

Content-based Router

Michael Hoffman
@mhi_inc



pluralsight 
hardcore dev and IT training

Content-based Routing

Content-based Router

- ✓ Enterprise Integration Pattern
- ✓ Camel DSL choice command

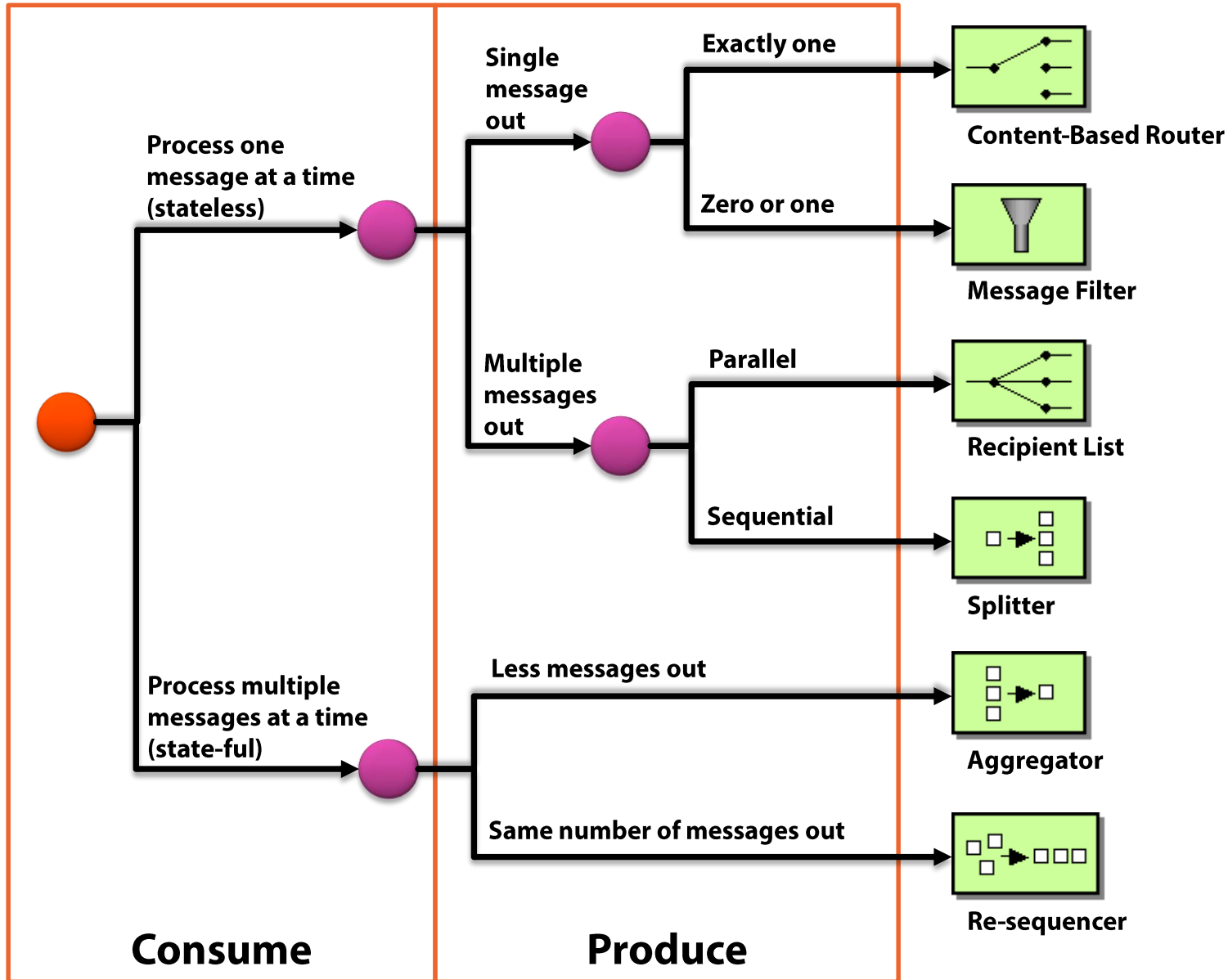
Case Study Project Updates

- ✓ Code content-based routing to fulfillment center ActiveMQ queue

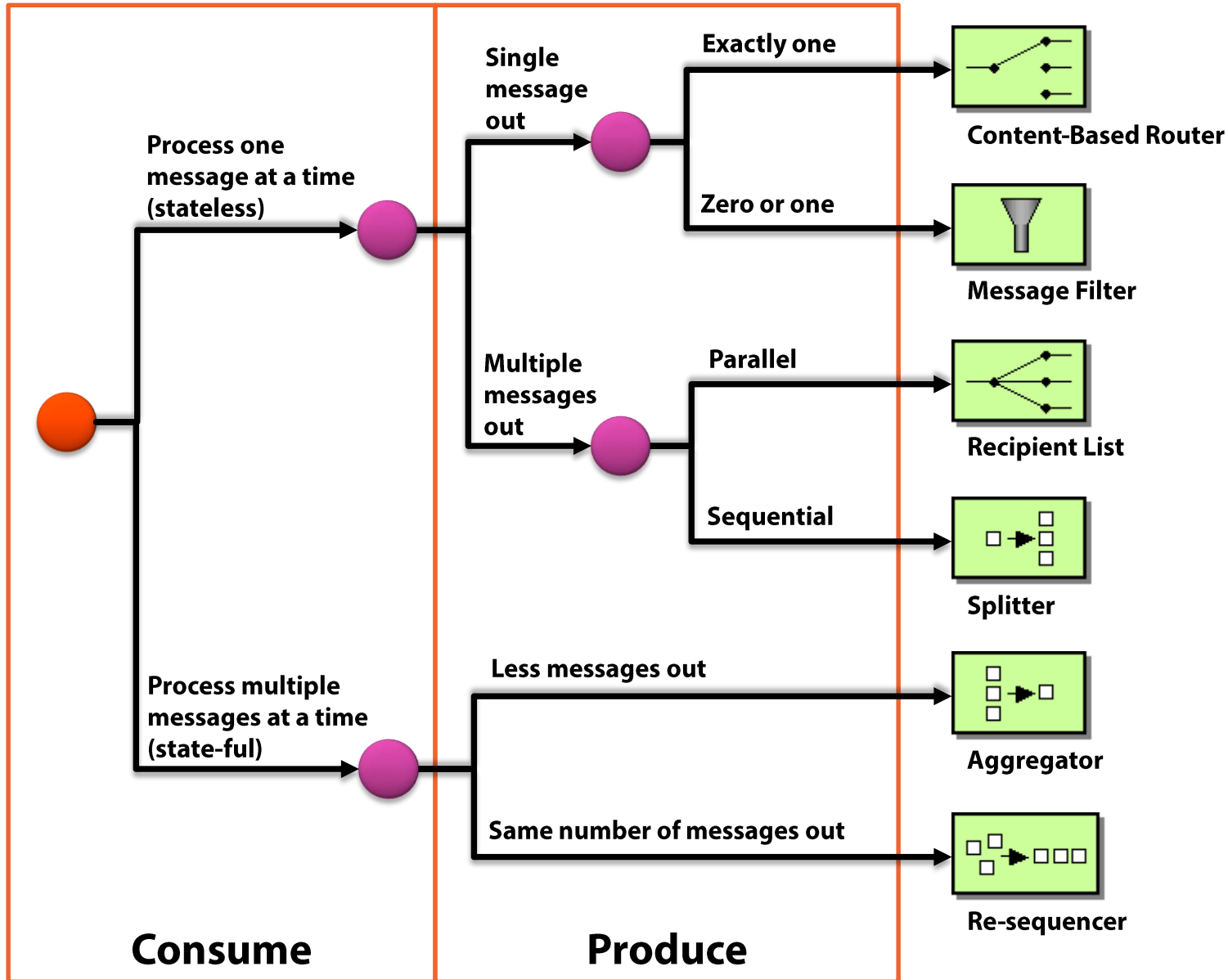
Message Router

- Foundational enterprise integration pattern
- Types of router
 - Simple
 - Composed

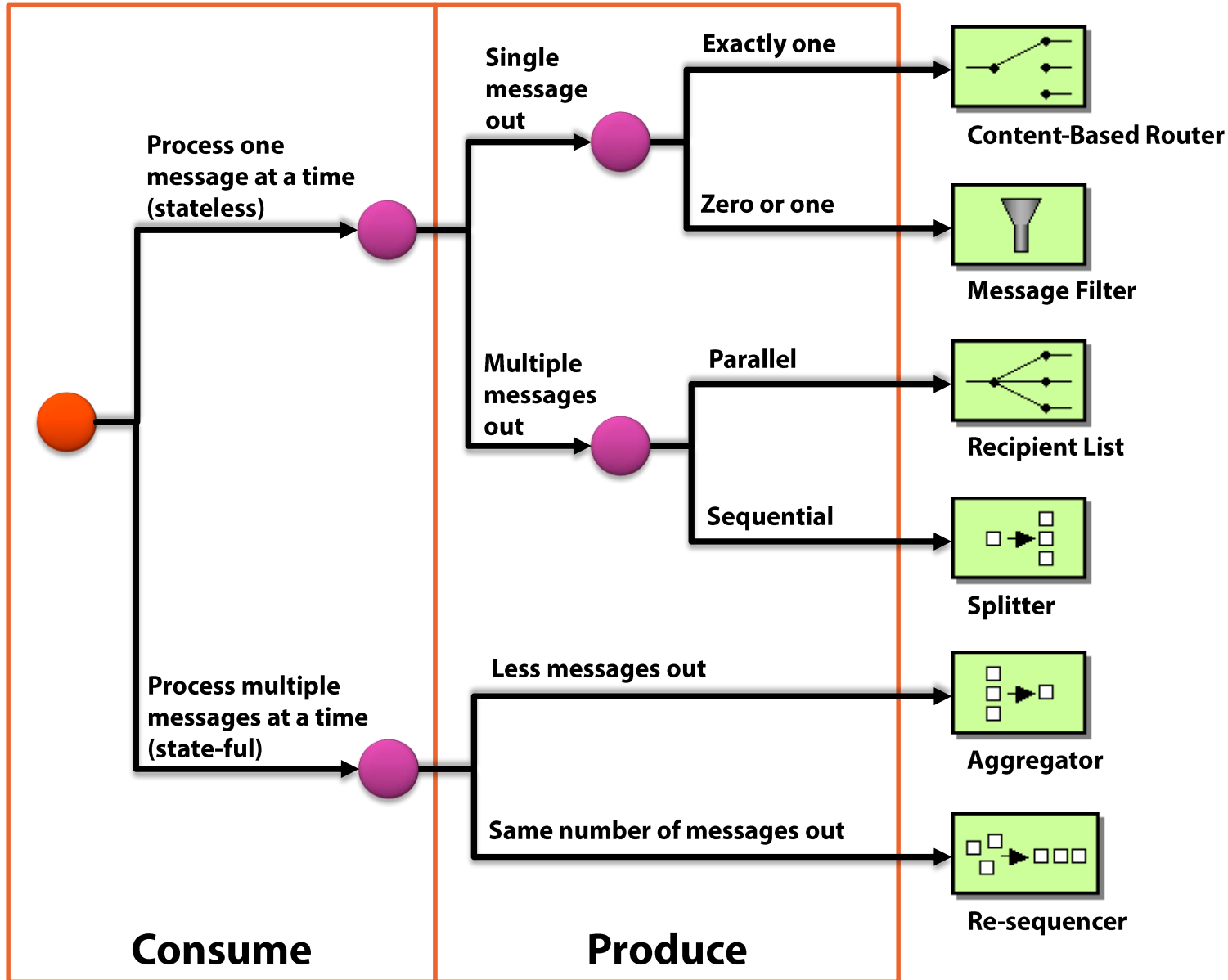
Simple Message Router Decision Tree



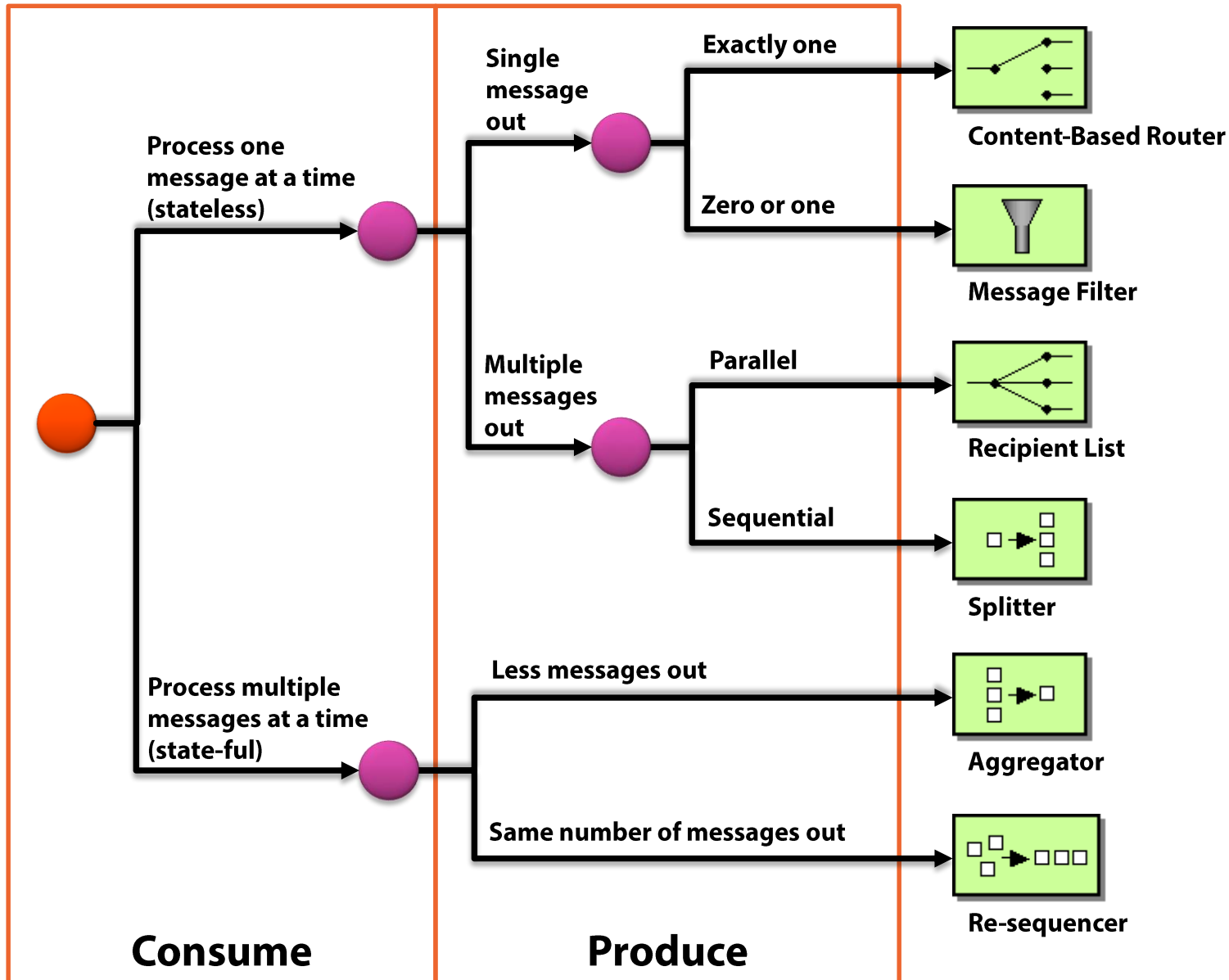
Content-based Router



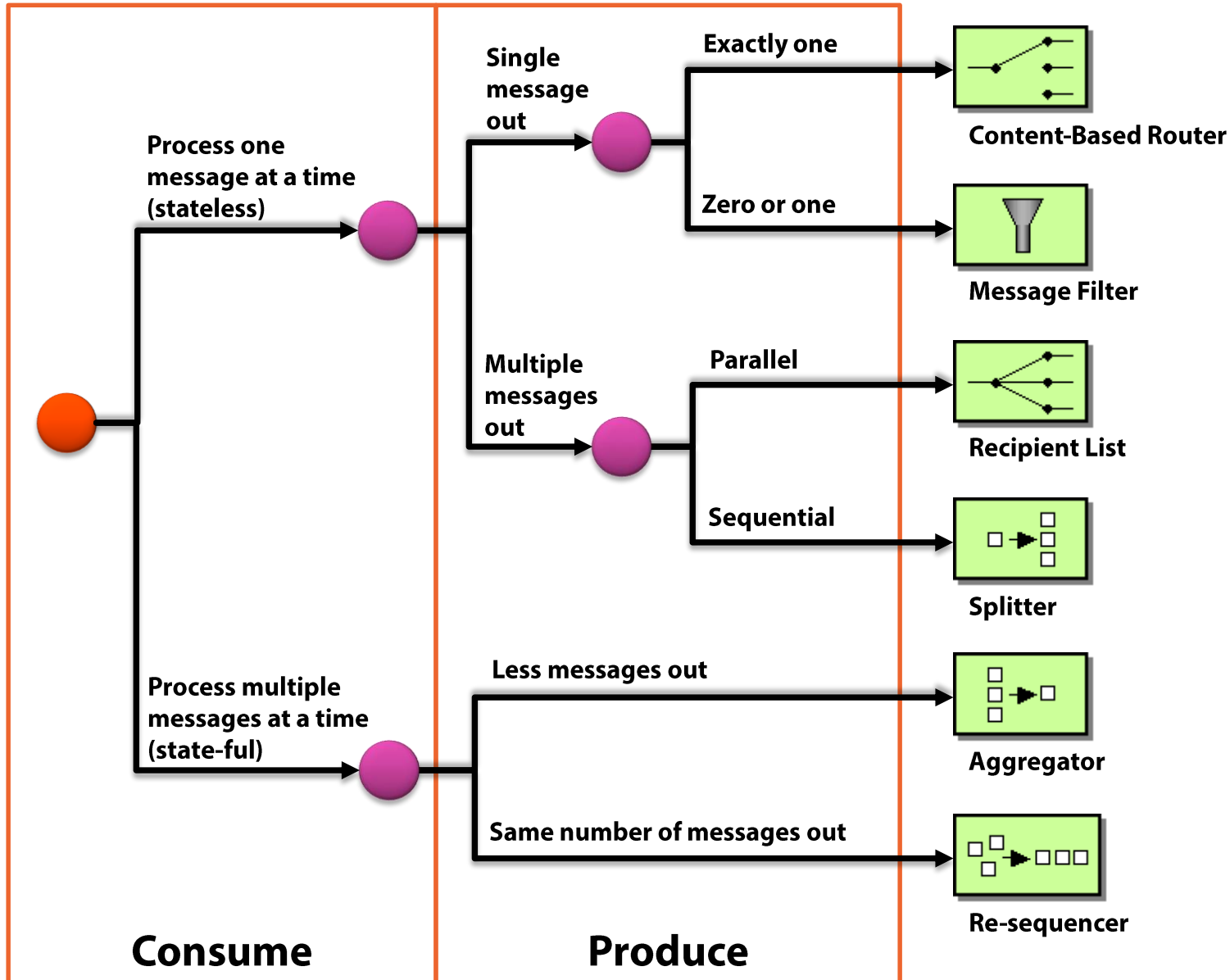
Message Filter



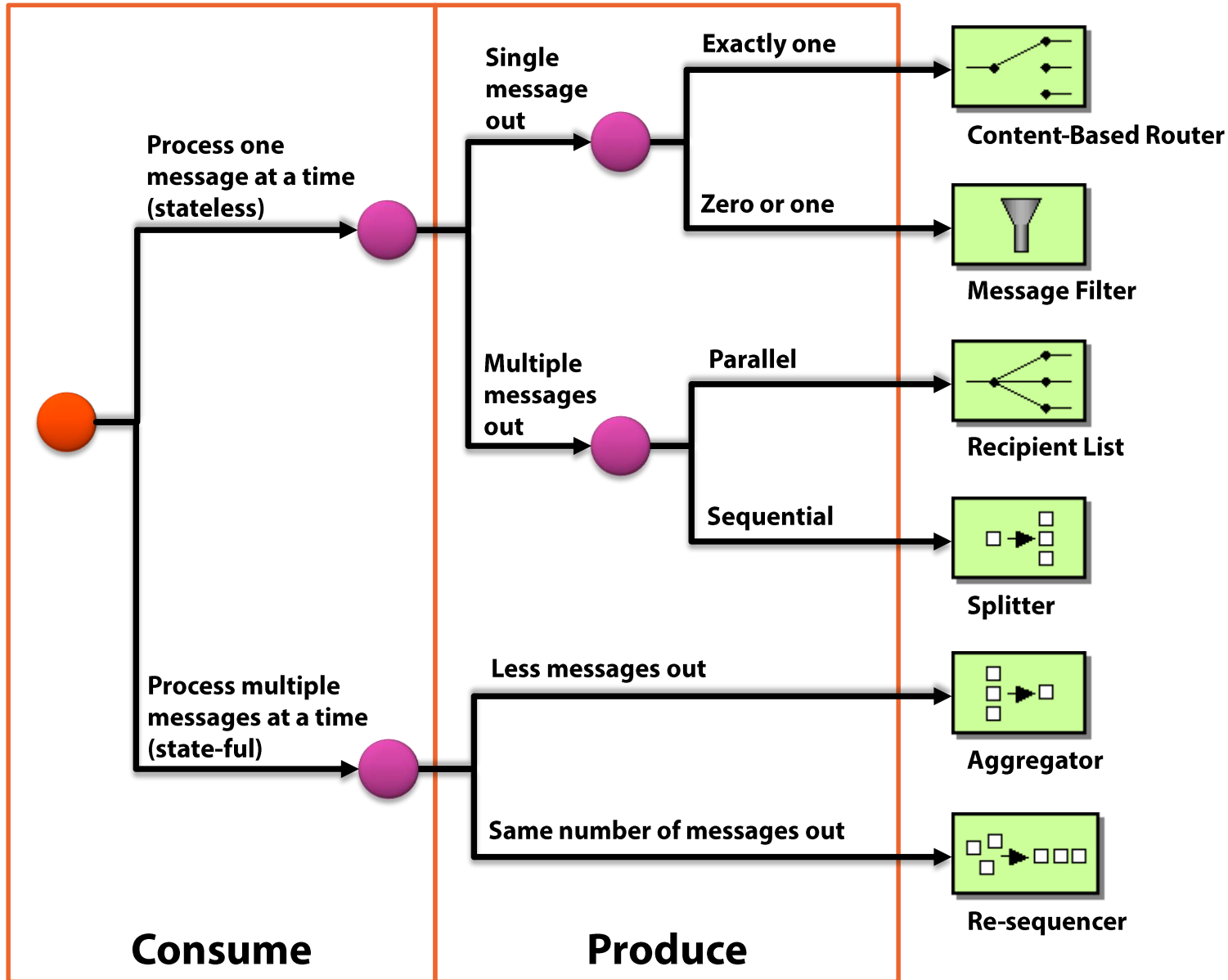
Recipient List



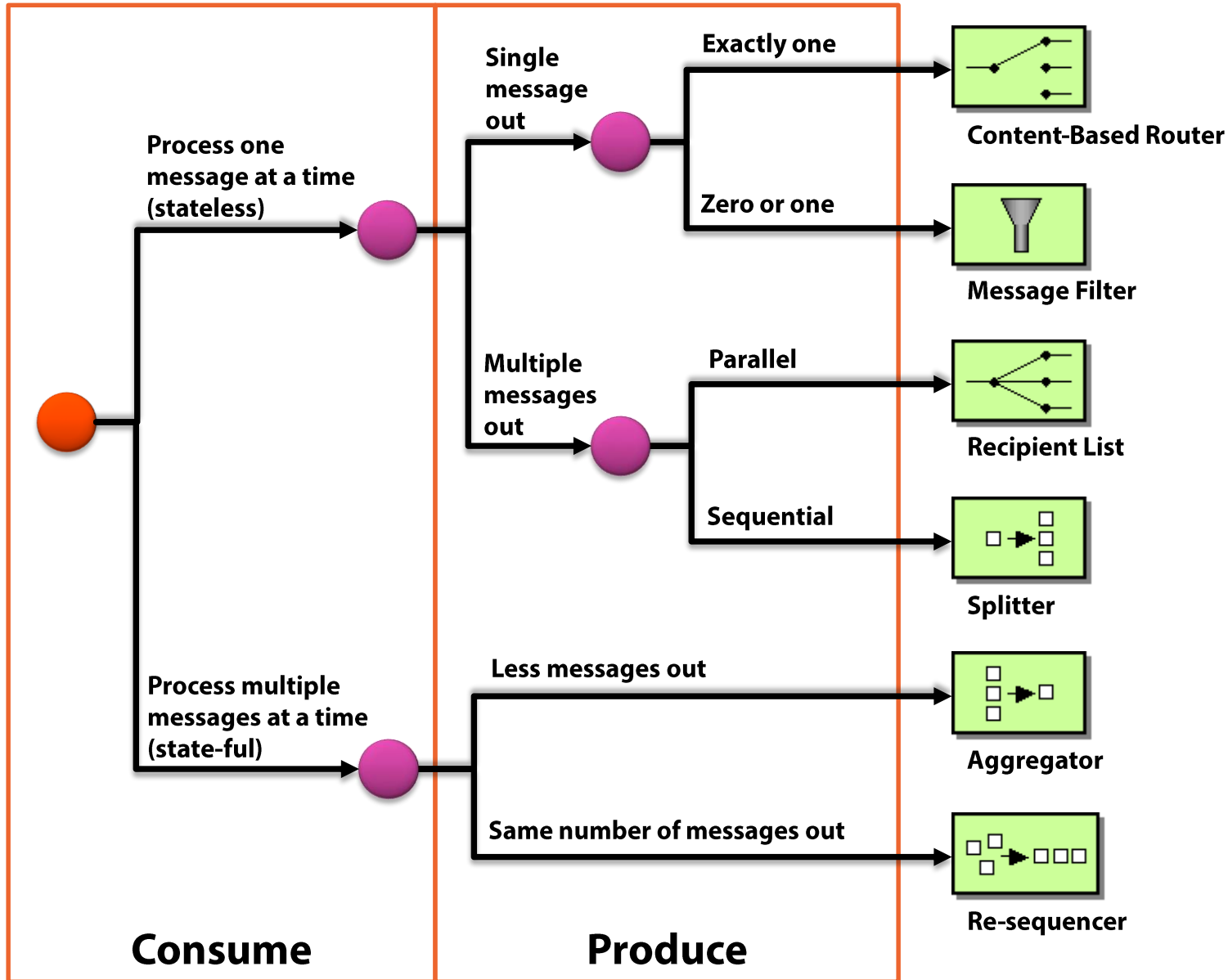
Splitter



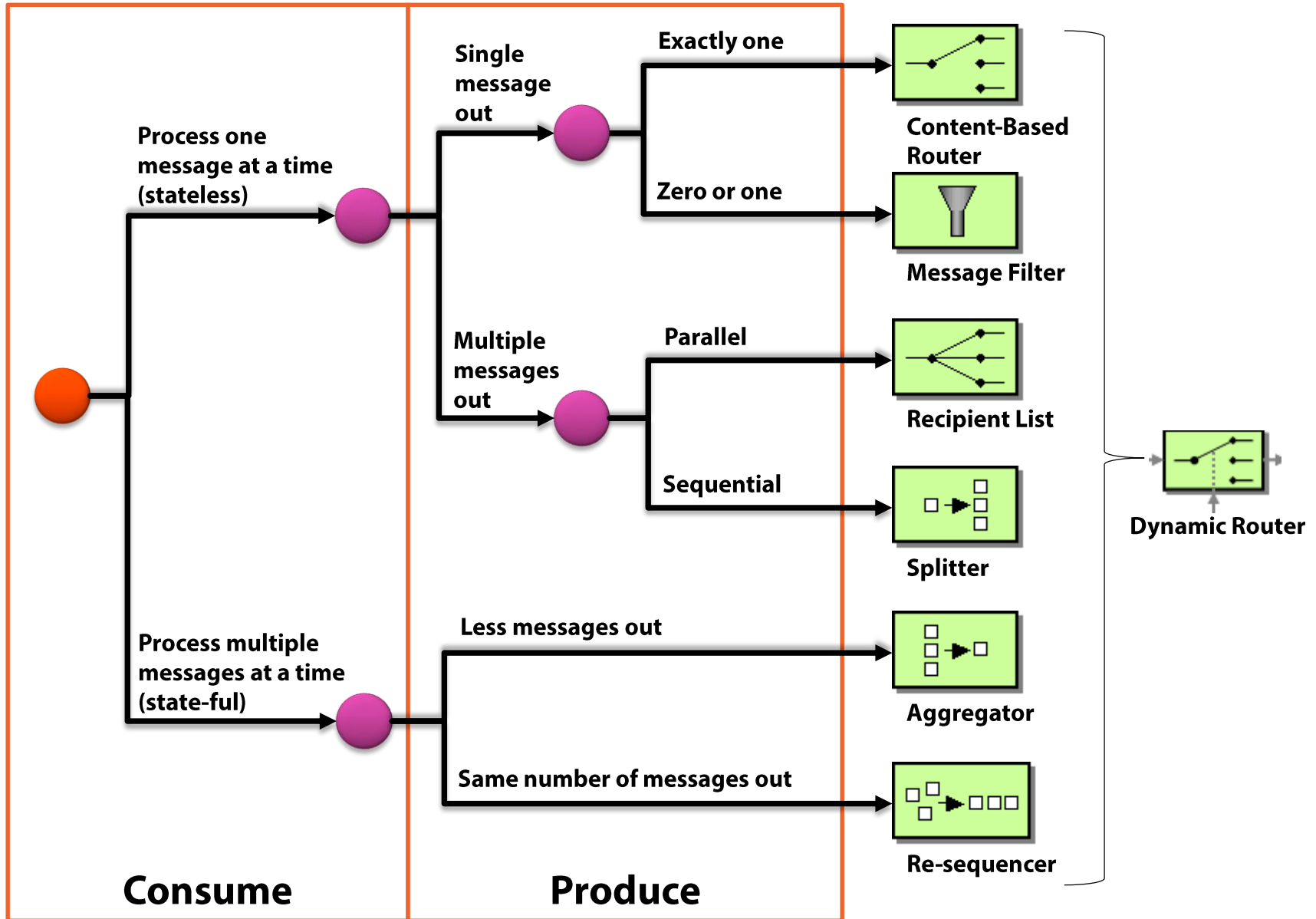
Aggregator



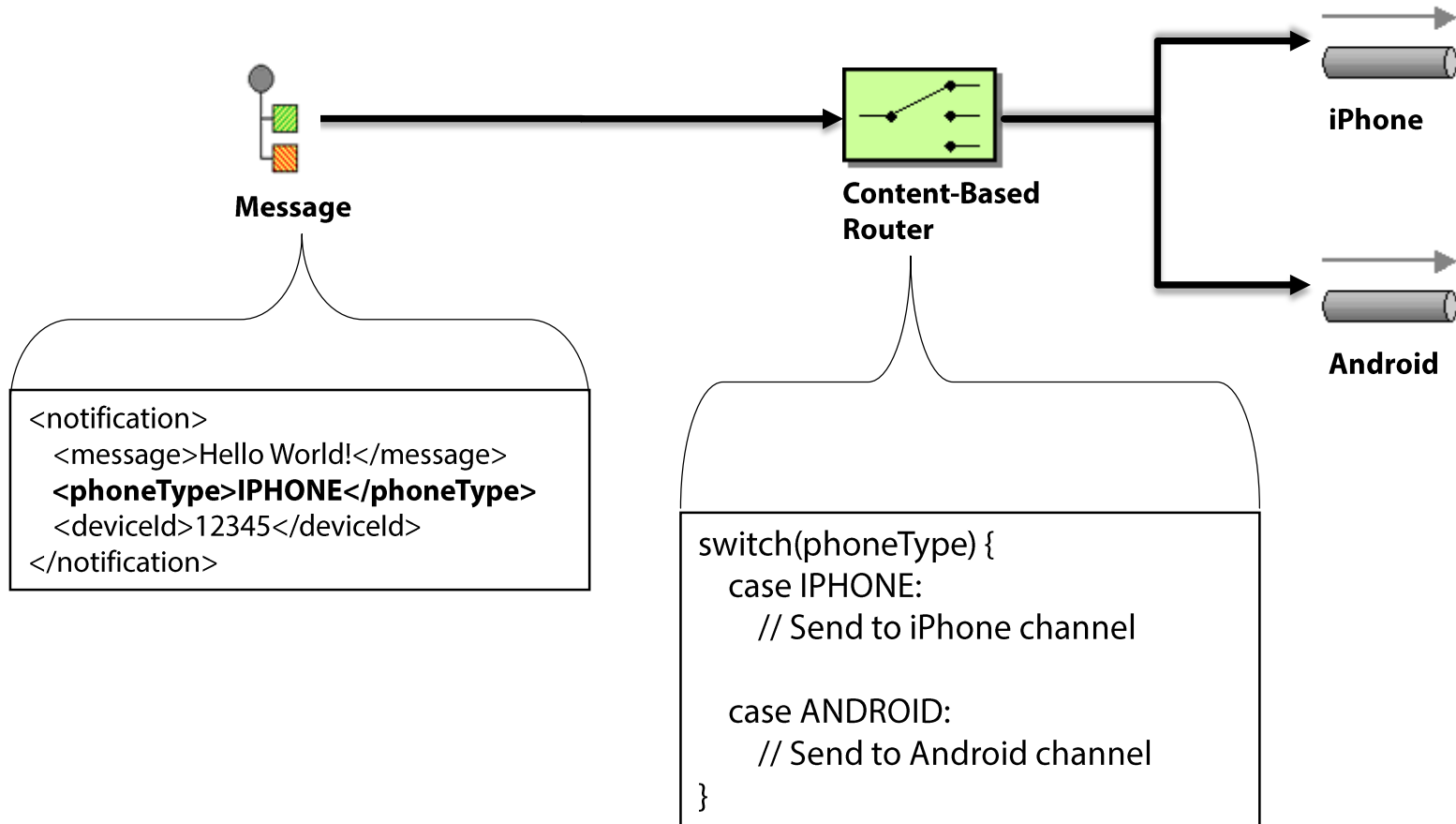
Re-sequencer



Simple Message Router Decision Tree



Content-based Router



Content-based Router

- **Predictive routing**
- **Benefits**
 - Hides internal systems from integrators
 - Minimize message traffic
- **Challenges**
 - Knowledge of all possible destinations
 - Complex criteria

Content-based Router in Camel

- **Implemented through the Camel DSL**
- **Choice processor**
 - When expression
 - Otherwise expression

Camel Expressions

- Extract a result from the exchange
- Strategies for expressions

Camel Predicates

- Evaluate a condition on the message exchange
- Returns a boolean value

Camel DSL Choice

```
from("activemq:queue:source").
```

```
    choice().
```

```
        when().xpath("/item = 'SomeItem'").
```

```
            to("activemq:queue:someItemDestination").
```

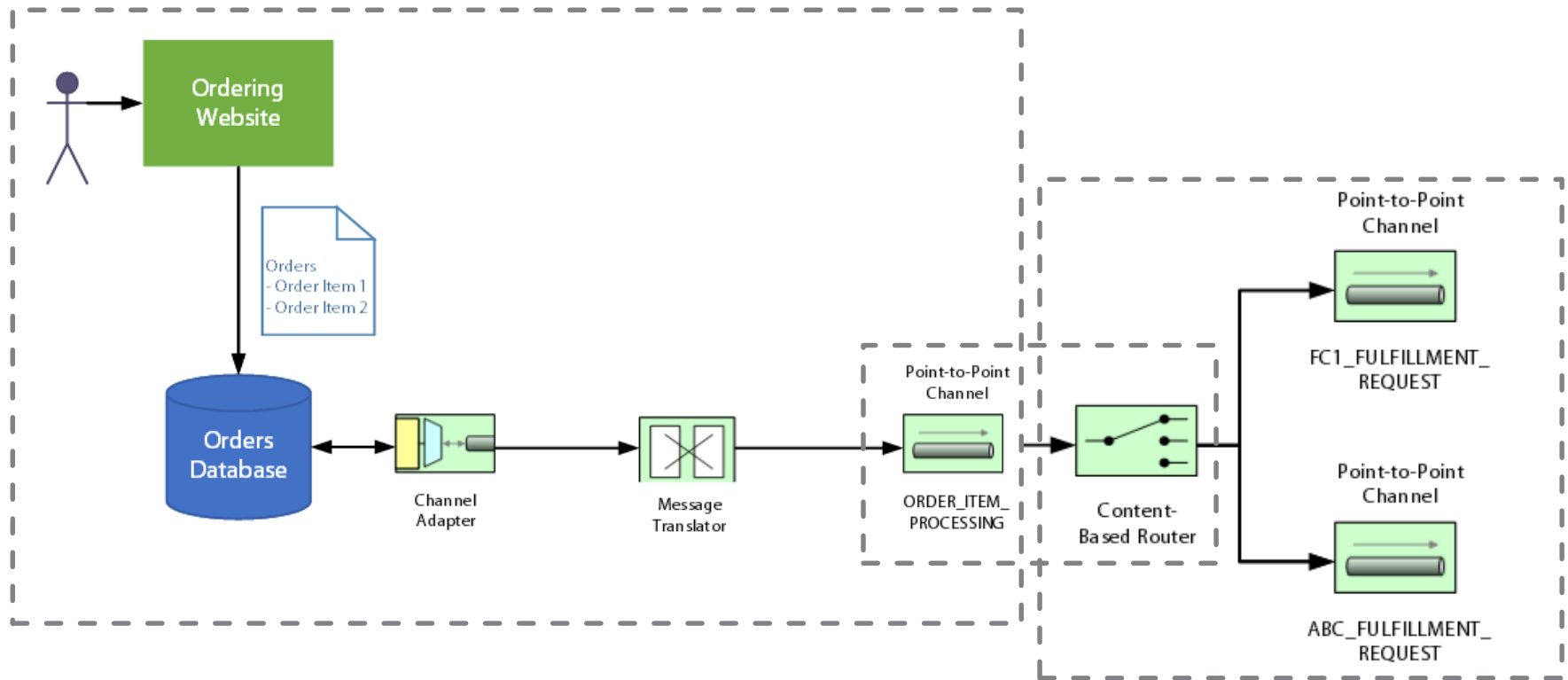
```
        when().xpath("/item = 'OtherItem'").
```

```
            to("activemq:queue:otherItemDestination").
```

```
        otherwise().
```

```
            to("activemq:queue:otherDestination");
```

Case Study Project – Content-based Router



Summary

Content-based Router

Case Study Project
Updates

