How to Compose Microservices
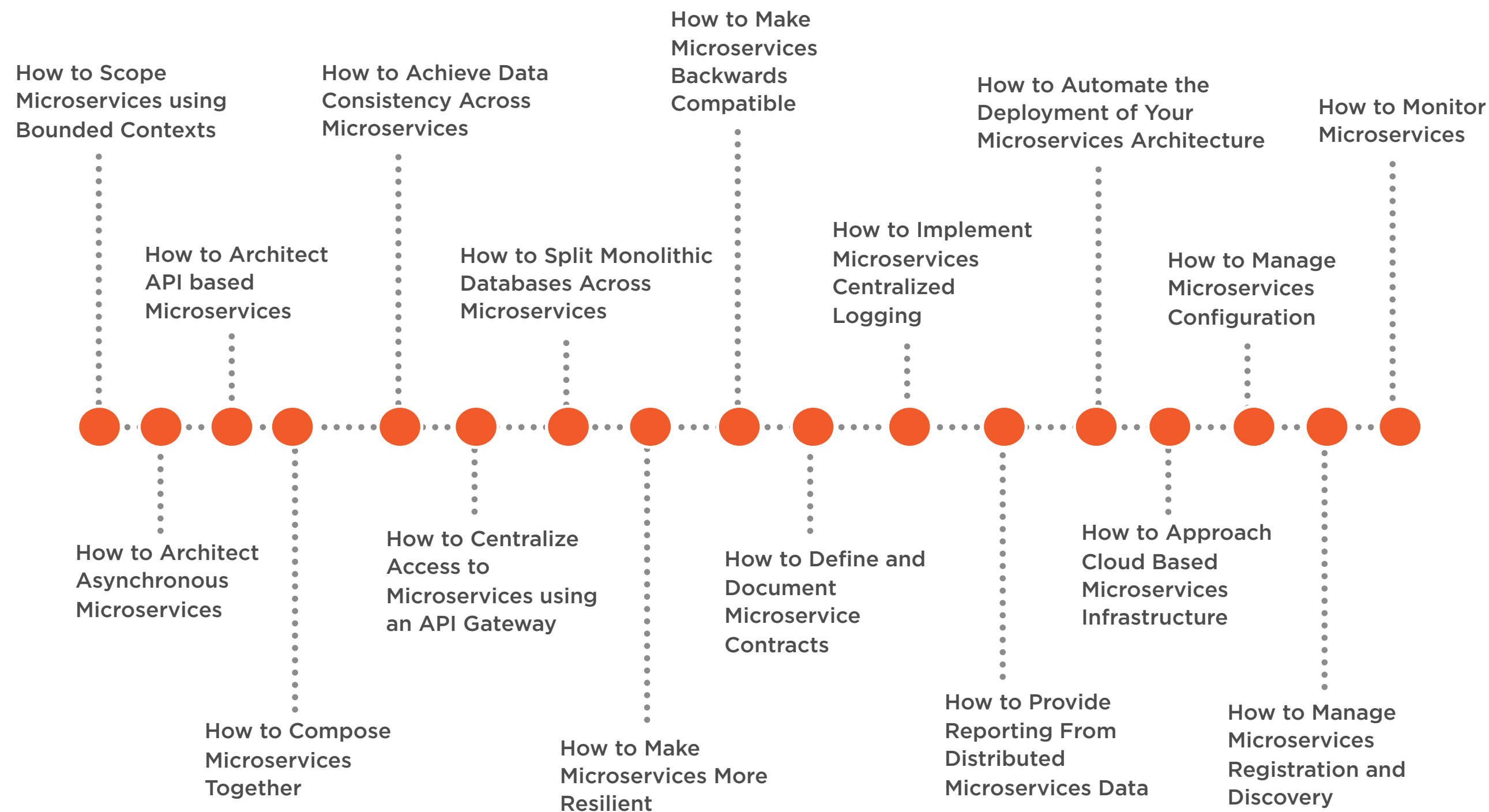
Rag Dhiman

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Microservices Architectural Design Patterns Playbook

How to Scope Microservices using Bounded Contexts

How to Achieve Data Consistency Across Microservices

How to Make Microservices Backwards Compatible

How to Automate the Deployment of Your Microservices Architecture

How to Monitor Microservices

How to Architect API based Microservices

How to Split Monolithic Databases Across Microservices

How to Implement Microservices Centralized Logging

How to Manage Microservices Configuration

How to Architect Asynchronous Microservices

How to Centralize Access to Microservices using an API Gateway

How to Define and Document Microservice Contracts

How to Approach Cloud Based Microservices Infrastructure

How to Compose Microservices Together

How to Make Microservices More Resilient

How to Provide Reporting From Distributed Microservices Data

How to Manage Microservices Registration and Discovery

Microservices Architectural Design Patterns Playbook

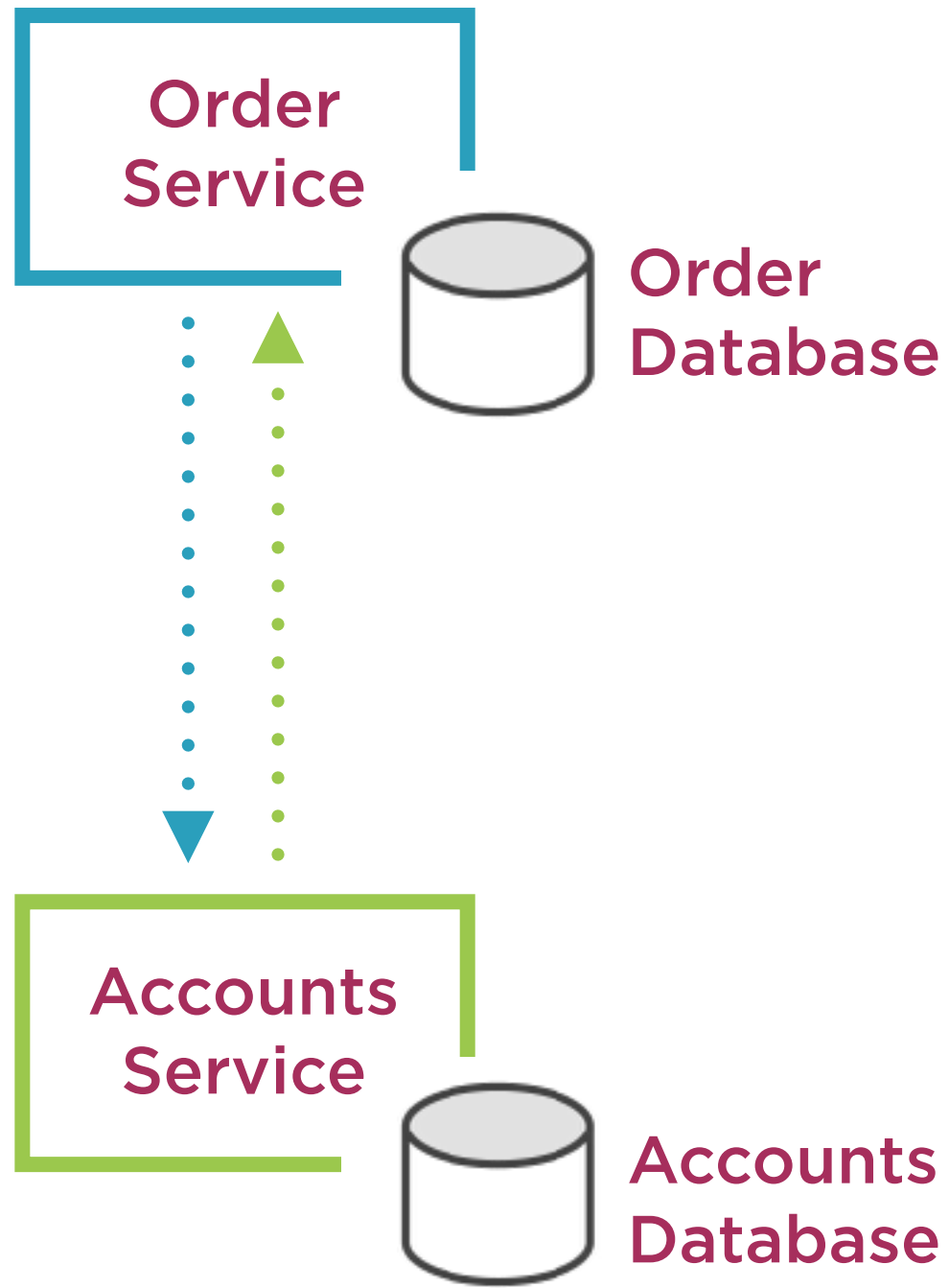# Overview

Introduction

Patterns

  - Broker

  - Aggregate

  - Chained

  - Proxy
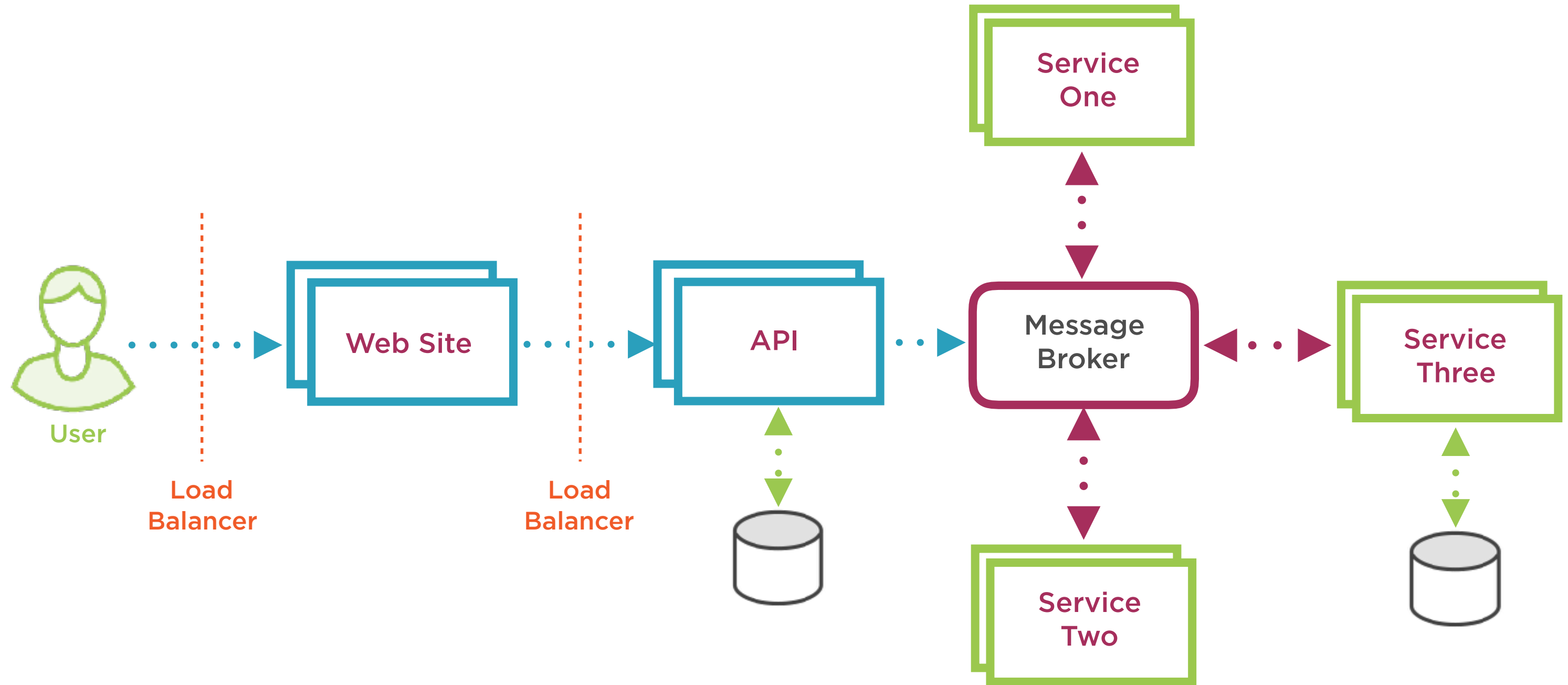
  - Branch

Introduction

Composing microservices

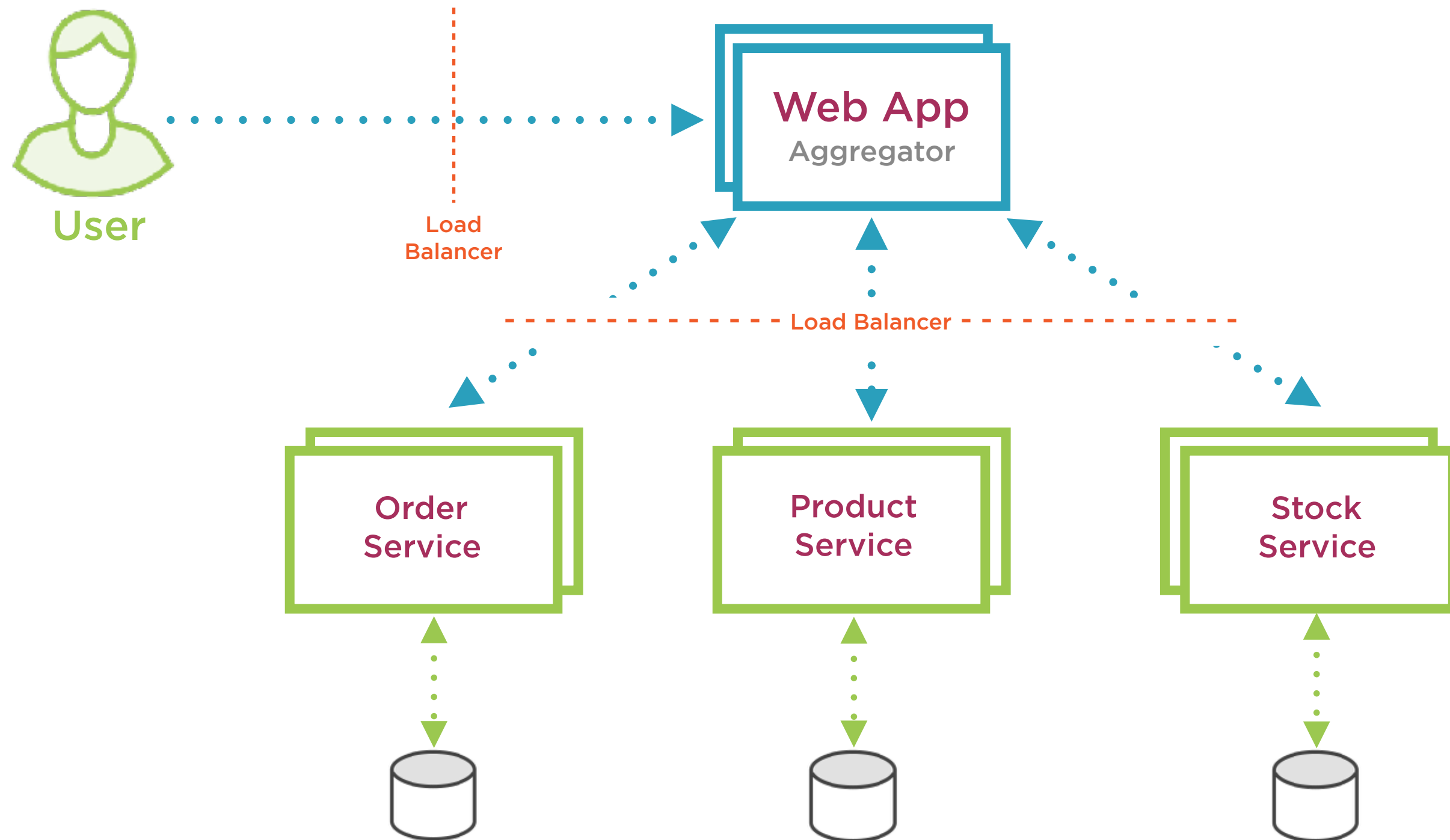- Communication within architecture

- Sequence of components

Composition Patterns

- Broker
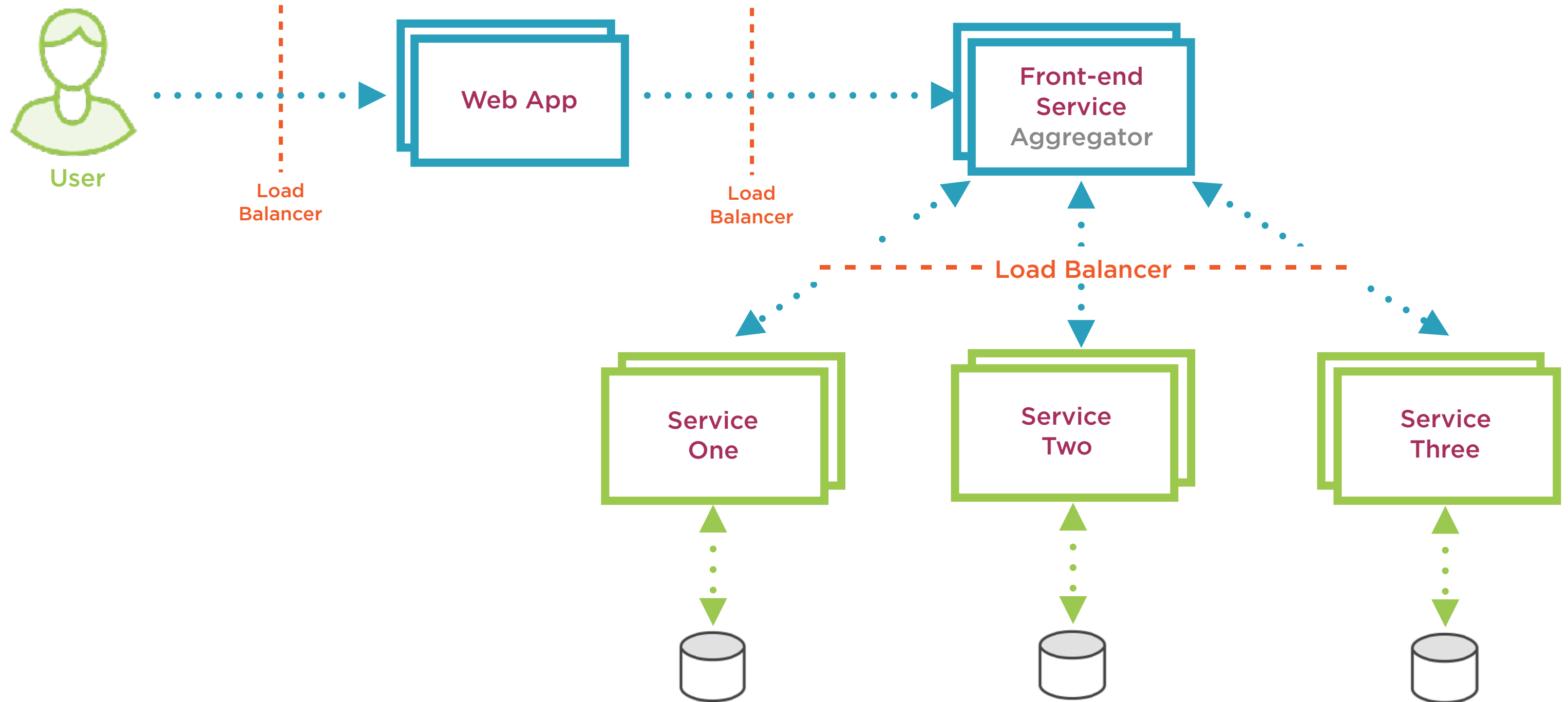
- Aggregate

- Chained

- Branch

- Proxy

Broker Composition Pattern

User

Load
Balancer

Web Site

Load
Balancer

API

Message
Broker

Service
One

Service
Two

Service
Three

Aggregate Composition Pattern

Aggregate Composition Pattern

User

Load Balancer

Web App

Load Balancer

Front-end Service
Aggregator

Load Balancer

Service One

Service Two

Service Three
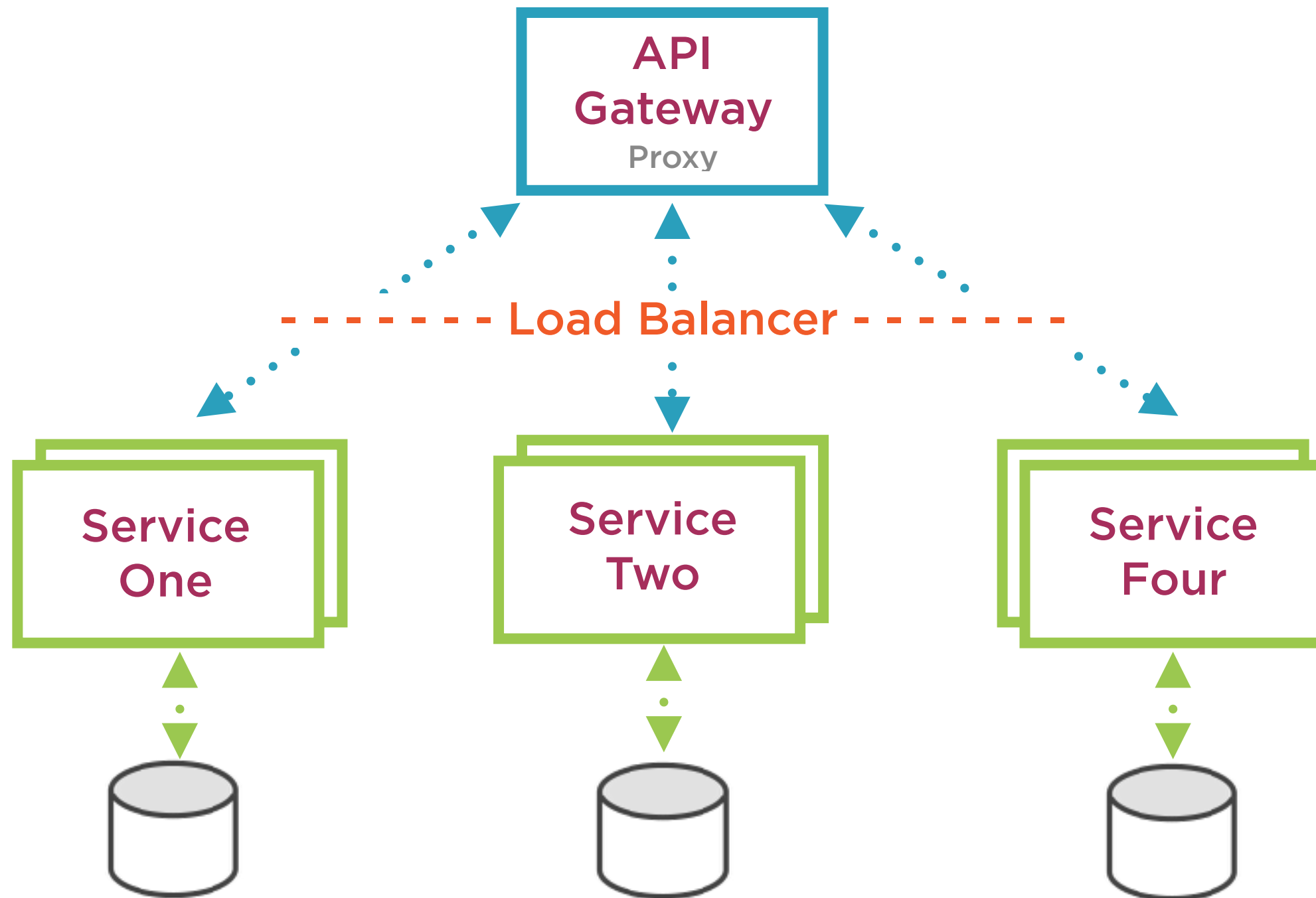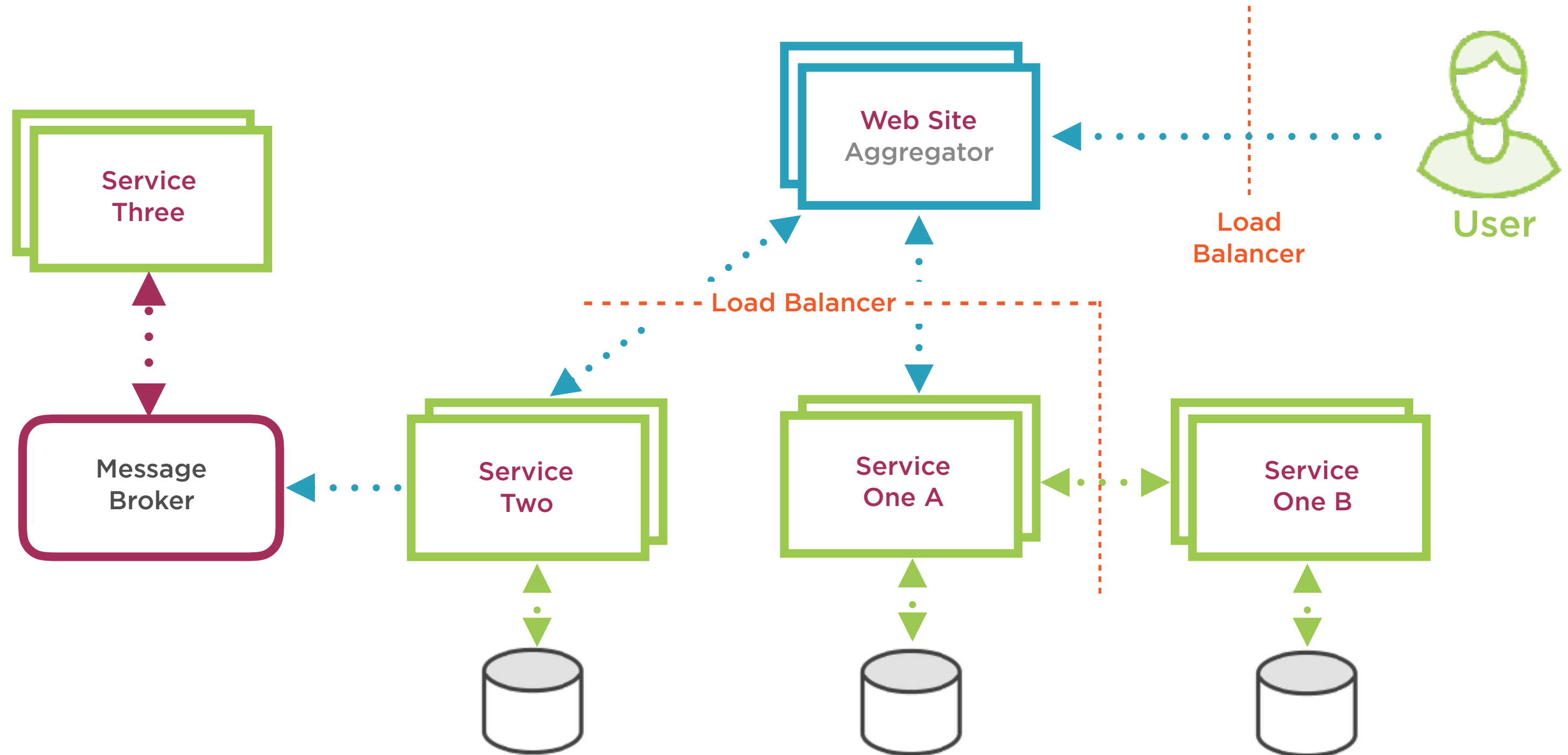
Chained Composition Pattern
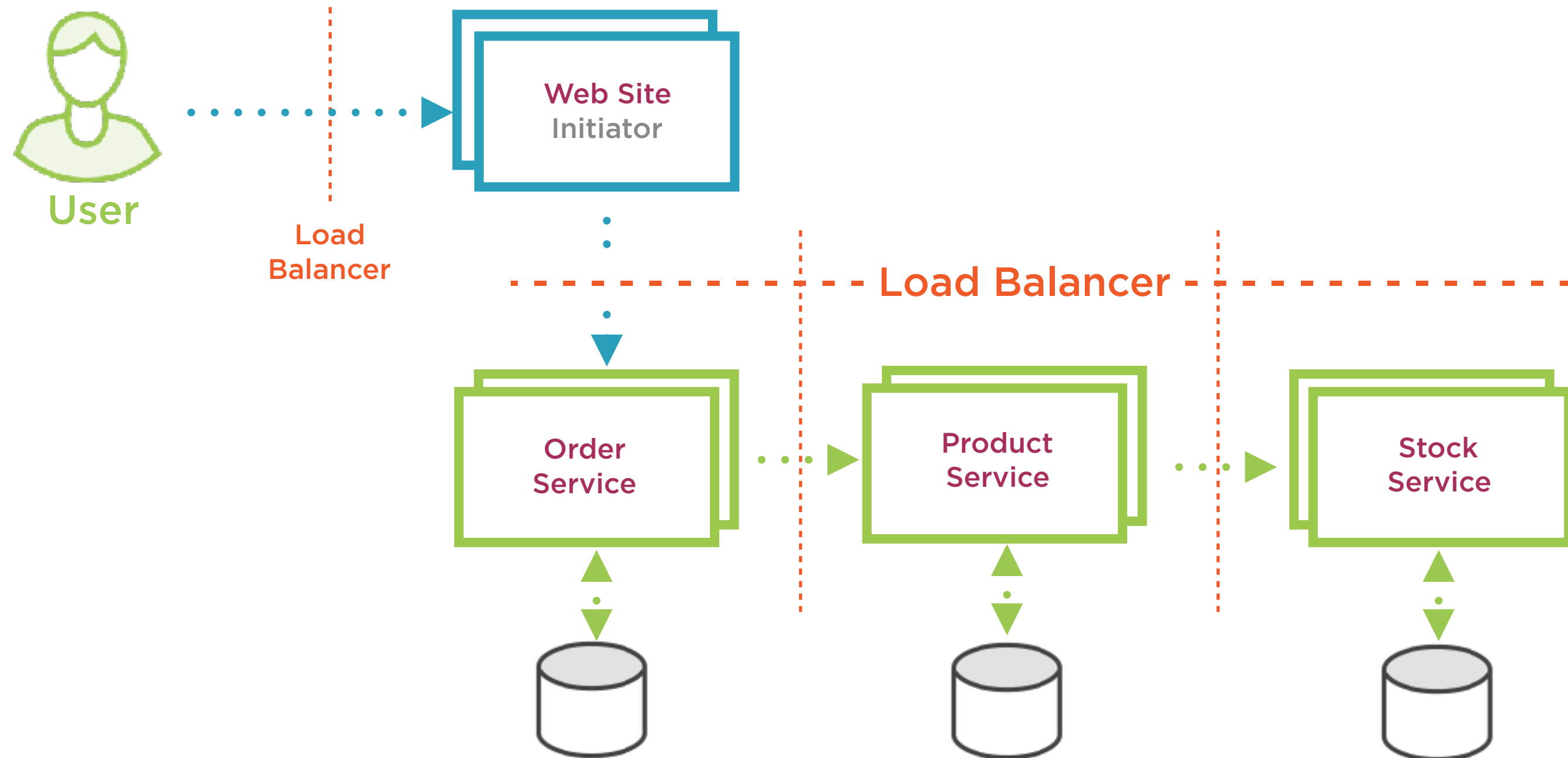
Proxy Composition Pattern

Branch Composition Pattern

Summary

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