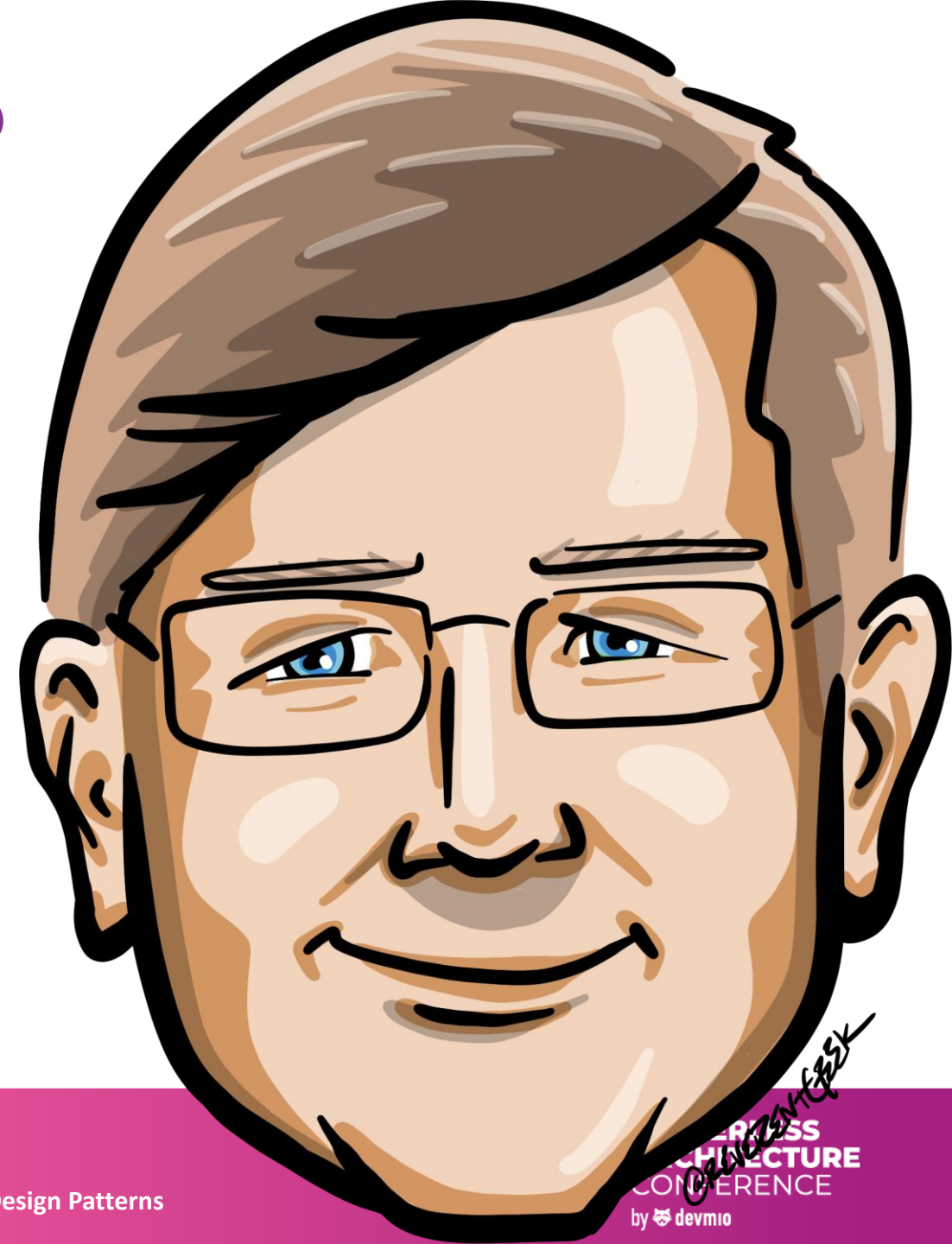




Architect Like a Boss

Mastering Serverless Design Patterns

Who is Chad Green?



Grew up in software development



Lots of Programming Languages

BASIC

Microsoft BASIC
GW-Basic
QuickBASIC
Visual Basic
VB.NET

C

C
C++
C#
Java

Niche

JavaScript
Pascal
Python
PHP
COBOL

Software development paradigms

Console Applications

Desktop Applications

Distributed Desktop Applications

Web Applications

Distributed Web Applications

COM

DCMO

.NET

Entity Framework

MVC

Service-Oriented Architecture

Microservices

Cloud-Computing

Serverless Computing

Serverless Computing

Functions-as-a-Service

Event-Driven Architecture

Microservices

Work Experience



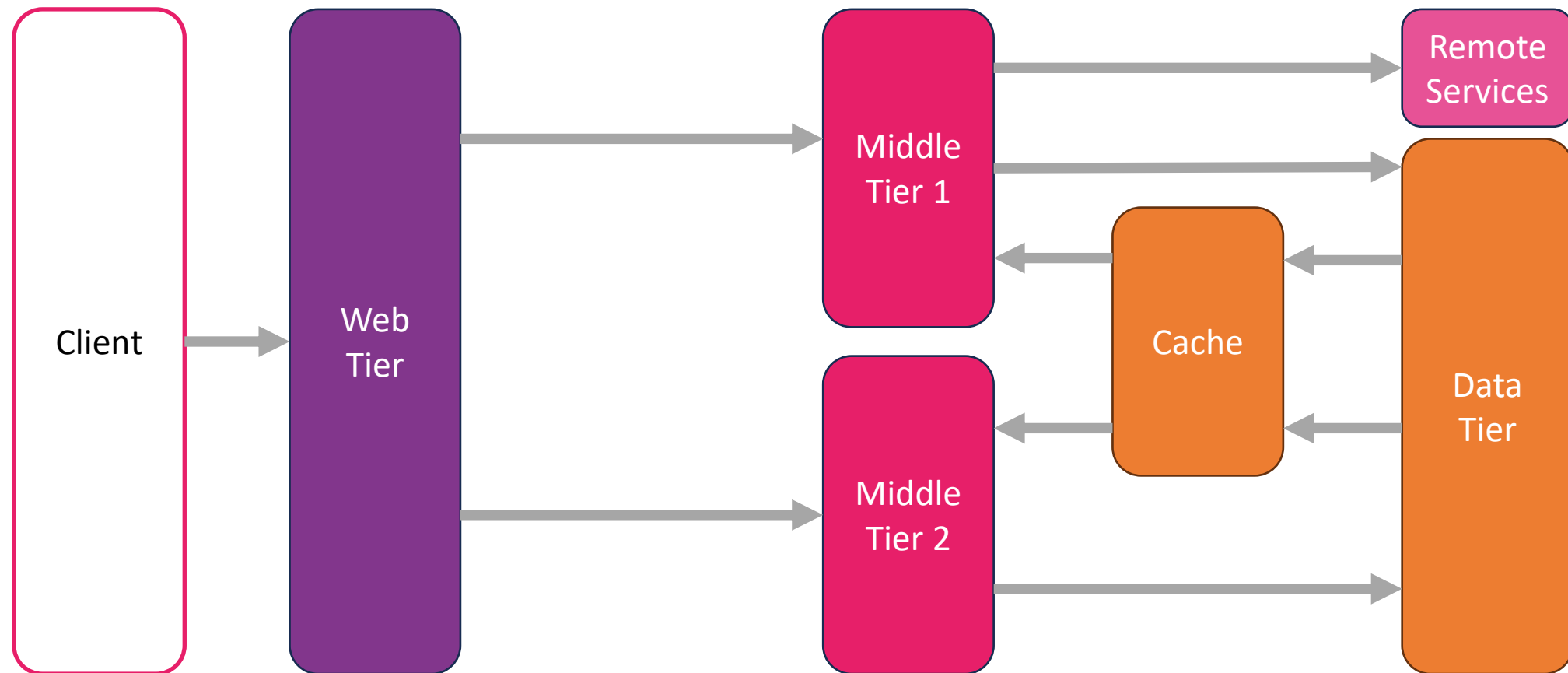
Disclaimer



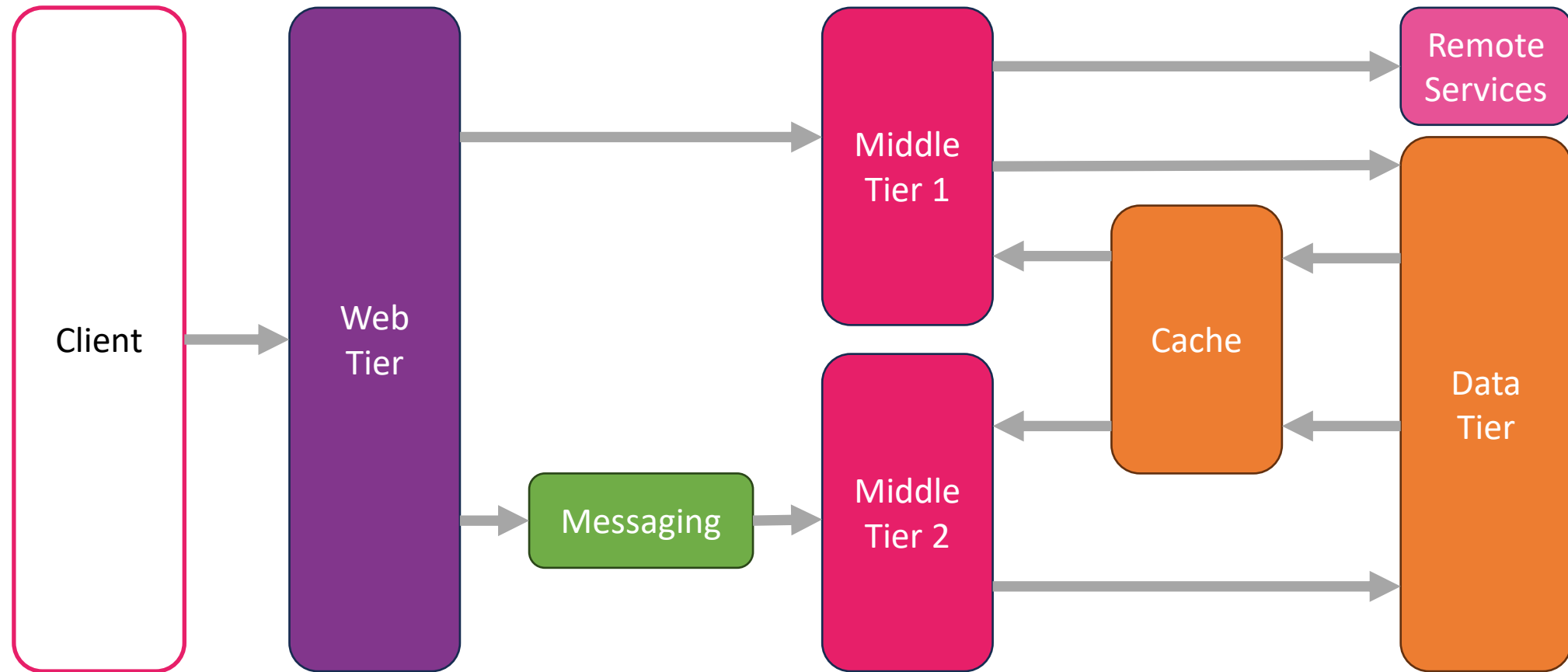
Architecture Styles

Crack the Code to Scalability

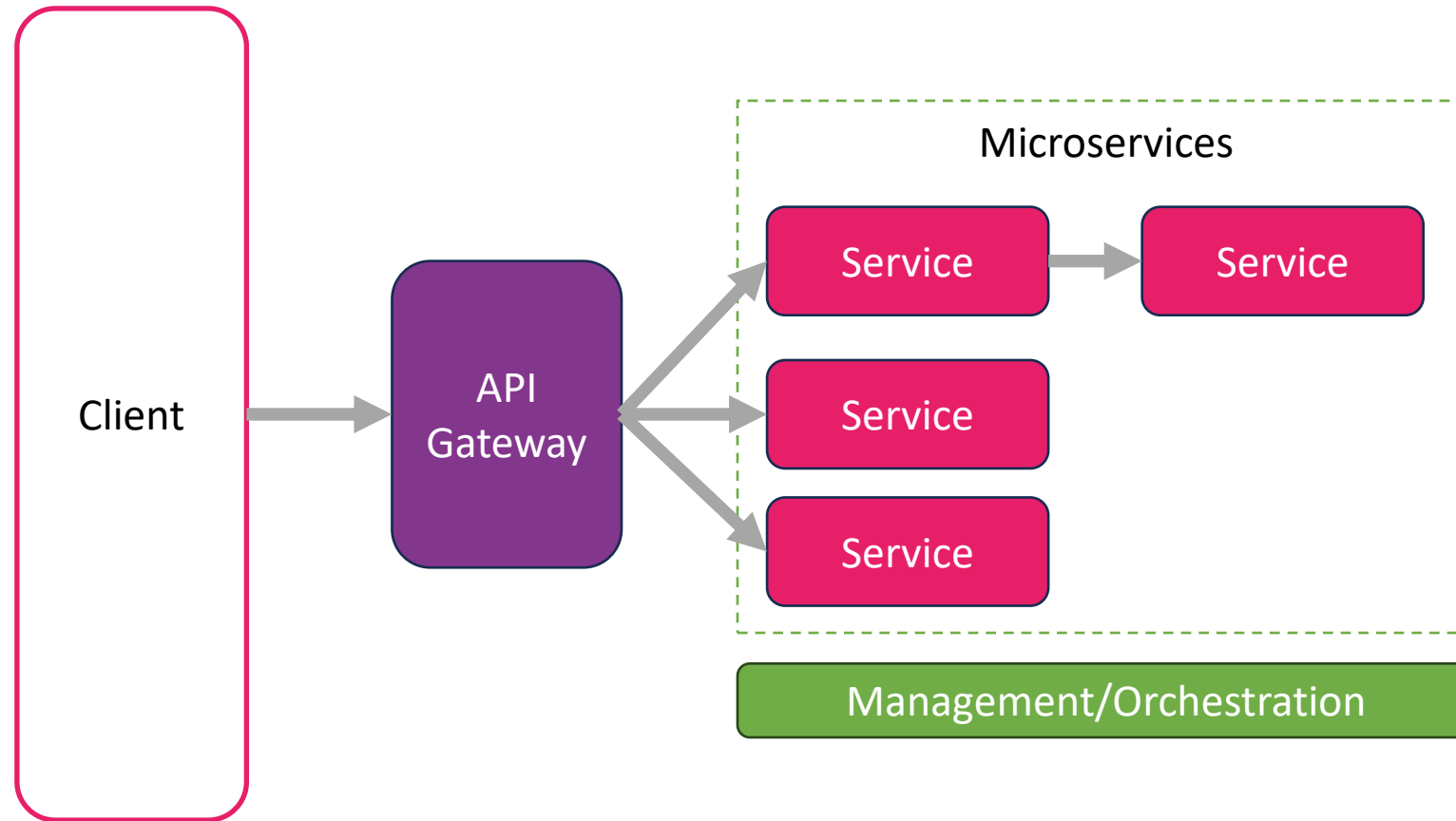
N-Tier



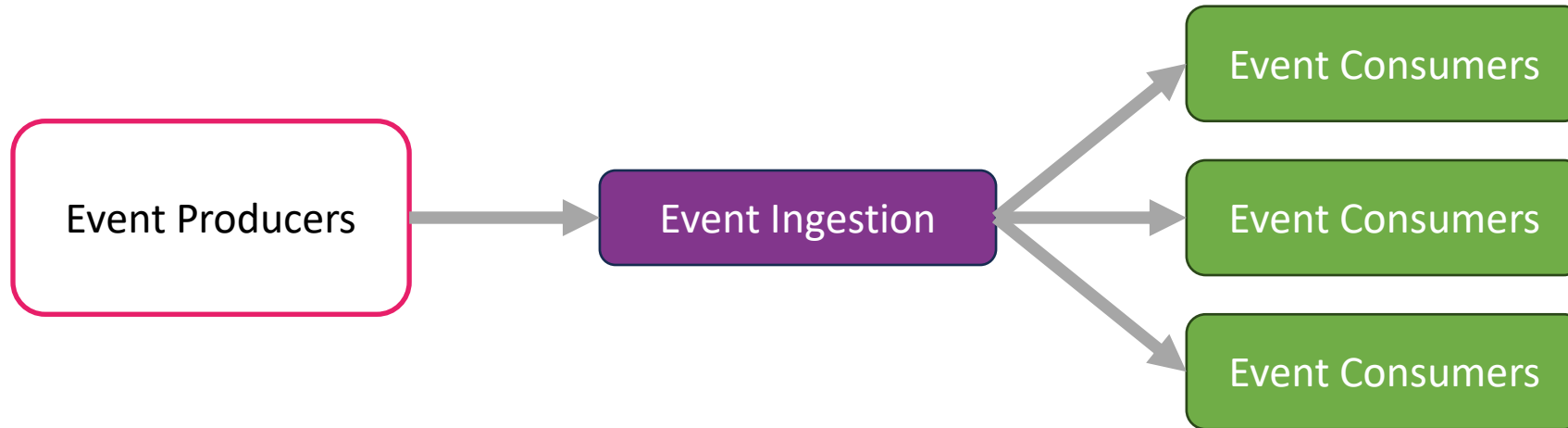
N-Tier with Messaging



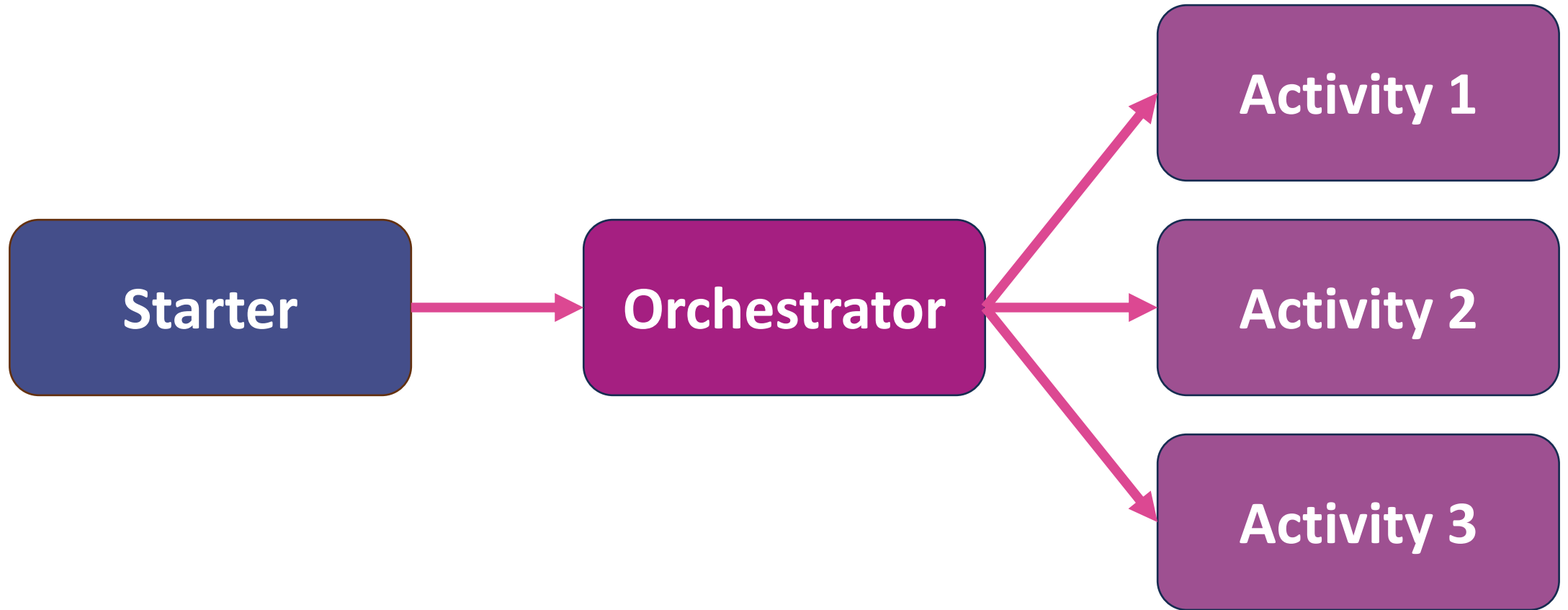
Microservices



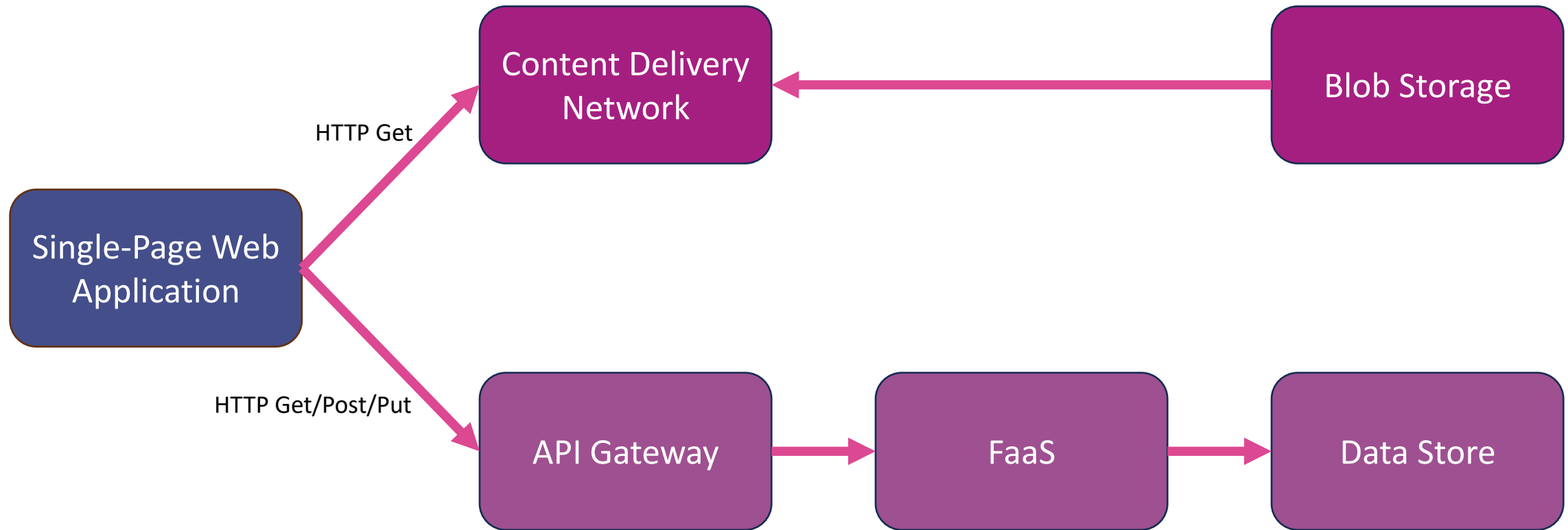
Event-Driven Architecture



Workflow Orchestration



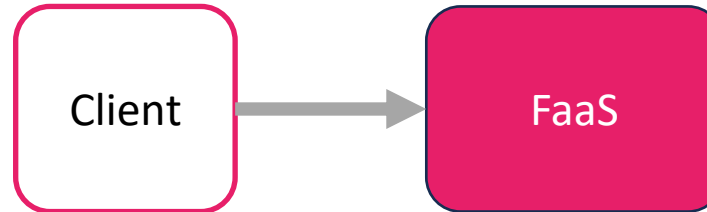
Scalable Web Applications



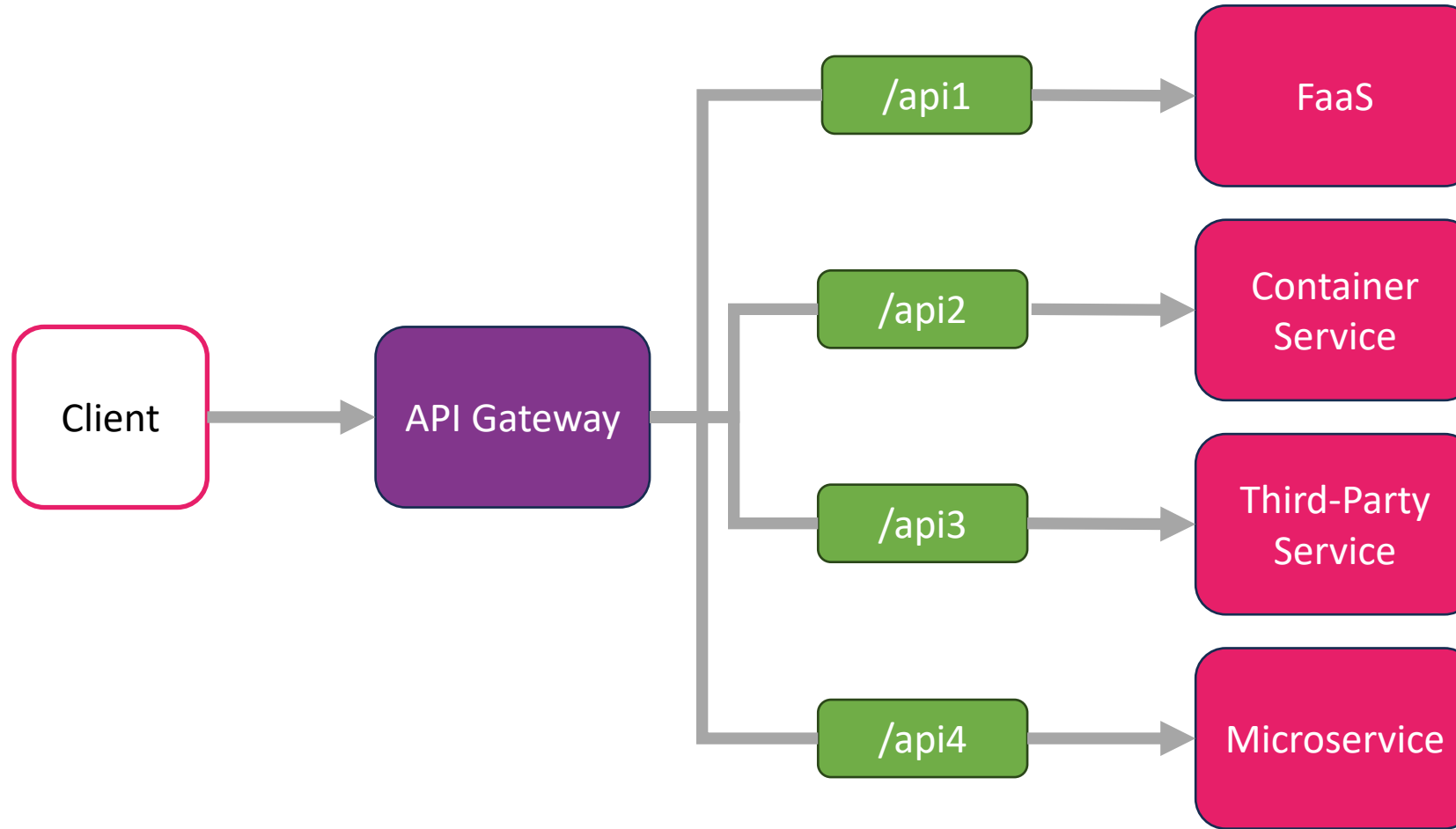
Serverless Design Patterns

Crack the Code to Scalability

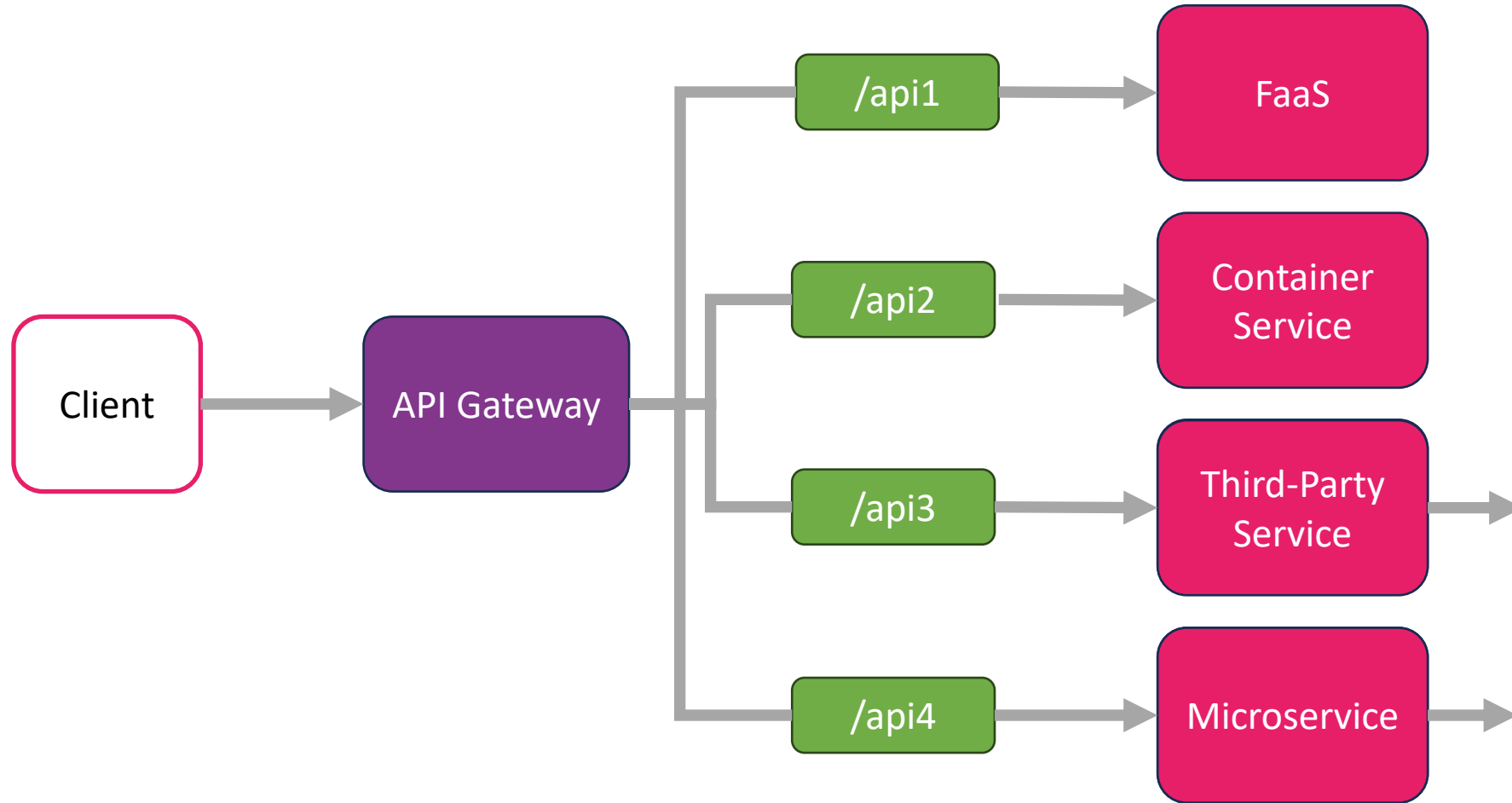
Simple Web Service



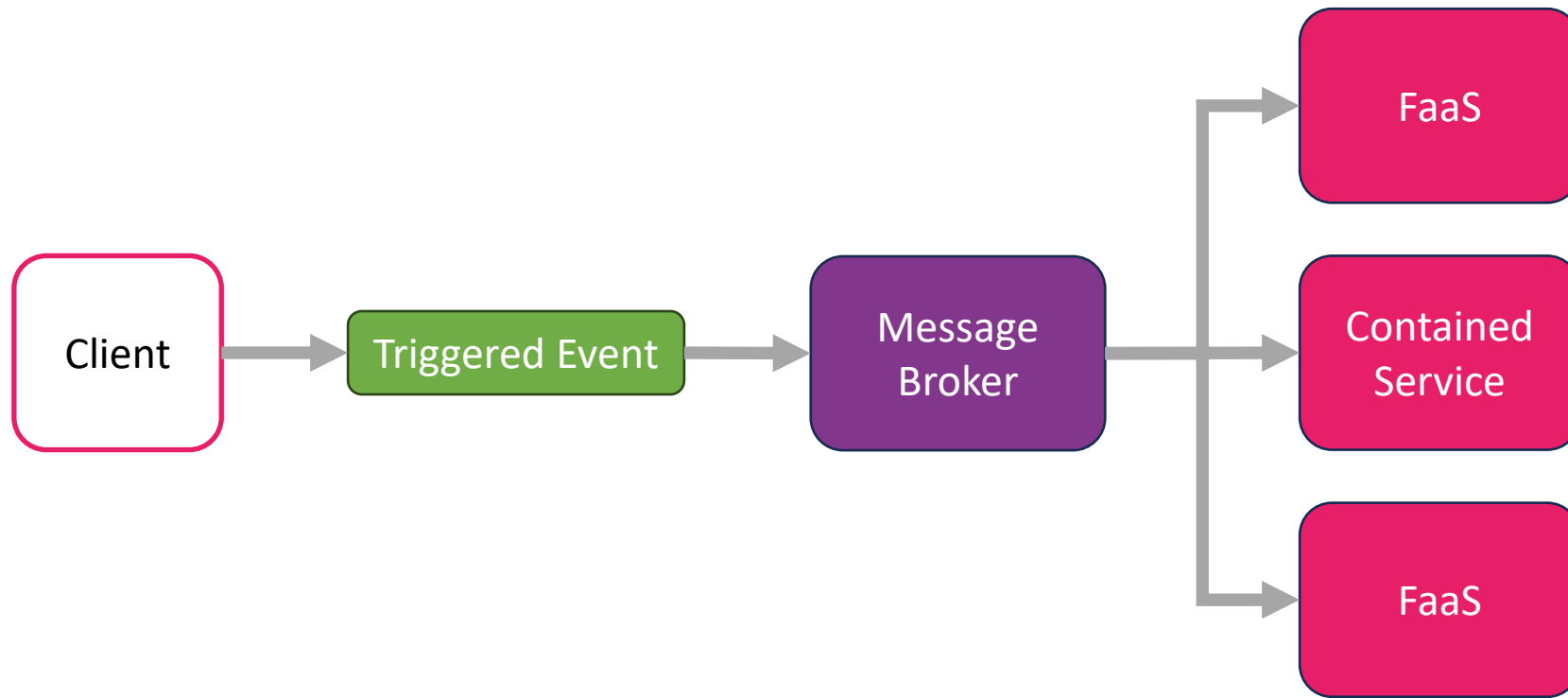
Robust API



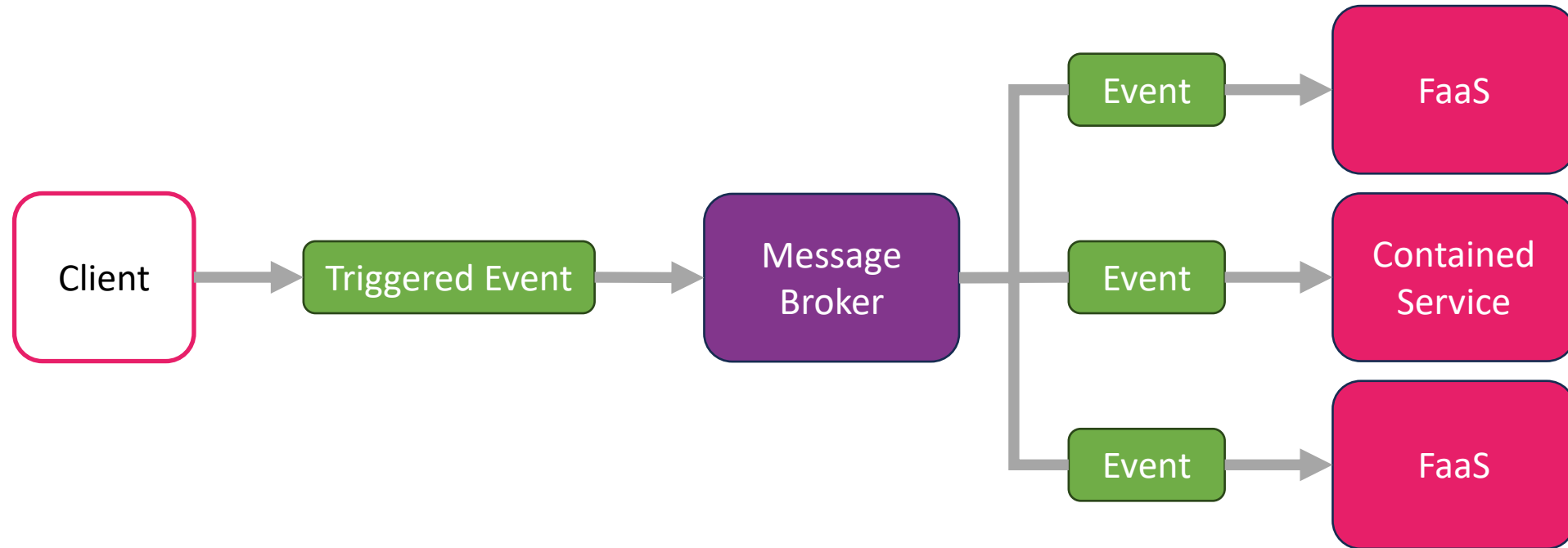
Robust API with Aggregation



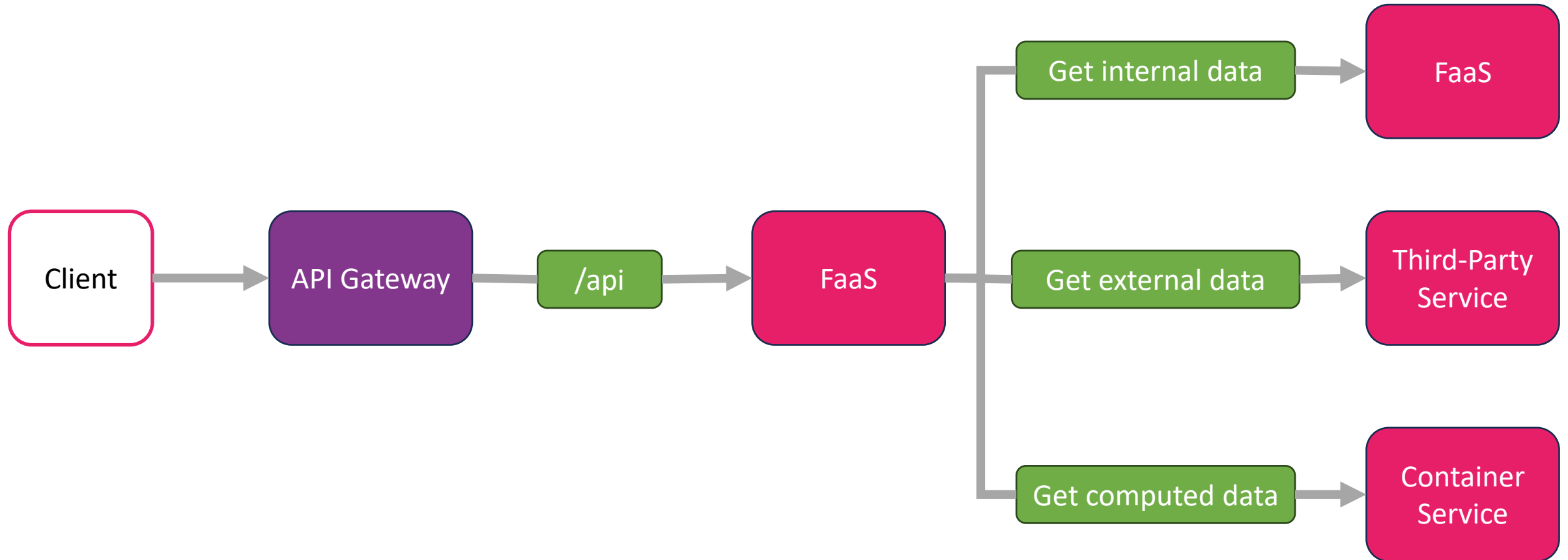
Decoupled Messaging



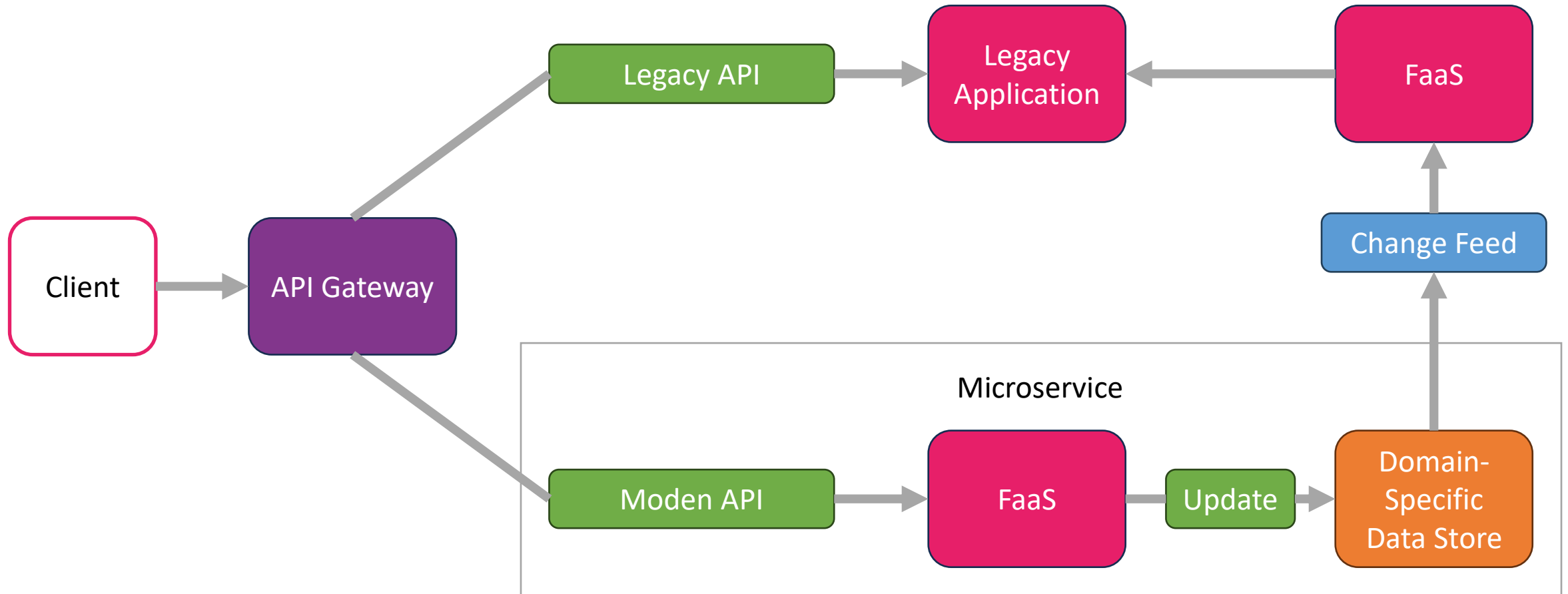
Publish/Subscribe



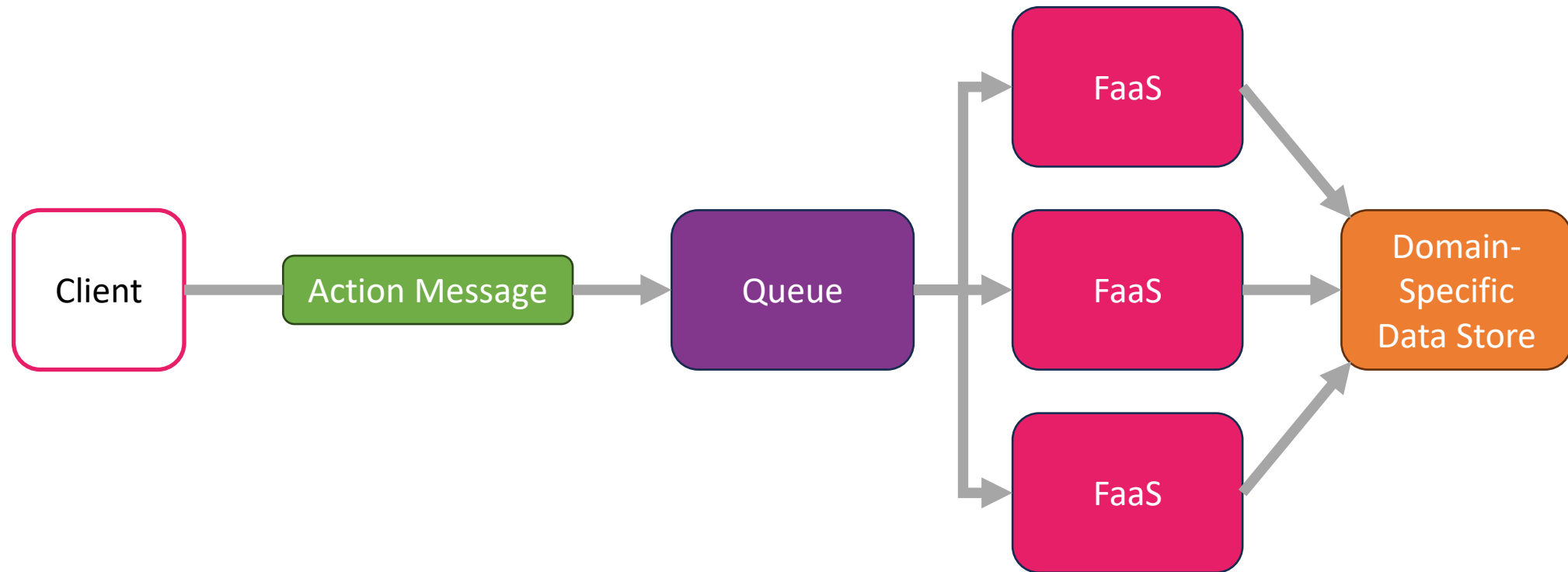
Aggregation



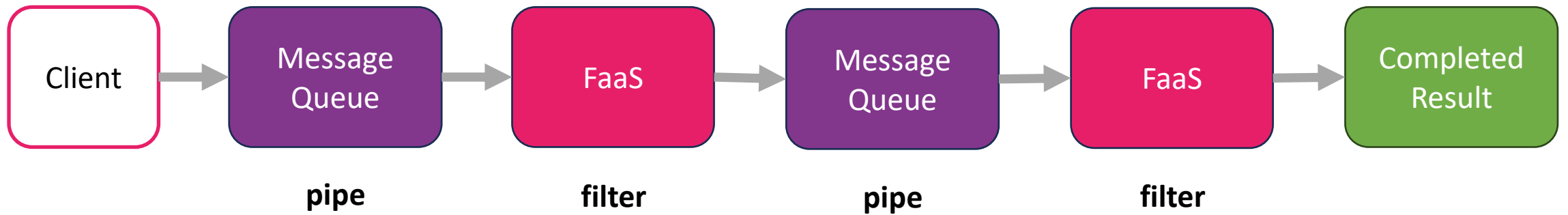
Strangler Fig



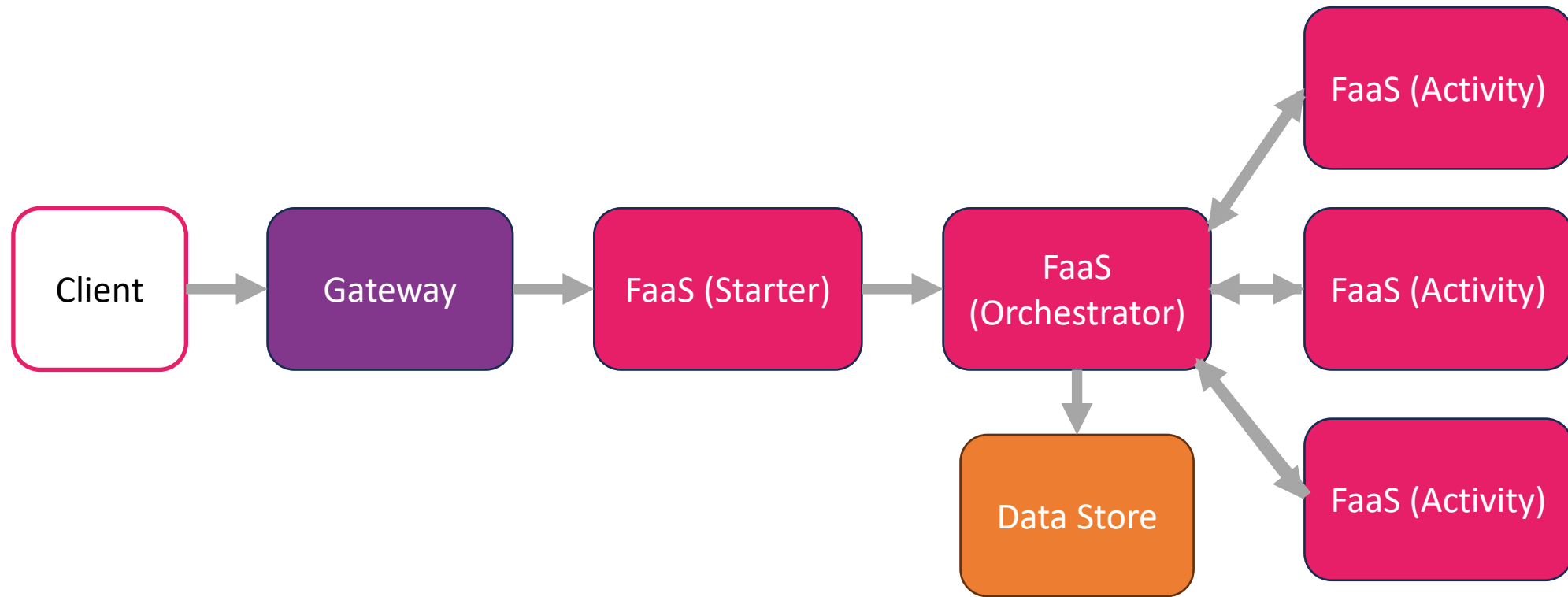
Queue-Based Load Leveling



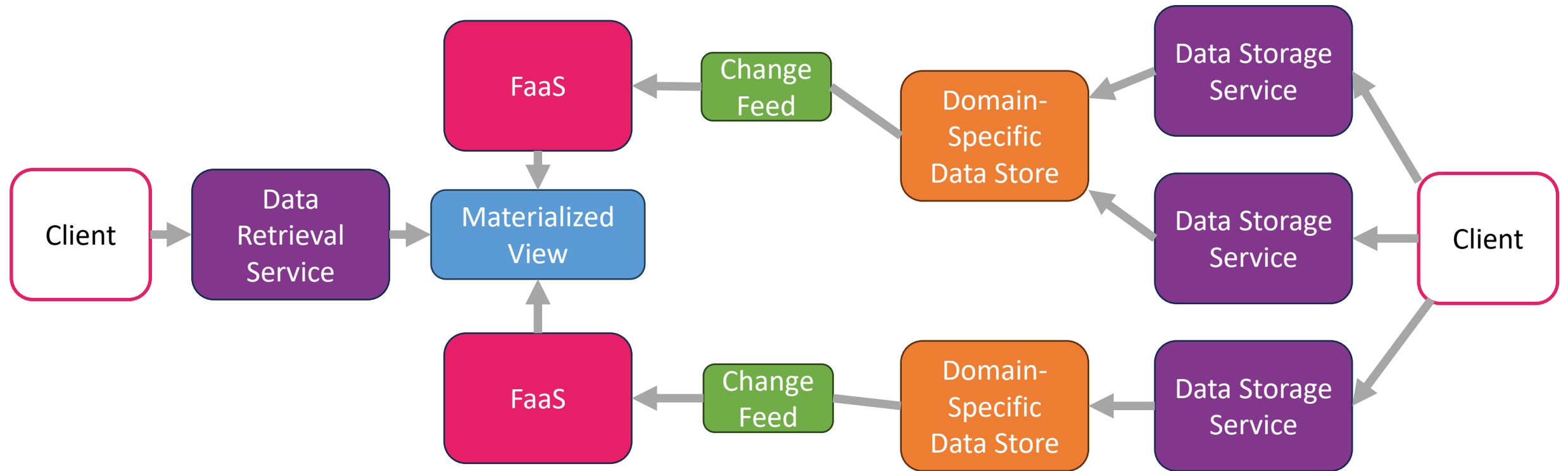
Pipes and Filters



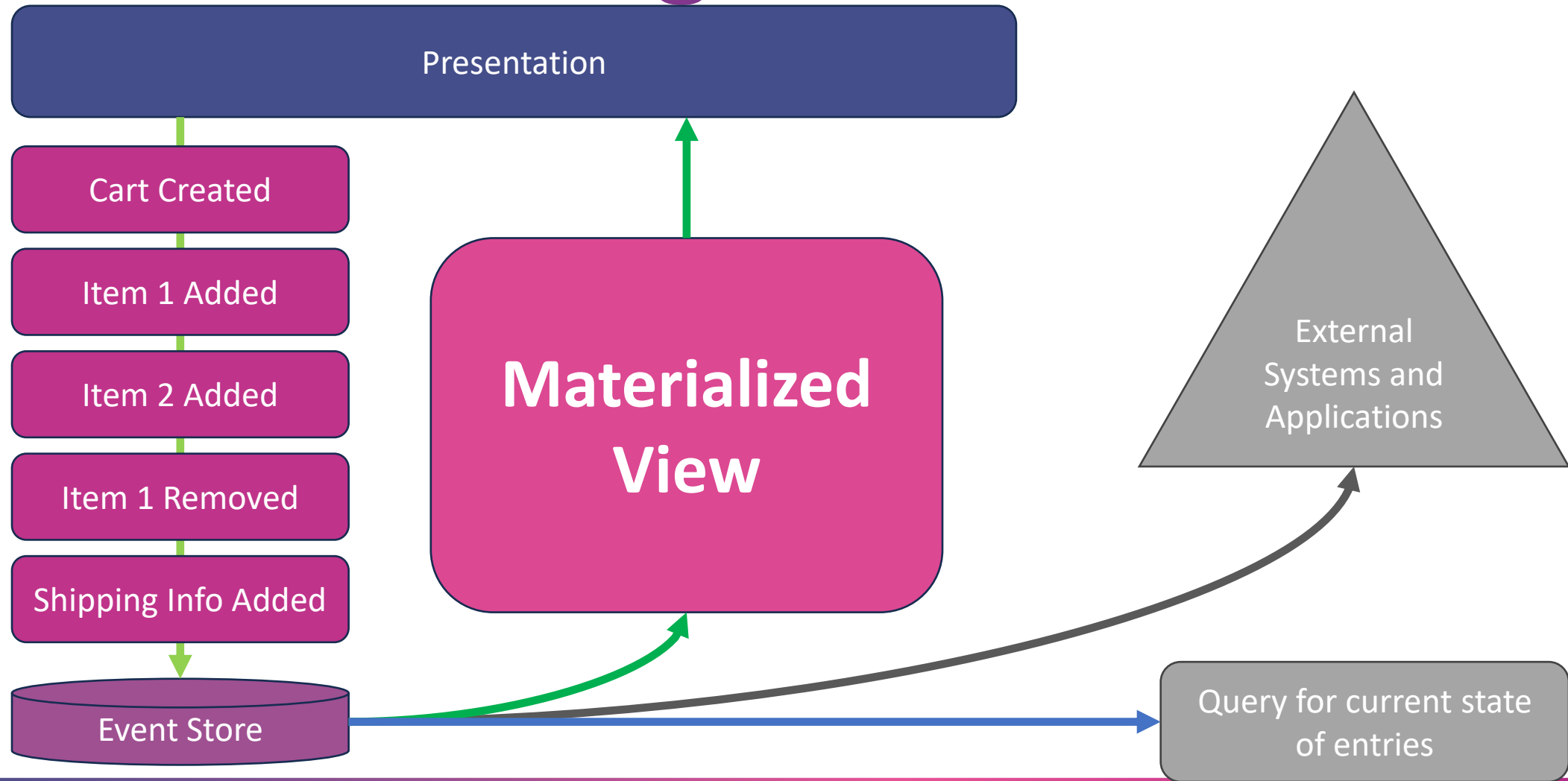
Fan-Out/Fan-In



Materialized Views



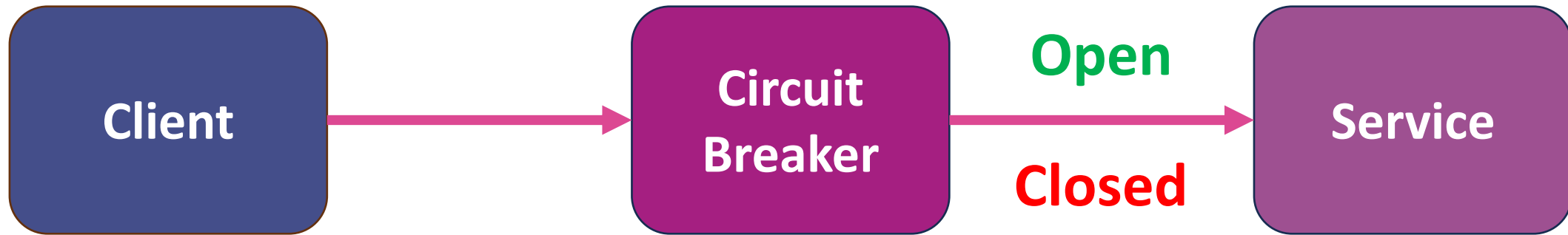
Event Sourcing



Retry



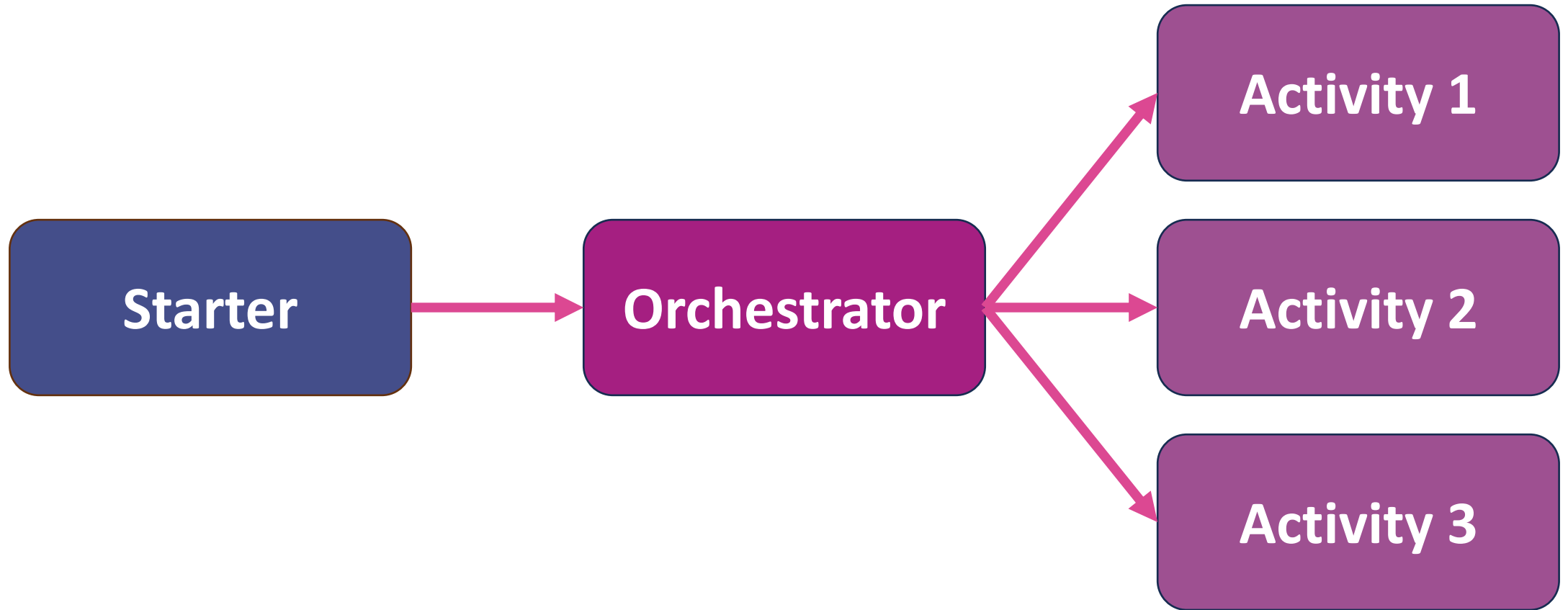
Circuit Breaker



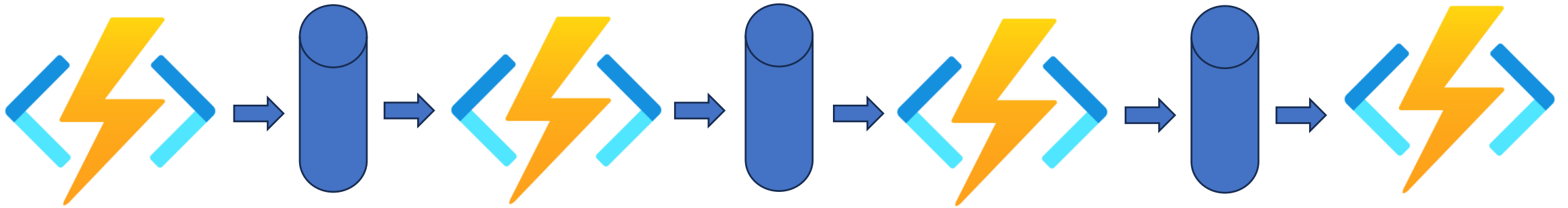
Orchestration

Crack the Code to Scalability

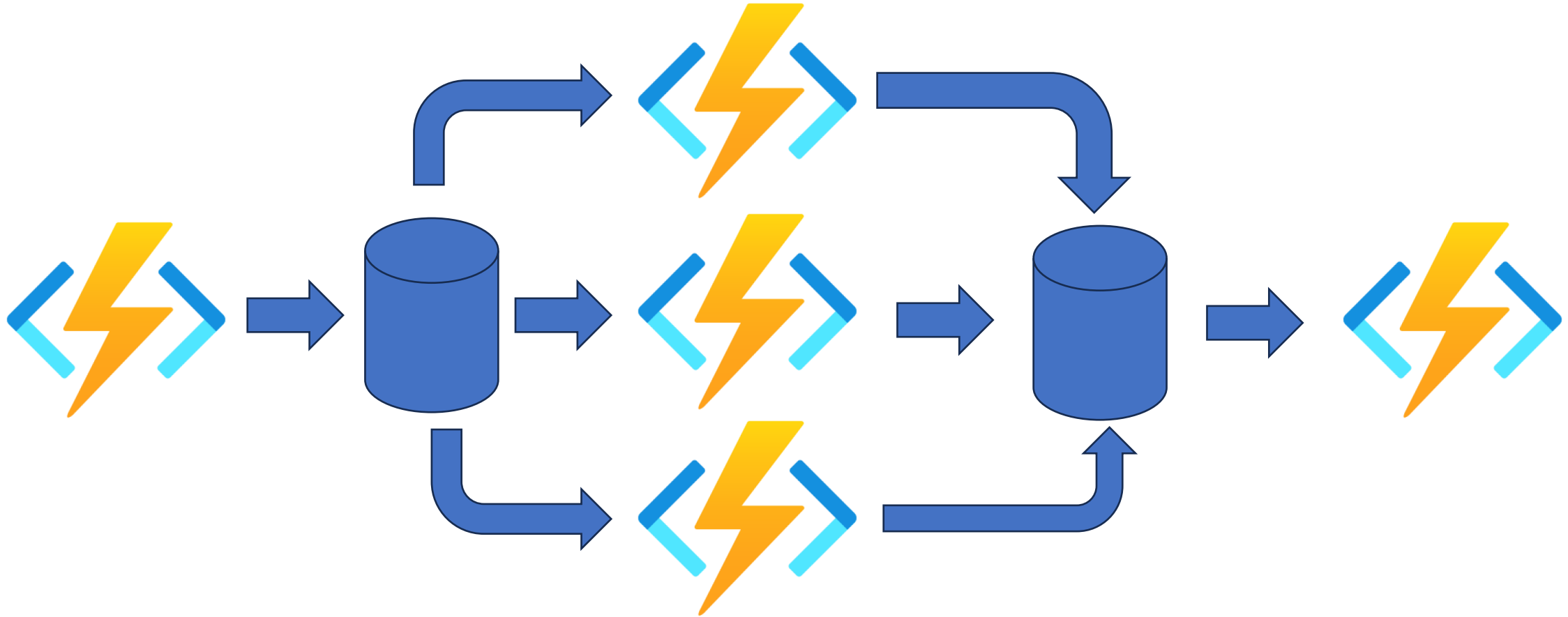
Workflow Orchestration



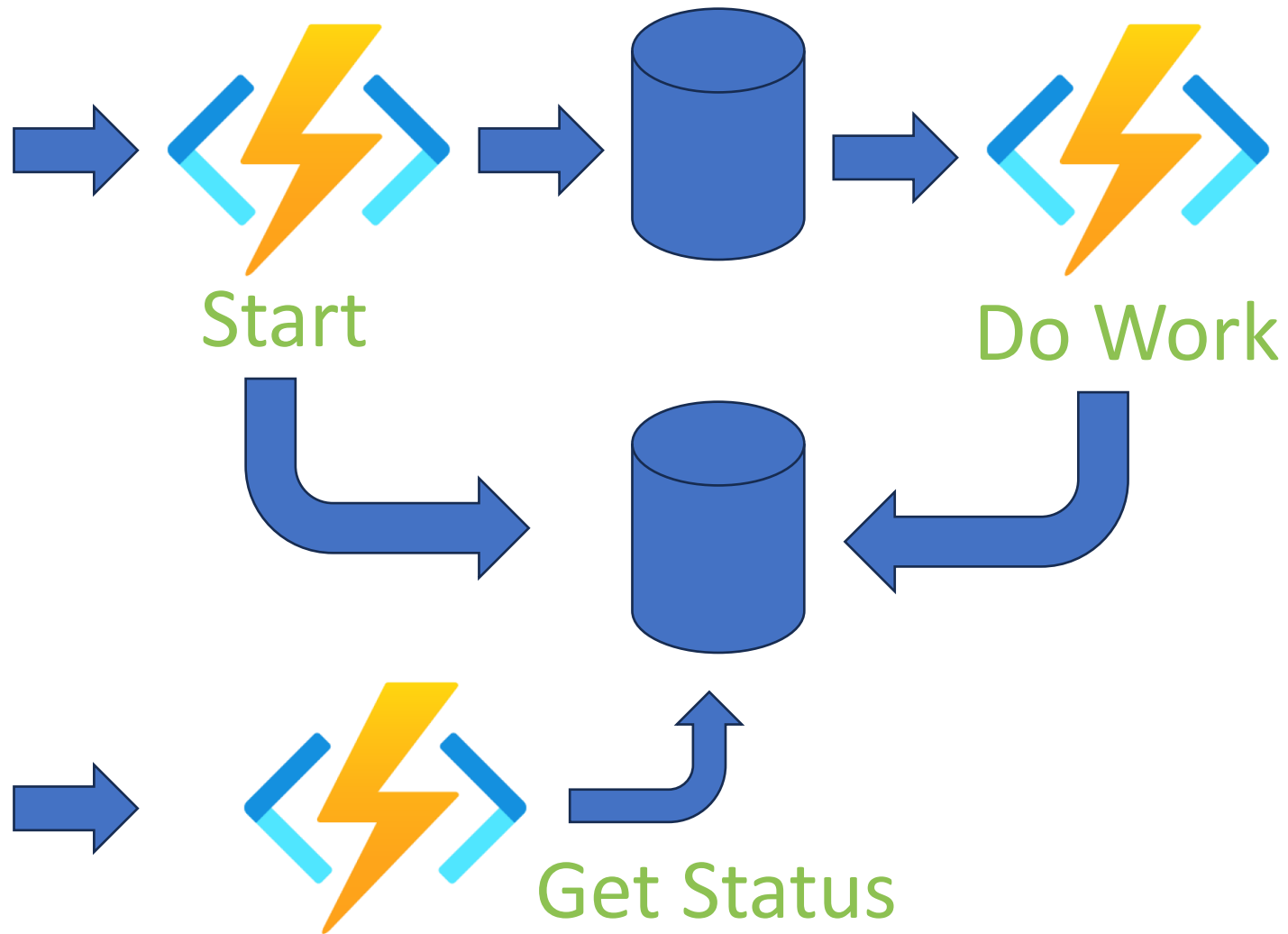
Function Chaining



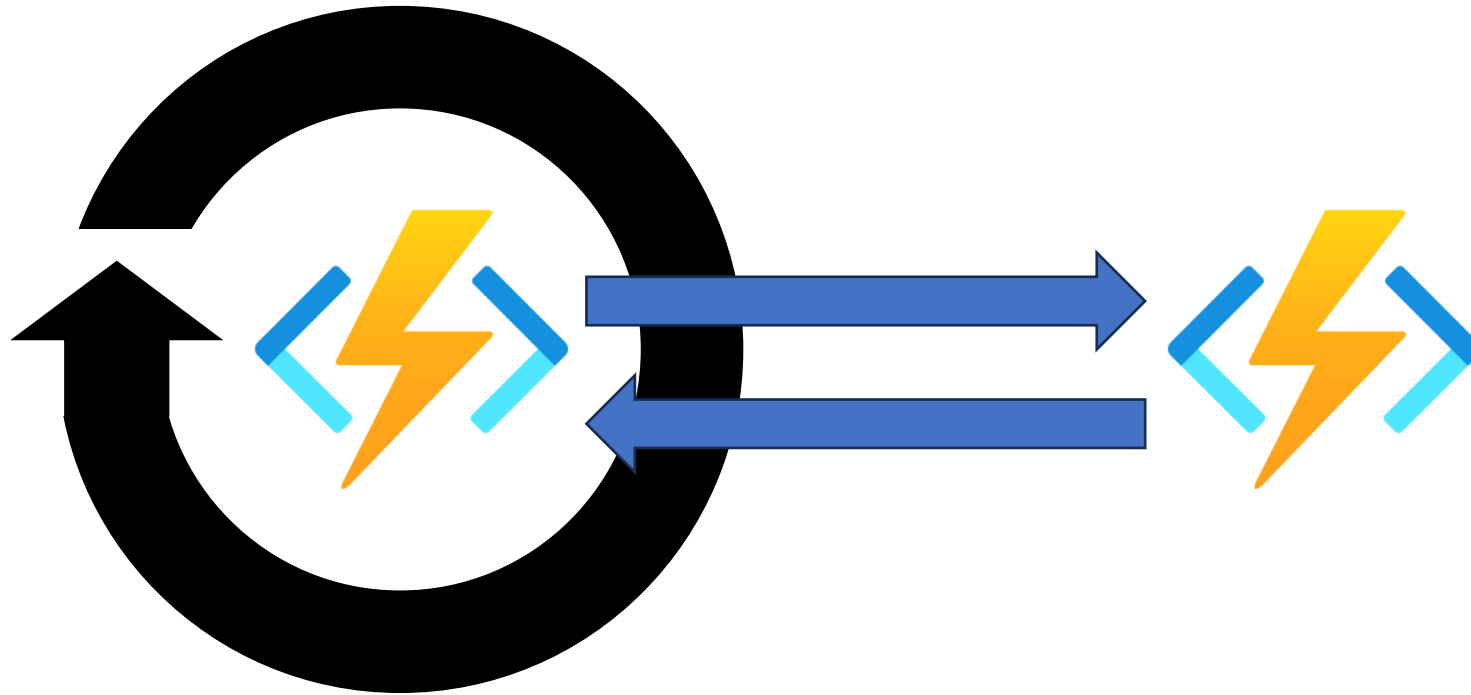
Fan Out / Fan In



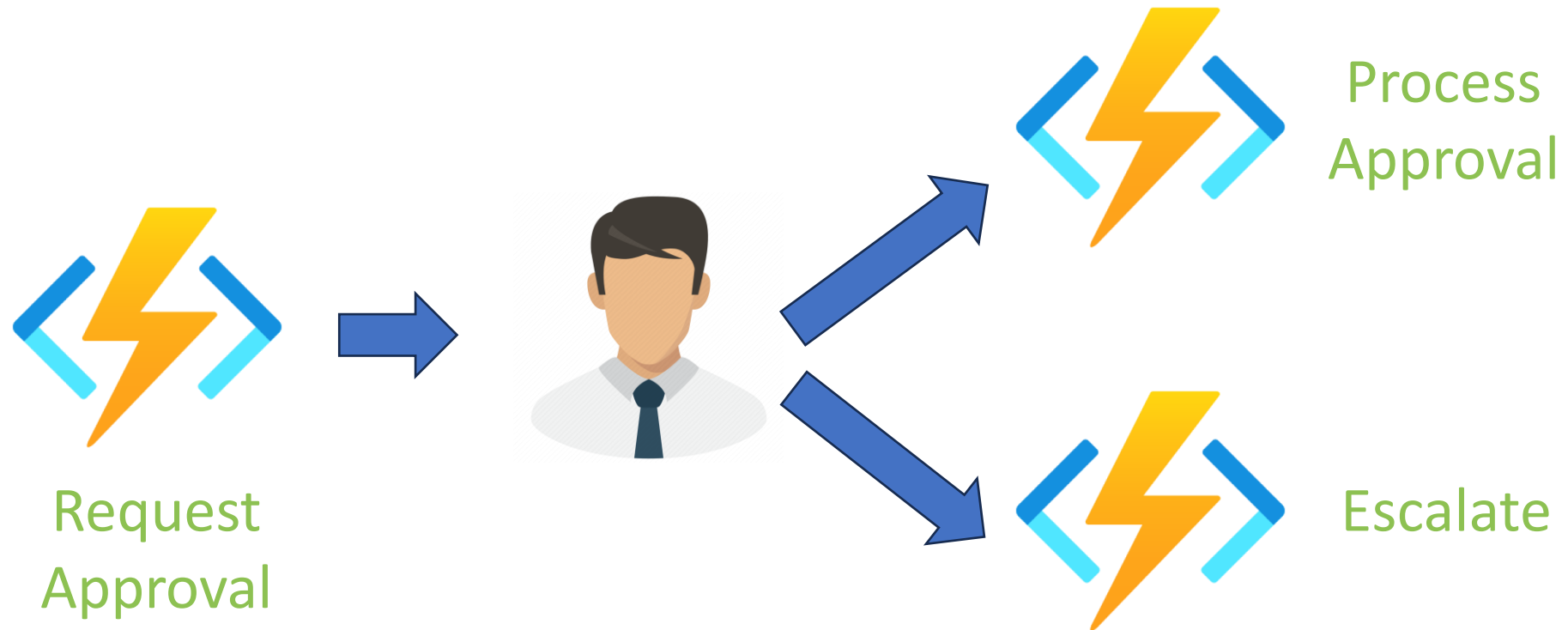
Async HTTP APIs



Monitor



Human Interaction



Serverless Best Practices

Crack the Code to Scalability

Serverless Best Practices

Stay Focused

Serverless Best Practices

Stay Focused

Handle Errors

Serverless Best Practices

Stay Focused

Handle Errors

Observe What's
Going On

Serverless Best Practices

Stay Focused

Handle Errors

Observe What's
Going On

Test, Test, and
Test Again

Serverless Best Practices

Stay Focused

Handle Errors

Observe What's
Going On

Test, Test, and
Test Again

Optimize Costs

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Log and Trace

Versioning and
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Thank You



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ChadGreen



ChadwickEGreen

