



Magento **Live**
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Integration with MCOM



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Order Management*

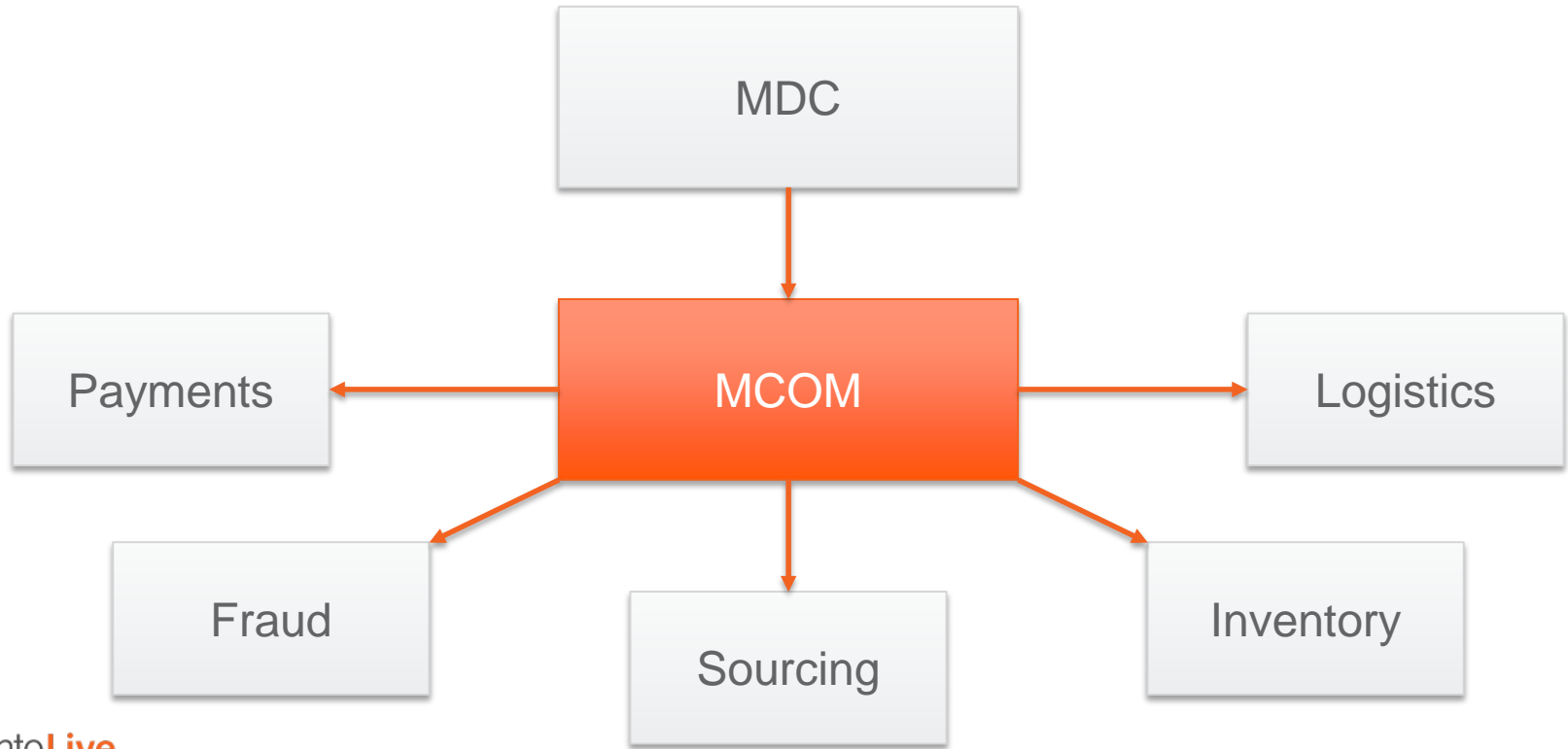


Magento Commerce Order Management

is a modular, cloud based platform designed to provide centralized **inventory, order** and **fulfillment** capabilities that enable commerce businesses to deliver a consistent, low friction, omnichannel experience to the customer.

Why Integration important?

Order Management

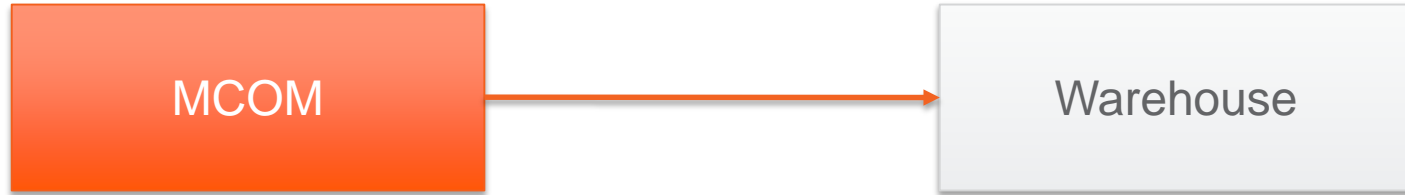


Typical integration

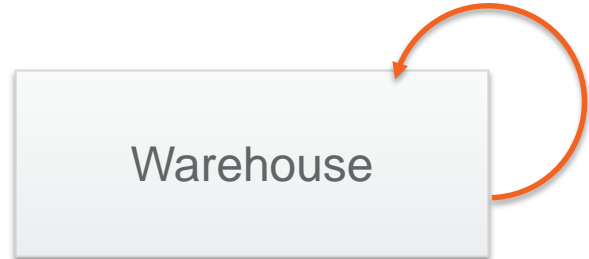


MCOM

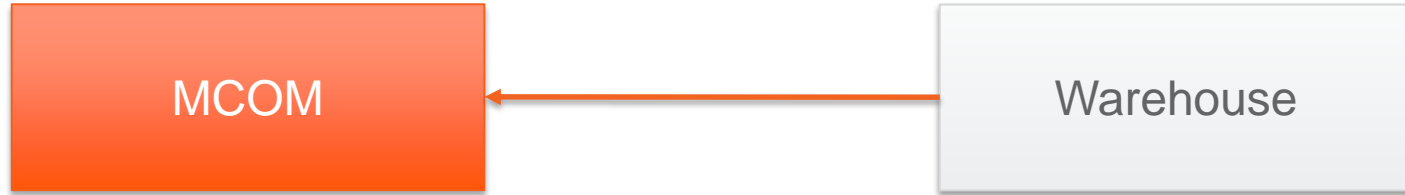
Typical integration



Typical integration



Typical integration





MDC vs MCOM – Different Extension Strategies

- Public web stores need engaging, branded user experiences
 - Deep code integration
 - HTML, CSS, JavaScript, ...
- Backend order management systems do not – they need integrations
 - Clearly defined data model and integration points
 - Synchronous and asynchronous information flows



Specification

- Describes data structures and interfaces
- Simple, machine friendly, XML format
- Unlike other schemas easy to parse
- Can be used for code generation, documentation generation etc

Data Structure in Specification

```
<struct name="shipment">
  <summary>Shipment</summary>
  <extensible>>true</extensible>
  <properties>
    <property name="order_id">
      <summary>Reference to the Order</summary>
      <type>string</type>
      <required>true</required>
    </property>
    <property name="lines">
      <summary>Product images</summary>
      <type>array[magento.sales.shipment_line]</type>
      <required>false</required>
    </property>
  </properties>
</struct>
```

...

Service in Specification

```
<service name="shipment_management">
```

```
  <command name="request">
```

```
    <summary>Request a new shipment</summary>
```

```
    ...
```

```
  <query name="find">
```

```
    <summary>Fetches shipments by search criteria</summary>
```

```
    ...
```

```
  <event name="shipped">
```

```
    <summary>Notifies about an shipment being shipped</summary>
```

```
    ...
```

Extensions in Specification

```
<struct name="shipment">
  <summary>Shipment</summary>
  <extensible>true</extensible>
  <properties>
    <property name="order_id">
      <summary>Reference to the Order</summary>
      <type>string</type>
      <required>true</required>
    </property>
    <property name="lines">
      <summary>Product images</summary>
      <type>array[magento.sales.shipment_line]</type>
      <required>false</required>
    </property>
  </properties>
</struct>
```

...

Extensions in Specification

```
<extension name="flight_information" extends="magento.sales.order">  
  <summary>Flight Information</summary>  
  <properties>  
    <property name="ticket_number">  
      <summary>Stock Keeping Unit</summary>  
      <type>string</type>  
      <required>true</required>  
    </property>  
    <property name="flight_date">  
      <summary>Product images</summary>  
      <type>datetime</type>  
      <required>false</required>  
    </property>  
  </properties>  
</extension>
```

...

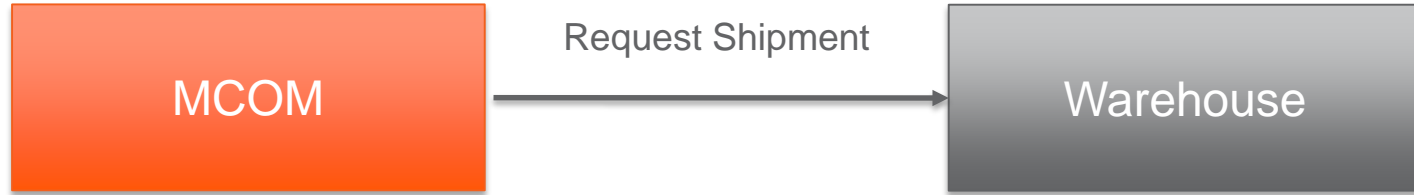
Communication between systems

MCOM

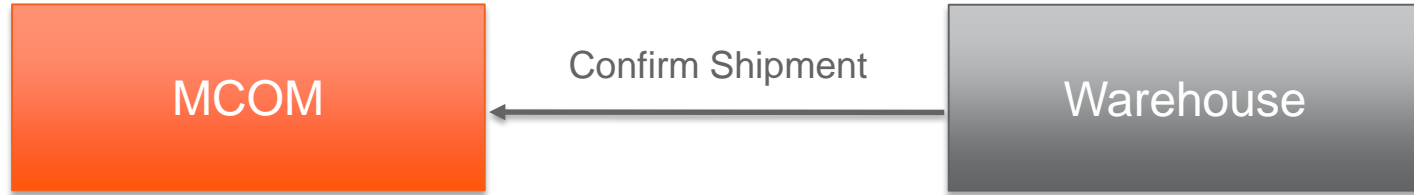
The diagram consists of two rectangular boxes. The box on the left is orange and contains the text 'MCOM'. The box on the right is dark grey with a gradient and contains the text 'Warehouse'. There are no lines or arrows connecting the two boxes, suggesting a conceptual relationship or a missing part of a larger diagram.

Warehouse

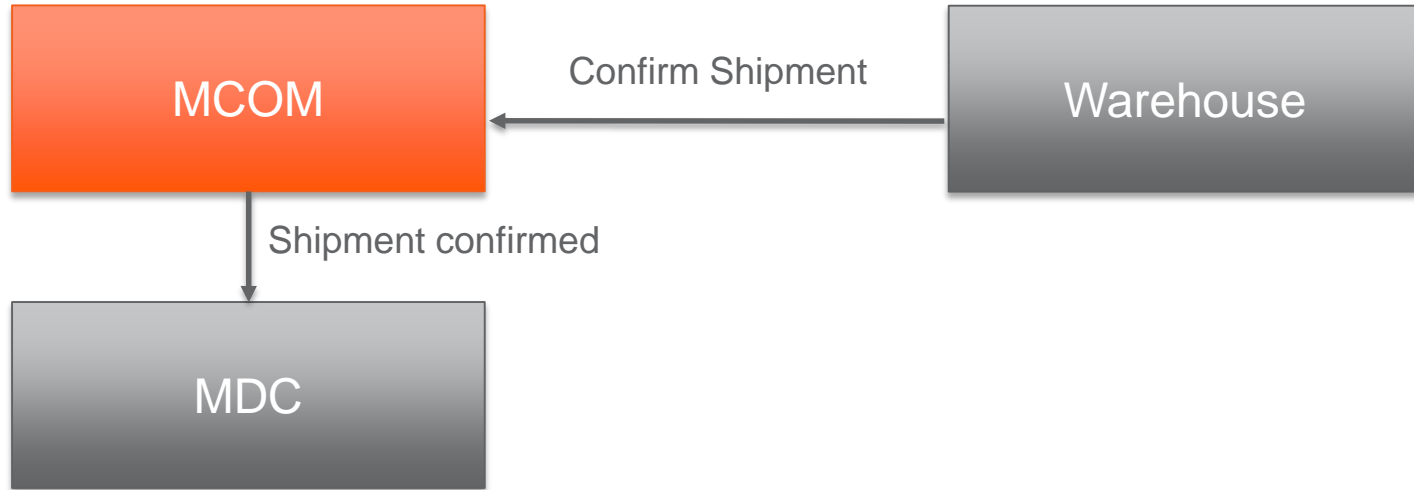
Communication between systems



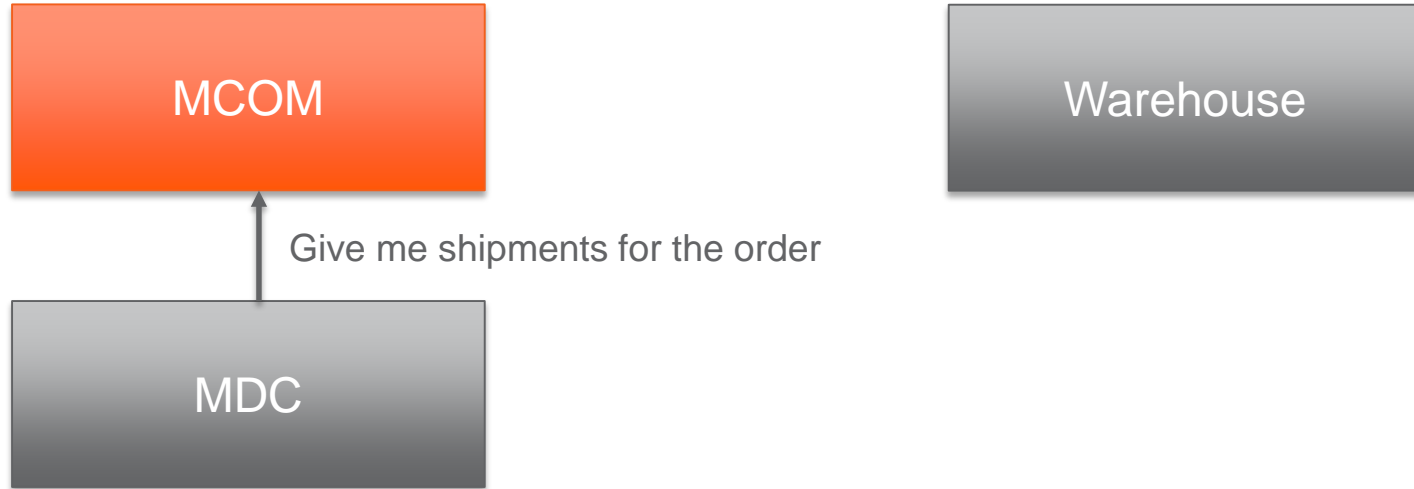
Communication between systems



Communication between systems



Communication between systems



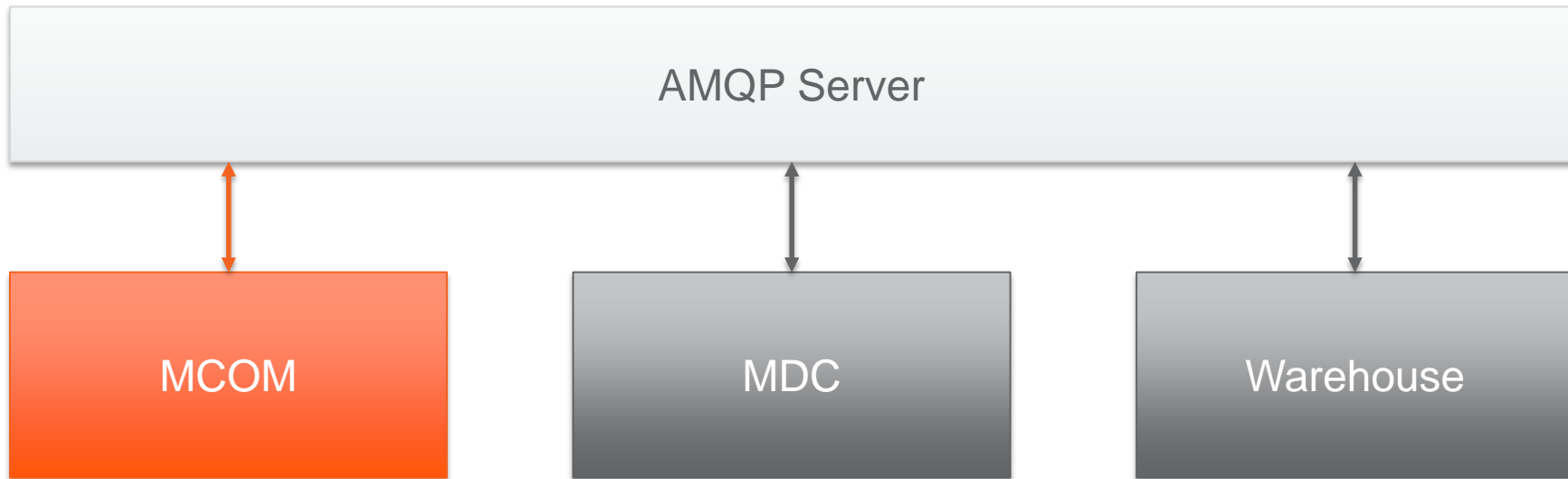


Protocol Binding

Interface	Format	Transport
Specification	JSON XML ...	AMQP(S) HTTP(S) STOMP? Google RPC? ...

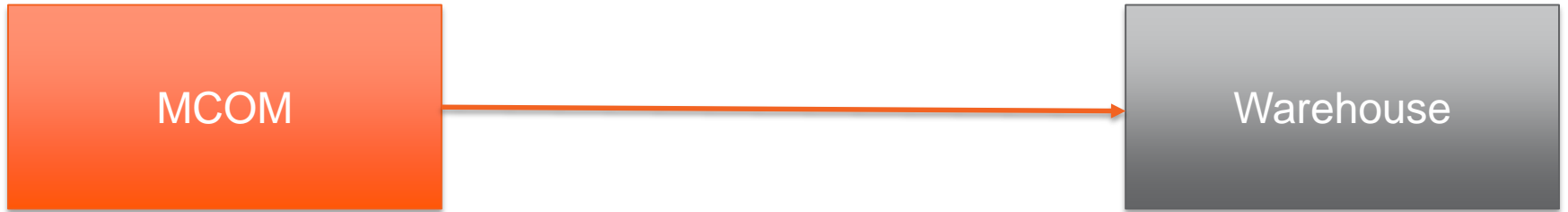


JSON over AMQP



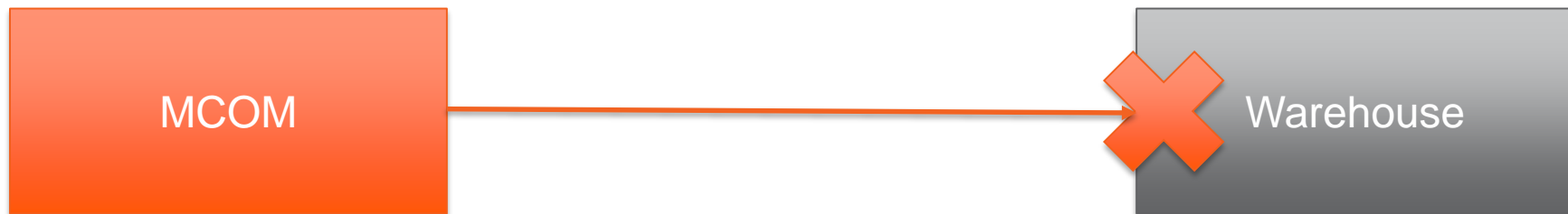


JSON over AMQP



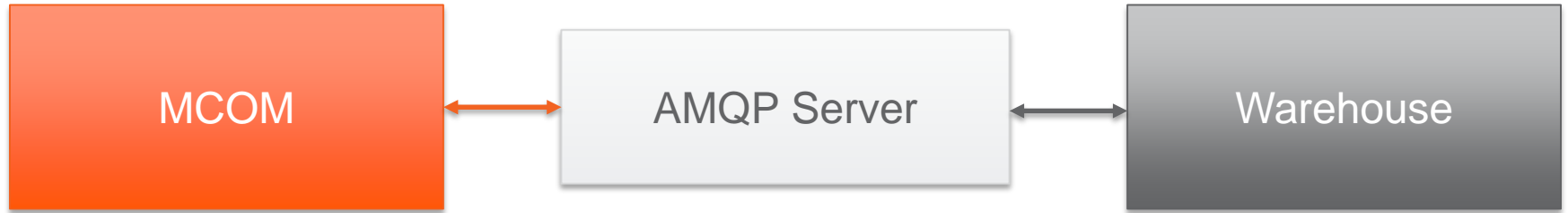


JSON over AMQP



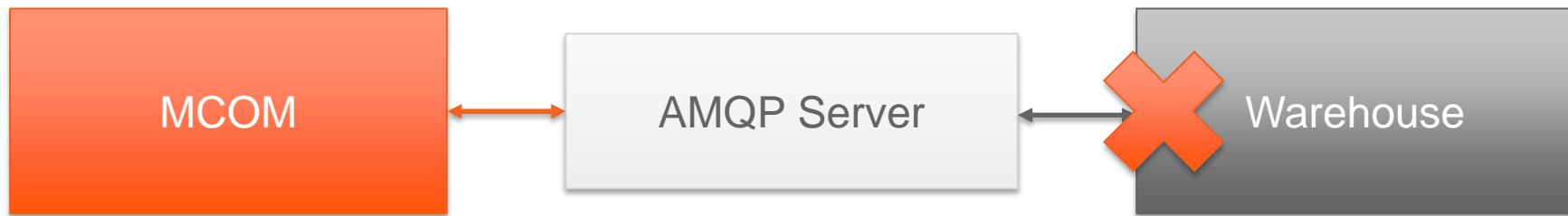


JSON over AMQP



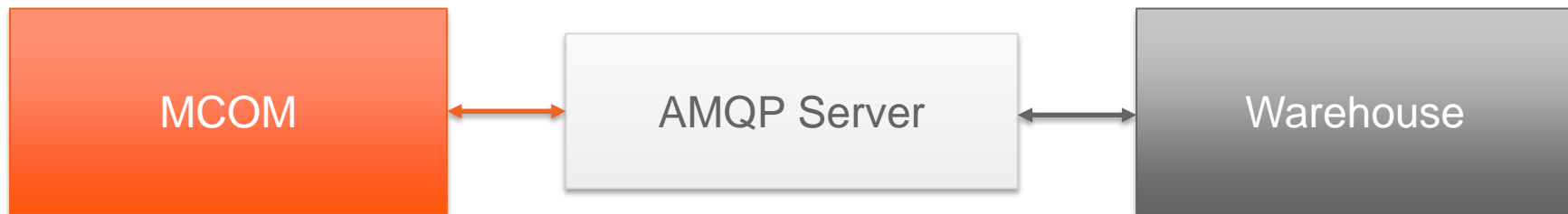


JSON over AMQP



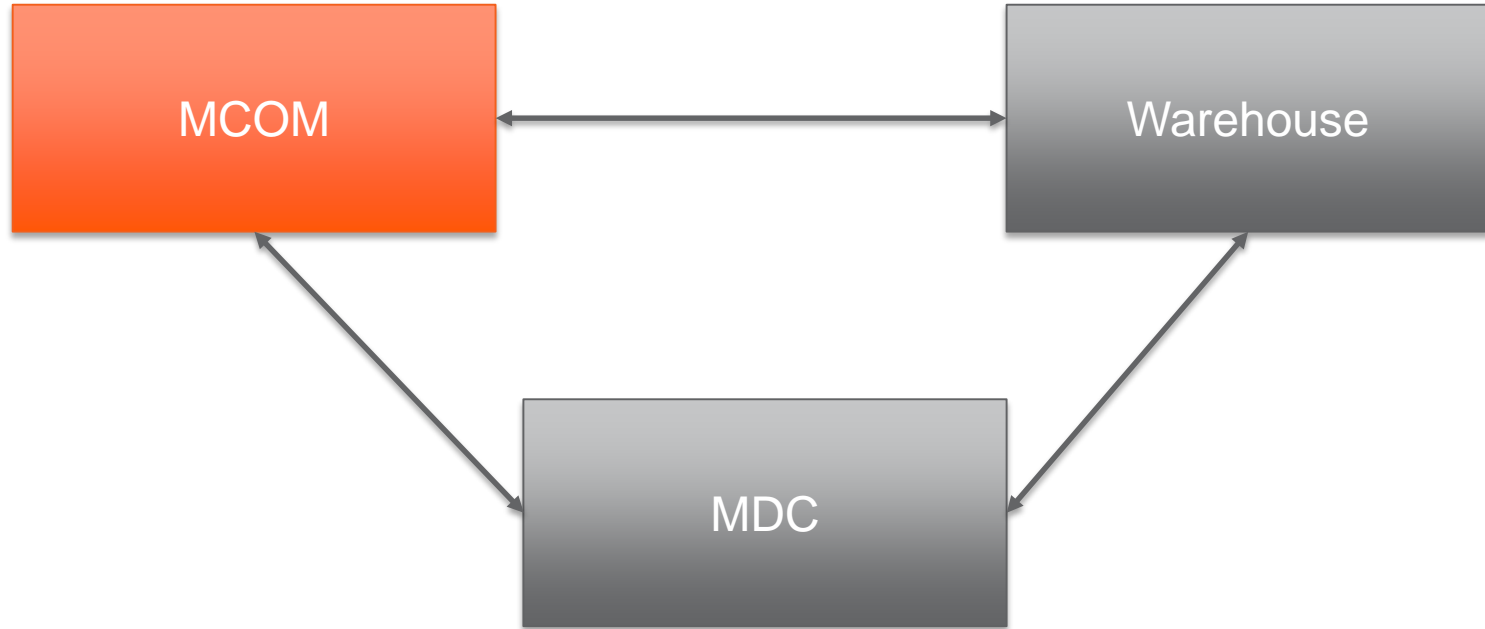


JSON over AMQP



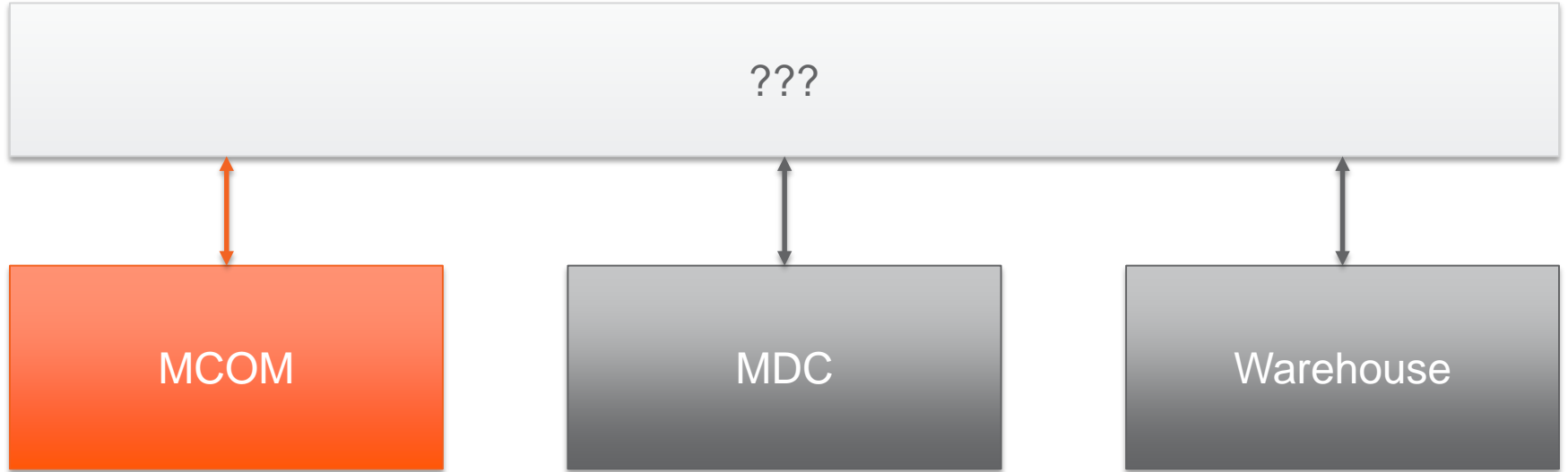


JSON over HTTP





Any over Any





Integration between MDC and MCOM

- Uses MCOM integration layer for communication
- All commands and events are asynchronous right now
- Close to real-time integration
- Includes catalog, sales, post sales, inventory and other integrations

Specification are available!

You can find specifications at:

<https://github.com/magento-mcom/shared-services>

A good blog where you can find updates on Specification and MCOM:

<https://alankent.me>

More tools and specs will be published soon!

Q & A