



**PLATFORM DEEP DIVE / Integrations / `jaeger-setup-for-microservices`**

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## PLATFORM DEEP DIVE / Integrations / Jaeger setup for microservices

The scope of this document is to present some basic information on how to include Jaeger tracing into a Java based project.

### Required dependencies

```
<dependency>
  <groupId>io.jaegertracing</groupId>
  <artifactId>jaeger-client</artifactId>
  <version>1.4.0</version>
</dependency>
<dependency>
  <groupId>io.opentracing.contrib</groupId>
  <artifactId>opentracing-kafka-client</artifactId>
  <version>0.1.13</version>
</dependency>
```

## Needed configs

### Add Kafka interceptors for Tracing

```
kafka:
  producer:
    properties:
      interceptor:
        classes:
io.opentracing.contrib.kafka.TracingProducerInterceptor
```

```
kafka:
  consumer:
    properties:
      interceptor:
        classes:
io.opentracing.contrib.kafka.TracingConsumerInterceptor
```

### Extract Jaeger span context from received Kafka message

```
@KafkaListener(topics = "${TOPIC_NAME}")
public void listen(ConsumerRecord<String, String> record) {
    // some code
    SpanContext spanContext =
TracingKafkaUtils.extractSpanContext(record.headers(),
tracer);
    // some other code
}
```

**TIP**

Use this context to create child spans of it and log events from adapter:

```
Span span =  
tracer.buildSpan(JAEGER_SPAN_NAME).asChildOf(spanContext).start();
```

## Send span context with outgoing Kafka messages

```
ProducerRecord<String, Object> producerRecord = new  
ProducerRecord<>(responseTopic, responseMessage);
```

```
TracingKafkaUtils.inject(span.context(),  
producerRecord.headers(), tracer);
```

```
kafkaTemplate.send(producerRecord);
```

**Was this page helpful?**