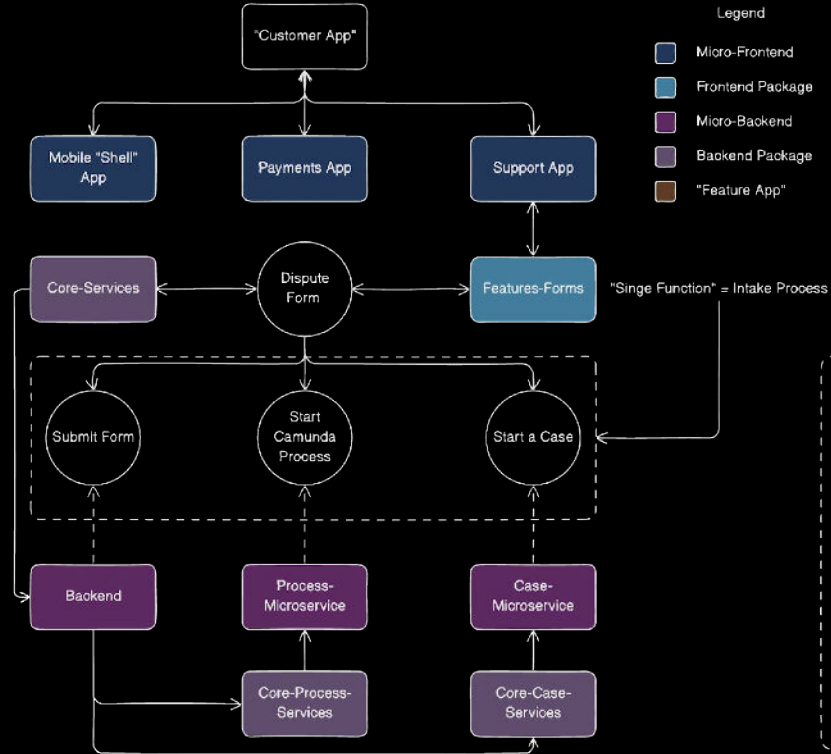
## Implementations:

- Horizontal Microarchitecture = multiple microapps connected to a "single function"
- Vertical Microarchitecture = multiple microapps connected to a "single feature"

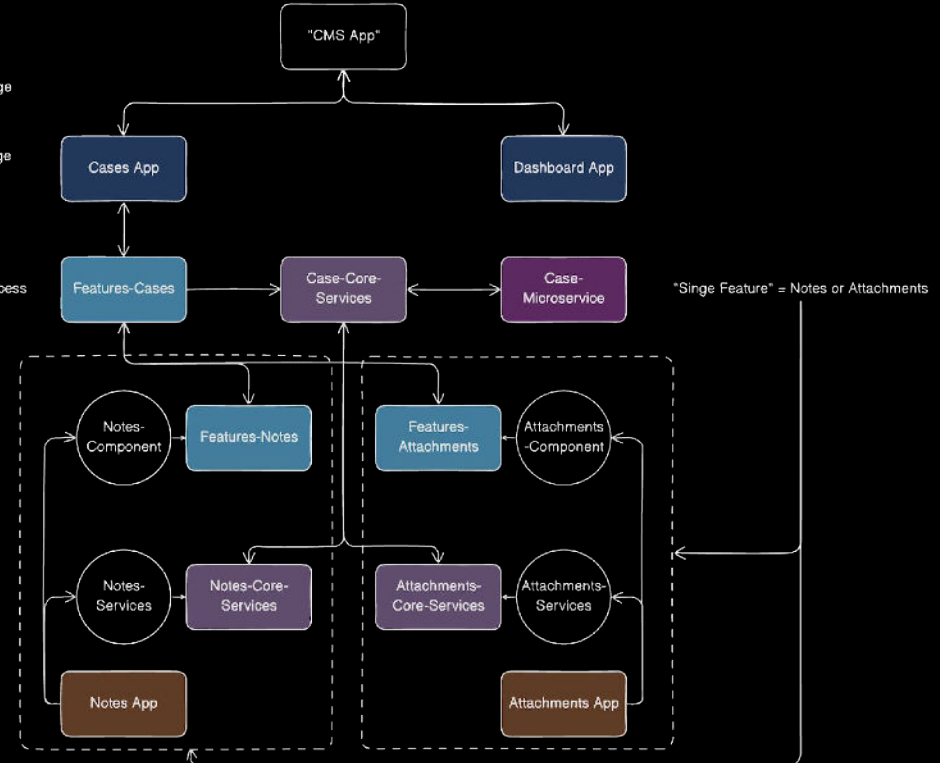
# Horizontal vs Vertical Implementations



## Horizontal



## Vertical



# Camunda with Microapps: Orchestration

- Orchestration can be handled by Camunda or your Microapps

## Camunda Orchestration:

- Pros:

- Simplifies Orchestration
- Real-time Process Management

- Cons:

- Tighter Coupling
- Scalability Challenges
- Complexity in Workflow

## Microapp Orchestration:

- Pros:

- Resilient Architecture
- Scalable Design

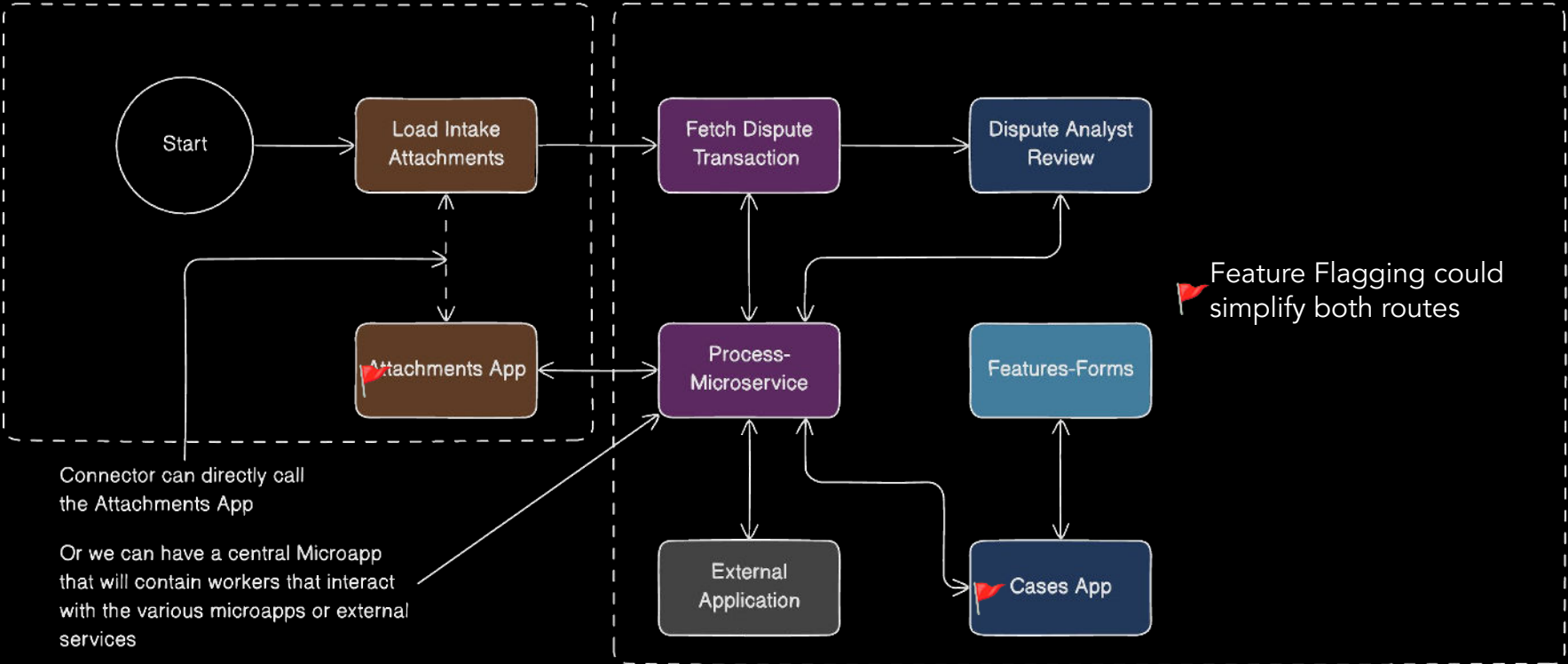
- Cons:

- Potential Latency
- Maintenance Overhead
- Complexity in Microapps

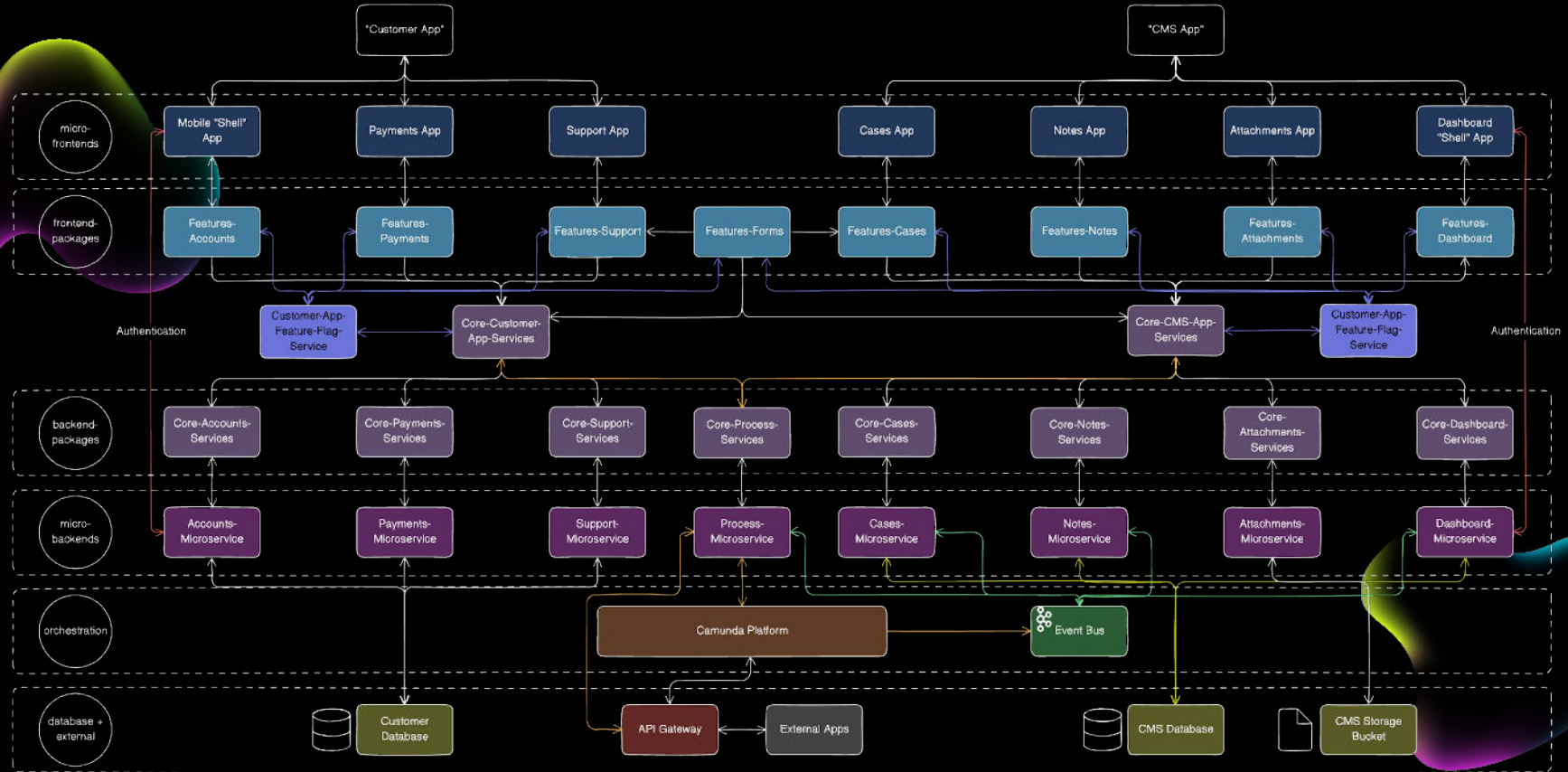
# Camunda & Microapps Implementations

## Camunda Orchestration

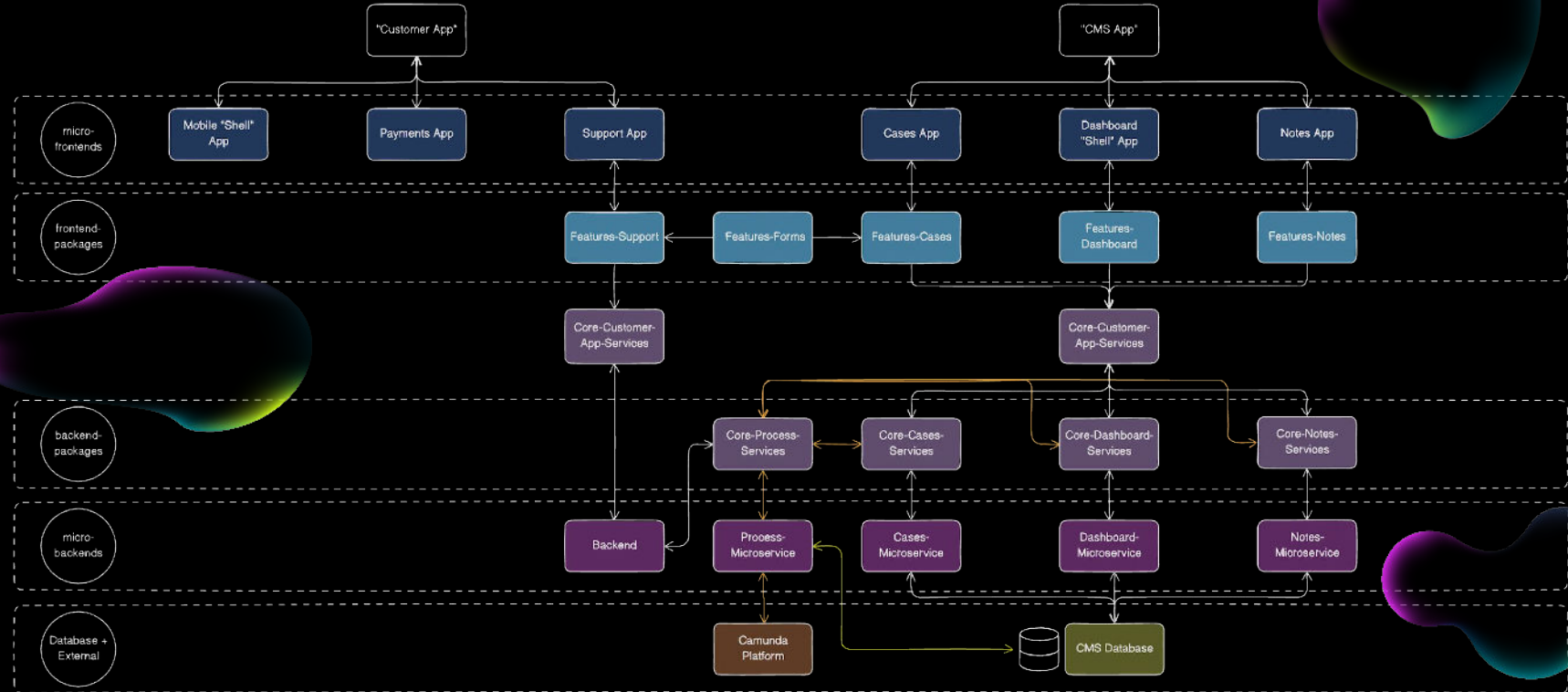
## Microapp Orchestration



# Demo Architecture : "Ideal"



# Demo Architecture : "Demo Setup"





# Live Demo



# Challenges and Microapps



- Independent, small applications serving specific functions

## Challenges:

- Data Consistency across Microapps
- Managing API Contracts between Camunda and Microapps
- Complex CI/CD
- Managing dependencies across Repos

## Best Practices:

- Centralize Core-Services
- Data Charts in each microservice interacting with DB
- Centralized Process Orchestrator and/or Centralized Microapp Service
- Feature flagging for flexibility

# Thank You



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