ENTERPRISE APPLICATION INTEGRATION (EAI) PART 2

BY

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1

EAI Recap :

Hub and Spoke is preferred method of EAI
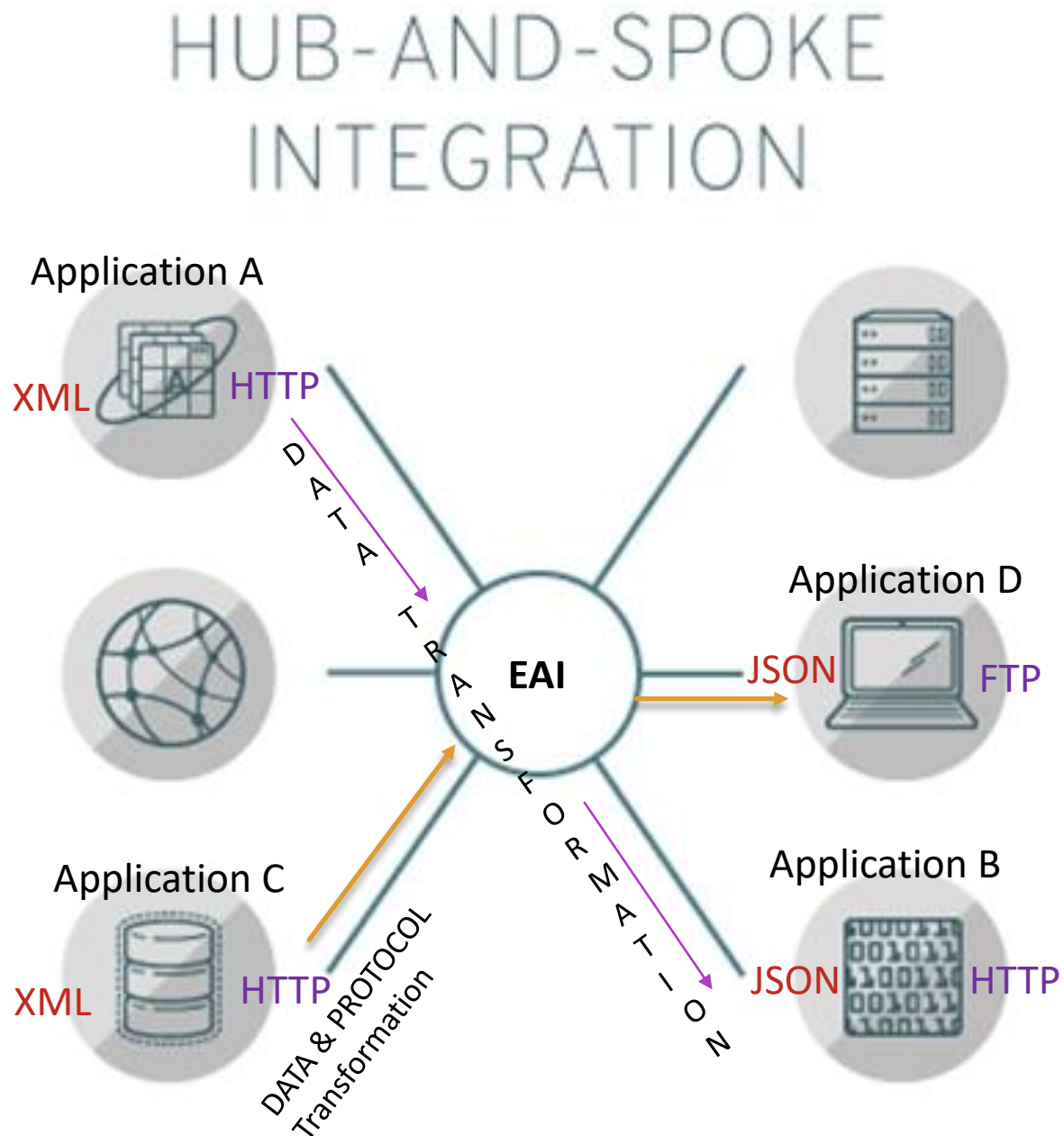
HUB-AND-SPOKE INTEGRATION

Application A

XML   HTTP

DATA TRANSFORMATION

EAI

Application D

JSON   FTP

Application C

XML   HTTP

DATA & PROTOCOL Transformation
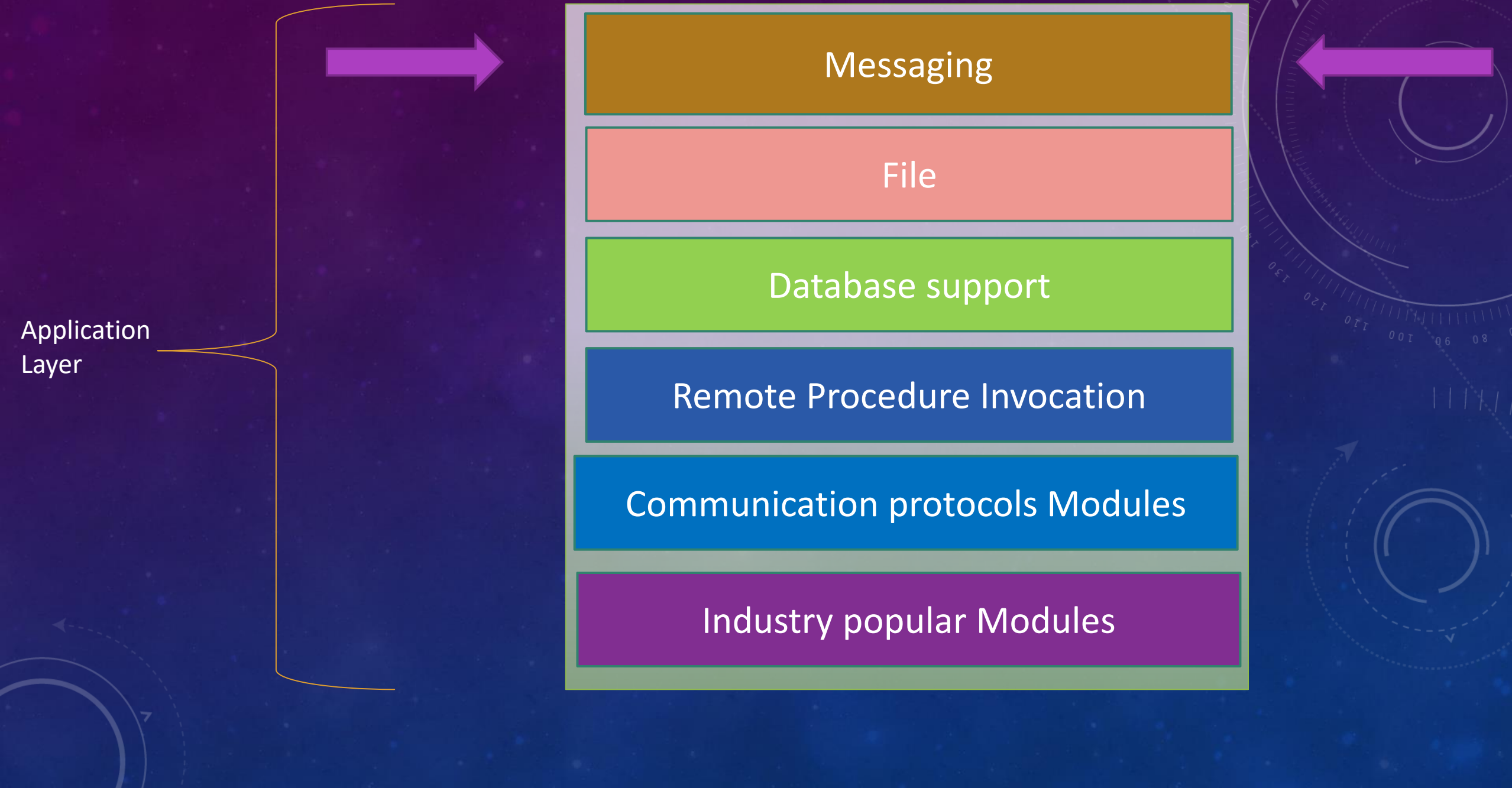
Application B

JSON   HTTP

EAI software main capabilities :

1. Routing
2. Transformation
   → Data transformation
   → Protocol transformation

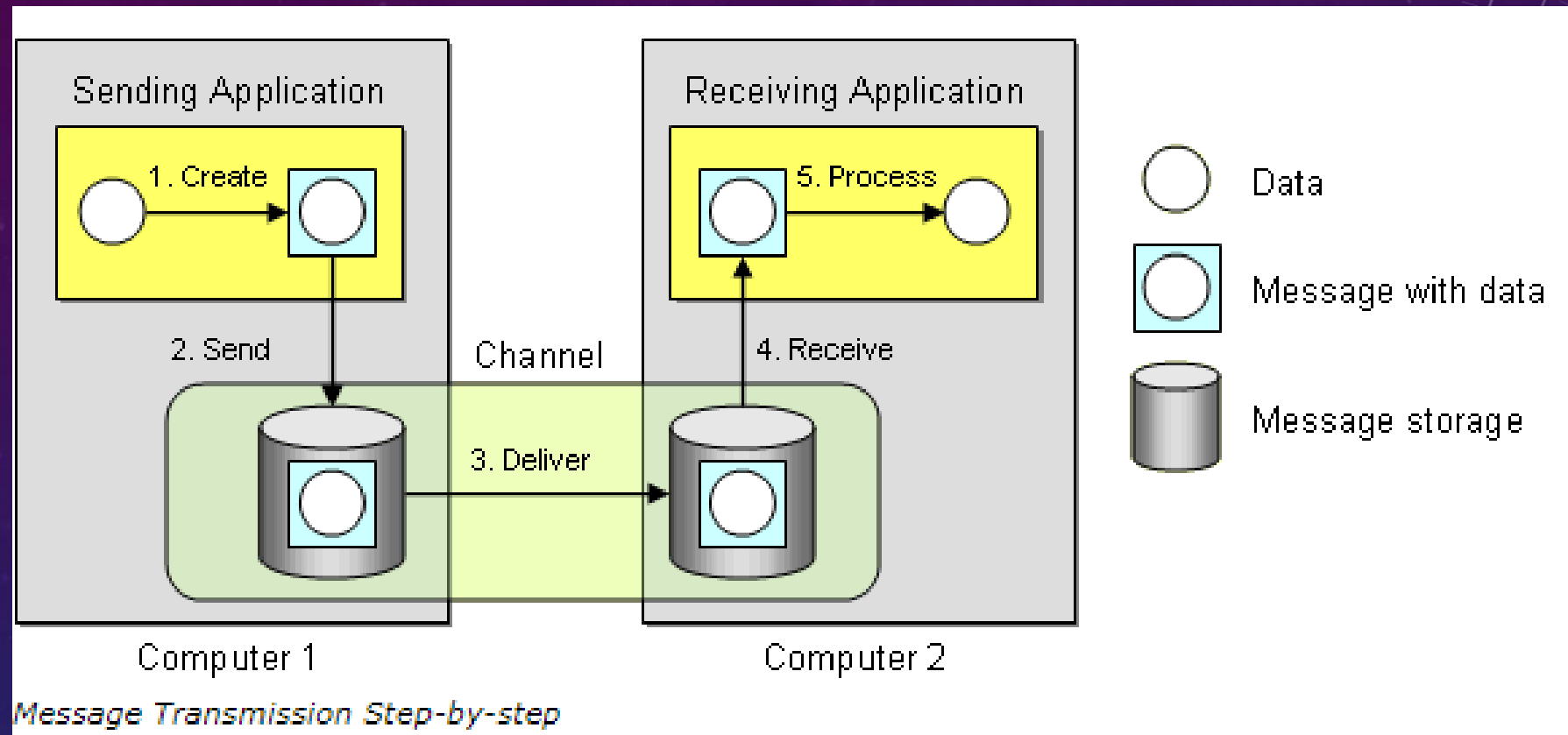**Commercial EAI software :**

1. IBM App Connect Enterprise (ACE)
2. Mulesoft
3. TIBCO
etc..

2

What EAI software contains:

Application Layer

- Messaging
- File
- Database support
- Remote Procedure Invocation
- Communication protocols Modules
- Industry popular Modules

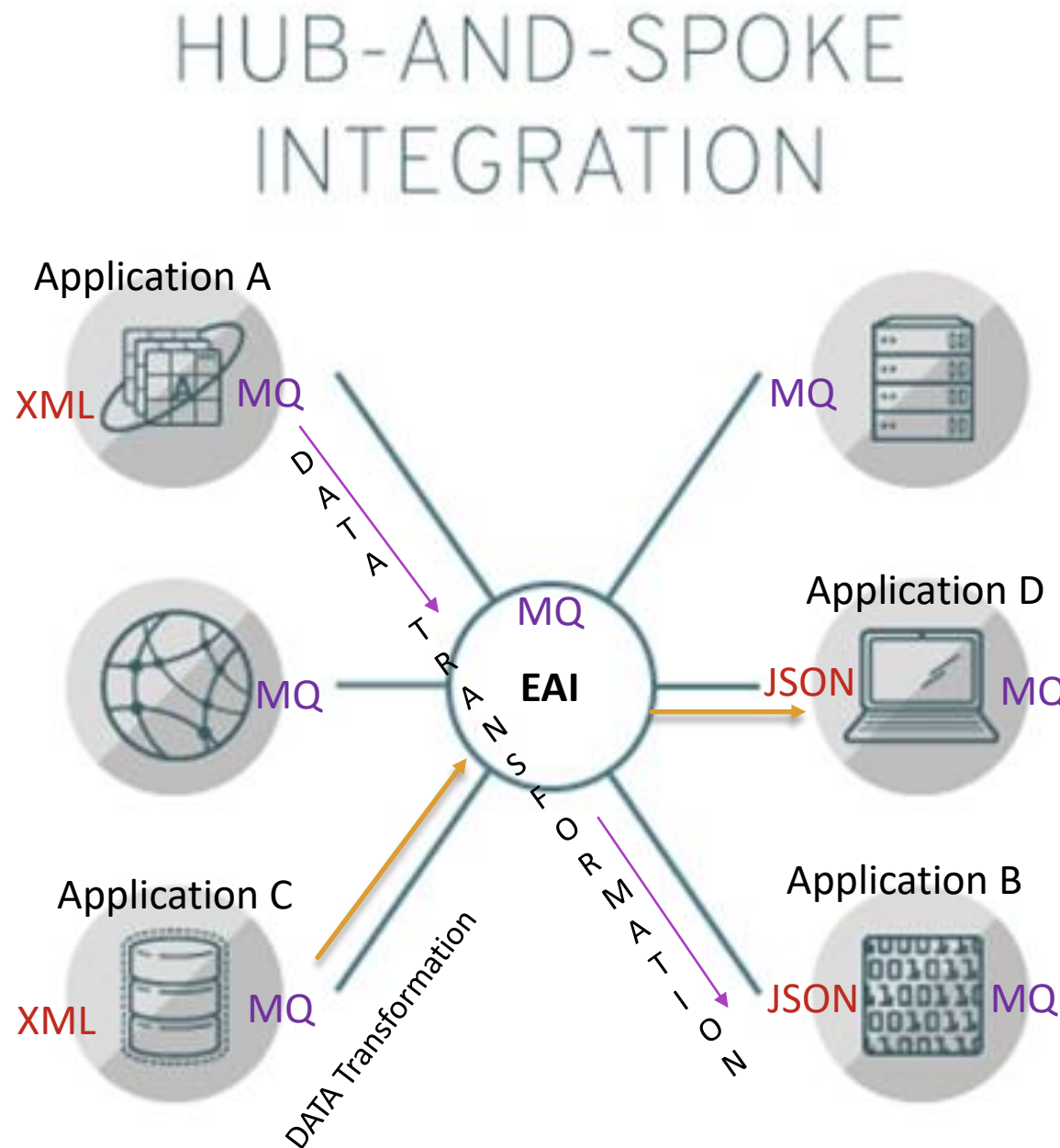# Lets focus on Messaging :

Message Transmission Step-by-step

Two methods :
1. Send and forget
2. Store and forward

EAI using Messaging:

Lets consider IBM MQ as our Messaging software

HUB-AND-SPOKE INTEGRATION

Application A
XML   MQ
DATA TRANSFORMATION

MQ

MQ   MQ   EAI   JSON   MQ   Application D

Application C
XML   MQ
DATA Transformation

JSON   MQ   Application B

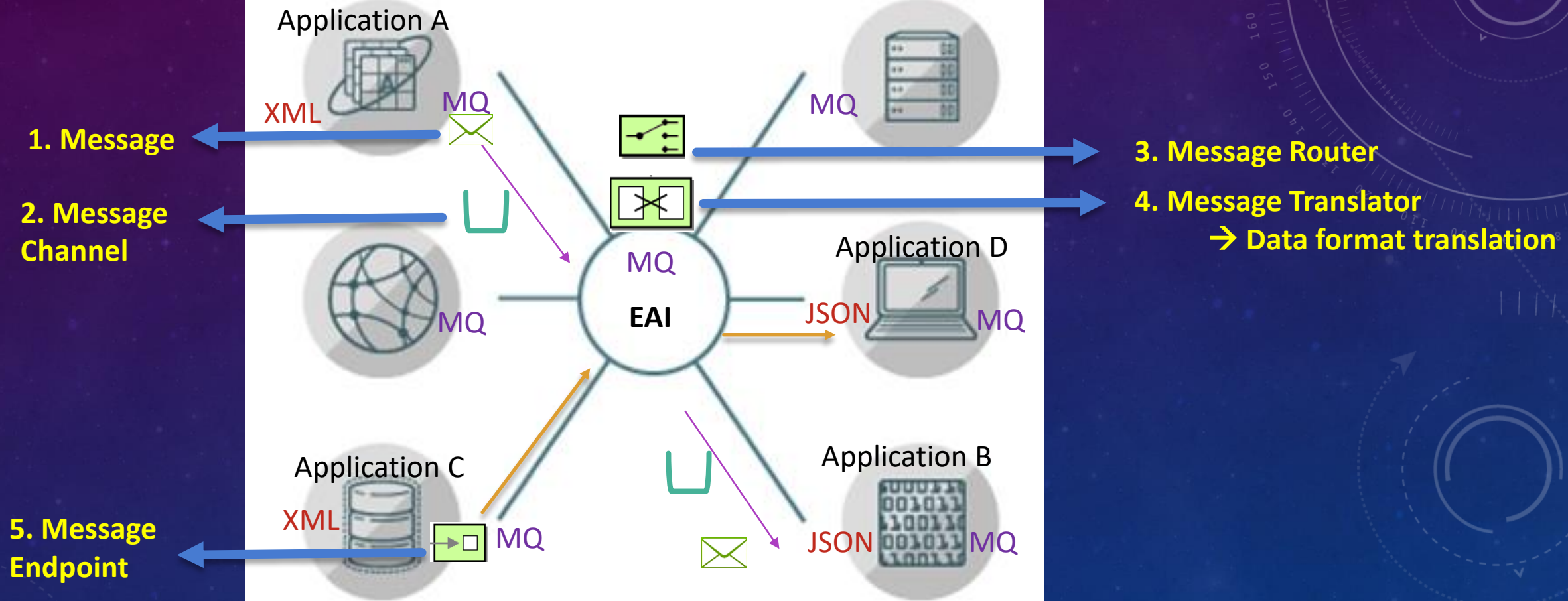**EAI software main capabilities :**

1. Routing
2. Transformation
   → Data transformation
   → ~~Protocol transformation~~

Advantages :

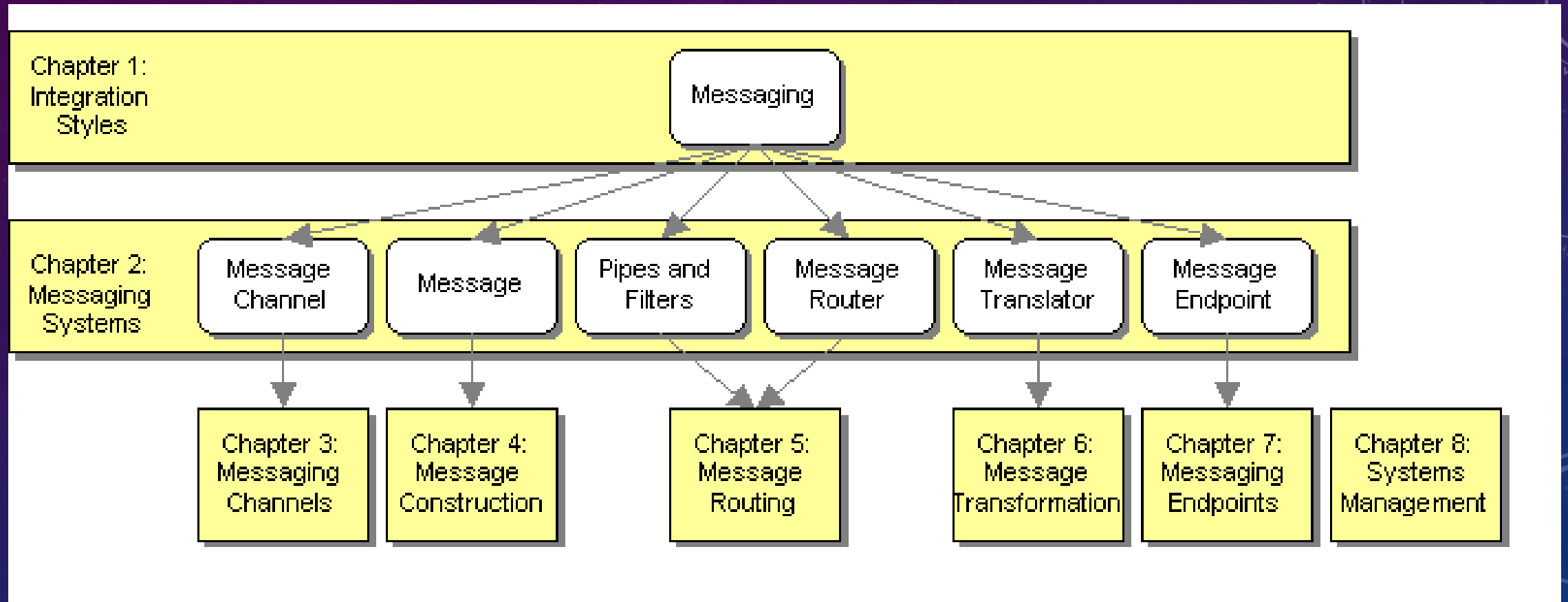1. Asynchronous
2. Reliable Communication(Store & forward)

5

Messaging Components:

HUB-AND-SPOKE INTEGRATION

Application A

XML — MQ

1. Message

2. Message Channel

MQ

MQ — EAI

Application D

JSON — MQ

3. Message Router

4. Message Translator
→ **Data format translation**

Application C

XML — MQ

5. Message Endpoint

Application B

JSON — MQ

6

EAI patterns :

References :

1. https://www.enterpriseintegrationpatterns.com/
2. Book : Enterprise Integration Patterns: Designing, Building, and Deploying Messaging Solutions by Gregor Hohpe