Structure of (User Guide WooCommerce Connector)

Outline

Implementation

User Guide WooCommerce Connector

Outline

WooCommerce is a free WordPress eCommerce plugin that allows you to easily construct an online store and sell your products. The Odoo WooCommerce Connector is important when you use Odoo to run your backend operations in addition to having a WooCommerce shop. The Odoo WooCommerce Connector will assist you in integrating and managing your WooCommerce store within Odoo. Import orders and customer data, update inventory, update order status, import and export products, product tags, product categories, coupons, and more. To make your life easier, automate operations like order import, stock update, and order status update.

Note: It is necessary to install the 'Odoo Base Connector' in order to utilize the functionalities of the WooCommerce Connector (particularly for Version 14 and 15).

Implementation

Download the Odoo WooCommerce Connector app from the Odoo store or Ksolves store. After successful download, add it to the Odoo Add-ons path or any desired path. Refresh the Odoo instance and go to the Apps tab in the dashboard. From the menu, select the Update Apps list.

After it completes loading, the Odoo WooCommerce will be displayed in the Apps. Select the install button, now you are ready to utilize the Odoo WooCommerce Connector in your Odoo.

1. **Odoo WooCommerce Connector Setup**

   1.1 Instance Configuration

After installing the Odoo WooCommerce Connector, you will need to configure your WooCommerce instance. The instance is equivalent to a store in WooCommerce.

The first screen you will see is the engaging Dashboard. It shows some Bar charts graphics and equivalent convertible Line chart graphics. The Dashboard shows you how much data is synced either from Odoo to WooCommerce or WooCommerce to Odoo.

With an interactive dashboard, you can configure an instance easily. All the necessary tasks can be performed using the dashboard. Further, you can connect your Odoo WooCommerce connector to your WooCommerce store.
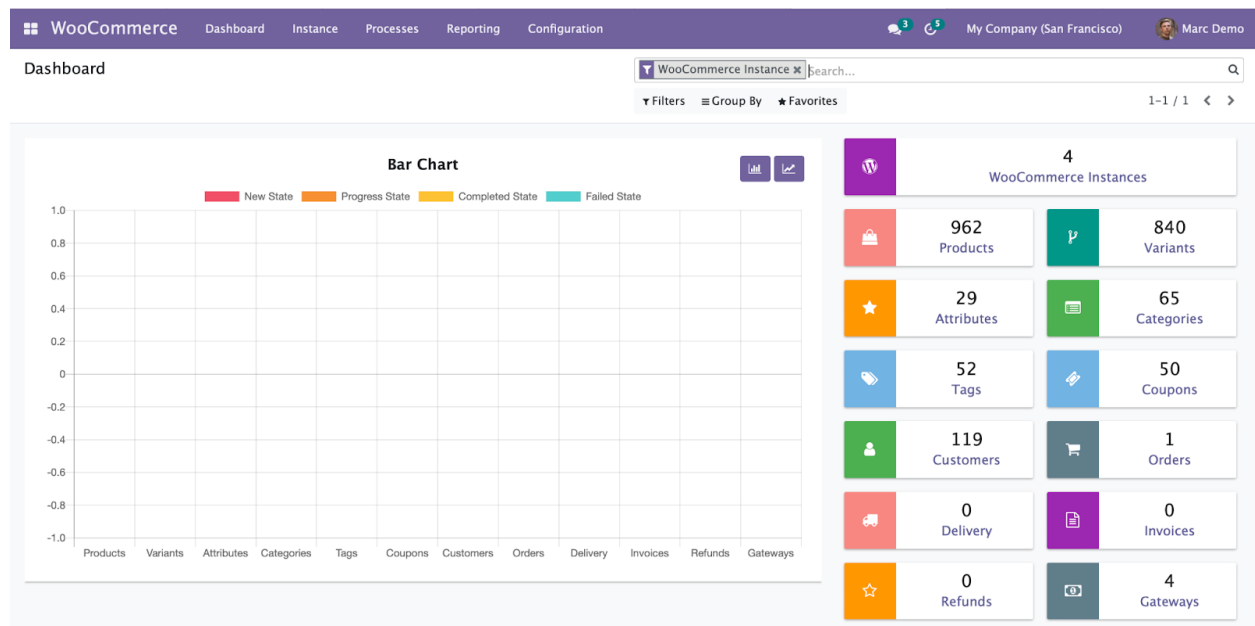
Click on "Instance" from the Woocommerce dashboard to begin the instance configuration process.

After clicking on the "Instance", a screen will appear as given below.
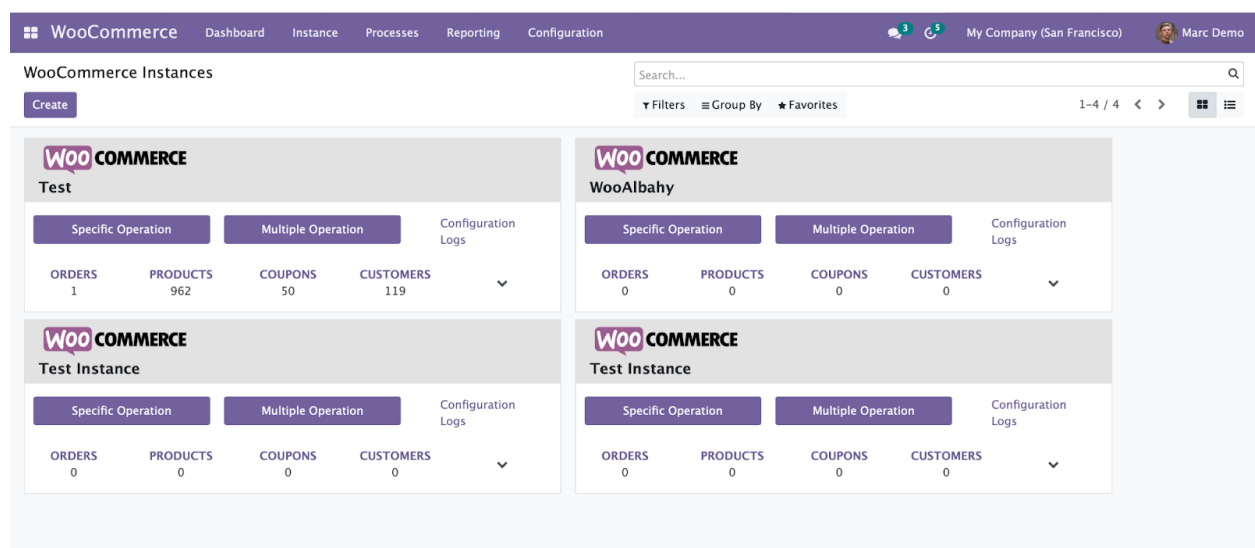
Click on the 'Create' button–it will take you to the next step, where you will be required to fill in all the necessary details.

You will be required to fill in the 'Instance Name' of your choice for further processing.

When you scroll down the screen, you will find an 'Authentication' tab.

Here, the fields of Store URL, Customer Key, and Customer Secret are important to fill.

1.1.1 Store URL

If you have access to your WordPress site, then you can easily get your store URL from there.

Visit the WordPress site, copy the store base URL and paste it into the Store URL field.

## 1.1.2 Customer Key & Customer Secret

If you already have the Customer Key & Customer Secret, paste them into their respective fields. If not, you can find them in the WooCommerce Settings.

Here it will go by this:

- Visit the WordPress site.

- Click on the WooCommerce button in the left panel and then click on the "Settings".

- On the Settings page, click on the "Advanced" button. Then click on the "Rest API" from the Page Setup menu.
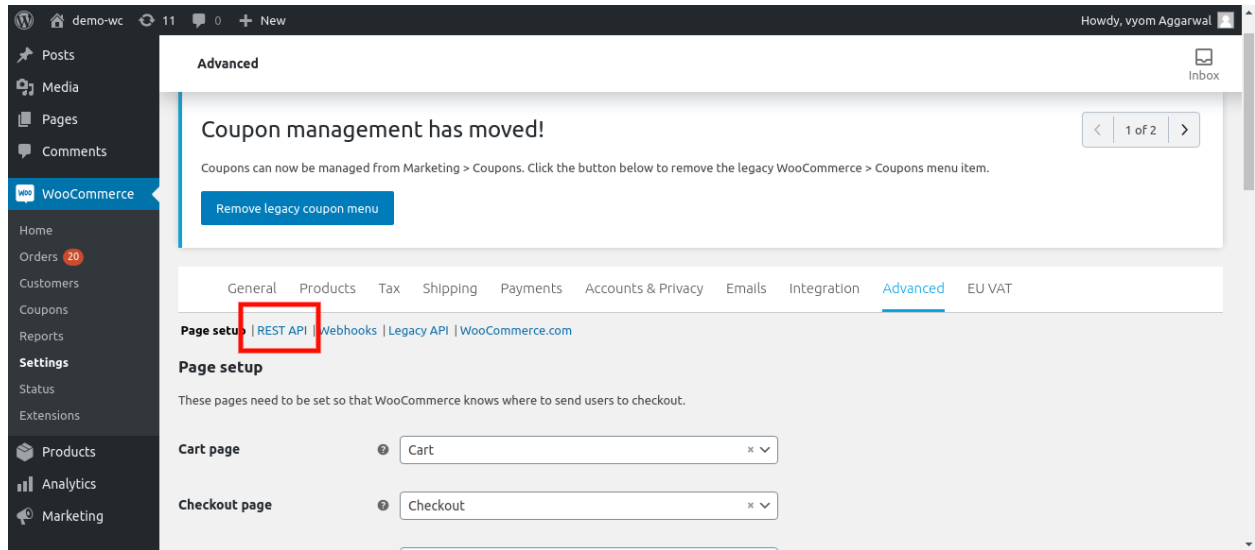
- Click on the "Add Key" button. The Key Details section will open up as given below. Fill in the Description here.
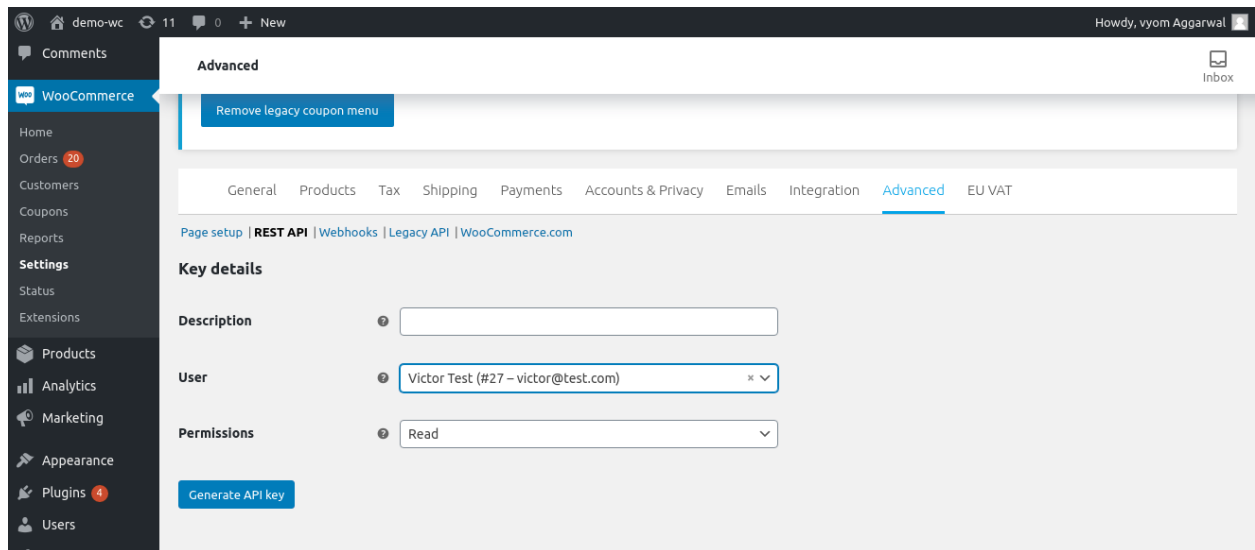
- Next, set the permission to "Read/Write"

- Click on the 'Generate API Key' to find the Customer Key & Customer Secret.

You can now access the Customer Key & Customer Secret.
Copy them and paste them into the fields of the WooCommerce instance page.

[Note: You would need to copy the key and secret in your notepad because once you move away from the page, the keys will not be visible anymore]

Upon filling the fields of Store URL, Customer Key, and Customer Secret, 'Save' the Instance & follow the steps given below:

Step 1: After filling in all the Connector details, click on Save and then click on the 'Connect Instance' button.

Step 2: Once the connection is successful, a message will appear to confirm the process.

Point to Note: When the instance has been successfully connected, you will see a yellow banner at the right corner showing 'CONNECTED. In order to 'ACTIVATE' the instance, you have to fill up the required details in General Information, Payment Information, Order Information, Stock Information, and Webhooks Configuration to successfully Sync your data from WooCommerce to Odoo.

1.1.3 Version & Authentication

WooCommerce Version, Verify SSL, & Authorization

These three fields suggest which WooCommerce version you are using. If you enable 'Verify SSL and Authorization', it will suggest that the SSL verification and Force Authorization will be implemented.

2. Configuration

2.1 General Information

It is important to fill in the Warehouse details and Main Currency to make the configuration successful.

Warehouse: Select the name of the place where your warehouse is located.
Main Currency: Select the currency you use for your payments.

You can use multiple currencies by enabling the Multi-Currency Option.

2.2 Product Information

You can add configurations for Importing Images, Prices, or Exporting variant product images from/to WooCommerce/Odoo respectively.

If you enable Woo Sync/Import Images and Price option, whenever you will import a product, its price and the images associated with it will be imported else they would not be.

Price lists   Configure Schedulers   Active Schedulers

Fields and their uses :–
- **Connector Instance Name** : Displays WooCommerce Instance Name
- **Company** : Shows the name of the company
- **Require Meta Mapping** : If you turn this on, you can initiate the excellent meta mapping feature

CONNECTED

Connector Instance Name

Test Instance

Company   My Company (San Francisco)

Require Meta Mapping ?

Authentication   General Information   **Product Information**   Payment Information   Order Information   Tax Information   Stock Information

Webhooks Configuration

Fields and their uses :–
- **Woo Sync/Import Images?** : Checkbox to enable import of Images of products on syncing
- **Export Variation Images** : Checkbox to enable export of Images of Variant products
- **Woo Sync/Import Price?** : Checkbox to enable import of Price of product on syncing

Woo Sync/Import Images?	☑	**Export Variation Images** ☐
Woo Sync/Import Price?	☑	

2.3 Payment Information

Mention the Payment Term as per your choice and business requirements. You can select from Immediate Payment, 15 Days, 21 Days, and so on.

Price lists   Configure Schedulers   Active Schedulers

Fields and their uses :–
- **Connector Instance Name** : Displays WooCommerce Instance Name
- **Company** : Shows the name of the company
- **Require Meta Mapping** : If you turn this on, you can initiate the excellent meta mapping feature

CONNECTED

Connector Instance Name

Test Instance

Company   My Company (San Francisco)

Require Meta Mapping ?

Authentication   General Information   Product Information   **Payment Information**   Order Information   Tax Information   Stock Information

Webhooks Configuration

Fields and their uses :–
- **Regular Main Pricelist** : Manages regular sale price of the product from WooCommerce instance.
- **OnSale Main Pricelist** : Manages on sale price/discounted price of the product from WooCommerce instance.
- **Payment Term** : Shows the payment term/mechanism

Regular Main Pricelist	[Test Instance] EUR Regular Pricelist (EUR)	**Payment Term**
OnSale Main Pricelist	[Test Instance] EUR Sale Pricelist (EUR)	

2.4 Order Information

The given fields in the Order Information tab are useful for importing orders from WooCommerce to Odoo. You can find the importance of each section from the 'Fields and their uses' column.

- Order Prefix: This section is important to fill during the synchronization process. The term you use as your Order Prefix will be visible when you import the sale order from WooCommerce.

- Auto Order Status Update to Woo: It updates the status of the sale order on the WooCommerce side whenever there is any change in the woo status of the sale order on the Odoo side. You need to enable it in order to automatically update the order status.

- Import Orders Through We can import orders through various processes/workflow. We can select configurations based on the(status or payment gateway) as per requirement from here. If "Status" is chosen, then the orders will be imported through status. If "Payment Gateway" is chosen, then the orders will be imported through the payment gateway. Based on this field, the AutoWorkflow id (present below) can be attached.

Connector Instance Name

Test Instance

Company   My Company (San Francisco)

Require Meta Mapping ?

Authentication   General Information   Product Information   Payment Information   Order Information   Tax Information   Stock Information

Webhooks Configuration

Fields and their uses :–
- **Auto Order Status Update to Woo** : Enables/disables – automatically order status synchronisation with WooCommerce
- **Default Order Prefix** : Enables/disables – default order prefix of the Odoo
- **Order Prefix** : Prefix added on orders imported from woo to odoo is shown here
- **Order Status** : Shows the configuration of the imported order status
- **Sales Team** : Shows the location of the sales team
- **Sales Person** : Displays the name of the sales person
- **Import Orders Through** : Shows the status of orders imported portal
- **Actual/Guest customer** : Enables/disables – Creation of Actual customer out Order's Guest Customer
- **Sale Workflow Configurations** : Shows the flow of the order when imported to the odoo
- **Emails Configurations** : Sends a monthly sales report to the email–ids provided in it.

Auto Order Status Update to Woo		**Sales Team**
Default Order Prefix		**Sales Person**
Order Prefix	WC	**Import Orders through** Status
Order Status		

- Order Status: It is basically the order status that you want to fetch from WooCommerce. For example, if you select "On Hold" & "Processing", then only those orders that are on hold or under processing status will be imported into the Odoo.

- **Actual/Guest customer** : Enables/disables – Creation of Actual customer out Order's Guest Customer
- **Sale Workflow Configurations** : Shows the flow of the order when imported to the odoo
- **Emails Configurations** : Sends a monthly sales report to the email–ids provided in it.

Auto Order Status Update to Woo		**Sales Team**
Default Order Prefix		**Sales Person**
Order Prefix	WC	**Import Orders through** Status
Order Status		

On Hold
Processing
Completed
Pending
Failed

Customer

Customer Address   **Actual/Guest customer**

Sale Workflow Configurations

Sale Workflow	Payment Gateway	Order Status
Add a line		

- Sales Team: It will show the sales team and is mandatory to fill this field.

- **Sales Person:** It is necessary to fill this field as it shows that the salesperson will be assigned to the imported order for this particular instance.

2.4.1 Customer

- **Customer Address:** We have given the option for the user to select their customer address as 'Billing' or 'Shipping' as per their requirement.

- **Actual/Guest Customer:** The user will have the full authority to manually set these settings. Enabling this feature will help you import orders with guest customers as well.

2.4.2 Sale Workflow Configuration

This functionality will let you configure the sale order status cycle for all the orders that are imported from this particular instance. Click on the 'Add a line' and fill in the required details as asked.

2.4.3 Email Configuration

The email ids added here will receive an email of the report generated regarding all the sales orders(for this instance), which will be updated every 24 hours.

2.5 Tax Information

We have two types of Tax Configuration.

Invoice TAX Account: It displays the tax account which is utilized for the invoice tax default account.

Credit Note TAX Account: It displays the tax account which will be used for the Credit Note/Refund tax default account.

2.6 Stock Information

'Stock Field Type' section suggests that while importing the stock from WooCommerce to Odoo, you can use either 'Free to Use Quantity' or 'Forecasted Quantity'.

For example, if you select "Free To Use Quantity", all the data related to it will be filled in.

Note: **'Stock Field Type'** is important to fill in order to activate the instance.

Auto Stock Update to Woo: If you enable this field, it will automatically update the quantity of the product to WooCommerce. Users will not have to manually update the quantity of the product, enabling this tab will help users to save time in manual entry.

For example, if you have 500 quantities of a product in your warehouse, and 50 are sold, then you are left with 450. When you enable Auto Stock Update to Woo, the available number of stocks will be updated at the WooCommerce end as well.

2.7 Webhooks Configuration

Whenever there is a change such as creation/updation in the multiple processes on the WooCommerce side, it can be directly reflected in the Odoo side through Webhook. It will eliminate the otherwise lengthy import operations.

Here are the steps to set it up:

1. There are 8 possible types of operations in Webhooks, that are in-built and provided to people.

2. When you select a certain webhook operation, it automatically captures the URL.
3. The Woocommerce ID gets assigned to it automatically and the instance is attached to it by default whenever the user clicks on the "Sync" button present on it.
4. The Hook Status will change to "Active". The Webhook will be created on the WordPress site.

Note: The "Sync" button will change to "Toggle Status" now, and if you click on it, it will change the Hook Status to "Paused", and one more click will change the status to "Disabled" again.

2.8 Meta Mapping

You will find the section called "**Require Meta Mapping?**" below the Instance Name in the instance configuration form.
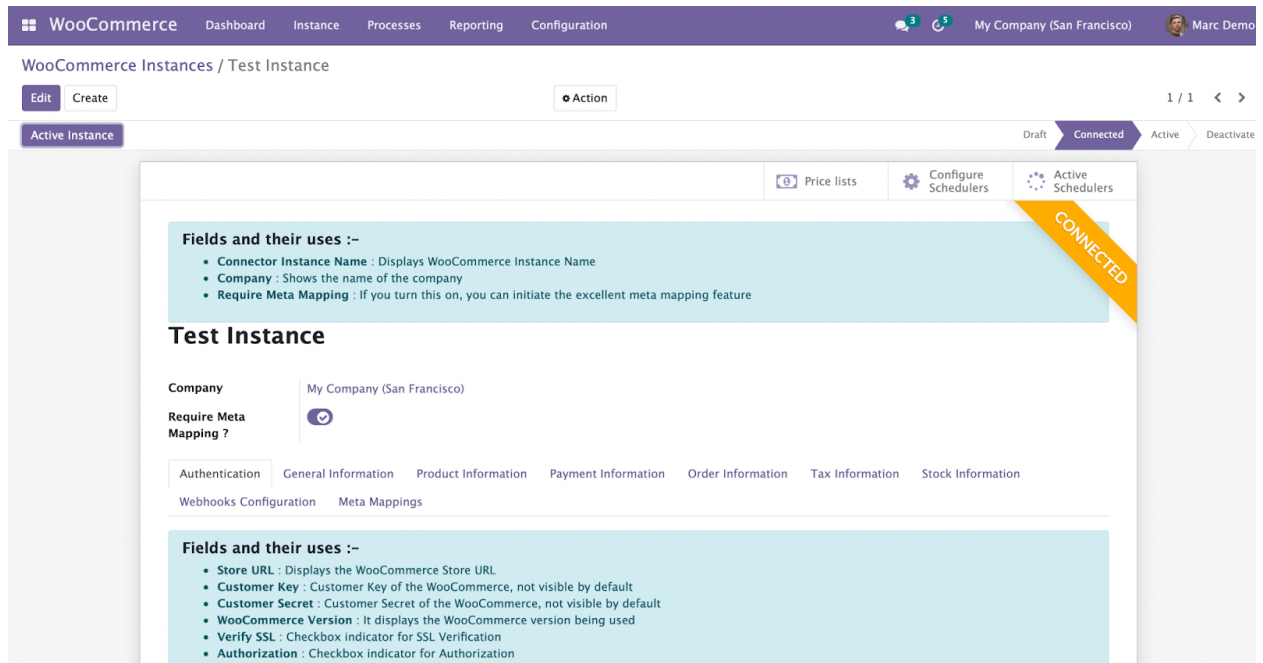
When you will enable that, a separate '**Meta Mappings'** tab will appear as given below:
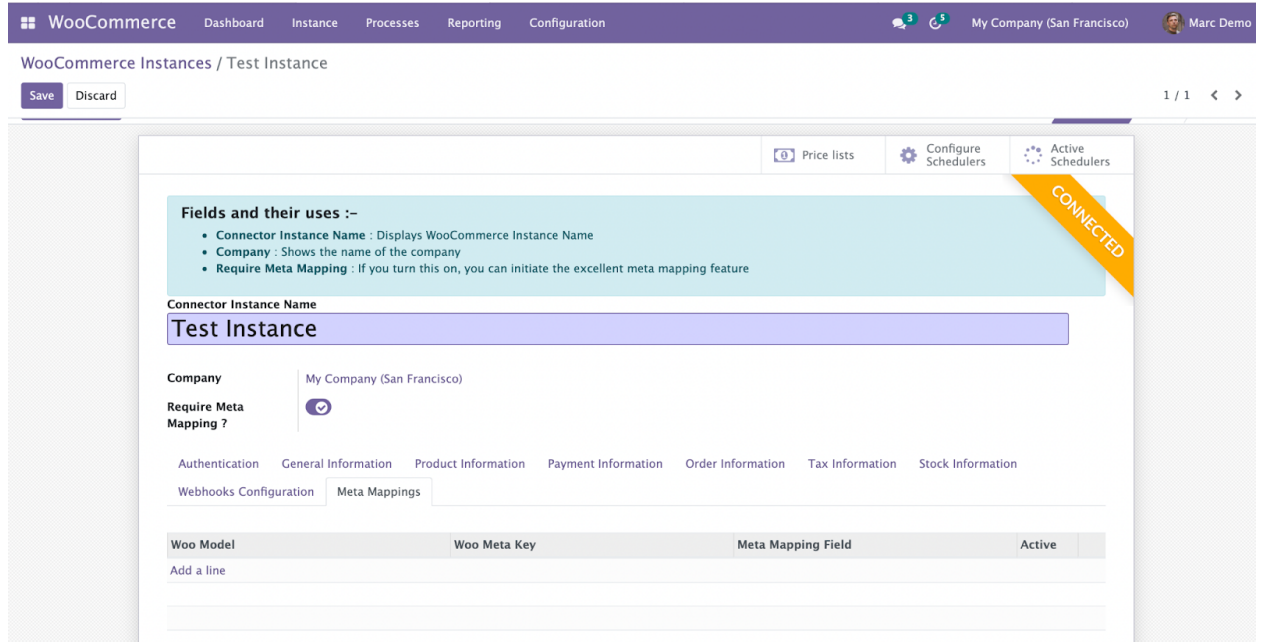
Follow the given instructions for Meta Mappings configuration.

Step 1: Click on 'Add a line'

Step 2: Enter the Woo Model name
Step 3: Enter the Woo Meta Key
Step 4: Enter the Meta Mapping Field
Step 5: Enable the Active button
Step 6: Switch on the Save button

You have successfully generated the meta-mapping for the particular instance.

Keynote: After Filling all the mandatory fields, you can 'ACTIVATE', 'DEACTIVATE', & 'CONNECT' your instance from here only.

➢ Click the 'ACTIVATE INSTANCE' button, and a dialogue box will appear. Closing the box will activate the instance and change the banner color to green.
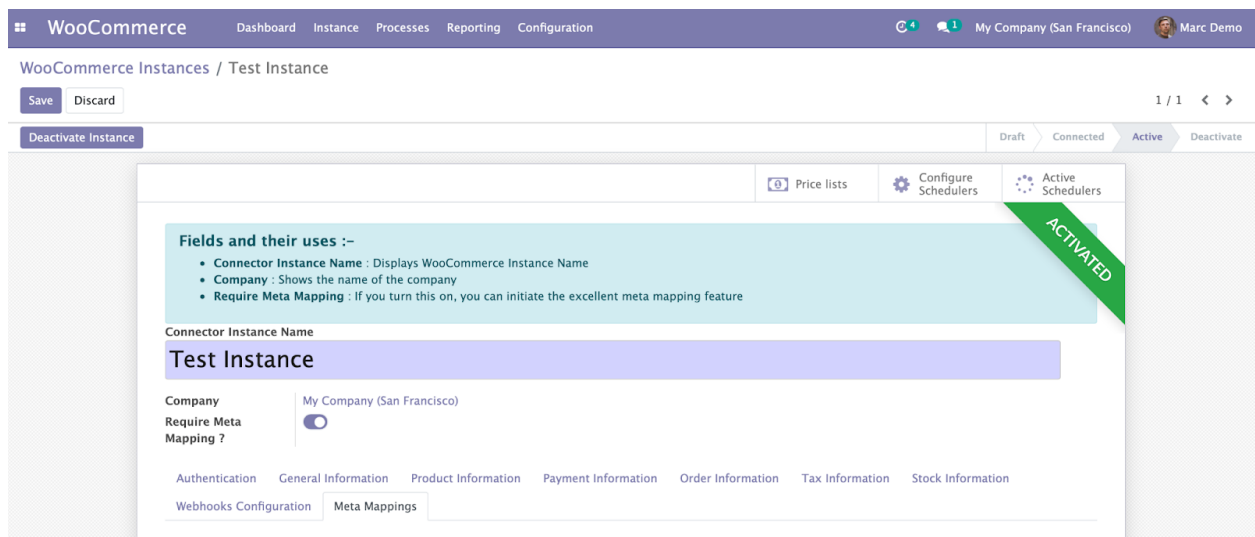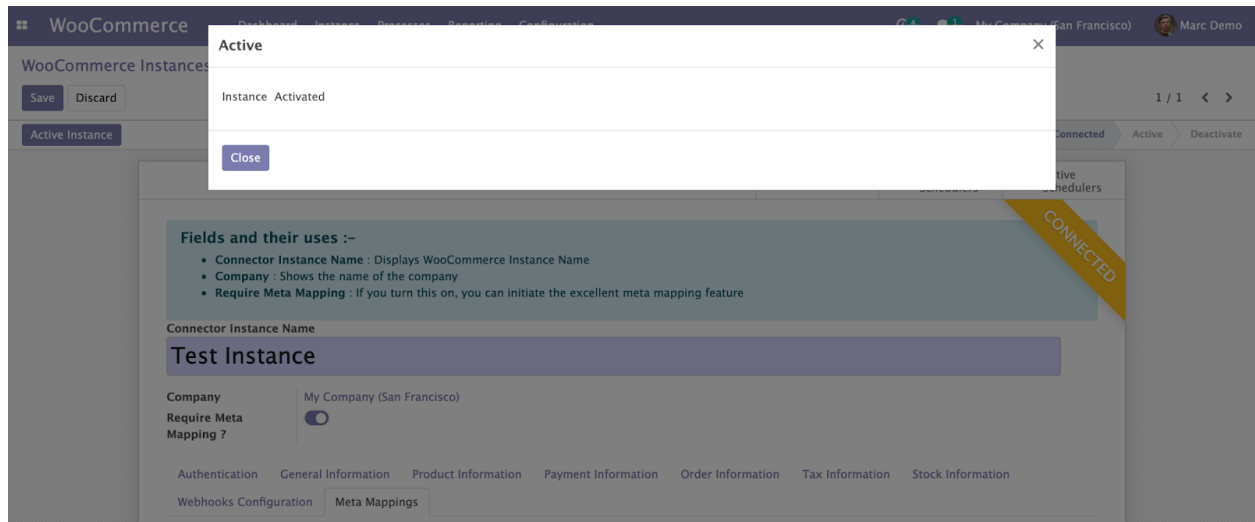
➢ To Deactivate the instance, click on the 'DEACTIVATE INSTANCE' button, and a dialogue box will appear. Closing the box will deactivate the instance and change the banner color to red.
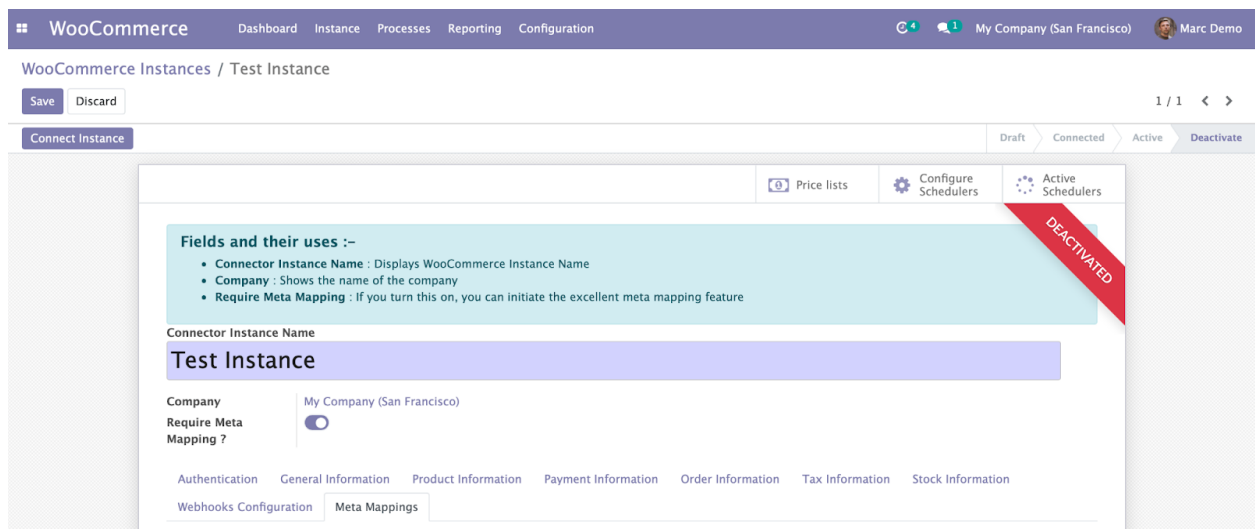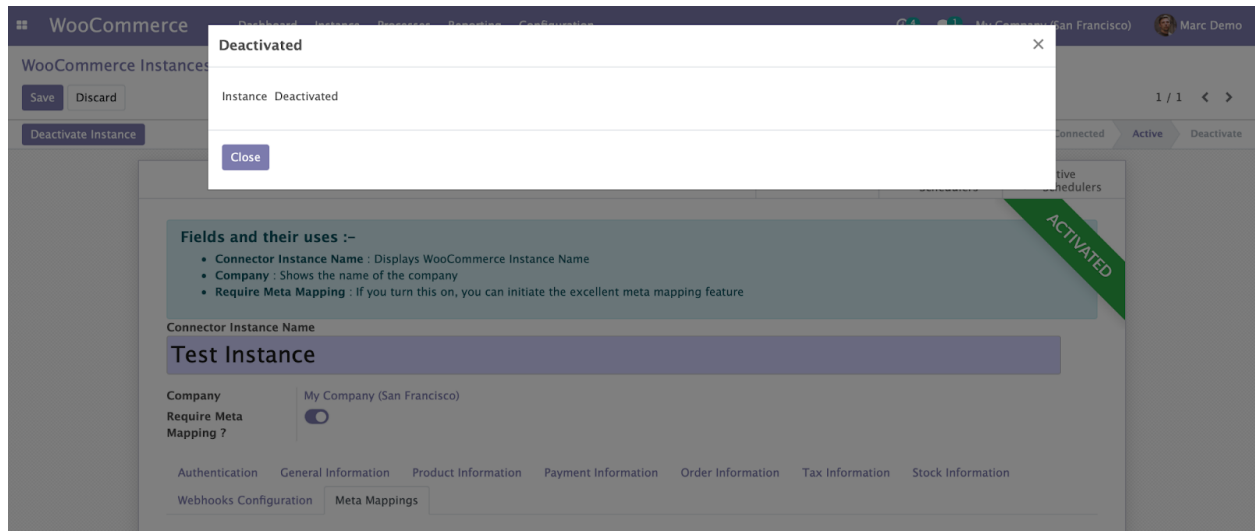
➢ Once again, if you click on the 'CONNECT INSTANCE' button, a dialogue box will appear. Closing the box will connect the instance and change the banner color to yellow again.
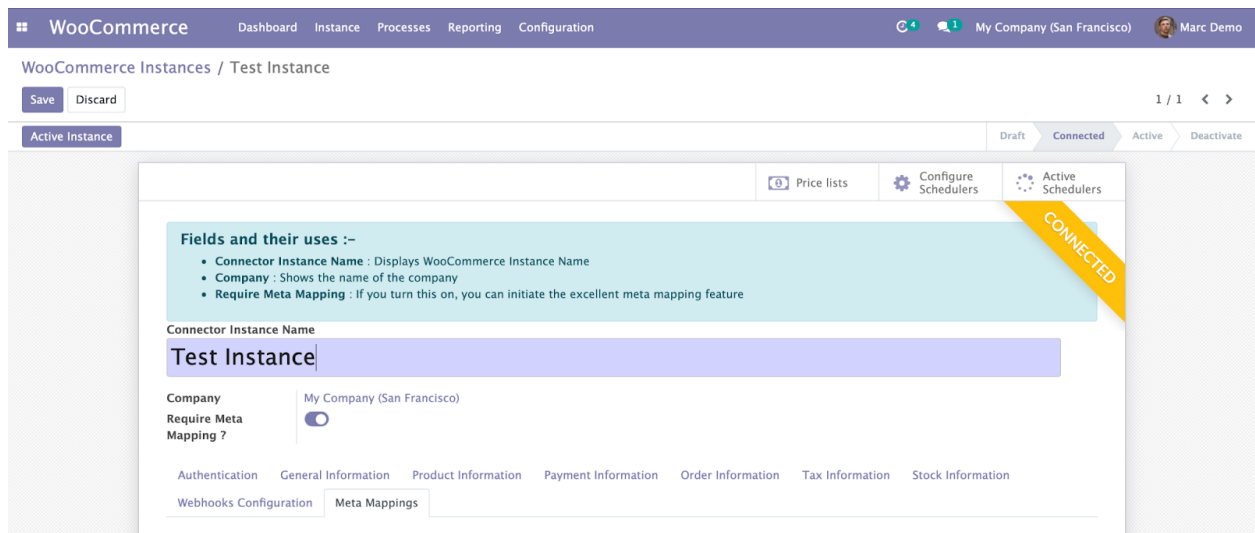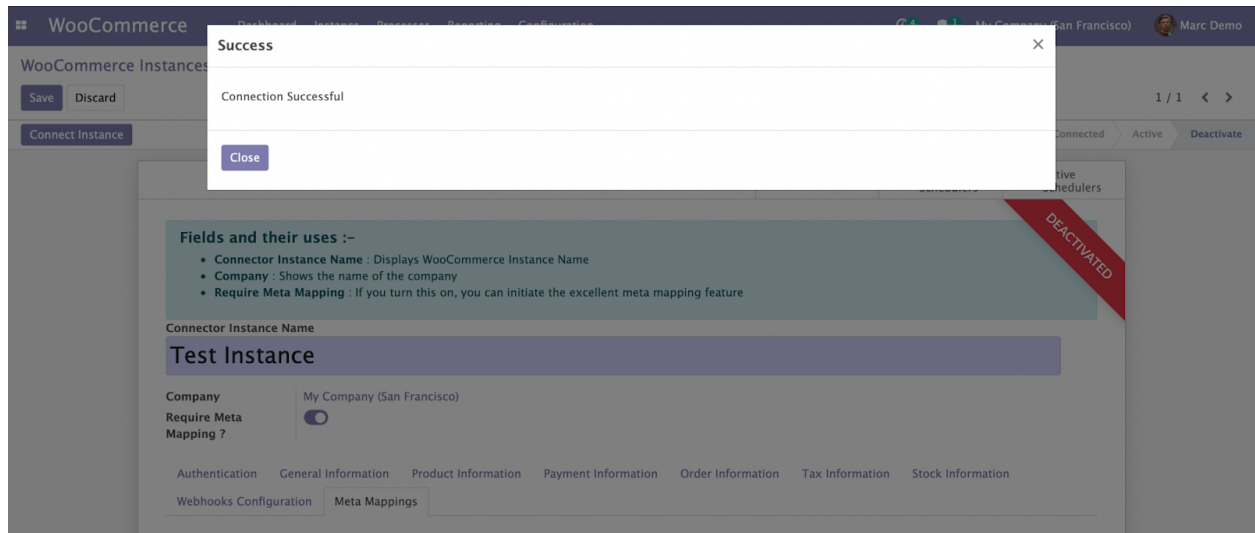
Now that you have learned to connect, activate, and deactivate an instance, let's fill out other given fields (section 2.9 onwards).

2.9 Price List

Click on the Price List as given below:
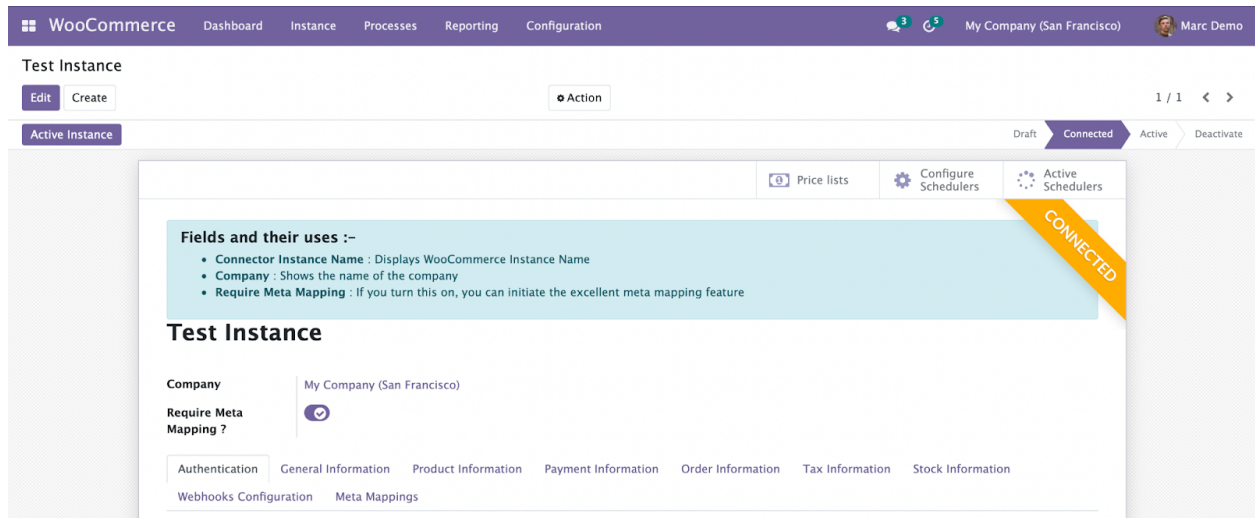
A window will appear like this, where you will find the Sale and Regular Price list associated with a particular instance.
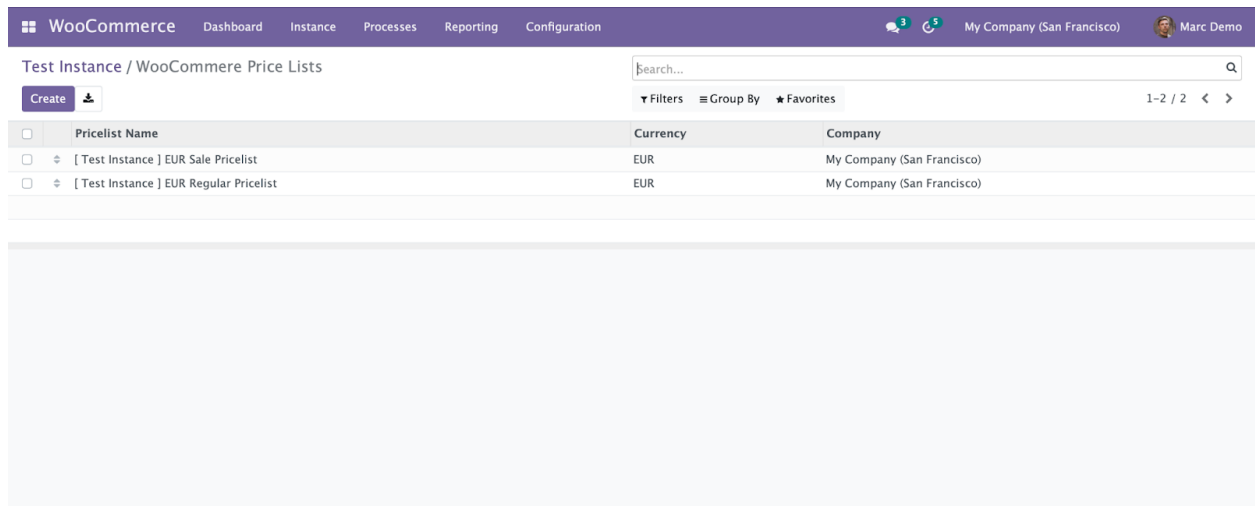
Here, the price list related to the instance will be attached. It will be based on the currency that you have selected, & will be generated automatically.

As you will click on each of them individually, the two price lists will appear like this:

- Regular Price List

- Sale Price List

In WooCommerce, each product has its sales price and regular price. The sales price will be added to the 'Sales Price List' and the regular price will be the 'Regular Price List.

The prices that will be imported along with the products will be reflected in price lists.

2.10 Configure Schedulers

There are two types of schedulers that are used to import orders from Woo to Odoo or to export product stock and Order status from Odoo to Woo.

Click on the '**Configure Schedulers**' as suggested below:
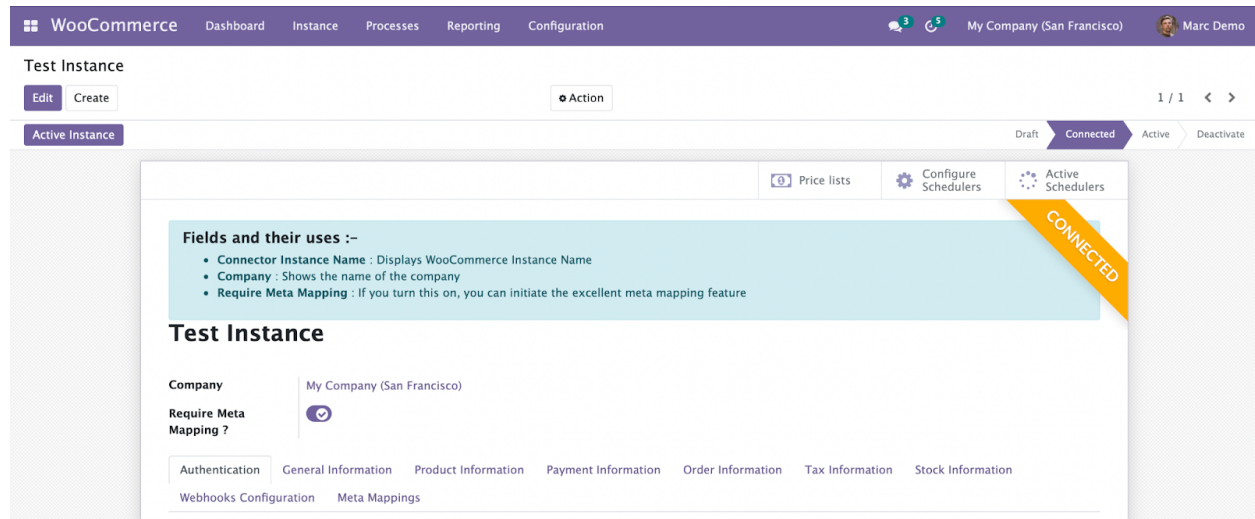
After clicking on the '**Configure Schedulers**', a new window will appear like this:
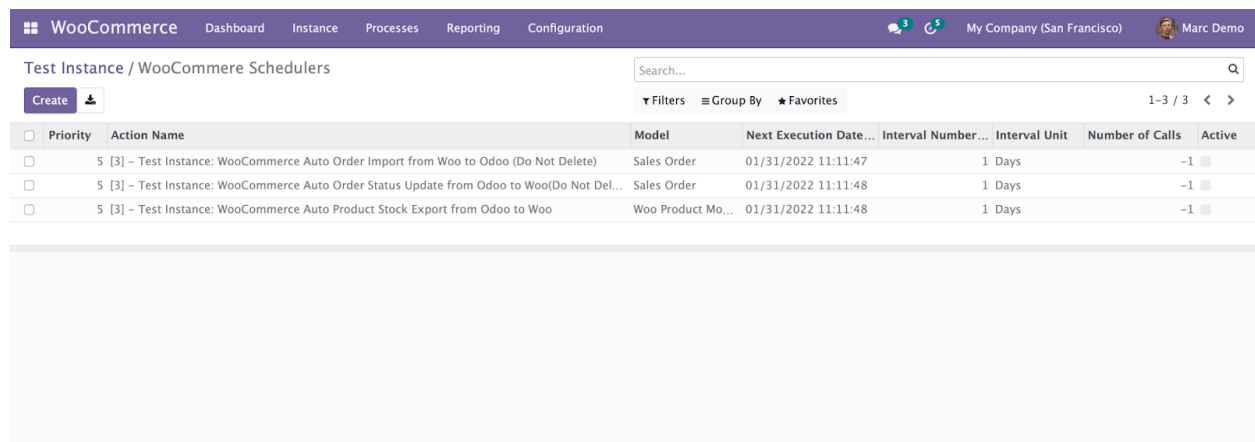
You can create a new WooCommerce Scheduler or use the existing one related to your instance.

If you click on each of the individuals, it will appear like the given images (a, b) and you can activate and deactivate the scheduler as per your requirement.

Note: To activate, enable the '**Active**' tab.

a. Auto Order Status Update from Odoo to Woo

It will automatically update the status of the orders from Odoo to WooCommerce when activated.

b. Auto Order Import from Woo to Odoo

It will automatically import orders from WooCommerce to Odoo when activated.
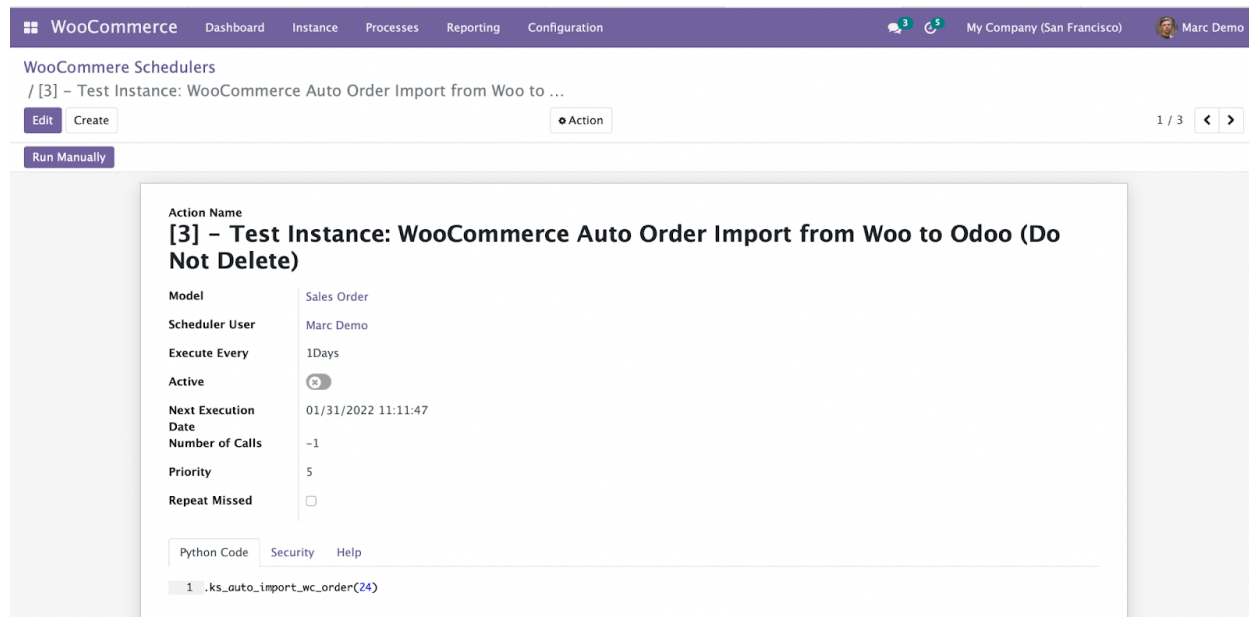
2.11 Active Schedulers

From here, you can create the active schedulers for a particular instance followed by clicking on "**Active Schedulers**".
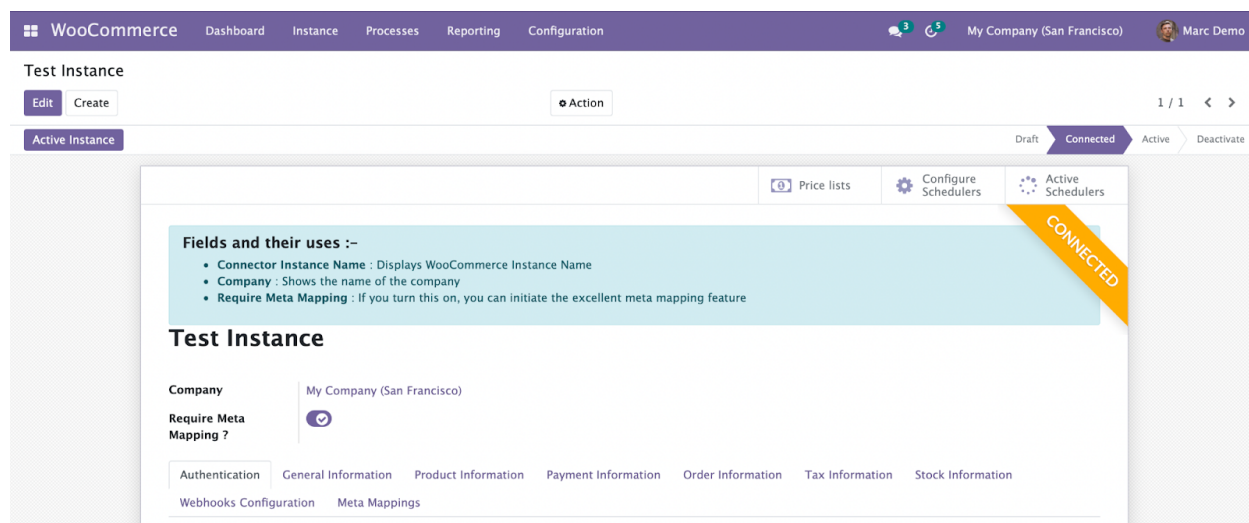
A confirmation message will pop up for instance activation and a new window will open as given below.
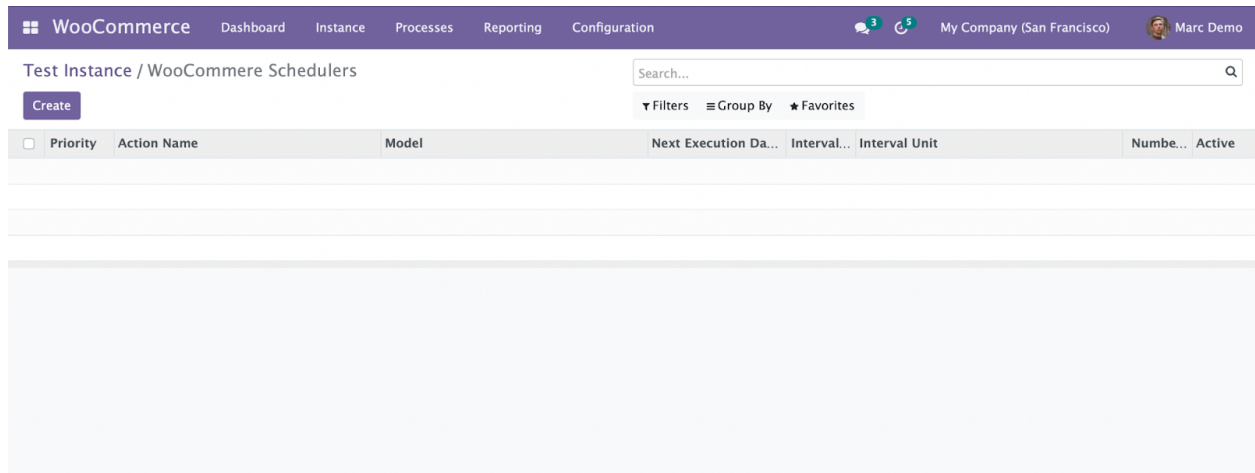
Click on the '**Create**' button. A new window will open as given below:

Fill all the required fields and click on the Save button.

Click on the name of the instance above followed by clicking on "**Active Instance**". A confirmation message will pop up for instance activation and it will look like as given below.
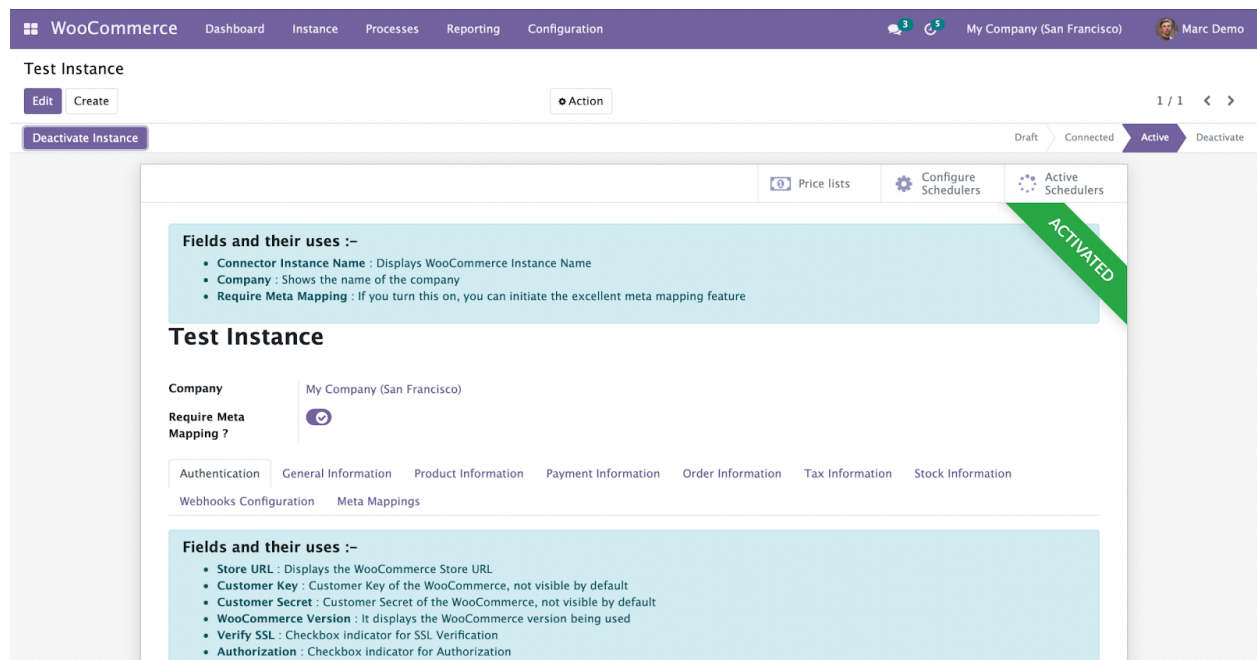
Now that the instance is completely active, it can start syncing data from Odoo to WooCommerce & vice versa.

Deactivate Instance

You can even deactivate the instance if it is no longer useful for you. Click on the 'Deactivate Instance' and your instance will be deactivated and will look like this:
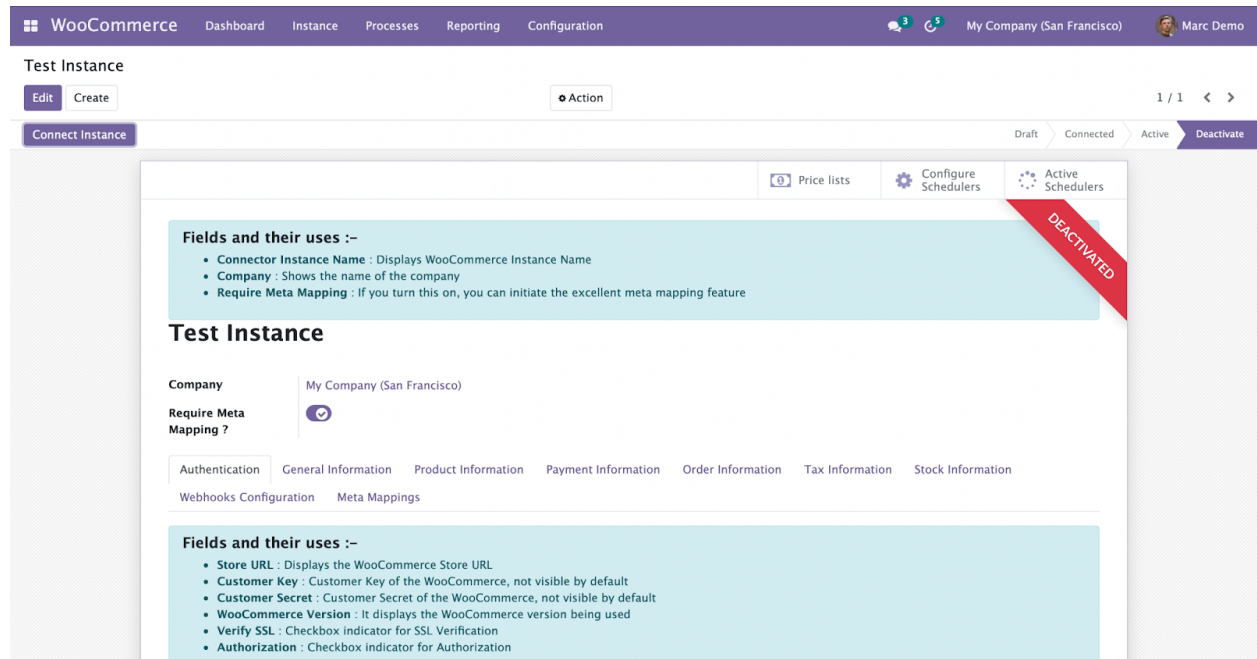
If you again need to activate it, click on Connect Instance> Activate Instance, a pop-up window will appear showing that the instance is activated.

3. WooCommerce Instances

When you click on Instance from the menu at the top, you will get a Kanban view of the instance. It will have two buttons called Specific Operation & Multiple Operation. Additionally, it will have Configuration and Logs. Inside the Logs, you can see success logs and failed logs.

It also has a counter for Orders, Products, Coupons, and Customers. It will display the number of orders, products, coupons, and customers synced using the instance. All of these counters are clickable and on clicking any of them, you will be redirected to its page.

There is also a drop-down menu. It shows the various details of Products, Sales, Delivery, and Invoices. Click on each detail and visit for further detailed data pages.

3.1 Synchronization Process

For every instance, you will find 'Specific Operation', 'Multiple Operation', & 'Logs' that are used for performing some unique actions.

3.1.1 Specific Operation

To get specific data from WooCommerce to Odoo or export the data from Odoo to WooCommerce, you have to select the Specific Operation.

Step 1: On clicking the Specific Operation, the WooCommerce Operations section will pop up like this:

Step 2: In the Instance field, the current instance will be selected by default. However, you can also select extra instances if you want.

Step 3: The '**Operations Flow**' options allow you to select how the data will be synced- WooCommerce to Odoo or Odoo to WooCommerce.
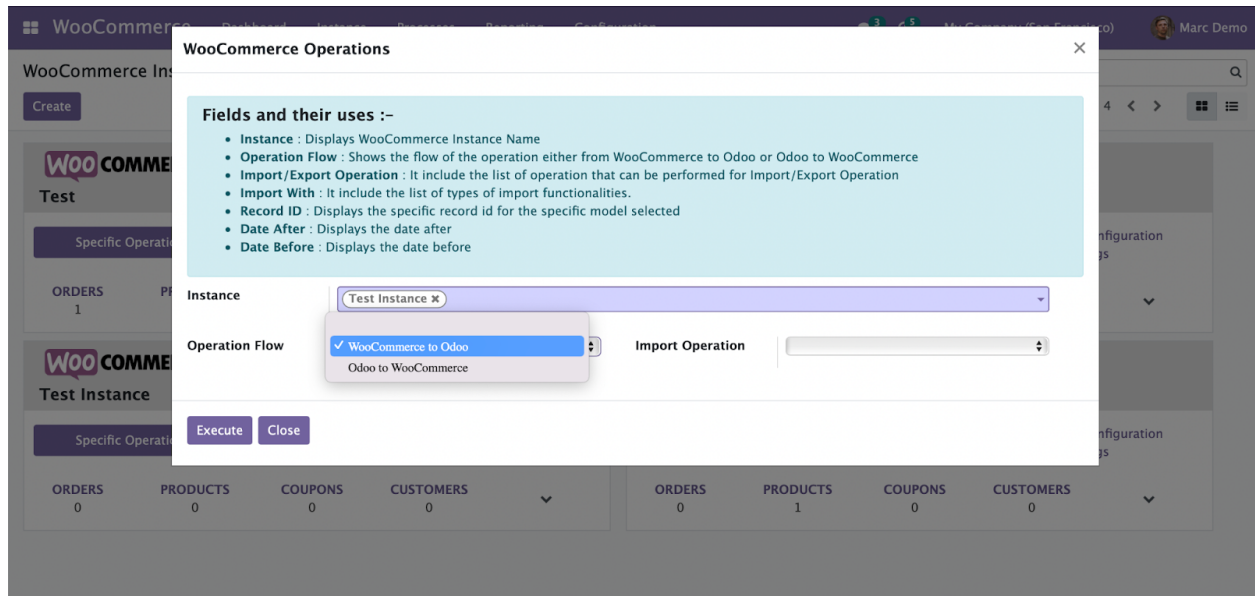
Step 4: Using the Import Operation options, you can import the specific data segment that you require like Import Products, Import Orders, Import Customers, etc.
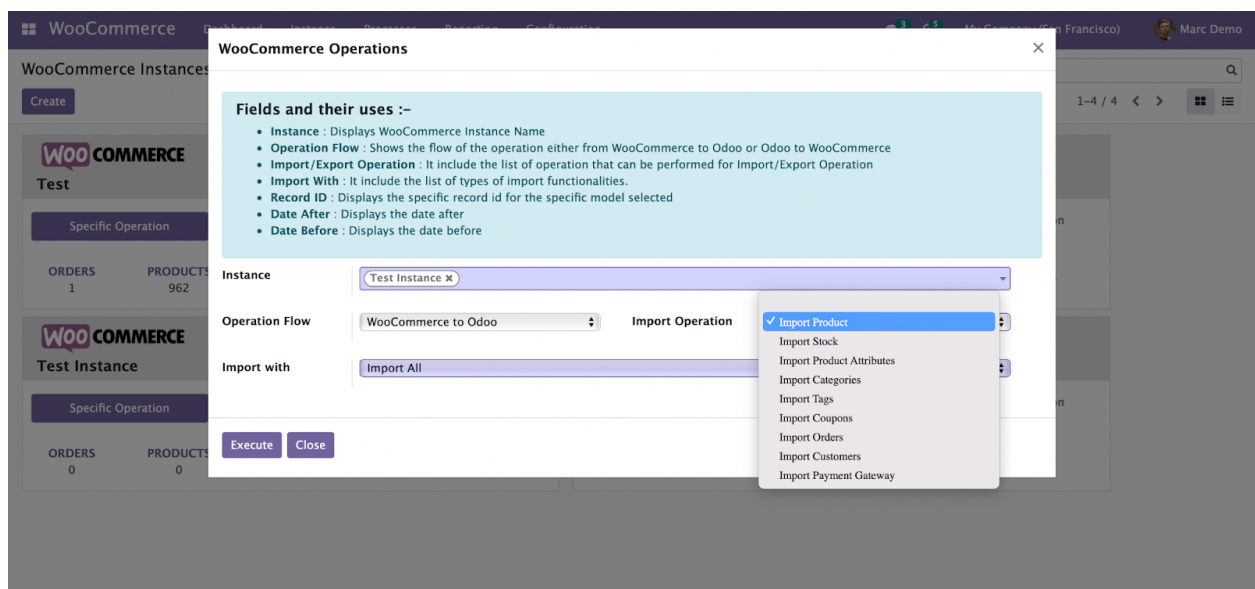
Step 5: After selecting the Import Operation, the Import With field will pop up. It has various filters that can be applied like Import All, Date Filter, and Specific Id Filter.
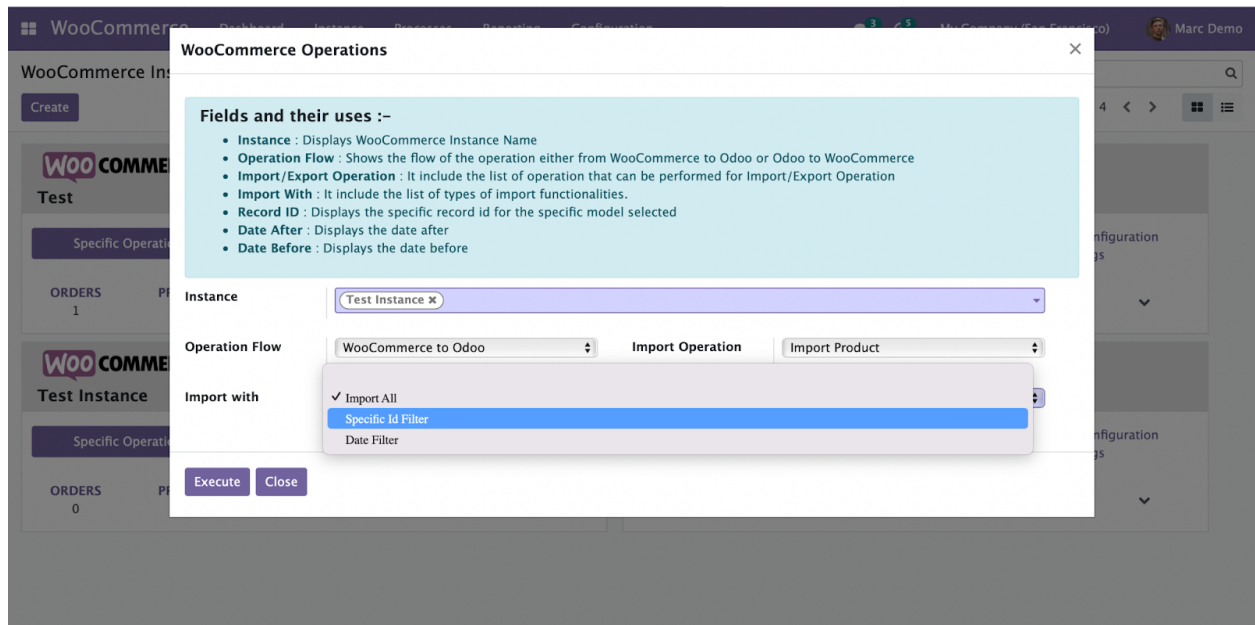
Step 6: For example, if you select "**Import Tags**" from the **Import Operation** and choose "**Specific Id Filter**" from **Import With**, you can fetch a tag with a specific WooCommerce id.
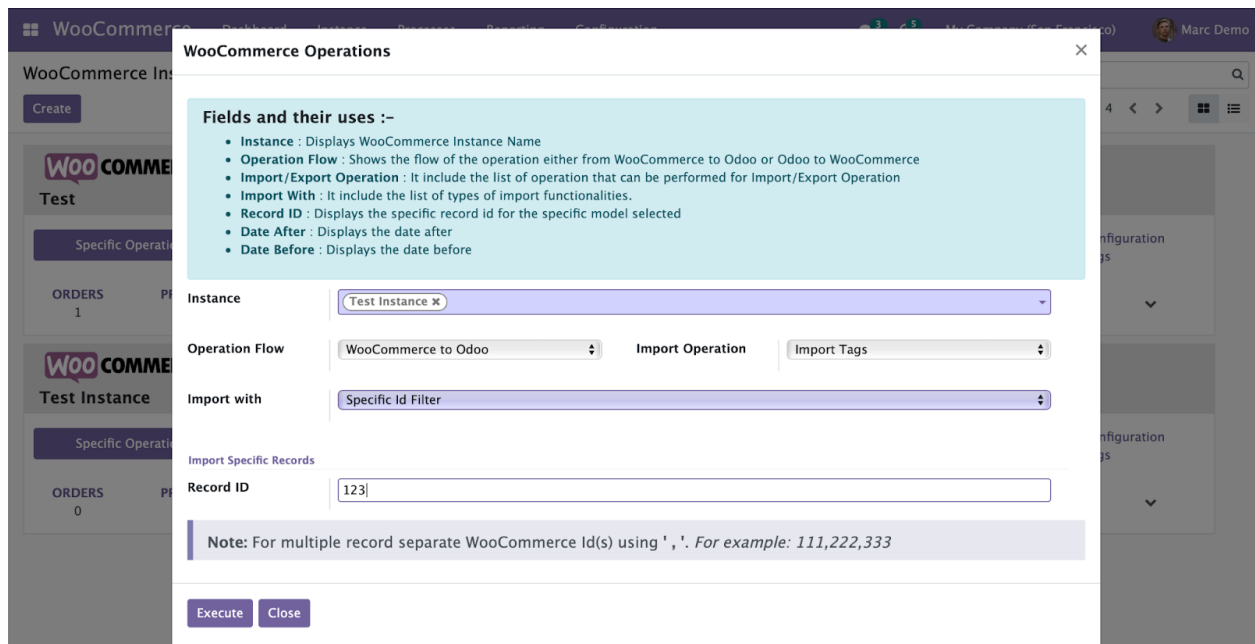
Record ID: This field is used to import or export products and more with their specific WooCommerce Id. You can Import or export two or more products using their special ids by separating them with commas. For example 111,222,333

Note: The 'Date Filter' & 'Specific Id Filter' in the Import with section are not supported by all domains. Thus, whenever there is an unsupportable type, it will show that the filter is not supported.

Step 7: After setting up the WooCommerce Operations, click on the "**Execute**" button. A confirmation message will pop up and all the data will be added to the Queue Job. It will be processed automatically and the tags will be synced with the site.
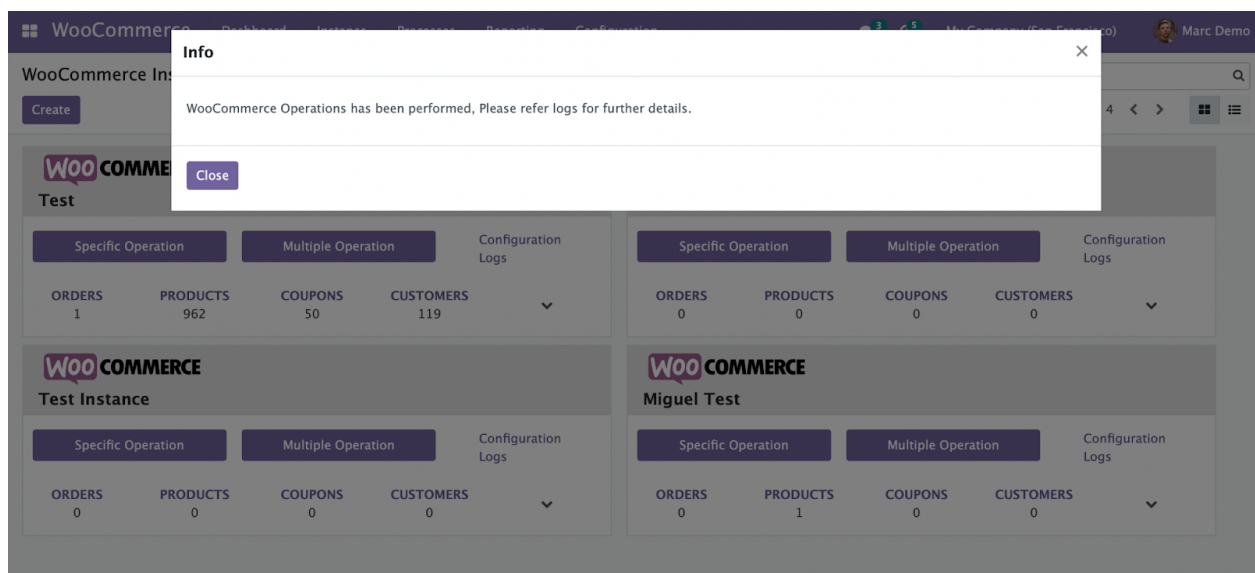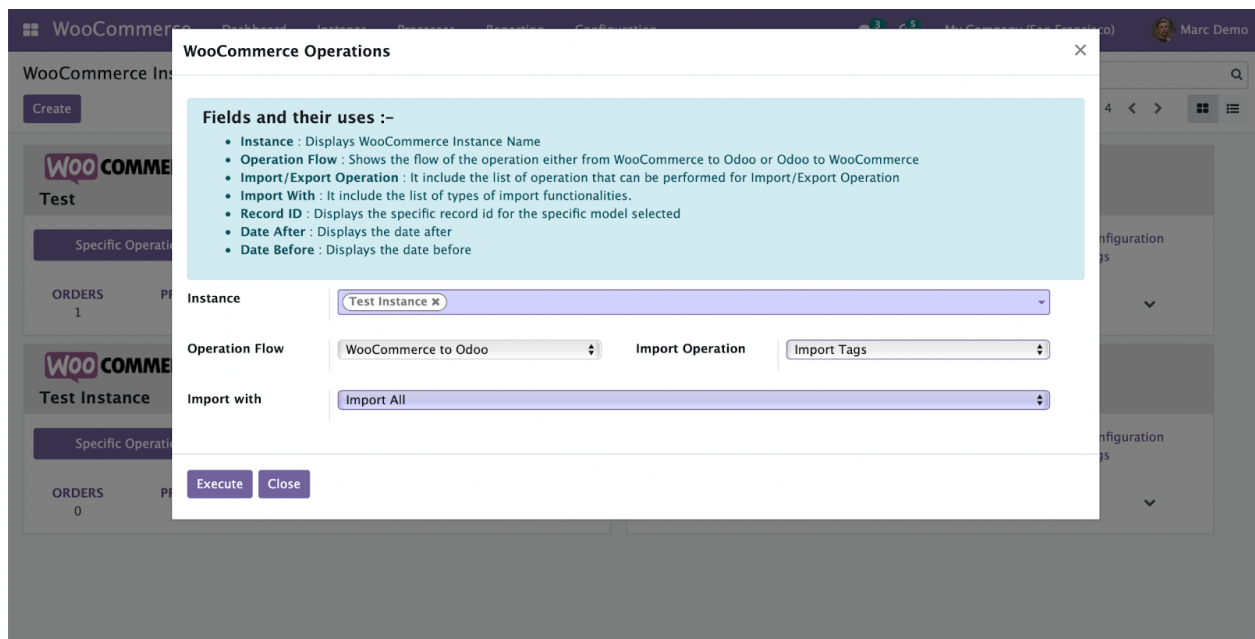
Step 8: Click on the Processes > Queue Jobs in the menu

Step 9: You can see the records that are either waiting-to-be-processed or in-progress or done or failed status.

3.1.2 Multiple Operation

Here, you can perform both operations at once- Woo to Odoo and Odoo to Woo.

Step 1: Click on the Multiple Operations and the WooCommerce Operations page will pop up.
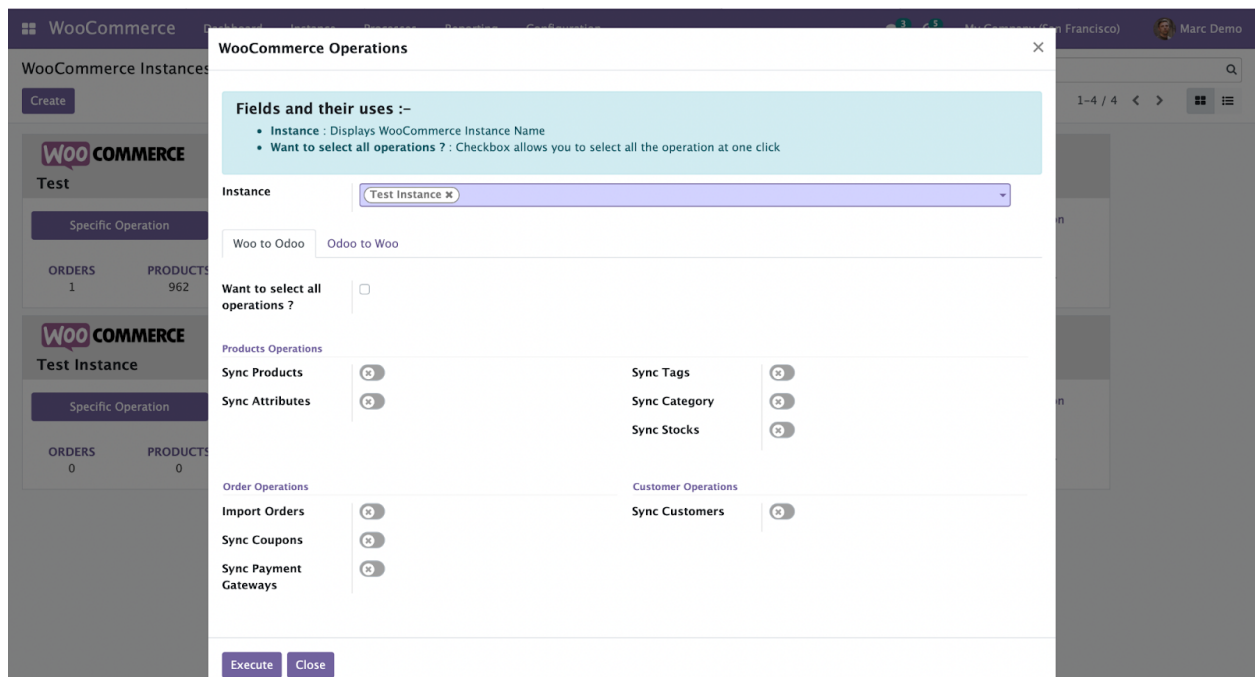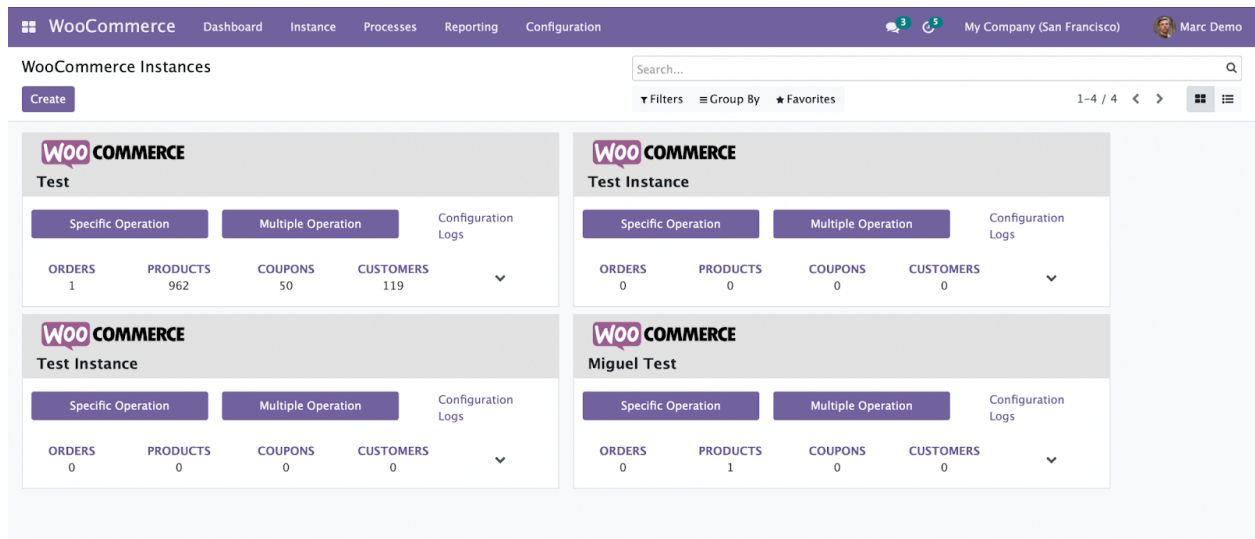
Step 2: Select the instance you want to operate on, in the Instance field. You can choose multiple instances if required.

Step 3: In the Woo to Odoo segment and Odoo to Woo segment, there are Product Operations, Order Operations, and Customer Operations with switch-boxes for multiple options.
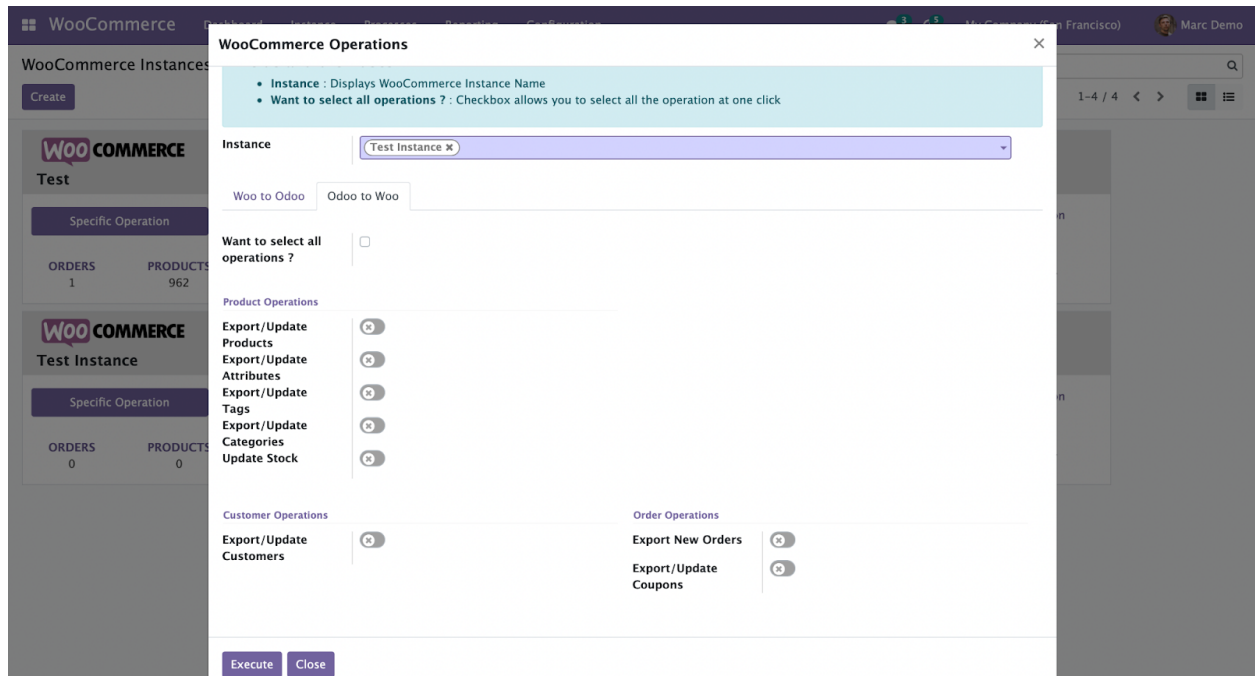
Step 4 : [Note: Both Woo to Odoo and Odoo to Woo segments have a checkbox for "Want To Select All Operations". If you check it, then all the options will be selected at once.]
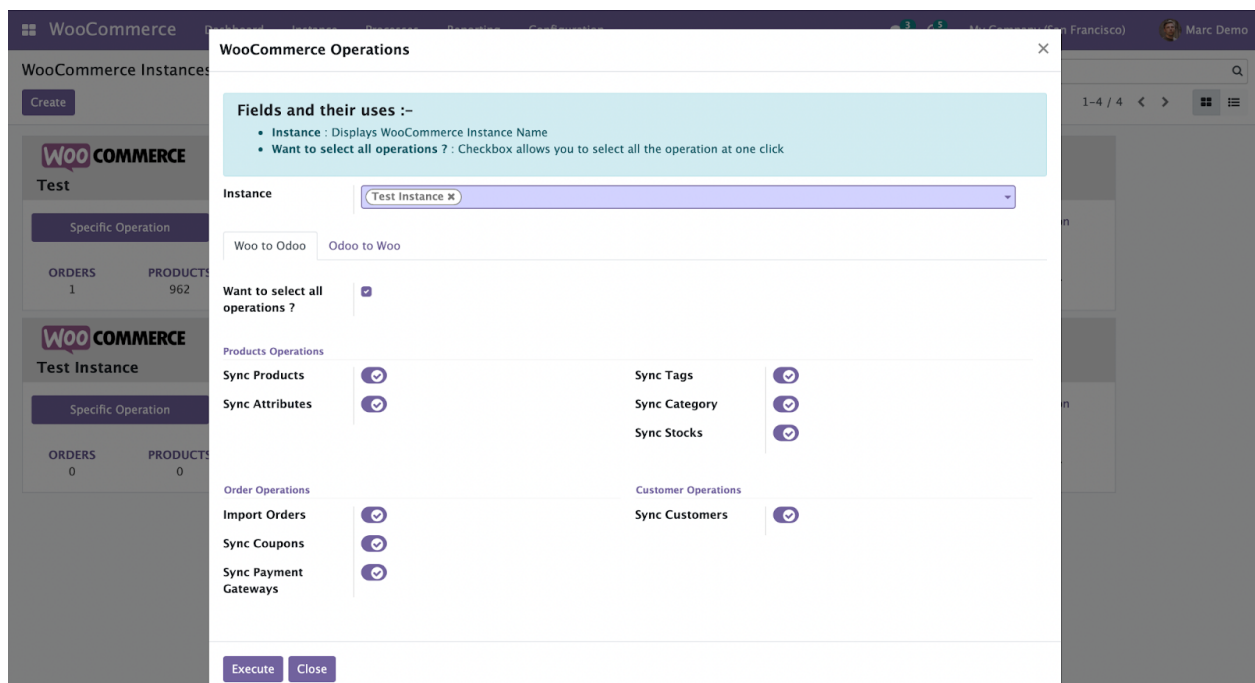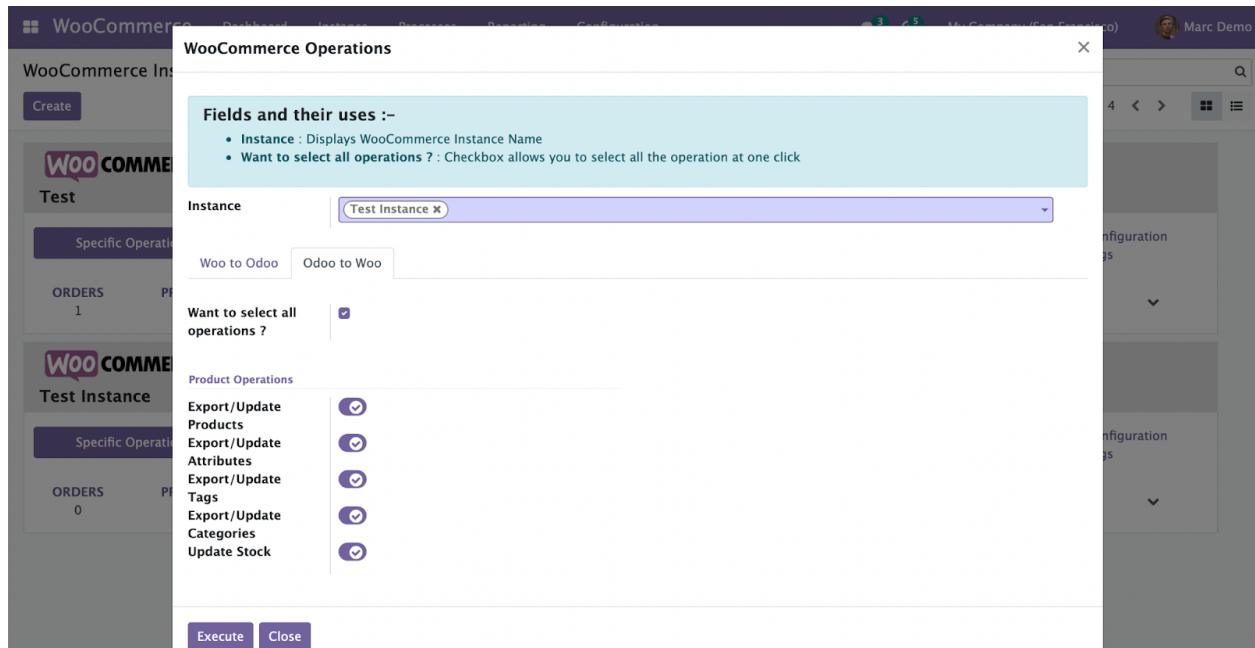
Step 5: After setting up the operations, click on Execute. A confirmation message will pop up and all the data will be added to the Queue Job.
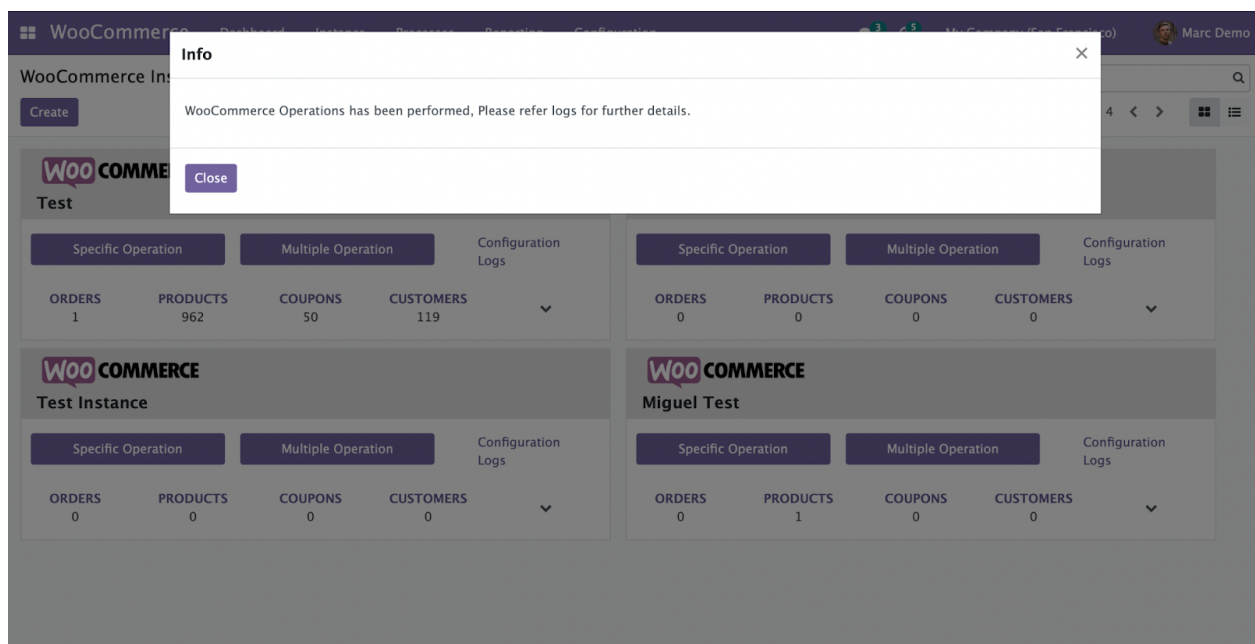
Step 6: You can go to Processes>Queue Jobs in the menu, and check all the records that are either waiting-to-be-processed or in-progress or done or failed status.

3.1.3 Logs

If you click on the logs, you can select all the logs generated for successful/failed entries. If there is an anomaly, you will get the details for the failed logs regarding the mismatch.
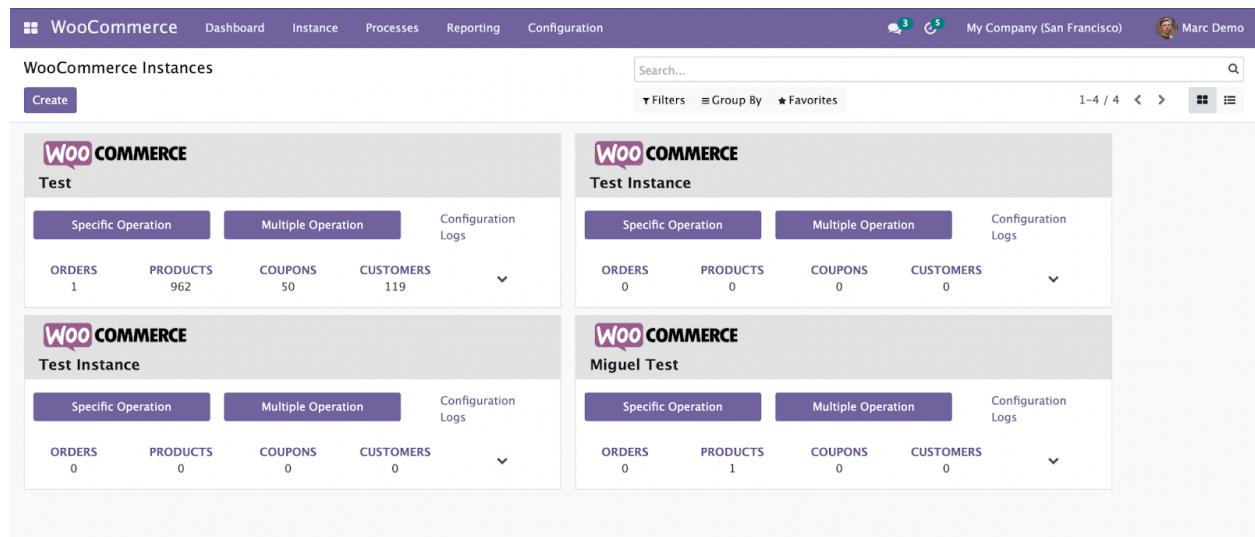
4. Import/Export Functionality

The import and export functions can be performed in two ways, whether you can import/export at once from the Instance or individually using the Push and Pull functionality that is described later in this User Guide.

4.1 Import Products

Importing the Product using the Specific Operation feature.

Go to the instance from the menu bar and select the WooCommerce instance you wish to perform the import/export function. For example, you pick the Test instance.

Click on **Specific Operation**>Select **Instance** name>Select **Import Product**

You can import products in three ways: Import All, Specific Id Filter, or Date Filter.
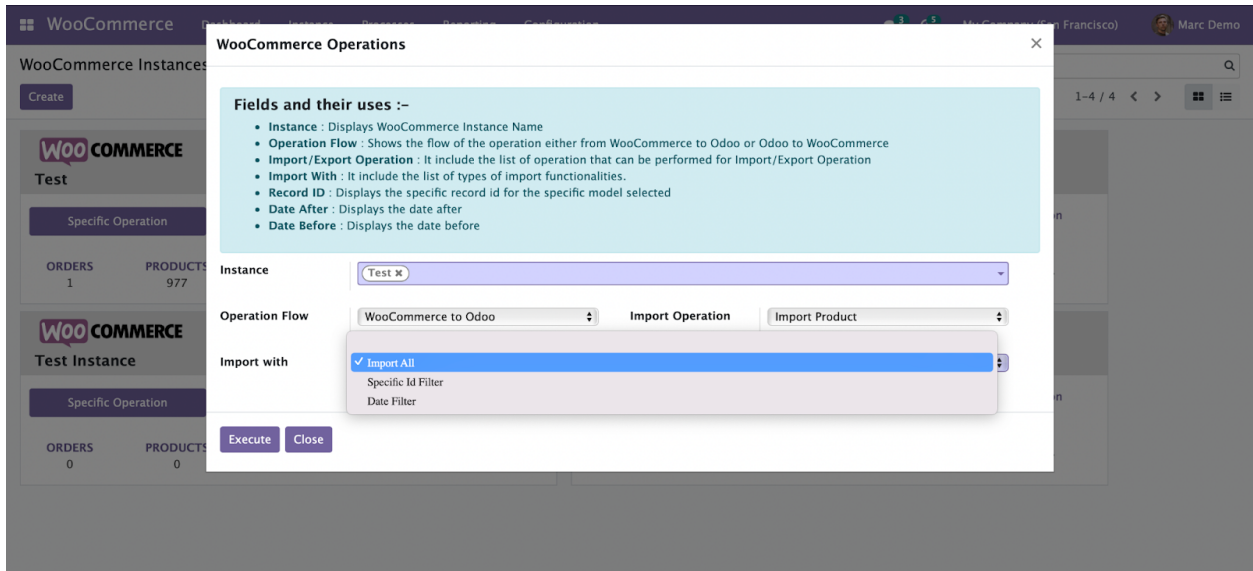
Suppose you want to import a product using a Special Id Filter. You can visit the WooCommerce backend and track the specific id of an existing product or you can create a new product.

4.1.1 Create a New Product

Follow the steps below to add a new product in WooCommerce and import it into Odoo using its specific id.

Step 1: Go to WooCommerce>Go to Products>Select **Add New**

Step 2: Give product name.

Step 3: Give product description.

Step 4: Fill in the general, inventory, shipping, and other information about the product as required.

Step 5: After giving all the information, scroll upwards and click on the Publish button.

Step 6: Go to Products>Select All Products

You will find your product in the list and if you hover your mouse over it, you will find its ID. Copy that ID and paste it into the Odoo WooCommerce Operations.
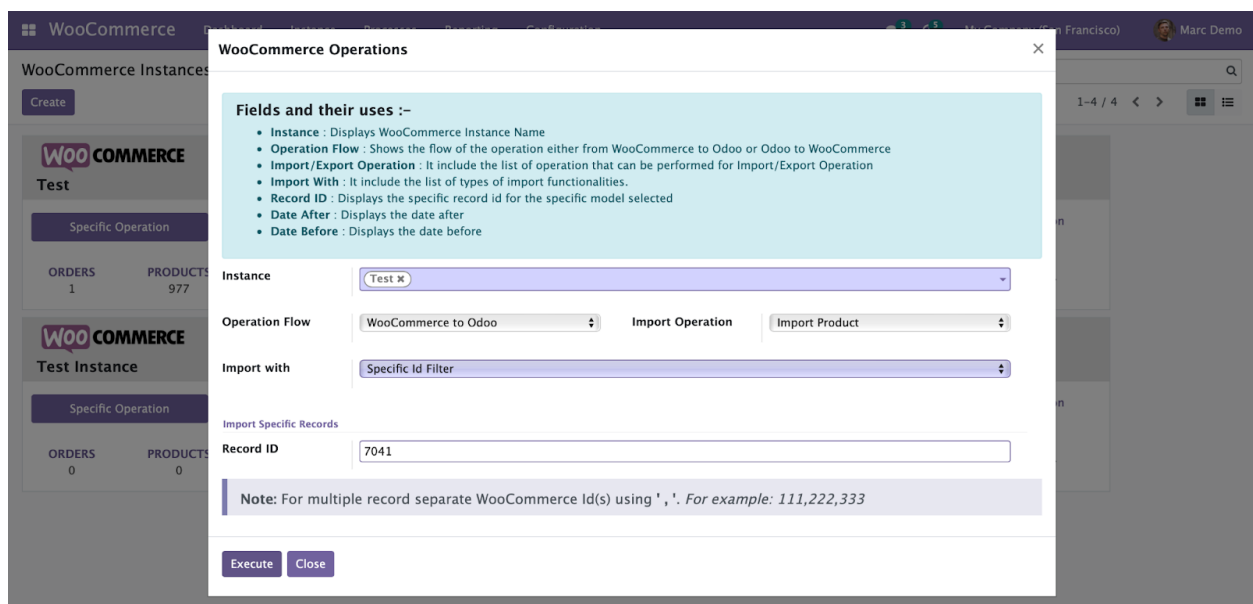
For example, the ID of **Books** Product here is **7041.**

Step 7: After filing the product id into the **Record ID** section, click on the **Execute** button.

Step 8: A message will appear for successful execution of the import product. Go to **Processes**>Click on **Queue Jobs**

You will find your record is added to the Queue Jobs.

Queue Jobs is a list of queuing processes in which all the records that are to be imported or exported are listed over here and executed one by one.

Step 9: If you click on the product, you will see that the product is been executed and has been shifted to the **Done** state.

This means that the product is imported successfully.

Step 10: To verify your product, Go to **Sale** from the App menu>Click on **Products**>**Products**
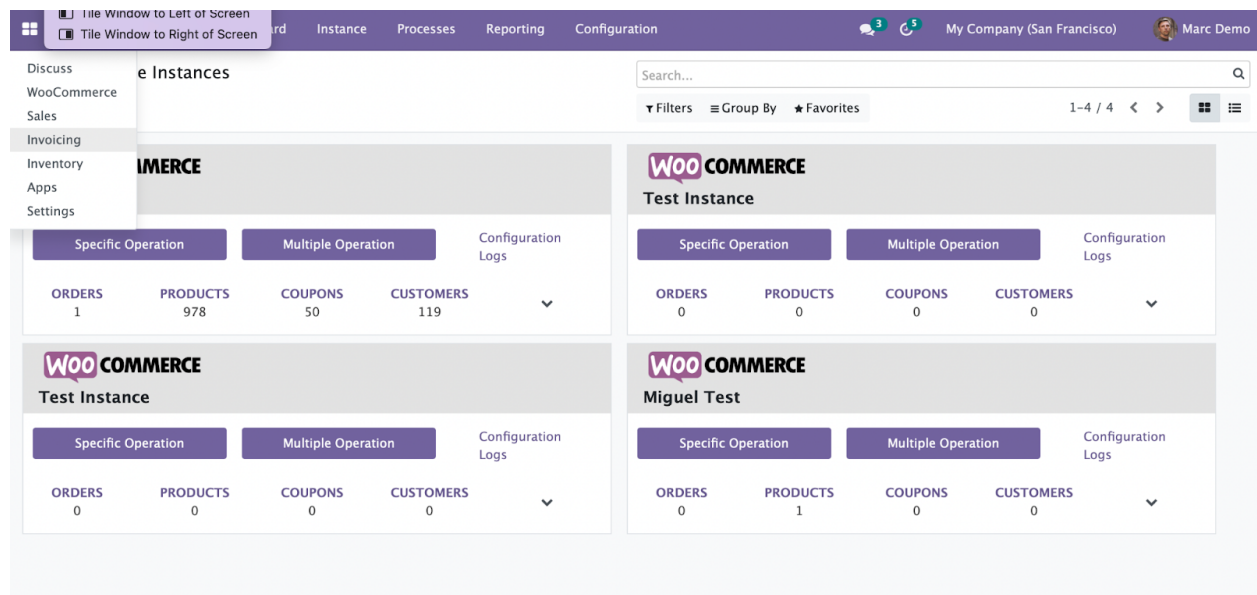
Step 11: Search for your product using the search bar and click enter.
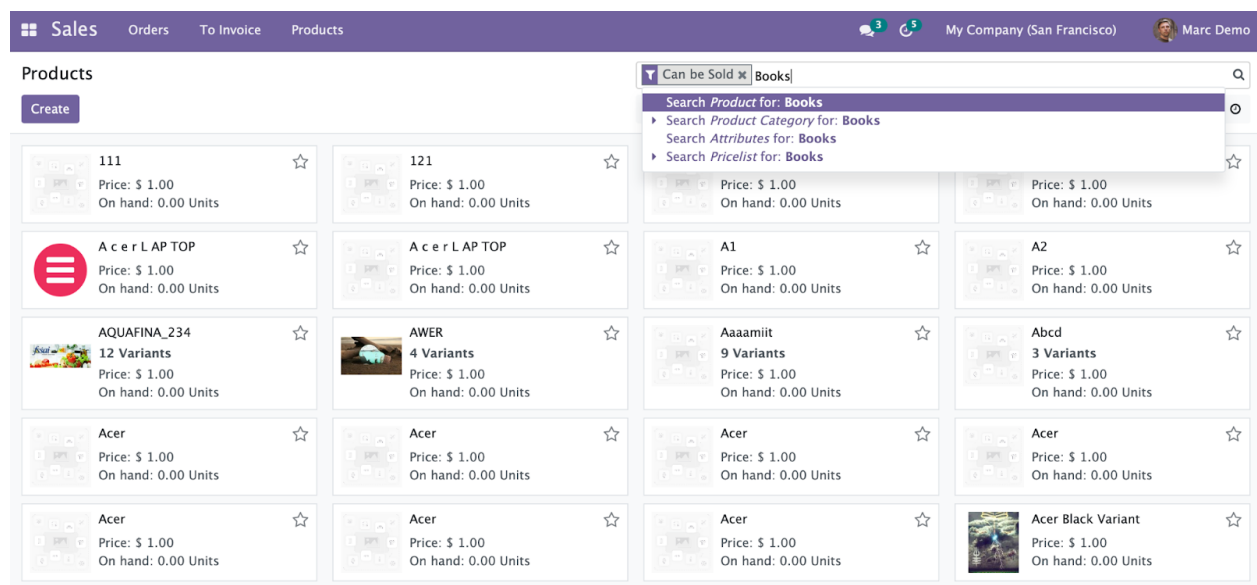
Step 12: If you will open your product you will find all the details associated with your product.
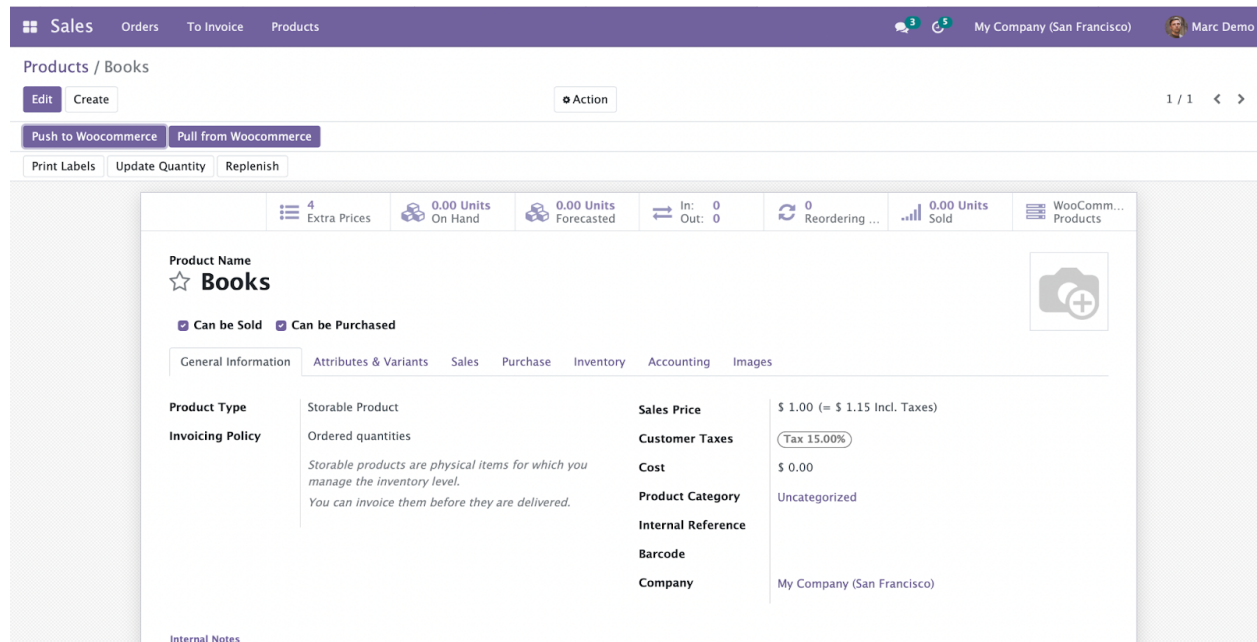
Note: Pull From WooCommerce: This button is used to import the data from WooCommerce to Odoo. However, there is a restriction to this particular button, which is the products must already be imported once so that next time you can pull them individually from the WooCommerce end.

4.2 Export Products

Note: Products can be exported in two ways. Through 'Instance', you can export all products (that have been once synced) and through 'Push to WooCommerce', you can export products individually.

- **First exporting products through 'Instance'**

Step 1: Go to **Instance**>select **Specific Operations**>Select Operation flow as **Odoo to WooCommerce**

In Export Operation, select Export Product
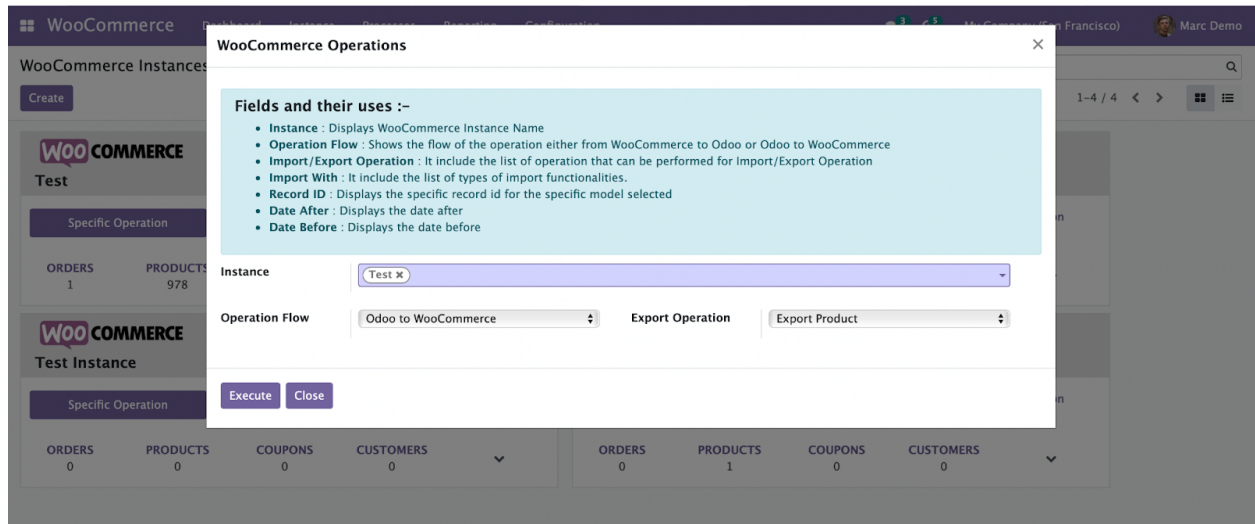
Step 2: Click Execute>Click on Processes>Select Queue Jobs

You will find all the products to be exported in the Queue list.

- **Exporting products through 'Pust to WooCommerce'**

Step 1: Go to Sale from the App Menu>Go to Products>Click on Products
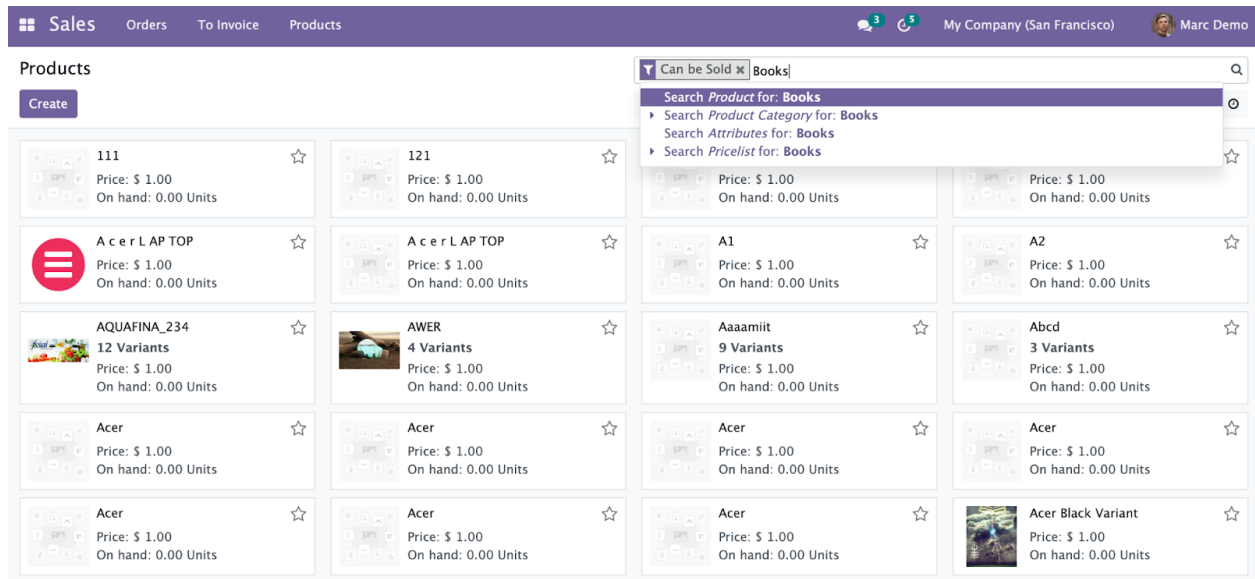
Step 2: Click Create, a page will appear to create a new product.

Step 3: Give a name to your product. Select the product type as Storable, Consumable, or Service based on the nature of your product.

Step 4: Give **Sale price** and fill in the **Inventory** details as required and click on save.

a.

b.

4.2.1 Update Product Quantity

While performing the export function and creating a new product, you can update the product as well.

For example, if you update the Stock of the product, Click Update Quantity followed by the below steps.

Click on create and enter the '**On Hand Quantity**' click on Apply and save.

Now you have all the details of the product. Click on the product to perform the push/pull function.

Here, in this case, the product is Mobile Phones, so click on it.

Click on '**Push to WooCommerce**', and a dialogue box will appear and ask for further details that you need to export with the product.
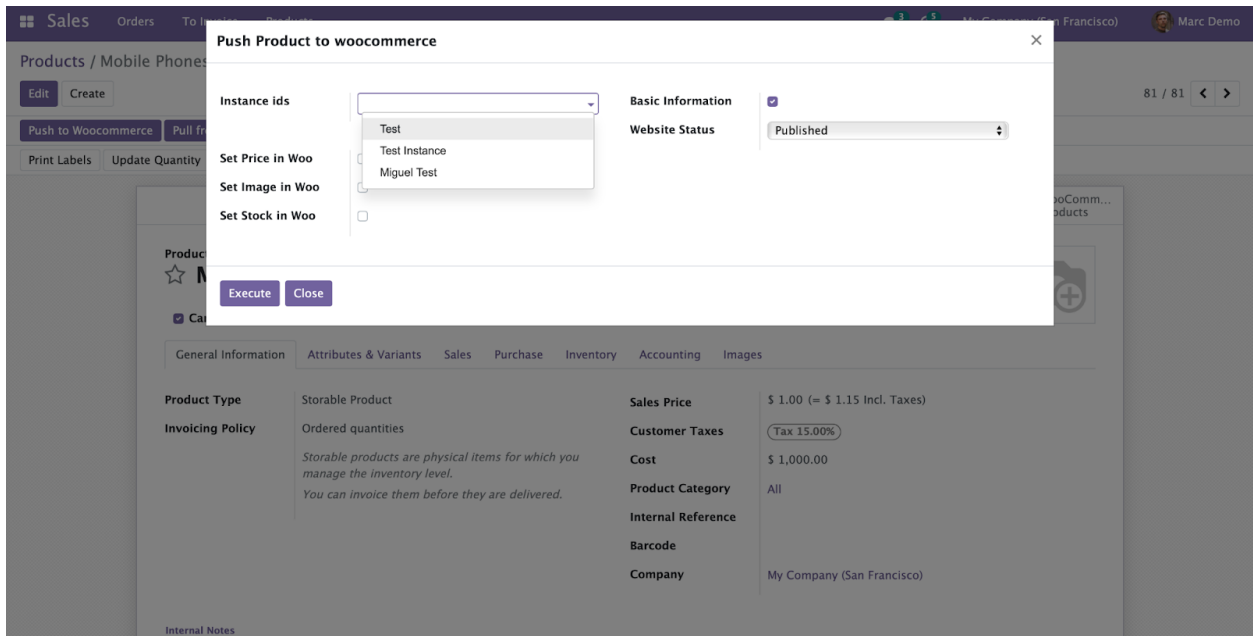
Select the **Instance**, you can select multiple Instances and export the same product into different WooCommerce stores.

Now, as per your requirement, you can select the Basic Information, Price, Image, Stock, or Product status(published/unpublished) you need to export or not with the product. After deciding which features of the product you want to export, click on the **Execute** button.
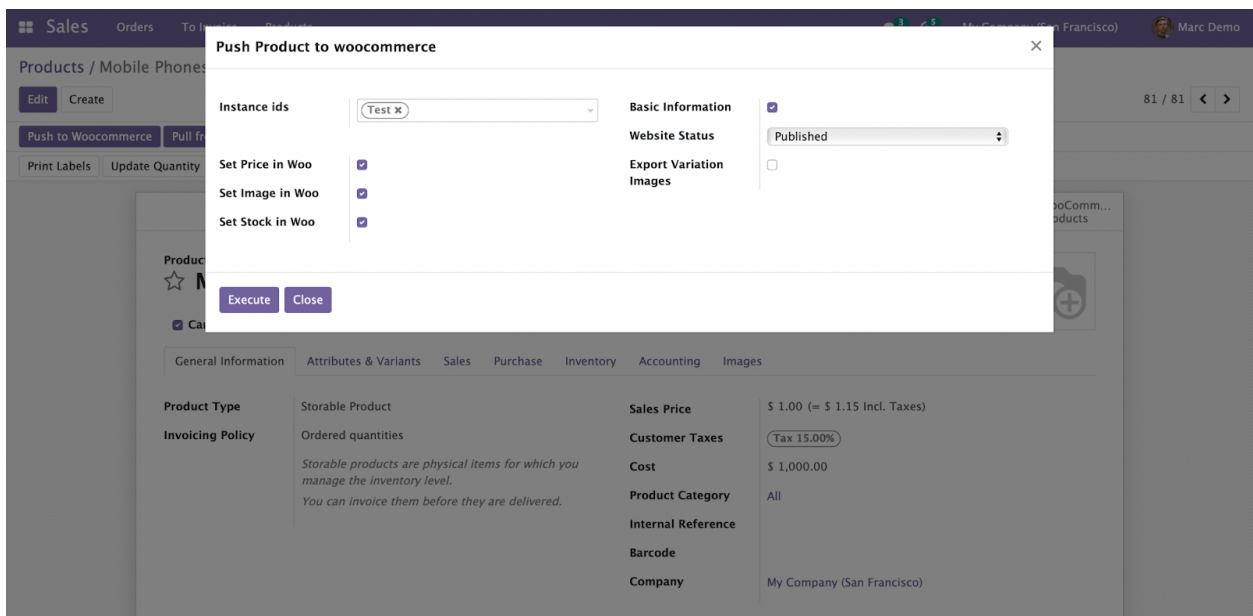
Now go to WooCommerce from the App menu.
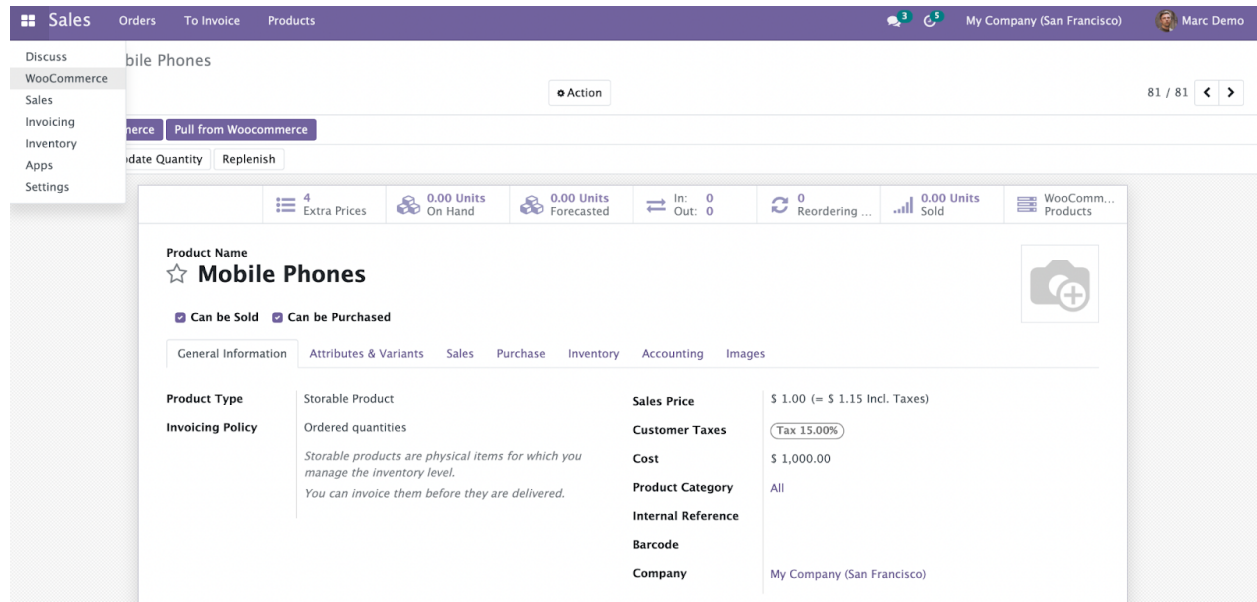
Go to Processes>Select Queue Jobs>Type your product name in the search bar and press enter.

Once you click on your product you will find all the details associated with it and its status will be in 'Done' state.

Check the product at the WooCommerce backend.

Visit the WooCommerce backend and click on all products, there you will find your product being exported to WooCommerce.
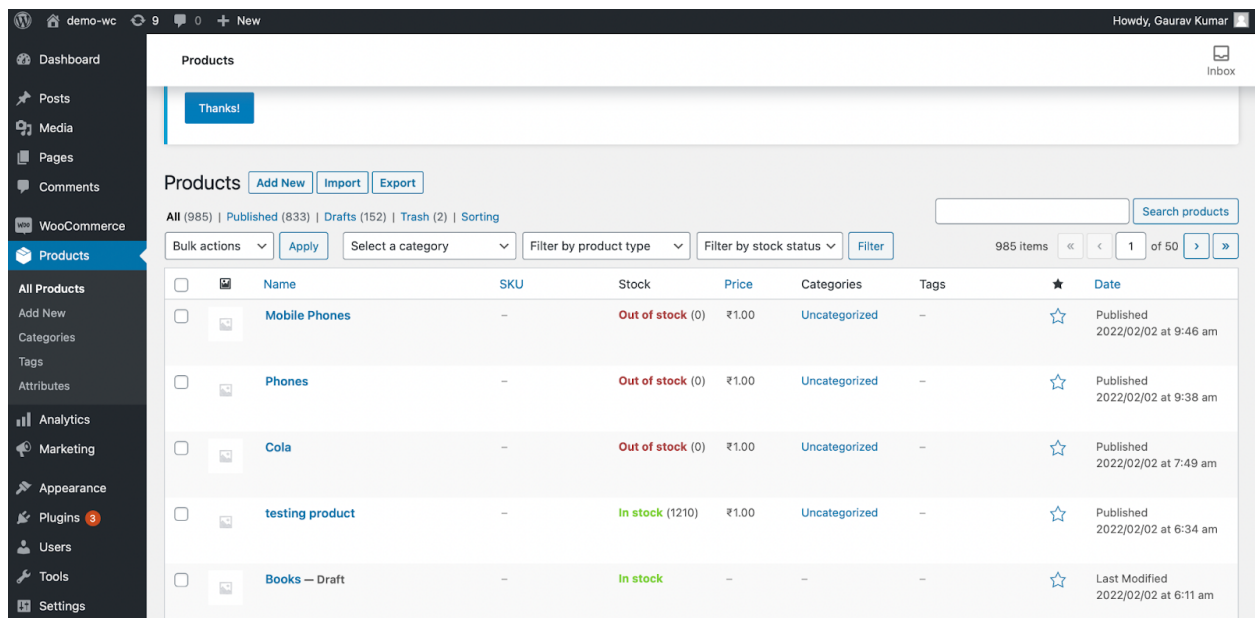
This way you can export a particular product using the Push functionality of our connector.

4.2.2 Check Product Sync Status

If you want to check the sync status of your product with other details–Go to Sales>Products>Products>Search your product name.
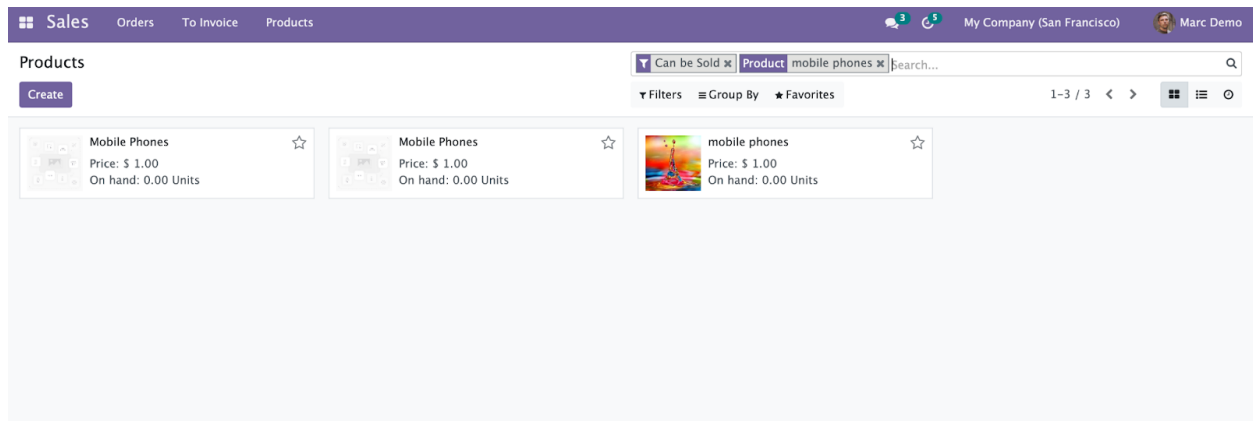
Click on your product which you have created recently. For instance, here our recently created product is 'Mobile Phones'.
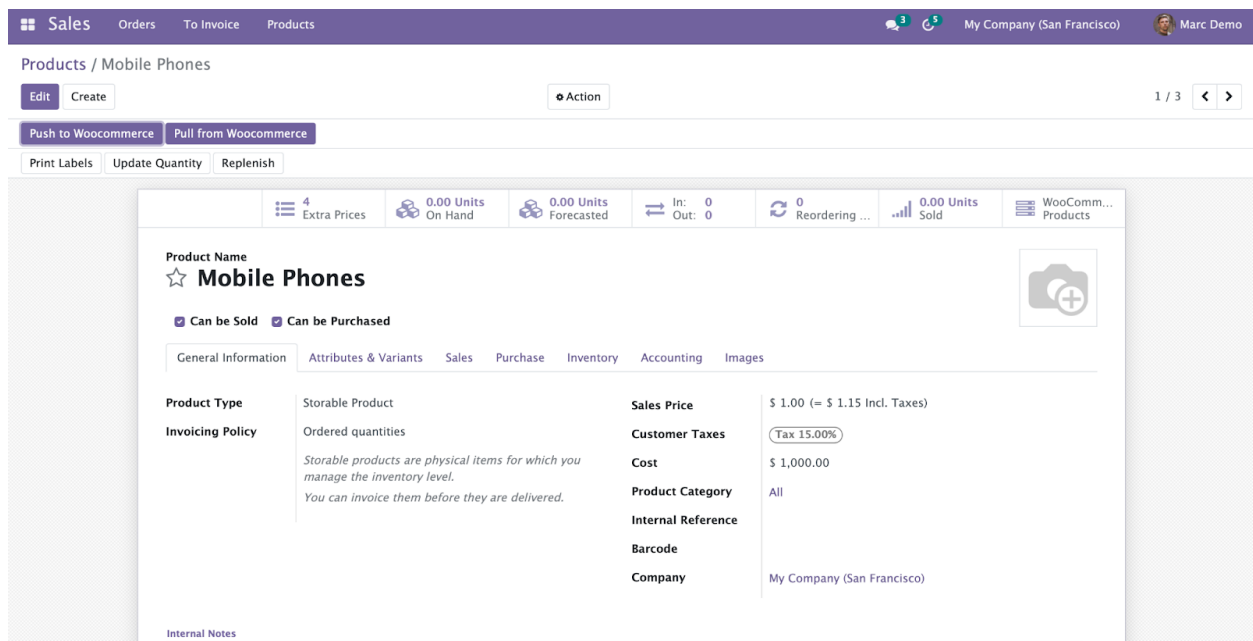
On the right corner, you will see the option "WooComm…Products". When you click on it a window will appear as given below:

Here you can see the Sync Status of your product. This layered model is used to check the MetaData related to a particular product.

If you click on your product, you will find all the details, such as when the product was created, modified, or synced, which instance it is associated with, the price lists associated with the products, the variants (if any) associated with the products, and the woo commerce id of the exported product.

At the top right corner, you will see that this particular product is Synchronised with Woo.

If you click on the **Edit** button and change the **Sale Price>Save>WooComm…Products**, you will find a layered model similar to the

previous one. If you open it, you will see that the product is **Unsynchronized with Woo**.
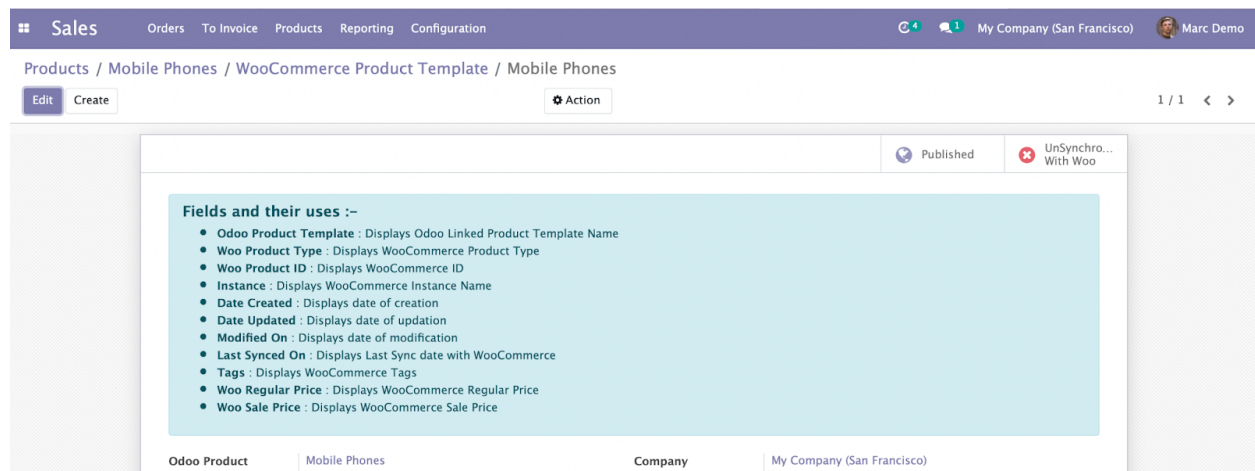
Purpose of **Sync/Unsync…with Woo** function: This will help to identify whether your product is in the synced state, a completely new product that has never been exported, or it is in the unsynced state but exported once.

Note: Import/Export of other entities (Customers, Orders, Product Attributes, Tags, Coupons, and more) can be performed similarly to the above-mentioned steps.

4.3 Import/Export of Customers

4.3.1 Import of Customers

You can import customers using the same steps as you performed for importing products.

If you want to import a customer using a specific Id, follow these steps:

Go to WooCommerce Instance>Special Operations>Select Import Customers>Special Id Filter
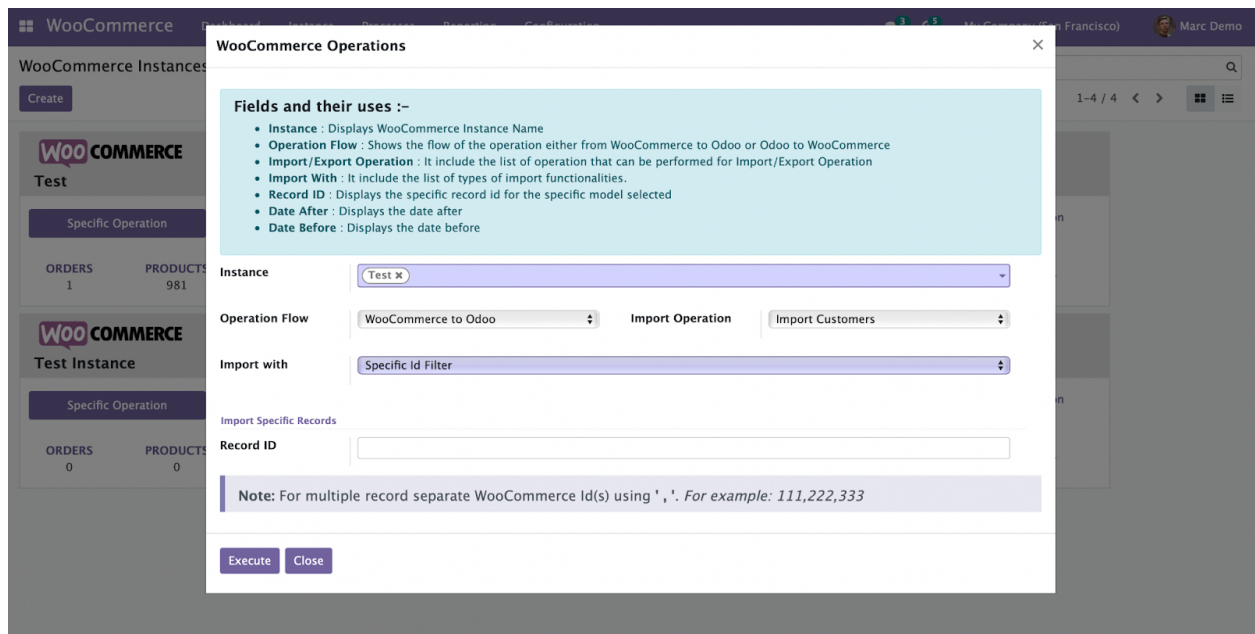
To retrieve the Id of the customer. Go to WooCommerce backend, and click on all customers.

You can either create a new customer or select the customer you wish to Import to Odoo.

For example, you pick the customer of your choice. Now, select its URL, there you will find the Id of that particular customer. Copy that Id and paste it into the Odoo.
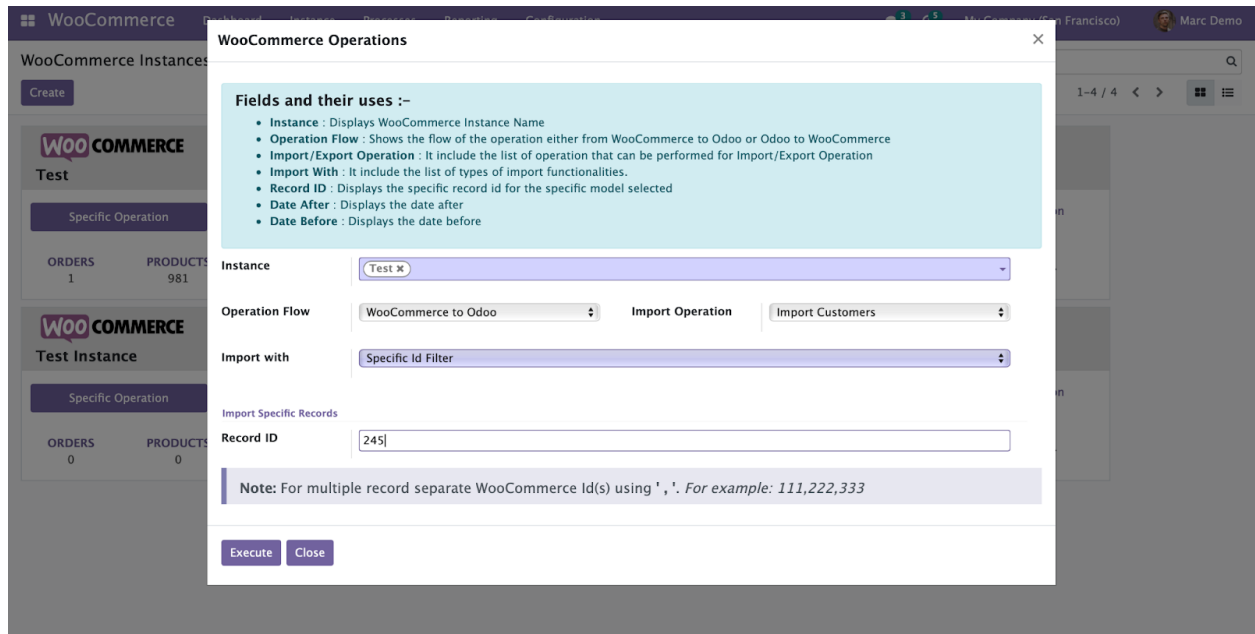
Click on the Execute button, and click on the Processes>Go to Queue Jobs.

Here you will see the customer that you have imported using the specific id.

4.3.1.1 Create a New Customer

Though you can pick the customer ID of your choice and perform the import function. However, if you want to create a new customer at the WooCommerce end, follow these steps:

Step 1: Go to WooCommerce end>Click **Users**>Click '**Add New**'
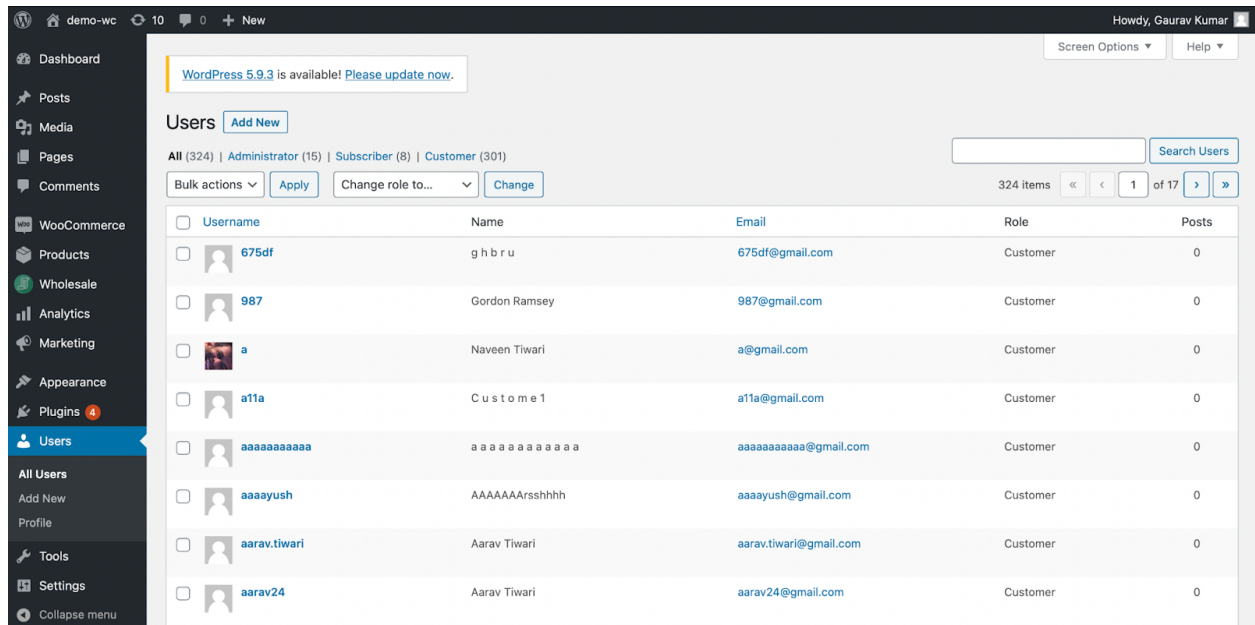
Step 2: Fill in the necessary details. It is important to give the email address (must be unique) as it will help distinguish between two customers with the same name. Fill in Name, Email, First & Last Name, and Select the Role as 'Customer'.

After filling in all the details click on the 'Add New User'
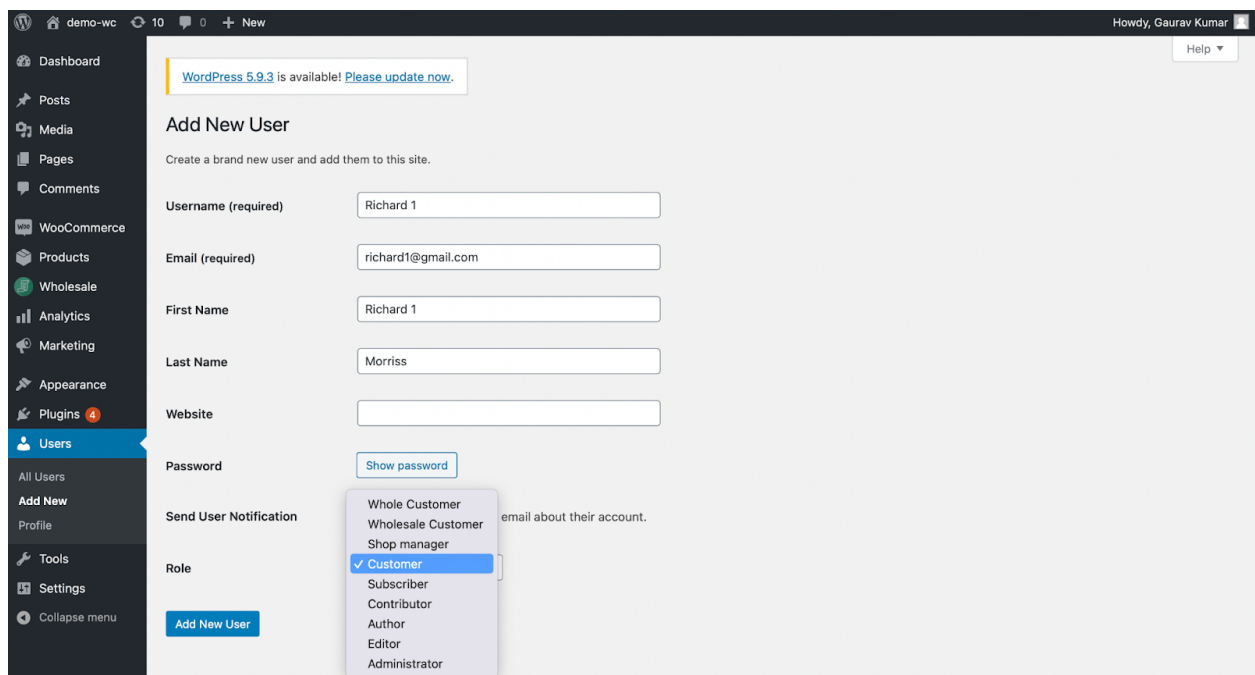
Step 3: Now go to 'All Users' and search for the newly created customer in the search bar.

Step 4: Open the user and fill in the Billing Address details and Shipping address details and click on 'Update User'.

Step 5: After updating the user, you can find the specific id of the user as mentioned below in the image. For instance, here the ID of the newly created user is 345. Use this Id to import the customer.
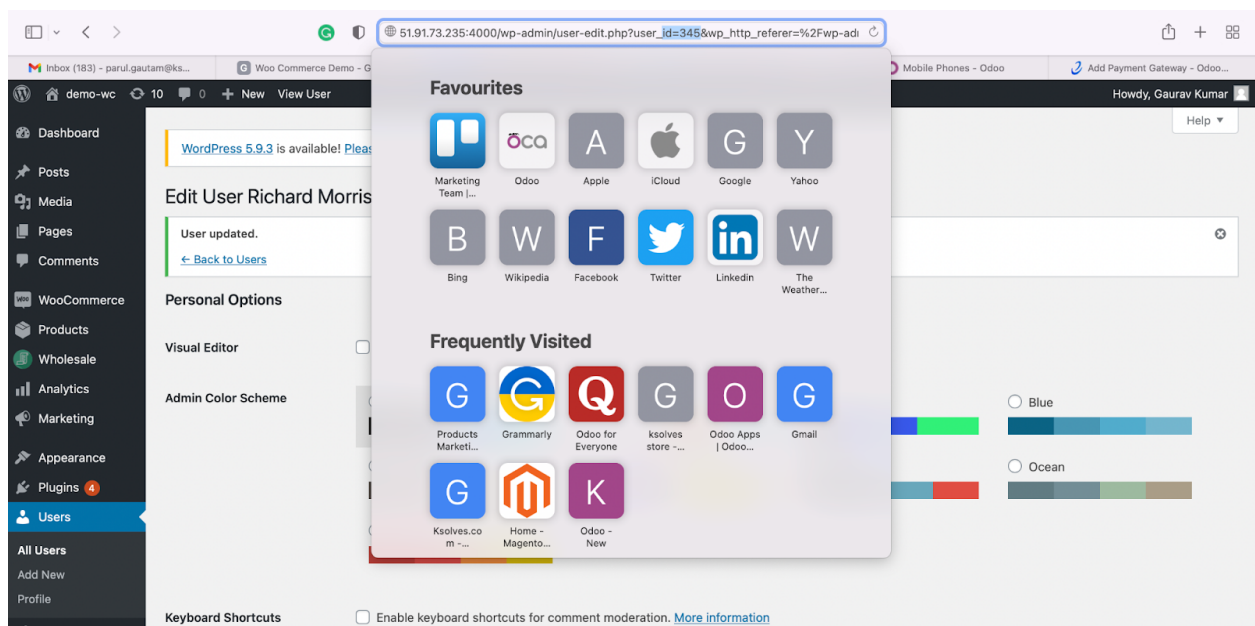
4.3.2 Export Customers

- **Exporting customers through Instance**

Click on the Specific Operation>Select the Instance>Select Odoo to WooCommerce as Operation flow
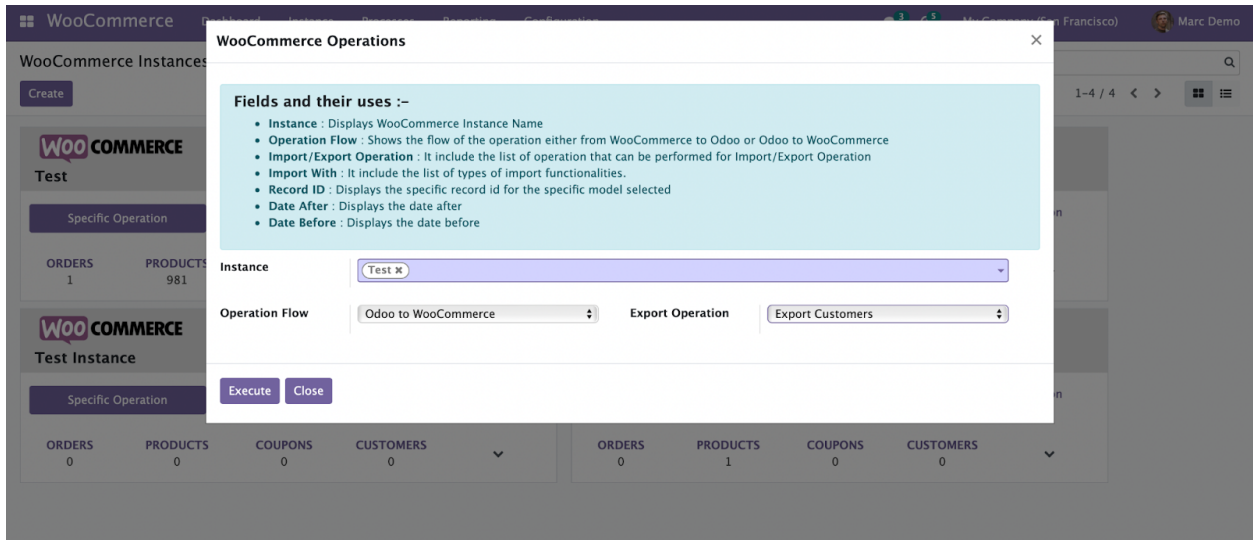
Click on the Execute button and refer to Queue Jobs to see the customers to be exported.

Here you will see the list of exported customers.

- **Exporting a customer through Push functionality.**

Go to Sales>Orders>Customers

You can choose the existing customer to export from the list or you can create a new customer.

Click Create to create a new customer.

Select whether you want to create a new customer as an Individual or a Company.

Fill in all the required fields, such as Name, Address, Phone, Email id (mandatory), tags, and other information.
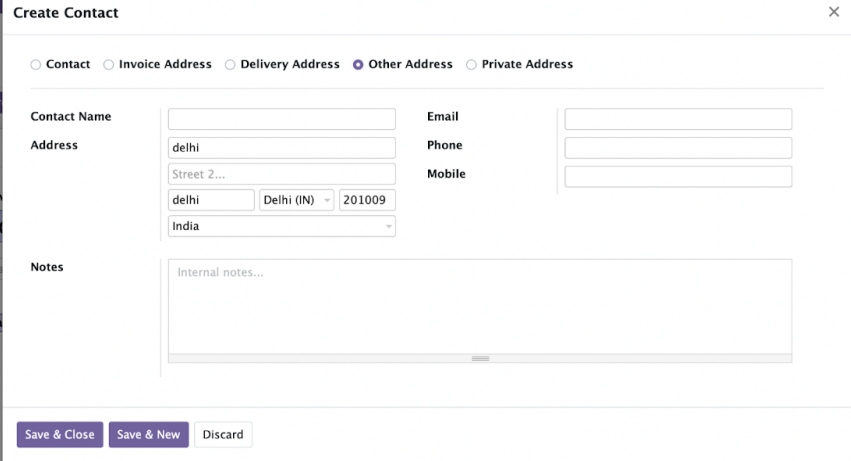
To add a single address or multiple addresses, in the Contacts & Addresses section, click on the Add button. A Create Contact window will appear, where you will have to fill in all the required details.

Choose from Contact, Invoice Address, Delivery Address, Other Address, or Private Address option.
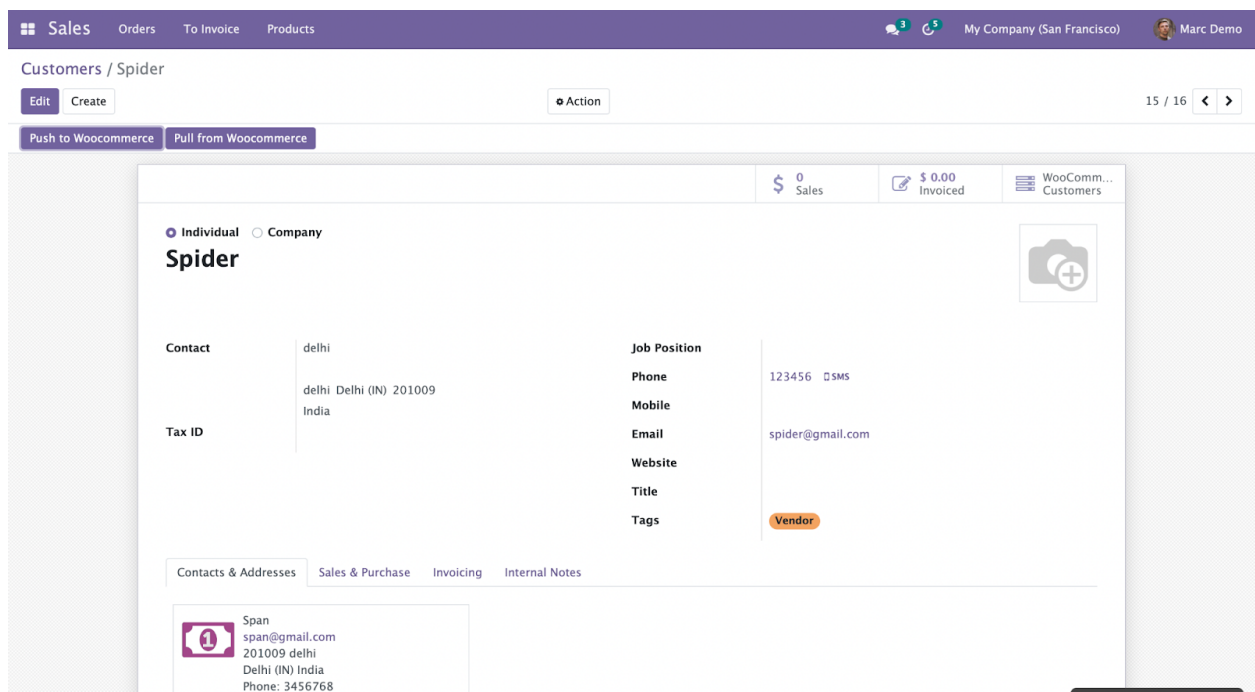
After filling in all the details click on the Save & Close button.

Now click on the 'Push to WooCommerce' button and the dialogue box will open.

Select the instance and click on the 'Execute' button.

Note: Pop-up to choose the instance appears only when there are multiple instances created in the woocommerce connector. In case there is only one instance created, then the pop-up for the customer won't appear.
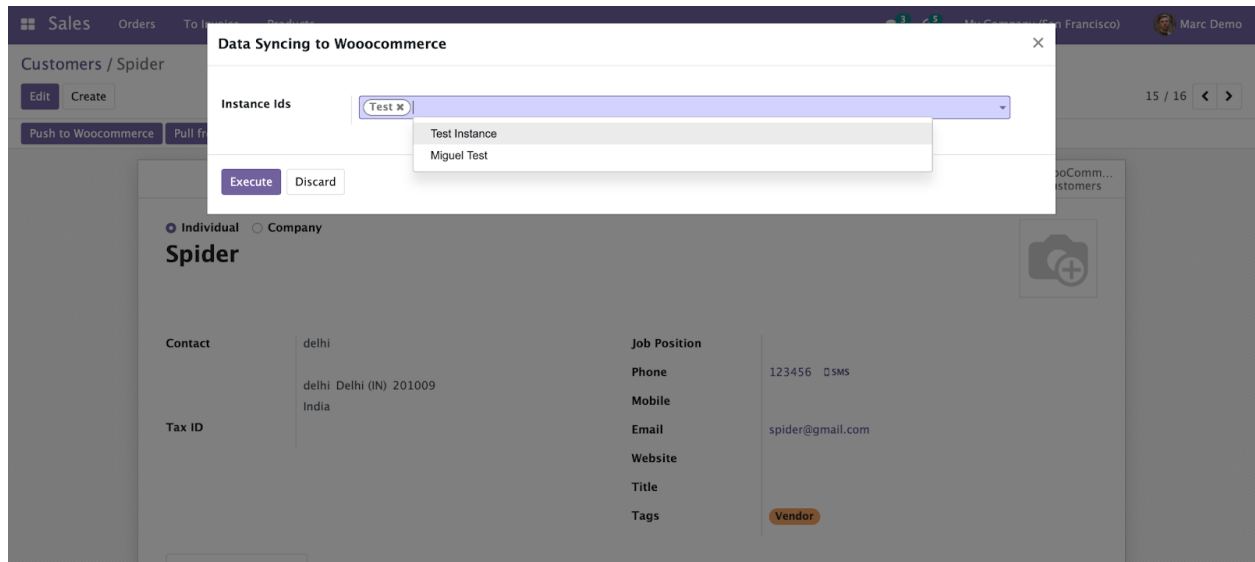
Once you click on the Customers, you will find the customer name that you have newly created.
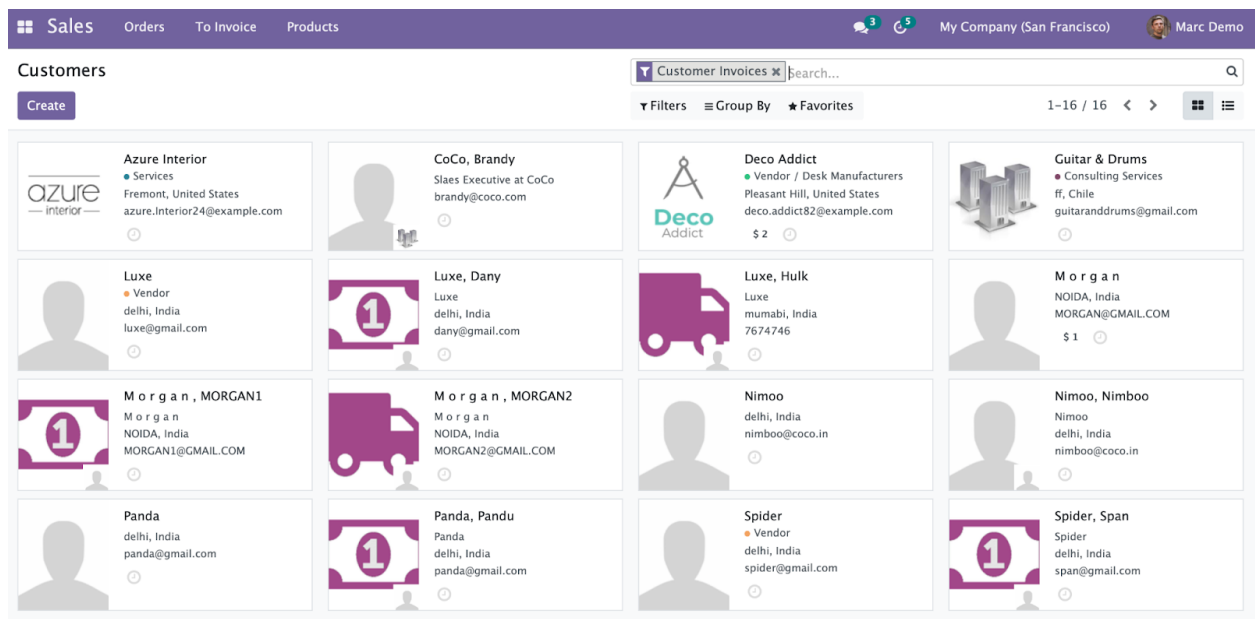
Click on your customer to check its Sync Status.

If you click on the customer, a detailed window will appear, containing all the necessary details. Details like when the customer was created, modified, or synchronized, instance name and woo commerce id of the exported customer .

To check the status of customers in logs.

Go to WooCommerce Instance>Logs

Here you will find all the details (status) of the intermediate steps that are followed to export customers. Depending on the time and date the customer was created you can check its status.

Prepare Update log verifies that customer data is mapped to the woo commerce format, click on it to see if it is in a successful state or not.

WooCommerce Instances / Logs

LOG423858	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:55:01	Test	My Company (San Francisco)
LOG423856	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:55:01	Test	My Company (San Francisco)
LOG423854	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:55:00	Test	My Company (San Francisco)
LOG423852	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:55:00	Test	My Company (San Francisco)
LOG423850	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:55:00	Test	My Company (San Francisco)
LOG423848	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:59	Test	My Company (San Francisco)
LOG423846	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:59	Test	My Company (San Francisco)
LOG423844	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:59	Test	My Company (San Francisco)
LOG423842	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:58	Test	My Company (San Francisco)
LOG423837	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:58	Test	My Company (San Francisco)
LOG423838	Customer	Update	Success	Odoo to WooCommerce	02/02/2022 17:54:58	Test	My Company (San Francisco)
LOG423840	Customer	Update	Success	Odoo to WooCommerce	02/02/2022 17:54:58	Test	My Company (San Francisco)
LOG423841	Customer	Prepare Update	Success	Odoo to WooCommerce	02/02/2022 17:54:58	Test	My Company (San Francisco)
LOG423835	Product	Fetch	Failed	WooCommerce	Odoo to WooCommerce	Test	My Company (San Francisco)
LOG423833	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:57	Test	My Company (San Francisco)
LOG423831	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:57	Test	My Company (San Francisco)
LOG423829	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:56	Test	My Company (San Francisco)
LOG423827	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:56	Test	My Company (San Francisco)
LOG423825	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:56	Test	My Company (San Francisco)
LOG423823	Product	Fetch	Failed	WooCommerce to Odoo	02/02/2022 17:54:55	Test	My Company (San Francisco)

Here you will find that the customer you have created has been successfully exported to the WooCommerce store.

WooCommerce Instances / Logs / LOG423841

⚙ Action   44 / 80

Fields and their uses :-

- **Operation Performed** : Displays operation type which is performed
- **Created on** : Displays the created date
- **Operation Status** : Displays the status of the operation Success/Failed
- **Operation Flow** : Shows the flow of the operation either from WooCommerce to Odoo or Odoo to WooCommerce
- **Domain** : Shows name of the model
- **WooCommerce Instance** : Displays WooCommerce Instance Name
- **Layer Model Associated** : Displays the layer model which is associated
- **Odoo Model Associated** : Displays the odoo default model which is associated
- **Odoo Record ID** : Displays the odoo record ID
- **Summary** : Displays the Summary of the Logs

SUCCESS

LOG423841

Basic Info

Operation Performed	Prepare Update
Created on	02/02/2022 17:54:58

Status

Operation Status	Success
Operation Flow	Odoo to WooCommerce

WooCommerce Information

Domain	Customer
WooCommerce Instance	Test

Model Info

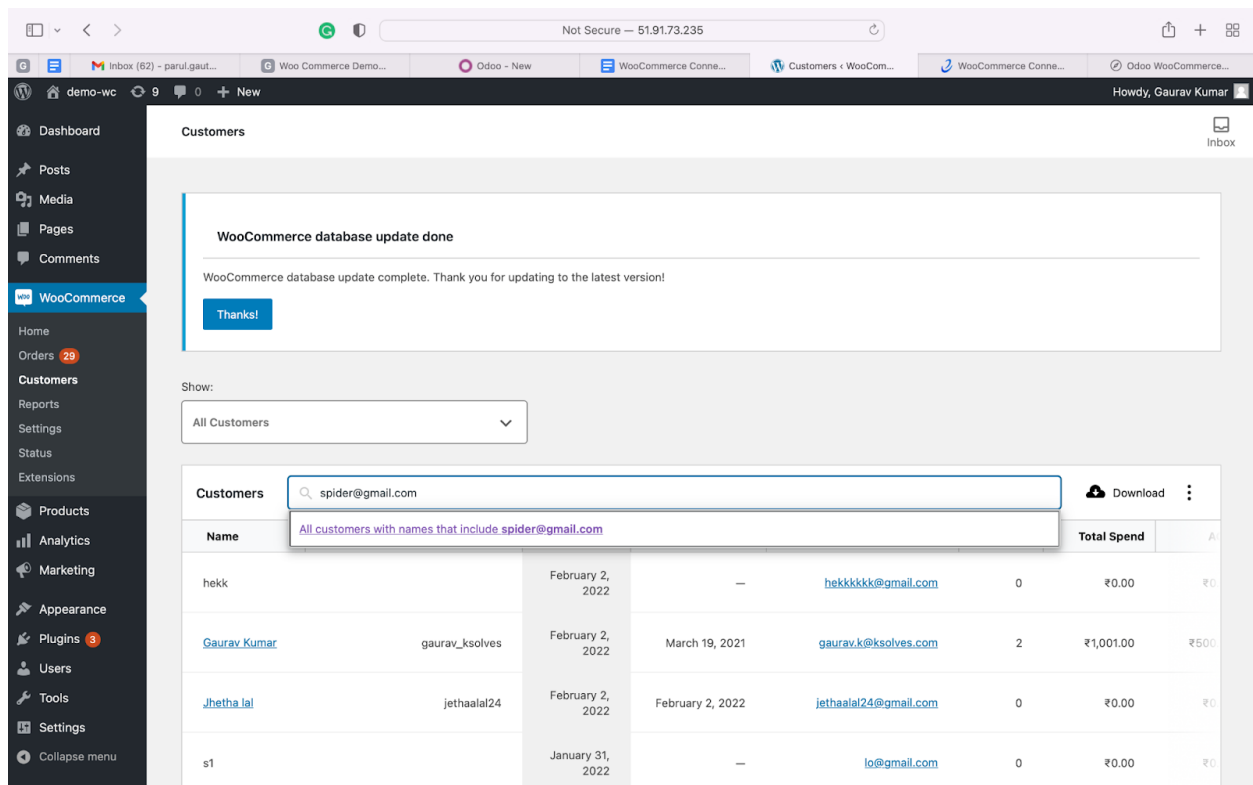|	
Odoo Model Associated	Contact
Layer Model Associated	Custom Partner to Connect Multiple Connectors
Odoo Record ID	551
Customer	Spider

To check your customer at the WooCommerce end, visit the WooCommerce backend and select Customers.

Enter the email address of the customer in the search bar, as an email id is one that differentiates between two customers of the same name.

After entering the email address, click enter and you will find that the customer is successfully exported.

4.4 Import/Export of Orders

4.4.1 Import Orders

Note: Creating Orders in woocommerce can be with customers and without the customer. The order without a customer is considered to have a guest customer.

For example, some buyers log in and then shop, while others do not login/sign up and just use their addresses to shop from the website.

A. Importing Orders with Customers

A.1 First, creating a new order

Step 1: Go to WooCommerce>Orders>Add Order

Step 2: We will give the name of the newly created customer as we are importing an order with the customer. We will add the product, for example, mobile phones, update the quantity and add. After that, we will click on the create button, and our new order will be created.

Step 3: Click on WooCommerce>Instance>Select the Instance>Specific Operation

Step 4: Select Operation Flow as WooCommerce to Odoo; Import with specific id filter. You can find the id of the order from the WooCommerce end as given below.

Step 5: Put the id in the Record ID field and click the 'Execute' button.

Step 6: Click Processes>Queue Jobs
Here you will find all the new, successful, and failed jobs.

Remember: If the cron (which is responsible for executing the queue records) behind executing the record is taking too long and you want to do the process manually, we have given an option the 'Process Record'. It will help you to manually execute any record that is stuck in your queue job.

When you click on the Process Record it will quickly move to the Done state.

You can check the imported sale order by clicking on the 'Sale' option from the menu button. Here you will find all the imported entities.

B. Importing Orders without Customers
- **Enable Actual/Guest Customer**

Step 1: Go to the **WooCommerce** backend and create a **new order** for the Guest user. Fill in the **billing** and **shipping details**, and add the product associated with it. After that click on the **Create button**.

Step 2: Go to Instance> Configuration> Order Information>Enable the Actual/Guest Customer option and click save.

Note: If the above configuration is enabled, then the imported order's shipping and billing addresses will be treated as legit customers, instead of addresses of a static Guest Customer record. **If disabled**, the shipping and billing address will be a part of the static Guest Customer record in Odoo.
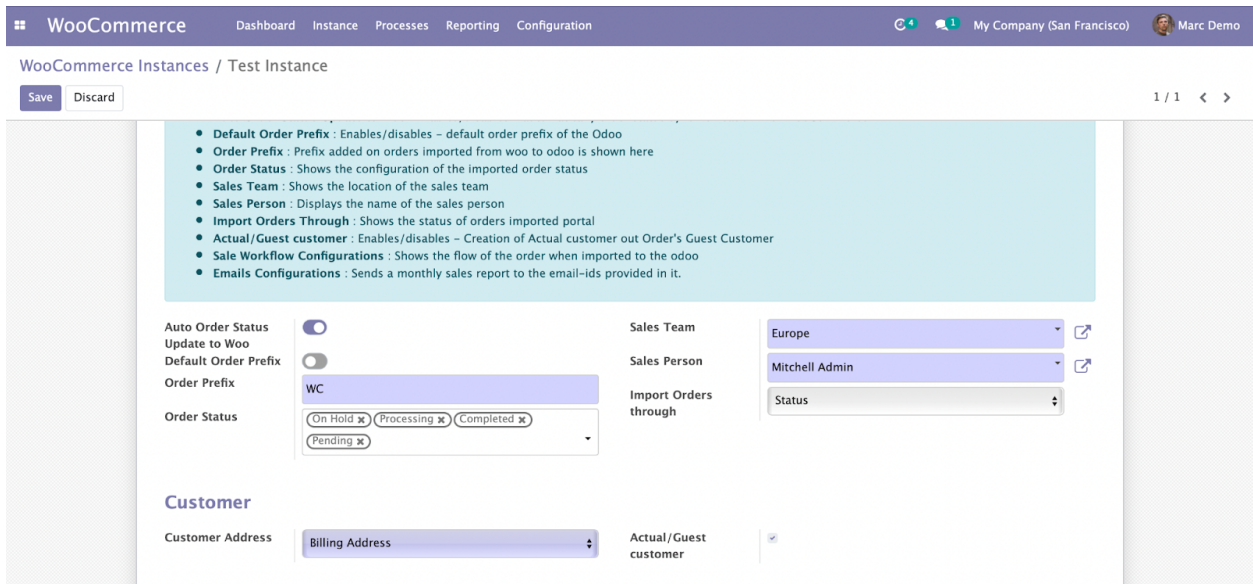
Step 3: Go to Instance again>Choose Specific Operation>Import Order using specific Id. Fill in the specific Id in the Record Id and click Execute.

You can find the Specific ID from the WooCommerce Orders' Page. For Instance, here the specific id in the given image is: 6979.

Step 4: Go to Processes>Queue Jobs, here you will find the status of the latest queue jobs.

If you will open your guest customer order, you will find all the customer details as displayed in the given image:

This way you can import an order without a customer.

- **Disable Actual/Guest Customer**

Now we will import an order without enabling the Actual/Guest Customer.

Step 1: Go to Instance> Configuration> Order Information>Disable the Actual/Guest Customer option and click save.

Step 2: Go to the WooCommerce backend and create a new order for the Guest user. Fill in the billing and shipping details, and add the product associated with it. After that click on the Update button.

Step 3: Go to Instance>Choose Specific Operation>Import Order using specific Id. Fill in the specific Id in the Record Id and click Execute.
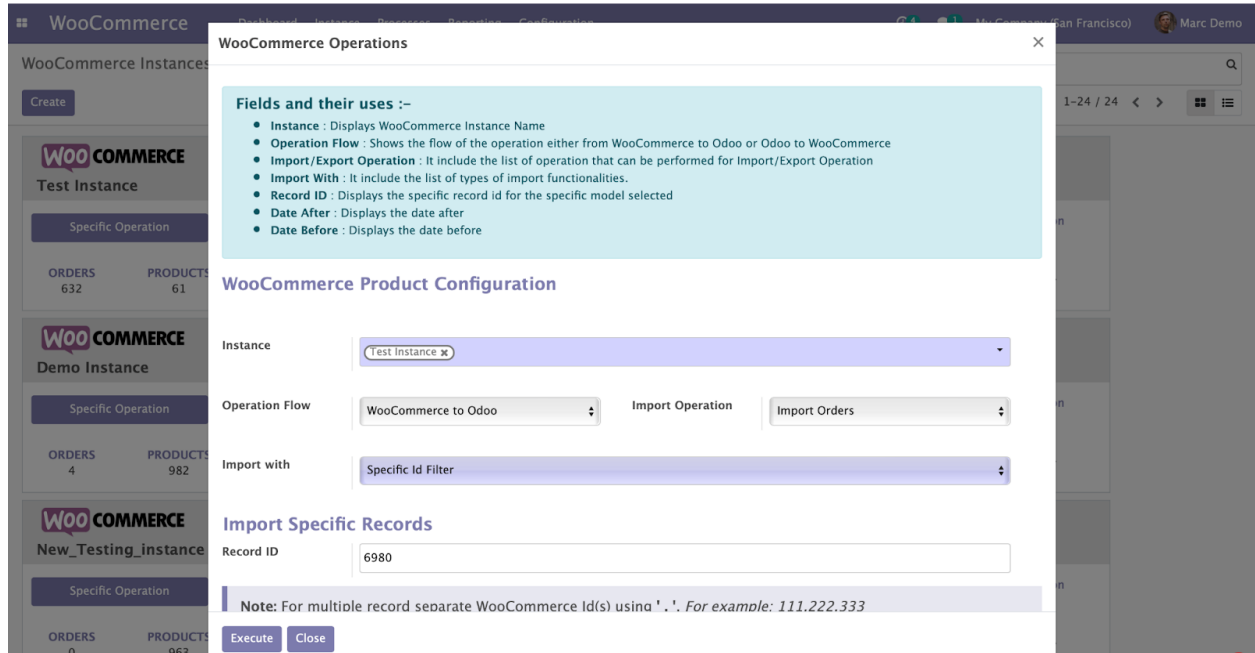
Go to Processes>Queue Jobs. Here you will find all the New, Done, and Failed logs.

Imported Order's address will be added to a static Guest Customer record's child address.

4.4.2 Export Order

Note: While exporting any order associated with a customer, the product and the customer must be already synced.

4.4.2.1 Create a New Order

Step 1: Click on Sales>Create

Step 2: Fill in the required details and click save.

Step 3: Click on the WooCommerce Info>Edit

As per your requirement, you can change the Woo Status and select the Instance.

Step 4: Click on the Action button and click on the Export Order in WooCommerce.

Step 5: Go to WooCommerce from App Menu>Processes>Queue Jobs

You will find the new order to be exported in the queue. If you click on it you will see all the details related to it.

Step 6: Go to the WooCommerce backend>click on Order, and there you will find your exported order.

- **[Note: By following the same Import/Export process, you can import/export other entities as well.]**

5. Processes

If you want to directly check successful/failed logs, you can follow the process like this:

Go to Processes > Success Logs/ Failed Logs

- **Success Logs**
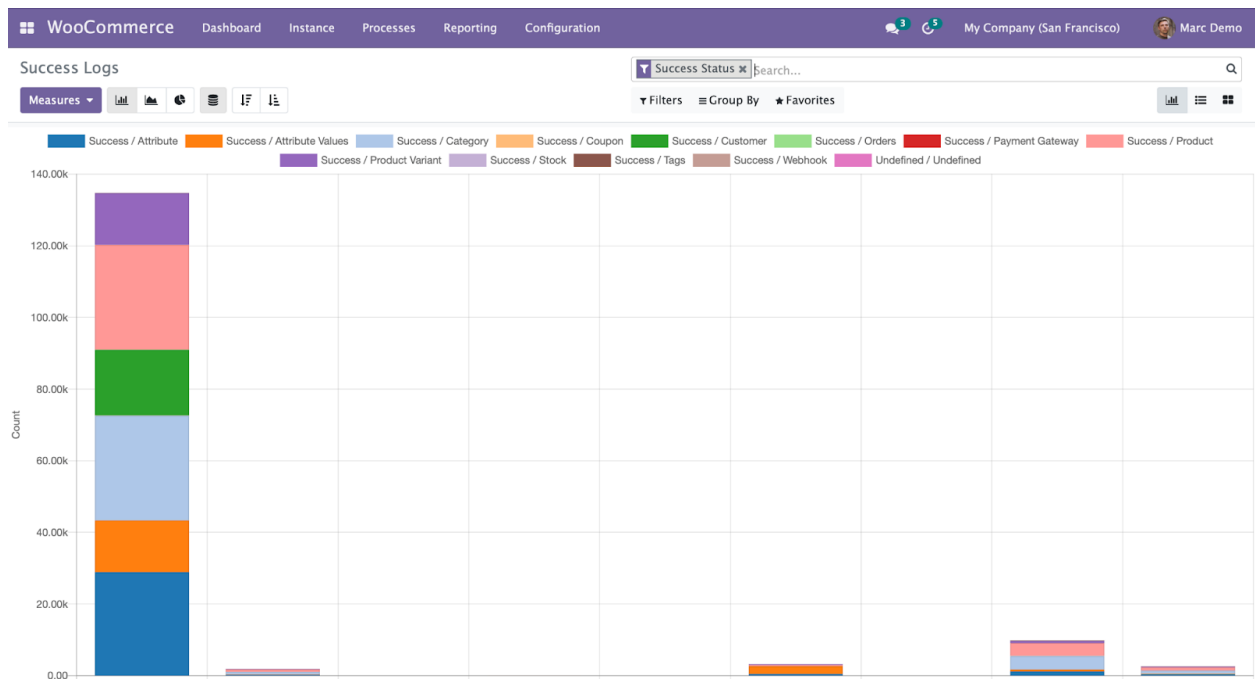
With this interactive chart, you can see logs generated so far.

Moreover, if you click on the list icon in the top right corner the logs will appear like this:

- **Failed Logs**

Similarly, you can check the Failed log by following the same process.

Failed Logs   Failed Status ✕ | Search...

Measures ▾ | 📊 📈 🥧 📚 | ↓F ↓↑   ▾Filters ≡Group By ★Favorites   📊 ≣ ▦

Failed / Attribute   Failed / Category   Failed / Product   Undefined / Undefined   Failed / Orders   Failed / Product Variant

Failed Logs ⬅

⤓   ▾Filters ≡ Group By ★ Favorites   1-1 / 1 ‹ ›   📊 ≣ ▦

	Log Id	Domain	Operation Performed	Operation Status	Operation Flow	Created on	WooCommerce Instance
☐	LOG1004	Category	Create	Failed	WooCommerce to Odoo	06/03/2021 13:25:23	Test Instance

6. Dashboard

Inside the Dashboard, the states of all the products, variants, attributes, and categories enqueued to the Queue Jobs are visible. For instance, if you hover your mouse over the bar in the bar chart, you can see the counts of the products.
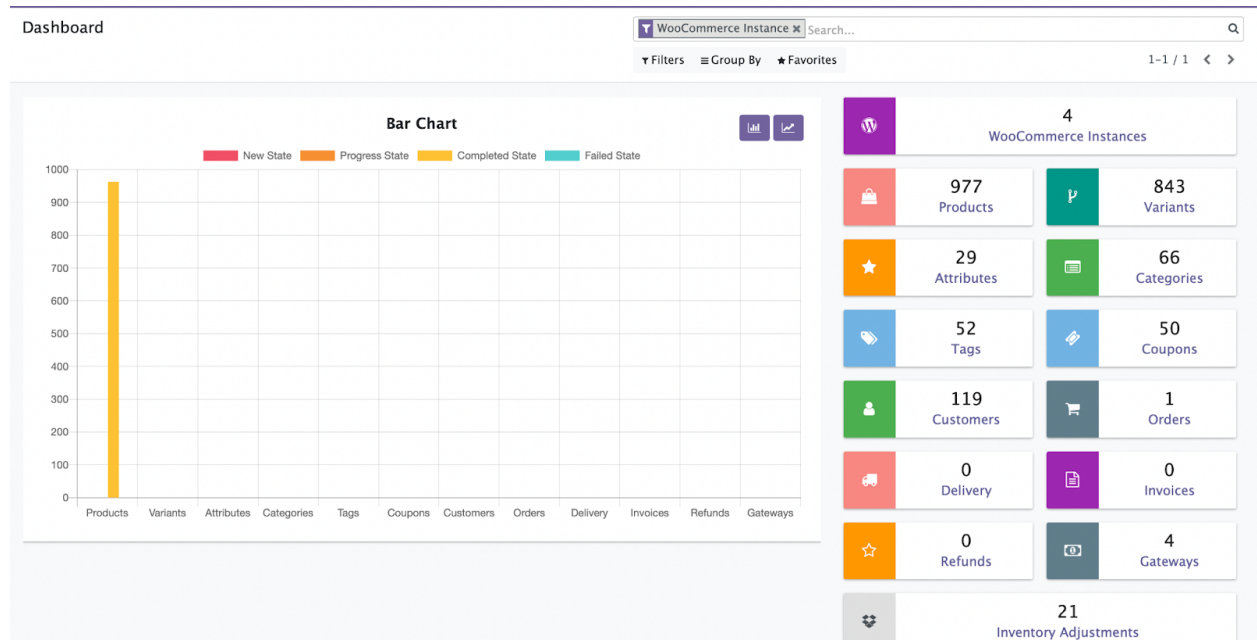
You can change the bar chart into a line chart by clicking on the line chart icon in the right corner of the graph.
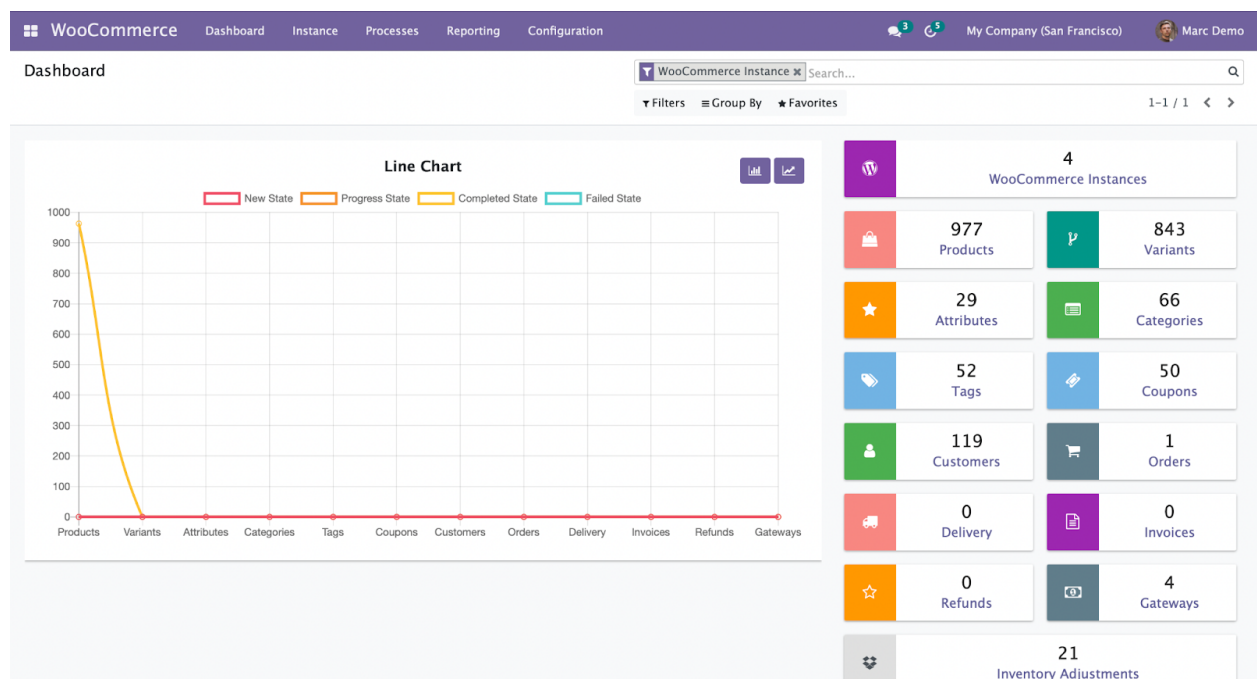
In the right panel, there are buttons to display the counts of various domains. For instance, if you are syncing products, you can see that the counter will be

updated in the Products. These counts for each domain are combined for every instance.
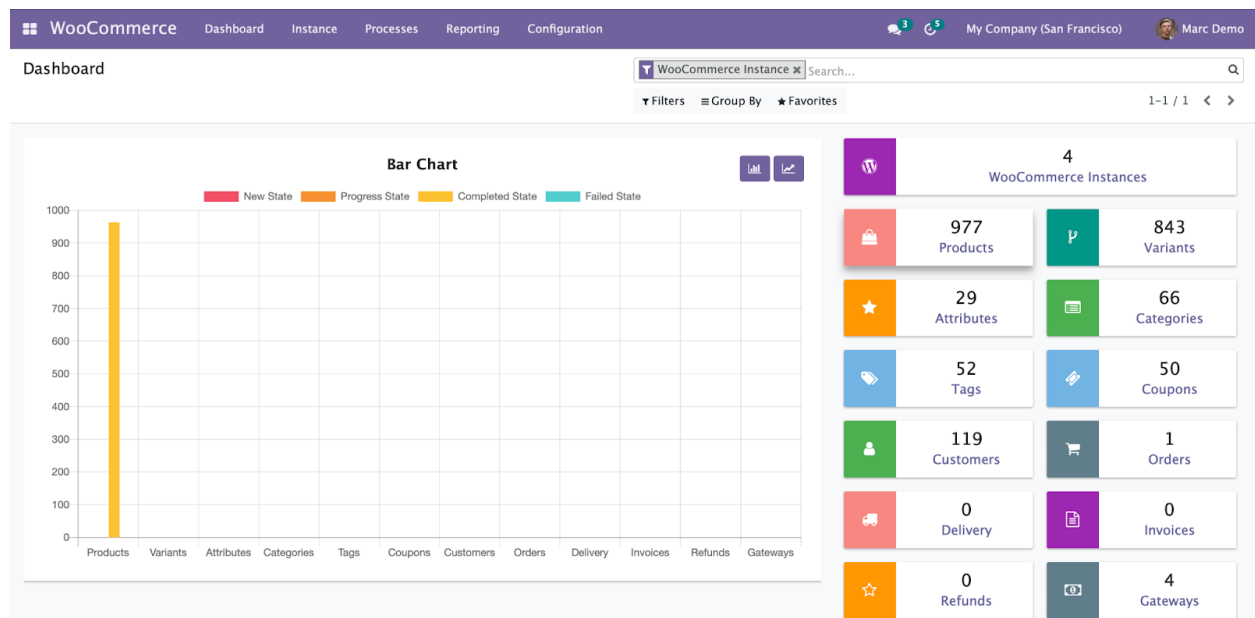
If you click on the Products tab, you will be redirected to the Product model. Here, you can see the total number of tags, the number of synced products, and more.

If you click on any specific product, you can see details such as:
Instance: to which WooCommerce instance it is associated.
Date Created & Date Updated: On which date the product was created and updated.

Modified on, Last Synced on, Woo Product Type, and more details can be found for a particular product.

In case you are syncing customers, the customer name will be shown on the left. If you click on the Odoo Partner name, all the details regarding the customer will be visible.

Dashboard / WooCommerce Customers

Search...

▼ Filters   ≡ Group By   ★ Favorites   1–80 / 119   ‹ ›

	Woo Customer ID	Odoo Partner	Instance	Company	Date Created	Date Updated	Sync Status
☐	150	M o r g a n	Test	My Company (San Francisco)	12/06/2021 22:35:56	12/06/2021 22:35:56	☑
☐	149	M A S M	Test	My Company (San Francisco)	12/06/2021 16:03:39	12/06/2021 16:11:54	☑
☐	33	ZLack Last	Test	My Company (San Francisco)	04/12/2021 15:32:39	11/26/2021 10:43:38	☑
☐	67	Xin shaung	Test	My Company (San Francisco)	07/23/2021 15:51:25	11/18/2021 11:42:55	☑
☐	114	webhook_cus_test1 name2	Test	My Company (San Francisco)	10/13/2021 18:56:54	11/26/2021 10:43:39	☑
☐	136	Vikram Sarabhai	Test	My Company (San Francisco)	12/01/2021 10:23:45	12/01/2021 10:36:23	☑
☐	46	Vibraium Bleeding Edge Armour	Test	My Company (San Francisco)	04/23/2021 16:39:14	11/18/2021 11:42:54	☑
☐	80	Azure Interior	Test	My Company (San Francisco)	09/09/2021 13:22:11	11/18/2021 11:42:54	☑
☐	66	Uni Ke	Test	My Company (San Francisco)	07/23/2021 15:29:54	11/18/2021 11:42:52	☑
☐	31	Trion Hyper	Test	My Company (San Francisco)	04/02/2021 11:06:55	11/18/2021 11:42:51	☑
☐	30	Tony Stark	Test	My Company (San Francisco)	04/01/2021 18:38:09	11/18/2021 11:42:51	☑
☐	61	T o m	Test	My Company (San Francisco)	07/09/2021 10:06:28	11/18/2021 11:42:50	☑
☐	47	the subtle art	Test	My Company (San Francisco)	04/23/2021 20:13:12	11/18/2021 11:42:49	☑
☐	36	testing odooo	Test	My Company (San Francisco)	04/15/2021 13:58:53	11/18/2021 11:42:48	☑
☐	119	Testing C3	Test	My Company (San Francisco)	10/19/2021 15:04:36	11/18/2021 11:42:47	☑
☐	118	Testing C2	Test	My Company (San Francisco)	10/19/2021 15:04:33	11/18/2021 11:42:46	☑
☐	117	Testing C1	Test	My Company (San Francisco)	10/19/2021 15:04:30	11/18/2021 11:42:45	☑
☐	141	Test Con	Test	My Company (San Francisco)	12/02/2021 13:11:42	12/02/2021 13:13:25	☑
☐	82	test_server_cus_1 test_server_cus_1	Test	My Company (San Francisco)	09/09/2021 18:43:46	11/26/2021 10:43:48	☑
☐	112	Test Cust	Test	My Company (San Francisco)	10/11/2021 12:18:03	11/26/2021 10:43:39	☑

Dashboard / WooCommerce Customers / M o r g a n

⚙ Action   1 / 80   ‹ ›

✔ Synchronised With Woo

Fields and their uses :–

- **Company** : Displays Company Name
- **Odoo Partner** : Displays Odoo related record name
- **Woo Customer ID** : Displays WooCommerce Customer ID
- **Instance** : Displays WooCommerce Instance Name
- **Date Created** : Displays date of creation
- **Date Updated** : Displays date of updation
- **Modified On** : Displays date of modification
- **Last Synced On** : Displays Last Sync date with WooCommerce

Company	My Company (San Francisco)	**Woo Customer ID**	150
Odoo Partner	M o r g a n	**Instance**	Test
		Date Created	12/06/2021 22:35:56
		Date Updated	12/06/2021 22:35:56
		Modified On	12/06/2021 22:56:22
		Last Synced On	12/06/2021 22:56:22

Once you click on the Odoo Partner name, the window containing all the details will appear.

7. Reporting

7.1 Sales

If you visit the Sales section under Reporting, the analysis for a particular sale order will be visible here.
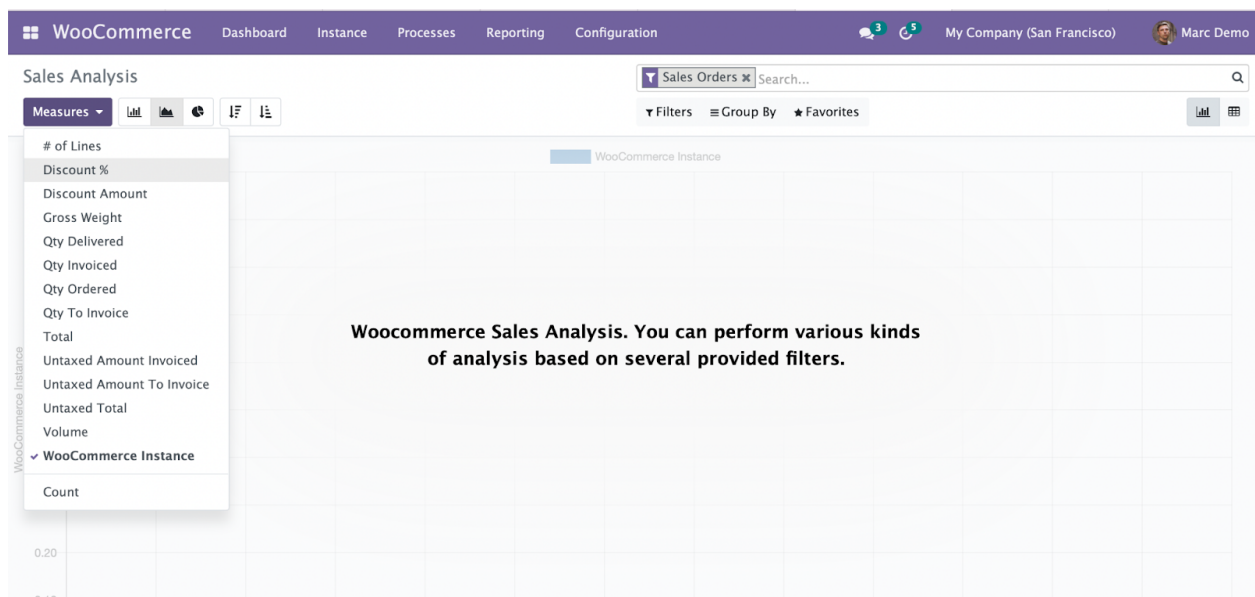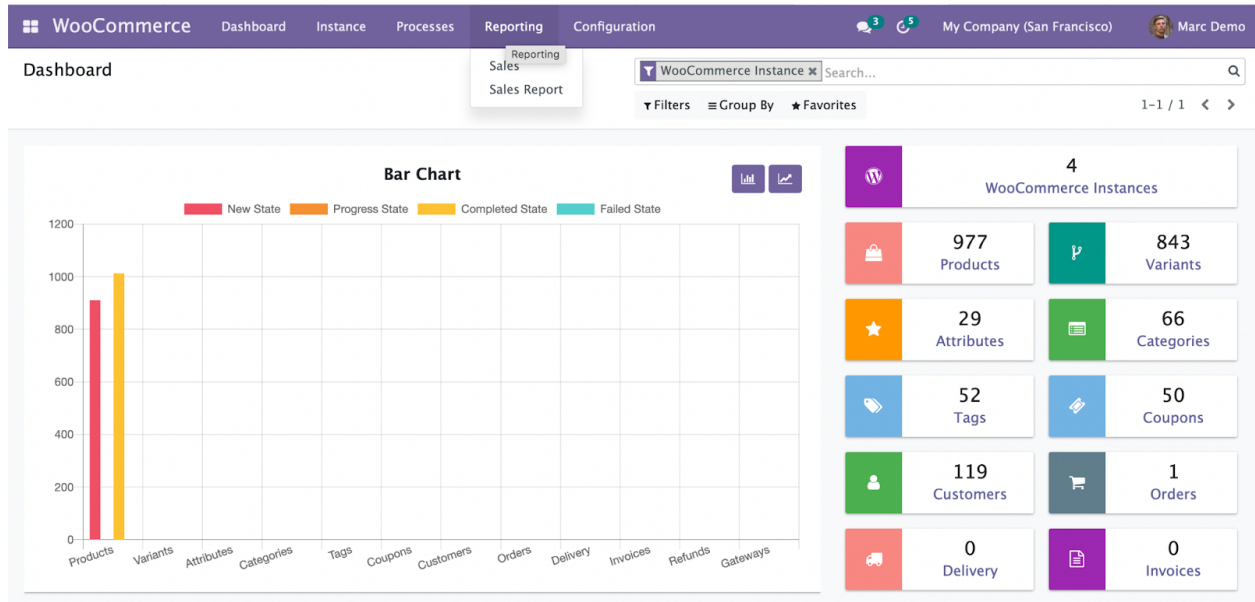
There are Graph Views and Pivot Views.

- Pivot: The Pivot View will display the data analysis of customers, sales, & more.

- Graph: In the Graph view, various kinds of graphs are there to represent the analysis of a particular sale order synced/associated to a WooCommerce instance.
- Bar Chart, Line Chart, Pie Chart, and more options are available to check the sale analysis.
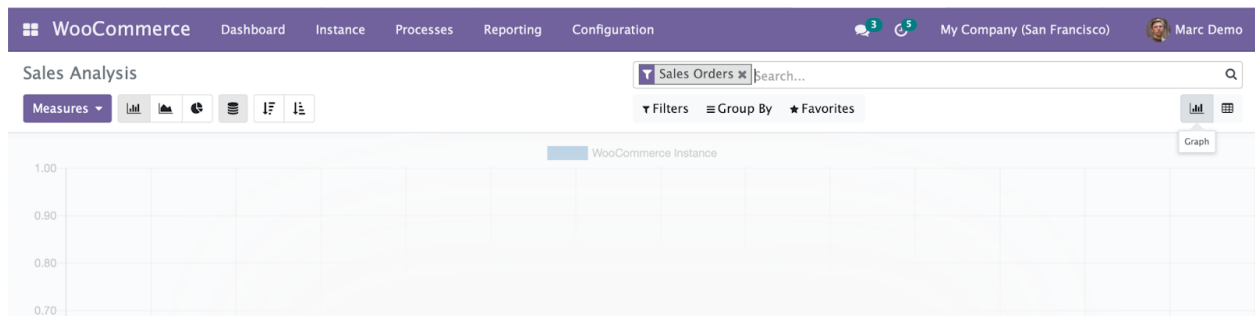
7.2 Sales Report

When you click on the 'Sales Report' from the reporting section, you will be allowed to create a sale report of a particular instance of your choice.
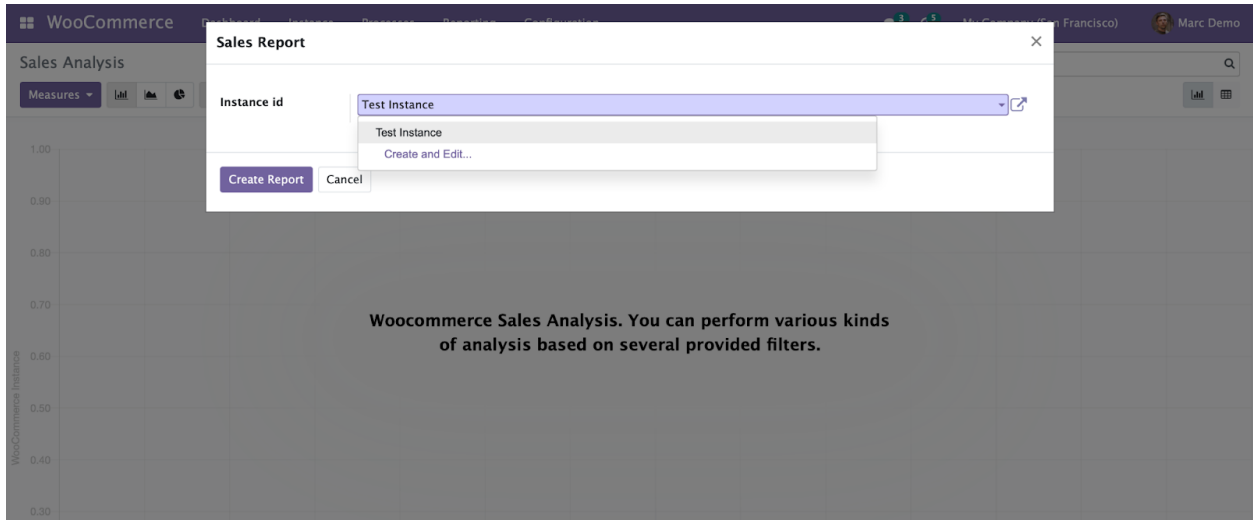
After selecting the Instance Id, click on the 'Create Report'.

You will get a window containing all the details about the sale orders for the chosen instance . You can customize your report by selecting the Layout, Font, Colors, and more. Click on save after customizing the report.
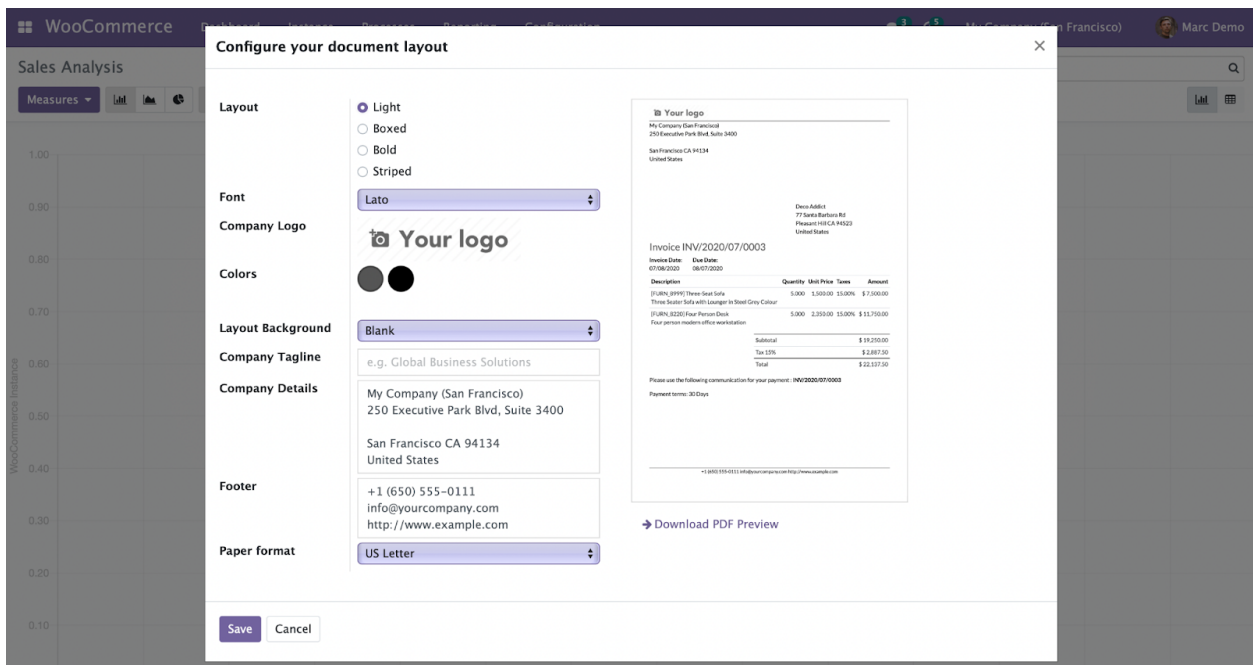
8. Configuration

Inside Configuration, by default, there will be three options–Sales Workflow, Email Configuration, and Meta Mapping, and when the developer mode is enabled then all the layer model manuals are there.
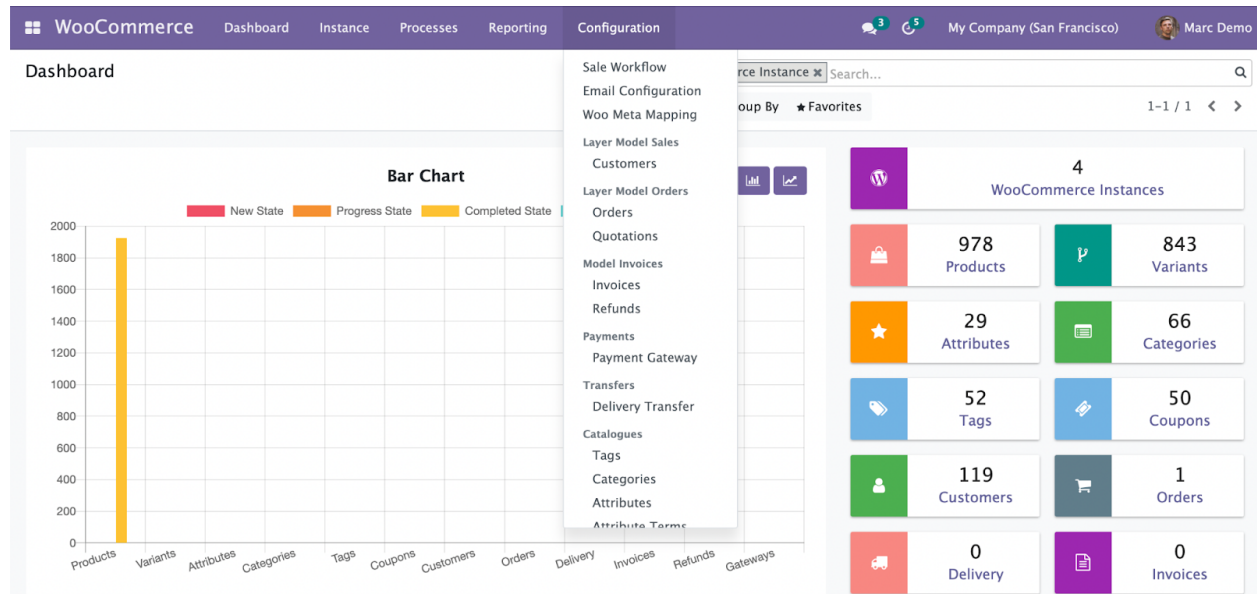
- How to enable the developer mode?

Step 1: In the app menu, go to 'Settings'.
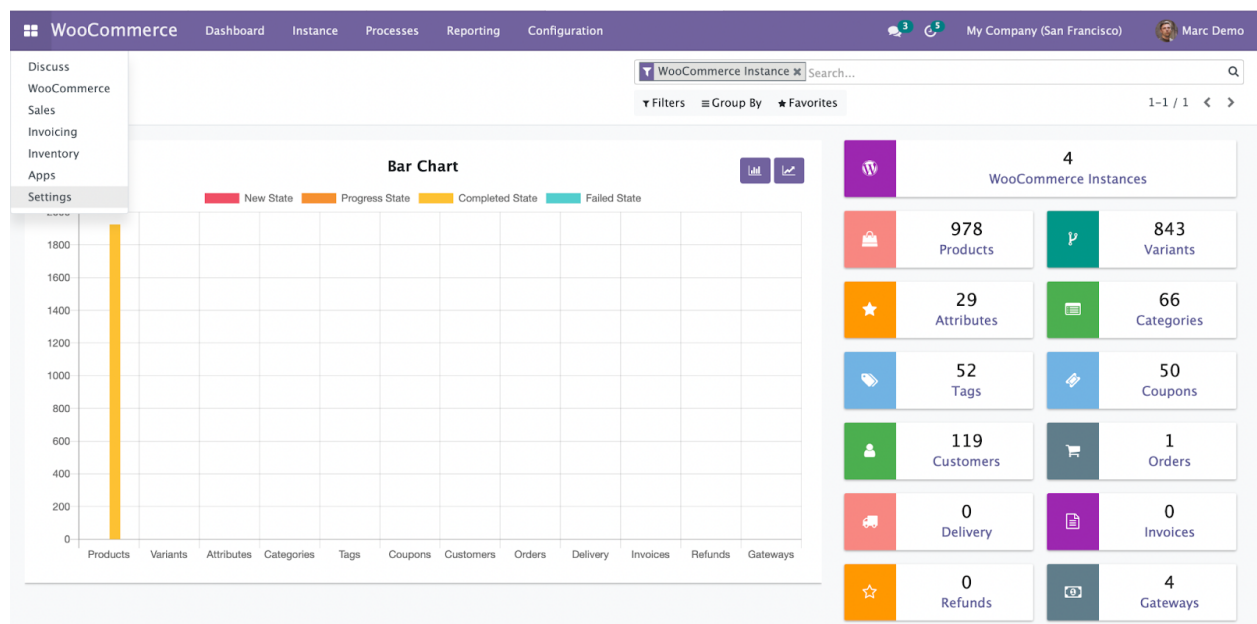
Step 2: Scroll down to the Developer Tools and click on the 'Activate the developer mode (with assets)/(with tests assets).

Step 3: You will see a 'debug' symbol on the top bar. Click on the debug icon and then click on 'Enable profiling'.

Step 4: A pop-up window will appear, where you can set the timeframe to activate the developer mode as per the given options: 5 minutes, 1 hour, 1 Day, or 1 Month.

After setting the time as per your requirement, click on the 'Enable profiling' button.
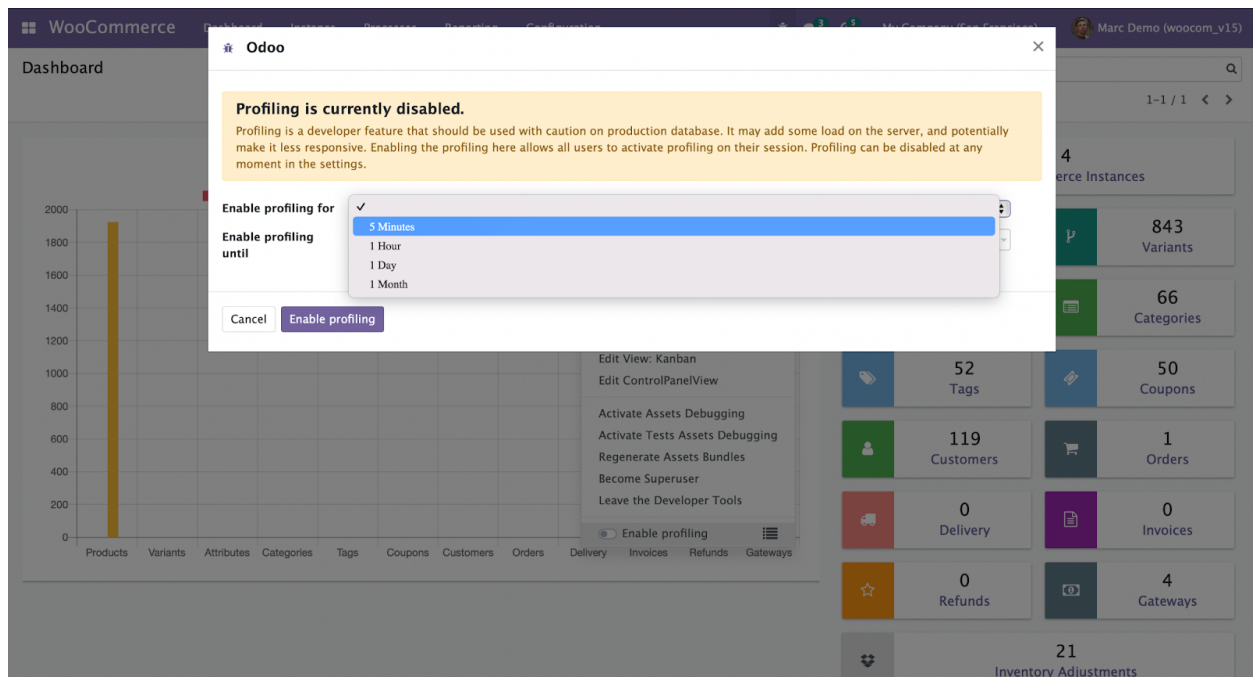
Step 5: You will find that a red dot will appear, suggesting that the developer mode is activated.
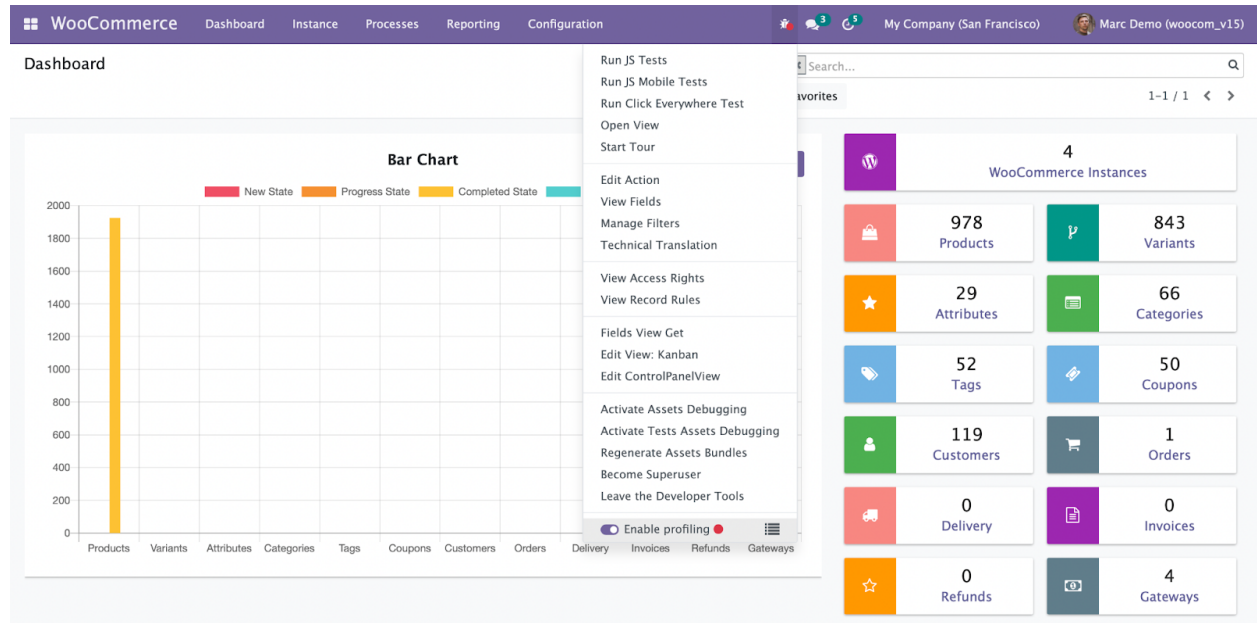
8.1 Sale Workflow

In simple words, the operations that you define in the Sales Workflow will complete the Odoo Order status cycle depending on the related entries that you make such as Payment Journal, Debit Method, Sales Journal, & more will be saved.

Moreover, a default workflow is provided and you can create your own workflows as well. Through orders or payment gateways, the auto workflow can be implemented on sales orders.
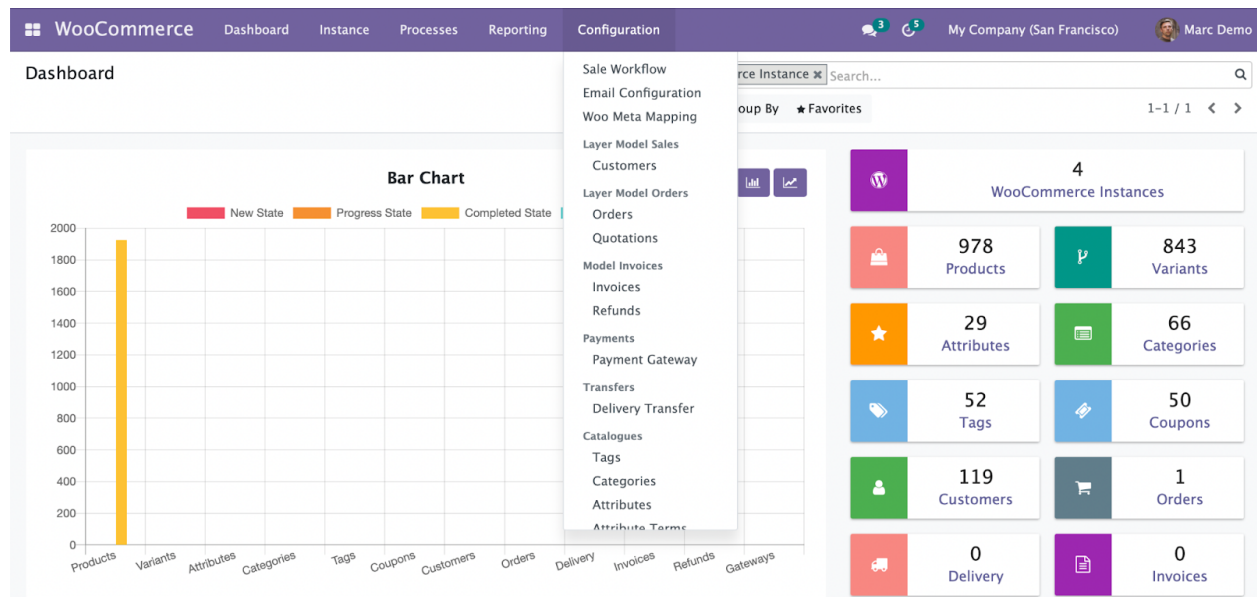
Click on Configurations > Sales Workflow

Click on create if you wish to want to create a new Sale Auto Workflow. A window will appear as given below:

Let's suppose an order has been imported from WooCommerce to Odoo in quotation state. And, you want to confirm the order automatically after the order is imported. You just need to go to that particular order in the Sale Workflow and switch on the Validate Order.

If you want an invoice to be created for that order, switch on the "Create Invoice". Similarly, there are options for Register Payment, Force Invoice Date, and Confirm Shipment. Based on these details, the status of the order will proceed.

- Create invoice & Confirm Shipment—visible when 'Validate Order' is enabled.
- Register payment & Force invoice date—visible only when 'Create Invoice' is enabled.
- Payment journal & Debit Method—visible only when 'Register Payment' is enabled.

Fill in all the details and click on the Save button.

8.2 Email Configuration

If you require emails for a particular instance regarding sales analysis, you can do it from email configuration.

Click on Configurations > Email Configuration
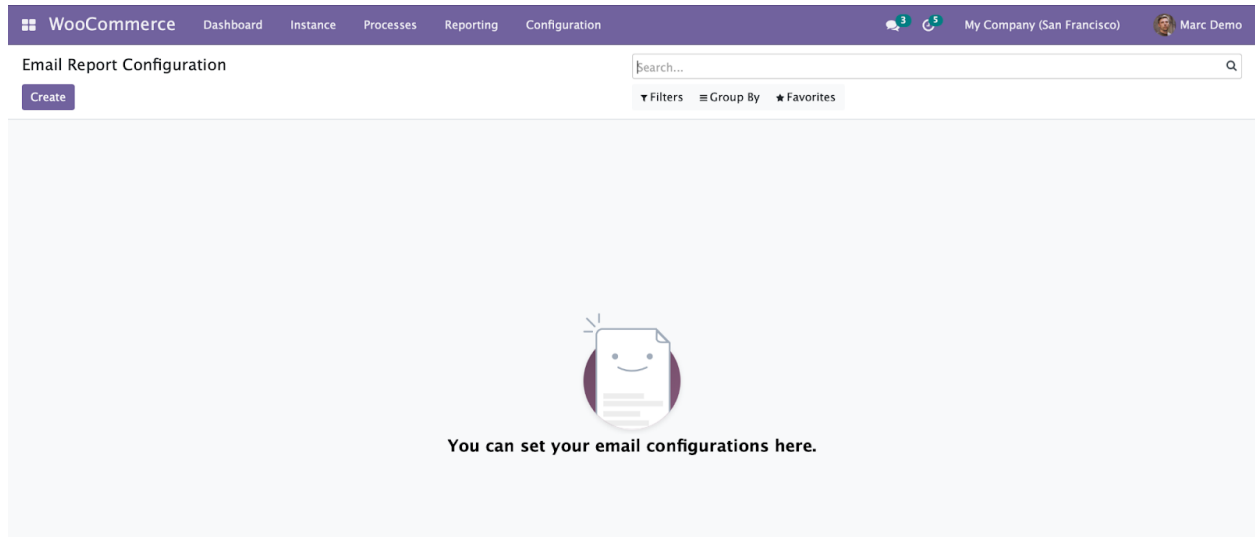
Step 1: Click on "Create" Email Report Configuration.
Step 2: The Basic Configuration set-up page will open up.

Step 3: Select the WooCommerce Instance and the pre-designated email ids for that instance will be displayed in the Email Ids field.

Step 4: There are two fields: Email Subject and Email Body. If you want a custom subject and body attached with the pdf report in the mail, you can fill the details in there.

Step 5: Click on Save.

The emails will be sent automatically to the designated email ids with the custom subject and body that you have entered on a daily basis after a 24 hours interval.

8.3 Woo Meta Mapping

To map the metadata of WooCommerce fields with the Odoo fields, Woo Meta Mapping is used.

Let's suppose a user has added an extra plugin in WooCommerce. The meta-mapping feature will be very handy for them. It will sync data for those extra plugins' field data because the plugin data comes under metadata.

Go to Configuration > Woo Meta Mapping
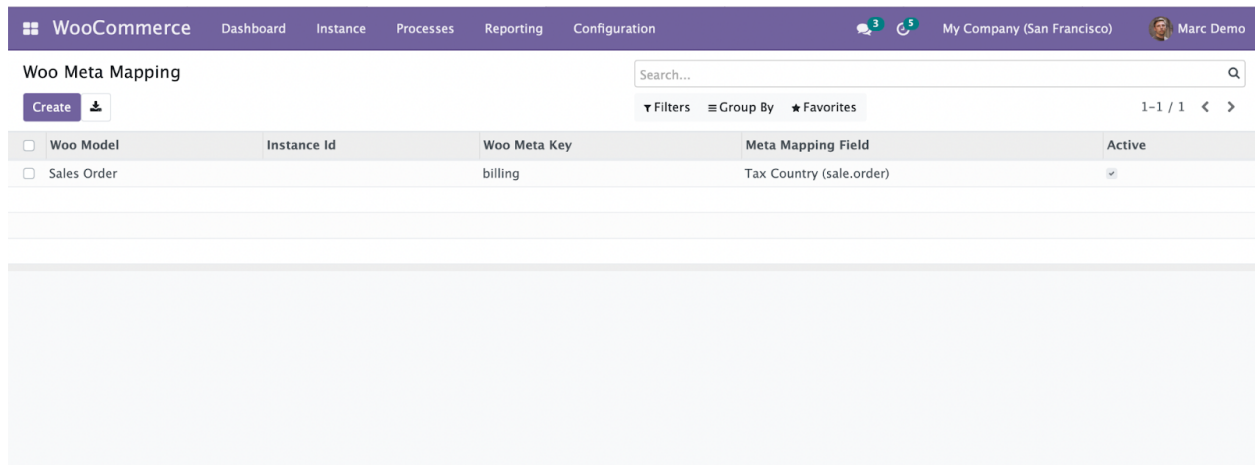
Click on the required model, a window will appear as given below:
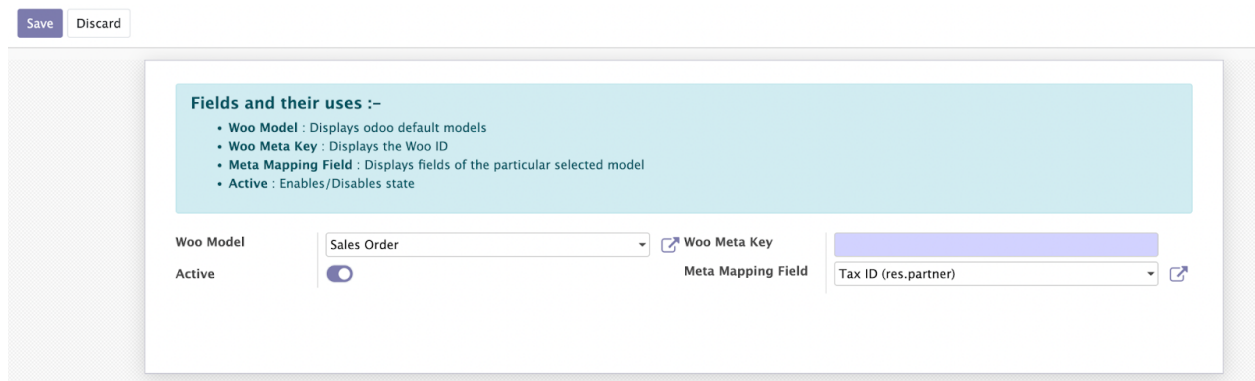
Fill in all the details as required. Select the Woo Model as per your choice.

Step 1: Enter the Woo Meta Key (retrieve it from the description of the particular plugin that you are utilizing).

How to retrieve the Meta Key?

1. Visit the WooCommerce Backend and click on the Product.
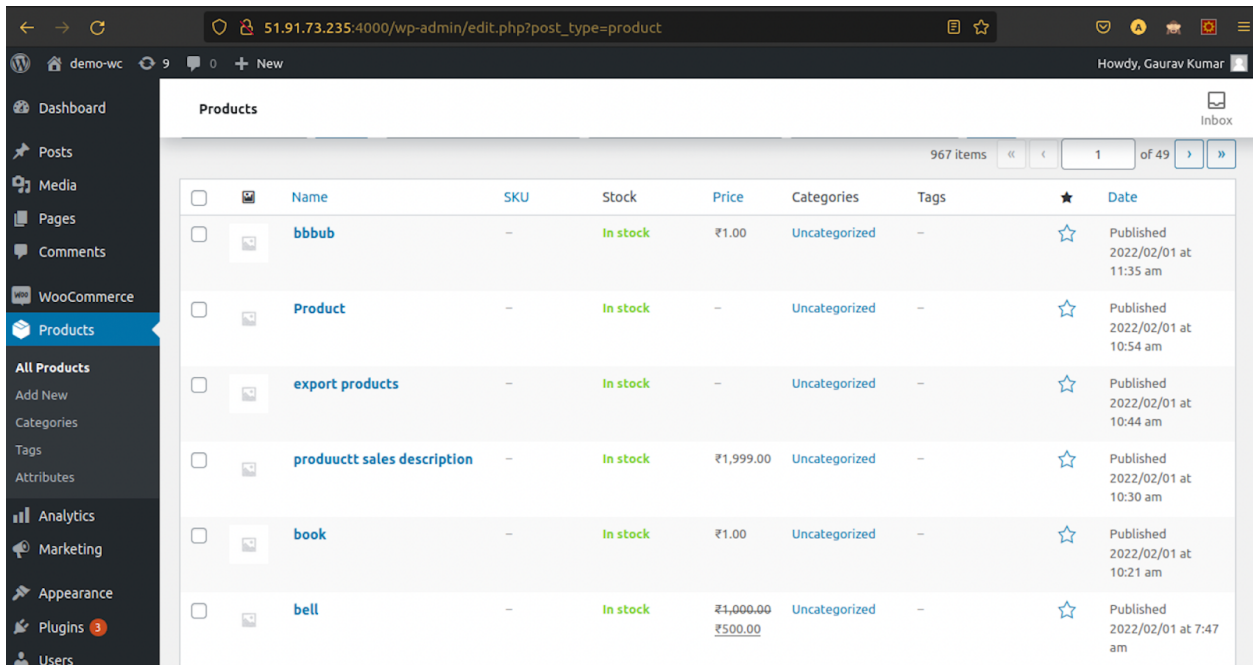
2. Click on the product name you wish to Map with the Odoo. For instance, you choose the 'Product' name from the list.
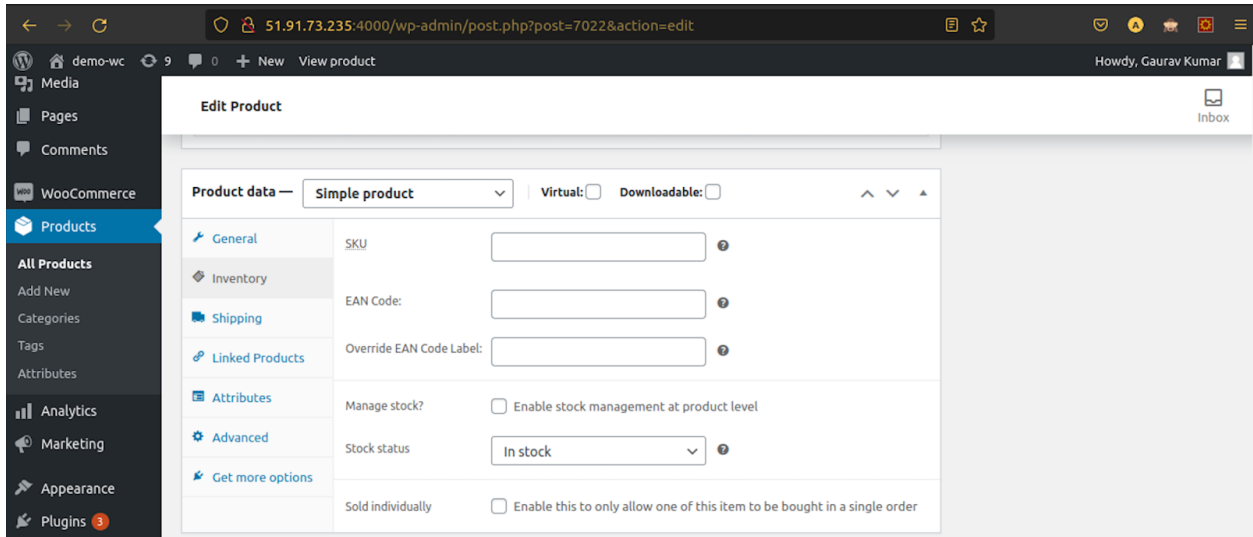
3. Scroll down to the Inventory option—right-click on the EAN code bar–and click on Inspect.
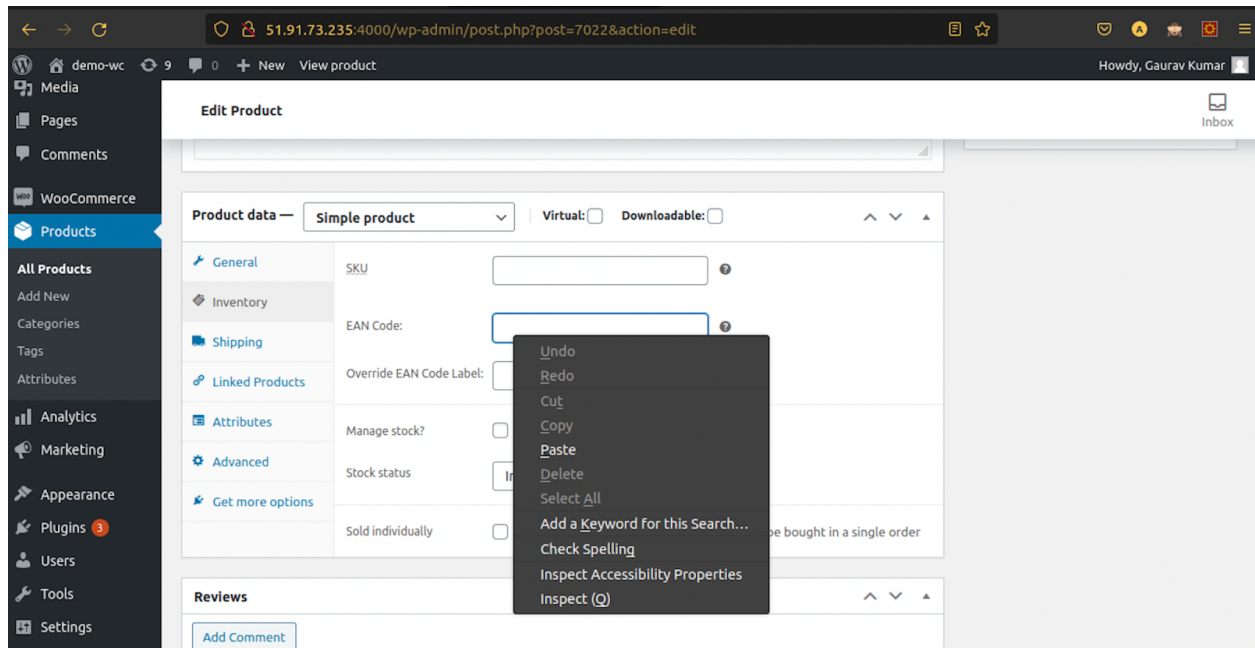
4. Copy the Meta Key from the description as mentioned below and paste it to the Woo Meta Key.
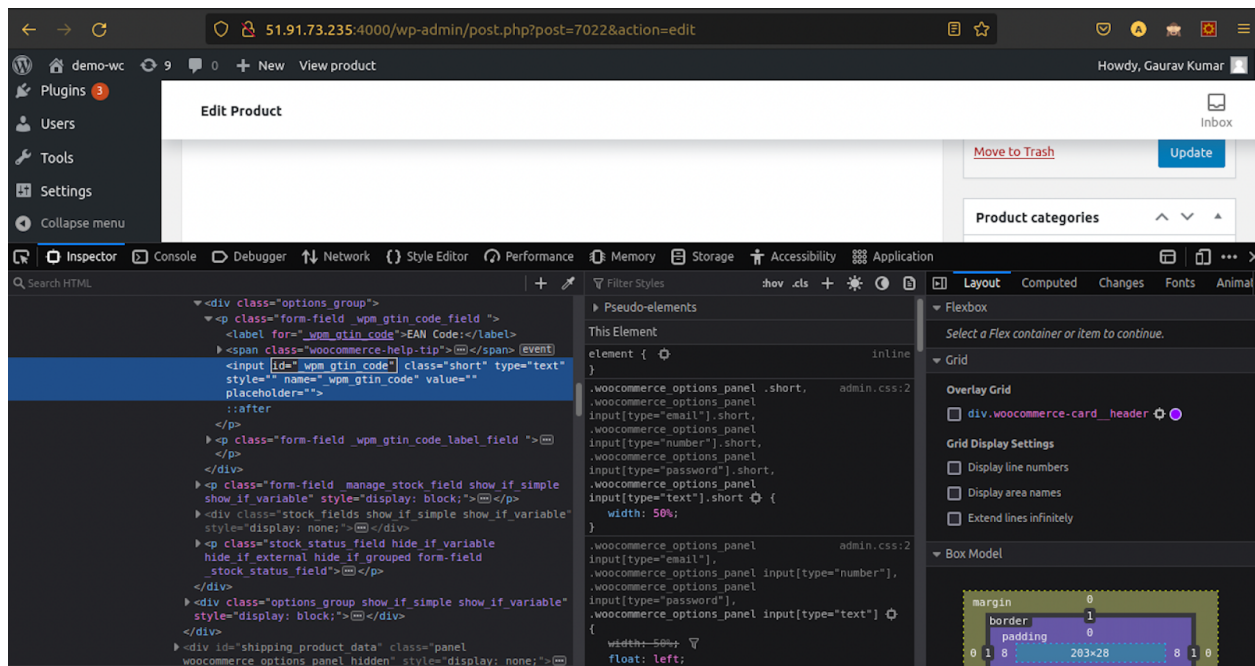
Step 2: Select the Meta Mapping Field where you want to store the value regarding the Meta Key.

Step 3: Enable the Active button and click on save.

You have successfully generated the meta-mapping for the particular instance now and the data will be stored in the Tax ID(res.partner) field.

8.3.1 Sync Data under Tax ID(res.partner)

If you want the data to be synced under the Tax ID(res.partner) field of the customer for whom the data mapping has been turned on, it is possible to do so.

Step 1: Go to the Specific Instance.

Step 2: Click on Specific Operations.
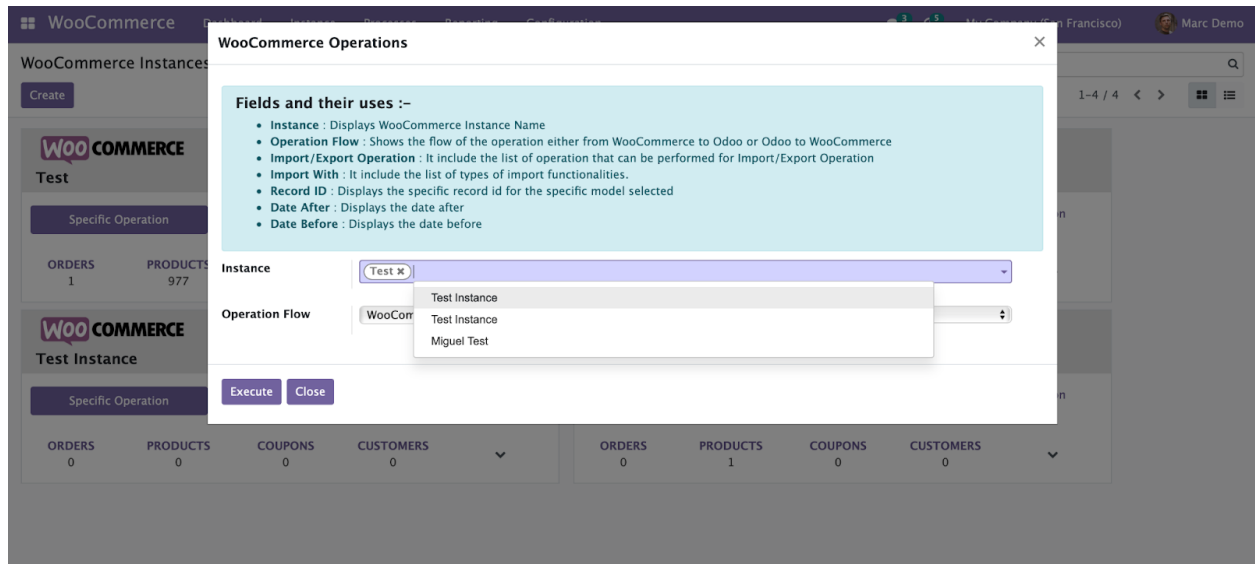
Step 3: Select Import Customers under Import Operation.
Step 4: Select Specific Id Filter from Import With.
Step 5: Enter the Record ID of the customer.
Step 6: Click on Execute.

Step 7: Now, Go to Processes > Queue Jobs

Here, you will see the customer with his/her WooCommerce ID is being processed for data synchronization. Give it some time and the sync will be completed successfully.

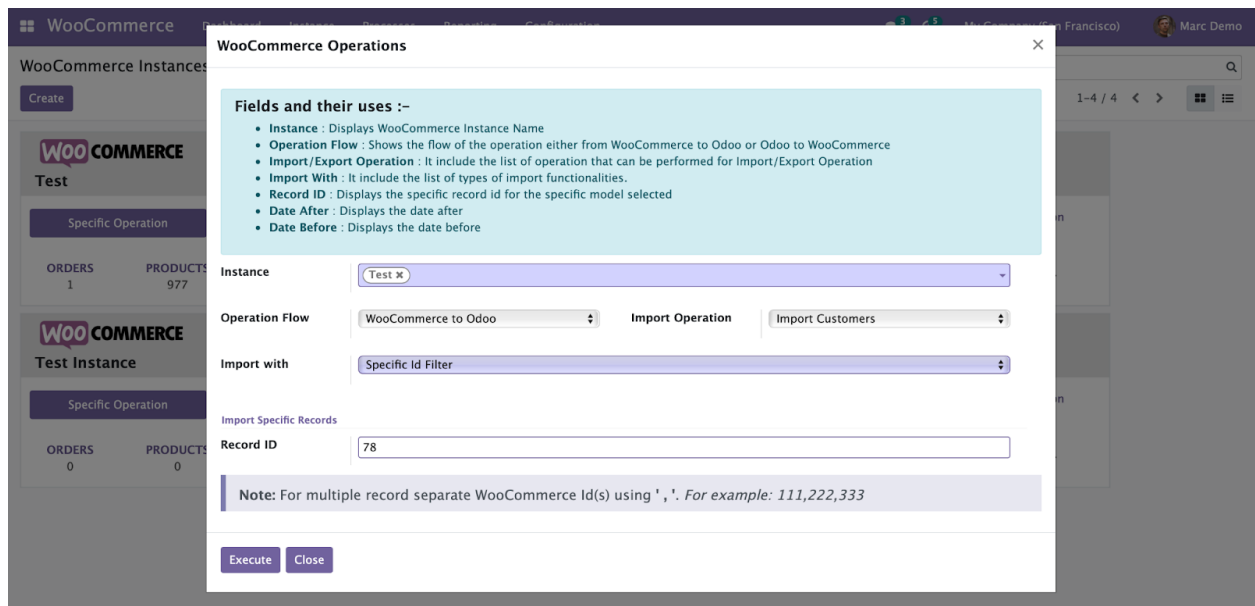| Name	WooCommerce ID	Domain	Operation Flow	Operation Type	Woo Instance	State
o d o o _ c u s _ 1 _ a b	78	Customer	WooCommerce to Woo Layer	Import	Test	New
bell	7018	Product Template	Woo Layer to WooCommerce	Export	Test	Done
chair55	7017	Product Template	Woo Layer to WooCommerce	Export	Test	Done
Migule123	7015	Product Template	Woo Layer to WooCommerce	Export	Test	Done
Cheese Burger	7011	Product Template	Woo Layer to WooCommerce	Export	Test	Done
new 22	7009	Product Template	Woo Layer to WooCommerce	Export	Test	Done
via instance	7008	Product Template	Woo Layer to WooCommerce	Export	Test	Done
serial product	7007	Product Template	Woo Layer to WooCommerce	Export	Test	Done
theeee product serial	7006	Product Template	Woo Layer to WooCommerce	Export	Test	Done
theeee product serial	7005	Product Template	Woo Layer to WooCommerce	Export	Test	Done
The product	7001	Product Template	Woo Layer to WooCommerce	Export	Test	Done
product name storable	7000	Product Template	Woo Layer to WooCommerce	Export	Test	Done
testing simple product	6999	Product Template	Woo Layer to WooCommerce	Export	Test	Done
testing variable	6995	Product Template	Woo Layer to WooCommerce	Export	Test	Done
[HREM] Testing Unsynced	6992	Product Template	Woo Layer to WooCommerce	Export	Test	Done
product name also	6989	Product Template	Woo Layer to WooCommerce	Export	Test	Done
product name stock	6988	Product Template	Woo Layer to WooCommerce	Export	Test	Done
Kites	6985	Product Template	Woo Layer to WooCommerce	Export	Test	Done

[**Note:** Meta mapping can also be done for products & orders in a similar way]

9. Synchronization

9.1 Push To WooCommerce/Pull From WooCommerce

Believe it or not, synchronization can be done now in seconds! The days of multiple clicks and backend operations to synchronize Odoo & WooCommerce are over now.

Utilizing the **Push To WooCommerce** and **Pull From WooCommerce** buttons, syncing is done with a single click.

Step 1: Click on the Inventory from the WooCommerce tiles present in the top left corner.

Step 2: Click on Products > Products

Step 3: Let's suppose you want to create a new product on which you want to perform the operation. Click on the "Create" button.

Step 4: Enter the product name (For example Pizza Cheese).
Step 5: Select the Product Type and Product Category.
Step 6: Enter the price of the product in the Sales price section.

Step 7: Enter the other details as per requirement, such as Attribute & Variants, Sales, Purchase, Inventory, Accounting, and Images.
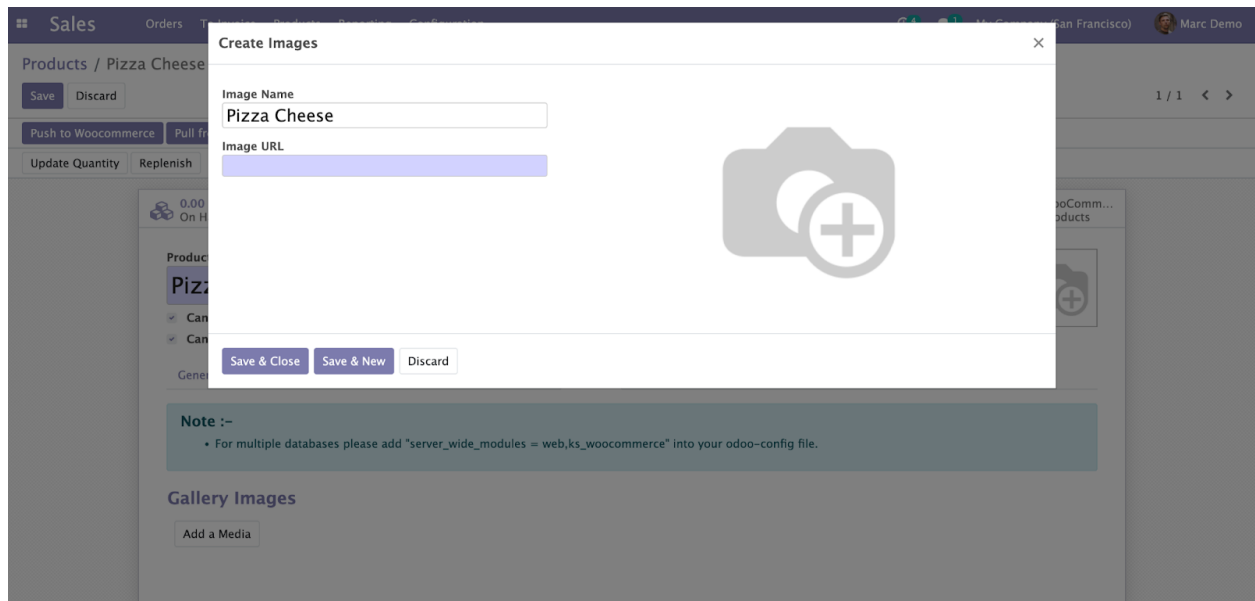If you want to add Inventory, click on it, a window will appear as given below:

Set the Weight, Length, Width, Height, and Volume of the product.

Also, if you want to add the image to your product, click on the Images.

Click on the Add a media.

Select the image URL from your system and click on Save & Close. You can give multiple images, by clicking on Save & New.

Step 8: Click on the Save button when done with filling in all the details.

Now, if you want to sync the product, you can directly do it from here by clicking on Push To WooCommerce. With just one click, you can accomplish the task by eliminating the lengthy process.

Step 1: Click on Push To WooCommerce.

Step 2: Select the Instance Ids.
Step 3: Select the Website Status.
Step 4: Check and set up the other details such as Set Price In Woo, Set Stock In Woo, etc.

Step 5: Click on Execute and a confirmation message will appear.
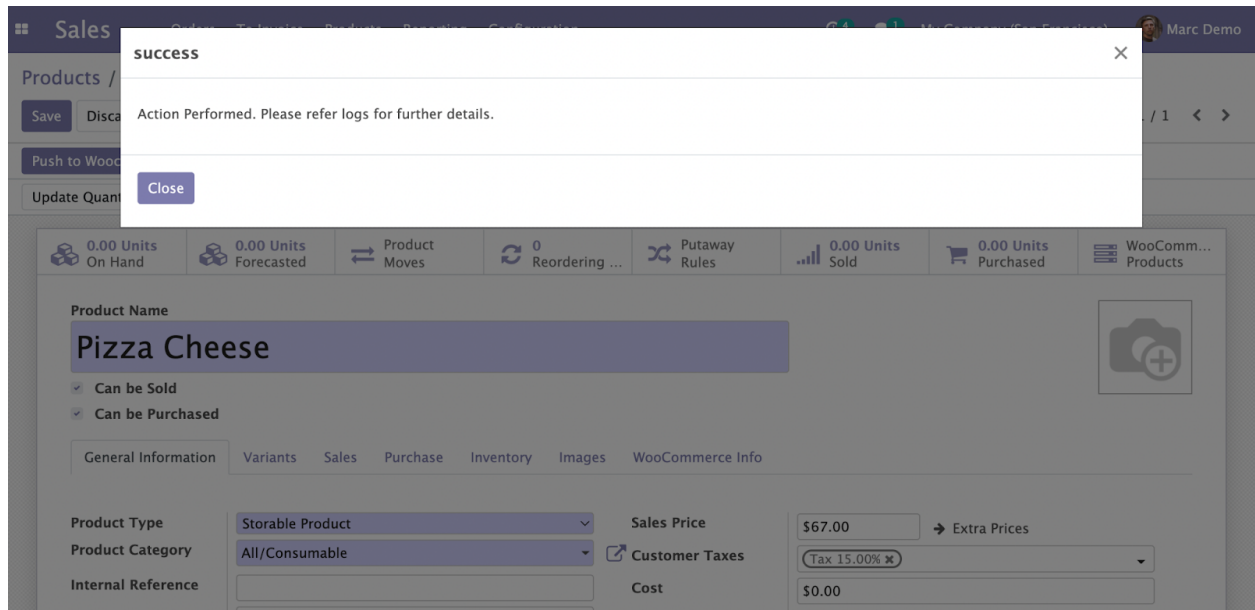
The product will now be synced with WooCommerce

In a similar fashion, you can also perform the Pull From WooCommerce operation. The product and the related data will be pulled from WooCommerce and synced with Odoo.

[Note: Both the operations- Push From WooCommerce and Pull From WooCommerce can be done with Product Categories, Customers, Attributes, and multiple products]

9.2 Mapping

Let's suppose you have a product category. And, you want to map it with a particular WooCommerce category. Here's how to do it:

Step 1: Get the WooCommerce ID from the WordPress site.

Step 2: Click on WooCommerce Tiles(on the top left corner) > Inventory > Configuration > Product Categories in the Odoo WooCommerce connector. Then open the specific Product Category you want to map.

You can create a new product category as well by clicking on the 'Create' button.

Fill in all the details as required and click on save.

Click on the Action button > Map Existing Records

The Category Record Mapping Page will open up.
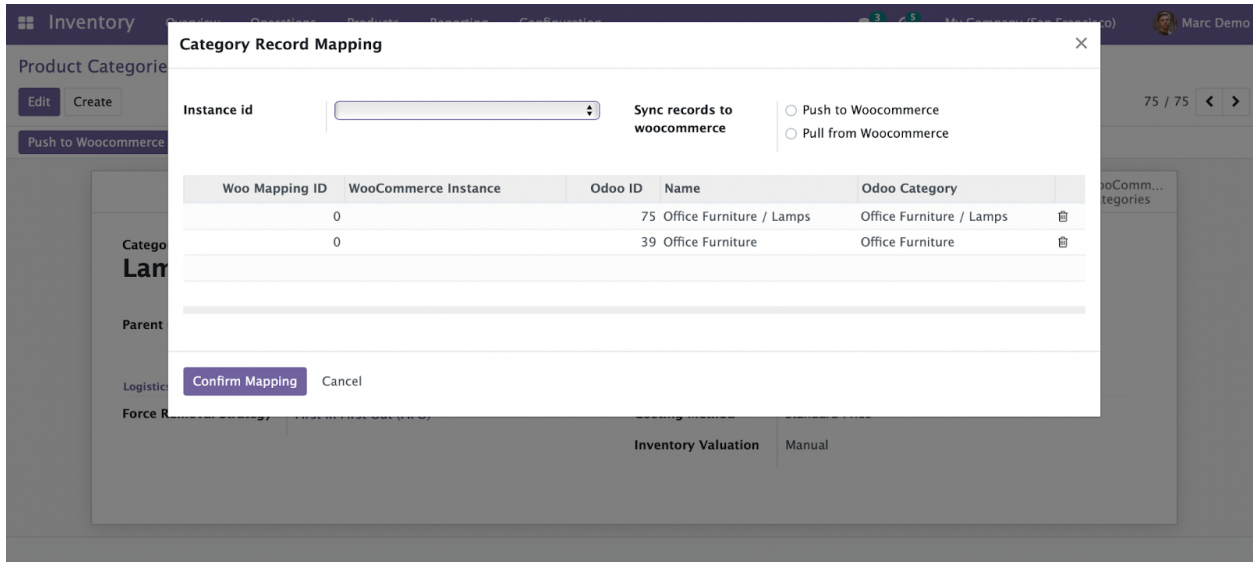
You can either select Push To WooCommerce or Pull From WooCommerce under Sync Records To WooCommerce.

Select an Instance Id if you want to fill a specific instance for all the records.

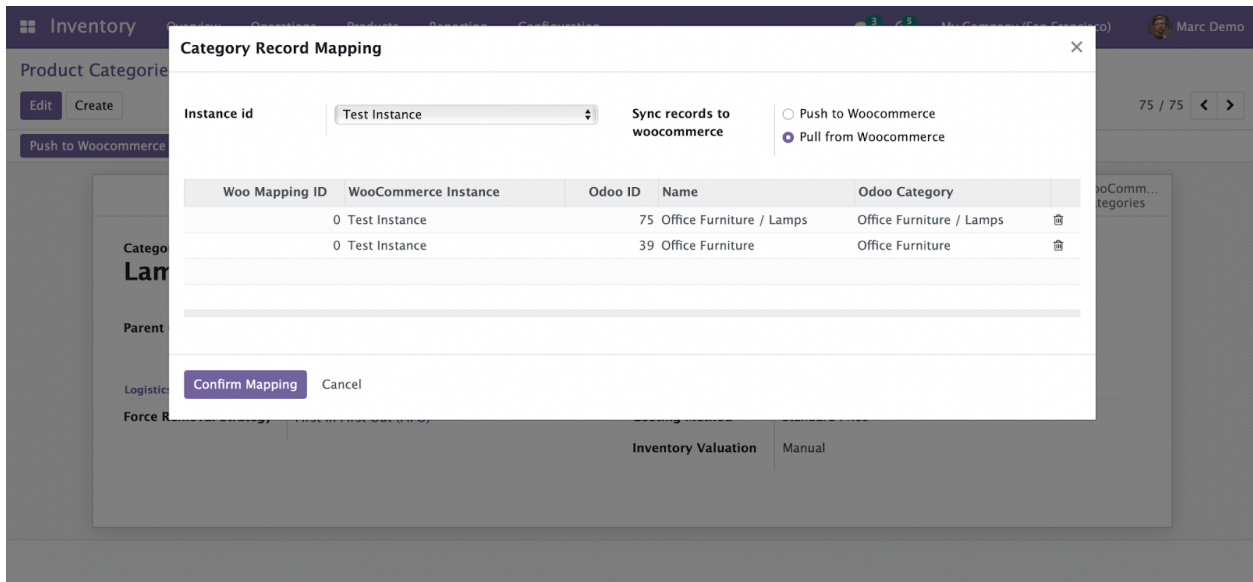If you want to select instances for each separate record, you can do so by entering the Woo Mapping Ids and their respective WooCommerce Instances below.

Click on the Confirm Mapping button when done.

The records will be mapped with the WooCommerce Instances accordingly. If you go to the Queue Jobs, you will see that the mapping has been added there.

[Note: You can map several records at once for mapping purposes in a similar way. You can also map Products, Customers, Categories, etc in a similar way]