

# Routing From a Database

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hardcore dev and IT training

# Routing From a Database

## Camel Route Design

- ✓ Solution Design
- ✓ Enterprise Integration Patterns

## Implement the Route

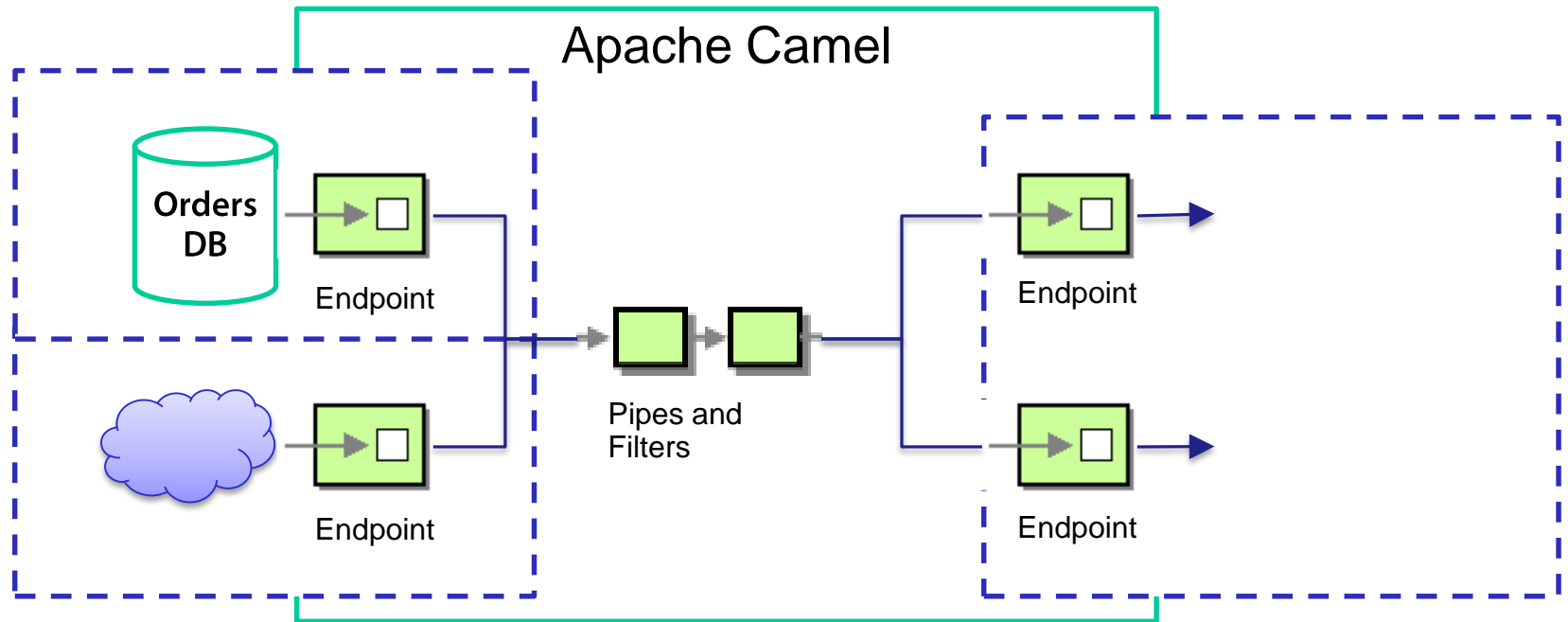
- ✓ SQL Component
- ✓ Log Component
- ✓ Unit Test

# Case Study Project

## Requirements

- **Website for order fulfillment**
- **Fulfillment processor**
  - Retrieves orders from a database
  - Sends orders to fulfillment center in a file
- **New Requirements**
  - New fulfillment center
  - New source for orders
  - Faster order processing

## Case Study – Order Fulfillment

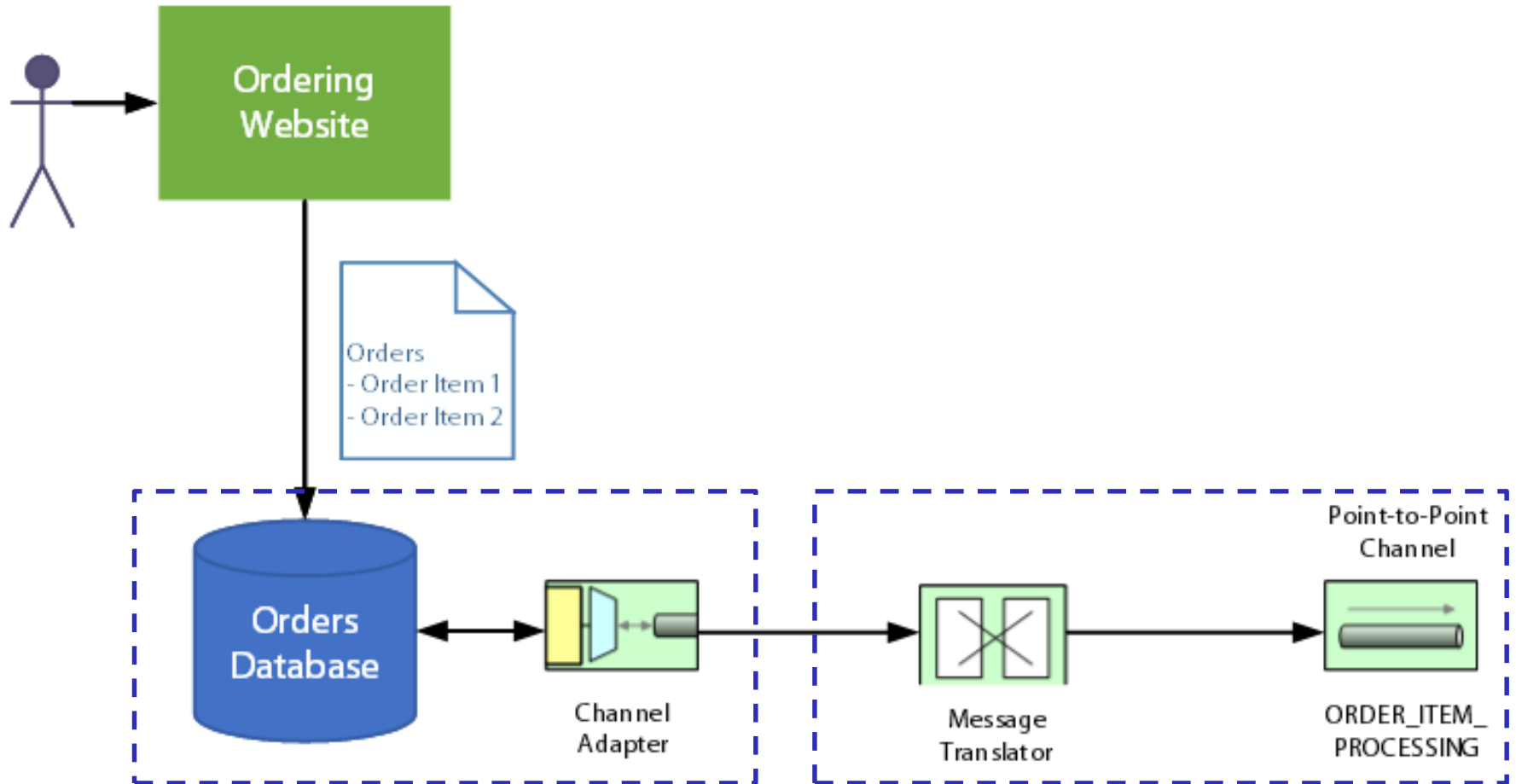


## Integration Design

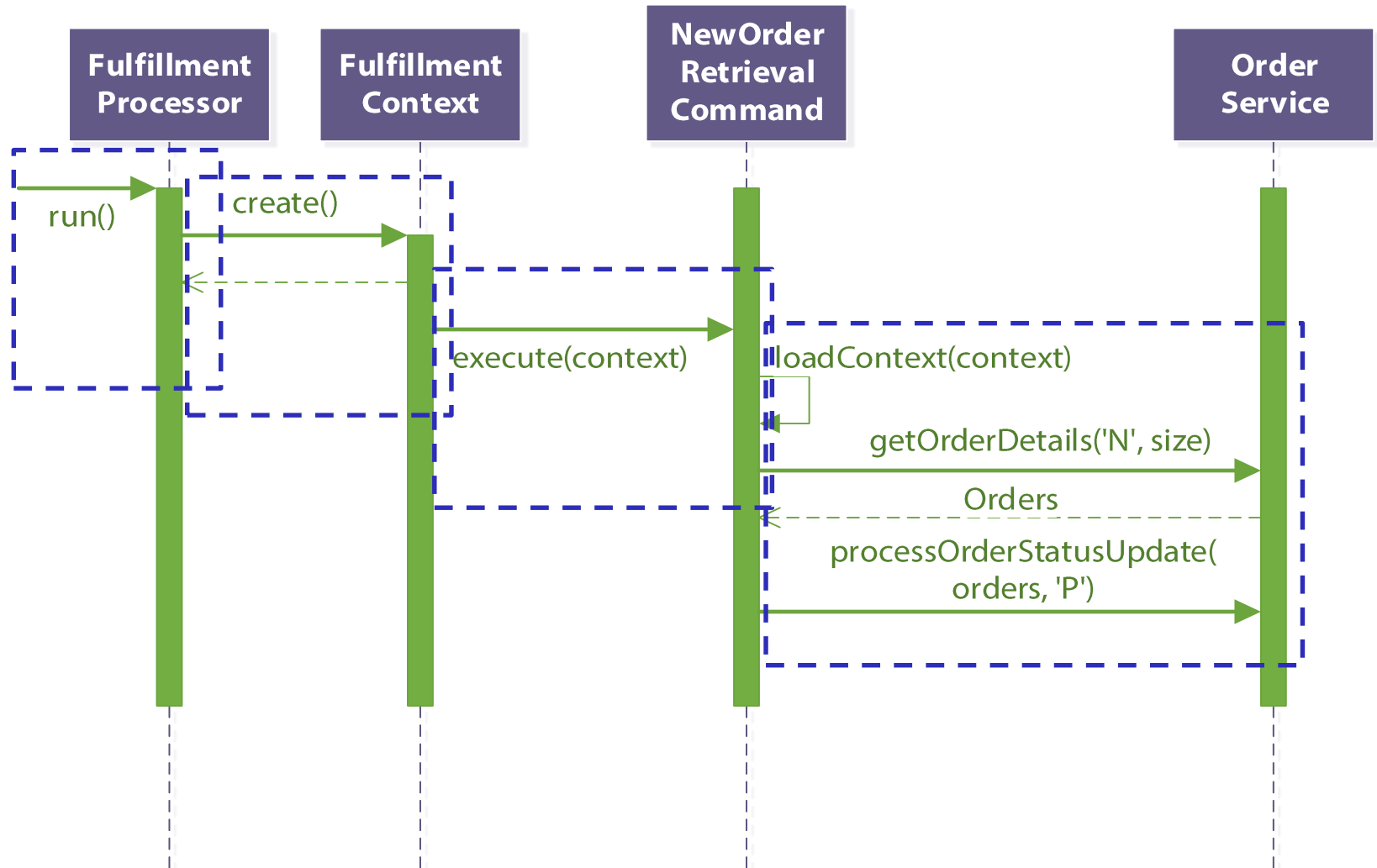
# Case Study Project

- Message channel
- Routes
- Message format and transformation

## Case Study – Order Item Processing Route



## Current Case Study Processing



# Camel Components

## Database Components

- **SQL**
  - Execute SQL queries
  - Uses Spring JDBC
- **JDBC**
  - Execute SQL queries
  - Uses standard JDBC API
- **List of Camel components**
  - <http://camel.apache.org/components.html>



# Camel Components

## SQL Component

- camel-sql library
- Initialize with DataSource
- URI syntax
  - sql:[sql-statement][?options]
- Option: consumer.onConsume
- Polls the database
  - Highly configurable

# Camel Components

## Log Component

- camel-core library
- URI syntax
  - log:[logging category][?options]
- Option: level

## Routing Rule Implementation

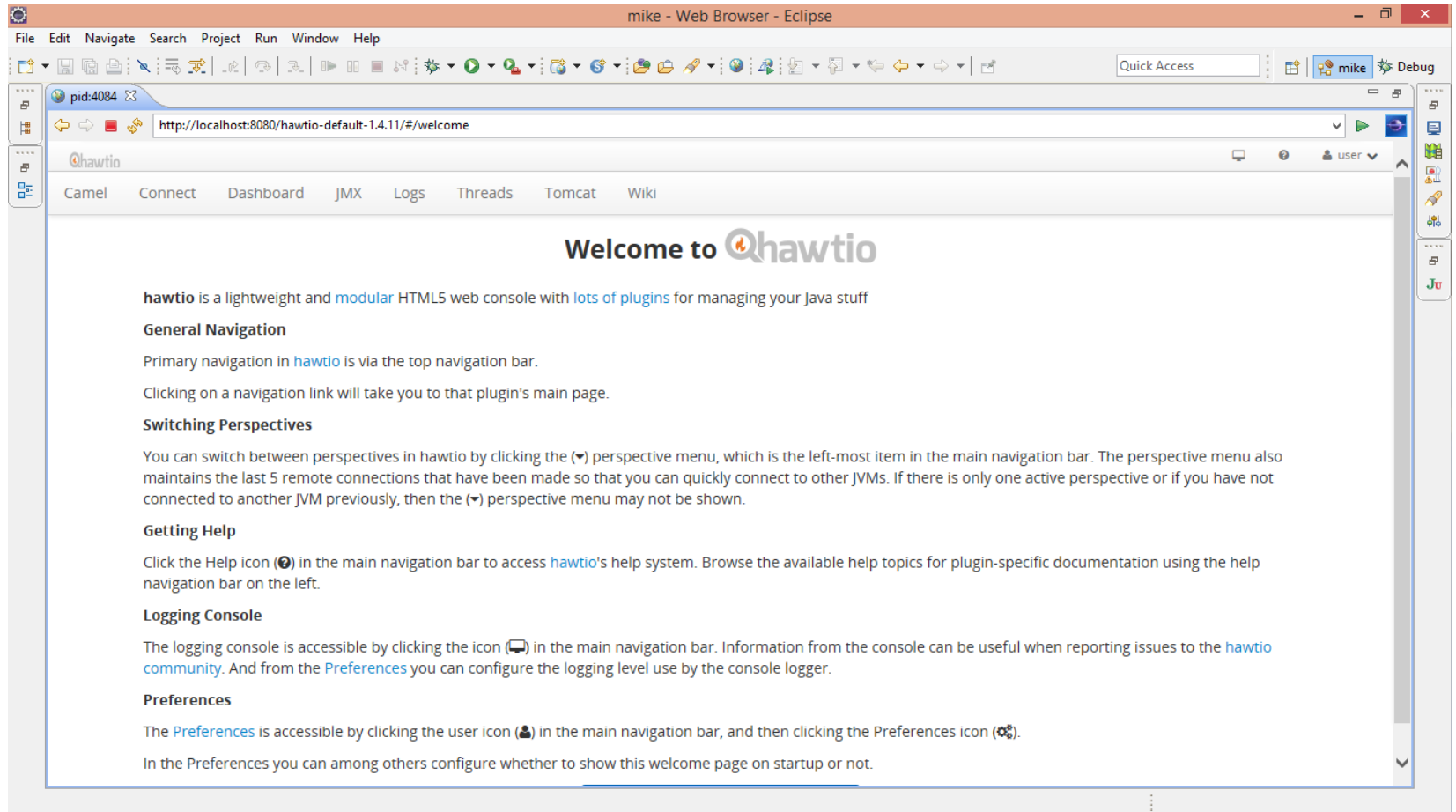
```
from(  
    "sql:"  
        + "select id from orders.\"order\" where status = '"  
    + OrderStatus.NEW.getCode()  
    + "'"  
    + "?"  
    + "consumer.onConsume=update orders.\"order\" set status = '"  
    + OrderStatus.PROCESSING.getCode()  
    + "' where id = :#id")  
.to("log:com.pluralsight.orderfulfillment.order?level=INFO");
```

# Camel Components

## Camel Route Testing

- camel-test library
- jUnit

# Hawt.io



# Summary

Camel Route Design

Camel Route  
Implementation

