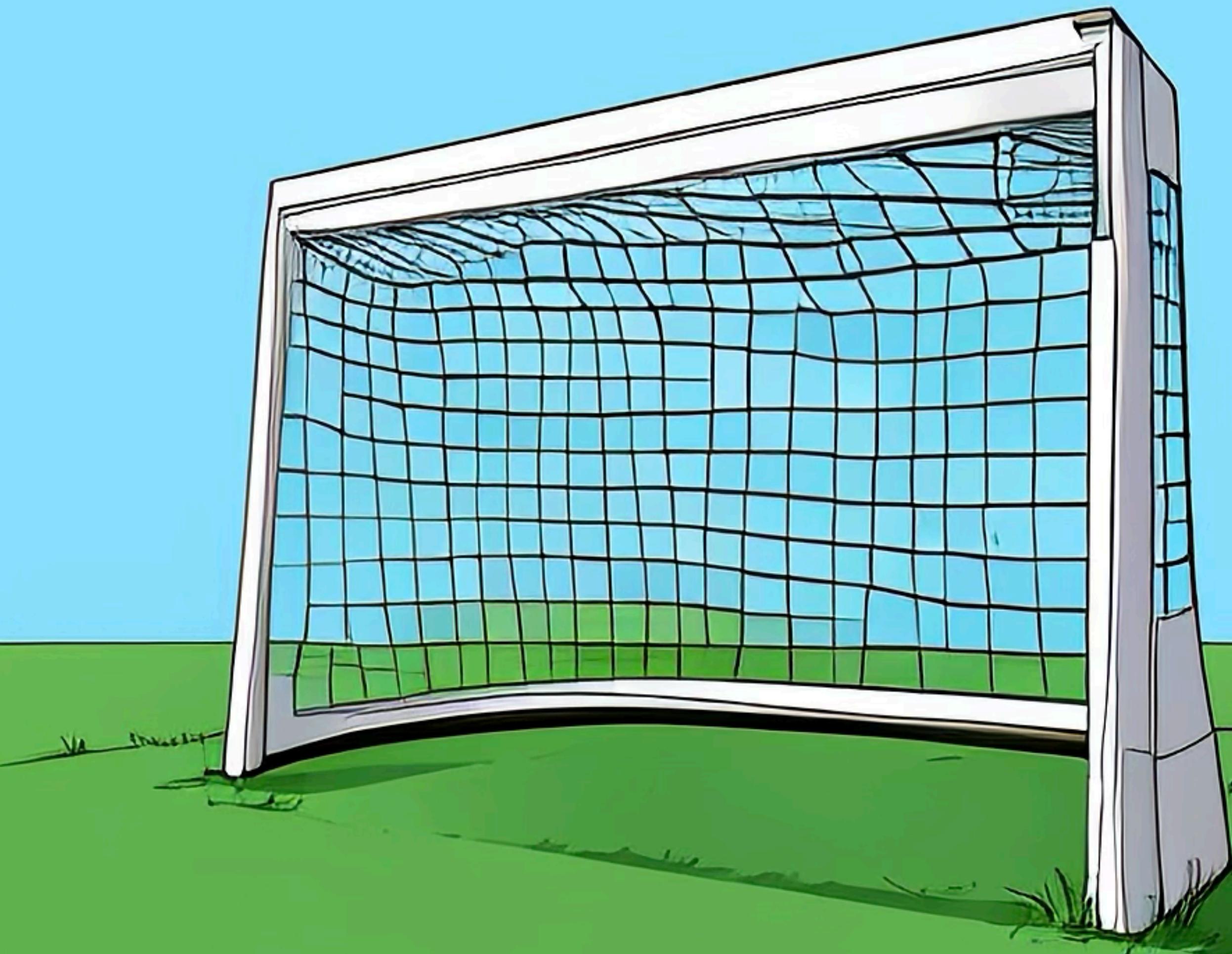


Creating the Search Service

Section Four

The goal of this
section



To set up and configure the search .Net service in Aspire

Configuring the Typesense aspire integration with this service

Create the search endpoint and configure RabbitMQ messaging so the search index is updated with new, updated, or deleted questions

typesensel

Typesense - What is it?

- Open source, typo-tolerant search engine
- Lighter, developer-friendly alternative to Elasticsearch or Algolia
- Designed for fast, relevant, full-text search with a simple API

typesense |

Core concepts

Collections

Similar to tables in DB

Each collection defines a schema (fields, types/sortable)

Documents

JSON objects we index into a collection

Search

Query by text fields

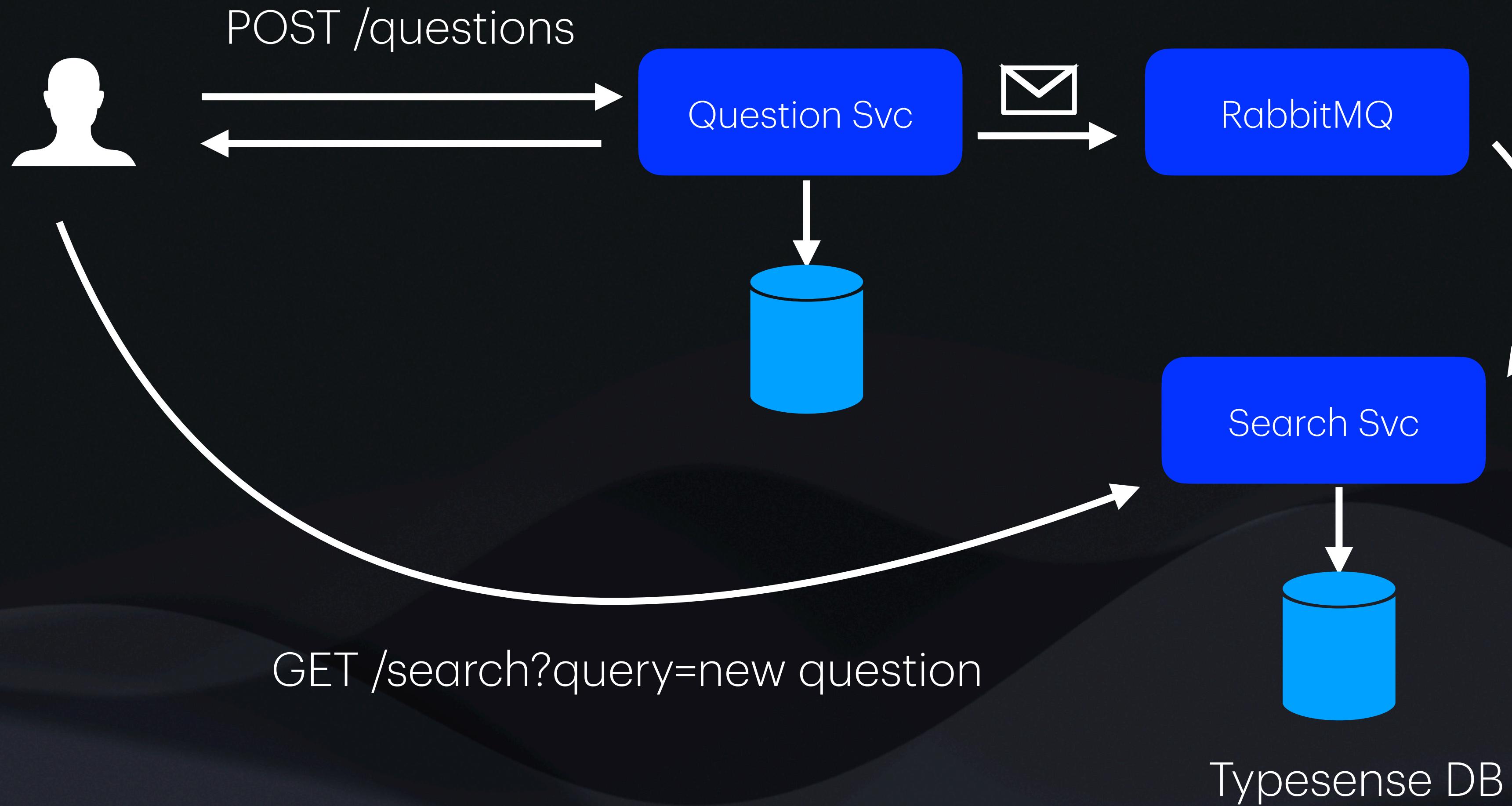
Automatically handles types, synonyms and relevancy ranking

Supports filters, faceting, sorting and pagination

Key features

- Typo tolerance (javscropt => javascript)
- Faceted search (filter and group results)
- Synonyms map (.Net <-> dotnet)
- Geosearch
- Sorting and ranking
- Instant search (optimized for <50ms response times)

The flow



Demo



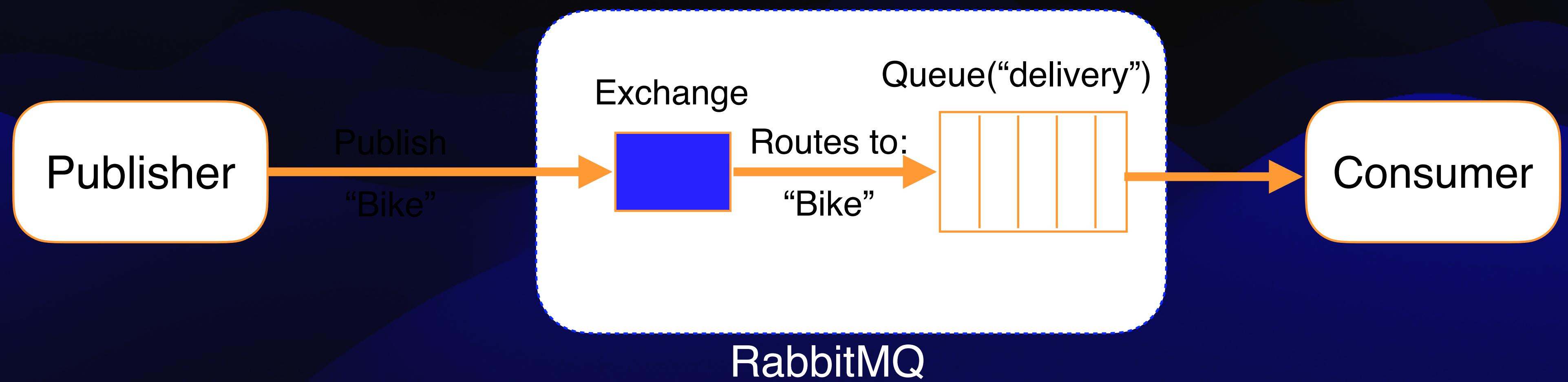
RabbitMQ

RabbitMQ - What is it?

- Message Broker - accepts and forwards messages
- Producer/Consumer model (Pub/Sub)
- Messages are stored on queues (message buffer)
- Can use persistent storage
- Exchanges can be used for “routing” functionality
- Uses AMQP

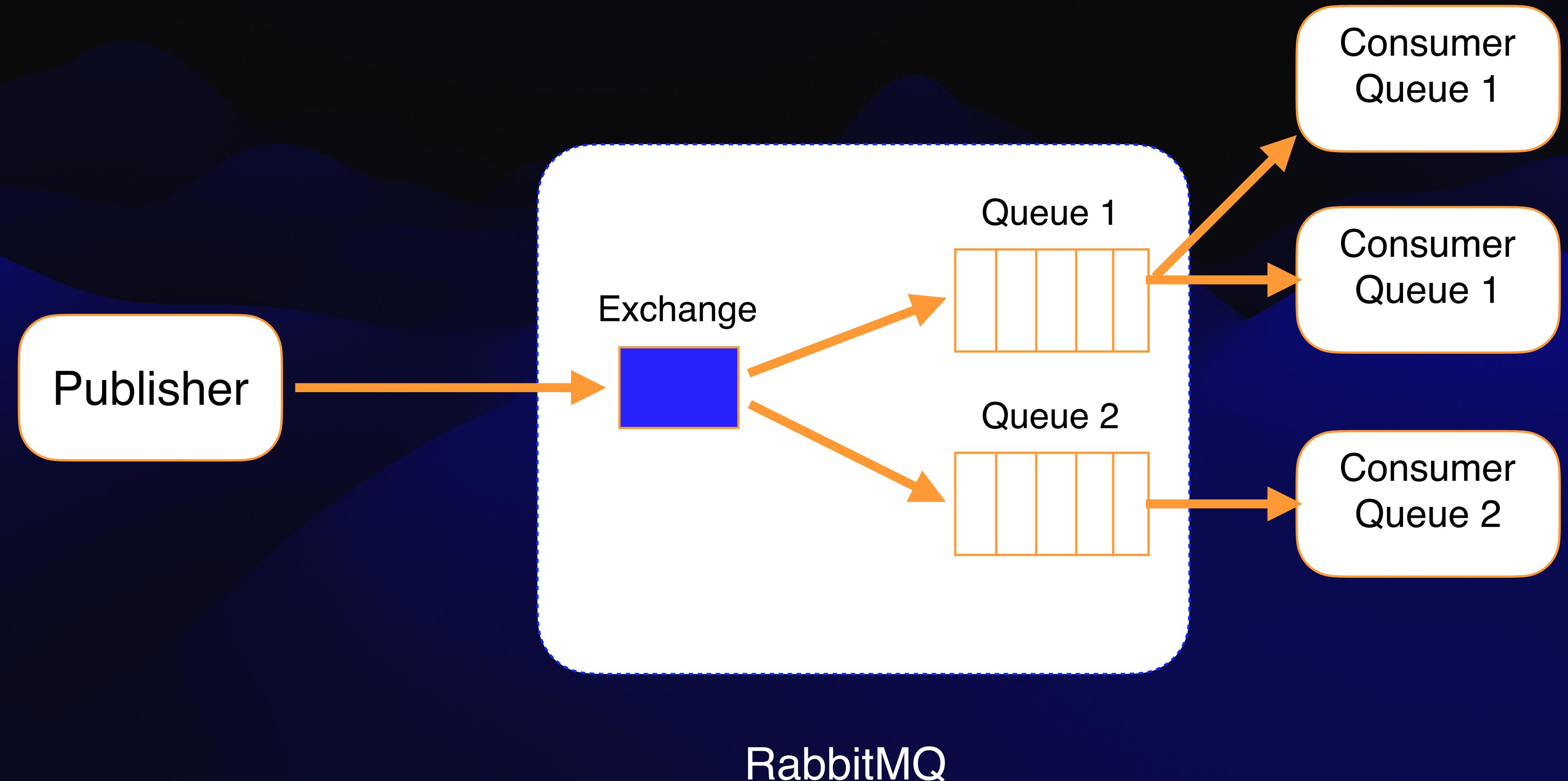
Exchanges

- Direct
- Fanout
- Topic
- Header



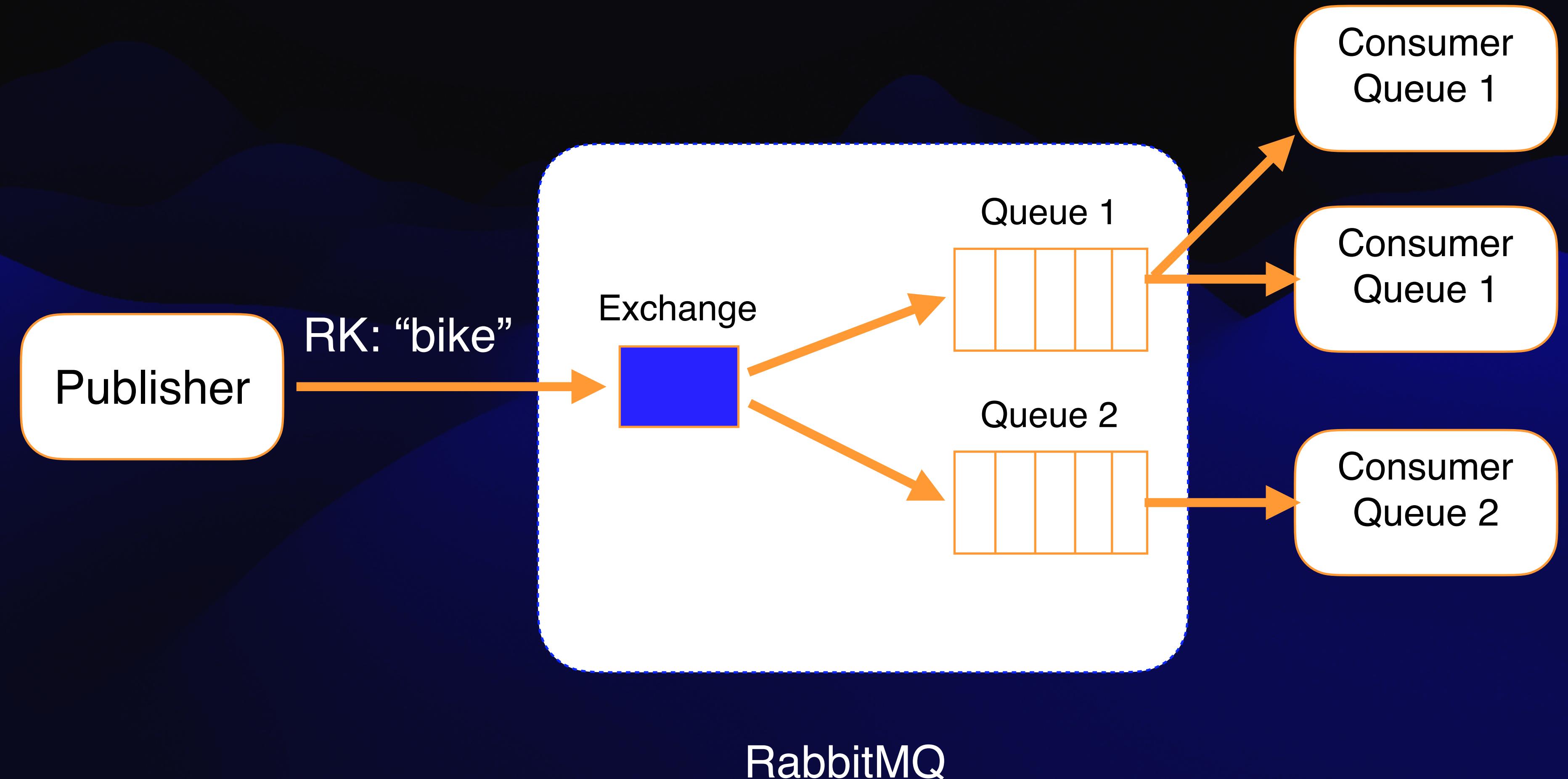
Exchanges

- Direct
- **Fanout**
- Topic
- Header



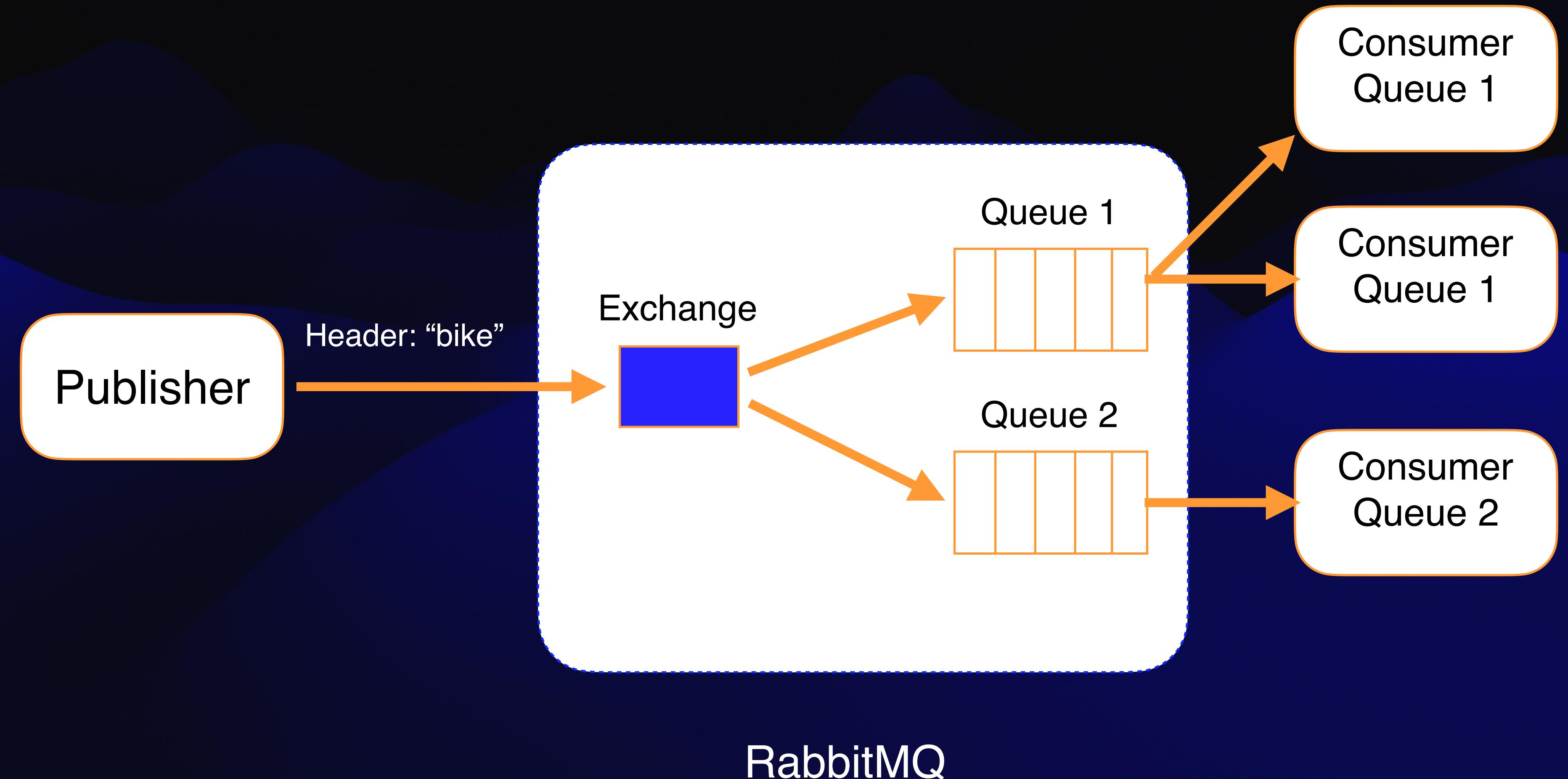
Exchanges

- Direct
- Fanout
- Topic
- Header



Exchanges

- Direct
- Fanout
- Topic
- Header



Wolverine

Build Robust Event Driven Architectures with Simpler Code

The messaging and web development framework that gets out of your way

[Get Started](#)

👉 Write Less Code

A unique approach to writing server side code that delivers fast performance & provides an effective middleware strategy whilst keeping out of the way of your application code

⚡ Messaging

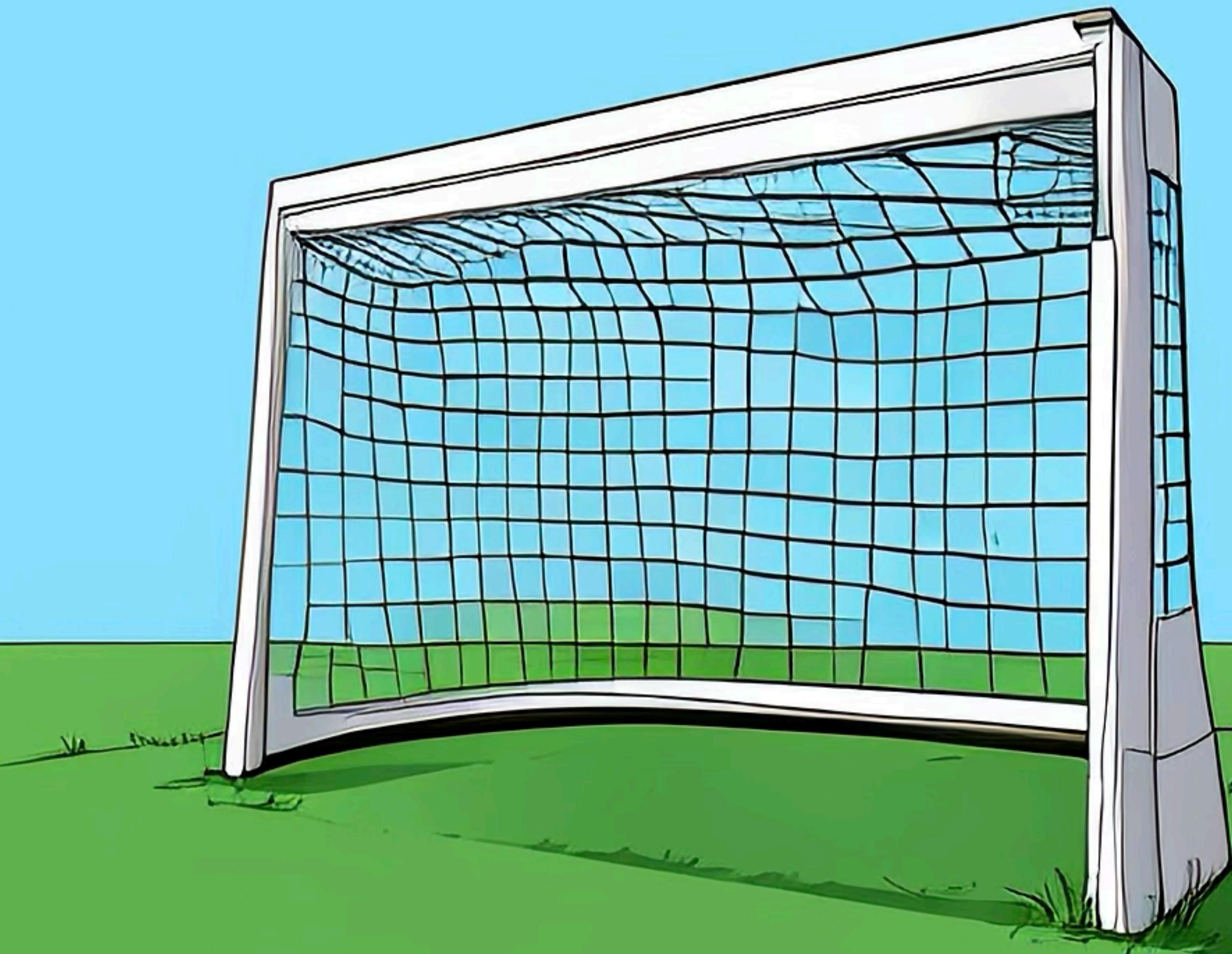
Everything you need for a robust messaging solution between services including support for many popular transports, message failure policies, and persistent inbox/outbox messaging

📚 Asynchronous Processing

Use Wolverine as an in memory command bus to easily leverage asynchronous and parallel processing within a single or multiple processes

Summary of section four

The goal of this
section



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Up next...