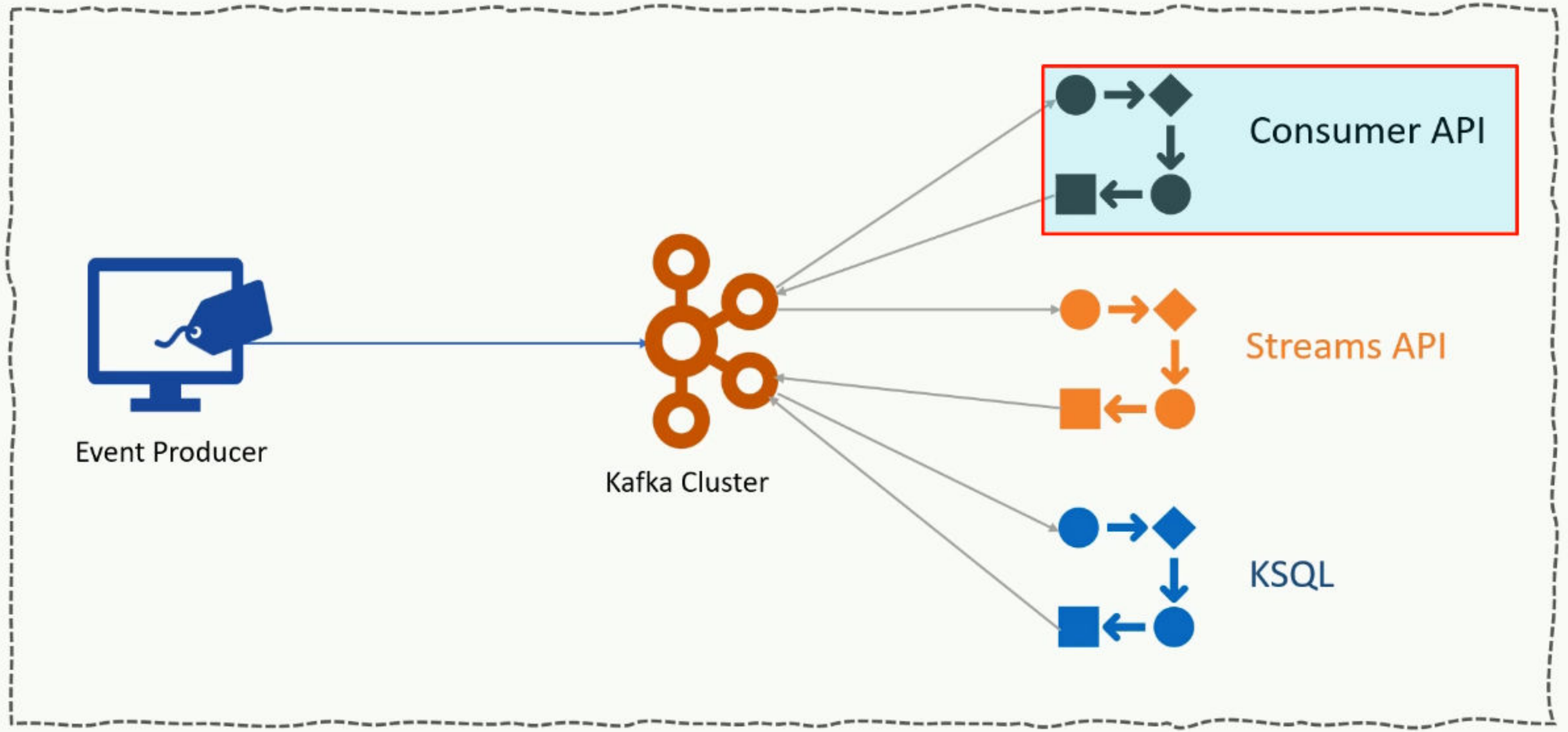
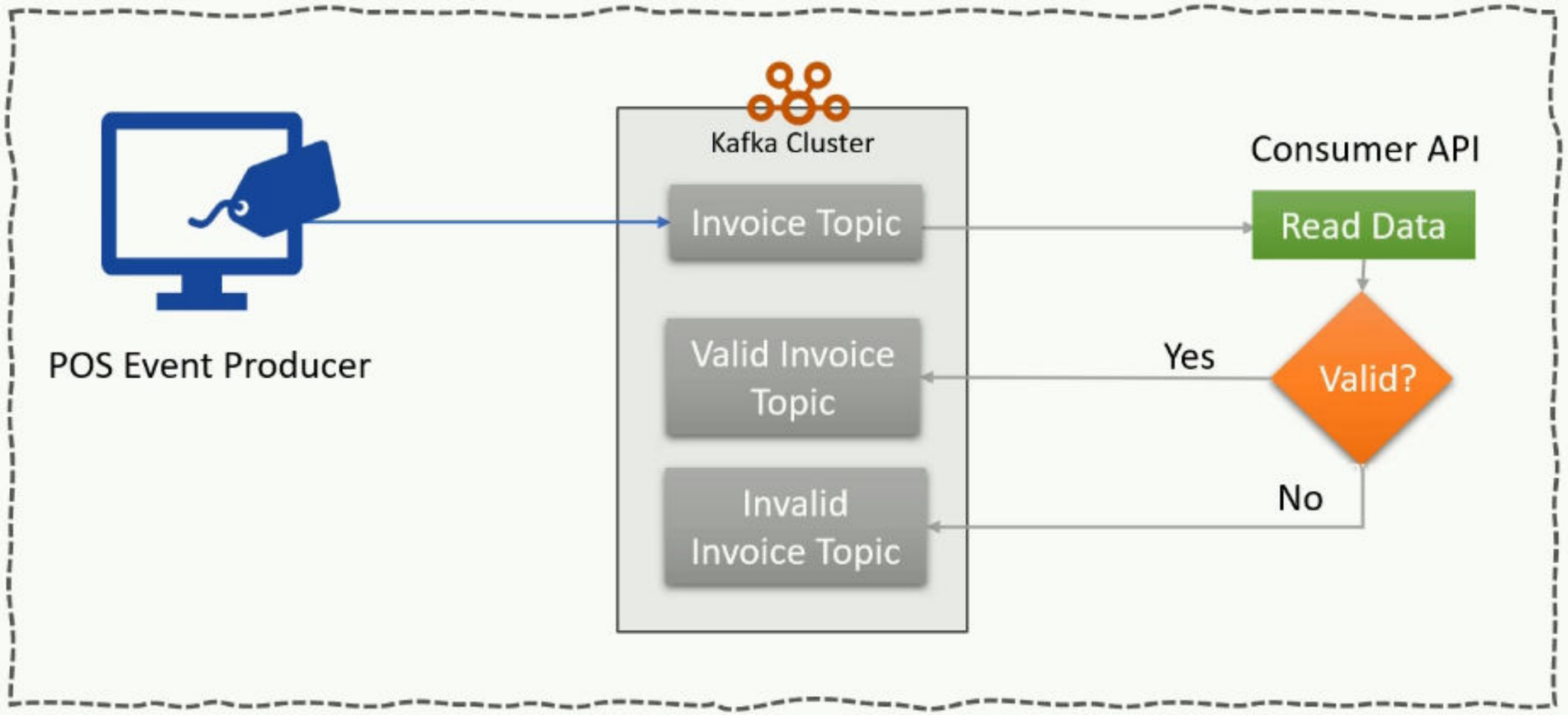
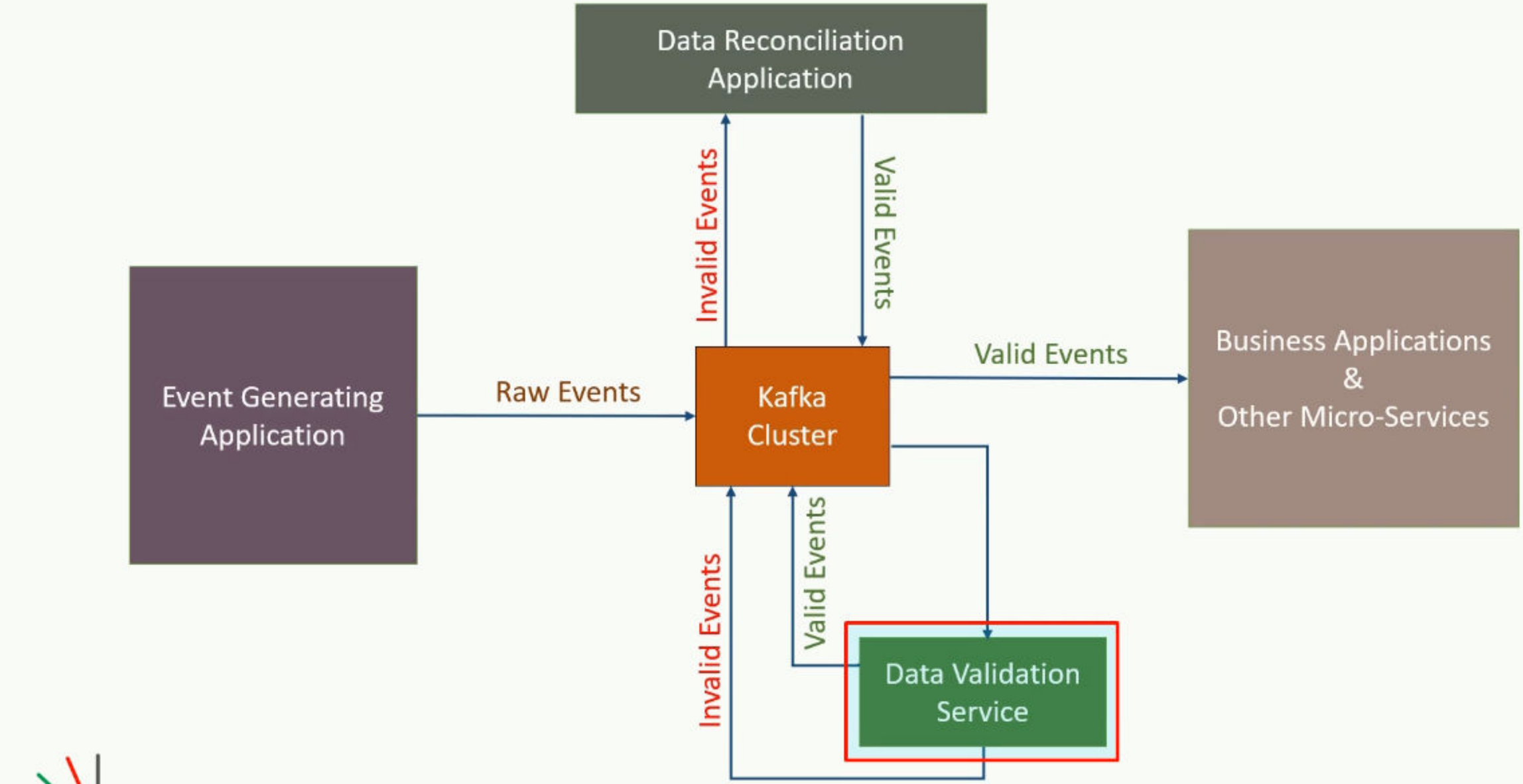


Stream Processing

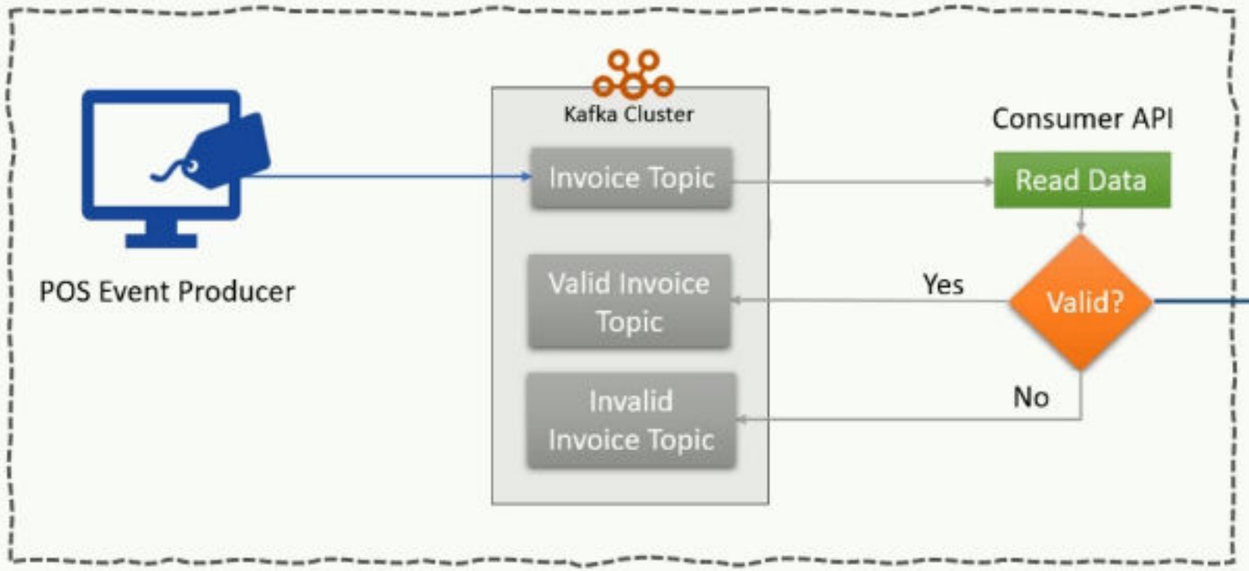
Creating Kafka Consumer Application

Problem Statement




Data Reconciliation Application
Invalid Events
Valid Events
Event Generating Application
Raw Events
Kafka Cluster
Valid Events
Business Applications & Other Micro-Services
Invalid Events
Valid Events
Data Validation Service

Creating Kafka Consumer Application



What is Invalid?

Delivery Type = **HOME DELIVERY**

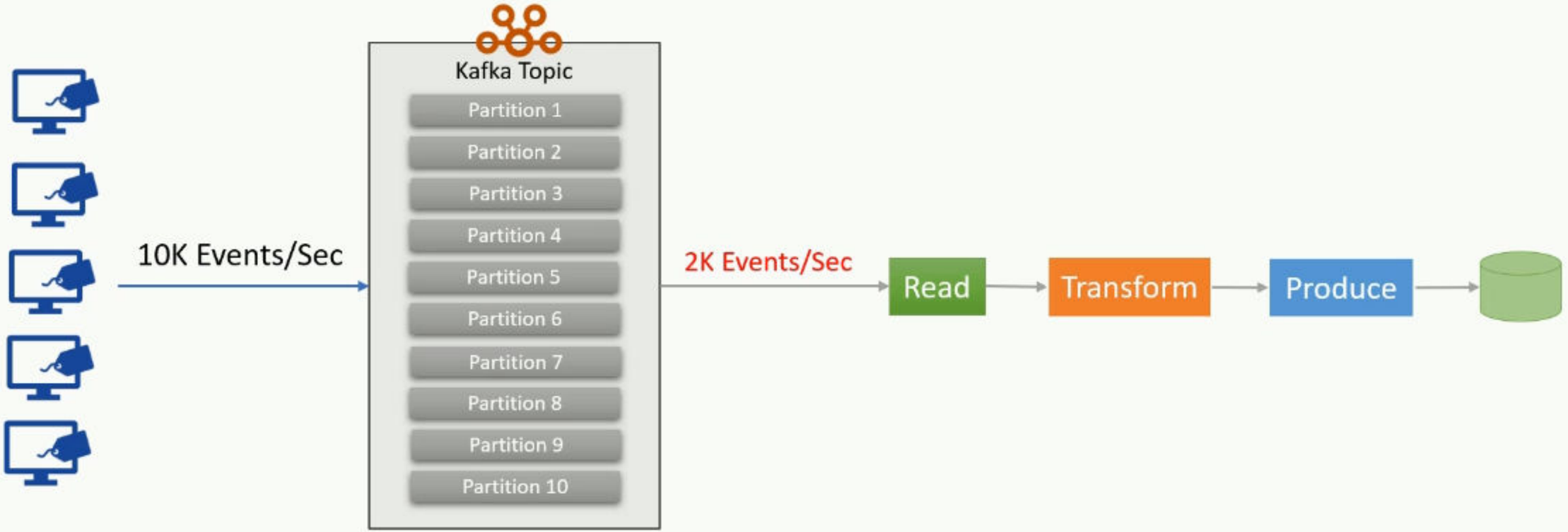
AND

Delivery Address -> Contact No = **NULL**

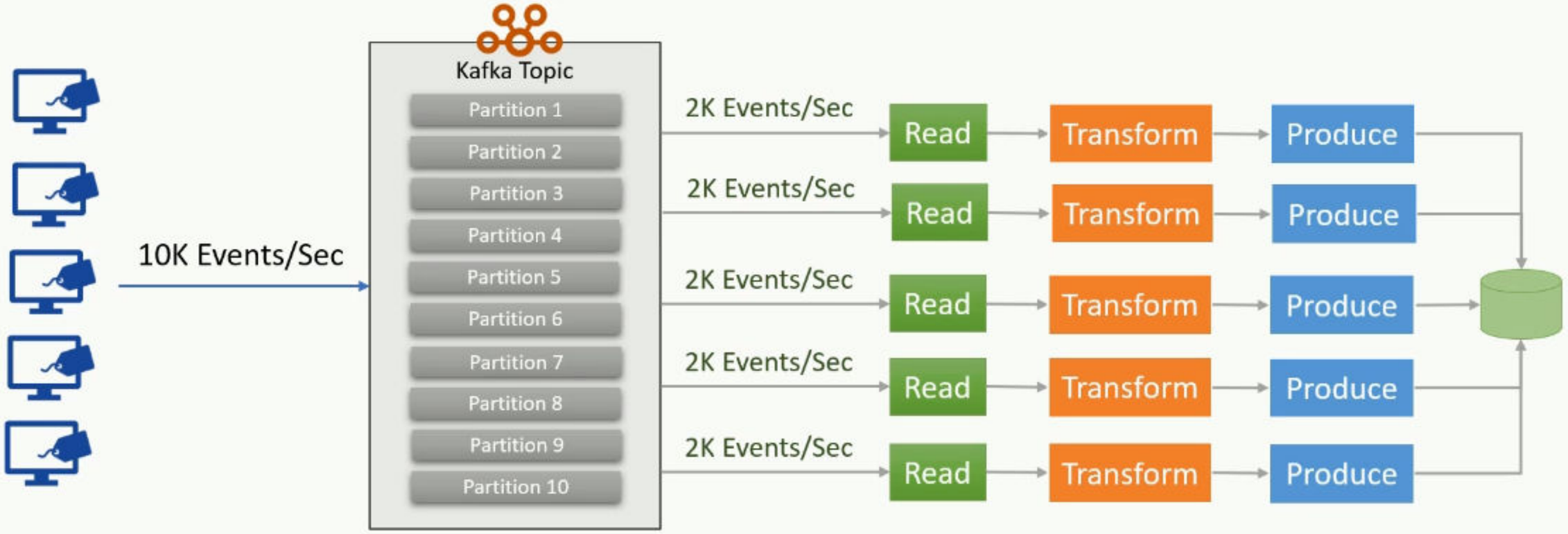
PosValidator.java

```
35
36          KafkaConsumer<String, PosInvoice> consumer = new KafkaConsumer<String, PosInvoice>(consumerProps);
37          consumer.subscribe(Arrays.asList(AppConfigs.sourceTopicNames));
38
39          Properties producerProps = new Properties();
40          producerProps.put(ProducerConfig.CLIENT_ID_CONFIG, AppConfigs.applicationID);
41          producerProps.put(ProducerConfig.BOOTSTRAP_SERVERS_CONFIG, AppConfigs.bootstrapServers);
42          producerProps.put(ProducerConfig.KEY_SERIALIZER_CLASS_CONFIG, StringSerializer.class);
43          producerProps.put(ProducerConfig.VALUE_SERIALIZER_CLASS_CONFIG, JsonSerializer.class);
44
45          KafkaProducer<String, PosInvoice> producer = new KafkaProducer<String, PosInvoice>(producerProps);
46
47          while (true) {
48              ConsumerRecords<String, PosInvoice> records = consumer.poll(Duration.ofMillis(100));
49              for (ConsumerRecord<String, PosInvoice> record : records) {
50                  if (record.value().getDeliveryType().equals("HOME-DELIVERY") &&
51                          record.value().getDeliveryAddress().getContactNumber().equals("")) {
52                      //Invalid
53                      producer.send(new ProducerRecord<>(AppConfigs.invalidTopicName, record.value().getStoreID(),
54                              record.value()));
55                      logger.info( s: "invalid record - " + record.value().getInvoiceNumber());
56                  } else {
57                      //Valid
58                      producer.send(new ProducerRecord<>(AppConfigs.validTopicName, record.value().getStoreID(),
59                              record.value()));
60                      logger.info( s: "valid record - " + record.value().getInvoiceNumber());
61                  }
62              }
63          }
64      }
65  }
66
```

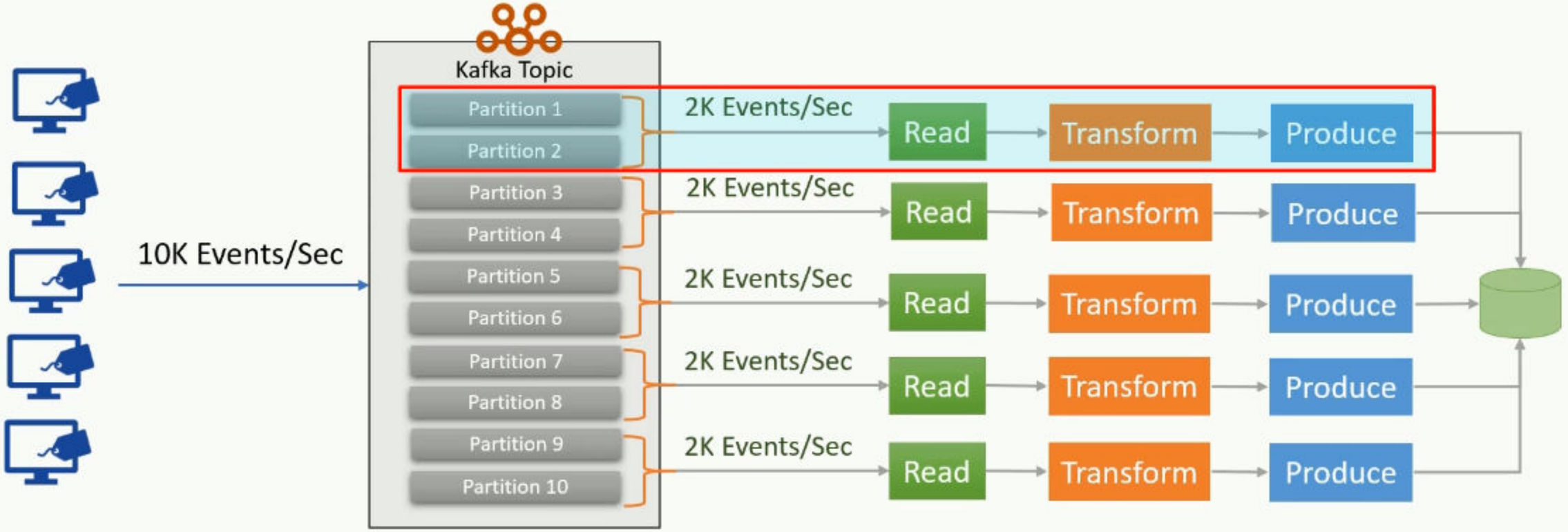
Kafka Consumer Application



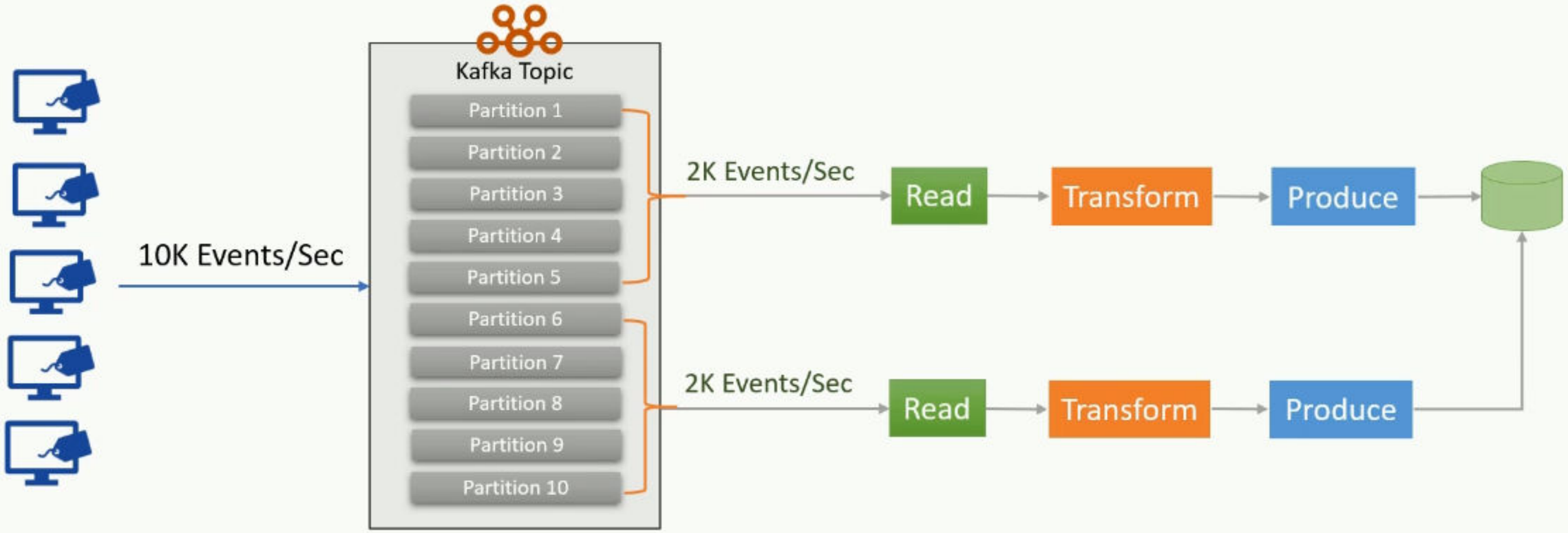
Kafka Consumer Application



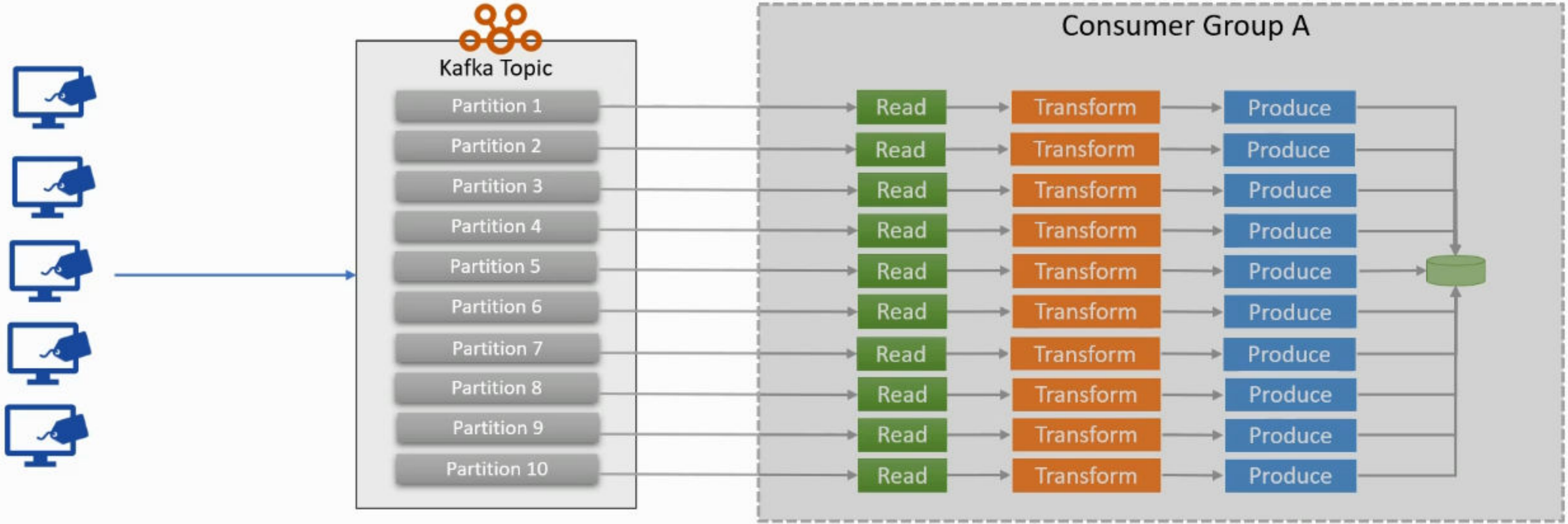
Kafka Consumer Application



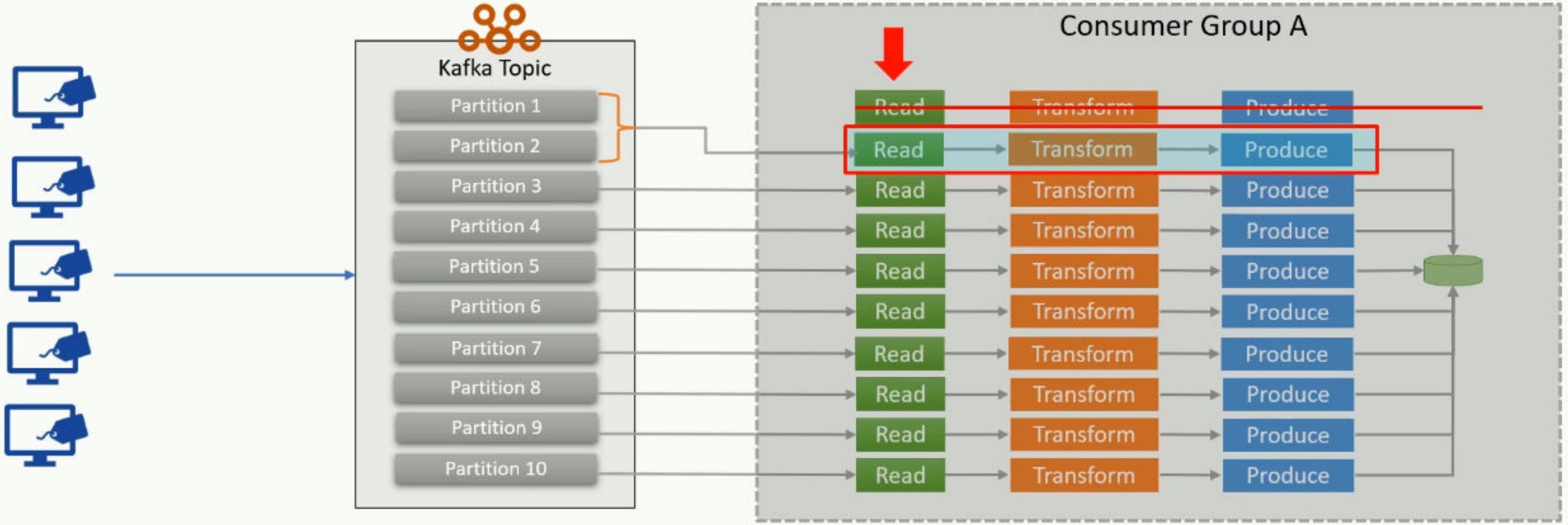
Kafka Consumer Application



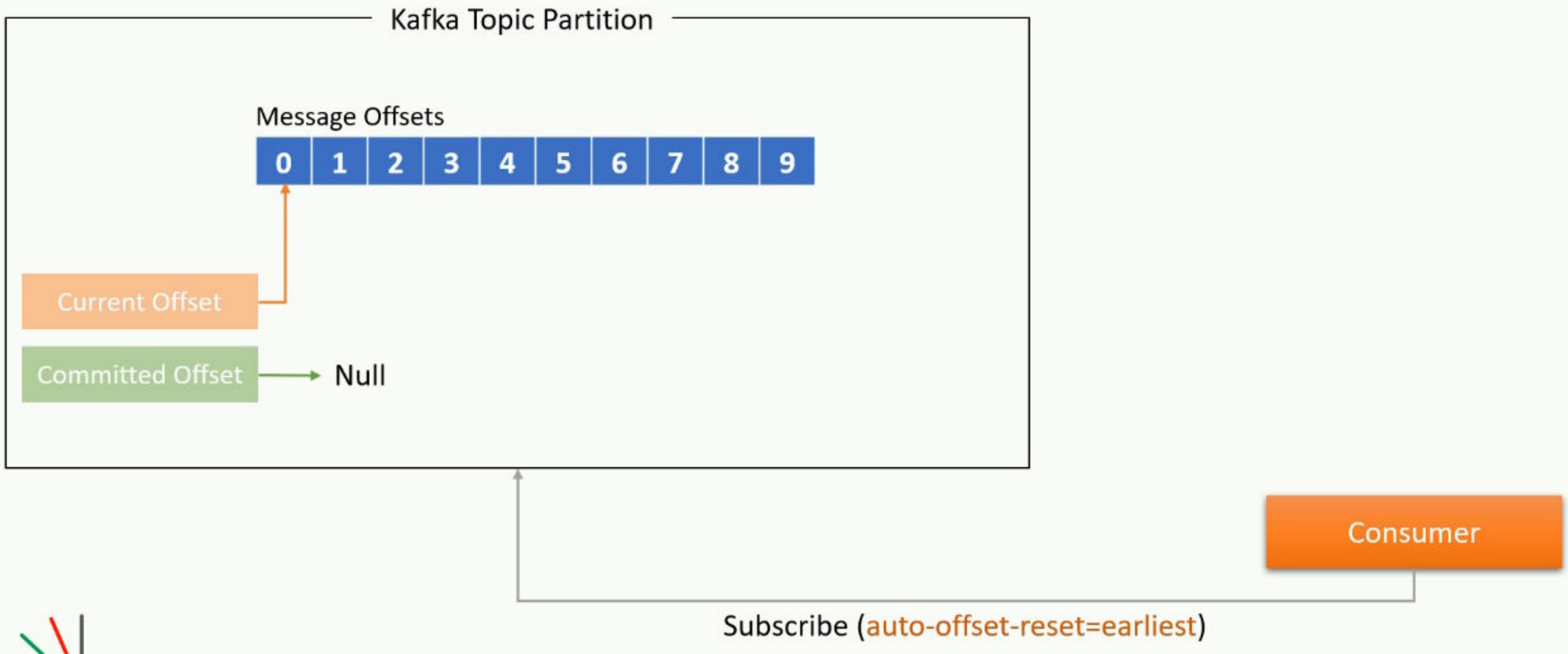
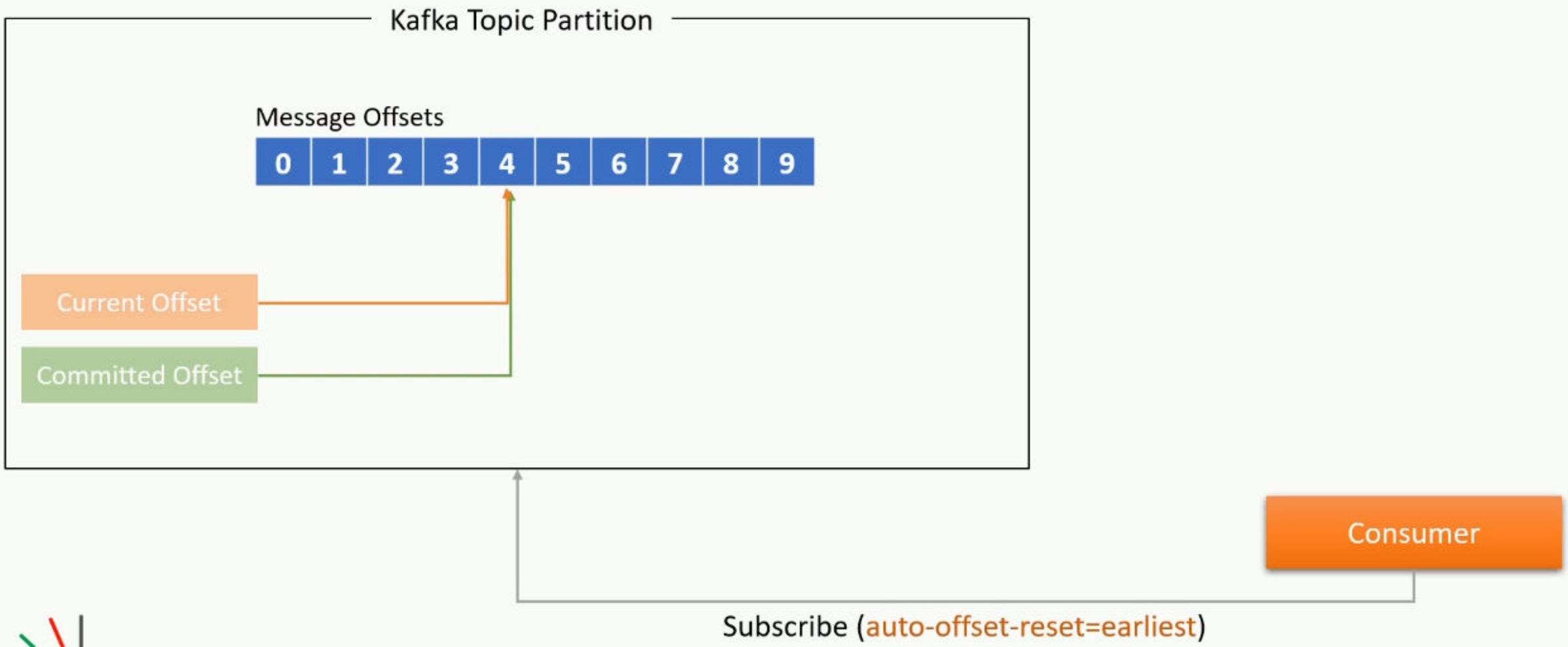
Kafka Consumer Application



Kafka Consumer Application



Kafka Consumer Application



Kafka Consumer Application