

# **IBM Message Hub**

Apache Kafka for the Enterprise

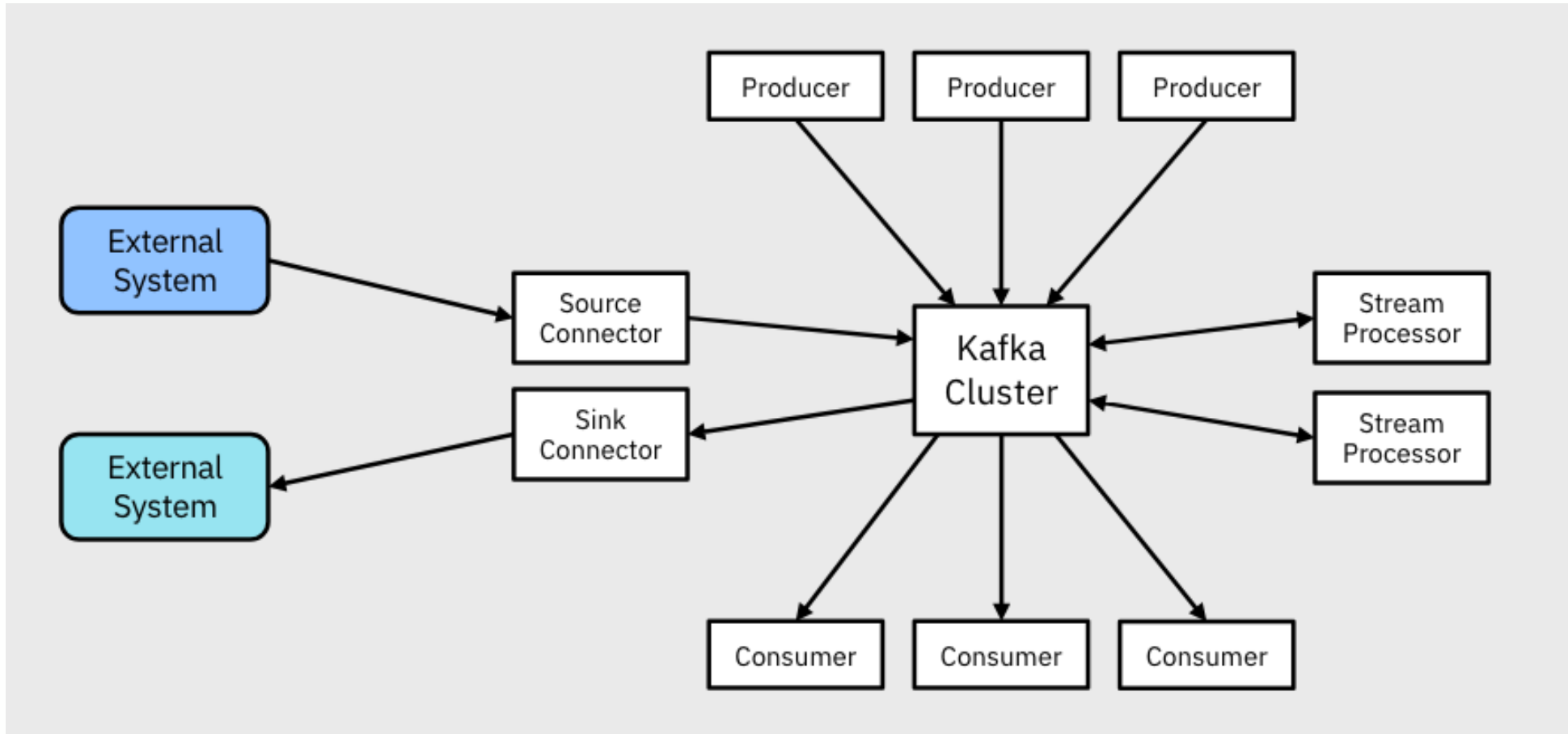
# Agenda

- What is Apache Kafka
- What is IBM Event Streams
- A tour of IBM Event Streams
- Use cases for IBM Event Streams and IBM MQ

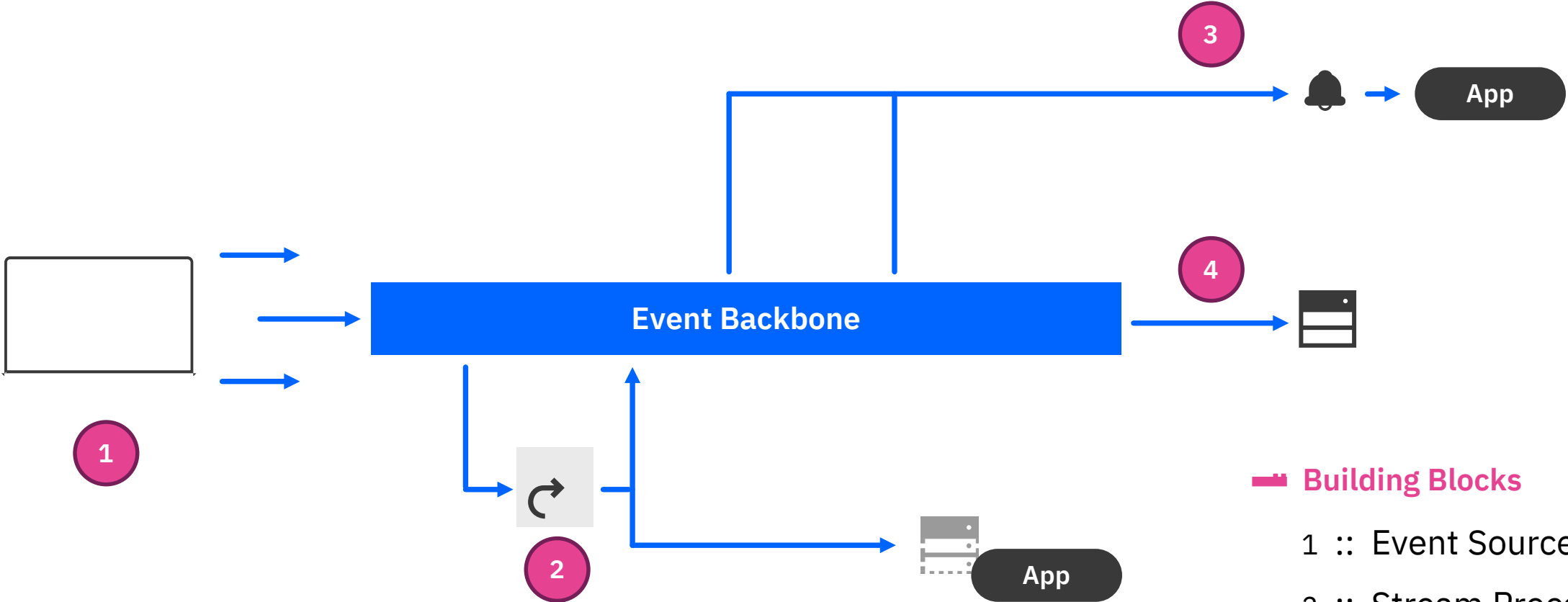


# WHAT IS APACHE KAFKA

# Apache Kafka is an Open-Source Streaming Platform



# Event-driven Use Case | Components



- Building Blocks**
- 1 :: Event Sources
  - 2 :: Stream Processing
  - 3 :: Event Listeners
  - 4 :: Event Archive

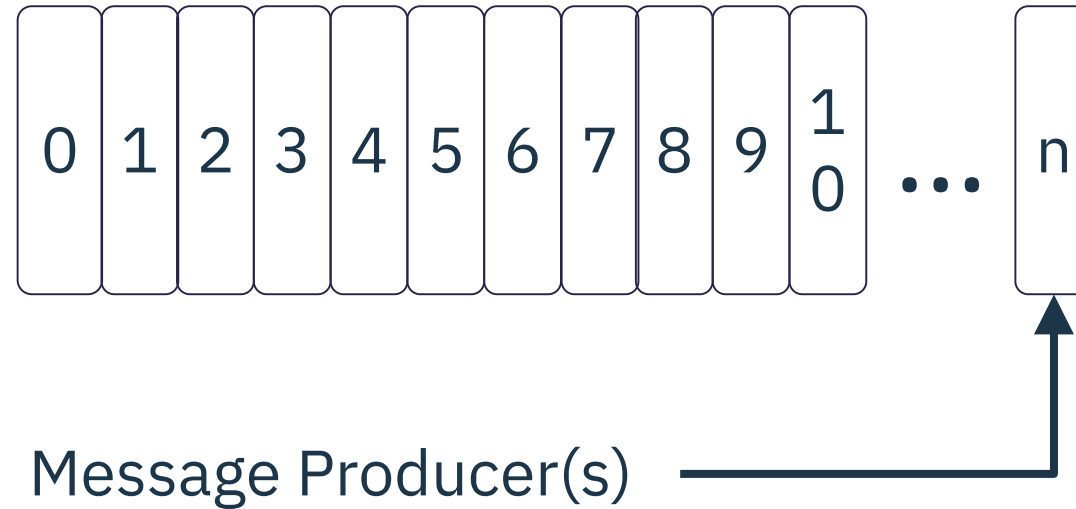
# Kafka Fundamentals - Topics

Topic = **registrations**



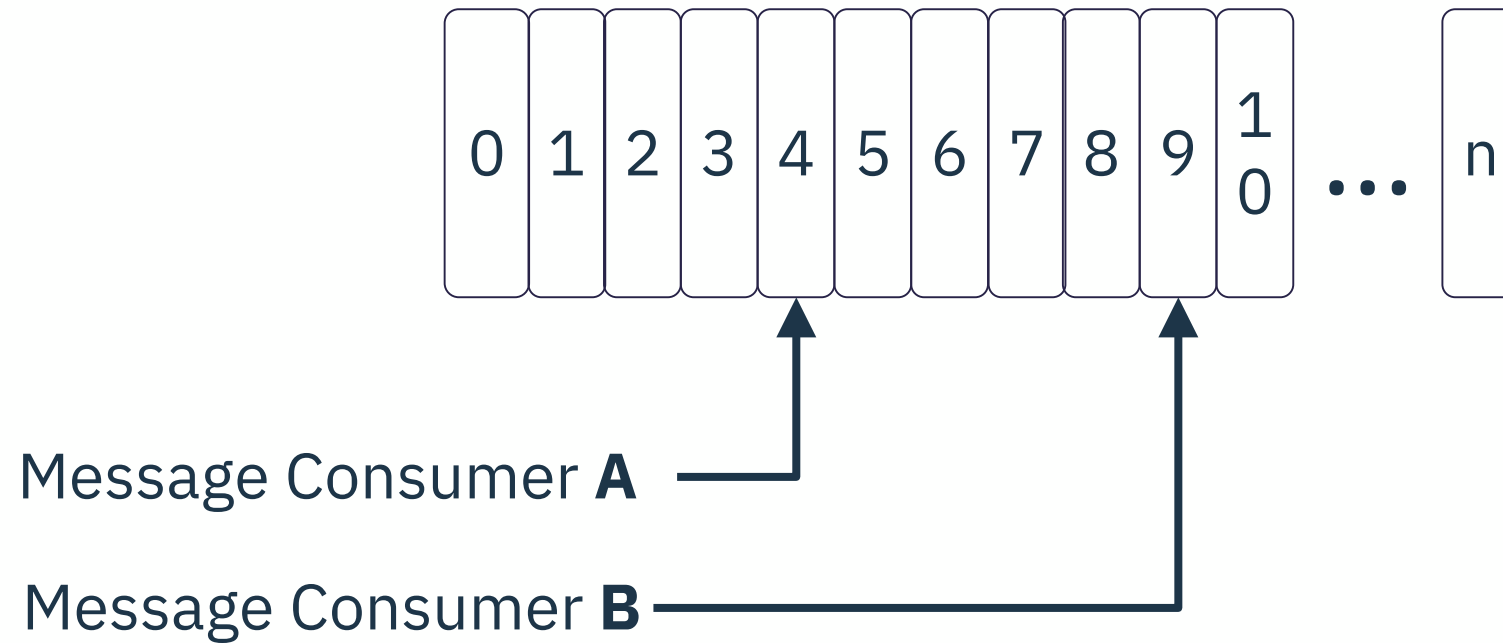
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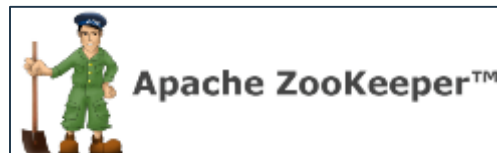
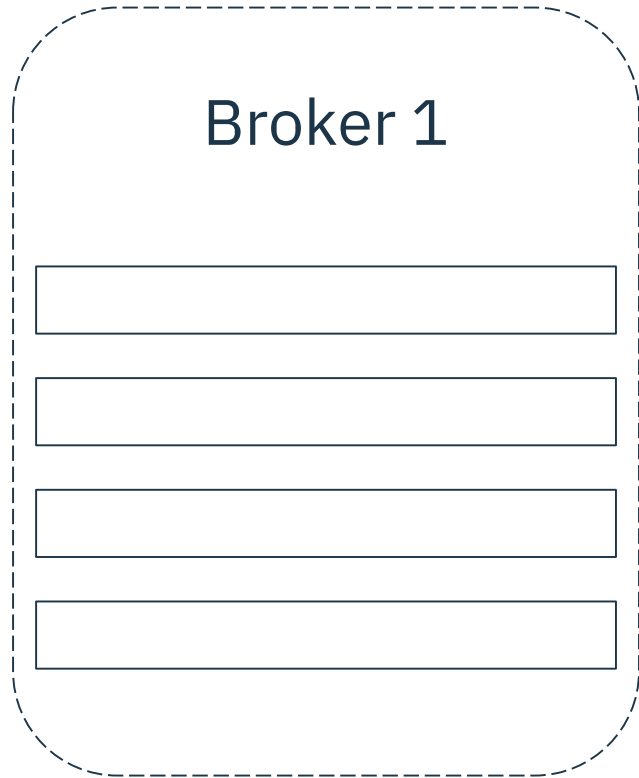
# Kafka Fundamentals - Topics

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# Kafka Components – Brokers (and Replicas)



# Kafka Components - Brokers (and Replicas)

Broker 1


Broker 2

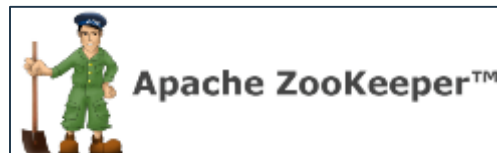



# Kafka Components - Brokers (and Replicas)

Broker 1

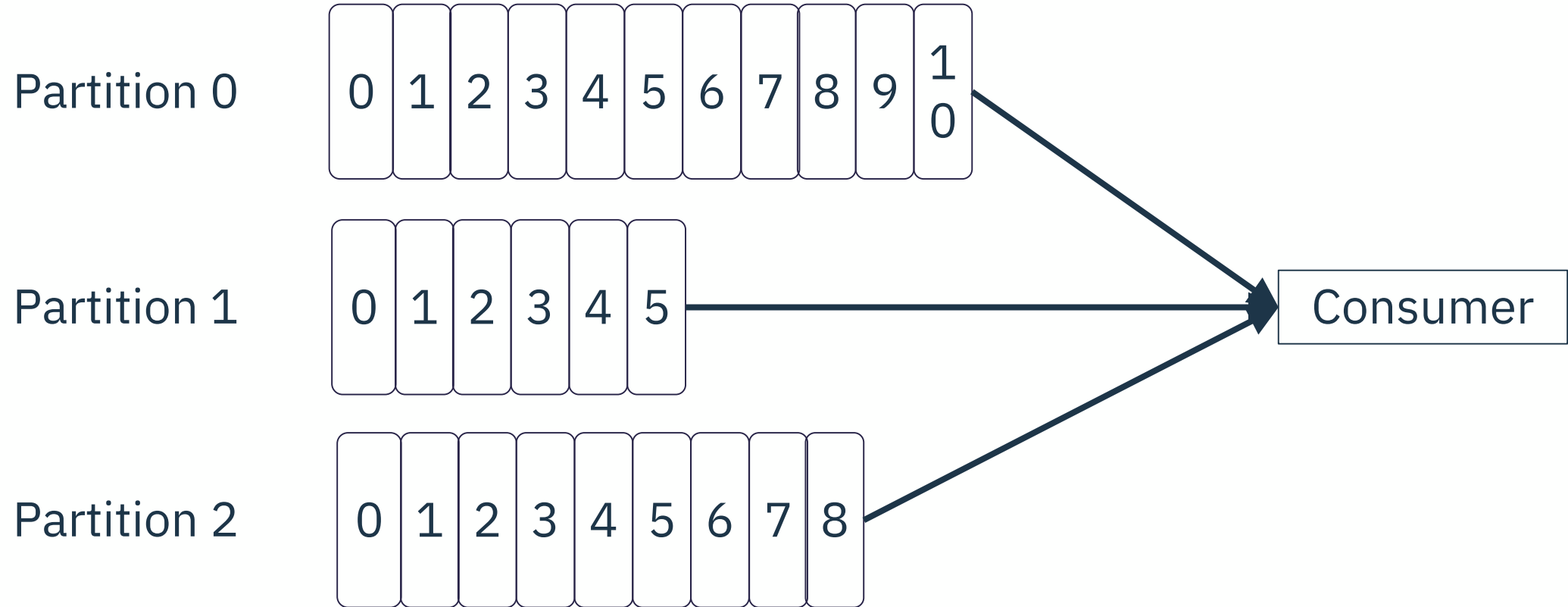

Broker 2


Broker 3

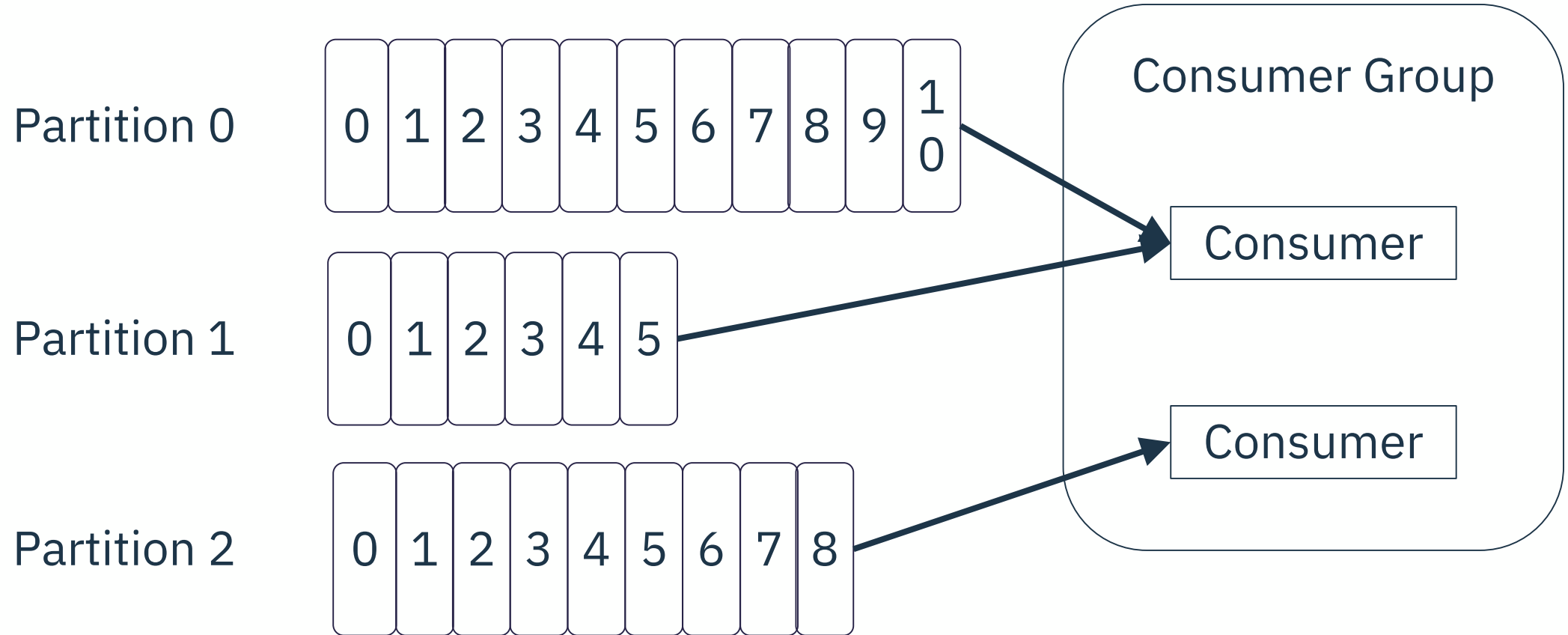
# Kafka Components - Partitions

Topic = **registrations**



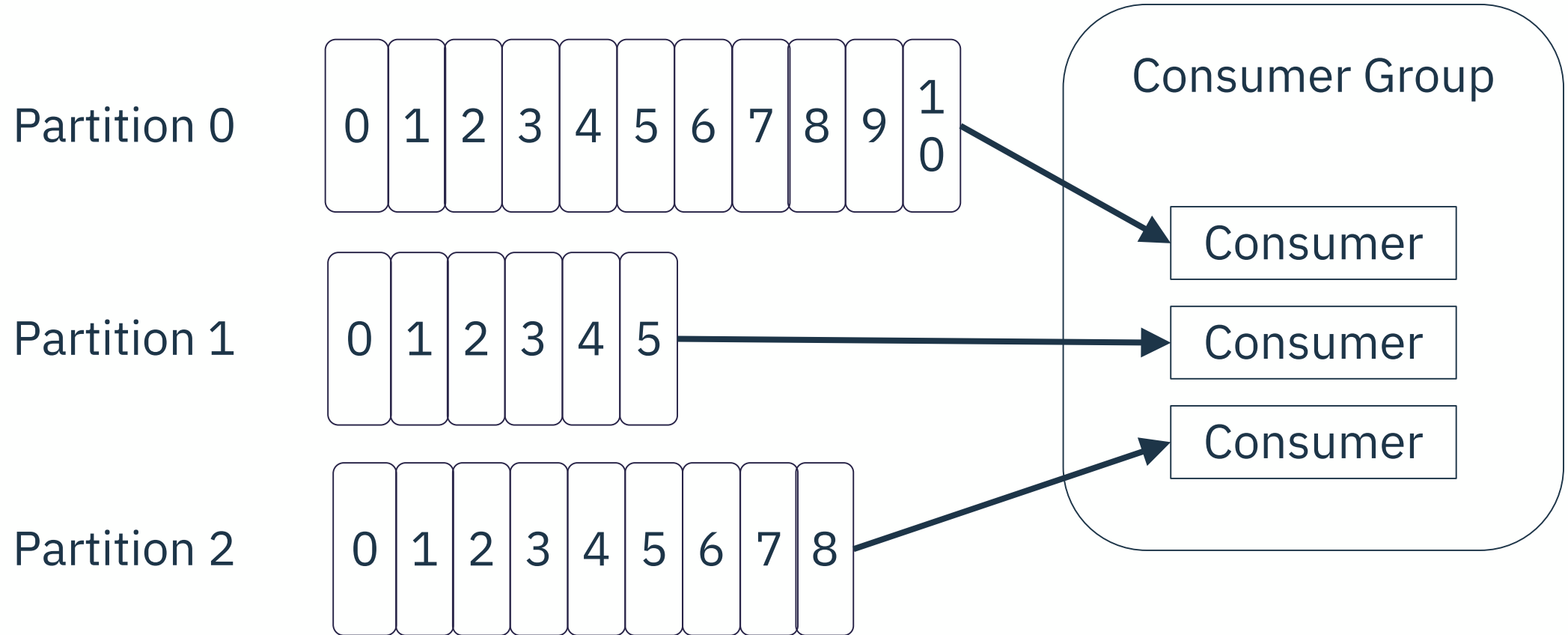
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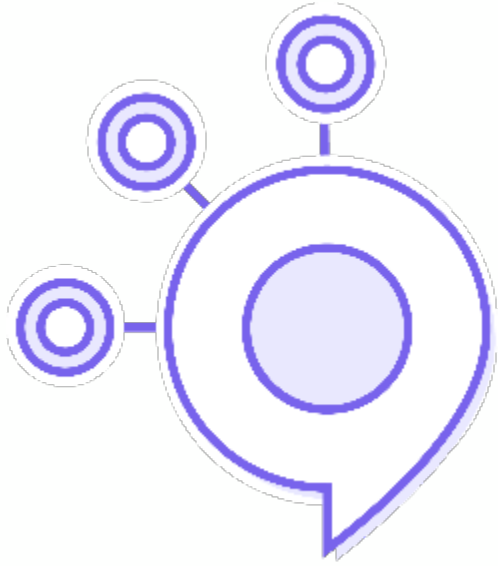
Topic = **registrations**



# Kafka Components - Partitions

Topic = **registrations**





# WHAT IS IBM EVENT STREAMS



# IBM Event Streams

Fully supported  
Apache Kafka<sup>®</sup>  
with value-add  
capabilities

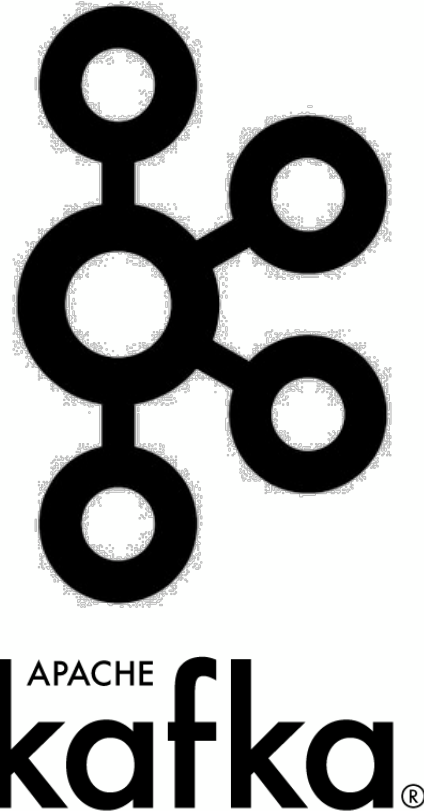




# IBM Event Streams

Deploy **production ready Apache Kafka** onto IBM Cloud or IBM Cloud Private **in minutes**

Build intelligent apps on Kafka with the **confidence IBM is supporting you**



Rely on high availability & security designed for **mission-critical use**

**Exploit existing data** to become a real Event Driven Enterprise

# IBM Event Streams – Key Facts

- Formerly branded as IBM Message Hub
- Available since **December 2015** for IBM Cloud
- Now available on IBM Cloud Private
- Managed Integrations to capabilities such as: **IBM MQ, Cloud Functions, Watson IoT, Streaming Analytics**

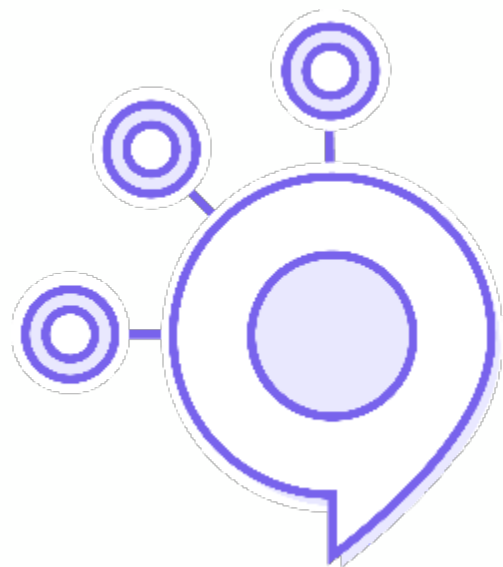
# Differentiated Value

- **IBM has years of operational expertise** running Apache Kafka for Enterprises
  - This experience has been embedded in the DNA of Event Streams
- Event Streams makes Kafka easy to run, manage & consume, **reducing skill requirements** and increasing speed of deployment for **faster time to value**
- IBM Cloud security integration **simplifies Kafka access** control using roles and policies
- **IBM's experience in Enterprise-critical software** has shaped features like geo-replication for disaster recovery & integration with IBM MQ, to give confidence deploying **mission-critical workloads**



**Event Streams**  
is available in  
3 deployment options





# A TOUR OF IBM EVENT STREAMS

# eventstreams

Getting started

Topics

Consumer groups

Monitor

Toolbox

Connect to this cluster

Welcome to IBM Event Streams, let's get you up and running...



### Use a simulated topic

Start exploring what IBM Event Streams has to offer with our simulated topic. You can do this even if your brokers aren't ready



### Generate a starter application

Download and install our starter Kafka application and view data flowing to and from IBM Event Streams in just a few minutes

Learn more...

[FAQs](#)

[GitHub](#)

[Documentation](#)



Kafka basics

Learn the basics of Apache Kafka, the heart of Event Streams.



System is healthy

# eventstreams

Getting started **Topics** Consumer groups Monitor Toolbox

[Connect to this cluster](#)

## Topics

[Geo-replication](#)

[Create topic](#)

Name	Replicas	Partitions
IBM_Simulated_Topic	3	2



### You have a simulated topic.

The simulated topic will allow you to explore the IBM Event Streams UI and see how you can interact with and view a real Kafka topic.



System is healthy

This is a simulated topic with generated data i

← Topics

# IBM\_Simulated\_Topic

Messages

Consumer groups

Connect to this topic 🔍



All partitions



Showing 14 message(s) across all partitions

Find message 🔍



This is a simulated topic



Show messages from date:



2/25/2019



FEBRUARY 2019

S	M	T	W	Th	F	S
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	1	2

Kafka timestamp i

Partition

Offset

2/25/2019, 3:47:52 PM

0

0

2/25/2019, 3:47:52 PM

1

0

2/25/2019, 3:47:55 PM

1

1

2/25/2019, 3:47:57 PM

0

1

2/25/2019, 3:48:01 PM

0

2

2/25/2019, 3:48:05 PM

1

2



System is healthy



## eventstreams

[Getting started](#) [Topics](#) [Consumer groups](#) [Monitor](#) [Toolbox](#)[Connect to this cluster](#) 

### Applications



#### Starter application

Download and install this application which you can connect to a topic. This application is a full project containing a Kafka producer and consumer for you to try out.

[Generate application](#)[Just looking for the instructions?](#)

#### Workload generation application

Want to quickly validate your IBM Event Streams instance? Download and run a pre-built tool to generate messages at a configurable rate, or download and modify the source to simulate your own workload.

[View In GitHub](#)

### Tools



#### IBM Event Streams command-line interface

Use the CLI to manage your IBM Event Streams instance from the command line.

[Find out more](#)

#### Apache Kafka Java client

Download the Apache Kafka Java client.

[Find out more](#)

### Connectors



#### Kafka Connect source connector for IBM MQ

You can use the Kafka Connect source connector for IBM MQ to copy data from IBM MQ into IBM Event Streams or Apache Kafka.

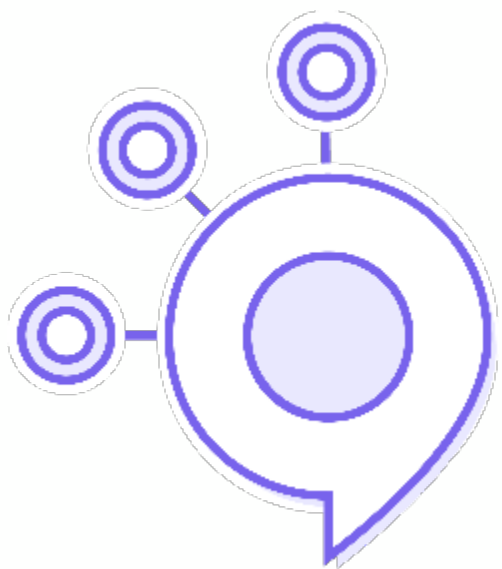
[Find out more](#)

#### Kafka Connect sink connector for IBM MQ

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[Find out more](#)



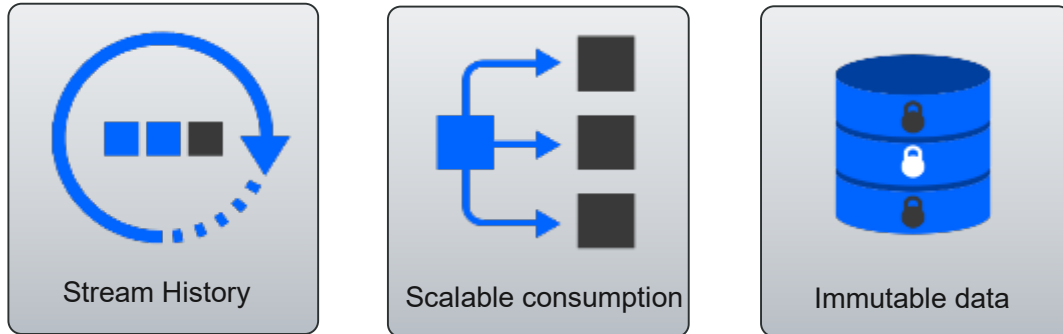


# USE CASES FOR EVENT STREAMS AND IBM MQ

# IBM Event Streams and IBM MQ Positioning

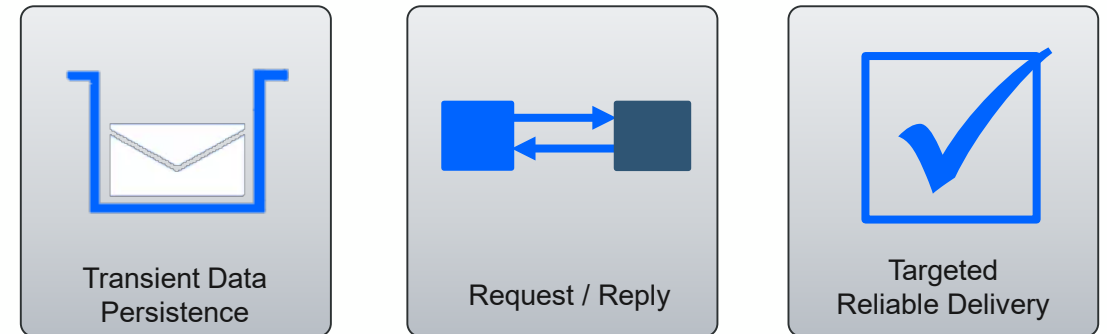
## IBM Event Streams

**Events:** Things that have happened



## IBM MQ

**Messages:** Work that needs to be done



## IBM Event Streams



## IBM Message Hub & IBM Streaming Analytics

