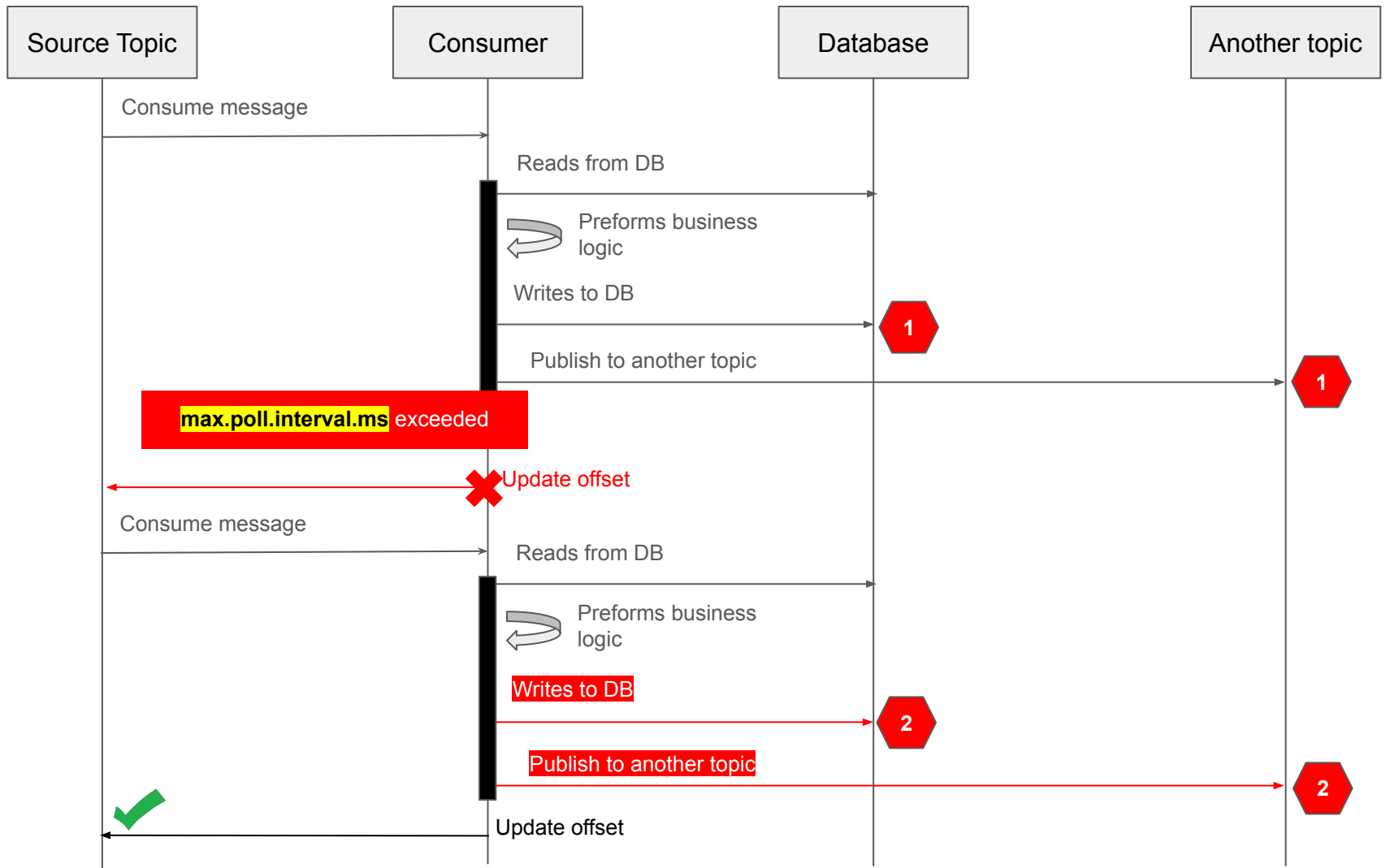# Idempotent Consumer

Introduction

What is Idempotent Consumer?

An idempotent Apache Kafka consumer is a consumer that can process the same message multiple times without causing any side effects or data inconsistencies.

Source Topic | Consumer | Database | Another topic

Consume message

Reads from DB

Preforms business logic

Writes to DB

1

Publish to another topic

1

max.poll.interval.ms exceeded

Update offset

Consume message

Reads from DB

Preforms business logic

Writes to DB

2

Publish to another topic

2

Update offset

Avoiding Duplicate Messages

- Idempotent Consumer
- Idempotent Producer
- Transactions