Understanding Channels

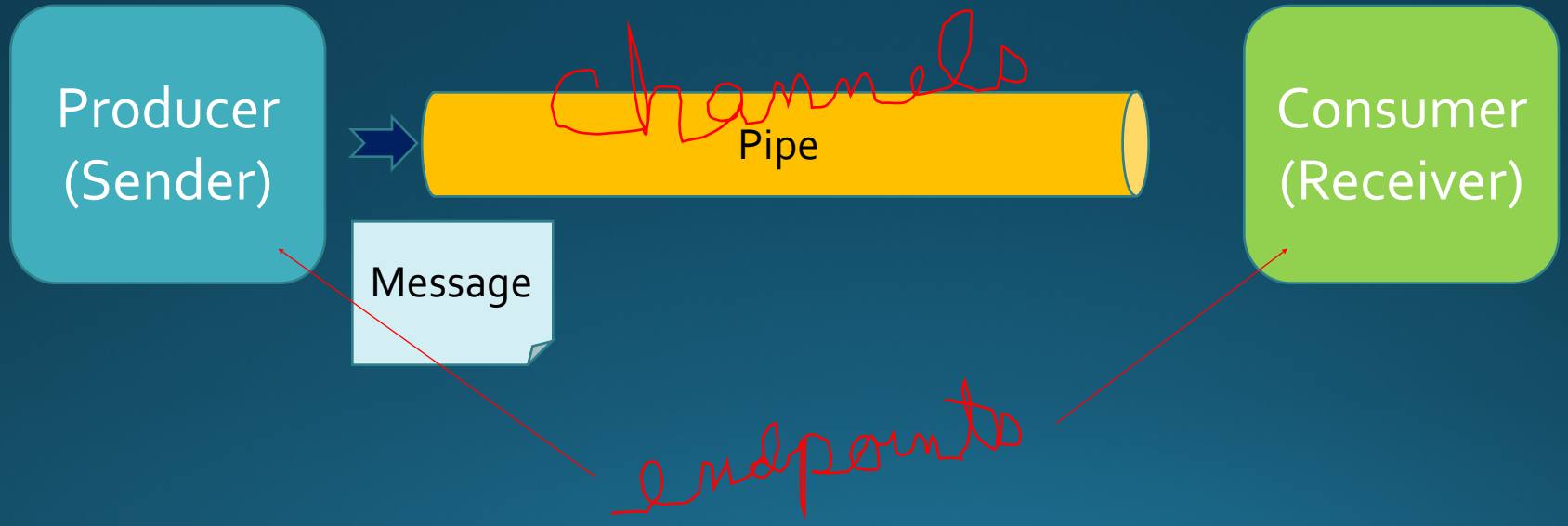
Express Spring Integration

The labs and additional learning tools for this tutorial can be found on:

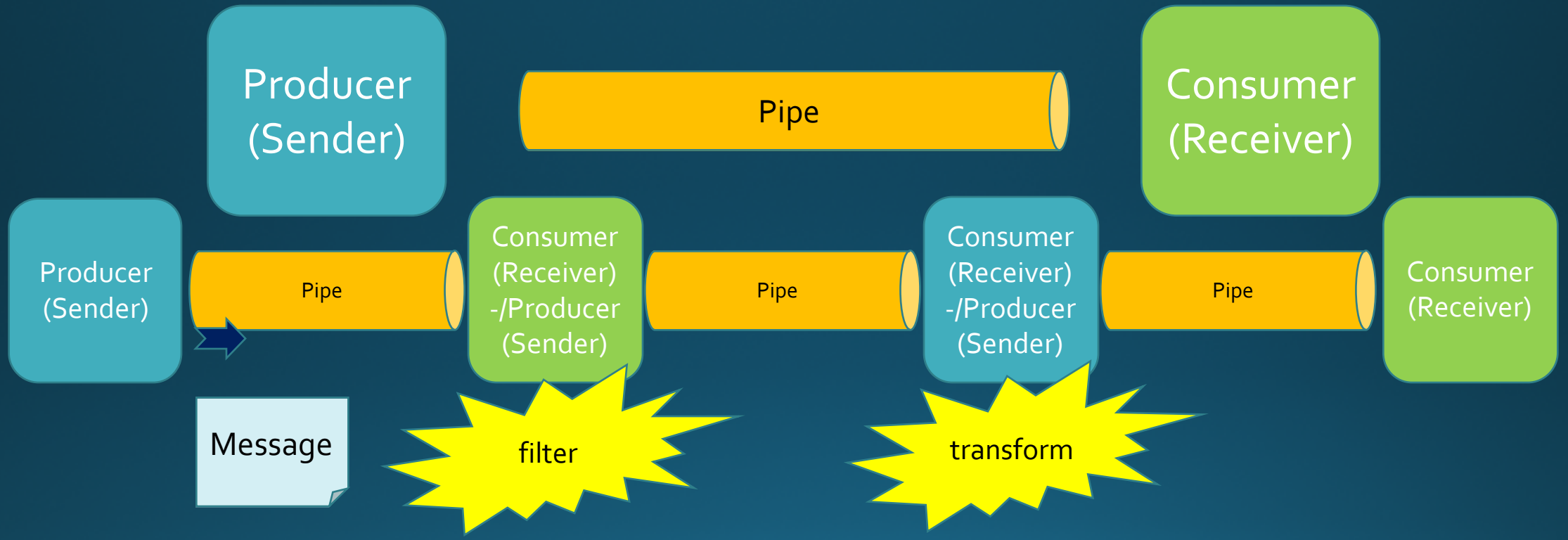
Intertech's Blog

Spring Integration

The main components



Spring Integration Applications



Messages

Message Endpoints

- Adapters (connect your channel to some other system)
- Filter (remove some messages from channels based on header, content, etc.)
- Transformer (convert a message content or structure)
- Enricher (add content to the message header or payload)
- Service activator (invoke service operations based on the arrival of a message)
- Gateway (connect your channels without SI coupling)

Message Channels

- Two general classifications of message channels
  - **Pollable Channel**
  - **Subscribable Channel**
- While there are many subtypes, they all implement at least one of these SI channel interfaces
  - see http://docs.spring.io/spring-integration/reference/html/messaging-channels-section.html

Pollable Channels

- May buffer its messages
  - Requires a queue to hold the messages
  - The queue has a designated capacity
- Waits for the consumer to get the messages
  - Consumers actively poll to receive messages
- Typically a point-to-point channel
  - Only one receiver of a message in the channel
- Usually used for sending information or "document" messages between endpoints

Subscribable

- Allows multiple subscribers (or consumers) to register for its messages.
  - Messages are delivered to all registered subscribers on message arrival
  - It has to manage a list or registry of subscribers.
- Doesn't buffer its messages
- Usually used for "event" messages
  - Notifying the subscribers that something happened and to take appropriate action.

You are ready to tackle Lab 1

- Lab 1 is about getting to know and understand Spring Integration channels
- You also learn how to create and configure a typical Spring Integration application in Eclipse (using Maven)

If you're viewing this presentation on SlideShare you can click the link below to go to the page with links to the first lab:

Lab 1-Understanding Channels