Comparing Pulsar and Kafka

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Team Checklist

Overview of Apache Pulsar

Apache Pulsar vs Apache Kafka

Setting up Google Kubernetes Engine

Installing Apache Pulsar with Helm

Customizing the Helm chart

Securing our Apache Pulsar cluster

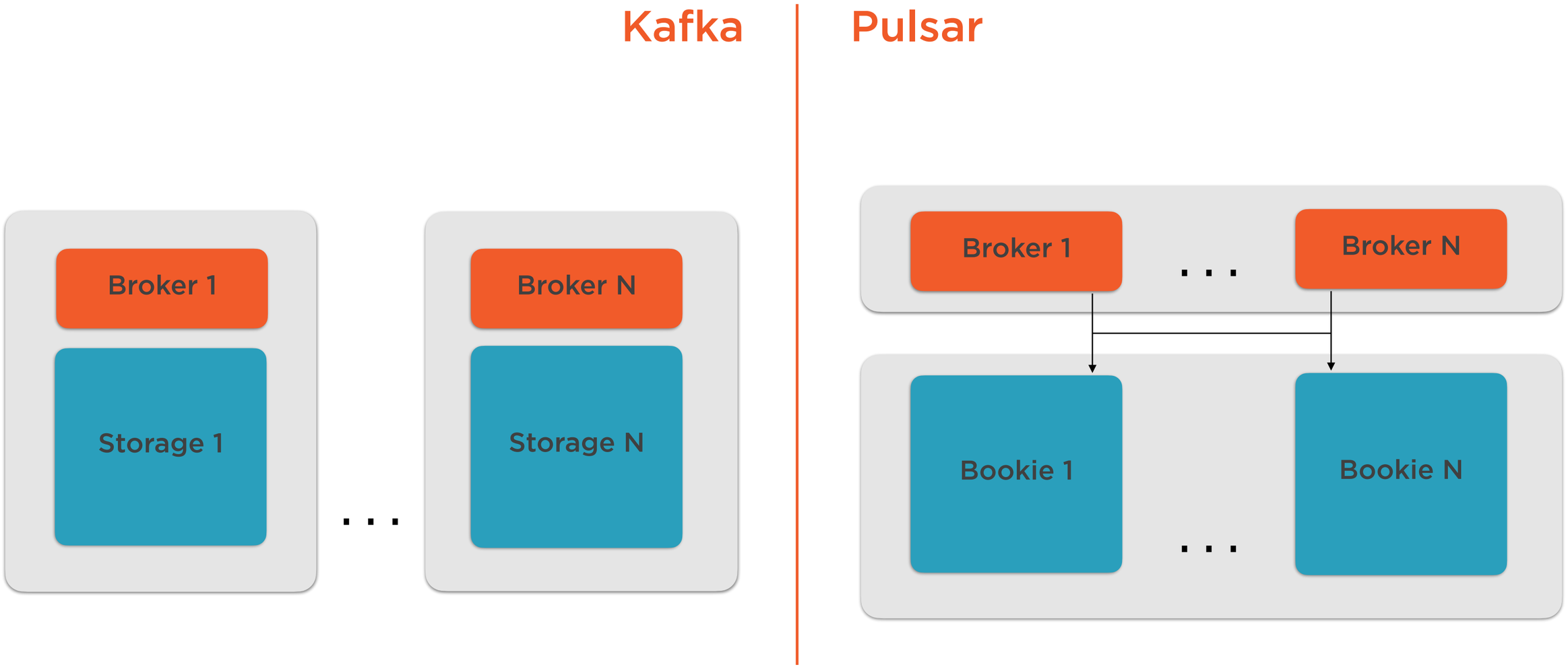
Creating producers and consumers

Leveraging schemas in our cluster

Overview

- Multi-layer architecture
- Storage models
- Read/Write speed
- Rebalancing
- Points of failure
- Geo-Replication
- Security models

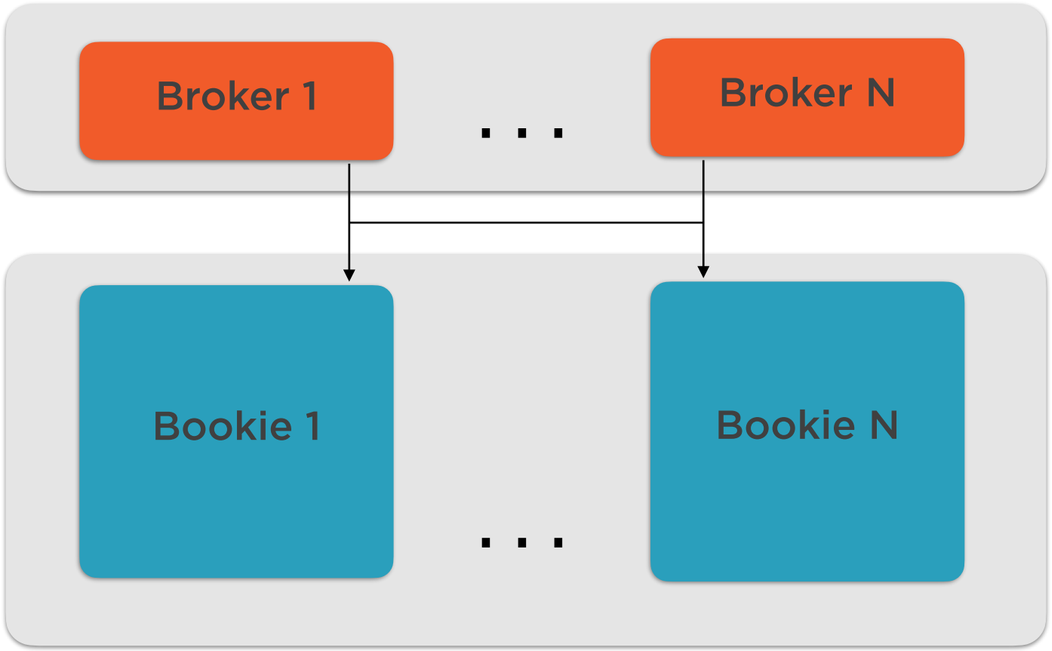
Multi-layer Architecture



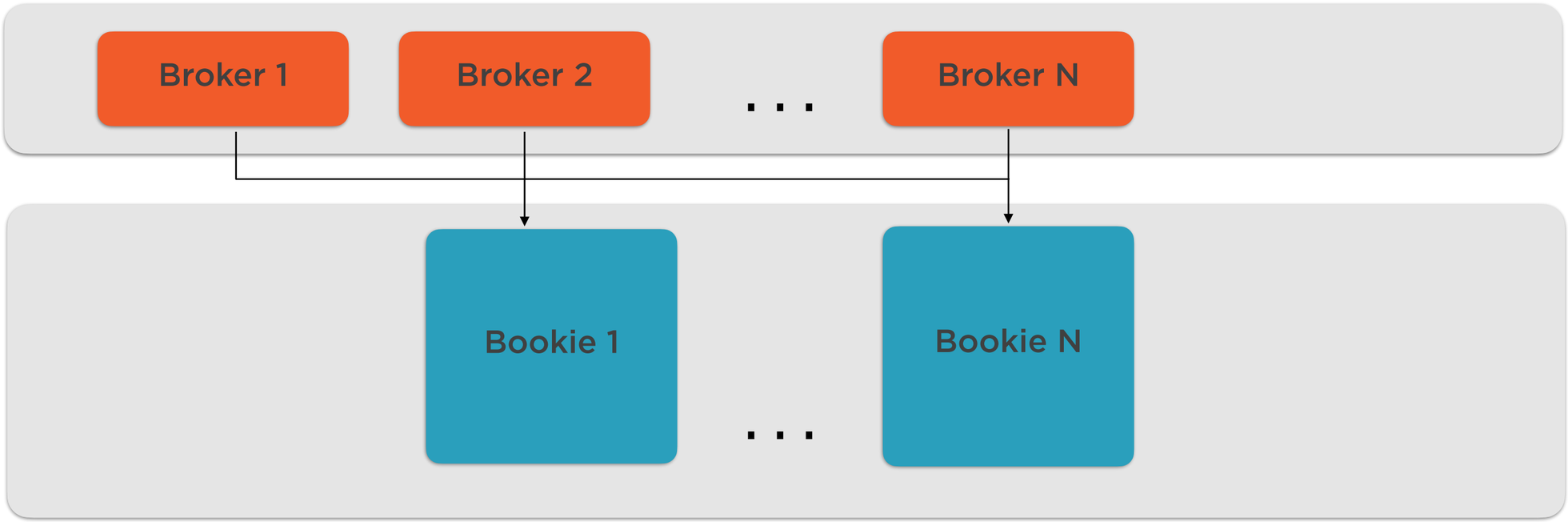
Multi-layer Architecture

Kafka

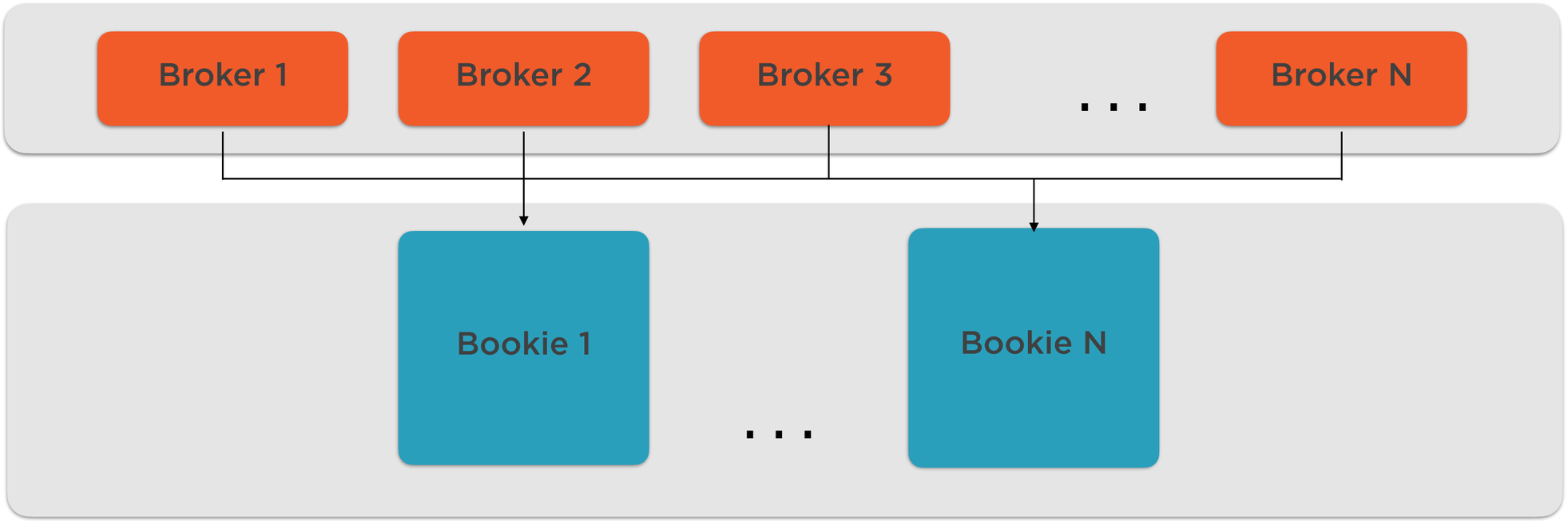
Pulsar



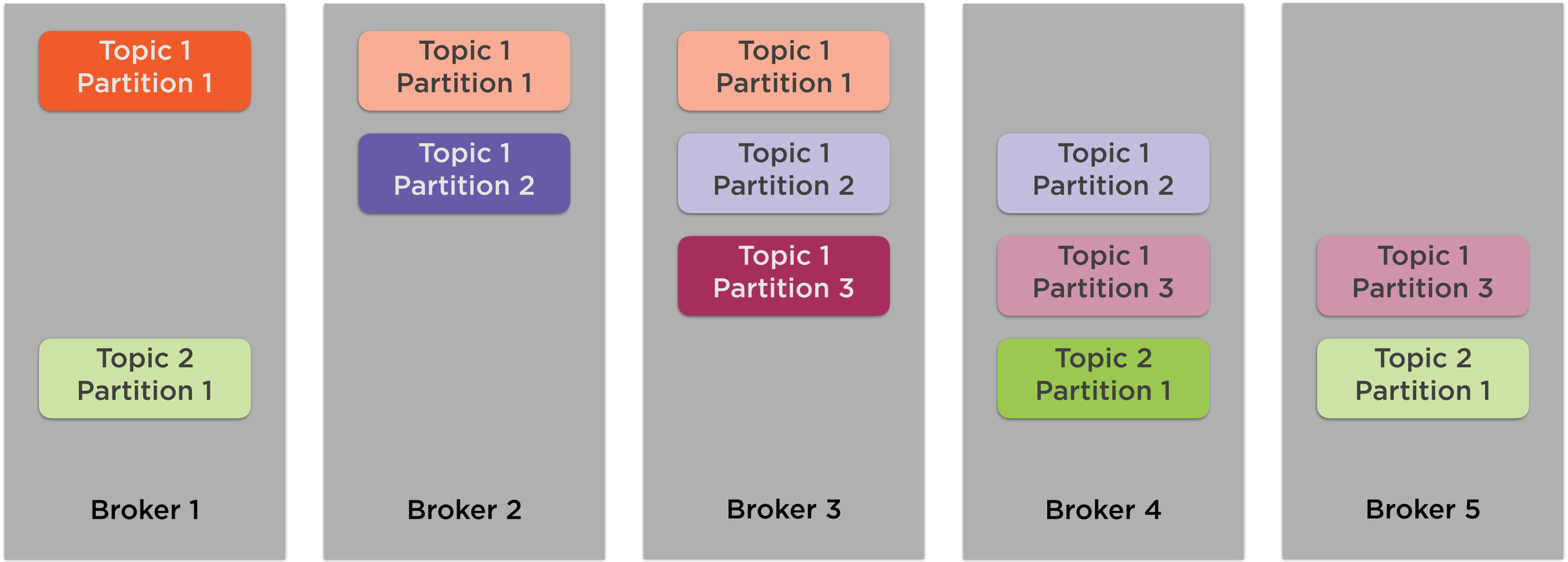
Multi-layer Architecture



Multi-layer Architecture



Kafka Writes



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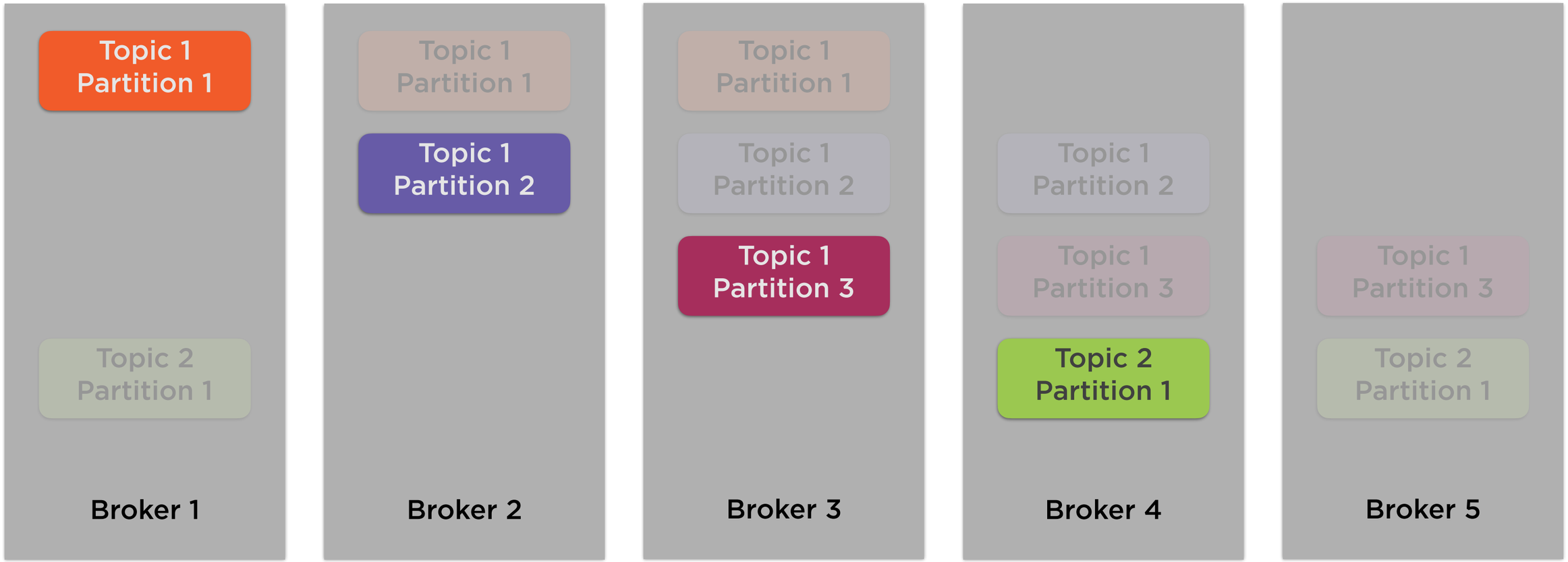

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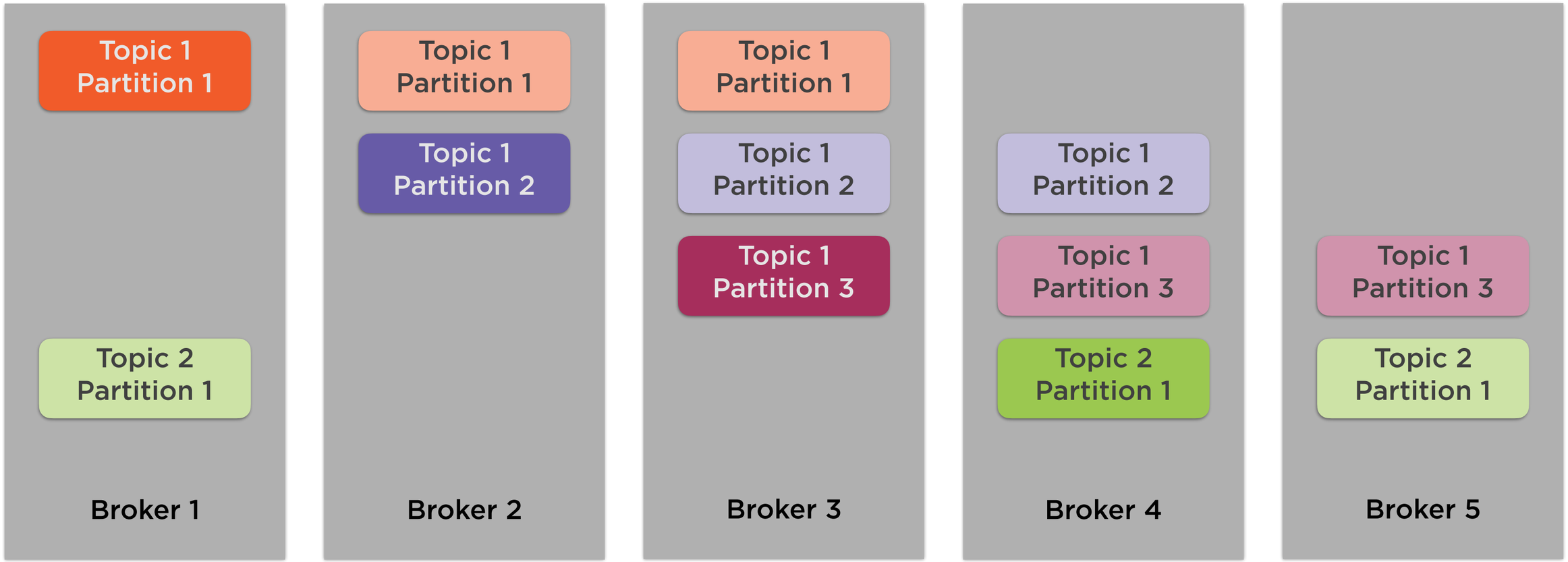

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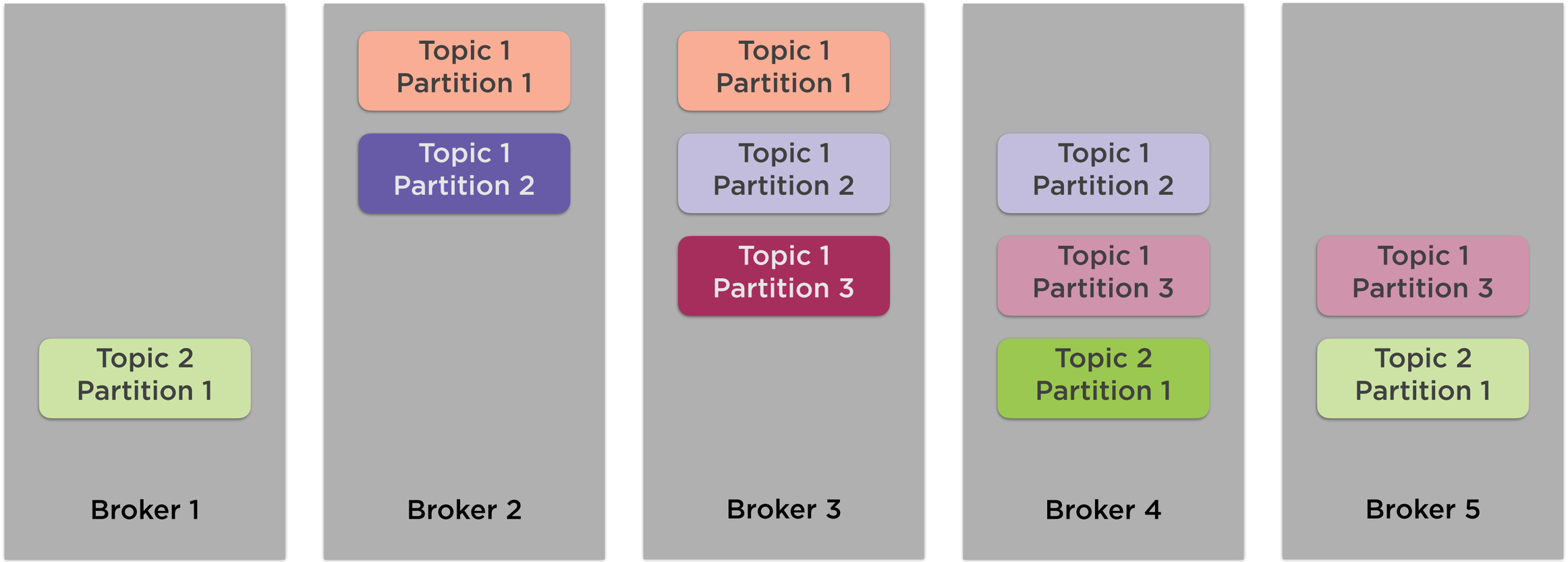

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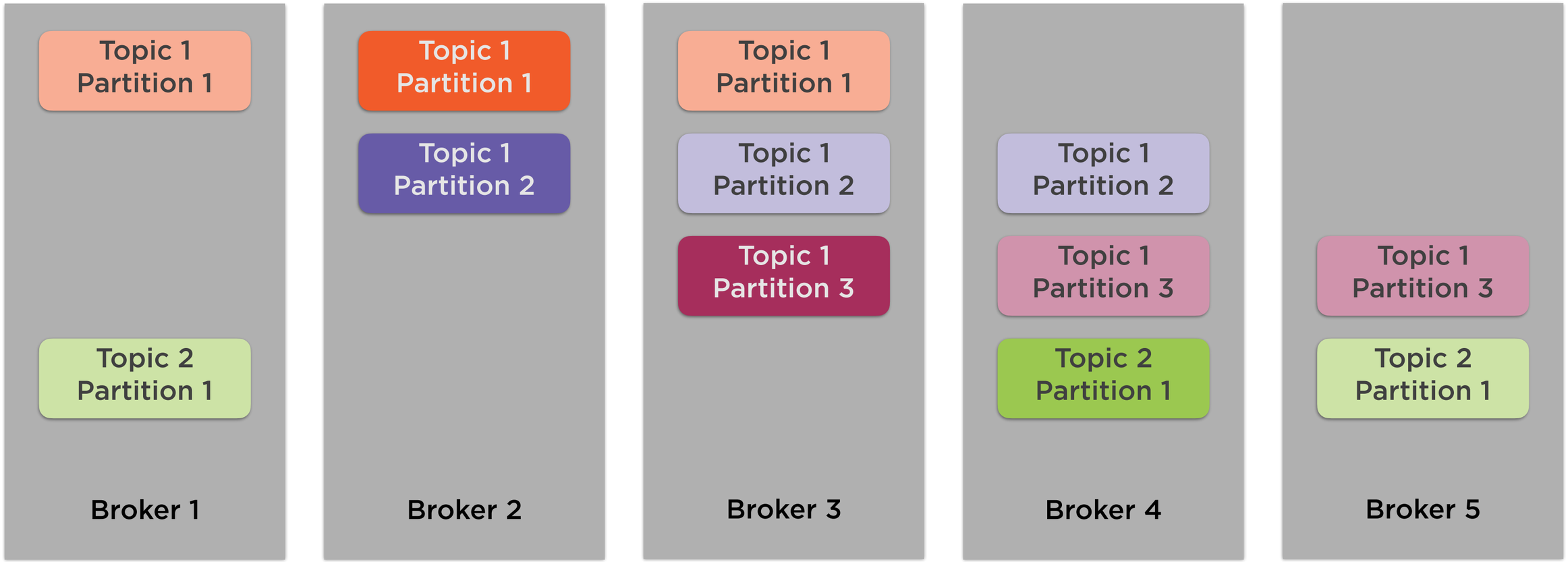

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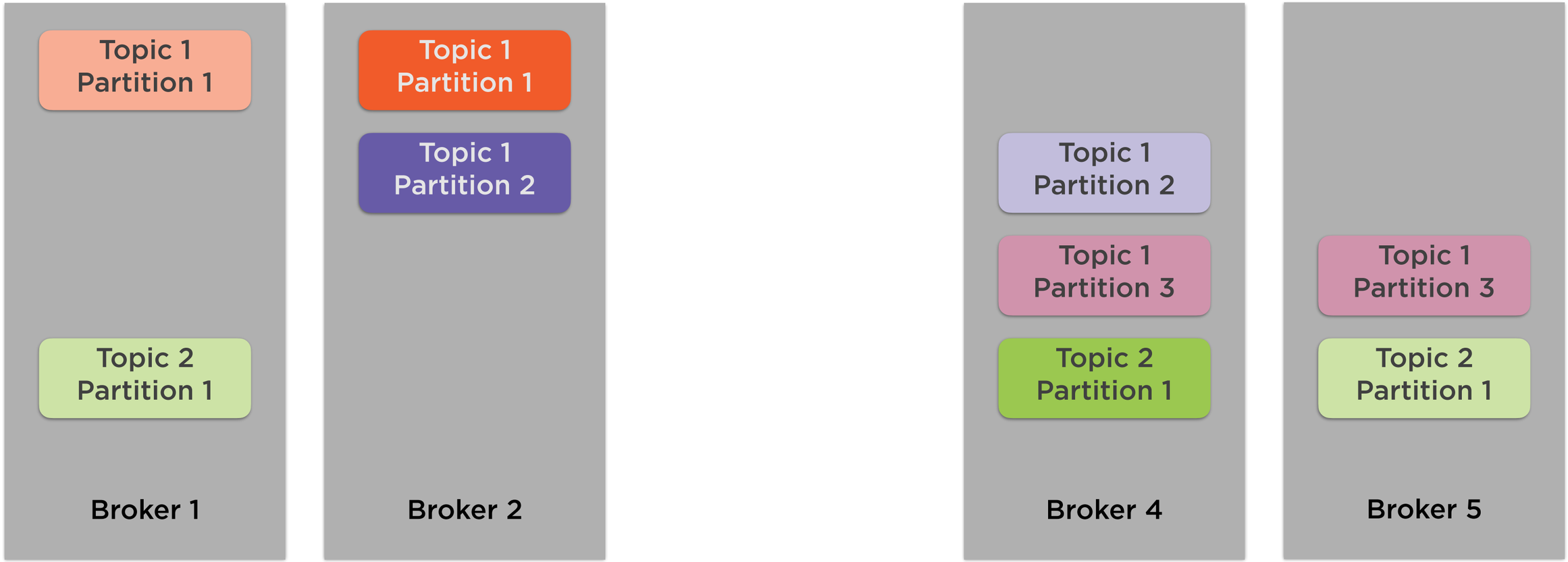

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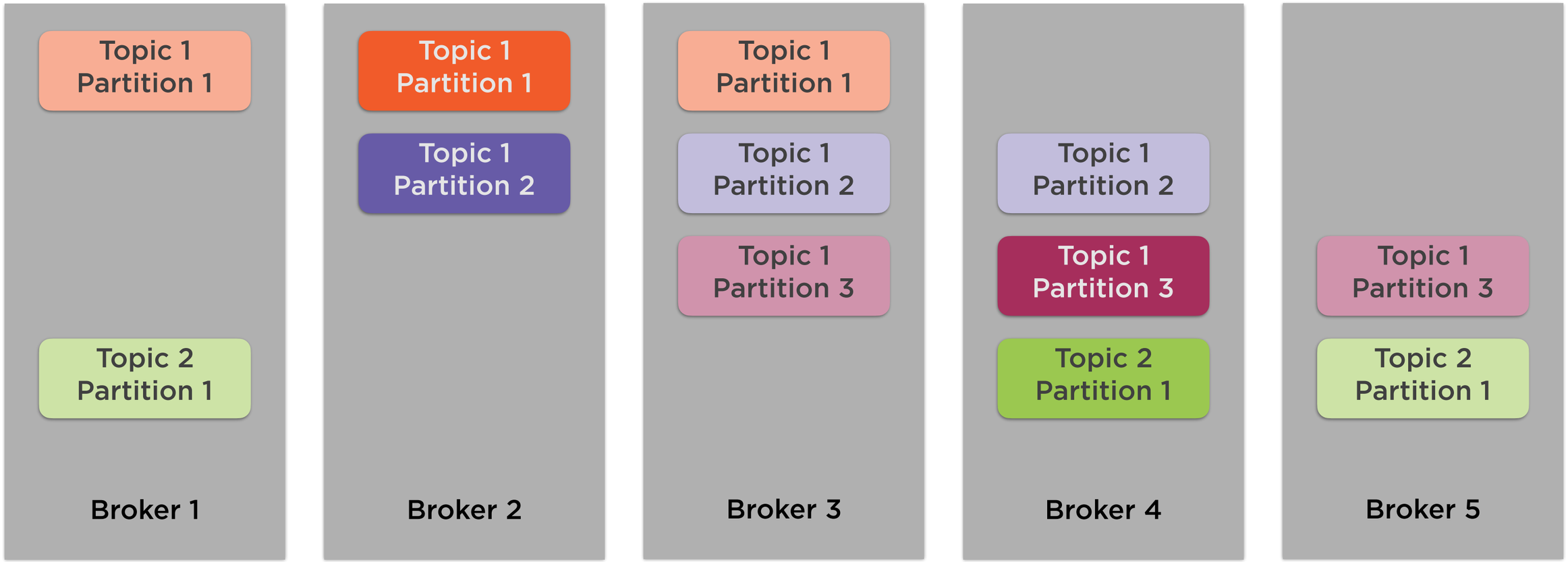

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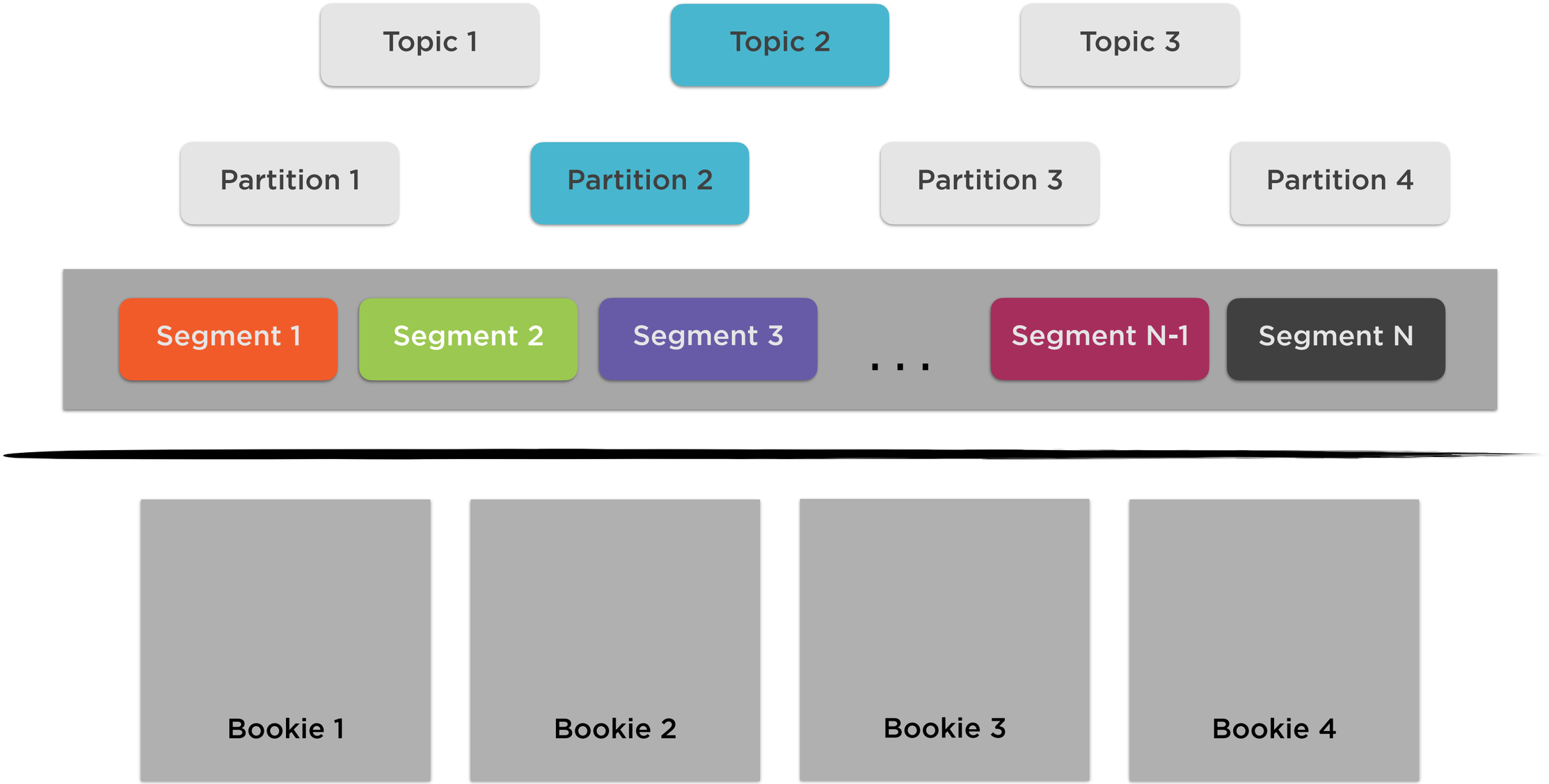

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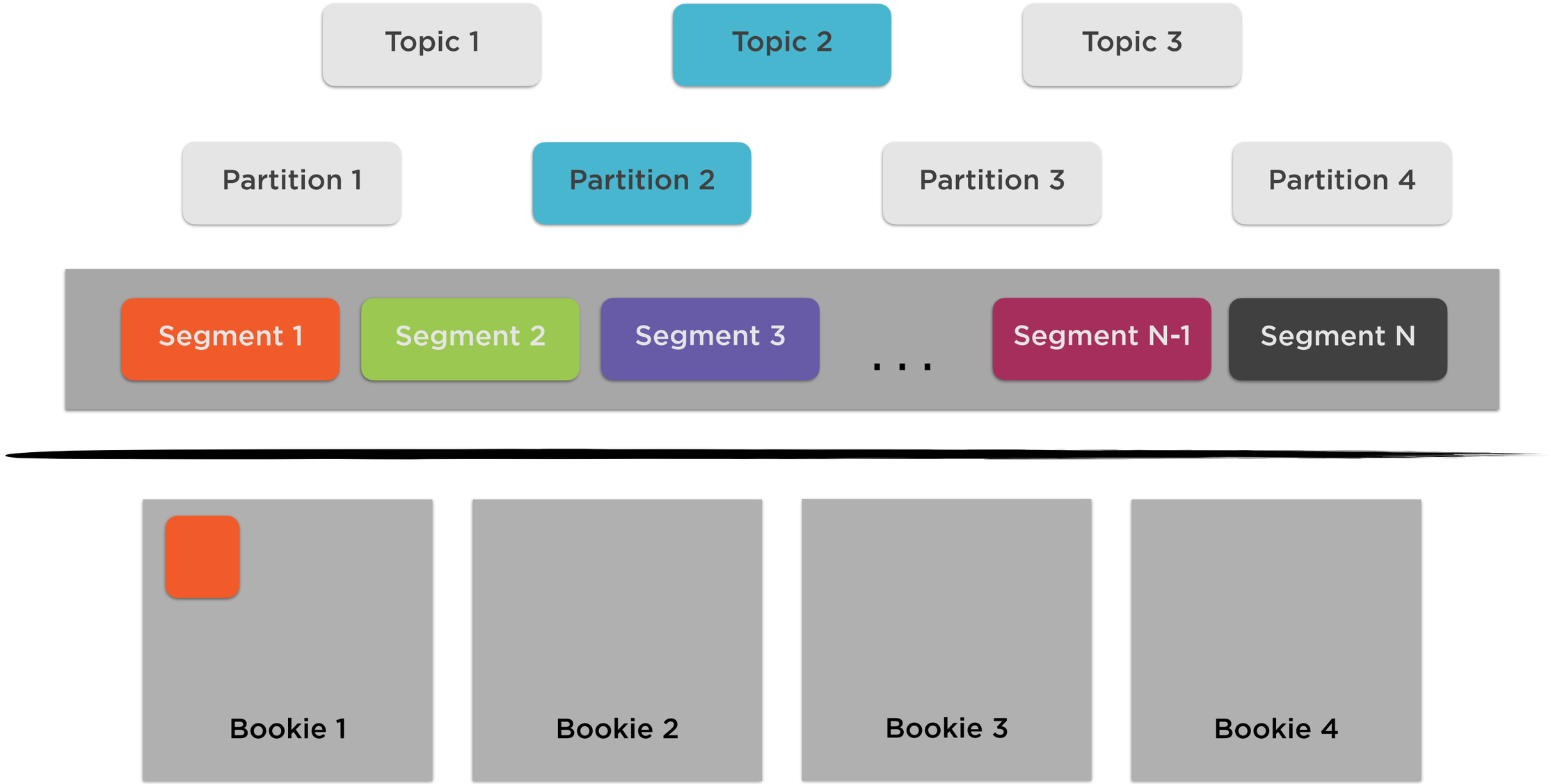

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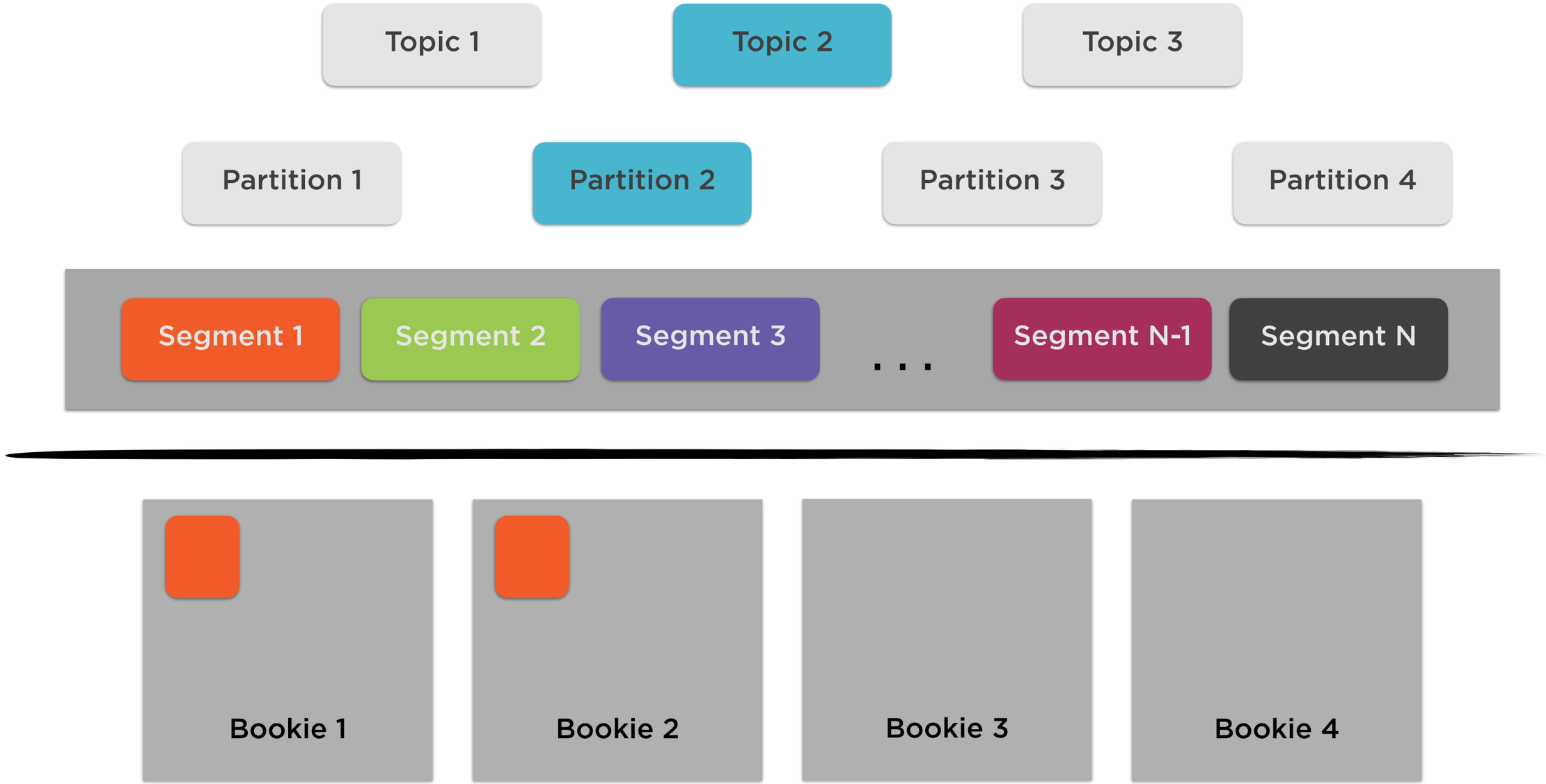

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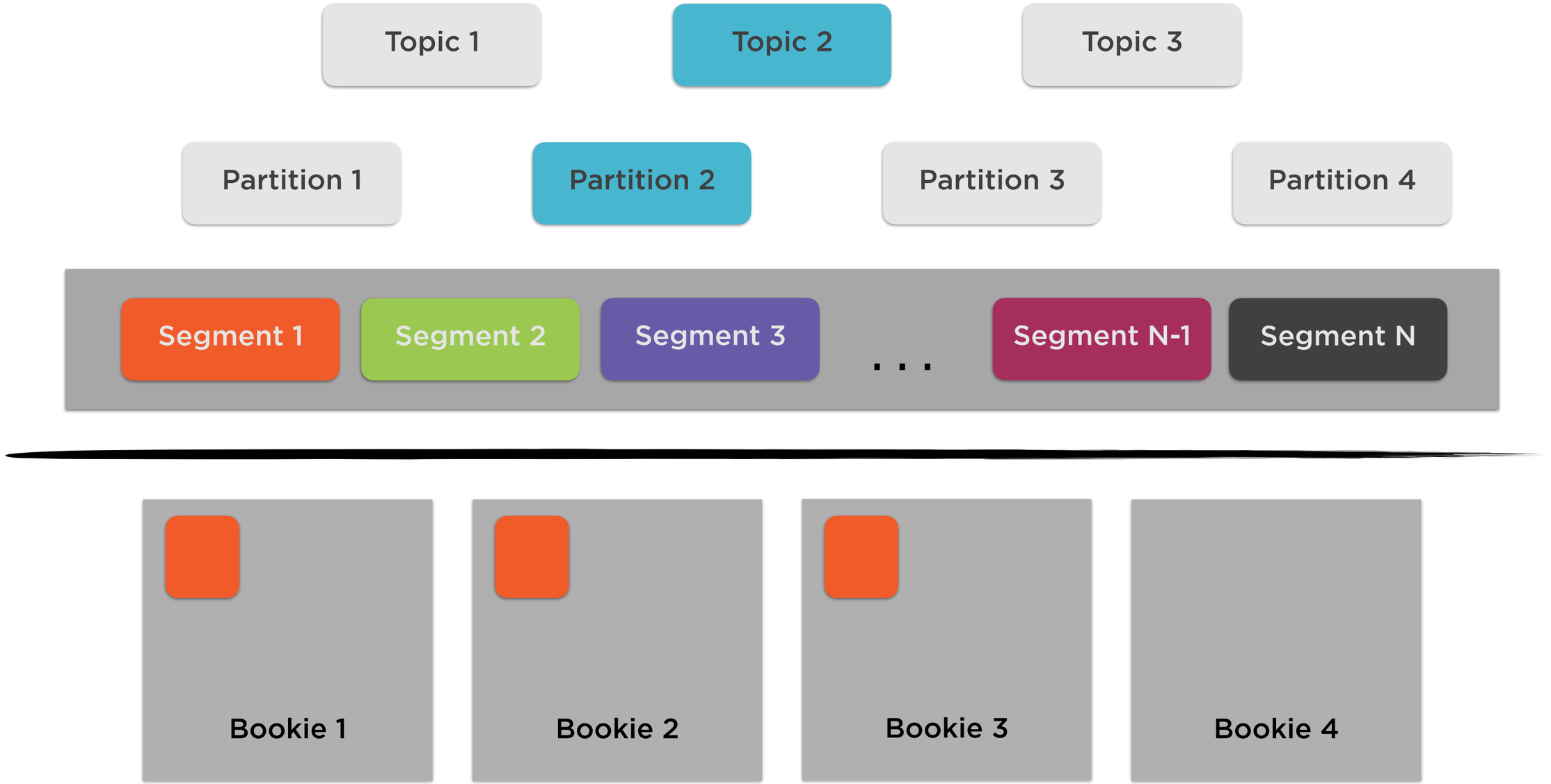

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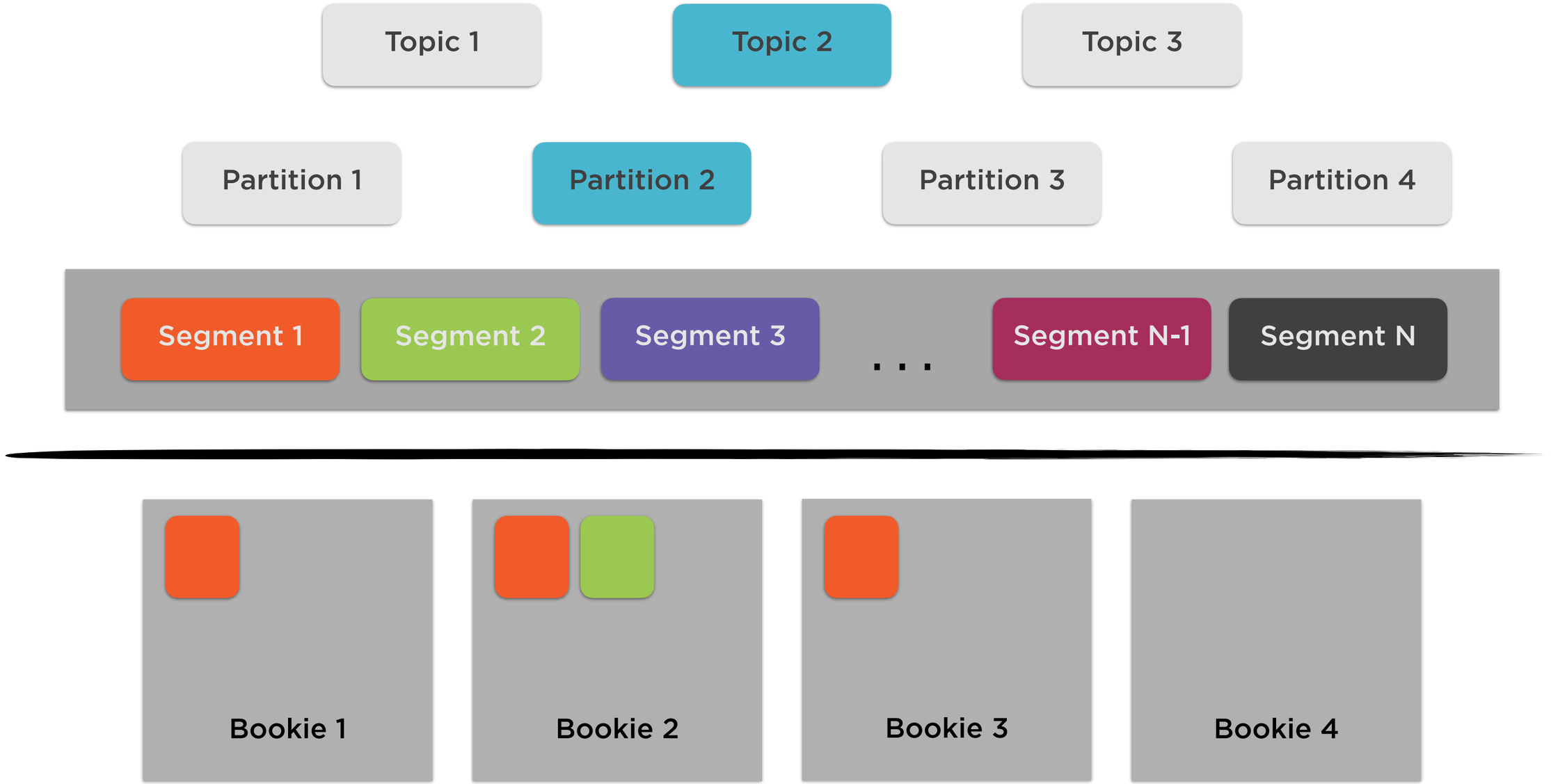

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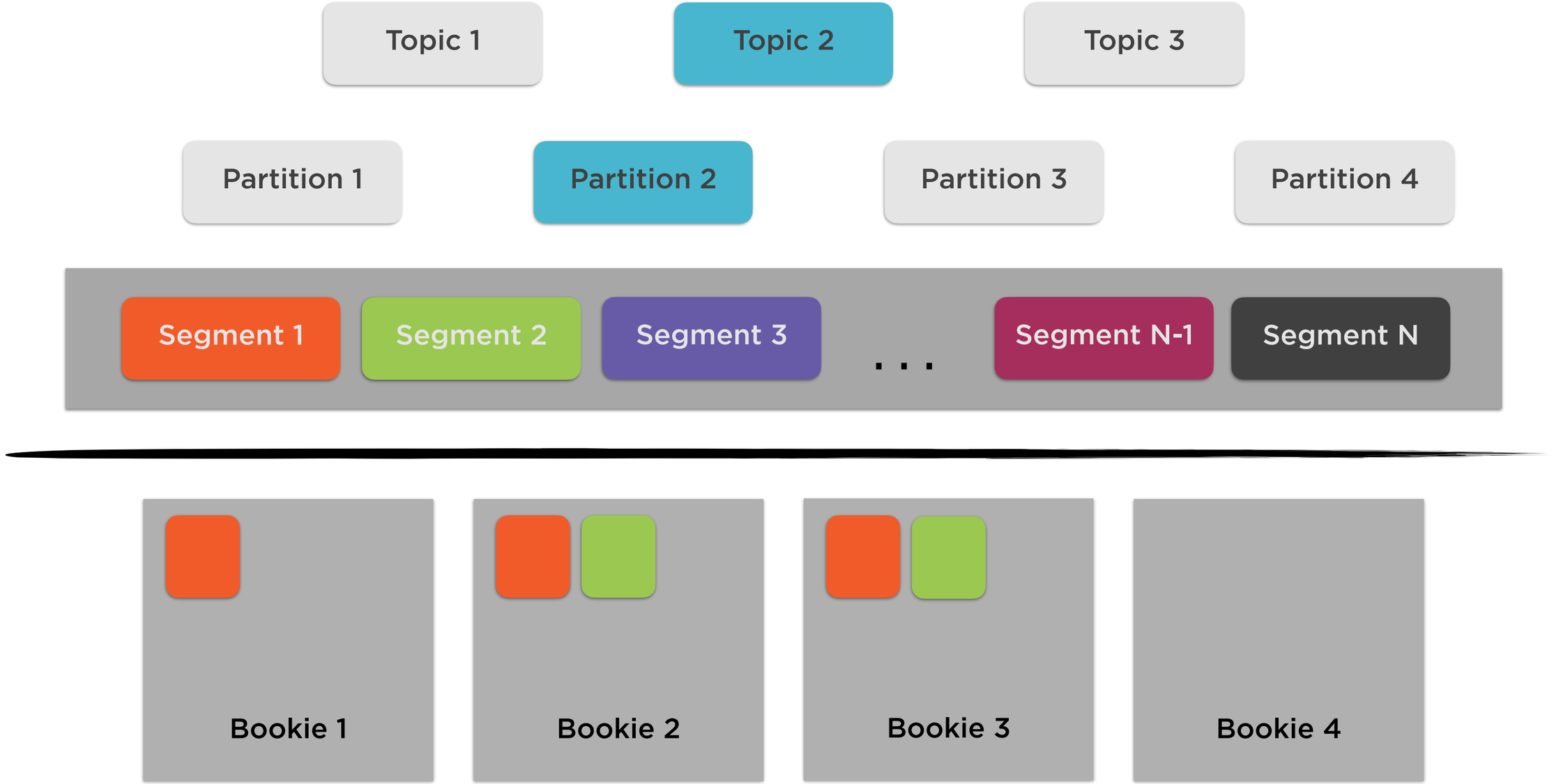

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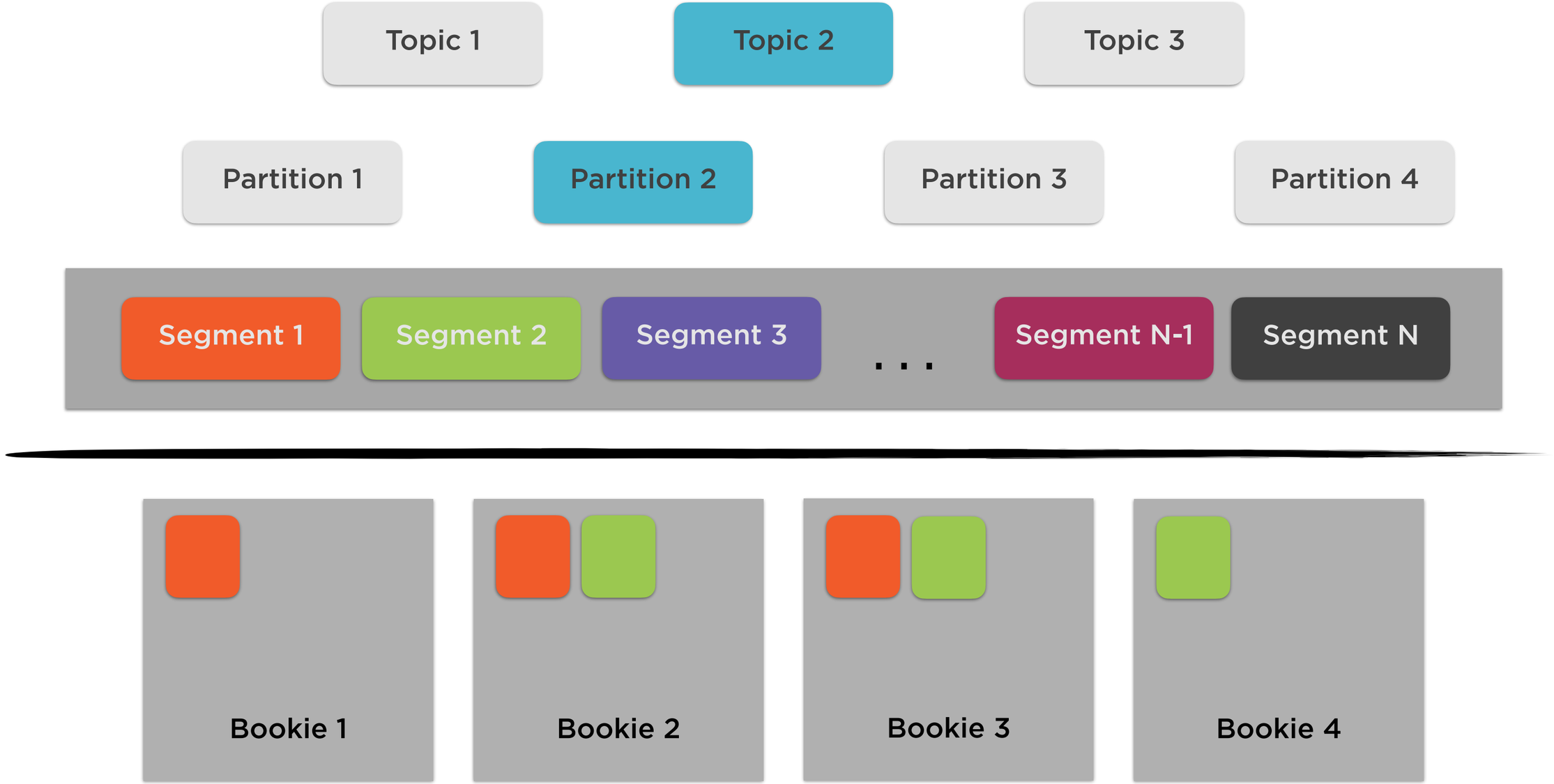

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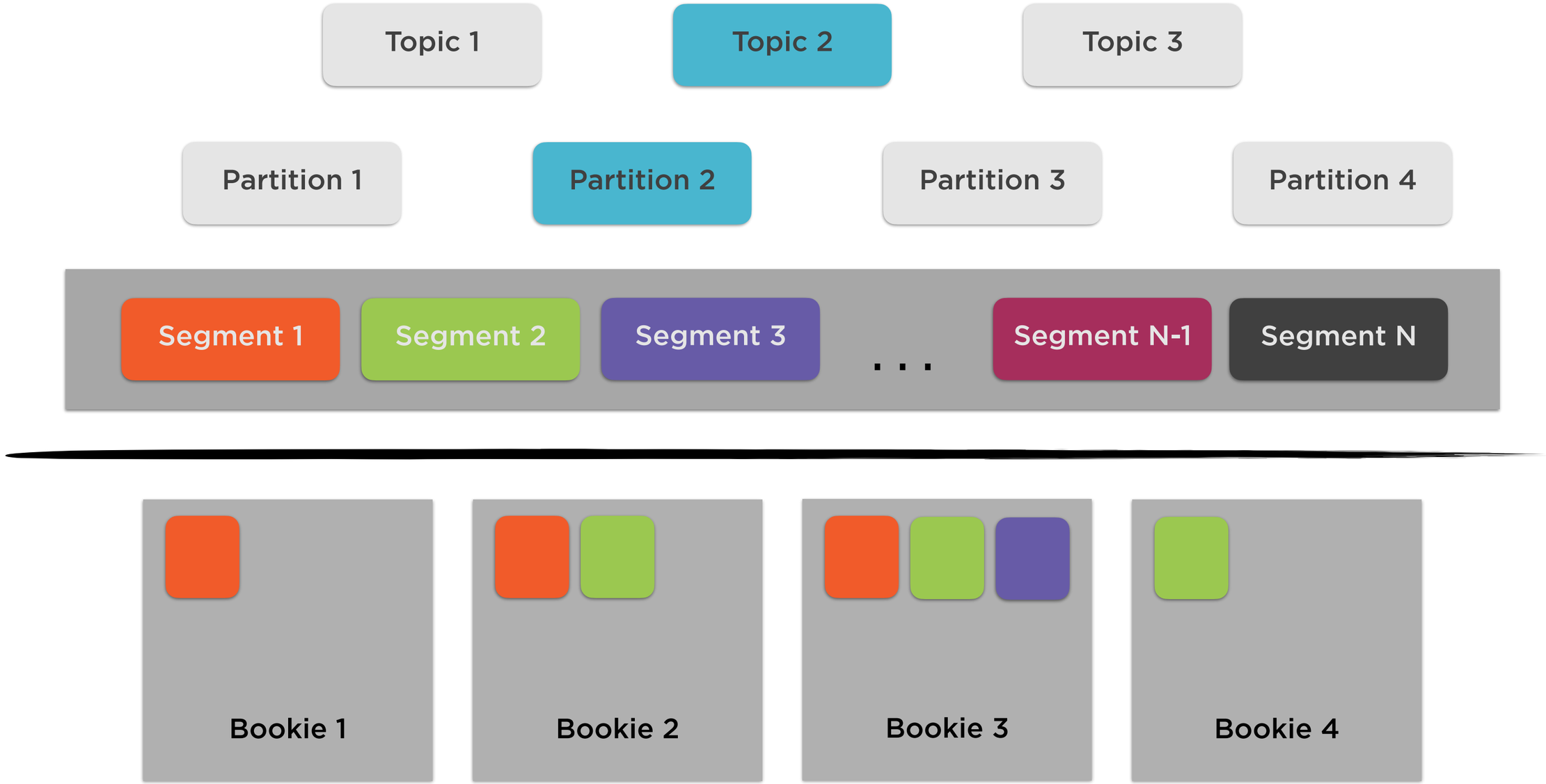

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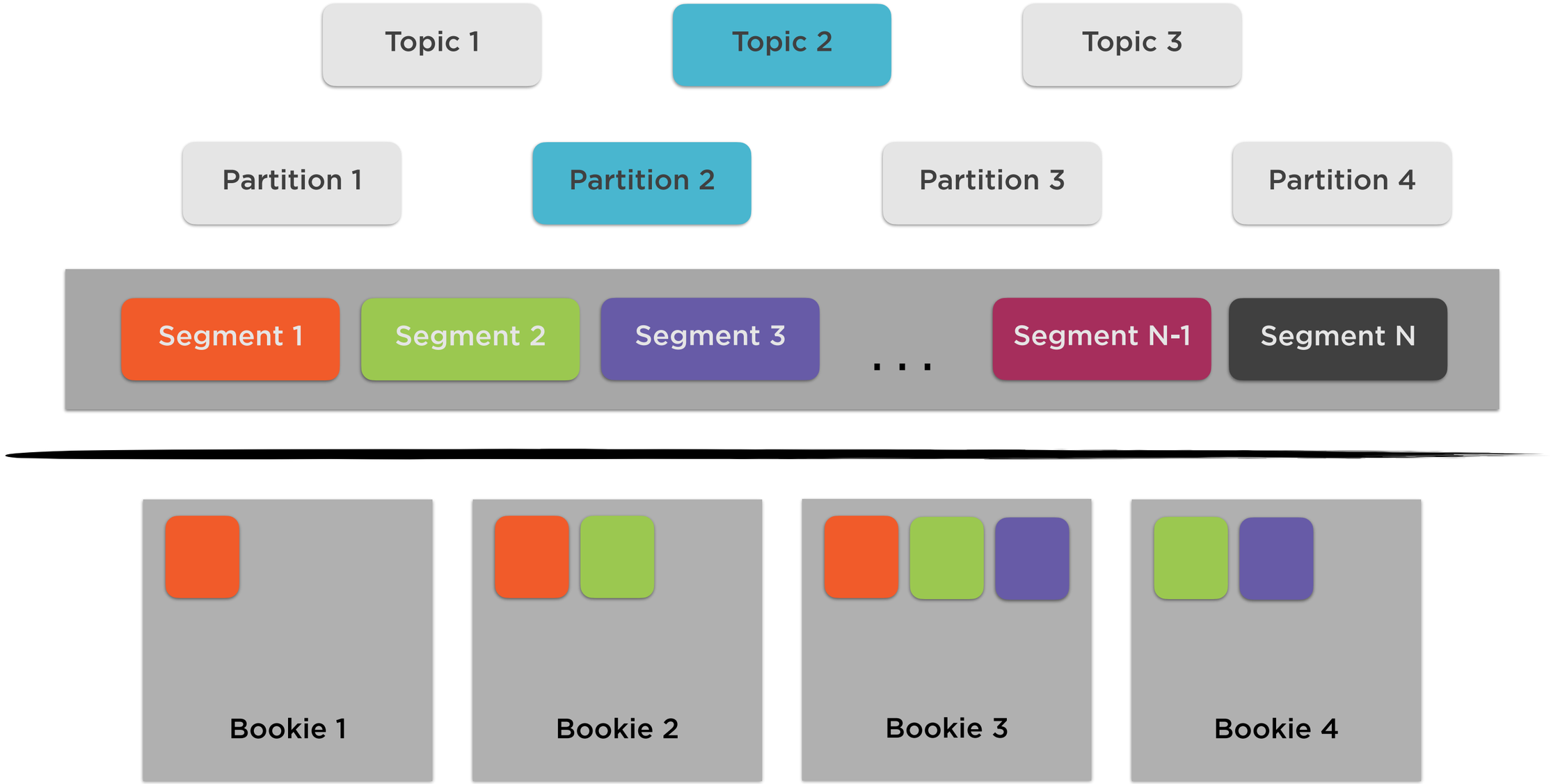

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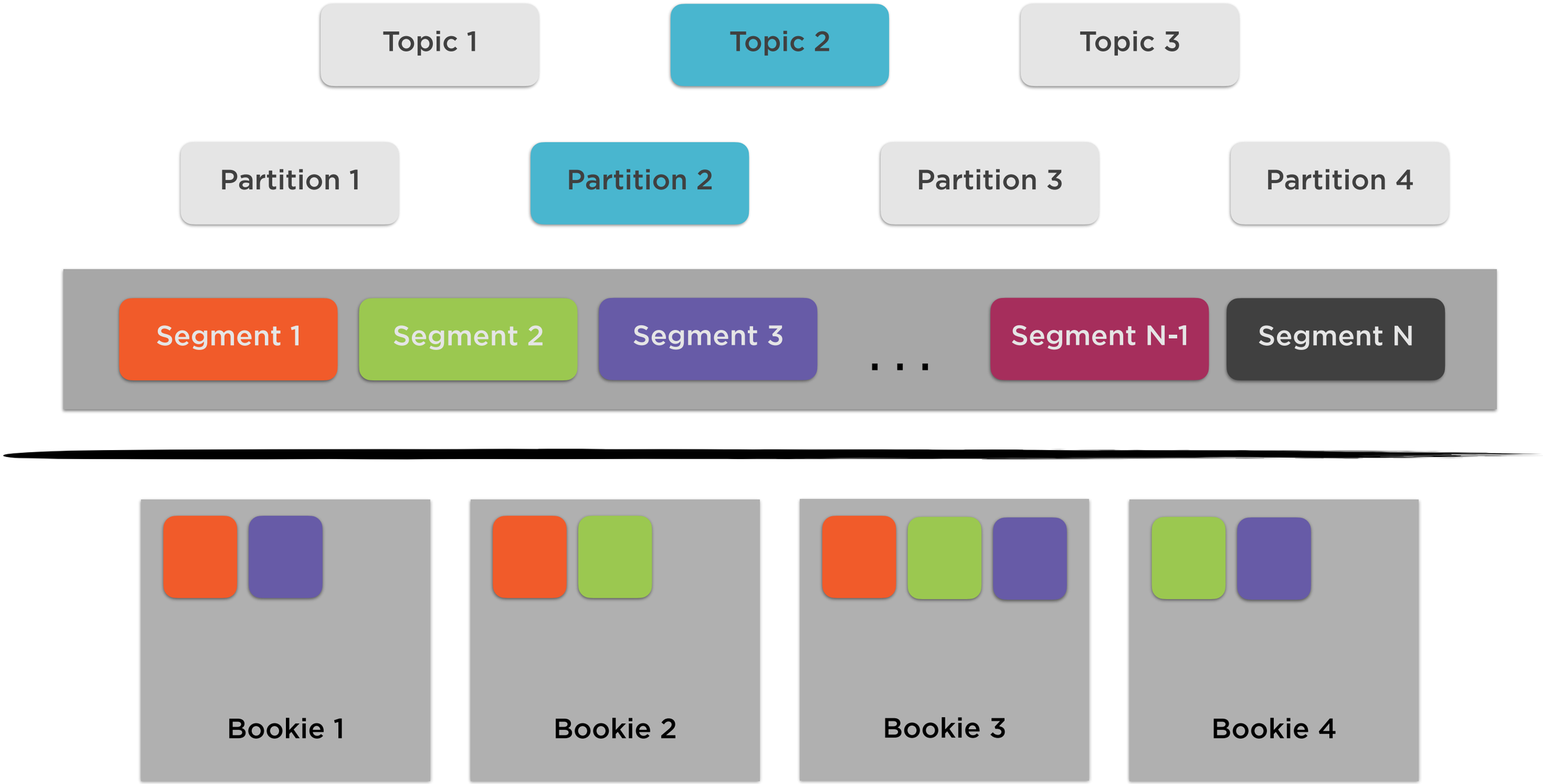

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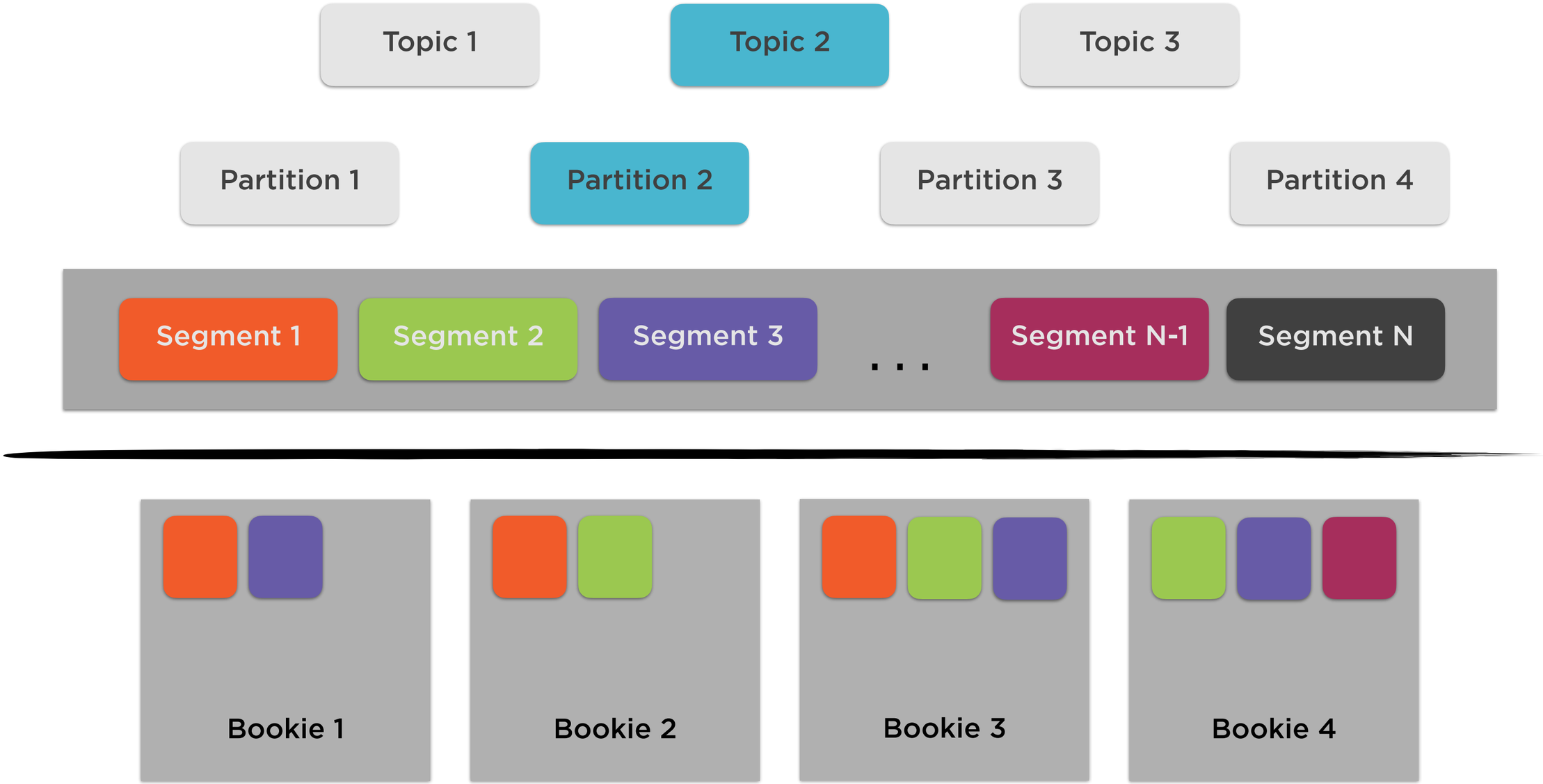

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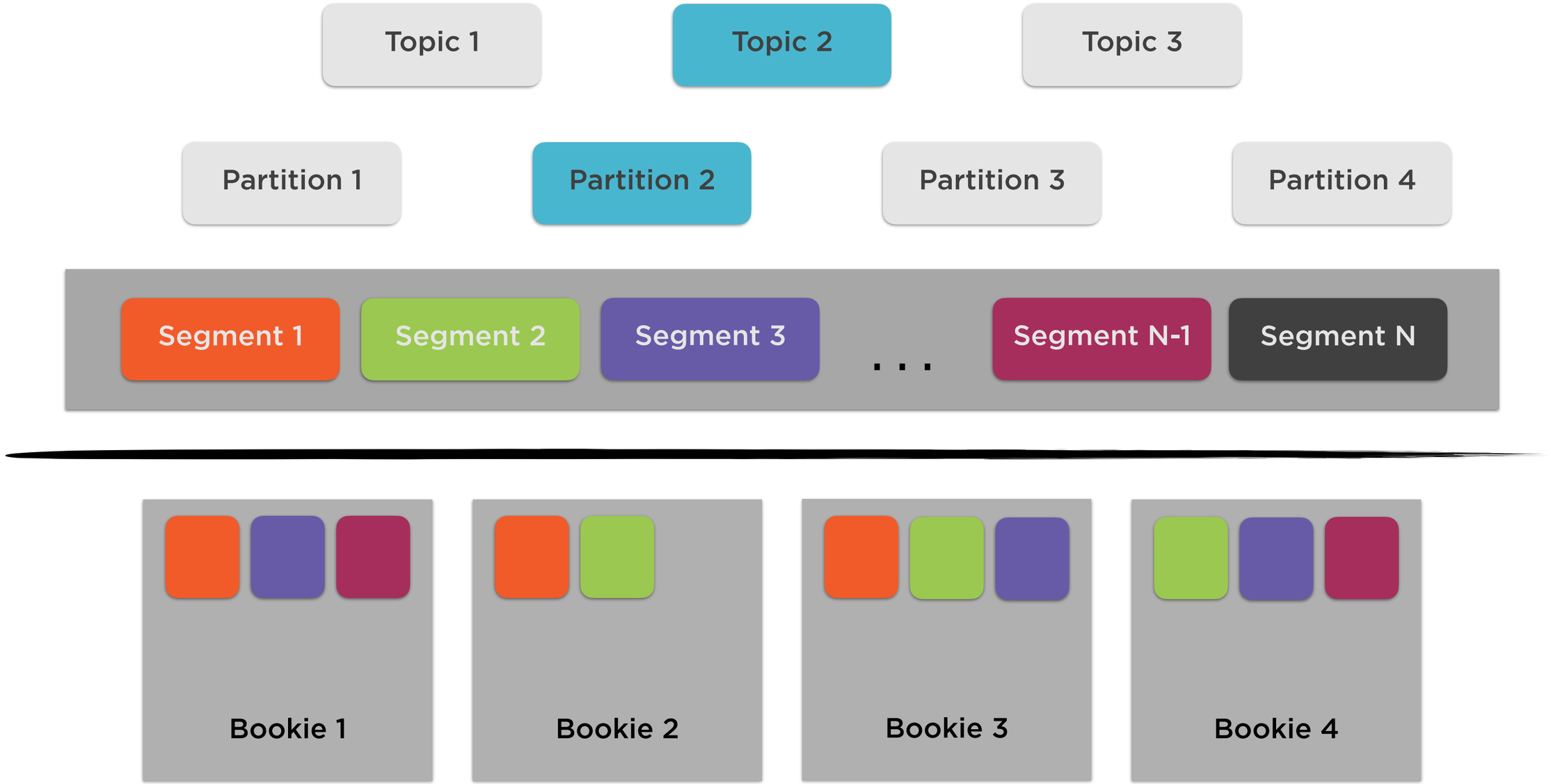

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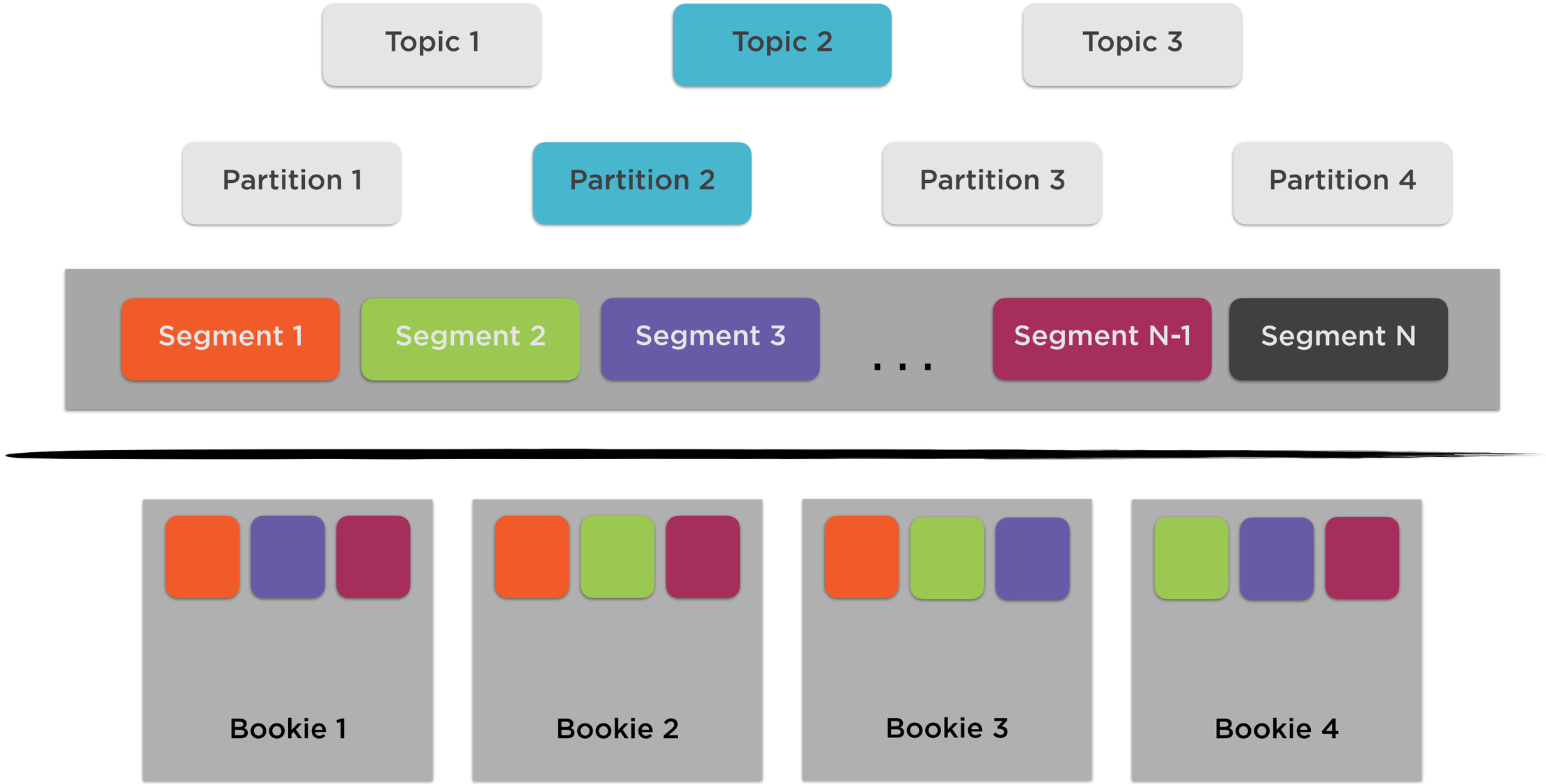

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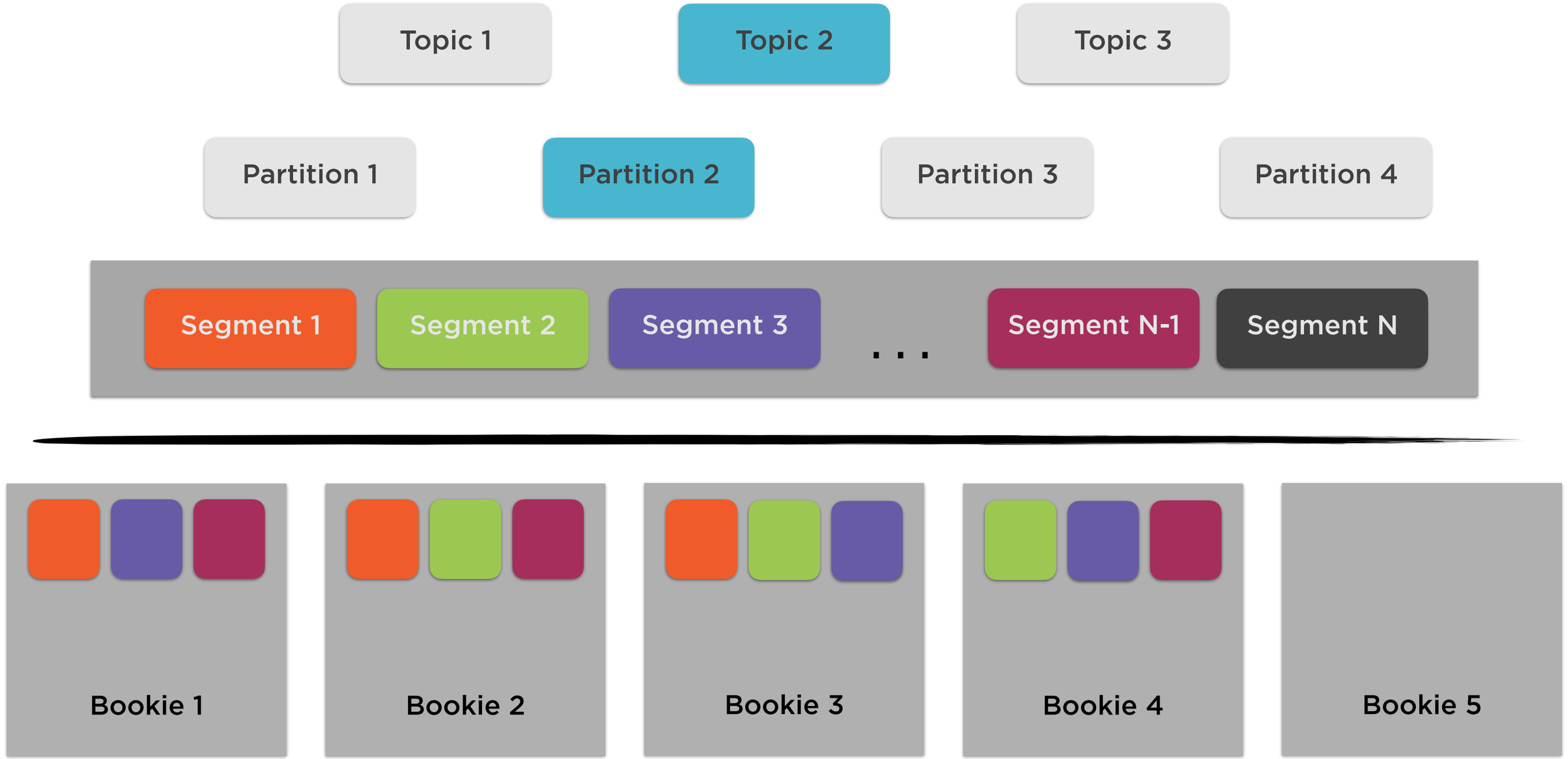

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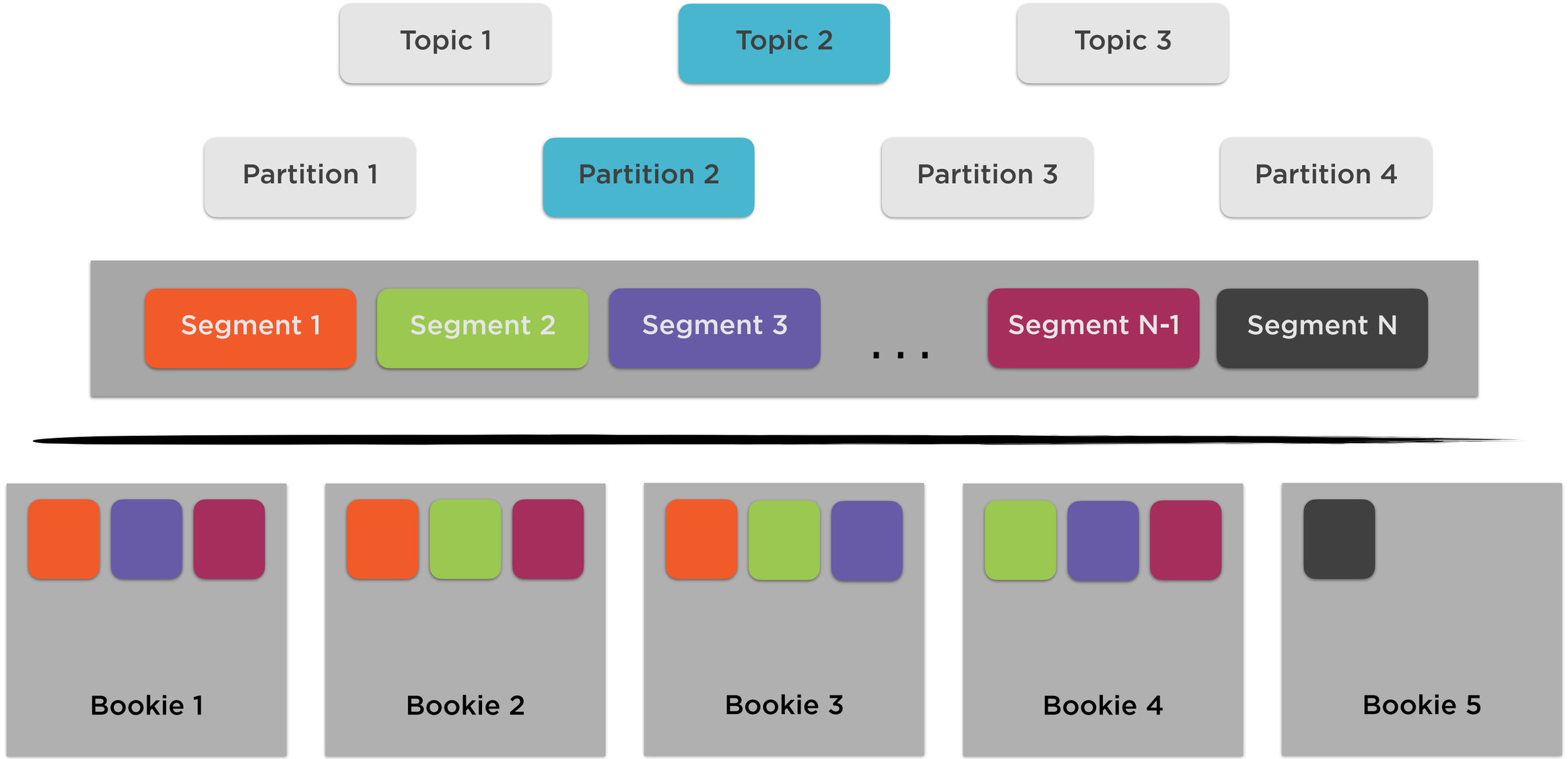

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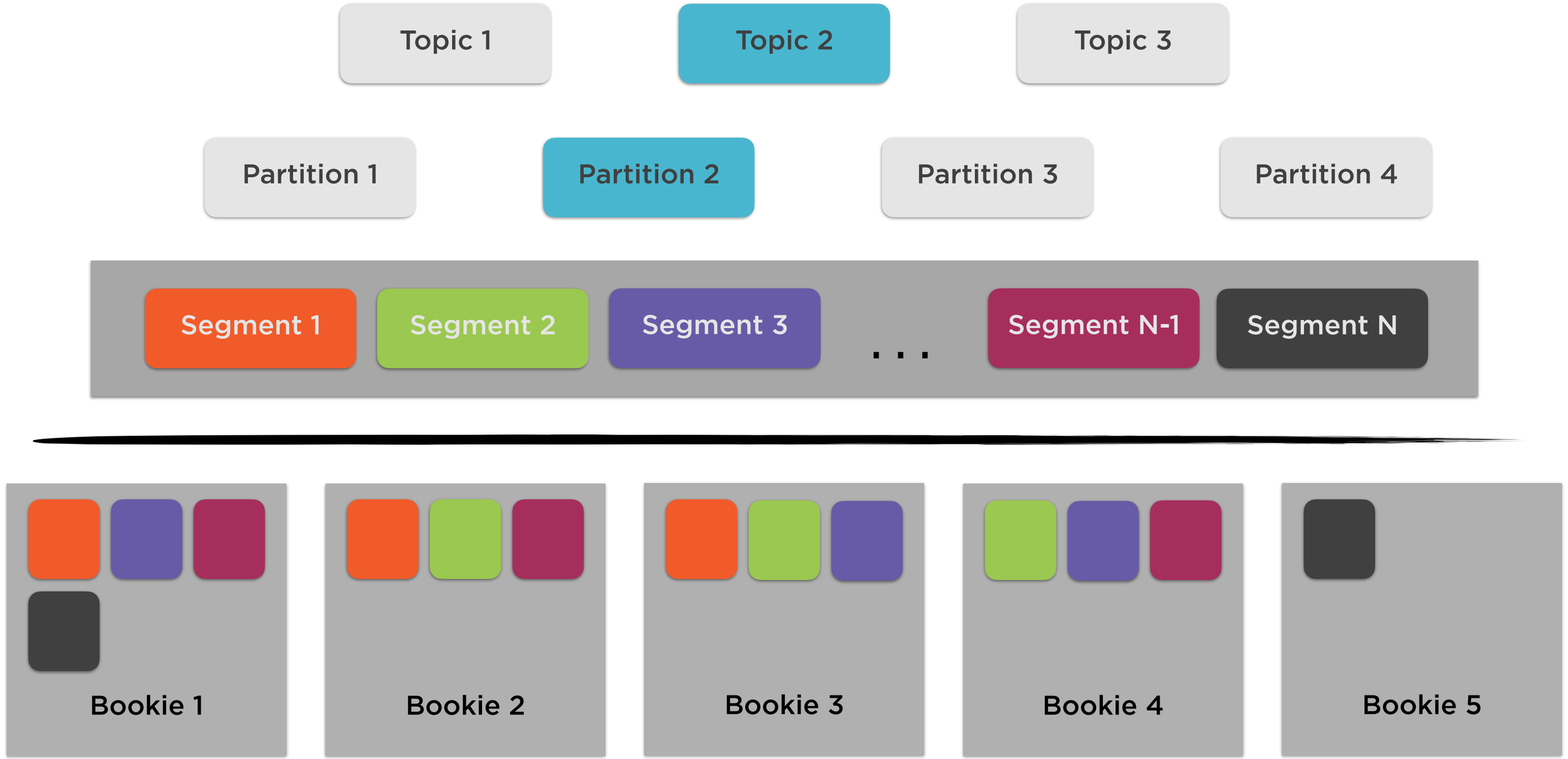

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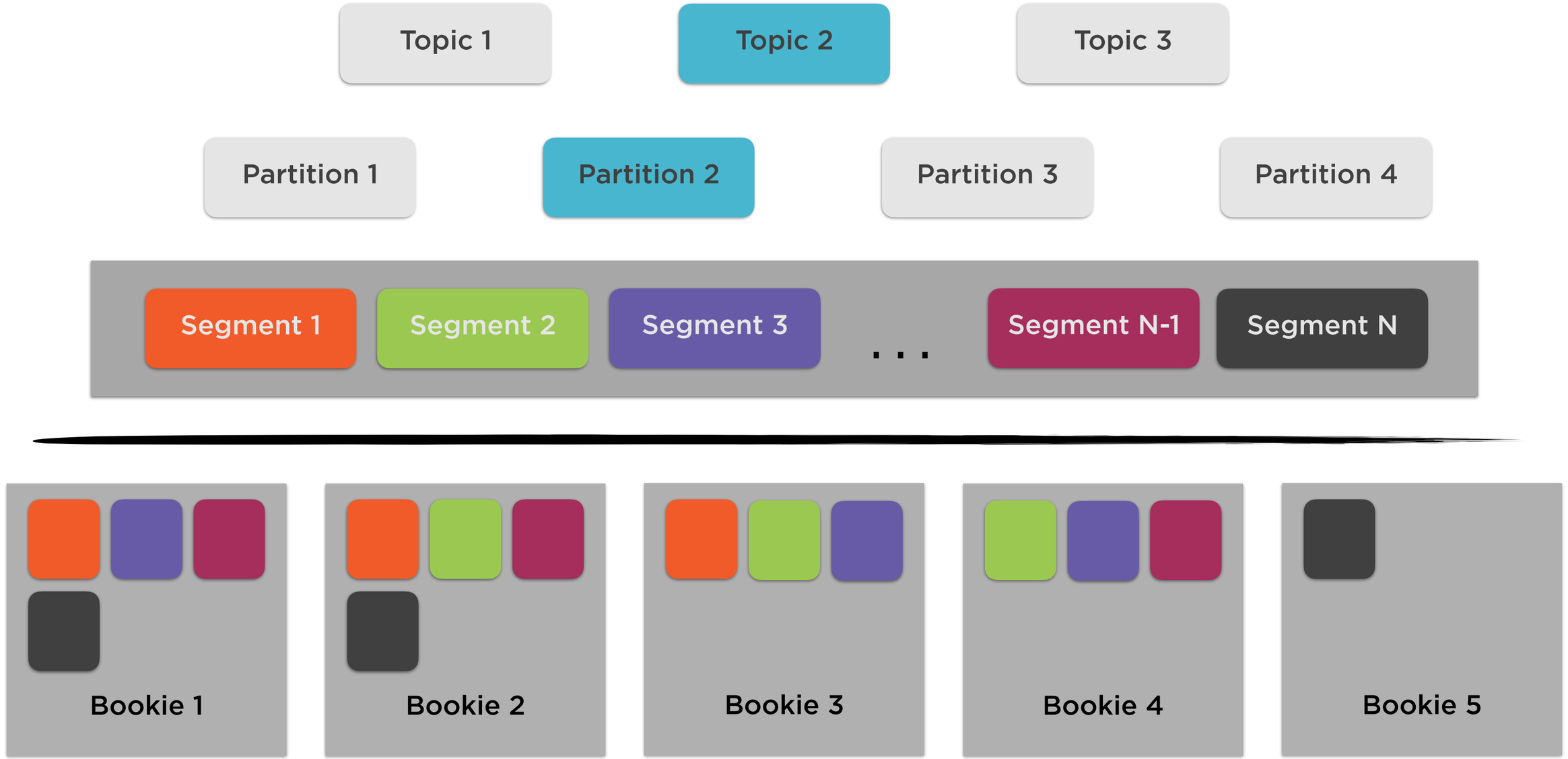

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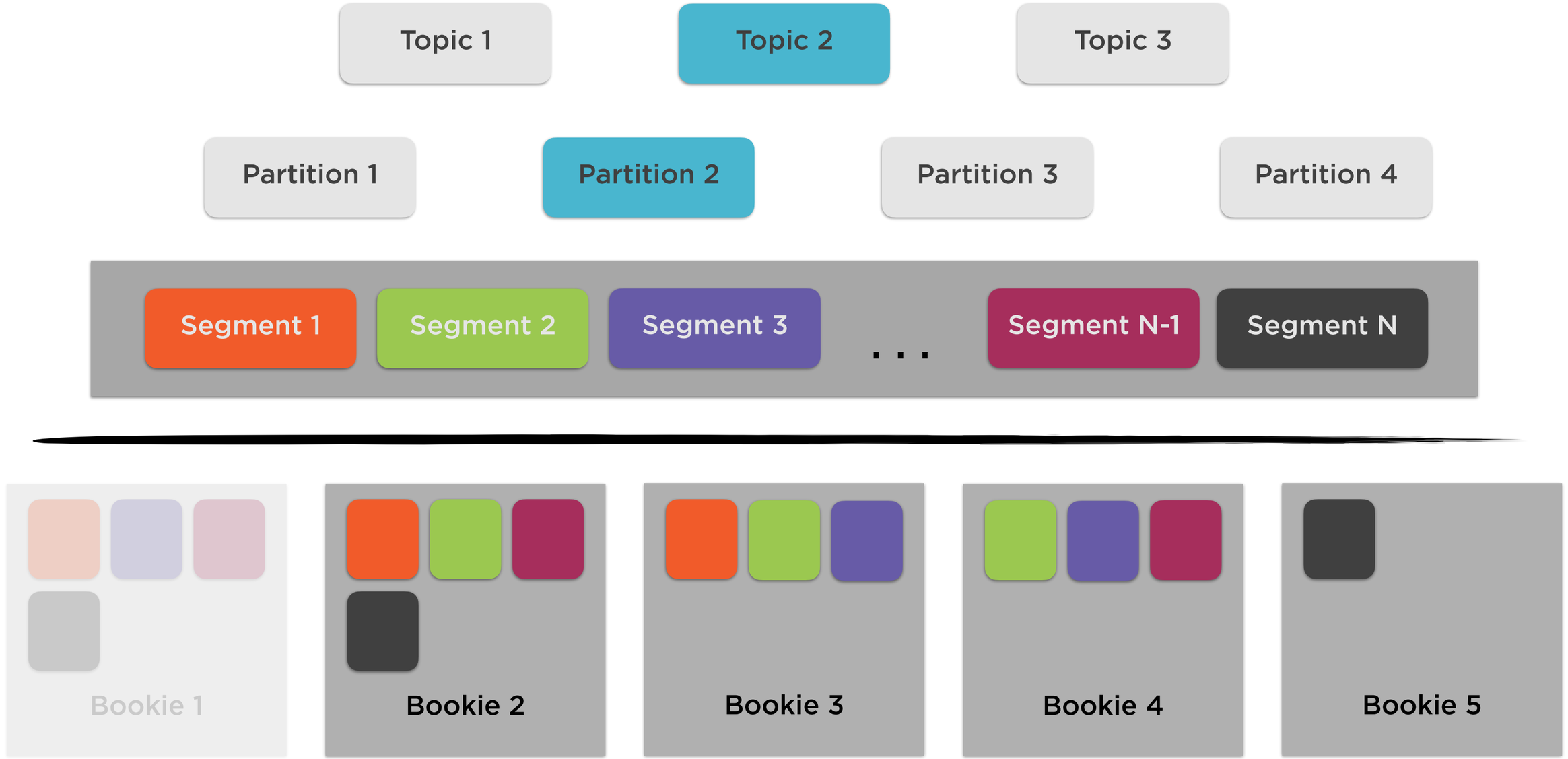

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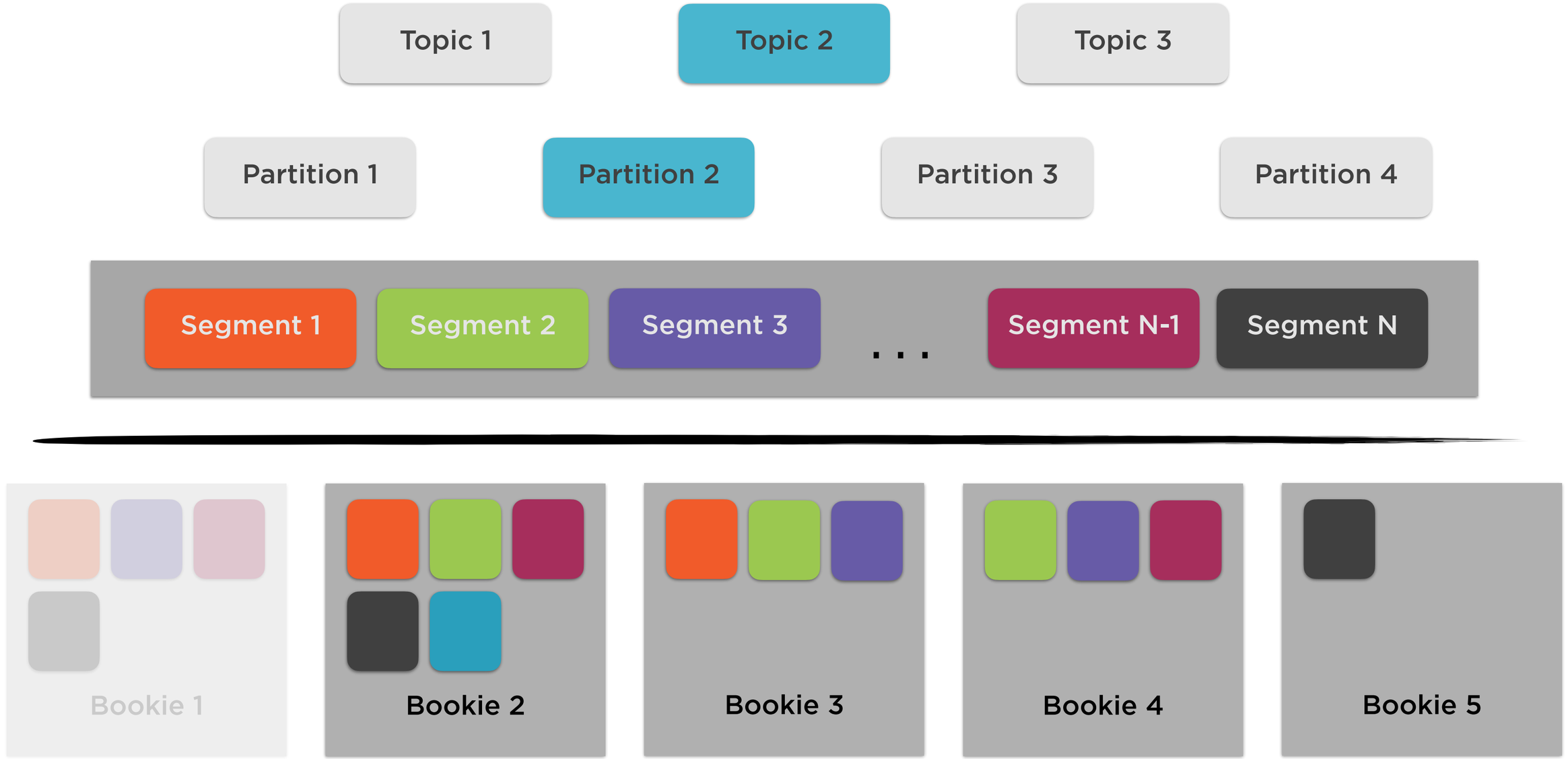

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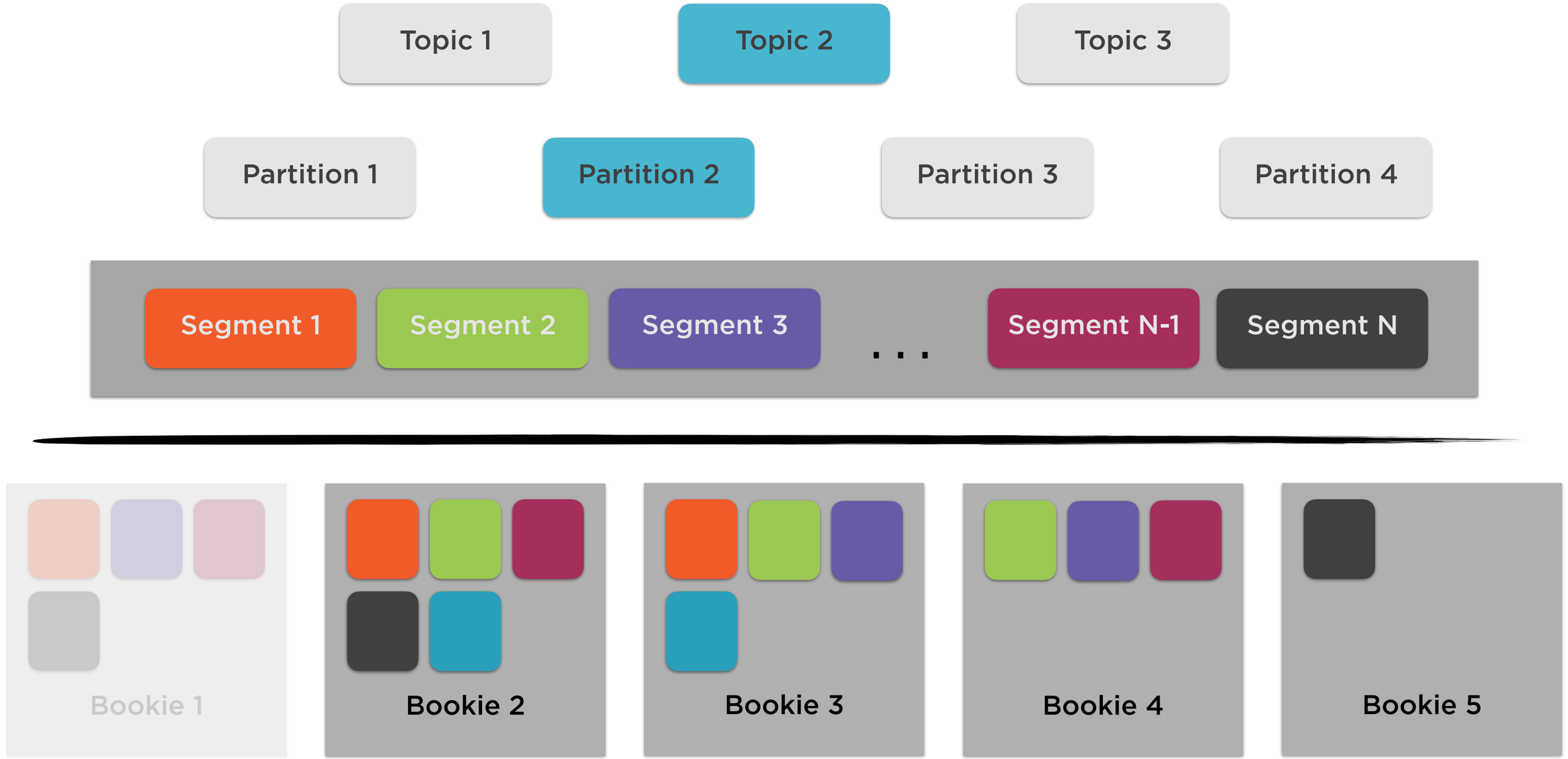

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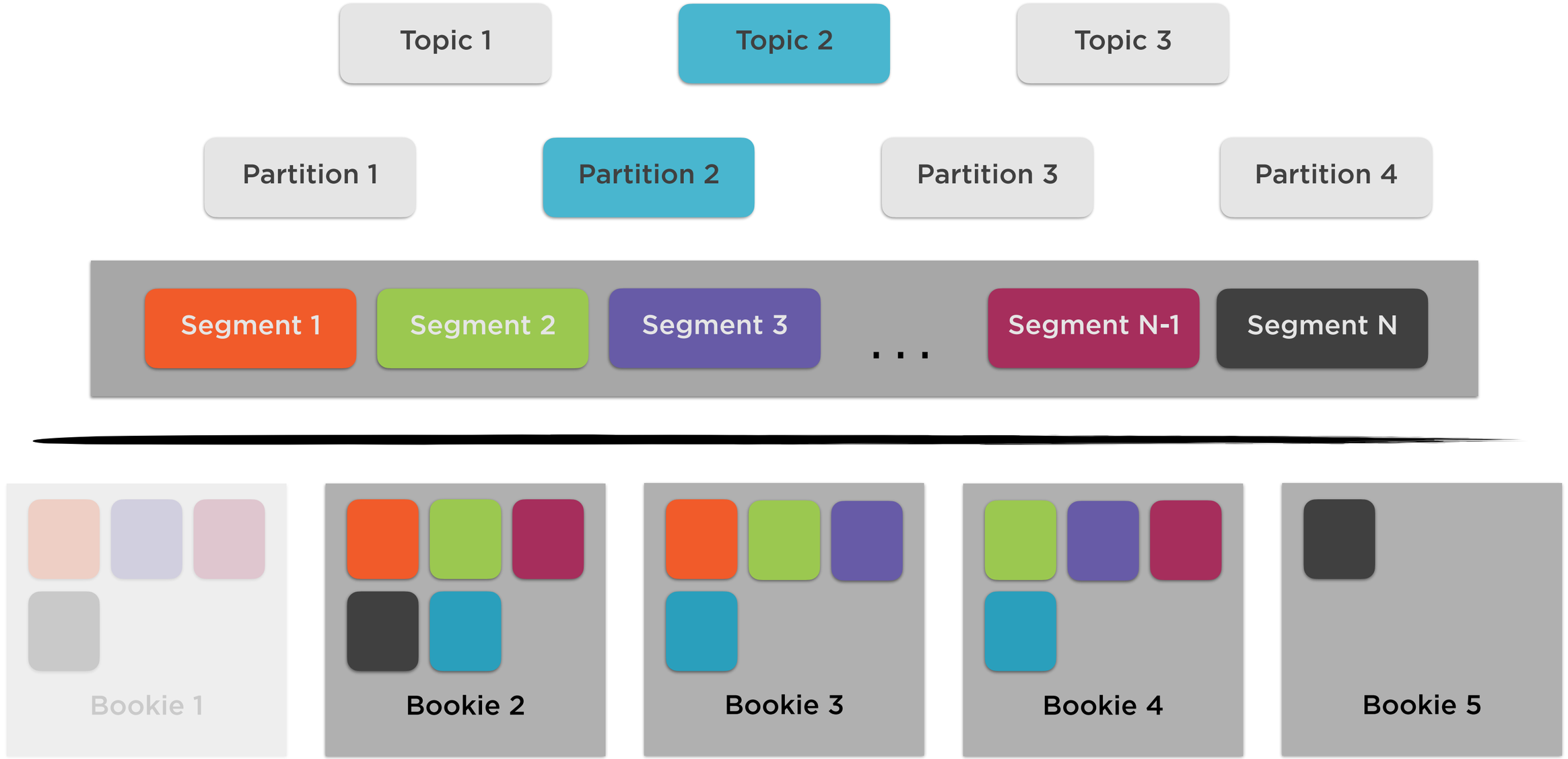

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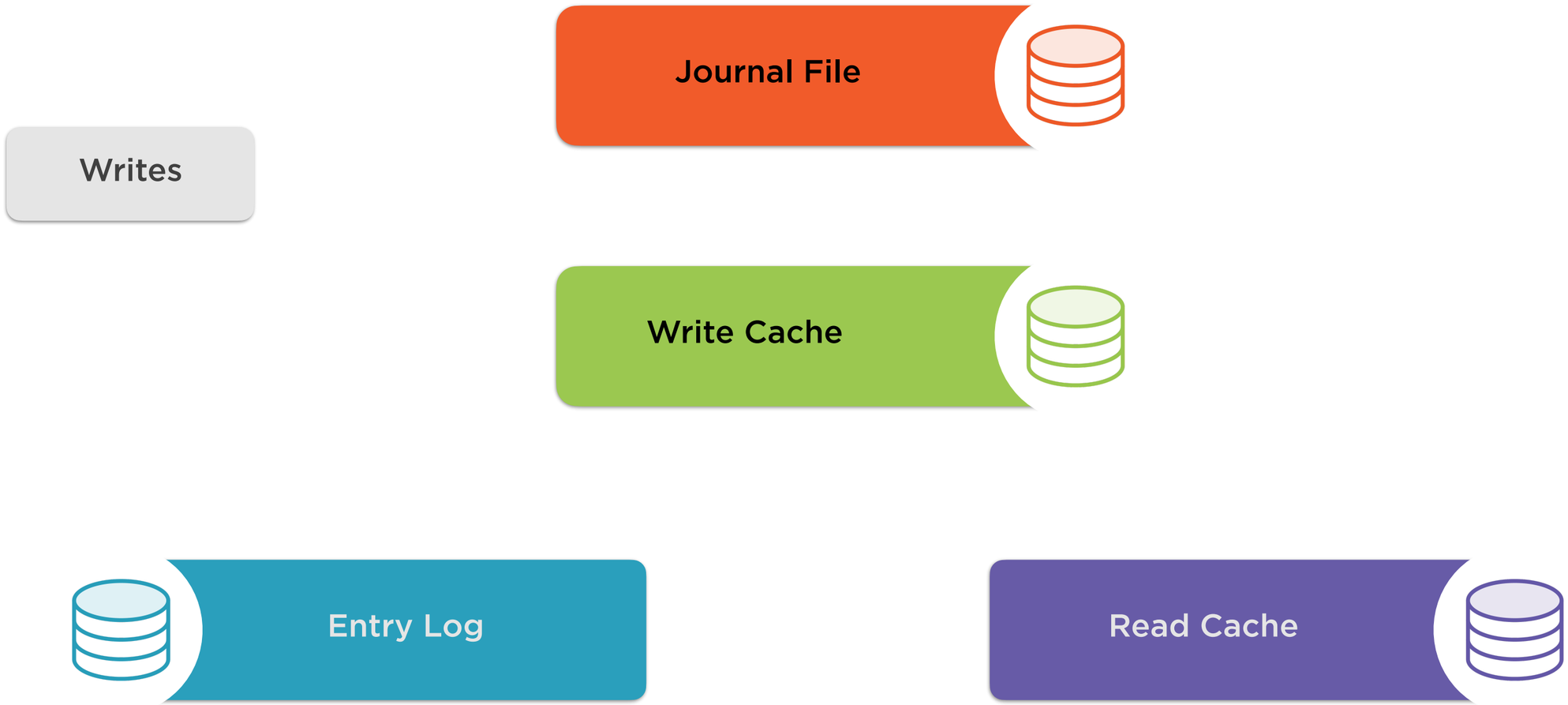

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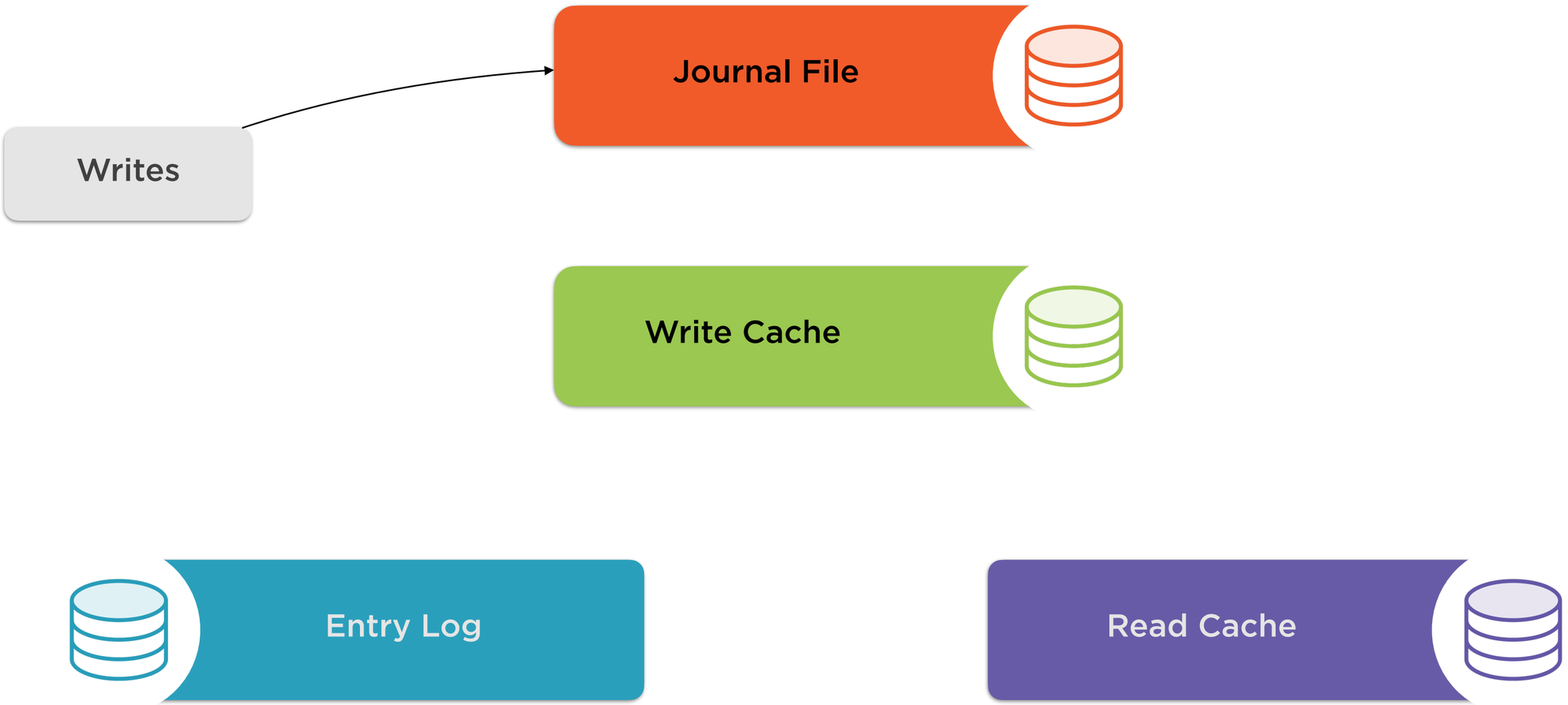

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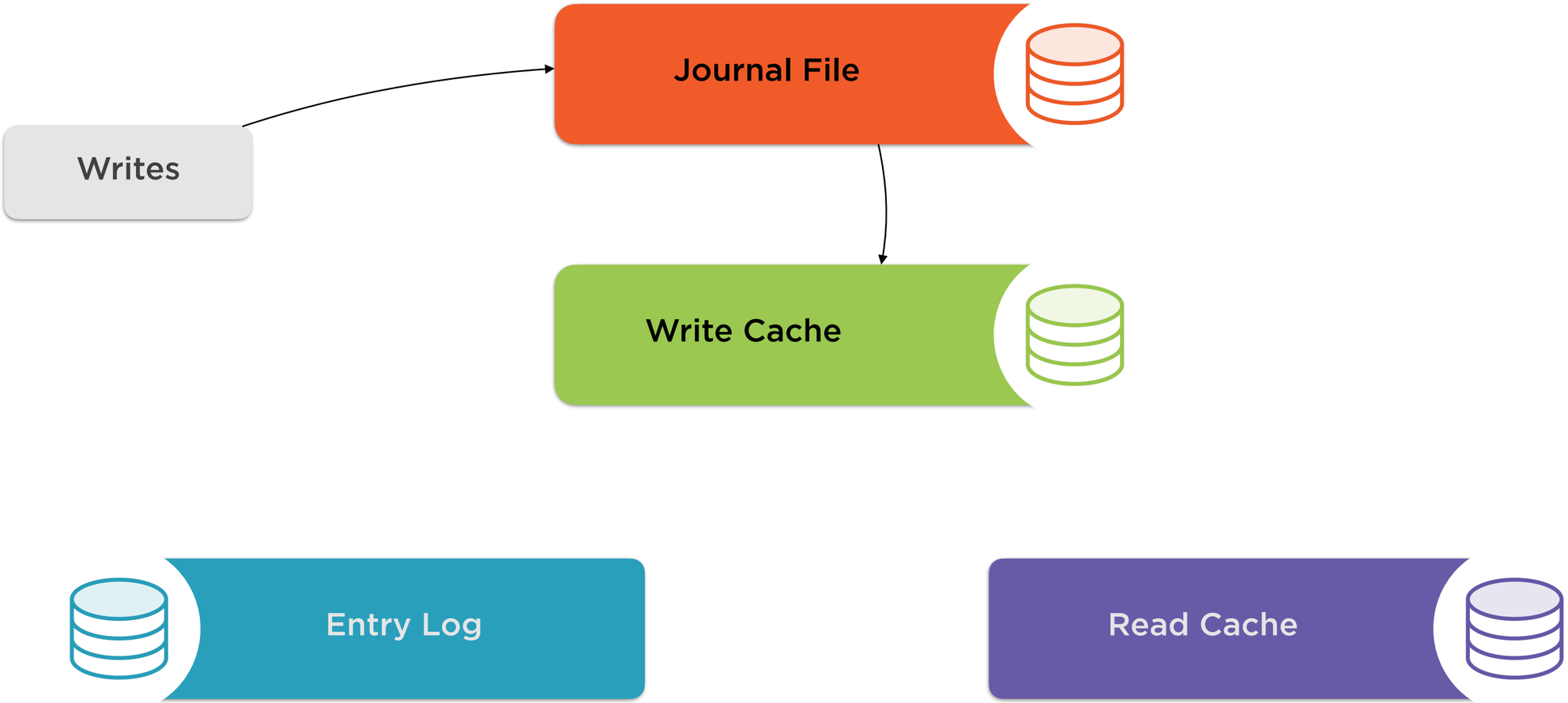
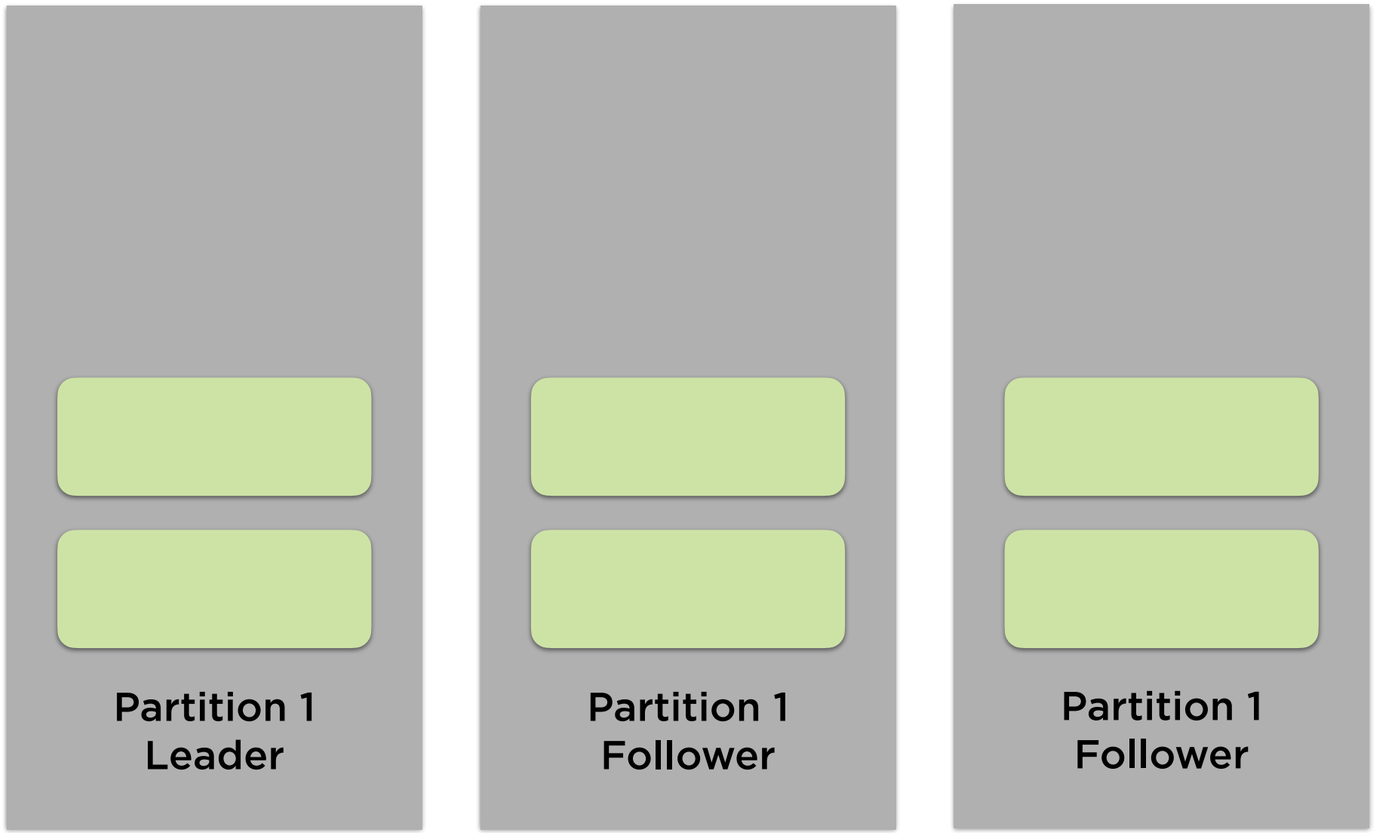


Kafka Partition Failure



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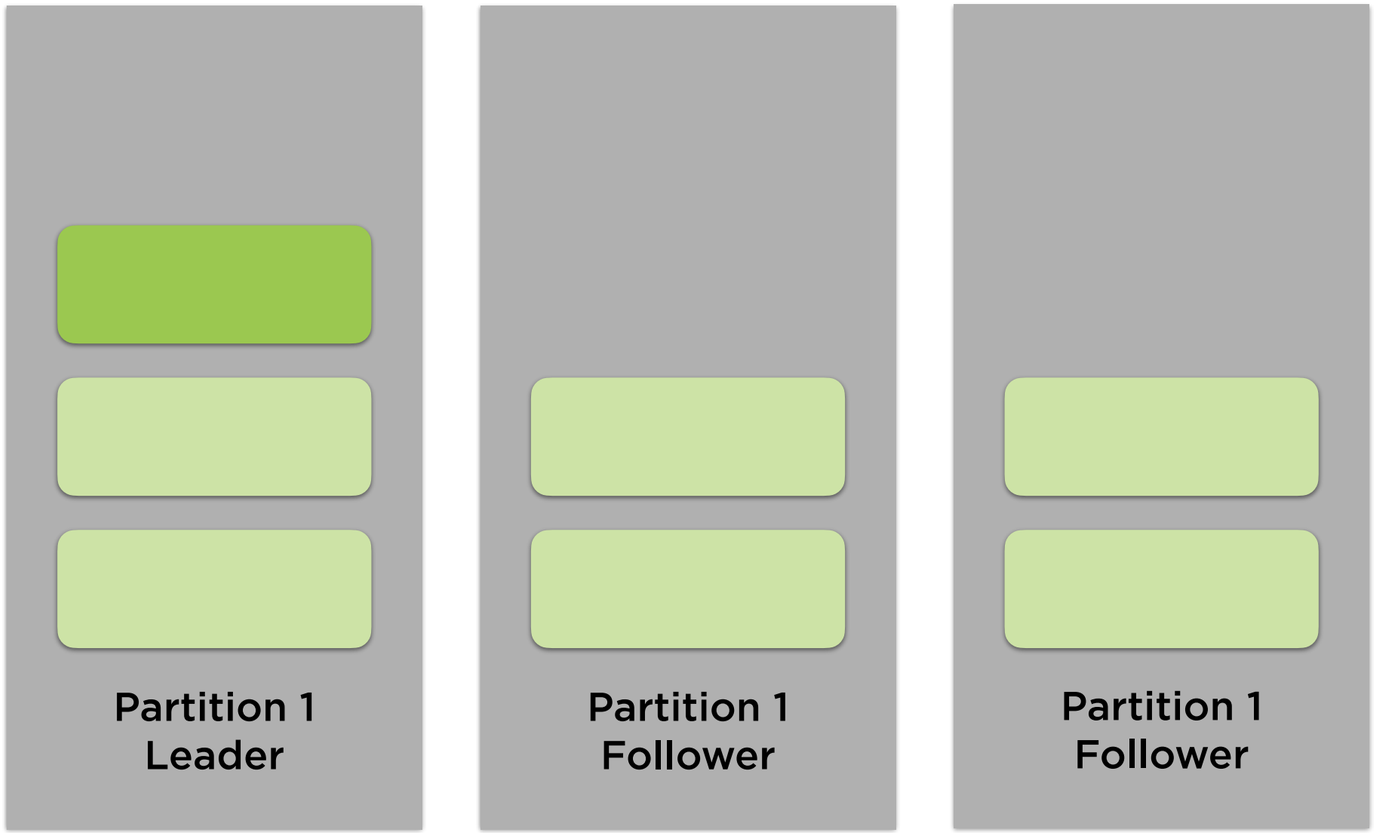

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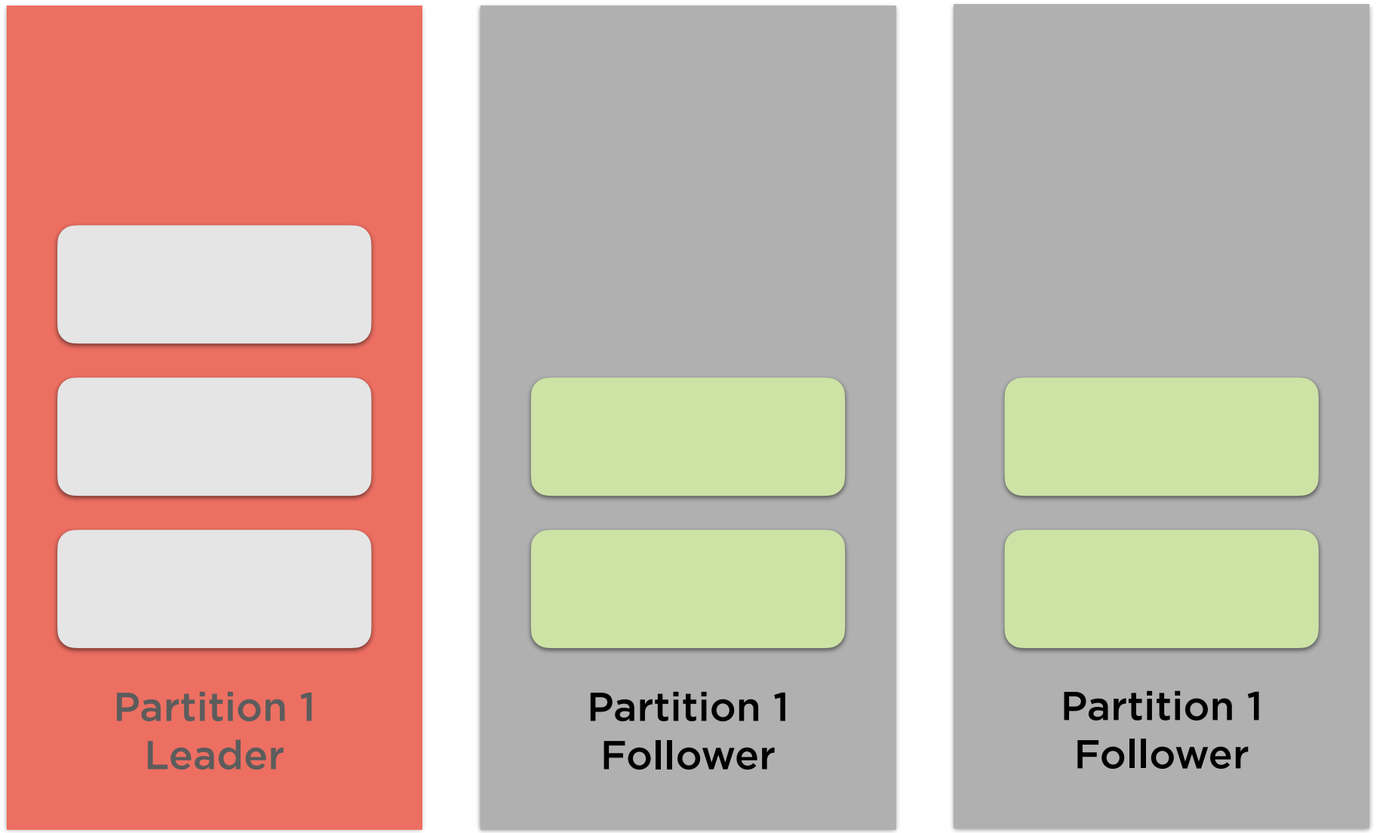

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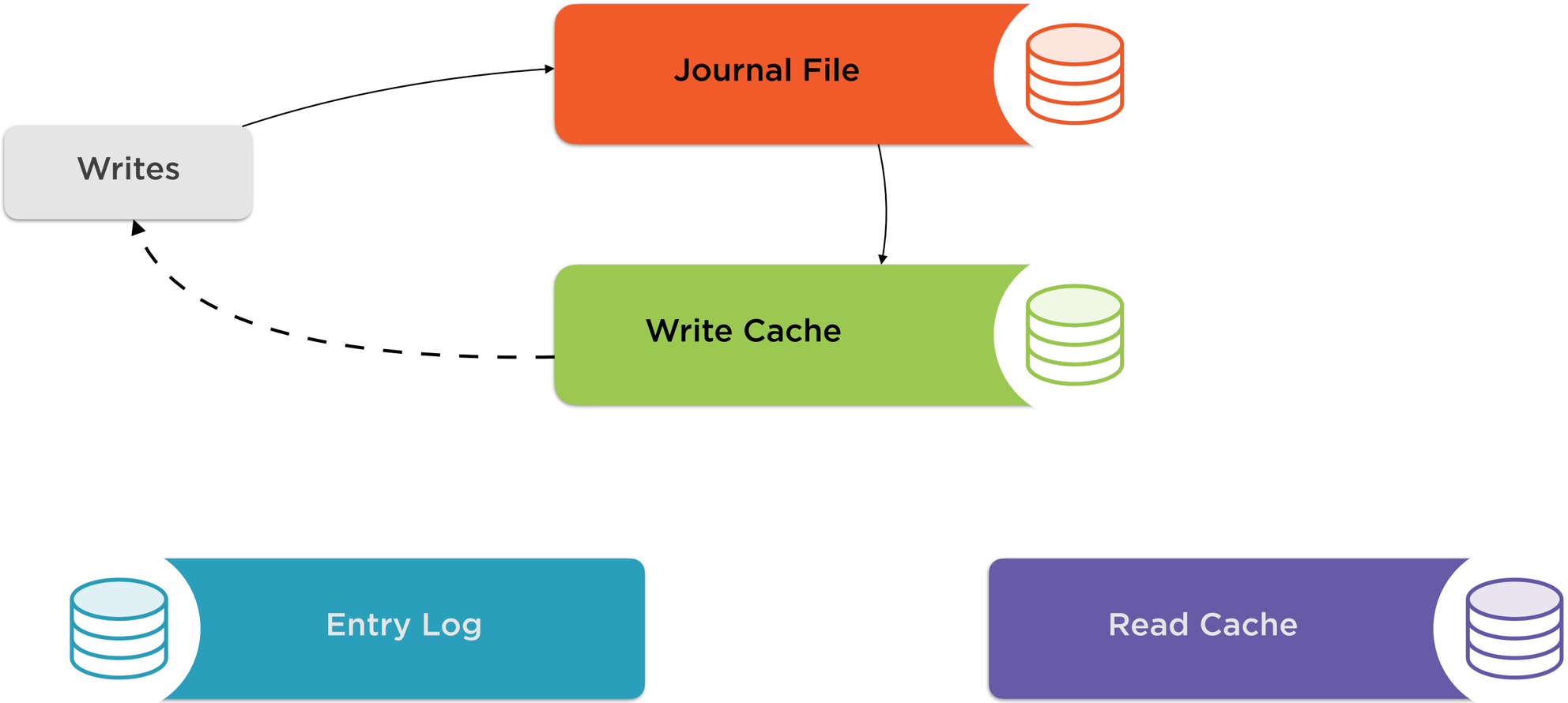

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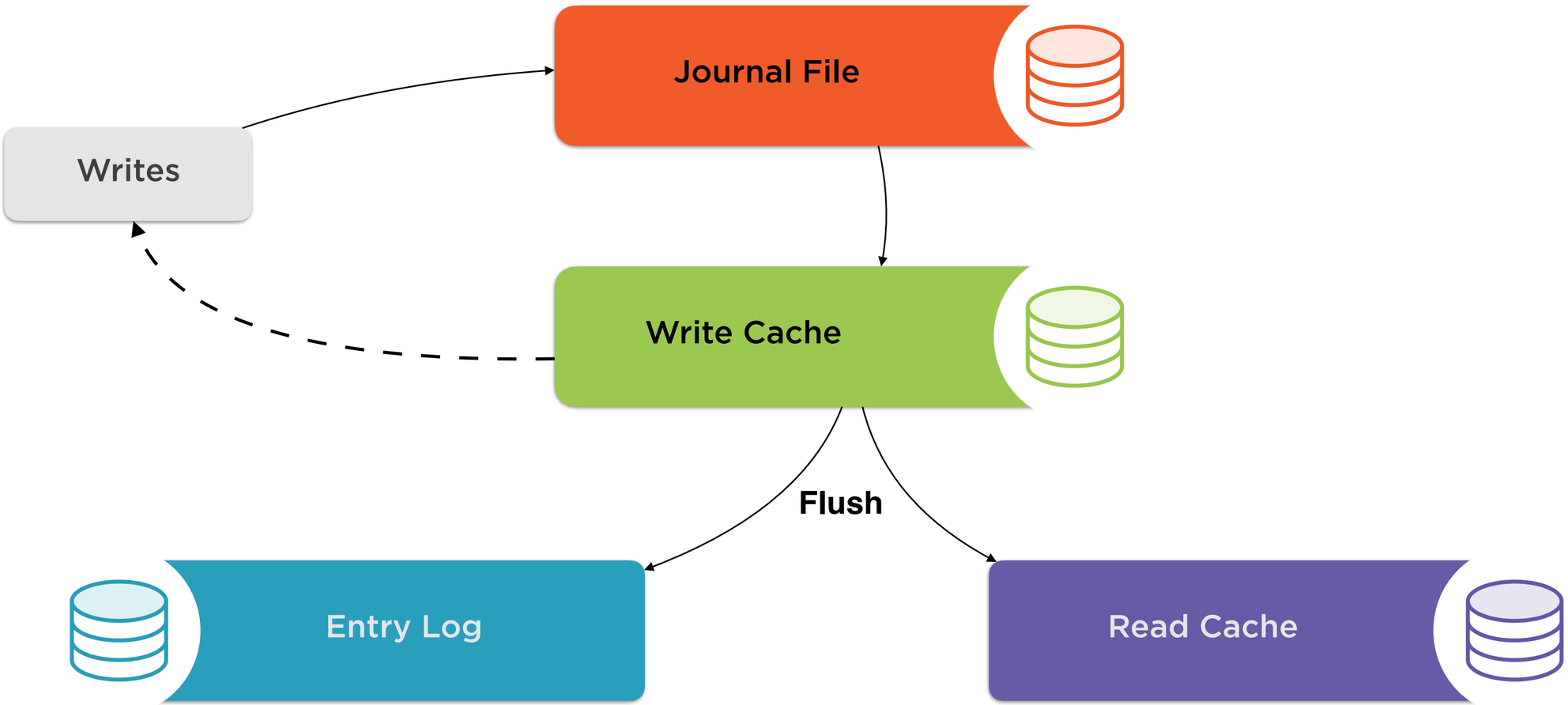

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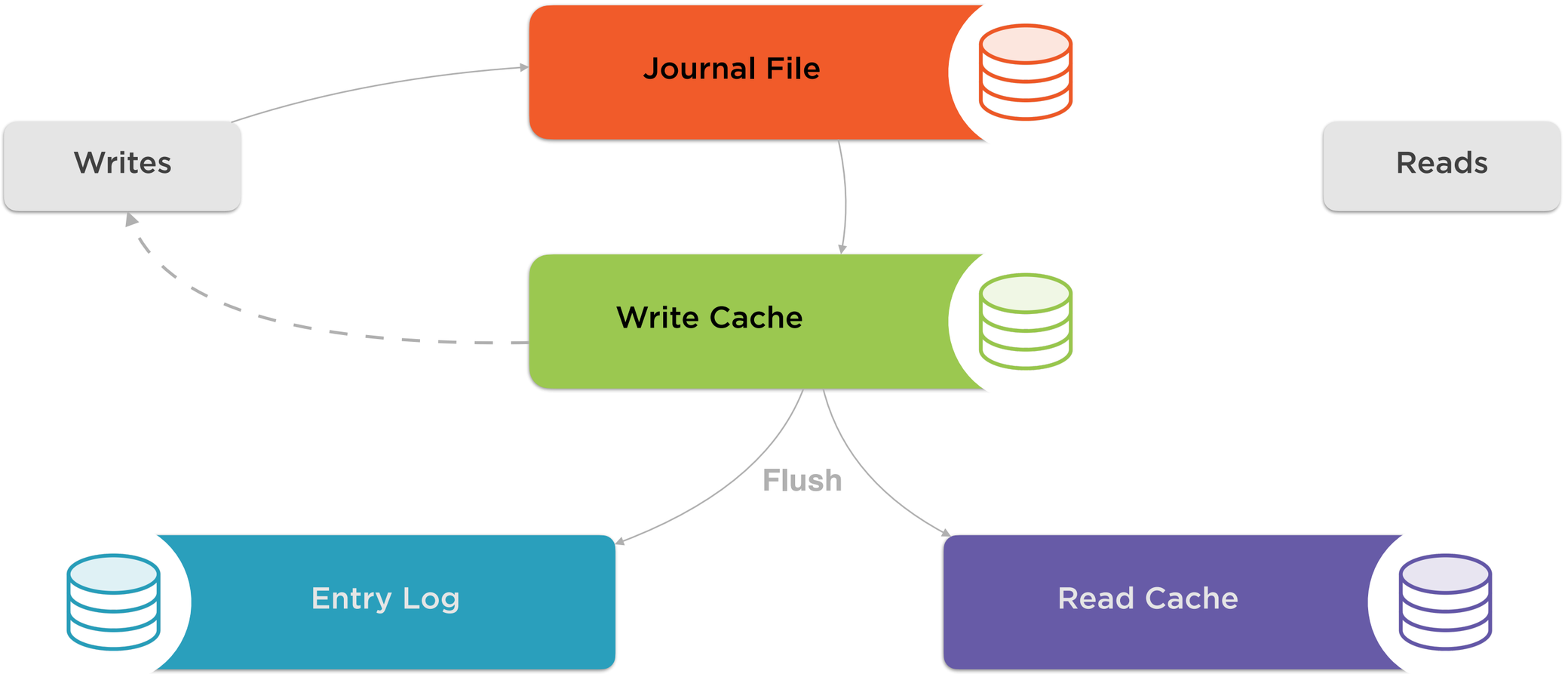
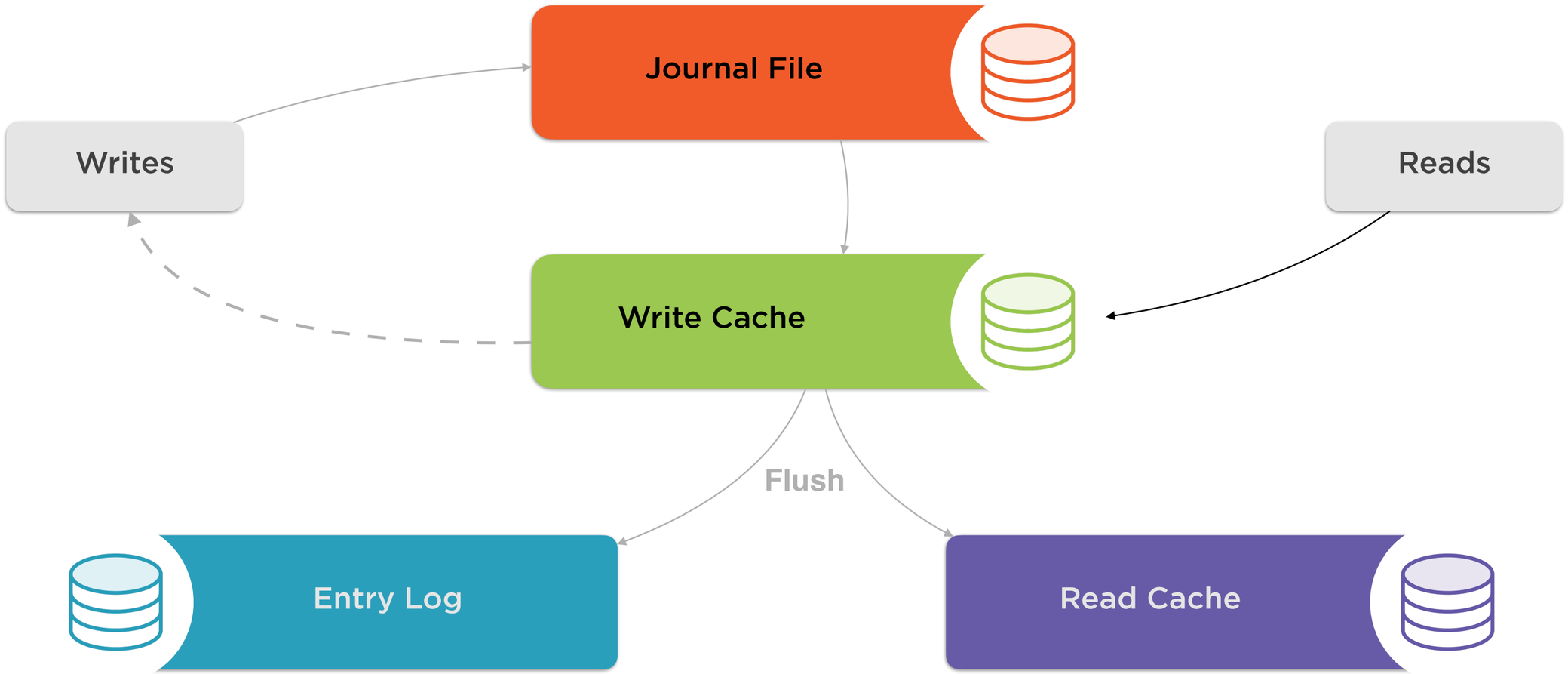
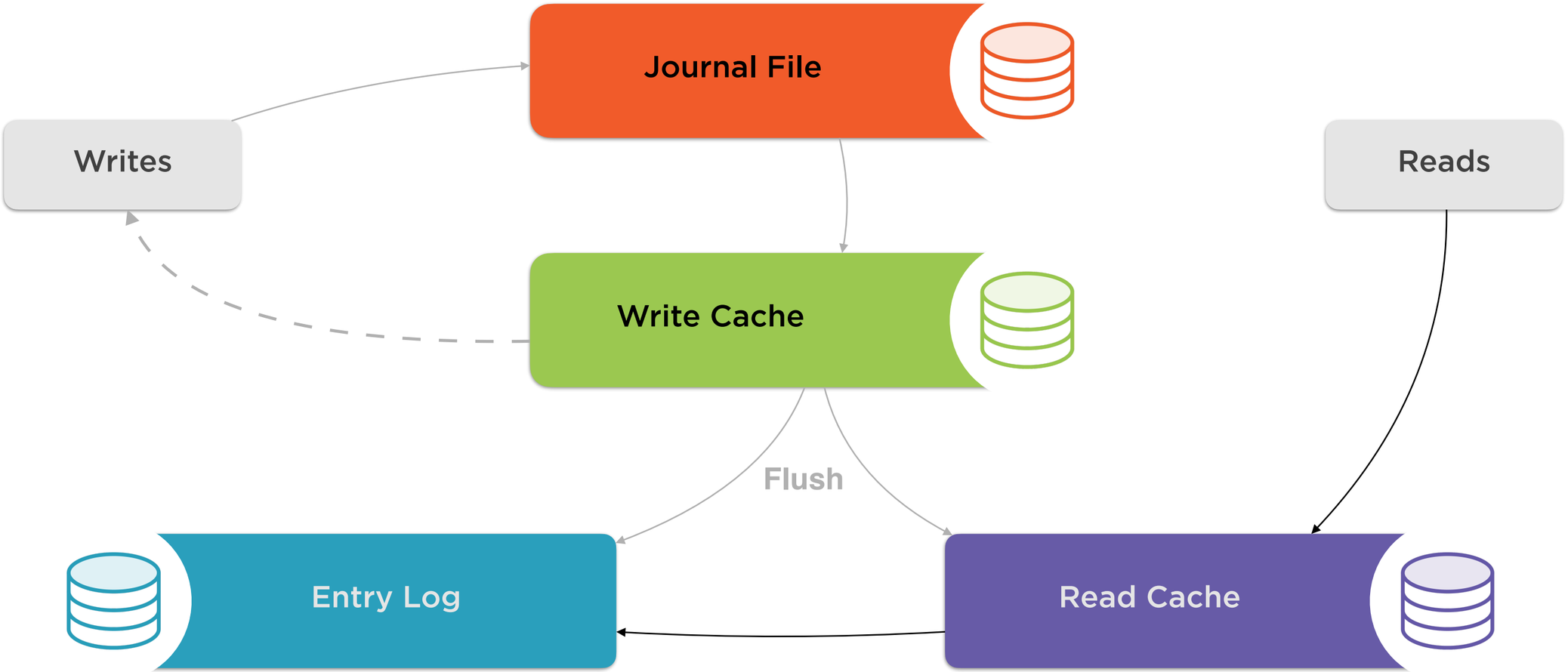


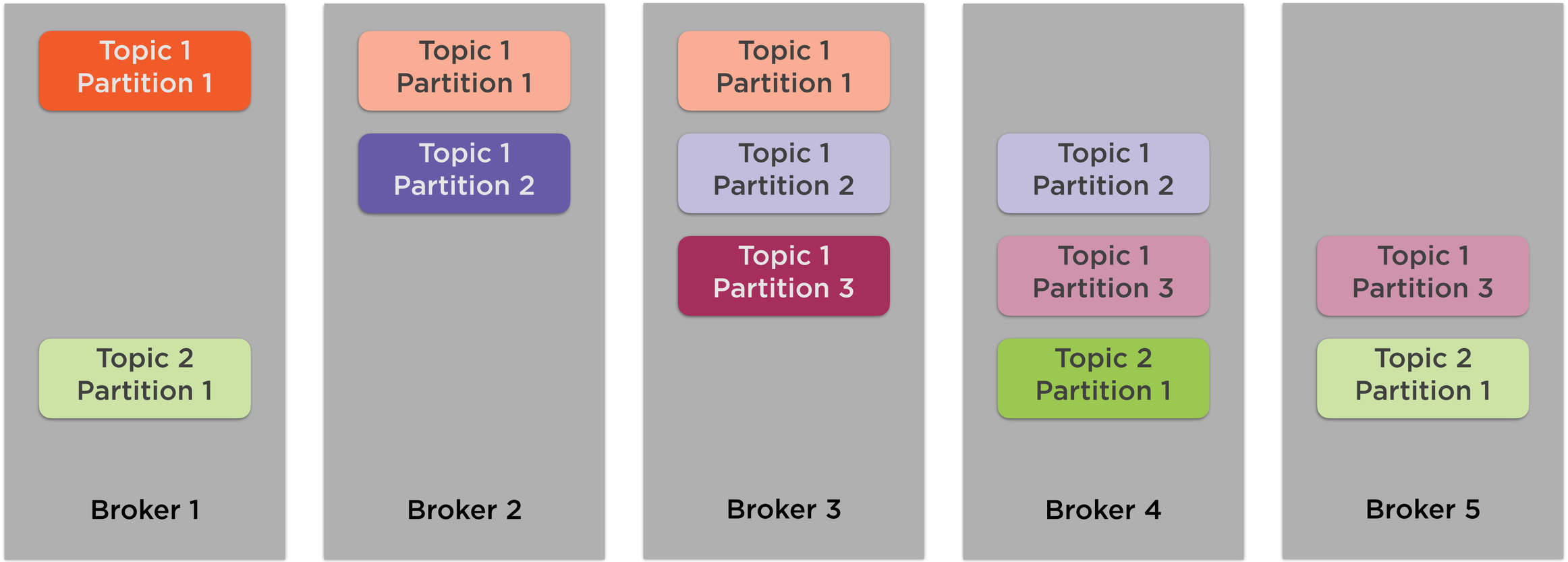
Pulsar Read and Write



Pulsar Read and Write



Kafka Writes



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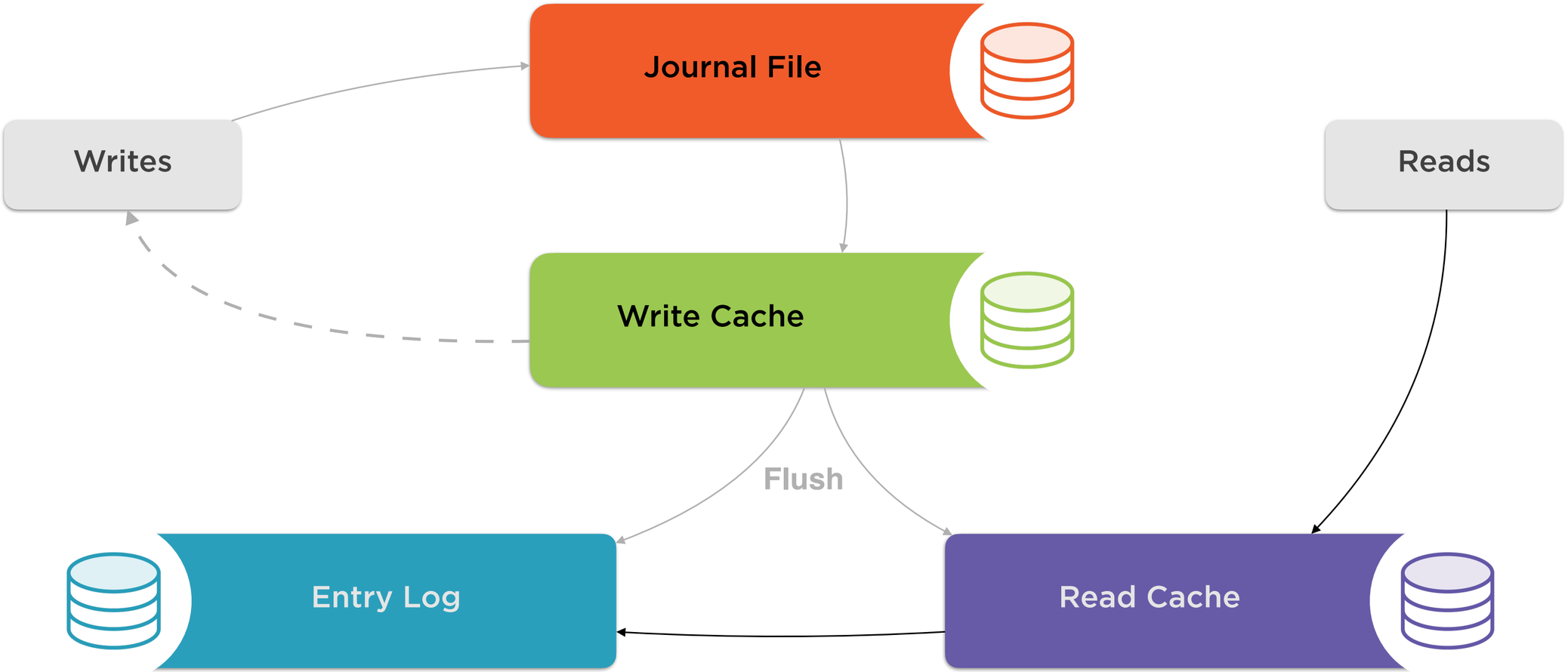
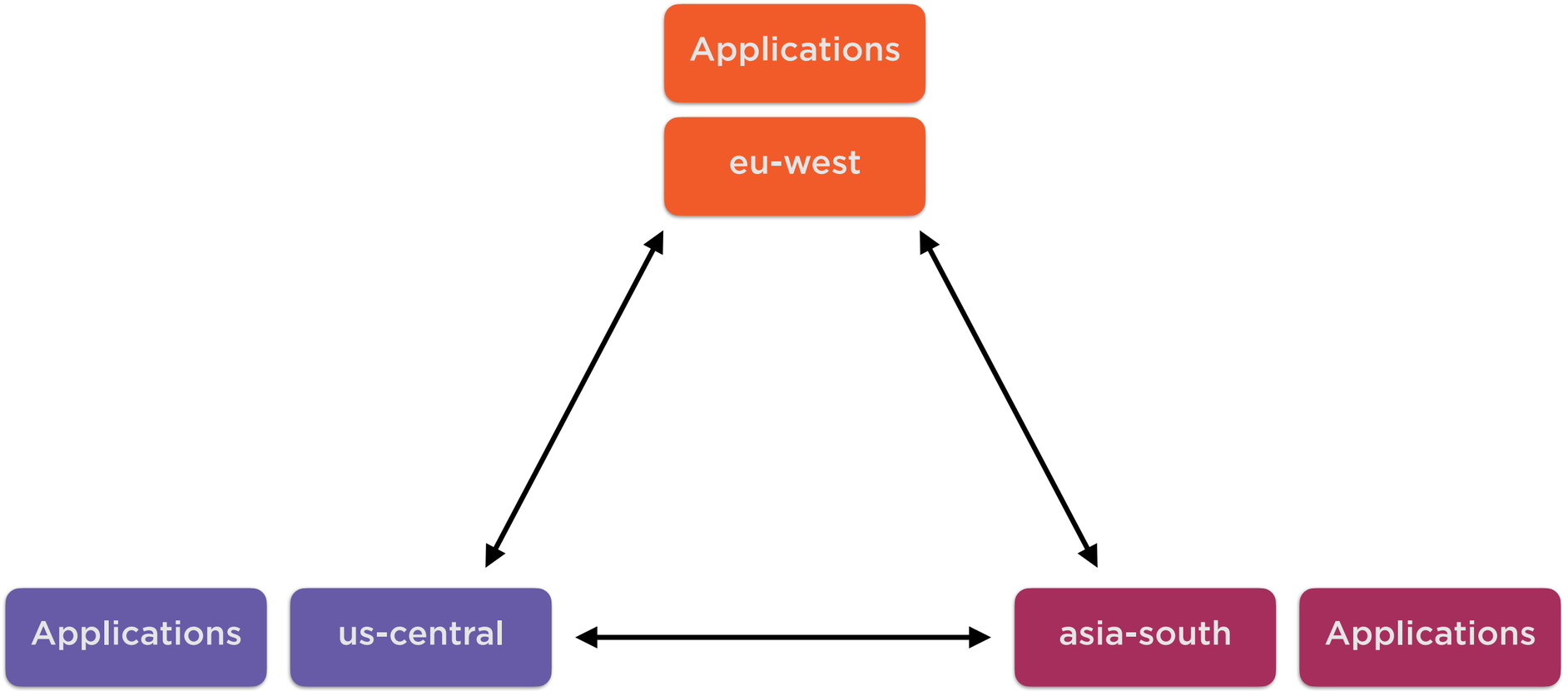
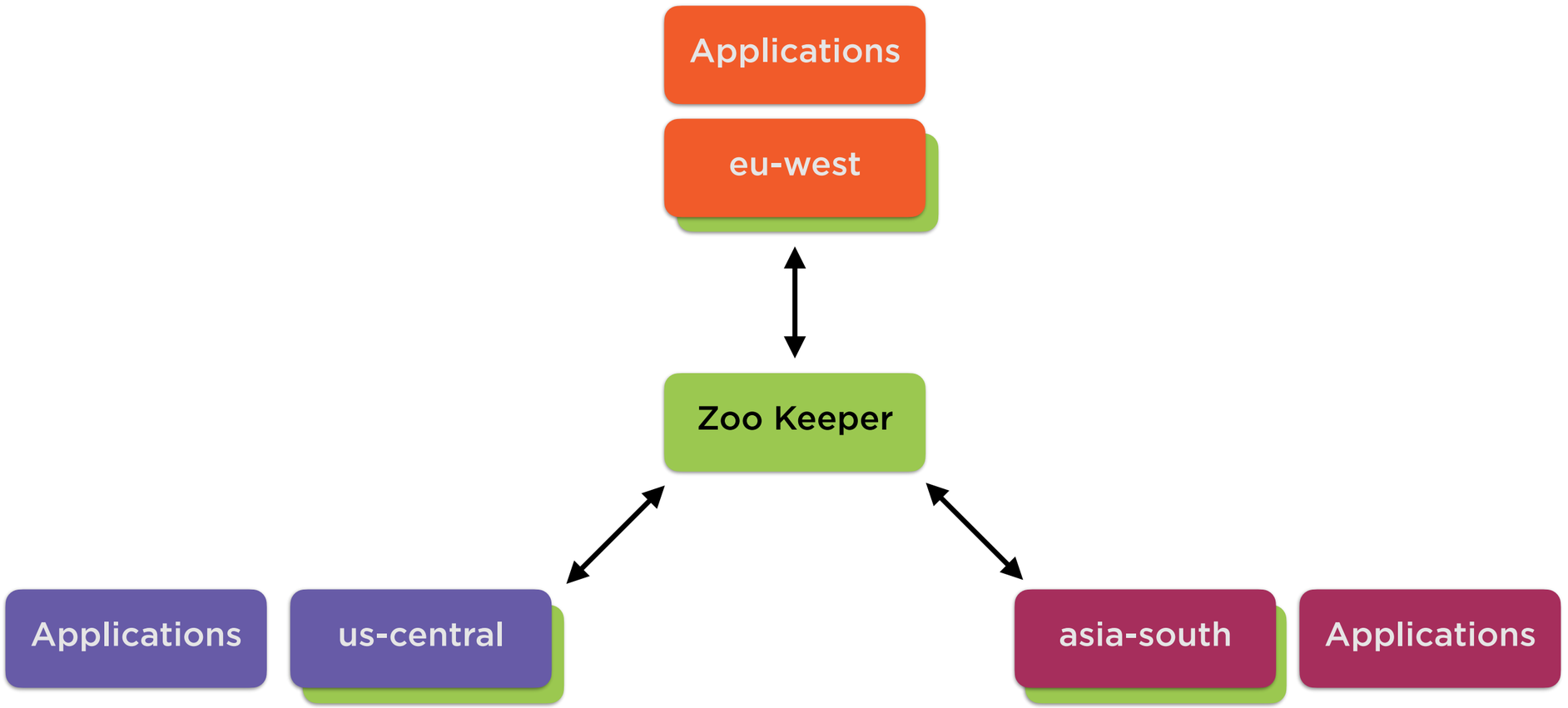


Geo-Replication

Geo-Replication



Multi-Region Cluster



Security

Kafka

TLS Secure Connections

Pulsar

TLS Secure Connections

Authorization Providers (e.g. JWT)

Security

Kafka	Pulsar
TLS Secure Connections	TLS Secure Connections
Authorization and ACLs	Authorization Providers (e.g. JWT)

Security

Kafka

TLS Secure Connections

Authorization and ACLs

Pulsar

TLS Secure Connections

Authorization Providers (e.g. JWT)

Multi-tenancy

Cluster-based Control

Roles and Permissions

Schema Registry

Summary

- Multi-layer architecture
- Storage models
- Read/Write speed
- Rebalancing
- Points of failure
- Geo-Replication
- Security models