Mirakl Shop API - Seller Guide

Agenda

1. Introduction
2. API integration prerequisites
3. Automate you catalog management
4. Automate your order management
5. Automate your after-sales service
6. Automate your accounting
7. Test your API integration using Postman
8. Integration error reports

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Introduction

About the API Integration method

ABOUT THIS GUIDE

The purpose of this guide is to present the APIs integration method for sellers. We will go through the main interactions between sellers systems and the Marketplace. In addition to this document you will have access to a technical documentation to build the APIs integration with your IT system. This integration method requires some technical resources.

WHAT IS AN API?

An API (Application Programming Interface) is an interface provided by a computing program. It allows independent programs to interact with each other. In other words it enables sellers to seamlessly manage their Marketplace activity with their overall ecommerce activity.

WHY USE THIS THIS INTEGRATION METHOD?

Thanks to Mirakl Seller APIs, sellers can automate their catalog, their orders and customer care management. It will increase their sales efficiency with no additional charge on the teams. It can also improve their overall quality of service by decreasing customer response time.

DO WE HAVE TO AUTOMATE EVERYTHING?

APIs are made to ease Marketplace daily operations. Depending on your level of autonomy you can automate part or all of your activity on the marketplace. For example, you can automate offers and orders but upload products manually with an excel file.

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Global view on APIs flows

Mirakl Seller APIs allow you to automate 4 main parts of your activity on the marketplace:

- Shop information
- Catalogue: products & offers
- Orders management & shipping information
- Accounting management

You are free to integrate part or all the APIs related to these 4 topics.

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API integration prerequisites

Choice of APIs & strategy of integration

Mirakl provides different automation methods, you can use either one depending your IT system:

→ If you are using **Magento 1**, Mirakl has developed a connector that will enable you to automate your products and offers very rapidly. This integration does not require any technical skills. Note that the order management is not available yet in the connector. If you want to automate your orders management, you can combine this method with one of the following methods.

Ask the Magento 1.9 Connector Documentation to your operator.

→ If your e-commerce solution is coded in **PHP** or **Java**, the operator will give you access to the **Mirakl SDK**. The SDK is a set of programming support tools that will help you integrate flows and Mirakl APIs more easily and rapidly, whilst decreasing your margin of error in your regular flows sent out. **To access Mirakl SDK, make the request to your operator.** The operator will then give you a link to your Artifactory account where the SDK is hosted.

→ If your e-commerce solution is not Magento or is not coded in PHP or Java, you will have to make all the **developments** to integrate the APIs yourself.

! The last two methods require development skills. If you don't have an IT department or if you don't want to use an external resource, you can opt for another integration method: manual, through file or FTP. Ask your operator for advice.

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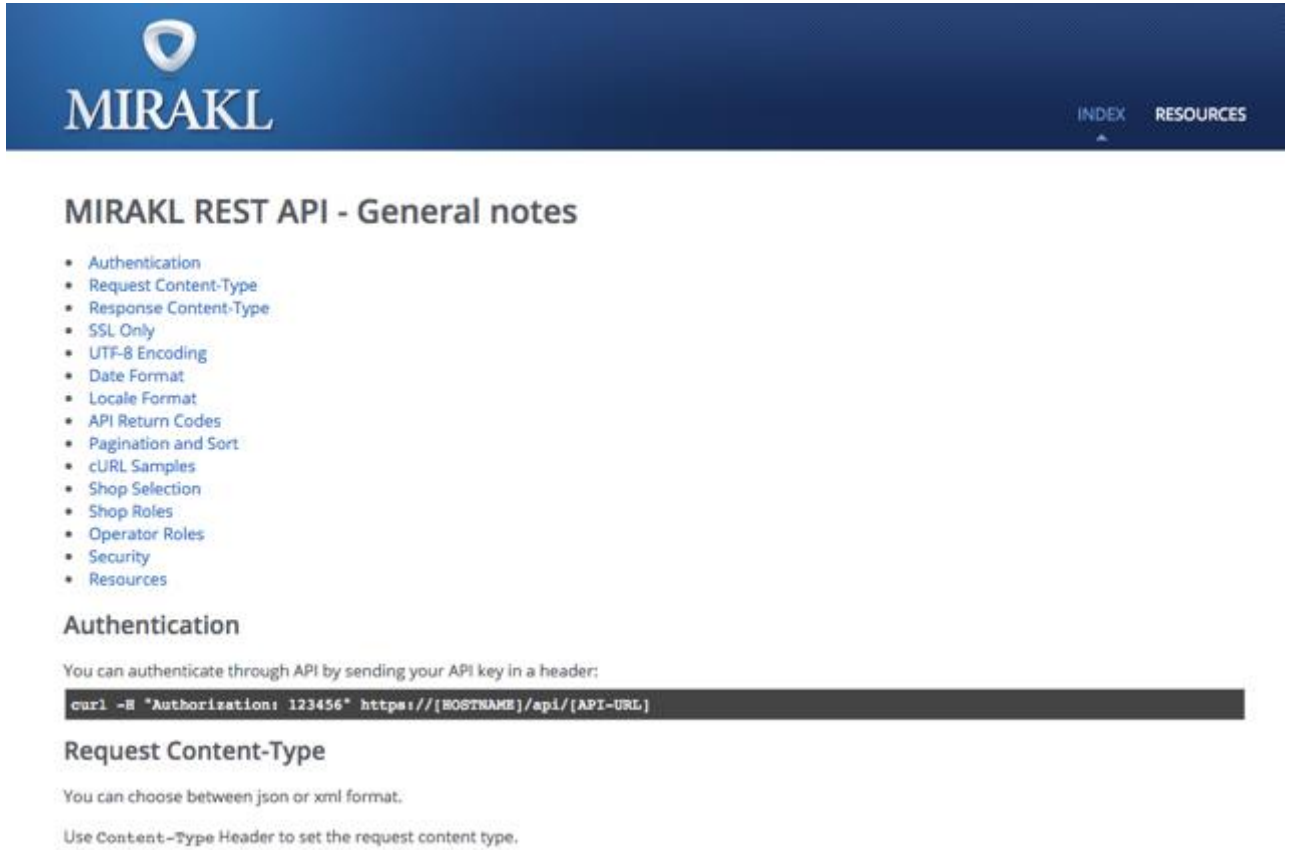
Get the technical documentation

If you are interested in integrating with Mirakl APIs, contact the Marketplace Operator for the complete set of technical documentation as well as the API collection.

The documentation contains everything you need to know for authentication, response types and codes, accepted formats and the detailed input and output for every API.



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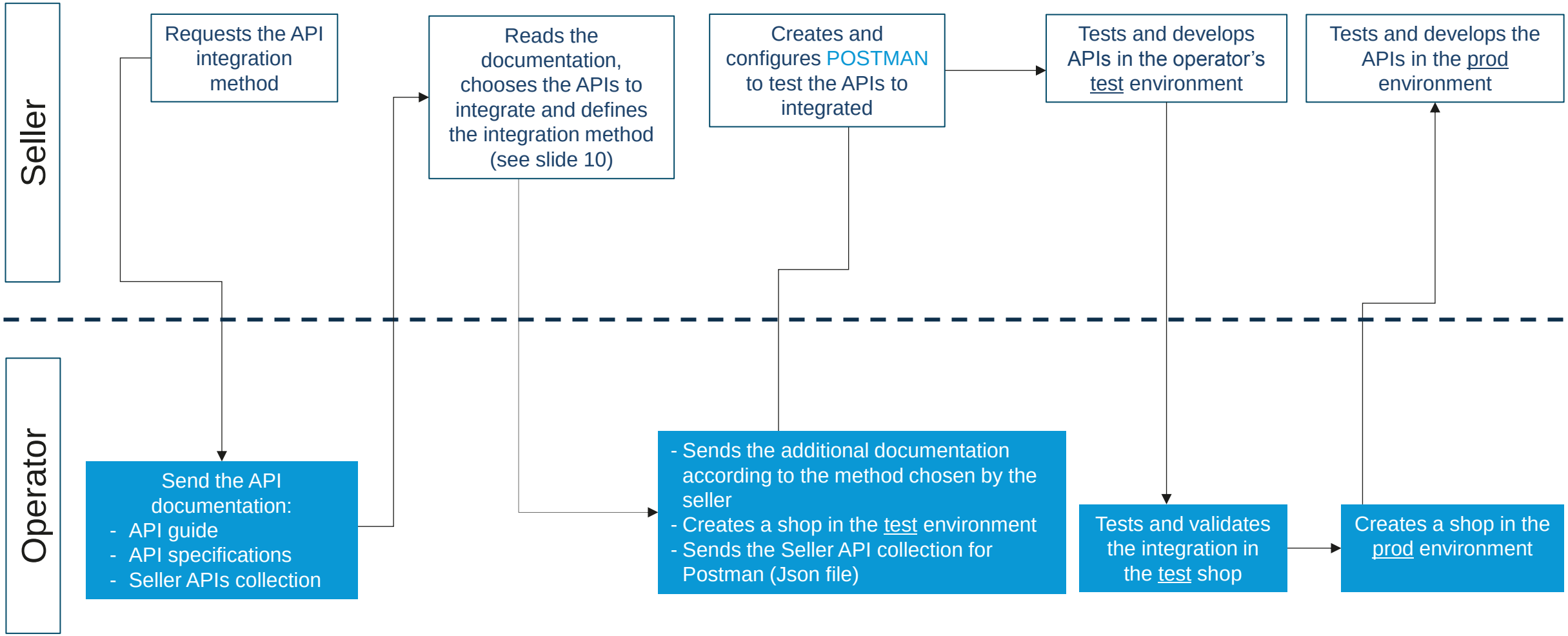
Understand the integration process



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In order to get started: get your API key

OBJECTIVE

The API key is unique for each seller. It gives you access to all the Mirakl Seller APIs. Do not communicate it to anyone.

SHOP API

Description

1. Log into your back office
2. Click on your username, in the top right, to access your user settings
3. In the tab “API key”, select “Generate” to create your own API key.

- Every operator has **2 environments**: **1 test environment** and **1 production environment**.
  As a seller, you will first integrate your APIs on the test environment, then, once your integration is validated by the operator, you will repeat the integration on the prod environment.

- An **API Key** is specific to an environment. You will have to generate an API key for the test environment and then, one for the prod environment.

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Automate you catalog management

Make the difference between « Product » and « Offers »

Product characteristics

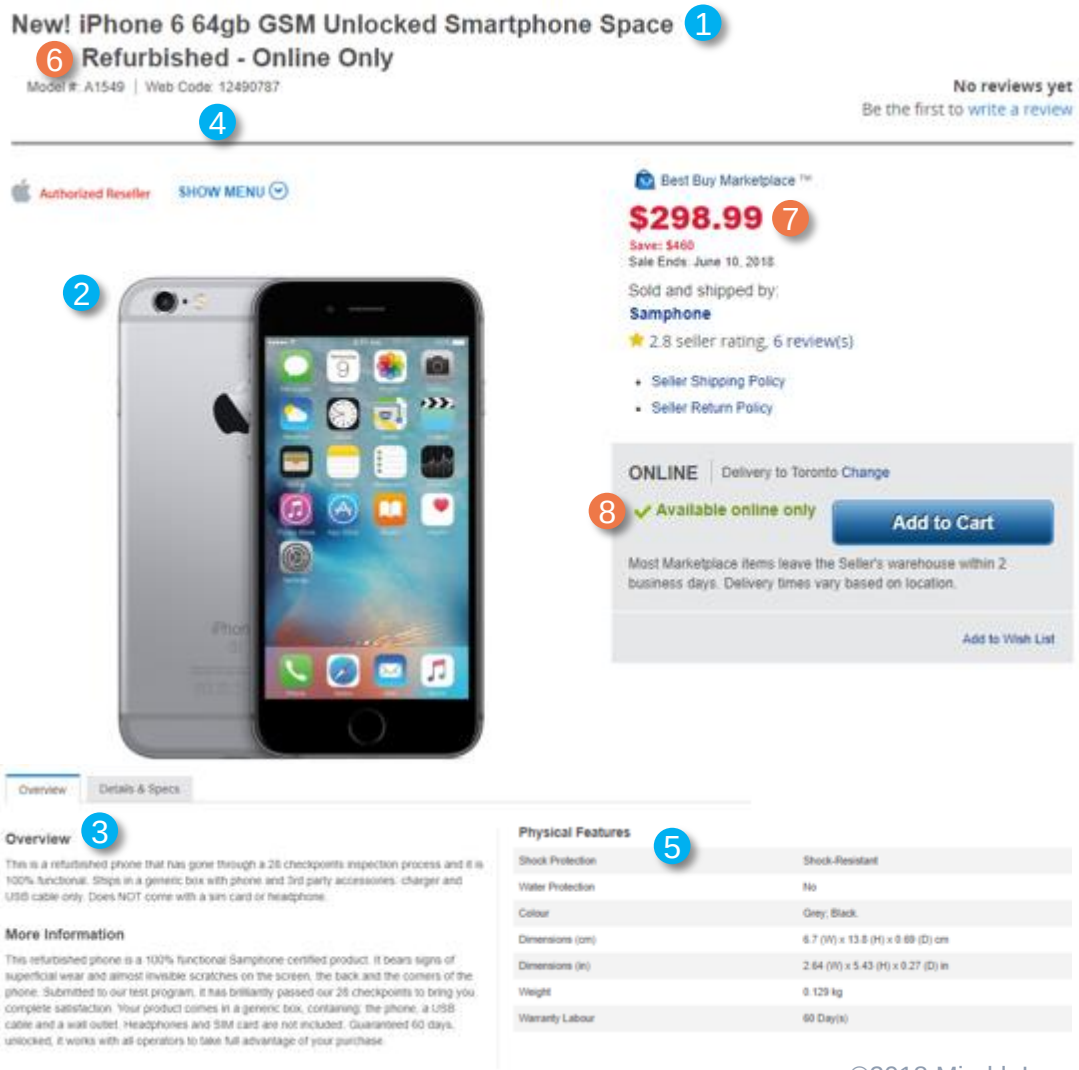
Every core features and characteristics of the product, they do not change from one seller to another:

1. Product name
2. Image(s)
3. Description
4. Product_ID / EAN / UPCs / ISBN…
5. Size / Color / Dimensions

Offer characeristics

All the info that are specific to each:

6. State of the product (new, second-hand, refurbished…)
7. Price
8. Available quantity



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APIs related to products

MIRAKL SHOP APIs

SELLER CATALOG

P41	Send products file
P42	Track catalogue import
P47	Get product feed transformation report
P46	Get transformed product file
P44	Get product integration report
P45	Get product integration error report

OPERATOR CATALOG

PX X — Main API

PX X — Optional API

*See the integration errors and solutions in slides 39-40

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Prerequisites to the products import automation: the mapping process

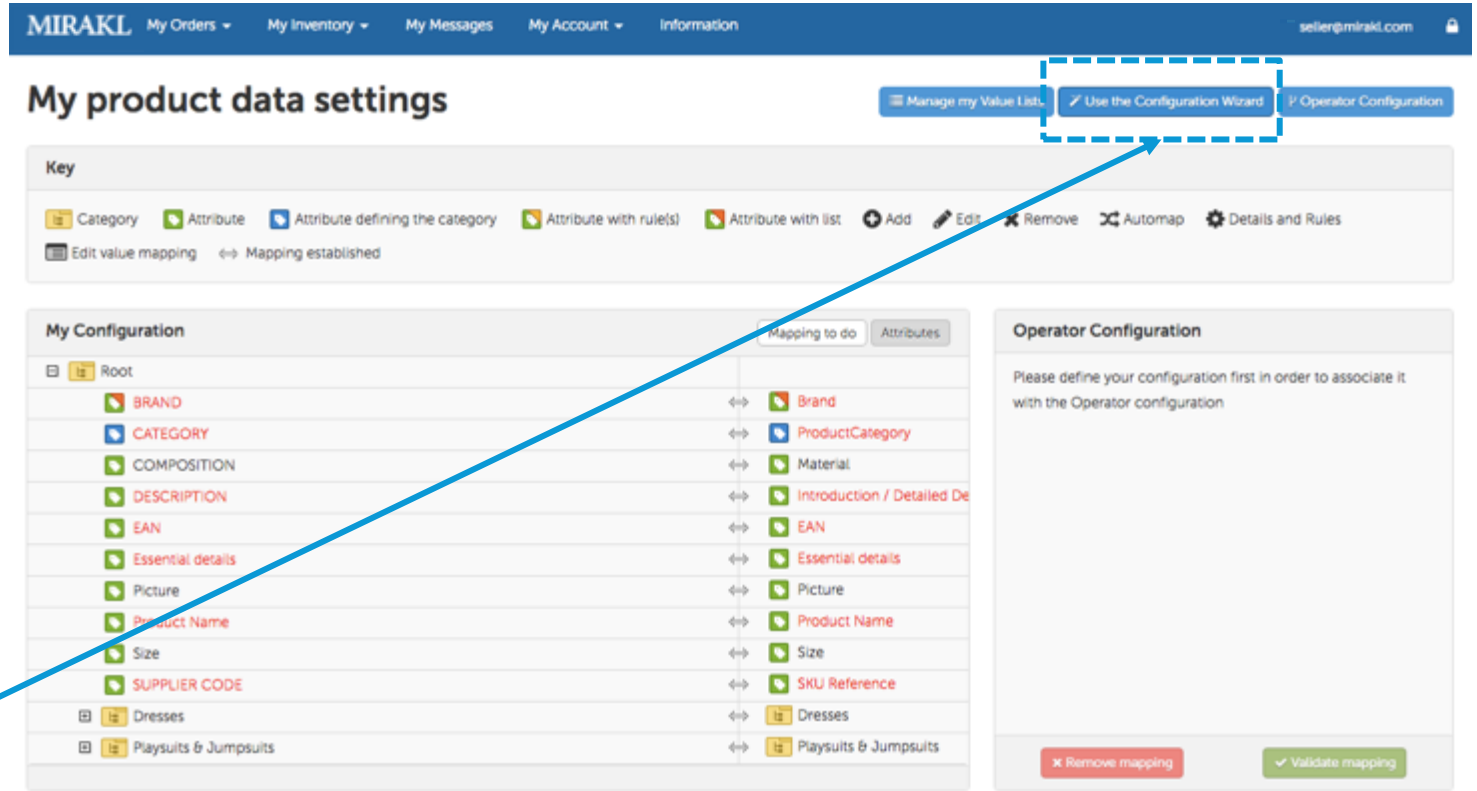
You must initialize the automation of your catalog by doing the mapping of your product format to the operator one. This action is required once and for all, unless you have new categories within your catalog. Once the mapping is done, you can import all your products directly by API.

Click on: ***Shop > Mapping Configuration > Use the configuration Wizard***

This is the last step of your Shop configuration. The goal is to define the mapping between our categories and your products' categories.

You need to repeat the process for each new category of product that you want to sell and which has not been mapped previously.

7 steps are needed for that mapping process.



Start the mapping process

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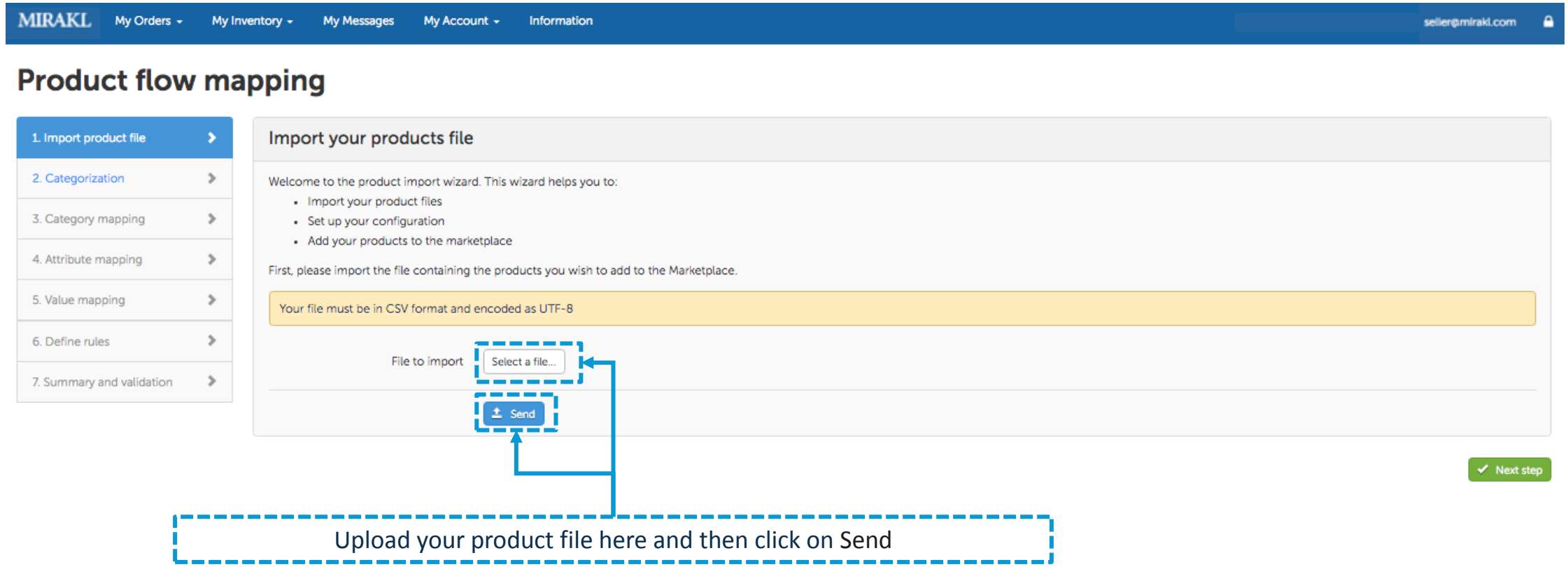
Prerequisites to the products import automation: the mapping process

Step 1/7: Import product file



Best practice: the file uploaded must be saved in Excel format or CSV format encoded in UTF8

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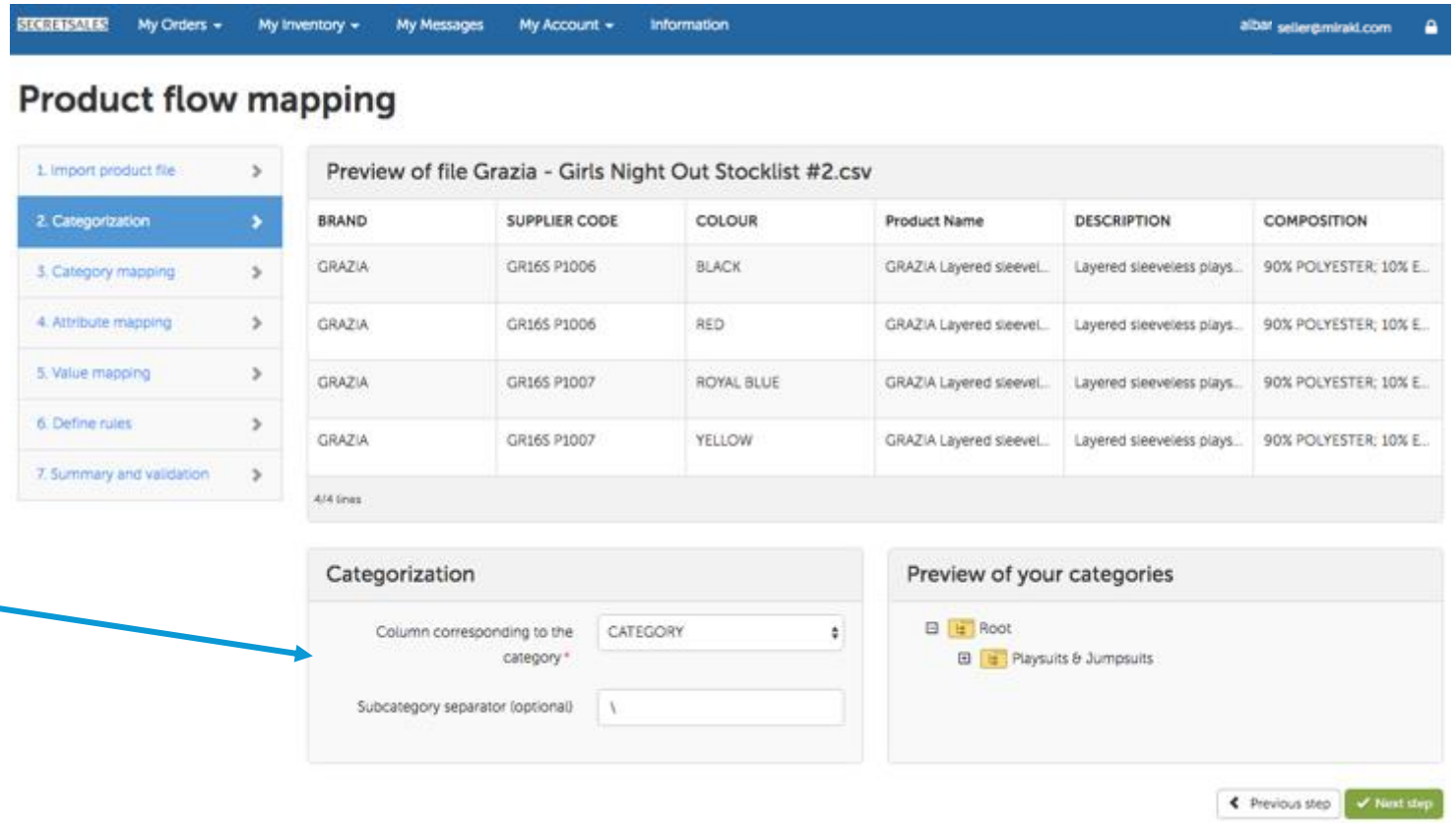
Prerequisites to the products import automation: the mapping process

Step 2/7: Categorization

Creating a category tree will allow you to add product descriptions by breaking them down into segments. You must place all your product categories in one column, which also includes the subcategory separator.



At the bottom of the screen, select:

- Category column’s name
- Define the type of separator.

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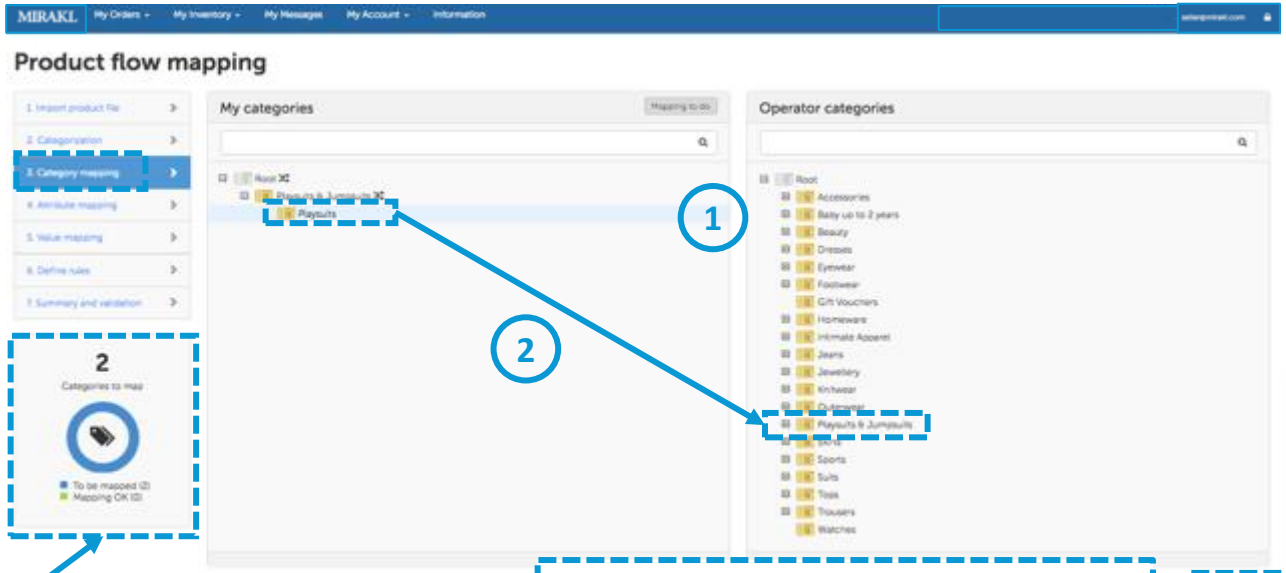
Prerequisites to the products import automation: the mapping process

Step 3/7: Category Mapping

Click on: Product data mapping > Category mapping

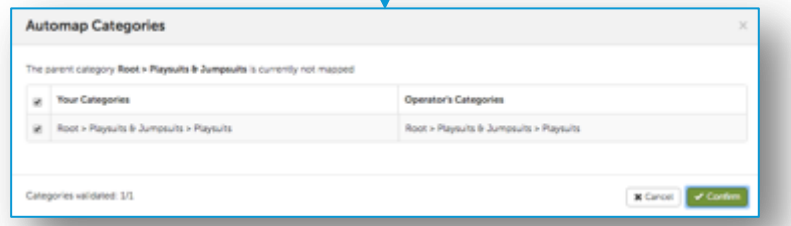
- By clicking on the “+” box, you open the categories: the lower level will appear. You must map each leaf level of your categories with the one of the the Operator. The platform will only allow you to map at leaf level.
- Categories with identical spelling can be mapped automatically by clicking on the Automap icon. For others you will have to do it manually by dragging the categories of your catalogue (left) to those of OPERATOR (right)
- Once a category is mapped, it will become a grey tint. To modify the mapping, click on « Mapping to do » then click on the cross next to the category you want to modify



The above graph shows you how many categories remain un-mapped

Drag & Drop the remaining categories from your catalog (left) to the corresponding categories of OPERATOR (right).

By clicking on the arrows, you'll run the auto-mapping of your categories. All categories spelled the same way will be recognized and mapped automatically. A pop-up opens with proposals, simply validate them by clicking on « confirm ».



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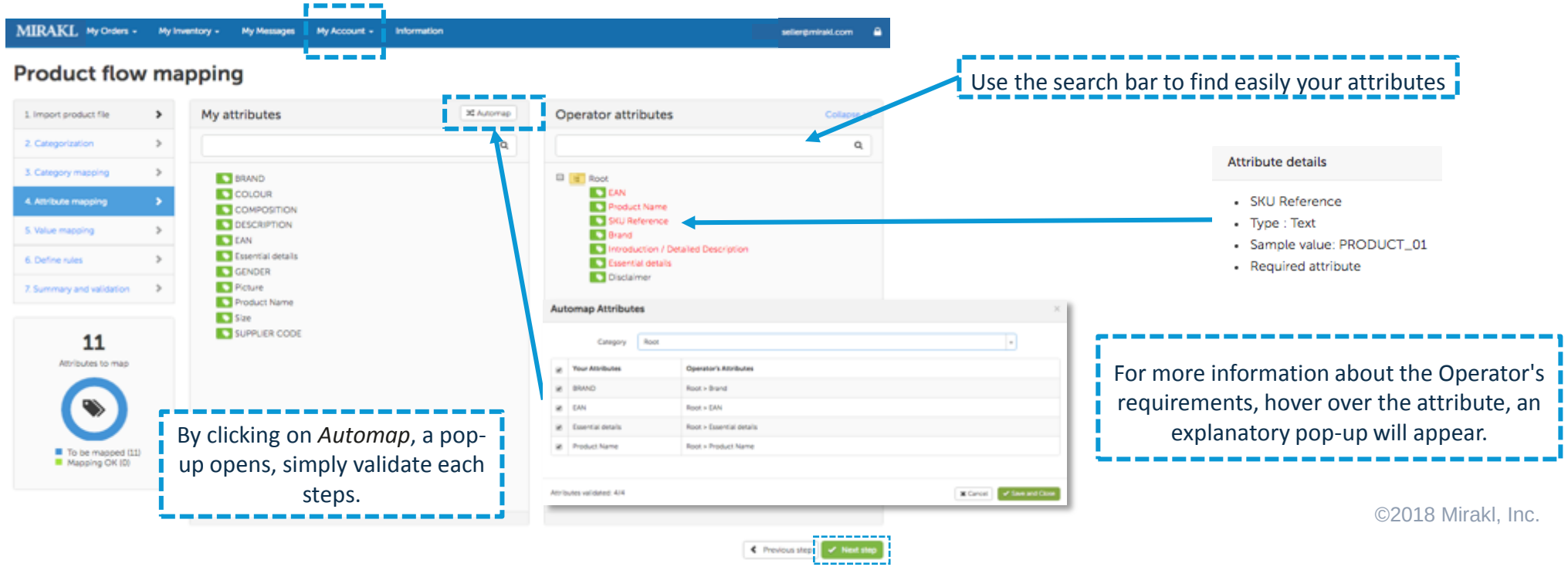
Prerequisites to the products import automation: the mapping process

Step 4/7: Attributes Mapping

Click on: Product data mapping > Category mapping

- By clicking on the “+” box, you open out each category: the lower level will appear. You must map each leaf level of your categories with the one of the the Operator. The platform will only allow you to map at leaf level.
- Categories with identical spelling can be mapped automatically by clicking on the Automap icon. For others you will have to do it manually by dragging the categories of your catalogue (left) to those of OPERATOR(right)
- Once a category is mapped, it will become a grey tint. To modify the mapping, click on « Mapping to do » then click on the cross next to the category you want to modify



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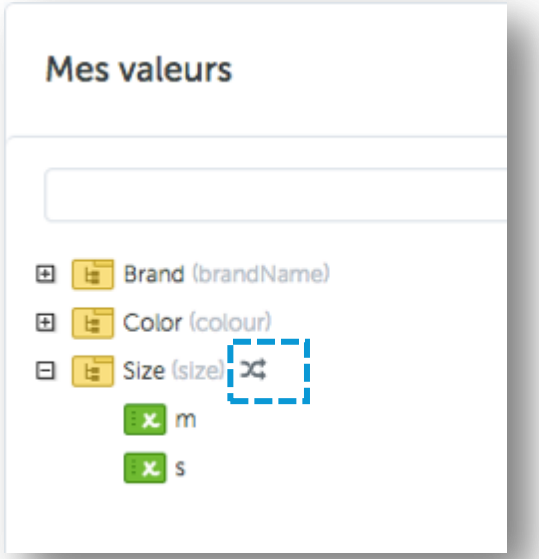
Prerequisites to the products import automation: the mapping process

Step 5/7: Value Mapping

Click on: Product data mapping > Value mapping

In the same way that for the attributes, values with identical spelling can be mapped automatically by clicking on the Automap icon. For others you will have to do it manually by dragging values of your attributes (left) in those of OPERATOR (right)



The list of values 'Brand' is predefined and it is possible that one of your brands is not registered.
In that case, please email to marketplace@OPERATOR.
Specify in the subject line «New brands to create » and in the email body, a list of your missing trademarks

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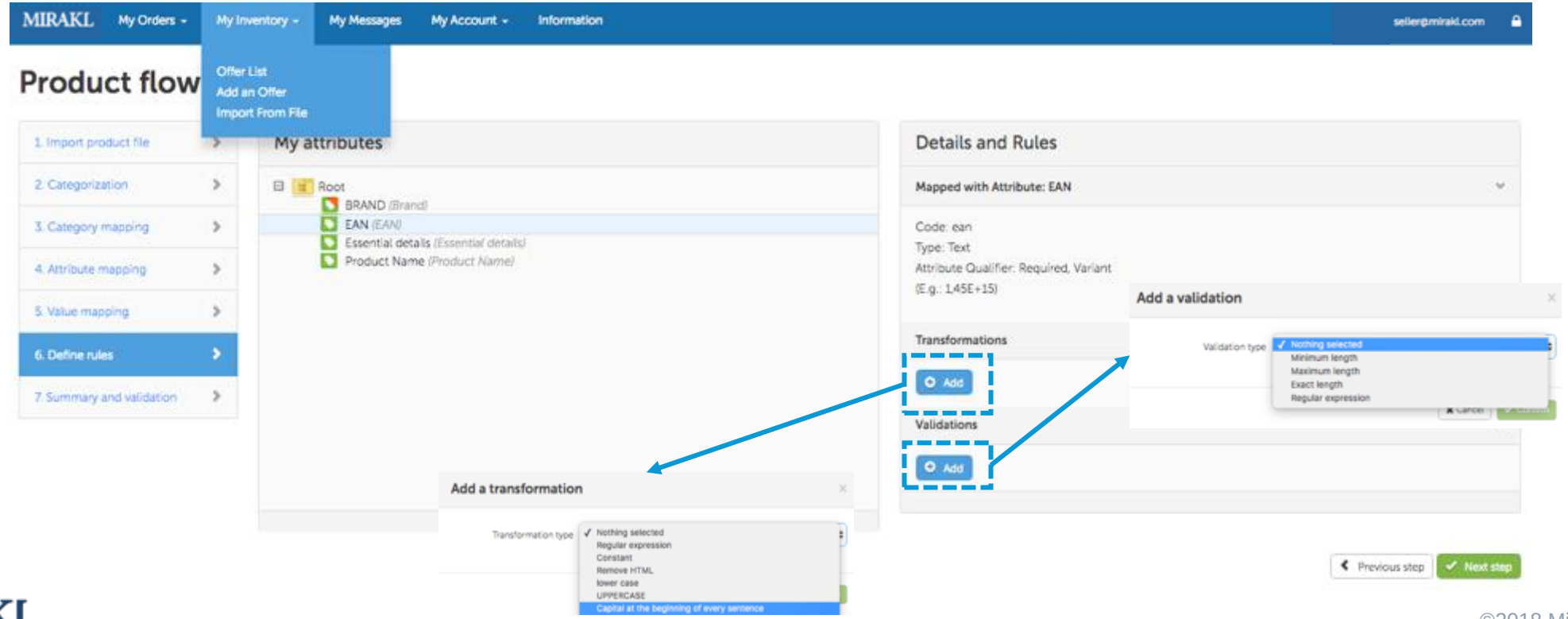
Prerequisites to the products import automation: the mapping process

Step 6/7: Define rules

Click on: Product data mapping > define rules

You can transform or validate the contents of your attributes at this step.

Example: Automatically add a capital letter at the beginning of each sentence for the attribute “Introduction / Long description”: *Transformations > Capital at the beginning of every sentence*.



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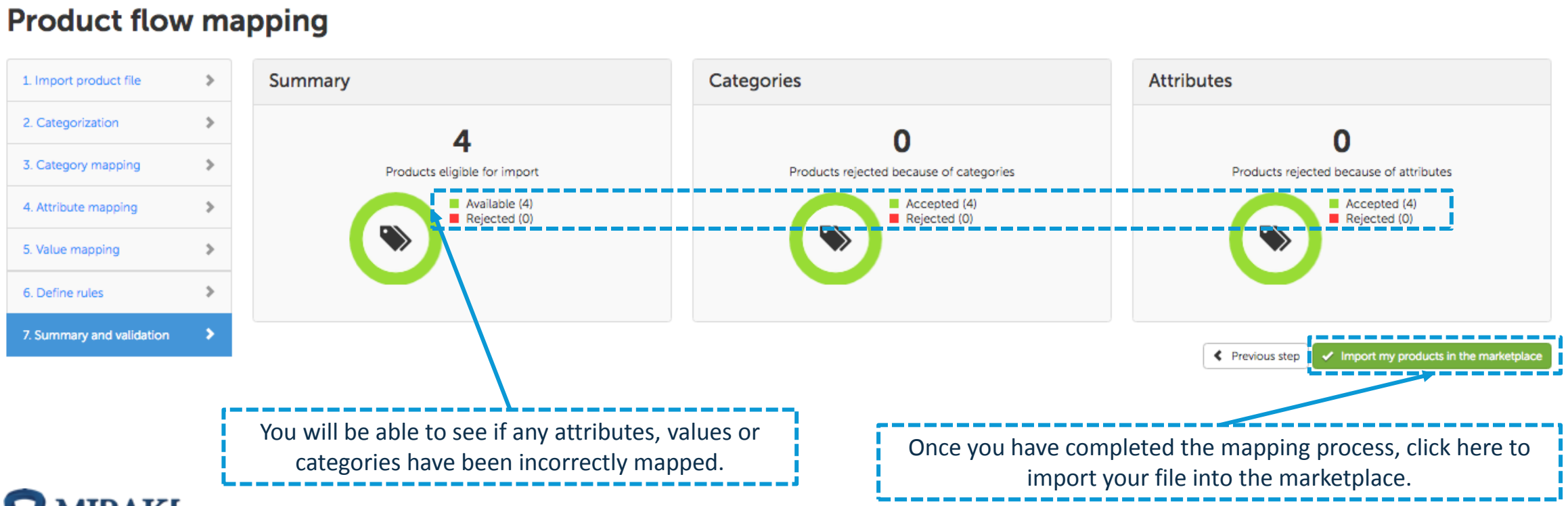
Prerequisites to the products import automation: the mapping process

Step 7/7: Summary and validation

Click on: Product data mapping > Summary and validation

Finally, before importing the catalog, you can review the steps to see if the data has been accurately imported.

If some categories, attributes or values are rejected, you will have to start that phase of the mapping process again. To do so, simply click on previous step



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APIs related to offers

MIRAKL SHOP APIs

SELLER CATALOGUE

OF 01	Import offers (create, update, delete) via a CSV file available on the platform
OF 02	Get the offer integration status
OF 03	Get the offer integration error report*
OF 21	List all the offers of one shop
OF 22	Get information about one offer
OF 24	Update offers (Json / XML)
OF 61	Get the offers' status list

OPERATOR CATALOGUE

OF xx — Main API

OF 00 — Optional API

*See the integration errors and solutions in slides 40-43

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! The format of the offer file is defined by the operator. See the fields and their status on the next slide. You can download the offer file from your backoffice: *My inventory > Download an Excel file template for offers.*

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Offer file upload: Mandatory fields

There is no mapping on the offer file, you must ensure that you fill the fields as shown below:

Field	Description	Status	Accepted Value	Example
sku	The offer's unique identifier in the shop	**Required**	Character string limited to 40 characters. The character '/' is forbidden	OFFER_SKU_1
product-id	Unique product identifier for a given product-id-type	**Required**	Character string limited to 40 characters	98987DC
product-id-type	Type of product-id identifier	**Required**	Value: SKU (product SKU) ,ISBN, UPC, EAN, SHOP_SKU,…	SKU
price	Original Recommended Retail Price (RRP) in GBP including taxes (VAT).	**Required**	Decimal number; a period is used to separate cents	45.50
state	The state **code** of the offer. This refers to whether the product is New or Vintage.	**Required**	The accepted values are defined in the back office view	See available values in the BO
quantity	The quantity available in stock	**Required**	Integer greater than or equal to 0	100
product-tax-code	The tax code associated to your products	**Required**	Text from the Avalara tax code list	PF050900

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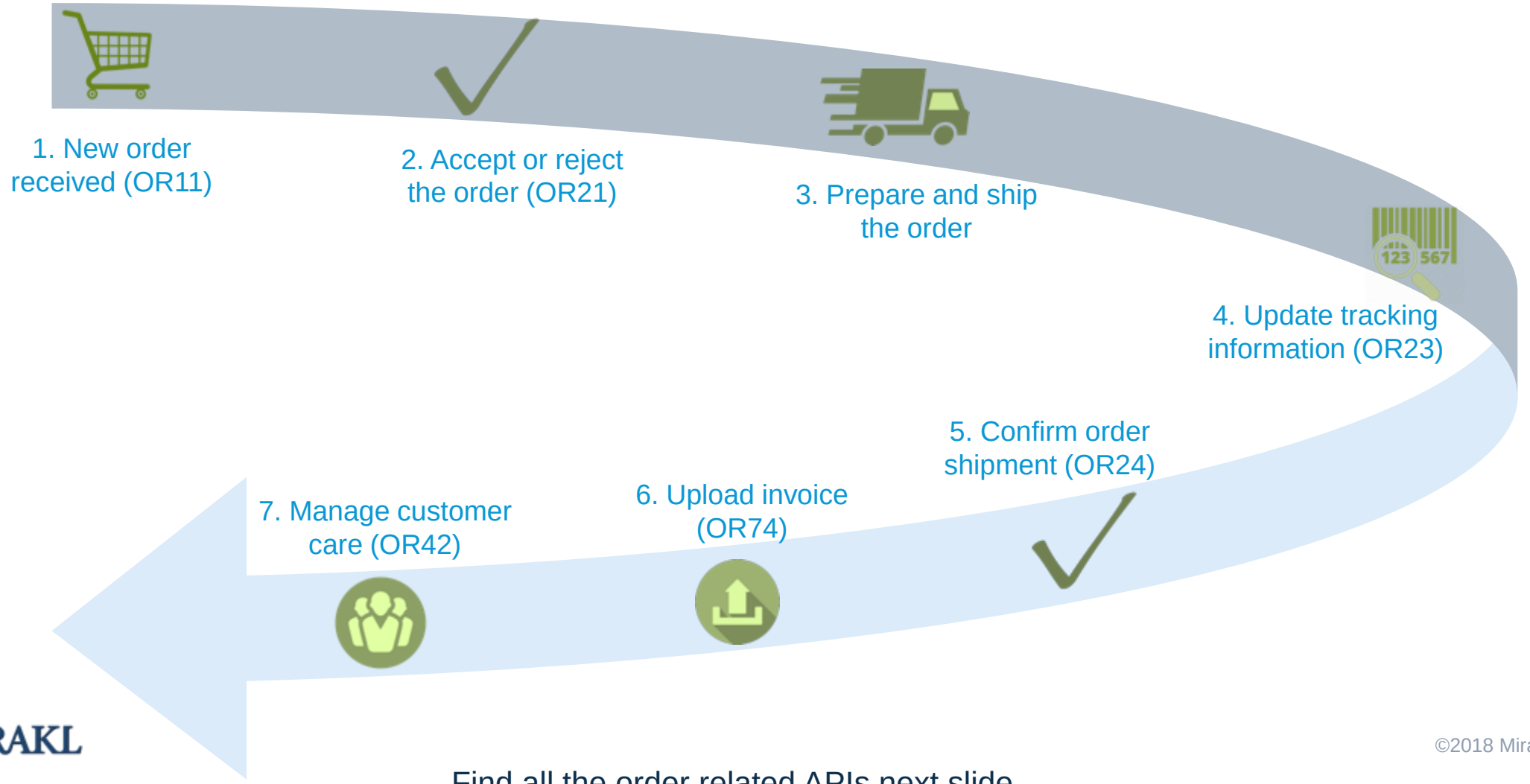
Offer file upload: optional fields

There is no mapping on the offer file, you must ensure that you fill the fields as shown below:

Field	Description	Status	Accepted Value	Example
discount-price	Discount price in the currency	**Optional**	Decimal number; a period is used to separate cents	30.15 (lower than “price” field)
min-quantity-alert	The minimum quantity in stock threshold triggering an alert. An alert is not triggered if blank	**Optional**	Integer greater than or equal to 0	10
description	Offer description	**Optional**	The offer description is limited to 2000 characters	New product, original packaging
internal-description	The description of the offer as shown in the back office view	**Optional**	The offer’s internal description is limited to 2000 characters	
available-start-date	The first day the offer becomes available The offer has no start date if blank	**Optional**	yyyy-mm-dd	2012-11-27
available-end-date	The last day the offer is available The offer has no end date if blank	**Optional**	yyyy-mm-dd	2013-03-16
logistic-class	This will overwrite the default logistics class defined for the product category assigned to the offer.	**Optional**	Technical code of the logistic class. BO > Informaiton > Shipping charges > value in ()	Ex: SP (small package)
favorite-rank	Define offer as favorite and set its rank value. This affects its positioning in shop window The offer will not be part of the favorite if blank	**Optional**	Integer other than 0	1
discount-start-date	The first day the offer becomes available The discount starts immediately if the discount price is filled and the start date is blank.	**Optional**	yyyy-mm-dd	2012-11-27
discount-end-date	The last day the offer is available. The discount has no end date if blank	**Optional**	yyyy-mm-dd	2012-12-27
discount-ranges	The discount quantity thresholds and prices to define discounts with ranges	**Optional**	quantityThreshold1|price1,quantityThreshold2|price2	2|9.00,10|8.50
Leadtime-to-ship	Time to prepare an order	**Optional**	Number of days	5
update-delete	Used only in Normal import mode Update mode is used if blank	**Optional**	"", "update", "delete"	update

Automate your order management

The Order cycle on a marketplace



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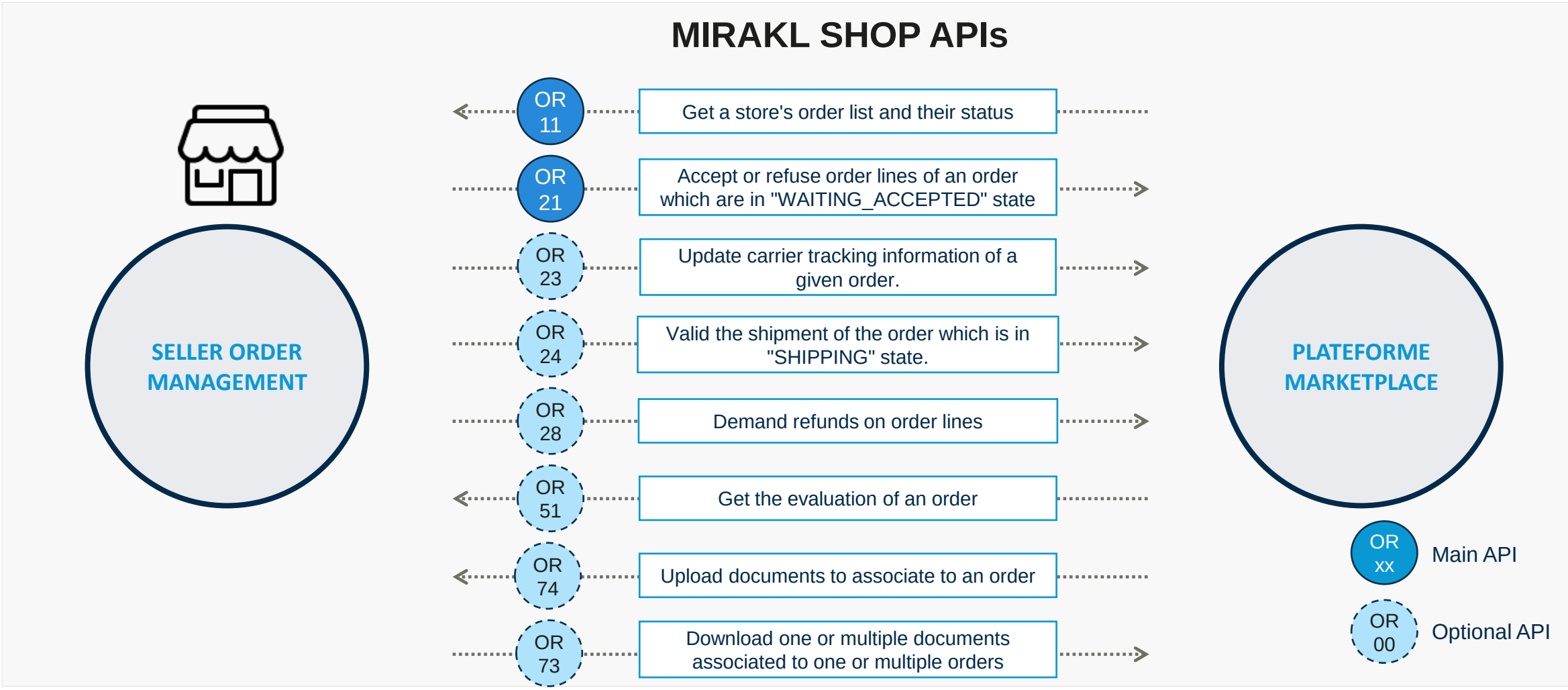
Find all the order related APIs next slide

APIs related to orders



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! If you do not want to automate your order management, you will still be able to track and process your orders from your Mirakl seller backoffice.

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Automate your after-sales service

APIs related to After-Sales management

MIRAKL SHOP APIs

- Messaging APIs enable the seller to communicate with a client or to answer a question about an order or his offers on the marketplace. Messages can be sent to the operator, the customer or both.
- If you do not want to automate your order management, you will still be able to track and process your orders from your Mirakl seller backoffice

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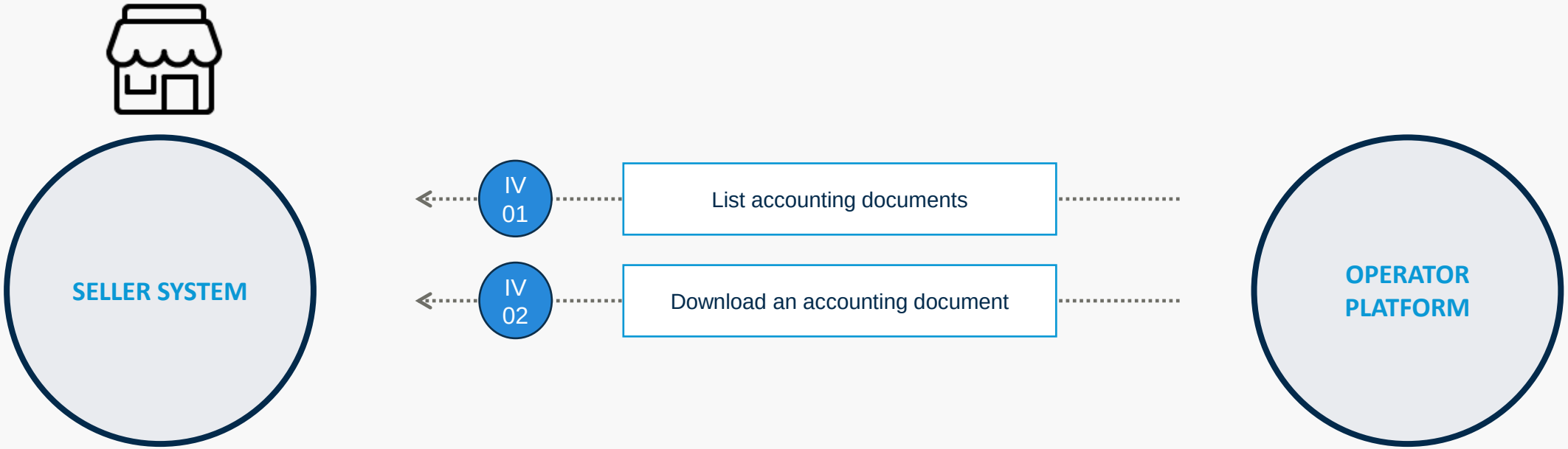
Automate your accounting

APIs related to Accounting



! You can retrieve all your invoices, credit notes and transaction history in your Mirakl seller backoffice.

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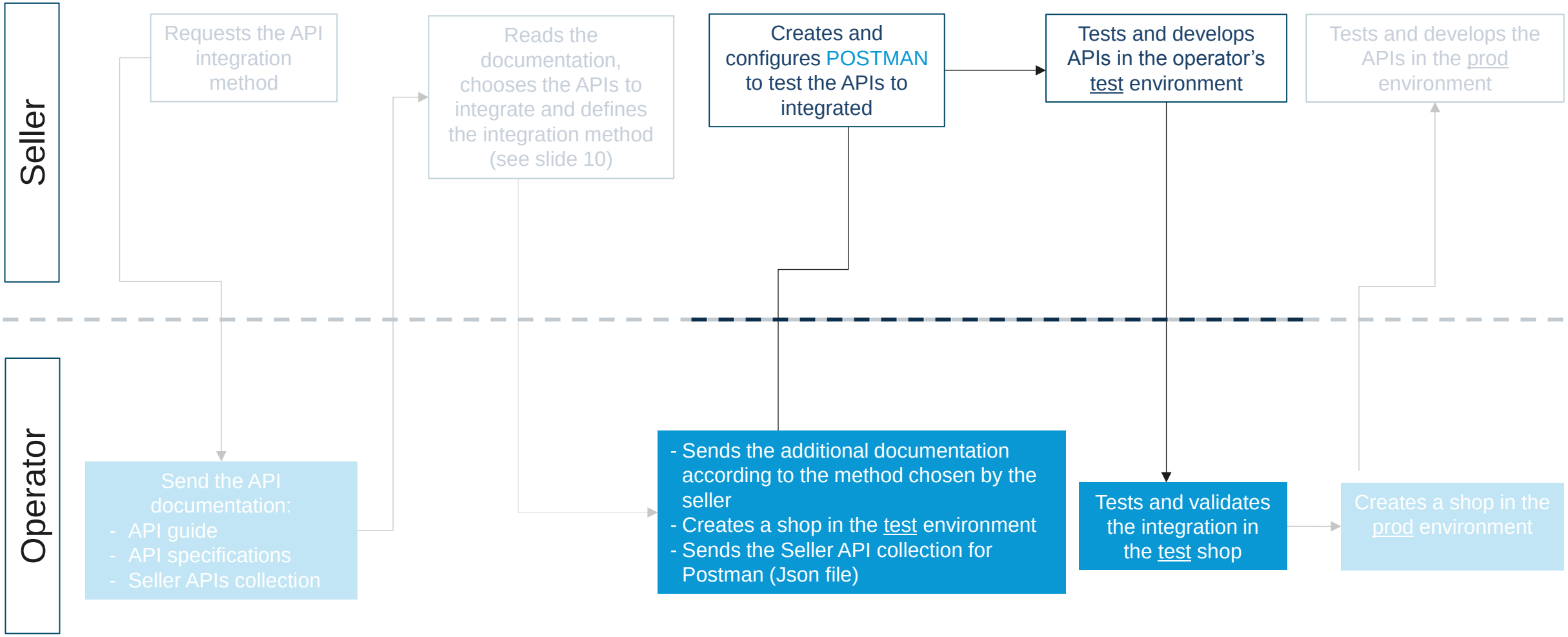
Test your API integration using Postman

Test your API integration using Postman

After reading the API documentation and defining your integration strategy, you can test all these APIs with Postman.

It will help you define which APIs you want to implement to automate your activity on the marketplace.



About Postman

About Postman

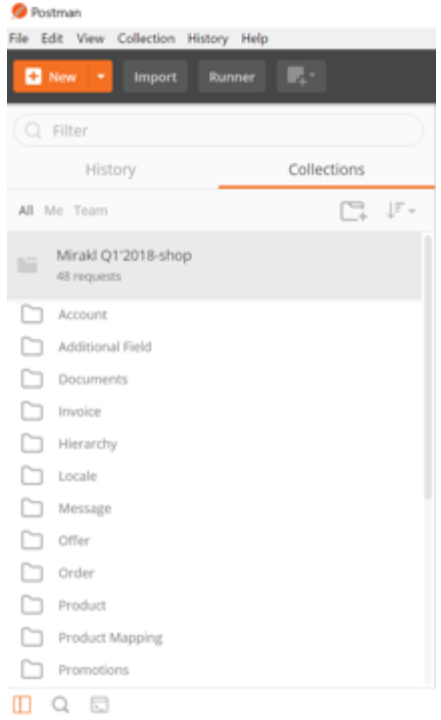
Postman is a third-party software that has not been developed by Mirakl. It allows testing API calls easily and efficiently.

Thanks to Mirakl API collection that can be imported in Posmtan, you will be able to test your API integration. Ask your operator the full API collection (under the format Json).

Use Google Chrome for Postman.

Install Postman and import the Mirakl API library:

1. On Chrome, click on this link
2. Download Postman and follow the installation instructions
3. Start Postman
4. In the Postman toolbar, click on « **Import** ». The import window appears.
5. Click on « **Choose Files** » to import the Mirakl API collection (Json file). The Mirakl collection appears in the Collections list:



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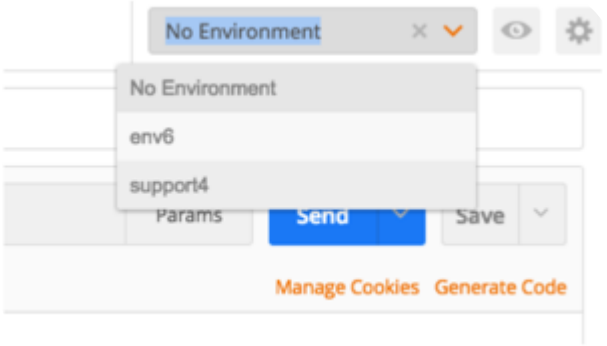
Configure Postman

You must use Postman with the test environment of the operator.

1. In Postman, click on and select **Manage Environments**. A window appears.
2. Click on **Add** and enter a name.
3. Click on the field ”**key**” and enter:
    1. the FRONT_KEY (ask for it to the operator)
    2. the OPERATOR_KEY (ask for it to the operator)
    3. the SHOP_KEY (that you will find in your backoffice: My user settings > API Key)
    4. the URL (the URL of the operator test environment (e.g. https://dev-new.mirakl.net)
4. For each API key, enter the value in the “**value**” field.
5. Click on **Add** and close the window "Manage Environments".
6. Click on the drop-down list **No Environments** and select the environment that you just set up.

You can now start testing Mirakl APIs.



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Example of tests

You can test your integration with **Postman**, with the help of the operator, in his test environment.

Here are some basic actions related to your activity on a marketplace that you can automate:

1. Before importing your catalog, check the operator category tree, thanks to the API **H11**, the mandatory and optional attributes related to the categories with **PM11**, and the value lists associated with **VL11**.
2. Adapt your product format consequently, **then proceed to the mapping with the operator product format, in our backoffice**: *My inventory > Import Importer products in your format > Open the Configuration Wizard*. (see slides 15 to 23 of this guide)
3. Import our catalogue thanks **P41**. Download the information related to the import as well as the error report with **P42** and **P44**. See slides 39 and 40 to correct the errors in your file.
4. Import your offers with **OF01**: **to do so, download the operator offer format in the backoffice**: *My inventory > Import Importer products in your format > Download an Excel file template for offers.* Download the information related to the import as well as the error report with **OF02** and **OF03**. See slides 40 to 43 to correct the errors in your file.
5. Once your catalogue has been correctly imported, ask the operator to create a test order in your shop.
6. Get the order with **OR11**, accept it with **OR21** and confirm shipping with **OR24**. You can download then upload the documents related to one or more orders thanks to **OR73** and **OR74**.
7. Ask the operator to send a test message on the order.
8. Get the message with **M01** and answer to it with **OR42**.
9. Ask the operator to create a test incident on this order.
10. Proceed to the full or partial reimbursement of this same order, thanks to **OR28**.

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! All the Shop APIs are not described in this example. See the technical documentation to see all the available APIs. Reminder: You can automate part or all you activity on the marketplace. You can choose the APIs you want to integrate.

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Error reports on products and offers imports

Error report on products (1/2)

In order to download the Product Import Error report, call P45.

Code	Error message	Cause / Solution
1004	"Category could not be identified"	The column which must contain the Catalog category is not specified in the file or not detected. **Solution**: Check if the attribute name is properly written in the header of the file (without space character).
1005	"Hierarchy has to be mapped to a leaf operator hierarchy"	Sellers can only create product on the leaf operator Catalog category. **Solution**: Sellers must change their mapping configuration to map their catalog categories to your leaf catalog categories.
1006	"Hierarchy has to be mapped to an operator hierarchy"	The seller's catalog category is not mapped to your catalog category. Mapping is mandatory for the seller to import his/her product. **Solution**: In the back office, map your catalog category to operator catalog category.
1100	"Internal error"	Another error occurred. **Solution**: Create a ticket on the support portal.
1001	"Category is unknown"	This catalog category informed by the seller does not exist or is not properly written. **Solution:** - if the category exists, your seller should check whether it is properly written (without space character) - or if the category does not exist, the seller must create its category and map it to your category (from the back office)

Error report on products (2/2)

Code	Error message	Cause / Solution
1000	"Attribute is required"	A required attribute has no defined value. Solution: In the imported product file, enter a value for this attribute.
2001/3001	"The attribute {a} must be superior to {x}"	The value is lower than the configured value. Solution: In the imported product file, enter a value higher than {x}.
2011/3011	"The attribute {a} must be a numeric"	The value is not numeric. **Solution:** In the imported product file, enter a numeric value (e.g. 1, 5, 45).
2012/3012	"The attribute {a} must be a date"	The value is not a date. **Solution:** In the imported product file, enter a date value.
2014/3014	"The attribute {a} must be a valid URL"	The value is not an URL. **Solution:** In the imported product file, enter a URL value.
2015	"The attribute {a} is not a supported file"	The mentioned file is not supported. Only happens for media type attribute. **Solution:** The value must refer to a file type such as: .pdf, .jpg, and so on.
2016/3016	"The attribute {a} must be a numeric with at most {x} decimals	There are more decimals than allowed. **Solution:** In the imported product file, enter a value with no more than {x} decimals.

Error report on offers (1/2)

In order to download the Product Import Error report, call OF03.

Error Message	Cause / Solution
The product linked to the new offer is different from the product linked to the existing offer.	You are trying to change the product linked to an existing offer. **Solution:** You must delete the existing offer, wait for the offer-product assignment delay to be over, and recreate the offer on the new product.
The product linked to the new offer is different from the product linked to an old offer which has the same shop id.	You are trying to create an offer using the ID of a deleted offer. The new offer is linked to a different product than the product the deleted offer was linked to. There is a waiting period defined by the operator before you can create the new offer. **Solution:** You can create the new offer with another ID to avoid waiting. For more information, refer to: Offer Stock Keeping Unit.
The product does not exist	In your file, you must indicate the "product-id" and "product-id-type" to match your offers with the product. If you got this error message, it is because no product with this identifier exists in Mirakl. **Solution:** - check with the operator to make sure the type of the identifier is correct (it can be EAN, ISBN, SKU, SHOP_SKU...) or if the product has been correctly created by the operator - you can use API P31 to check if the product exists with the couple "product-id|product-id-type"
This import type does not allow the use of the 'update-delete' column	You cannot use the "update-delete" column with the current import mode. **Solution**: Use the "NORMAL" import mode to use the "update-delete" column in your file.

Error report on offers (2/2)

Error Message	Cause / Solution
No existing offer to update	You are either: - using the "UPDATE" mode to import the offers and the offer SKU does not match an offer existing in Mirakl - trying to create an offer but the "product-id" and/or "product-id-type" headers are not entered correctly or do not exist **Solution** - Check if the SKU is correct or use the "NORMAL" mode to add the offer. - Refer to: Importing offers from the back office or using API.
The state of the product is unknown	The product state you entered does not exist. **Solution:** - You must enter the state code, not the label. Check if you properly filled the state code and not the label. - Call API OF61 to get the list of all states allowed by the operator.
The 'price' field is mandatory	The "price" field is not found in the file. This information is mandatory to create an offer. **Solution**: If you have added this field, check if it is properly written.
The 'sku' field is duplicated in the source file	The sku already exists in the file. **Solution:** You cannot duplicate a sku in the file.
The logistic family is unknown	The logistic family you entered does not exist. **Solution**: Specify an existing logistic family.
The available date range is incorrect	The correct format of each date is "yyyy-mm-dd". **Solution:** Check if: - the date format is "yyyy-mm-dd“ - the start date is prior or identical to the end date
The discount date range is incorrect	The correct format of each date is "yyyy-mm-dd". **Solution:** Check if: - the date format is "yyyy-mm-dd“ - the start date is prior or identical to the end date

Error report on offers (3/3)

Error Message	Cause / Solution
The discount price is incorrect: must not be null or must be lower than price	You cannot specify a discount price equal or greater than the original offer price. **Solution:** Check if the discount price is strictly lower of the offer price. If you get this message during price update, first check if any discount is still associated to the offer. • if yes and if the promotion is outdated, remove it before update the price • if not or if the promotion is still relevant, adjust the price and the discount together
This product is not available for sale	The operator has temporarily or definitively decided not to sell this product. **Solution:** Contact your operator.
The 'price' field has an invalid range	The price of your offer is lower or greater than the limit price set by the operator. **Solution:** Contact your operator. Ask for the limit and adjust the price of your offer.
The 'discount_price' field has an invalid range	The discount price of your offer is lower or greater than the limit price set by the operator. **Solution:** Contact your operator. Ask for the limit and adjust the discount price of your offer.
The mandatory additional field is missing	The mandatory additional field set by the operator is missing in your file. **Solution:** Call API AF01 to get the list of available additional fields.
The 'leadtime-to-ship' field has an invalid value. The value must be a positive integer and must not exceed the limit defined by the operator.	The "leadtime-to-ship" field value is incorrect. **Solution:** - change the value of the "leadtime-to-ship" field - ask the operator about the maximum value
The 'product-id' field is mandatory when 'product-id-type' is filled	The "product-id" and "product-id-type" fields are linked together and cannot be separated. The "product-id-type" is used to know the type of the product reference you filled in the "product-id" field.

Thank you