



Informatica® Cloud Application Integration  
January 2024

# Tutorial: Order Management

Informatica Cloud Application Integration Tutorial: Order Management  
January 2024

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# Preface

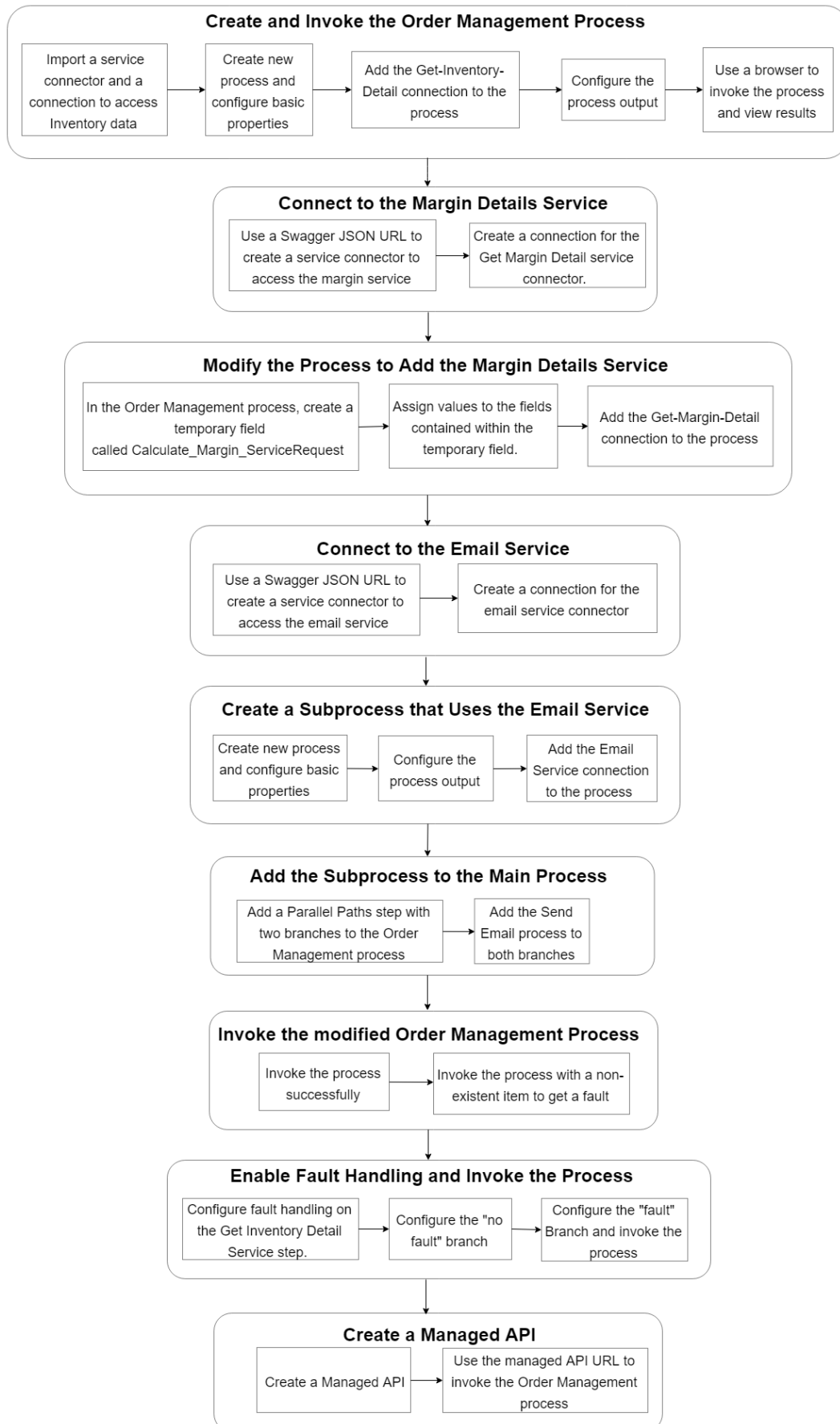
Follow the instructions in the *Order Management* tutorial to learn how to create and invoke a process that uses inventory details and does further processing. You also use the API Manager service to create a proxy API.

# CHAPTER 1

## Introduction

In the *Order Management* tutorial, you use Application Integration to create a process that fetches inventory details and sends margin and commission details via email to vendors and consumers. You also create a managed API using the API Manager Service.

The following image depicts the process you follow in the *Order Management* tutorial:



# Before you Begin

Before you begin, perform the following tasks:

1. Create an Informatica Intelligent Cloud Services<sup>SM</sup> account and verify that you have access to the Application Integration and the Application Integration Console services. For information on how to create an account, see the *Register* section of the [Training Program Overview](#) community article.
2. Log in to Application Integration, go to the **Explore** page and select **Projects** in the Explore list.
3. Create a **Tutorial** project. Click **New Project** to create the project.
4. Inside **Tutorials**, create an **Order Management** folder. Click **New Folder** to create the folder.

## Concepts

Learn about the assets that you create and the services and concepts that you use in this tutorial.

### Assets

#### Service Connector

A service connector interacts with services in Informatica Intelligent Cloud Services, within a firewall, or anywhere in the cloud, if the service has an exposed API. In this tutorial, you do not create a service connector from scratch. Instead, you import a Swagger JSON file to create a service connector. You also import a complete service connector.

#### Connection

A connection defines the configuration to connect to a service connector. The service connector may be a built in connector like JDBC or one that you create, like the Calculator service connector in this tutorial. To use the service connector in a process, you must first create a connection and then add the connection to the process.

#### Process

A process is a set of instructions that automate a business requirement. Use process steps to configure a process to run tasks in sequence, obtain information using complex XQuery, take decisions based on some criteria, and much more.

#### Subprocess

A process that is called from within another process.

### Concepts

#### Fault Handling

Fault handling refers to configuring the process to account for an exception or an unanticipated condition that occurs during the process flow. With fault handling, a predictable result always occurs.

### Services

#### Application Integration

Application Integration is an Informatica Intelligent Cloud Services service that you can use to perform API-based integration, event processing, and service and process orchestration.

#### Application Integration Console

Application Integration Console is an Informatica Intelligent Cloud Services service that you can use to perform detailed monitoring and debugging for invoked process instances.



## API Manager

API Manager is a cloud-based service that an organization uses to manage the APIs for enterprise services and processes built in Application Integration.

# Tutorial Objectives

After you complete this tutorial, you will be able to perform the following tasks:

- Import a service connector and a connection and use them in a process.
- Import a Swagger JSON URL to create a service connector.
- Create a process that uses the following steps:
  - Assignment
  - Service
  - Parallel Paths
  - Subprocess
- Call a subprocess from within a process.
- Invoke the process with and without errors.
- Update the process to enable fault handling.
- Create a managed API using the Informatica Intelligent Cloud Services API Manager service.

## CHAPTER 2

# Create and Invoke the Order Management Process

Create a process that calls the Get-Inventory-Detail.

Configure the process to accept the following input fields:

- Customer Name
- Customer Email
- Item Name
- Item Count

Configure the process to provide the following output fields:

- Order Status
- Order ID
- Item Price
- Order Price

## Step 1: Import a Service Connector and Connection

Import a service connector and connection to access inventory data. Later, you use the connection in the process you create.

1. Go to <https://knowledge.informatica.com/s/article/DOC-17733> and download the `Get Inventory Detail Connector.zip` file.
2. Log in to Application Integration and click **Explore > Import**.  
The **Import Assets** page appears.
3. Click **Choose File** and then browse to and select `Get Inventory Detail Connector.zip`.  
The following assets are available for import:
  - **Get Inventory Detail** (a service connector)
  - **Get-Inventory-Detail** (a connection)
4. Click **Import**.  
The assets are imported to the **IW2018 > Shared** folder.
5. Go to **IW2018 > Shared** and select **Get Inventory Detail** and **Get-Inventory-Detail**

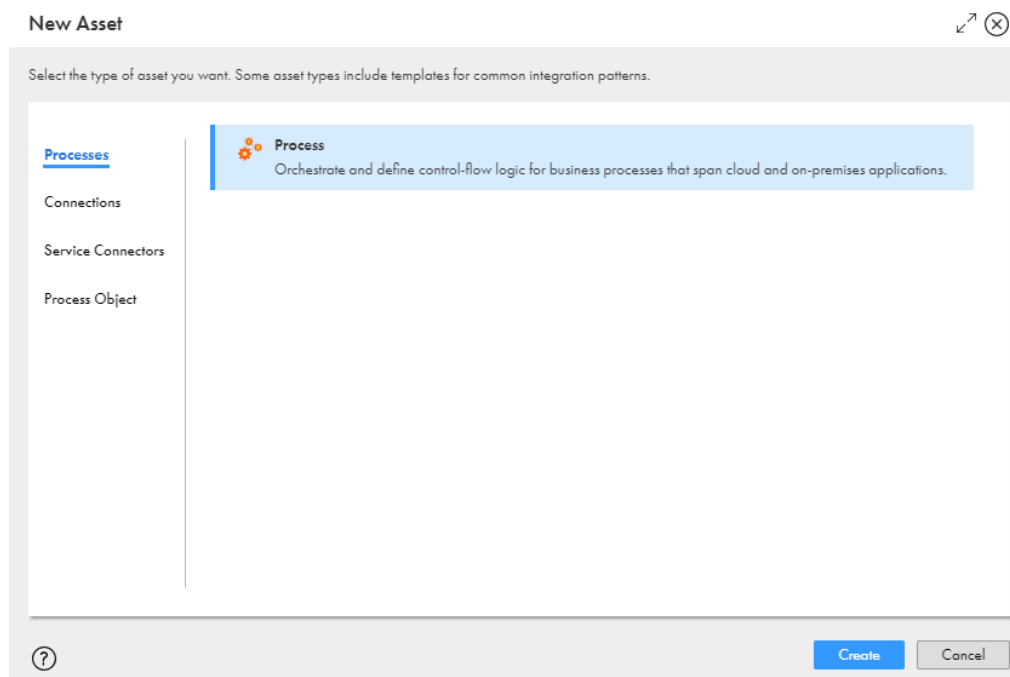
6. From the menu, select **Copy To... > Tutorials > Order Management**.
7. Next to the **Get Inventory Detail** service connector, select **Actions > Publish**.
8. Click the **Get-Inventory-Detail** connection.  
The connection opens.
9. Set the **Type** to **Tutorials > Order Management > Get Inventory** and then click **Save**.
10. Repeat [7](#) for **Get-Inventory-Detail** connection.

## Step 2: Create A New Process

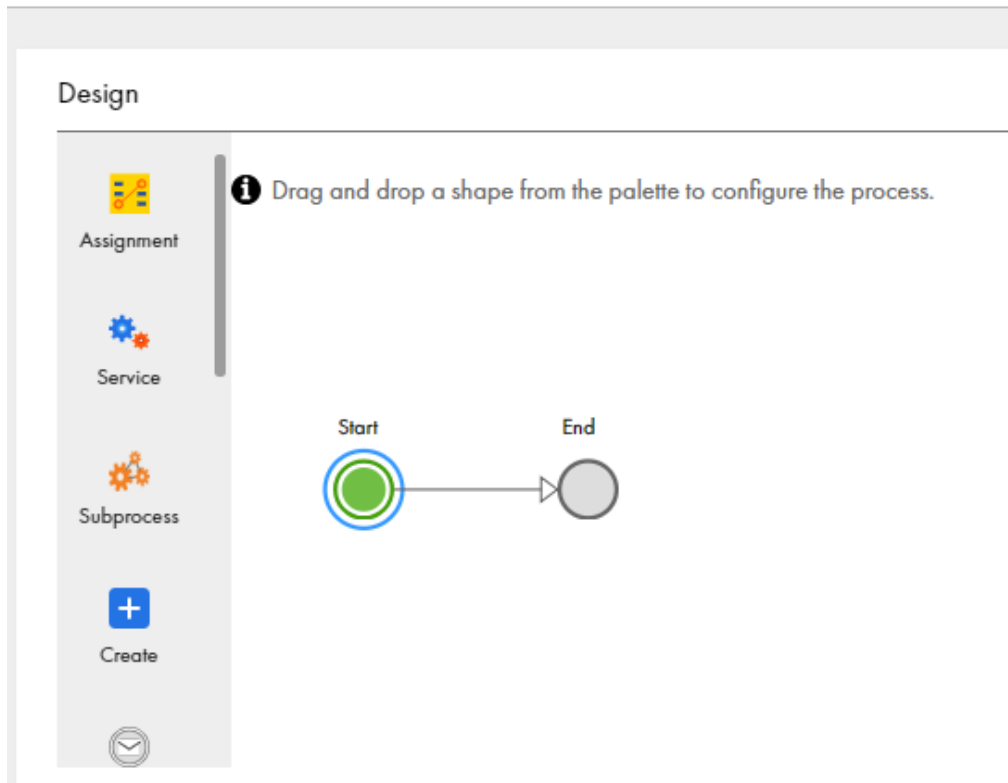
Create a process and use the **Start** step to configure basic process properties like the input and output fields.

1. In Application Integration, click **New**.
2. In the **New Asset** dialog box, select **Processes > Process** and then click **Create**.

Process Designer opens with a process template.



You see a process with Start and End steps. You need to add logical steps in between the Start and End steps.



3. Click the **Start** step.  
The process properties section appears.
4. Select the **General** tab and enter the following properties:
  - a. Click **Select** next to **Location** and then browse to and select the **Tutorials > Order Management** folder.
  - b. In the **Description** field, enter **Use multiple services to get order status, order ID, item price, and order price based on customer details**.
5. Select the **Start** tab and enter the following properties:
  - a. In the **Binding** list, select **HTTP/SOAP**.  
The Binding property defines how a process is invoked.
  - b. Next to **Allowed Roles**, enter **Service Consumer**.  
Only users who have the Service Consumer role assigned to them can access the process service URL and invoke the process.
  - c. In the **Run On** list, select **Cloud Server**.

Do not change the **Applies To** or **Run As** fields in the **Start** tab.

- Select the **Input Fields** tab and add the following fields:

Name	Type	Required
CustomerName	Text	Yes
CustomerEmail	Text	Yes
ItemName	Text	Yes
ItemCount	Integer	Yes

You enter these values at run time when you invoke the process.

- Select the **Output Fields** tab and add the following fields:

Name	Type
Status	Text
OrderID	Text
ItemPrice	Number
OrderPrice	Number

This is the output you see after you invoke the process.

- Select the **Advanced** tab and set the **Tracing Level** to **Verbose**.

When the Tracing Level is Verbose, the Application Integration Console logs all steps. This is useful if you need to debug the process.

- Select the **General** tab and enter **Order Management** in the **Name** field.

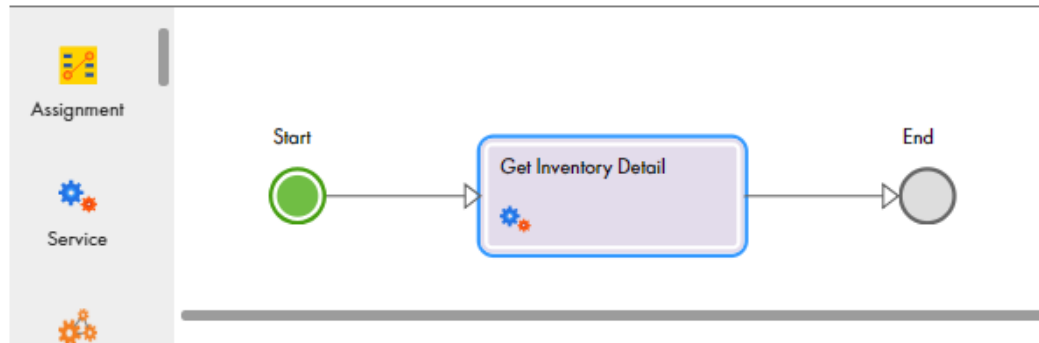
## Step 3: Get Inventory Details

Use a Service step to add the Get-Inventory-Detail connection that you imported.

- Click and drag a **Service** step on to the canvas in between the Start and End steps.  
The step properties section appears.
- Select the **Service** tab and perform the following tasks:
  - Set the **Service Type** to **Connection**.
  - Set the **Connection** to **Tutorials > Order Management > Get-Inventory-Detail**.
  - Set the action to **getInventoryDetail**.
- Select the **Input** tab and add the input field **Item Name**, with type **Field** and value **ItemName**.
- Select the **General** tab and enter **Get Inventory Detail** in the **Name** field.

The following image shows the Service tab of the **Get Inventory Detail** step:

## Design



### Get Inventory Detail Properties

#### General

#### Service

#### Input Fields

#### Fault Handling

#### Timer Events

#### Message Events

Service Type:

Connection:

Action:

#### Description

Returns item pricing details given item name.

#### Input Fields

Name	Required
Item Name	<input type="checkbox"/>

## Step 4: Configure Output

Use an Assignment step to assign values to the output fields you defined earlier.

1. Click and drag an **Assignment** step on to the canvas in between the **Get Inventory Detail** and **End** steps.
2. In the step properties section, select the **Assignments** tab and assign values to the following output fields:

Target	Value Type	Value
Status	Content	Your order is accepted
OrderID	Formula	<code>infa:getProcessId()</code>

Target	Value Type	Value
ItemPrice	Field	item > sellprice
OrderPrice	Formula	\$output.ItemPrice*\$input.ItemCount

3. Select the **General** tab and enter **Assign Order Details** in the **Name** field.
4. Click **Save**.
5. Click the **Validation** button. If there are no errors, click **Save**.  
If there are errors, fix them and then save the process.

Order Management | Valid

Design Find

Assign Order Details Properties

General

**Assignments**

Target	Value
Status	Content   Your order is accepted
OrderID	Formula   info:getProcessId()
ItemPrice	Field   Item > sellprice
OrderPrice	Formula   \$output.ItemPrice*\$input

## Step 5: Invoke the Process

Invoke the process and view run time details on the **My Processes** page.

1. Click **Actions > Properties Detail**.  
The **Properties Detail for Order Management** window appears.
2. Copy the service URL.
3. Open a text editor and add the following input parameters to the service URL:

```
<Service URL>?
CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=item1&ItemCount=2
```

The following URL is a sample service URL with input parameters:

https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Order\_Management?  
CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=item1&ItemCo  
unt=2

4. Open a browser and paste the service URL with input parameters. Enter your Informatica Intelligent Cloud Services credentials, if prompted.

You see the following output:

```
{"Status": "Your order is  
accepted.", "OrderID": "178749969799331840", "ItemPrice": 50.0, "OrderPrice": 100.0}
```

5. In Application Integration, click **My Processes** in the left navigation area.

You see that the process was successful.

My Processes Cloud

Processes (9) Updated 7:27 PM UTC Find

Id	Name	Version	Start Date	End Date	State
187648353876590592	Order Management	8	2018/6/2 07:27:33:903 PM	2018/6/2 07:27:34:167 PM	Completed



## CHAPTER 3

# Connect to a Margin Service

Use a margin service to calculate the margin and sales commission for the order.

Import a Swagger JSON URL to create a service connector that accesses the service available at the following URL:

[https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Calculate\\_Margin\\_Service](https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Calculate_Margin_Service)

Then create a connection for the service connector.

## Step 1: Create a Service Connector to the Margin Service

Use a Swagger URL to access the margin service.

1. In Application Integration, click **New**.
2. In the **New Asset** dialog box, select **Service Connectors > Service Connector from Swagger**, and then click **Create**.
3. In the **New Service Connector from Swagger** dialog box, enter the following properties on the **Swagger Source** tab, and then click **Next**:

Property Name	Property Content
Name	Get Margin Detail
Location	<b>Tutorials &gt; Order Management</b>
Description	Access the margin service at <a href="https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Calculate_Margin_Service?swagger">https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Calculate_Margin_Service?swagger</a>
Swagger URL	<a href="https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Calculate_Margin_Service?swagger">https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Calculate_Margin_Service?swagger</a>
User Name	testuser2
Password	password2#

**New Service Connector from Swagger** ↗ ×

1 **Swagger Source** 2 Services and Operations 3 Summary 4 Progress

Specify information to identify the Service Connector and Swagger JSON file.

Name: \*

Location: \*

Description:

**Swagger File**

Swagger Source: \*  File  URL

Swagger URL: \*

Use Authentication:

User Name: \*

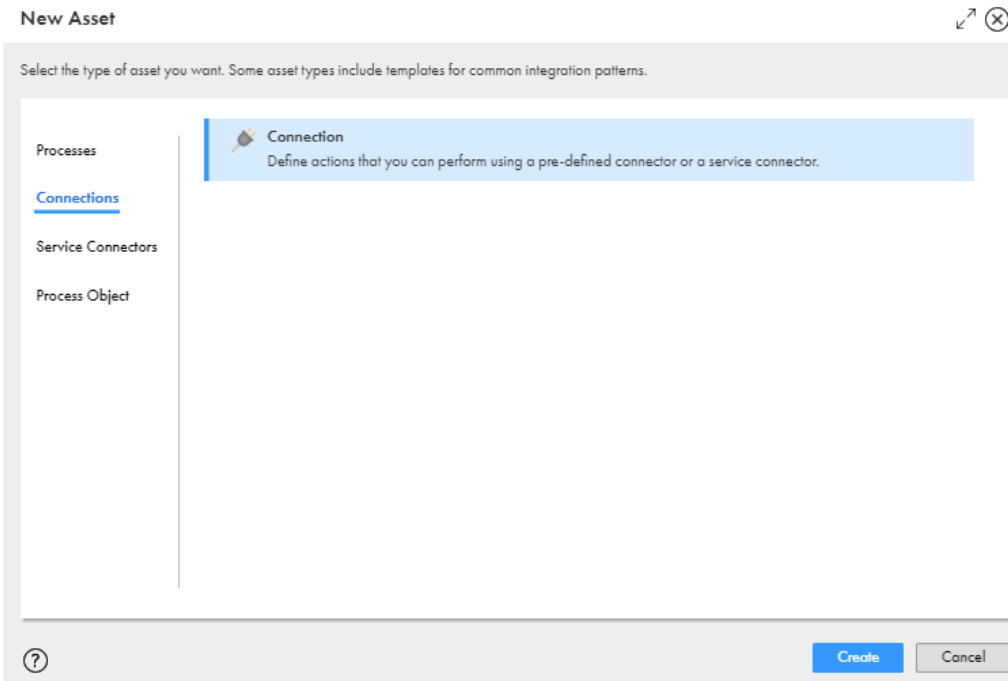
Password: \*

4. Review the **Service and Operations** tab, and then click **Next**.
5. On the **Summary** tab, click **Start Import**.
6. On the **Progress** tab, click **Finish**.  
The service connector opens.
7. Click **Save > Publish**.

## Step 2: Create a Connection

Create a connection for the Get Margin Detail service connector.

1. In Application Integration, click **New**.
2. In the **New Asset** dialog box, select **Connections > Connection** and then click **Create**.



Process Designer opens with a connection template.

3. Enter the following information in the **Properties** tab:

Property Name	Property Content
Name	Get-Margin-Detail
Location	<b>Tutorials &gt; Order Management</b>
Description	Connection for the Get margin Detail SVC.
Type	<b>Tutorials &gt; Order Management &gt; Get Margin Detail</b>
Run On	Cloud Server or any Secure Agent
hostName	na1.ai.dm-us.informaticacloud.com:443
username	testuser2
password	password2#

4. Click **Save > Publish**.

Optionally, view connection metadata on the **Metadata** tab

### Connection Details

Name:\*  (Unpublish connection to edit name)

Location:

Description:

Type:\*

Run On:

Connection Test: Not Supported

OData-Enabled: Not Supported

### Connection Properties

Name	Value	Description
hostName:*	<input type="text" value="na1.ai.dm-us.informaticacloud.com:443"/>	Host Name
username:*	<input type="text" value="testuser2"/>	User Name
password:*	<input type="password" value="....."/>	Password

## CHAPTER 4

# Modify the Process to Add the Margin Details Service

Create a temporary field and assign values to the fields contained within the temporary field. Then add the Get-Margin-Detail connection to the process.

## Step 1: Add a Temporary Field

Create a temporary field to serve as input to the **Get-Margin-Detail** connection.

1. In Application Integration, open the **Order Management** process and select the **Start** step.
2. Select the **Temporary Fields** tab and create a field with the following properties:
  - Name: **InventoryDetails**
  - Type: **More Types > Connection Defined Types > Tutorials > Order Management > Get-Margin-Detail > Calculate\_Margin\_ServiceRequest**.

Edit Type ⓧ

Category:

Connection:

The Field can be one of several types.

---

Types

---

Calculate\_Margin\_ServiceRequest  
 Calculate\_Margin\_ServiceResponse  
 string  
 boolean  
 double  
 integer

---

Allow a list of objects of this type.

The four fields contained within **Calculate\_Margin\_ServiceRequest** appear as options in the Assignment step.

## Step 2: Assign Values

The Calculate\_Margin\_ServiceRequest field contains four fields. You must assign values to the each field.

1. Select the **Assign Order Details** step and click the **Assignments** tab.
2. Assign values to the following fields





Target	Value Type	Value
InventoryDetails > ItemCostPrice	Field	Item > costprice
InventoryDetails > ItemCount	Field	ItemCount

Target	Value Type	Value
InventoryDetails > ItemSellingPrice	Field	Item > sellprice
InventoryDetails > SalesCommissionInPercentage	Field	Item > commission

 Assign Order Details Properties

General

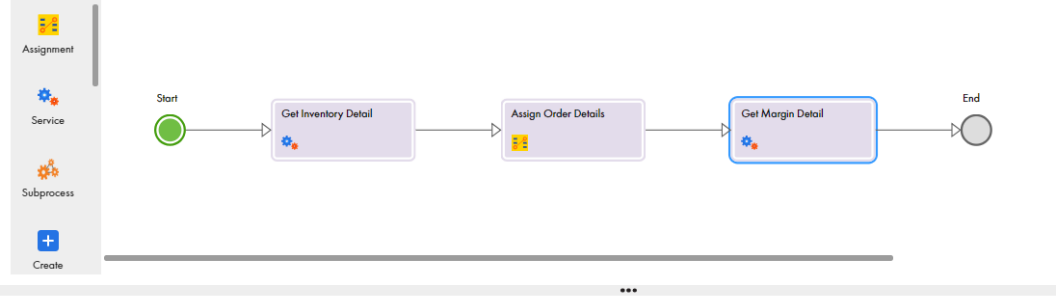
Assignments

InventoryDetails > ItemCostPrice	Field	Item > costprice	
InventoryDetails > ItemCount	Field	ItemCount	
InventoryDetails > ItemSellingPrice	Field	Item > sellprice	
InventoryDetails > SalesCommissionInPercentage	Field	Item > commission	

## Step 3: Configure the Process to Get Margin Details

Add the Get-Margin-Detail connection to the process.

- Click and drag a **Service** step on to the canvas in between the Assign Order Details step and the End step.  
The step properties section appears.
- Select the service tab and perform the following tasks:
  - Set the **Service Type** to **Connection**.
  - Set the **Connection** to **Tutorials > Order Management > Get-Margin-Detail**.
  - Set the action to **Calculate\_Margin\_ServiceOperation**.
- Select the **Input** tab and assign the value **Field > InventoryDetails** to the **body** field.
- Select the **General** tab and enter **Get Margin Detail** in the **Name** field.



**Get Margin Detail Properties**

**General**

Service Type:

Connection:

Action:

**Service**

Input Fields

Fault Handling

Description  
This mock service calculates margin for a particular order. For a particular item, this service will provide details on company margin, sales margin and margin per unit.



## CHAPTER 5

# Connect to an Email Service

Create an email service connector and a connection. You later use these connections in the process to send emails to consumers and service providers.

Use a Swagger URL to connect to the following service:

[https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Email\\_Service](https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Email_Service).

Then create a connection for the service connector.

## Step 1: Create a Service Connector to the Email Service

Use a Swagger URL to create a service connector to an email service.

1. In Application Integration, click **New**.
2. In the **New Asset** dialog box, select **Service Connectors > Service Connector Patterns > Create from Swagger** and then click **Create**.
3. In the **New Connector from WSDL** dialog box, enter the following properties in the **WSDL Source** tab and then click **Next**:

Property Name	Property Content
Name	Email Service
Location	<b>Tutorials &gt; Order Management</b>
Description	Sends emails using the <a href="https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Email_Service">https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Email_Service</a> service
Swagger source	<a href="https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Email_Service?swagger">https://na1.ai.dm-us.informaticacloud.com/active-bpel/rt/Email_Service?swagger</a>
User Name	testuser2
Password	password2#

## New Service Connector from Swagger



1 **Swagger Source** 2 **Service and Operations** 3 **Summary**

Provide identifying information for the service connector and Swagger JSON file.

Name: \*

Location: \*

Description:

Swagger File

Swagger source: \*  File  URL

Swagger URL: \*

Use authentication

User Name: \*

Password: \*

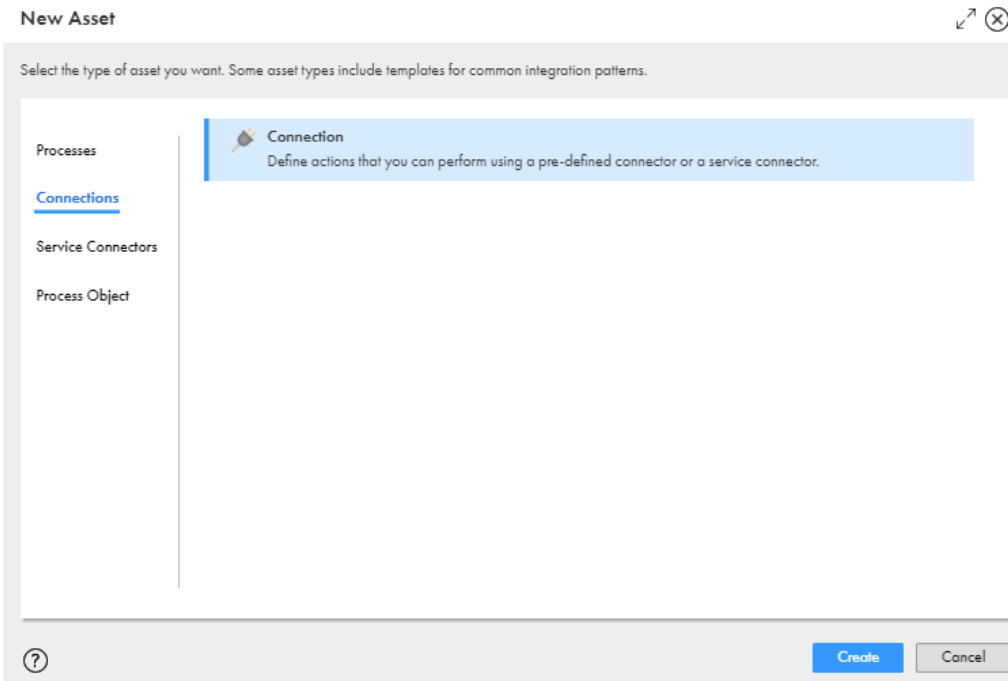
< Back **Next >** Finish Cancel

4. Review the **Service and Operations** tab and then click **Next**.
5. On the **Summary** tab, click **Finish**.  
Process Designer opens with the service connector.
6. Click **Save > Publish**.

## Step 2: Create an Email Connection

Create a connection for the email service connector.

1. In Application Integration, click **New**.
2. In the **New Asset** dialog box, select **Connections > Connection** and then click **Create**.



Process Designer opens with a connection template.

3. Enter the following information in the **Properties** tab:

Property Name	Property Content
Name	Email-Service
Location	<b>Tutorials &gt; Order Management</b>
Description	Connection for the Email Service SVC.
Type	<b>Tutorials &gt; Order Management &gt; Email Service</b>
Run On	Cloud Server or any Secure Agent
hostName	na1.ai.dm-us.informaticacloud.com:443
username	testuser2
password	password2#

4. Click **Save > Publish**.

Optionally, view connection metadata on the **Metadata** tab

### Connection Details

Name:\*  (Unpublish connection to edit name)

Location:

Description:

Type:\*

Run On:

Connection Test: Not Supported

OData-Enabled: Not Supported

### Connection Properties

Name	Value	Description
hostName:*	<input type="text" value="na1.ai.dm-us.informaticacloud.com:443"/>	Host Name
username:*	<input type="text" value="testuser2"/>	User Name
password:*	<input type="password" value="....."/>	Password

# CHAPTER 6

## Create a Subprocess

Create a process that uses the email connection to send emails to consumers and vendors. When you add this process to the Order Management process, it becomes a subprocess.

### Step 1: Create a New Process

Create a process and use the **Start** step to configure basic process properties like input, output, and temporary fields.

1. In Application Integration, click **New**.
2. In the **New Asset** dialog box, select **Processes > Process** and then click **Create**.  
Process Designer opens with a process template.
3. Click the **Start** step.  
The process properties section appears.
4. Select the **General** tab and enter the following properties:
  - a. Click **Select** next to **Location** and then browse to and select the **Tutorials > Order Management** folder.
  - b. In the **Description** field, enter **Use the email service to send emails**.
5. Select the **Start** tab and enter the following properties:
  - a. In the **Binding** list, select **HTTP/SOAP**.  
The Binding property defines how a process is invoked.
  - b. Under **Allowed Roles**, select **Allow Anonymous Access**.
  - c. In the **Run On** list, select **Cloud Server**.  
Do not change the **Applies To** or **Run As** fields in the **Start** tab.
6. Select the **Input Fields** tab and add the following fields:

Name	Type	Required
EmailAddress	Text	Yes
Message	Text	Yes

7. Select the **Temporary Fields** tab and add a field with the following properties:
  - Name: **InventoryDetails**
  - Type: **More Types > Connection Defined Types > Tutorials > Order Management > Email-Service > Email\_ServiceRequest**.

Edit Type

Category: \* Connection defined Types

Connection: Tutorials > Order Management > Email-Service

The Field can be one of several types.

Types

Email\_ServiceRequest

string

boolean

double

integer

Allow a list of objects of this type.

OK Cancel

8. Select the **Advanced** tab and set the **Tracing Level** to **Verbose**.  
When the Tracing Level is Verbose, the Application Integration Console logs all steps. This is useful if you need to debug the process.
9. Select the **General** tab and enter **Send Email** in the Name field.

## Step 2: Configure Output

Assign values to the output fields you defined.

1. Click and drag an **Assignment** step on to the canvas in between the **Send Email** and **End** steps.  
The step properties section appears.

2. Select the **Assignment** tab and assign the following values to the input fields:

Target	Value Type	Value
Email > Message	Field	Message
Email > SendTo	Field	EmailAddress

3. Select the **General** tab and enter **Create Email** in the **Name** field.

## Step 3: Add the Email Connection

Add the Email Service connection to the process.

1. Click and drag a **Service** step on to the canvas in between the Create Email step and the End step. The step properties section appears.
2. Select the **Service** tab and perform the following tasks:
  - a. Set the **Service Type** to **Connection**.
  - b. Set the **Connection** to **Tutorials > Order Management > Email-Service**.
  - c. Set the action to **Email\_ServiceOperation**.
3. Select the **Input** tab and assign the value **Field > Email** to the **body** field.
4. Select the **General** tab and enter **Call Email Service** in the **Name** field.

Send Email ✔ Valid

The screenshot shows a process flow in a design tool. The flow consists of four steps: Start, Create Email, Email\_ServiceOperation, and End. The Email\_ServiceOperation step is highlighted with a blue border. Below the canvas, the 'Email\_ServiceOperation Properties' panel is open, showing the following configuration:

- General** tab is selected.
- Service Type:** Connection
- Connection:** Tutorials > Order Management > Email-Service
- Action:** Email\_ServiceOperation
- Description:** No description
- Input Fields:**

Name	Required	Type	Description
body	<input checked="" type="checkbox"/>	Object ID (Email-Service:Email_ServiceRequest)	
- Output Fields:** (empty)

## CHAPTER 7

# Add the Subprocess to the Main Process

Add the Send Email process to the Order Management process. You need to send emails to the consumer and to the vendor. To do this, add a Parallel Paths step with two branches and add a service step on each branch. The first branch sends an email to the consumer and the second branch sends an email to the vendor.

## Step 1: Add a Parallel Paths Step

Add a Parallel Paths step with two branches to the Order Management process.

1. In Application Integration, open the **Order Management** process.
2. Click and drag a Parallel Path step onto the canvas in between the **Get Margin Detail** Service step and the End step.

## Step 2: Add the Subprocess to each Parallel Path

Add the Send Email process to both branches. The first branch sends an email to the consumer. The second branch sends an email to the vendor.

1. Click and drag a Subprocess step onto the first branch.  
The step properties section appears.
2. Select the **Process** tab and select the **Send Email** process.



3. Select the **Input Fields** tab and add the following fields:

Field Name	Field Type	Field Value
EmailAddress	Content	testconsumer@mailinator.com
Message	Formula	fn:concat ("Dear ", \$input.CustomerName, ". Thanks for ordering.", "Your order ID is: ", \$output.OrderId, ". We will deliver your order in 7 days.")

You use the XQuery `concat()` function to build the email message.

**Note:** Click `f(x)` to open the Expression Editor and view the XQuery expression that you entered.

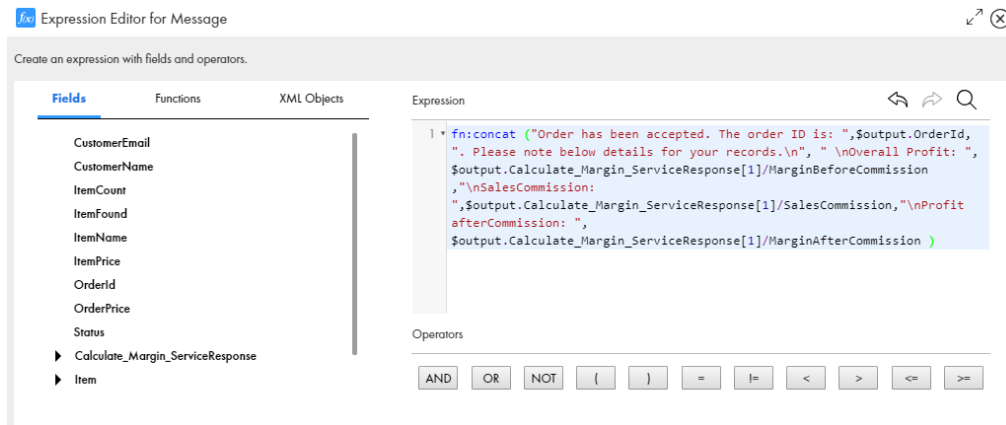


4. Select the **General** tab and enter **Send Email to Consumer** in the **Name** field.
5. Click and drag a Subprocess step onto the second branch.  
The step properties section appears.
6. Select the **Process** tab and select the **Send Email** process.

7. Select the **Input Fields** tab and add the following fields:

Field Name	Field Type	Field Value
EmailAddress	Content	testvendor@mailinator.com
Message	Formula	<pre>fn:concat ("Order has been accepted. The order ID is: ", \$output.OrderId, ". Please note below details for your records.", " Overall Profit: ", \$output.Calculate_Margin_ServiceResponse[1]/MarginBeforeCommission, ". SalesCommission: ", \$output.Calculate_Margin_ServiceResponse[1]/SalesCommission, ". Profit after Commission: ", \$output.Calculate_Margin_ServiceResponse[1]/MarginAfterCommission )</pre>

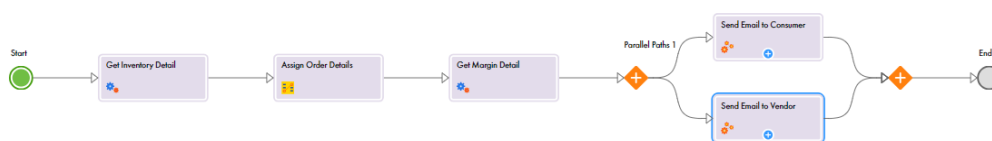
**Note:** Click f(x) to open the Expression Editor and view the XQuery expression that you entered.



8. Select the **General** tab and enter **Send Email to Vendor** in the **Name** field.

9. Click **Save > Publish**

The following image shows the process canvas:



## CHAPTER 8

# Invoke the Modified Order Management Process

Invoke the modified process with two sets of input parameters.

First, invoke the process with the following parameterized URL:

```
<service URL>?  
CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=item1&ItemCount=2
```

The invoke is successful and emails are sent to the consumer and vendor.

Then, invoke the process with the following parameterized URL:

```
<service URL>?  
CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=Newitem1&ItemCount=2
```

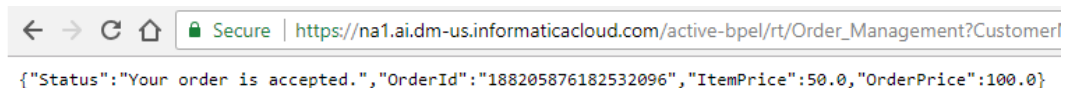
The item name "Newitem1" does not exist and you see a fault.

## Step 1: Invoke the Process Successfully

1. Click **Actions > Properties Detail > Copy Service URL**.
2. In a browser, paste the following parameterized service URL:

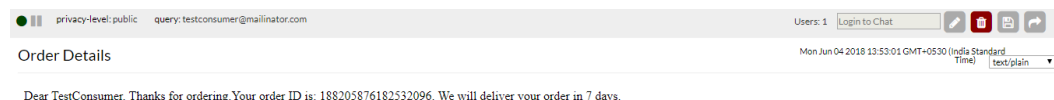
```
<service URL>?  
CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=item1&ItemCount=2
```

You see a successful response.



```
{\"Status\": \"Your order is accepted.\", \"OrderId\": \"188205876182532096\", \"ItemPrice\": 50.0, \"OrderPrice\": 100.0}
```

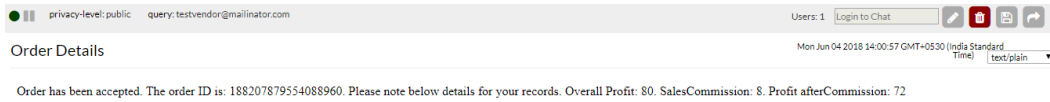
Emails are sent to the consumer and vendor.



privacy-level: public query: testconsumer@mailinator.com Users: 1 Login to Chat

Order Details Mon Jun 04 2018 13:53:01 GMT+0530 (India Standard Time) text/plain

Dear TestConsumer. Thanks for ordering. Your order ID is: 188205876182532096. We will deliver your order in 7 days.



## Step 2: Invoke Process to Show a Fault

Invoke the process with a faulty item name, newitem1, to get a faulted process. View the error response and the process status on the **My Process** page.

1. In a browser, paste the following parameterized service URL: `<service URL>?CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=newitem1&ItemCount=2`

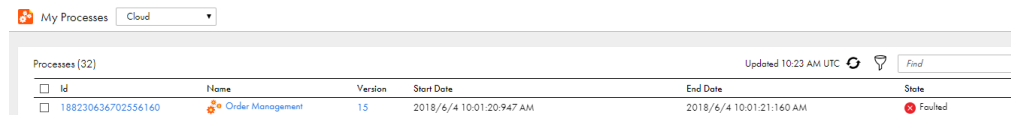
You see an HTTPS 400 error response.



No email is sent to the consumer or to the vendor.

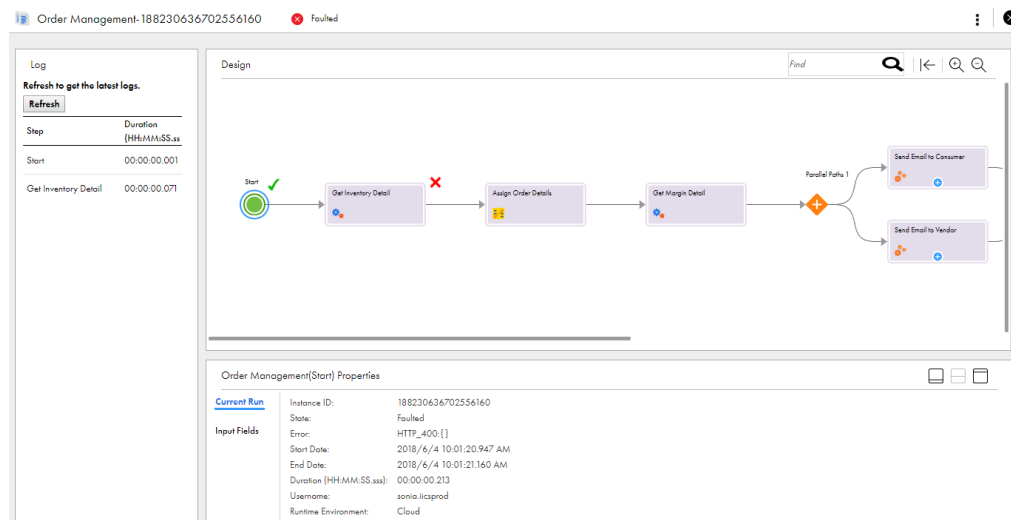
2. Select the **My Processes** tab.

You see that the process is in the **Faulted** state.



3. Click the process ID.

The **Process View Detail** page appears. You see that the process has faulted at the **Get Inventory Detail** step because the "newitem1" does not exist.



## CHAPTER 9

# Enable Fault Handling

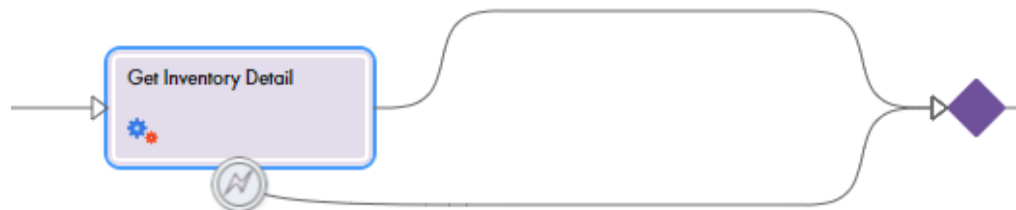
To improve the process design, enable fault handling for the Get Inventory Detail step.

## Step 1: Enable Fault Handling

Configure fault handling on the Get Inventory Detail Service step.

1. Open the **Order Management** process and select the **Get Inventory Detail** step.  
The step properties section appears.
2. Select the **Fault Handling** tab and enable **Catch Faults**.

Two converging branches emerge from step. The lower branch represents the path taken if a fault occurs. The upper branch represents the path taken if no fault occurs.

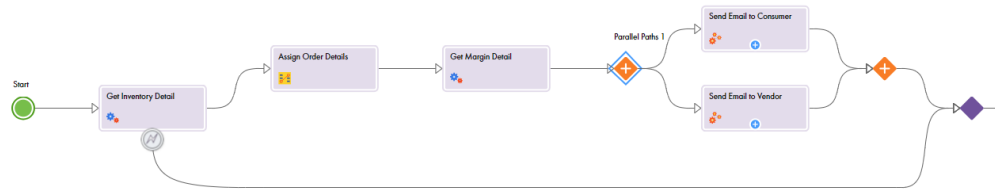


## Step 2: Configure the "No Fault" Branch

Configure the "no fault" branch by moving all steps after Get Inventory Detail on to the branch.

1. Click and drag the **Assign Order Details** step to the "no fault" branch.

- Repeat [step 1 on page 37](#) for all steps except the End step. Do not change the order of the steps.



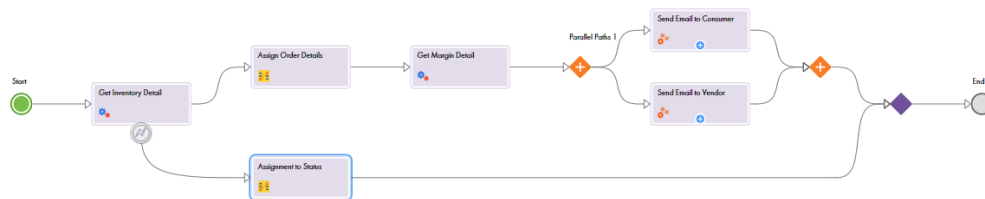
## Step 3: Configure the "Fault" Branch and Invoke the Process.

Configure the process to show an "Item not in stock. Apologies for the inconvenience" message instead of an HTTPS error code in the event of an error.

- Click and drag an Assignment step on to the "fault" branch of the Get Inventory Detail step. The step properties section appears.
- Select the Assignments tab and add the **Status** field with the **Value** as **Content >Item not in stock. Apologies for the inconvenience.**

If an error occurs, you will see the message "Item not in stock. Apologies for the inconvenience" instead of an HTTPS 400 error.

- Click **Save > Publish.**



- Paste the following parameterized URL in a browser:

<Service URL>?

CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=newitem1&ItemCount=2

You see the following message in the browser:

`{"Status": "Item not in stock. Apologies for the inconvenience"}`

- Click My Processes. You see that the process is **Completed**, and not **Failed**.

My Processes Cloud

Id	Name	Version	Start Date	End Date	Status
188253524892655040	Order Management	16	2018/6/4 11:32:17:916 AM	2018/6/4 11:32:18:147 AM	Completed
188230636702556160	Order Management	15	2018/6/4 10:01:20:947 AM	2018/6/4 10:01:21:140 AM	Failed

# CHAPTER 10

## Create a Managed API

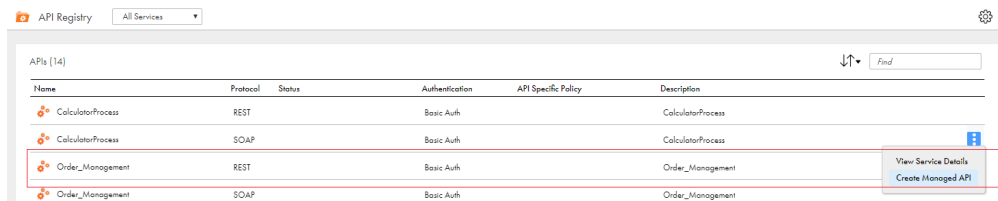
Use the **API Manager** Informatica Intelligent Cloud Services service to create a managed API for the Order Management process. Invoke the process using the managed API.

For the complete API manager help, see the documentation at:

<https://network.informatica.com/onlinehelp/IICS/prod/APIMgr/en/index.htm>

### Step 1: Create a Managed API

1. In Informatica Intelligent Cloud Services, click **My Services** and select the **API Manager** service. You are prompted to choose an API domain name. Retain the default name and click **Save**.
2. On the API Registry page, click **Actions** > **Create Managed API** next to the **Order\_Management** process with REST protocol.



API Registry All Services

APIs (14) Find

Name	Protocol	Status	Authentication	API Specific Policy	Description
CalculatorProcess	REST		Basic Auth		CalculatorProcess
CalculatorProcess	SOAP		Basic Auth		CalculatorProcess
Order_Management	REST		Basic Auth		Order_Management
Order_Management	SOAP		Basic Auth		Order_Management

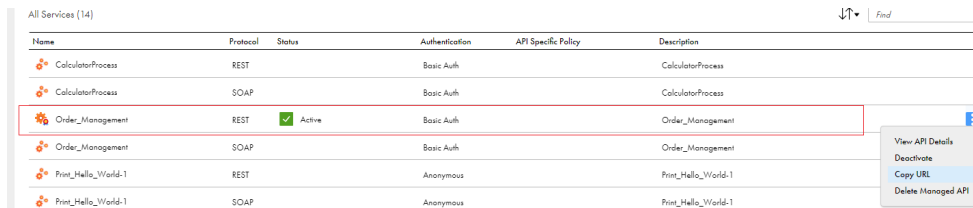
View Service Details  
Create Managed API

The managed API is successfully created.

## Step 2: Invoke the Managed API

Use the Managed API URL to invoke the Order Management process.

1. Next to **Order\_Management**, click **Actions > Copy URL**



The screenshot shows a table titled "All Services (14)" with columns: Name, Protocol, Status, Authentication, API Specific Policy, and Description. The row for "Order\_Management" is highlighted with a red border. A context menu is open over this row, showing options: "View API Details", "Deactivate", "Copy URL", and "Delete Managed API".

Name	Protocol	Status	Authentication	API Specific Policy	Description
CalculatorProcess	REST		Basic Auth		CalculatorProcess
CalculatorProcess	SOAP		Basic Auth		CalculatorProcess
Order_Management	REST	Active	Basic Auth		Order_Management
Order_Management	SOAP		Basic Auth		Order_Management
Print_Hello_World-1	REST		Anonymous		Print_Hello_World-1
Print_Hello_World-1	SOAP		Anonymous		Print_Hello_World-1

You get a URL similar to the following URL:

```
https://apigw-pod1.dm-us.informaticacloud.com:8243/t/sonia.domain1.com/Order_Management/1.0.0
```

2. Add parameters to the URL.

The URL should look similar to the following URL:

```
https://apigw-pod1.dm-us.informaticacloud.com:8243/t/sonia.domain1.com/Order_Management/1.0.0?CustomerName=TestConsumer&CustomerEmail=testconsumer@mailinator.com&ItemName=item1&ItemCount=2
```

3. Paste the URL in a browser.

You see the same result as when you invoked the process with the Application Integration service URL.