What's new IBM Event Streams 2019.4.1

Improving Apache Kafka for enterprise

IBM Software Engineer Chris Patmore

Apache Kafka

IBM Event Streams

IBM

Chris Patmore

Chris is an IBM Software Engineer and is a member of the IBM Event Streams development team. Through his work on IBM Event Streams he has built up experience running enterprise level Kafka clusters on Kubernetes, and writing microservices for the cloud. He has a first class masters in physics and If he's not writing code, he's probably out bouldering.

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Apache Avro schemas

What is a schema

Why use schemas

How Event Streams improves the experience

Multizone

Why multizone

Kafka and zones

CICS integration

Questions

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What is a schema

```
{
 "type": "record",
 "name": "Book",
 "namespace": "com.mycompany.schemas.materials",
 "fields": [
  {
   "name": "Title",
   "type": "string"
  },
  {
   "name": "Author",
   "type": "string"
  },
  {
   "name": "Blurb",
   "type": "string"
  },
  {
   "name": "Rating",
   "type": "int"
  },
  {
   "name": "Pages",
   "type": "int"
  }
 ]
}
```

Apache Avro

A schema defines the content and types of data in a Kafka message

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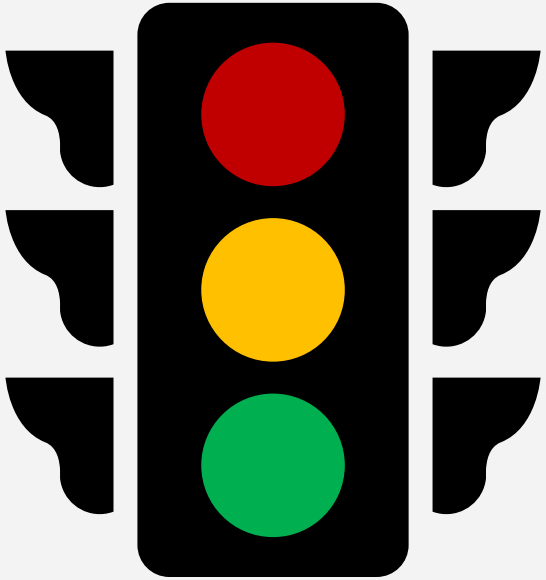
Schemas Provide Governance

Schemas ensure message integrity between producers and consumers.



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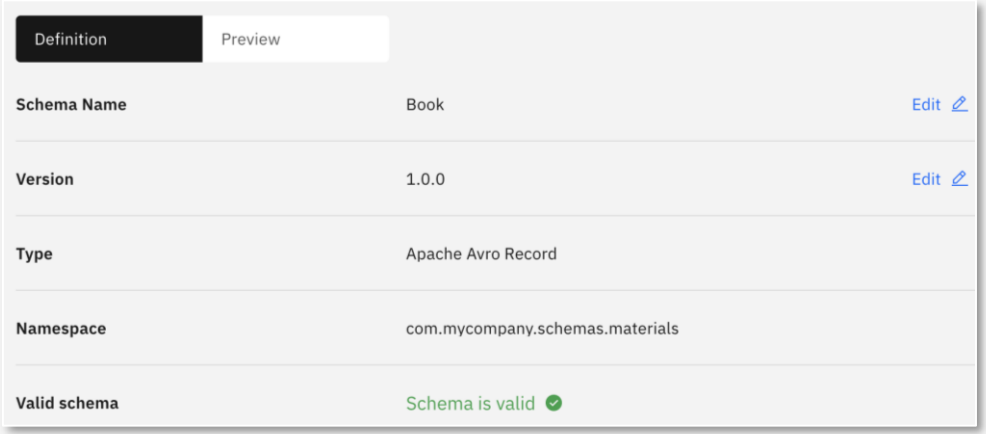
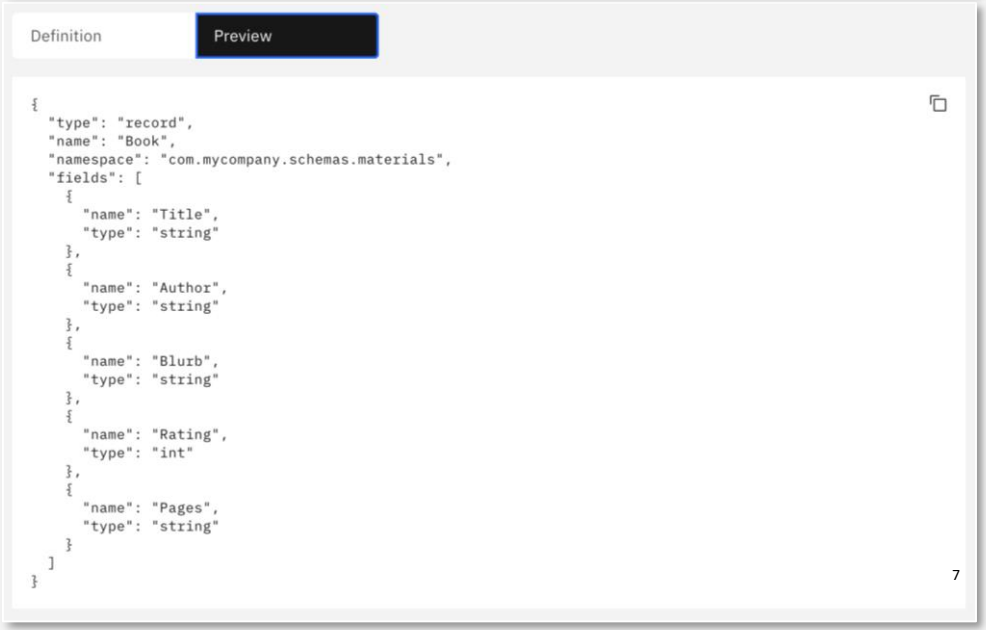
Schema Validation

Upload from UI

Upload from CLI

Get schema validation





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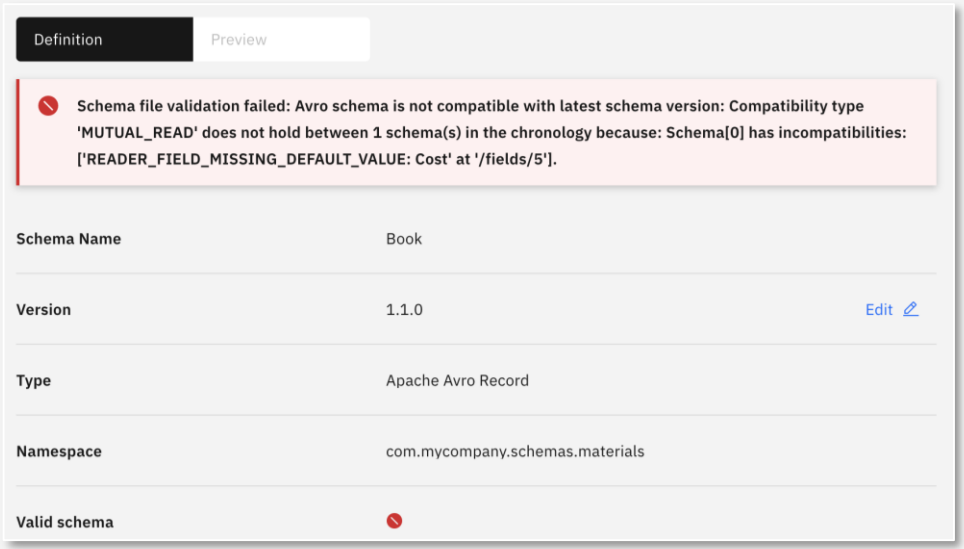
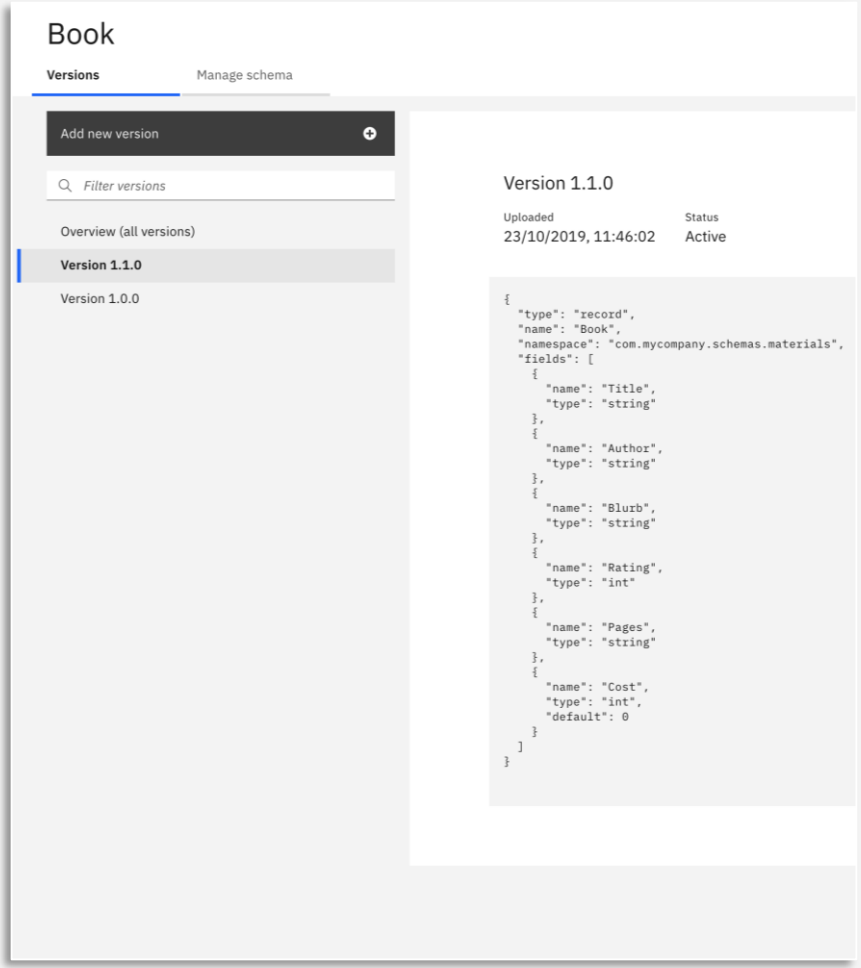
Schema Versioning

Controlled compatible evolution





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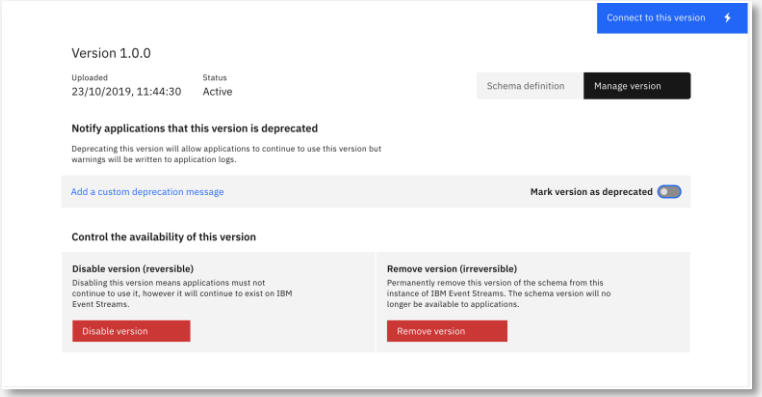
Schema Lifecycle

Manage the lifecycle of your schemas

Inform clients about changes

Stop outdated clients



Active

All clients running happily

Deprecated

Producers get a warning

Customise your warning

Consumers don’t notice

Disabled

Producers stop

Consumers get warned

Removed

All clients stop

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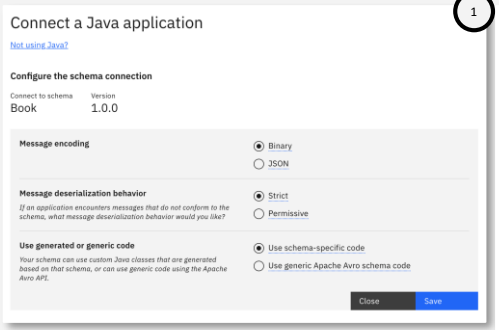
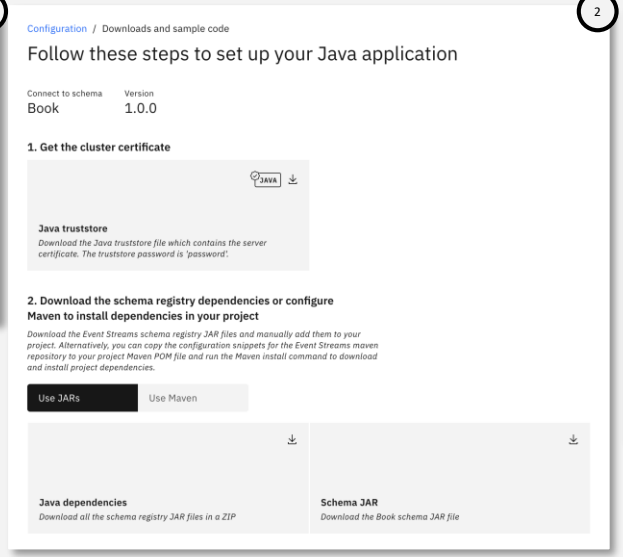
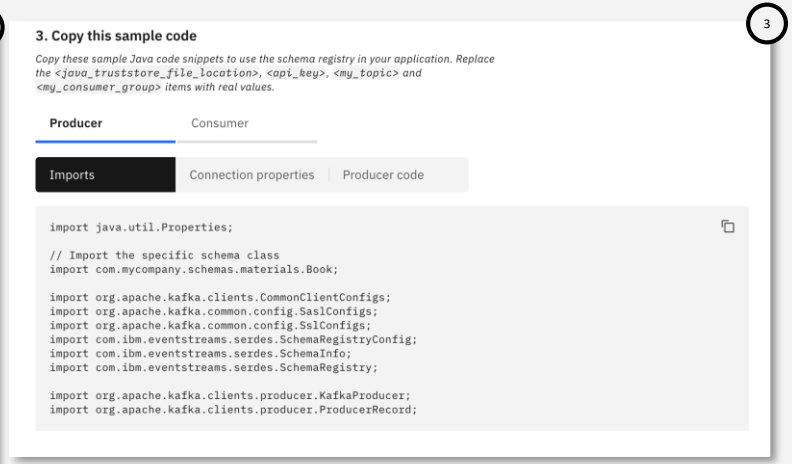
Application Development

Schema applications are Effortless to develop







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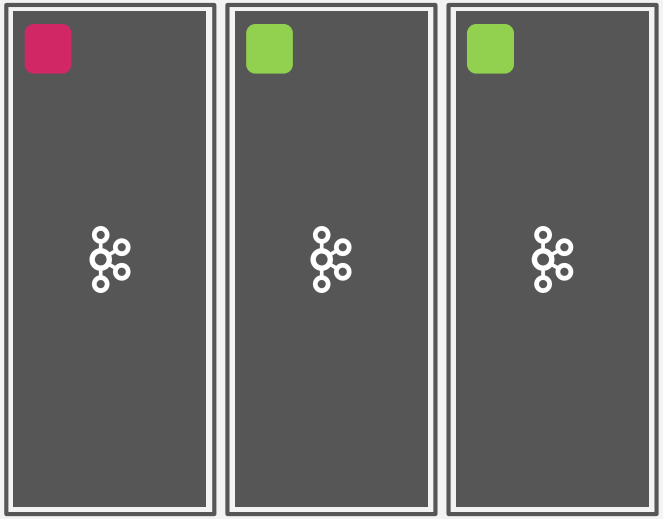
Multizone Provides Resilience

Spread your enterprise resources

Native Kubernetes feature

Tolerate failure



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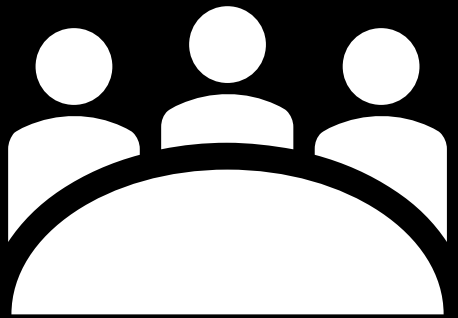
Consensus

Kubernetes is asynchronous

Who’s right

Consensus required



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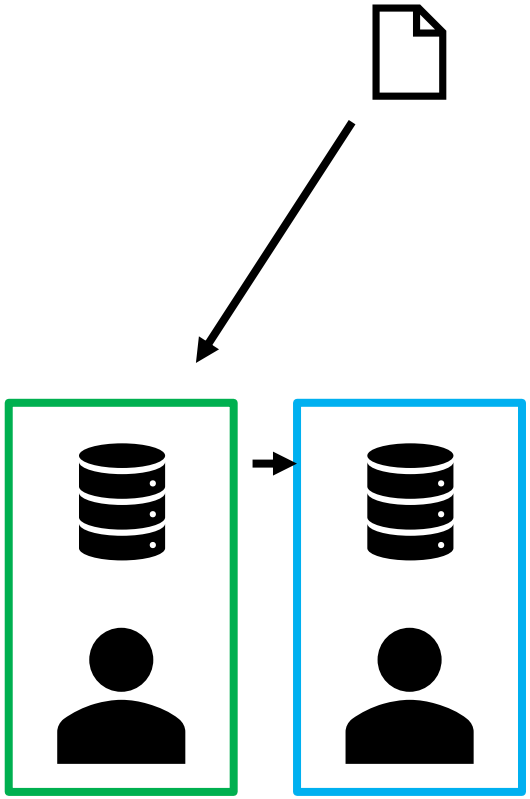
Consensus continued



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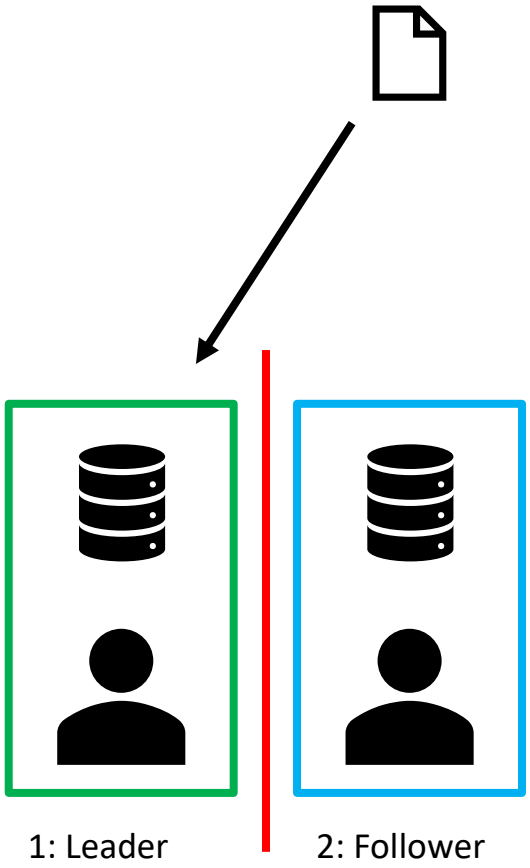
Consensus continued



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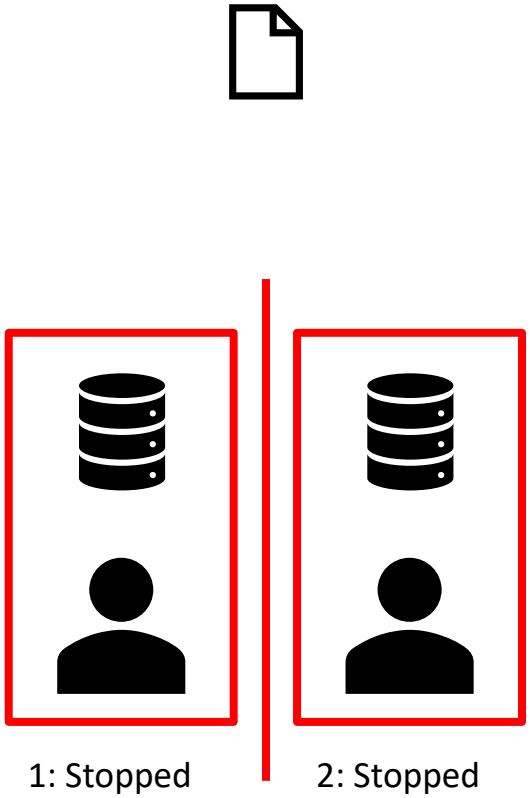
Consensus continued



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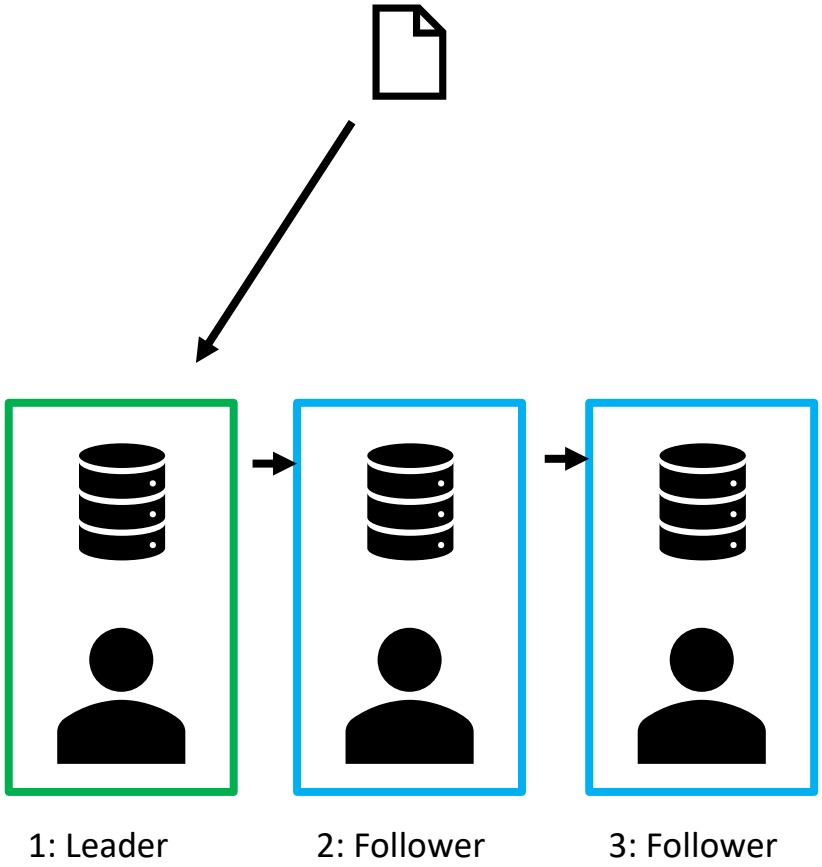

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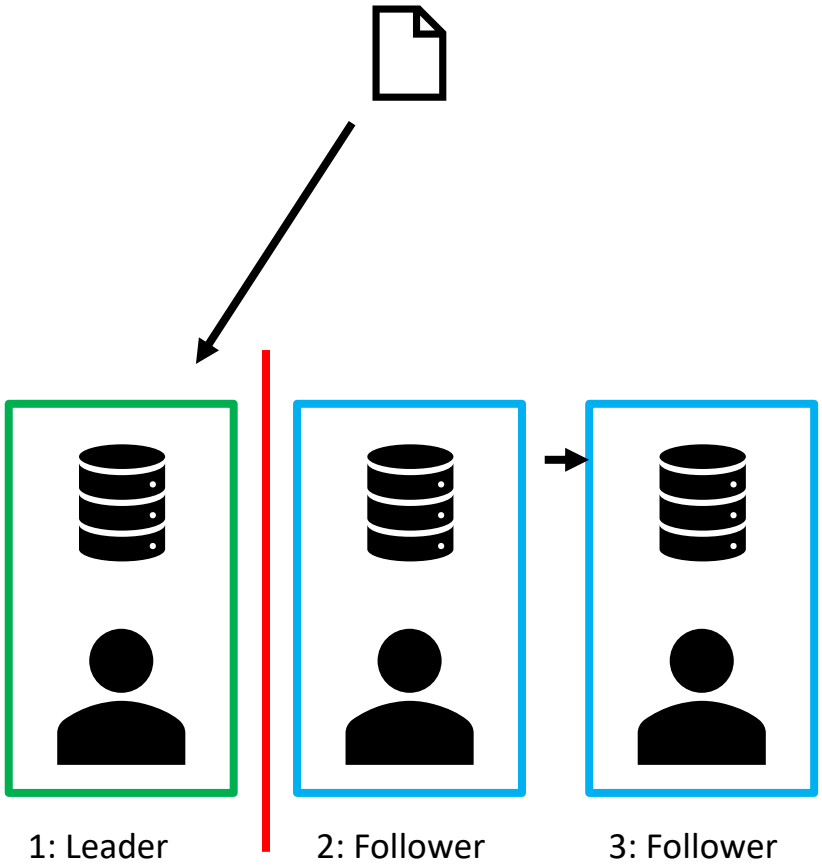

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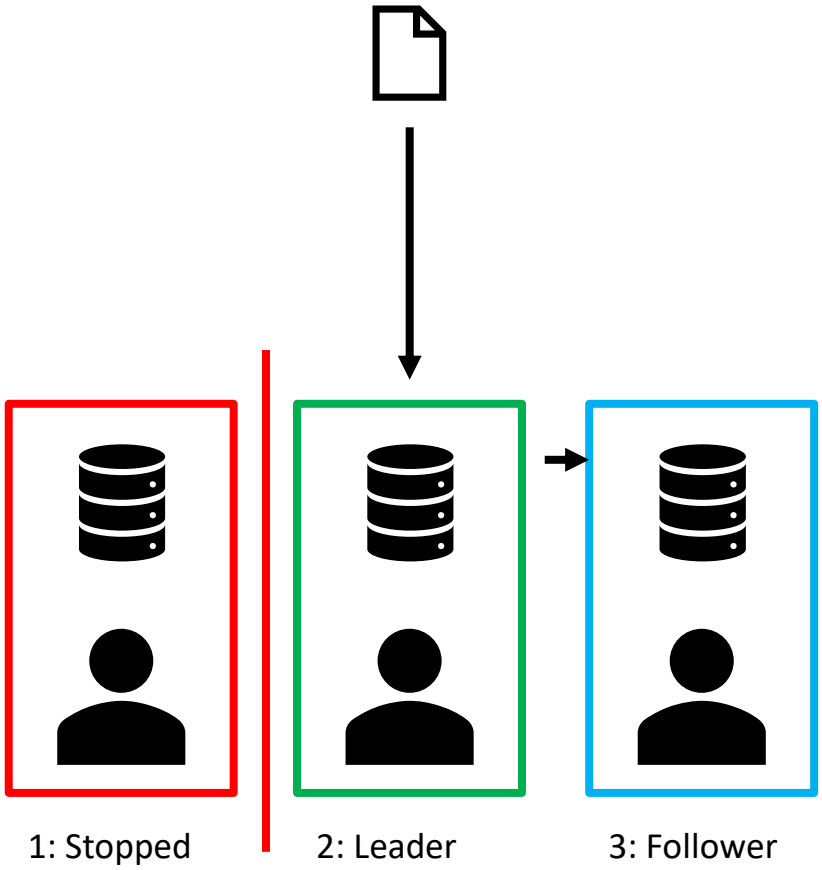

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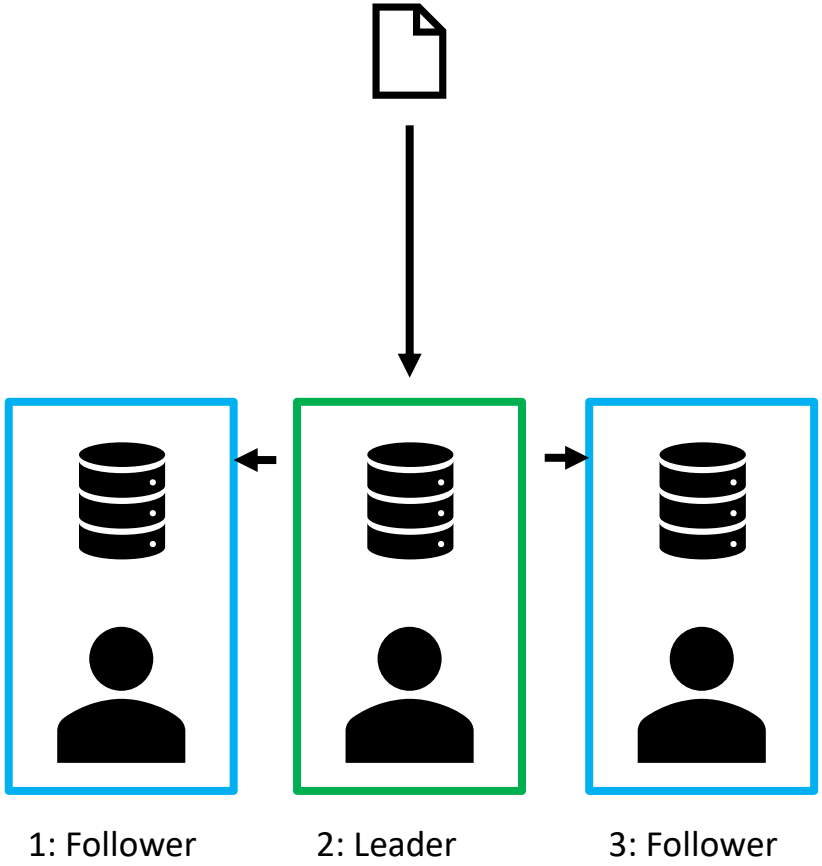

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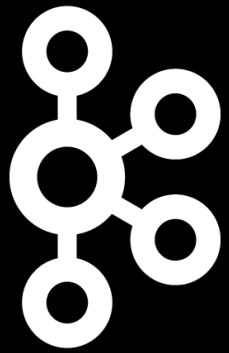
Kafka and Zones



Align Kafka with Kubernetes

Spread topics and partitions

Keep your data

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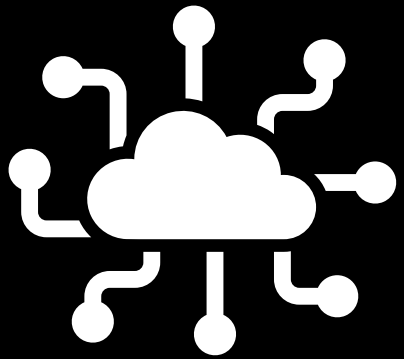
CICS Integration

CICS events = Kafka messages

Secure by design



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Thank you for listening

Documentation:
https://ibm.github.io/event-streams/schemas/overview/
https://ibm.github.io/event-streams/installing/preparing-multizone/
https://www.ibm.com/support/knowledgecenter/en/SSGMCP_5.2.0/com.ibm.cics.ts.eventprocessing.doc/concepts/dfhep_event_processing_adapters.html
https://ibm.github.io/event-streams/connecting/rest-api/

Ask more questions on slack:
https://ibm.github.io/event-streams/support/
IBM Cloud Technology - #ibm-eventstreams

Apache Kafka

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