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# User Manual - PLM Connector

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## UserManual PLM Connector

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## 1 PREMISE

The purpose of the following manual is to illustrate the functions of PLM Connector

## 2 SETUP APP

### 2.1. Setup of PLM Connector

In the menu **PLM Connector**, there are several parameters to set:

- ✓ Release Item After Creation – this function is available together with the Release Pro Tool, activating this function all imported items will be released automatically
- ✓ Check Item Template – can be selected the action in case if the importing item will not coincide with the existing template.

Available options:

- ✓ Check Item Category - can be selected the action in case if the importing item will not coincide with the existing item categories.
- Available options:

- ✓ Version Padding – defines Nr series for the importing versions of BOMs. It's suggested to set up the version padding to 0000, thus the new version imported from PLM with the number "1", in BC will have the number 0001.
- ✓ Certify BOM After Creation – gives an opportunity to automatically certificate the created BOMs from the import
- ✓ BOM modify action – this setup defines the system behavior in case the existing DB is imported into MS-BC. Available options:

BOM Modify Action ..... Recreate ▾  
 Default Routing Link ... Not Allowed  
Recreate

- ✓ Default Routing link – defines the default routing link code between the components of the BOM and its routing

BOM Modify Action ..... Recreate ▾  
 Default Routing Link ... 100 ▾

Code ↑	Description
→ 100	Assemblaggio
200	CNC/assale
300	Ispezione
+ New <span style="float: right;">Select from full list</span>	

- ✓ Item Routing Action - specifies the behavior of item routing no.
  - Ignore: no value is assigned
  - Existing: the routing no. passed through the interface is assigned to the item. If routing does not exist, an error will be raised
  - Template: the interface routing no. is used as a template. A new routing will be created with the same no. of the item
- ✓ Check Version Sequence - Specifies the type of log message if the version does not follow the right sequence.

## 2.2. PLM Extra Data Type List

PLM Extra Data Type List setup allows to add new extra fields which can be imported from the PLM. For example, the GTIN code:

PLM Extra Data Type List | Work Date: 01/04/2020 ✓ Saved 🔖 📄 🔗

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🔍 Search + New 📄 Edit List 🗑️ Delete ✎ Edit 👁️ View ⚙️ Extra Data Config. ⋮ 🔍 ☰

Type ↑	Description
→ <span>GTIN</span>	⋮ GTIN

PLM Extra Data Type Card | Work Date: 01/04/2020 ✎ + 🗑️

### GTIN

⚙️ Extra Data Config. | Related Fewer options

#### General

Type ..... GTIN Validate Config. Values .....

Description ..... GTIN

Field Relation		Manage		Check Message Type	Run Validate Trigger
Table Id ↑	Table Name	Field Id	Field Caption		
→ 2Z	⋮ Item	1217	GTIN	Information	<input checked="" type="checkbox"/>

To define the new extra data field, we should click on New  
 The PLM Extra Data Type Card will be opened:

← +

### PLM Extra Data Type Card

Extra Data Config. | More options

**General**

Type ..... \* |  Validate Config. Values .....

Description .....

Field Relation | Manage

	Table Id ↑	Table Name	Field Id	Field Caption	Check Message Type	Run Validate Trigger
→	0		0		Error	<input checked="" type="checkbox"/>

For example, we would like to add the data type Item Category:  
PLM Extra Data Type Card

Extra Data Config. | More options

**General**

Type ..... ITEM.CAT Validate Config. Values .....

Description ..... Item category

Field Relation | Manage

	Table Id ↑	Table Name	Field Id	Field Caption	Check Message Type	Run Validate Trigger
→	0		0		Error	<input checked="" type="checkbox"/>

In the Field Relation Tab we should define the relation with the Table Id and Field Id of the MS-BC:  
For example, the Category of item should be related to the field 5702 Item Category Code of the Item table 27:

**Fields Lookup**

	No. ↑	Field Name	Field Caption
→	5702	Item Category Code	Item Category Code

### PLM Extra Data Type Card

Extra Data Config. | More options

**General**

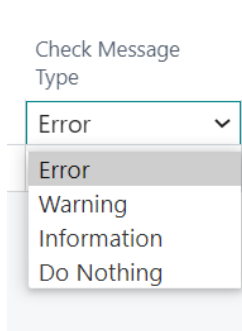
Type ..... ITEM.CAT Validate Config. Values .....

Description ..... Item category

Field Relation | Manage

	Table Id ↑	Table Name	Field Id	Field Caption	Check Message Type	Run Validate Trigger
→	27	Item	5702		Error	<input checked="" type="checkbox"/>

In the field "Check Message Type" we can define the action of the system during importing for the extra data of this field.  
The available options:



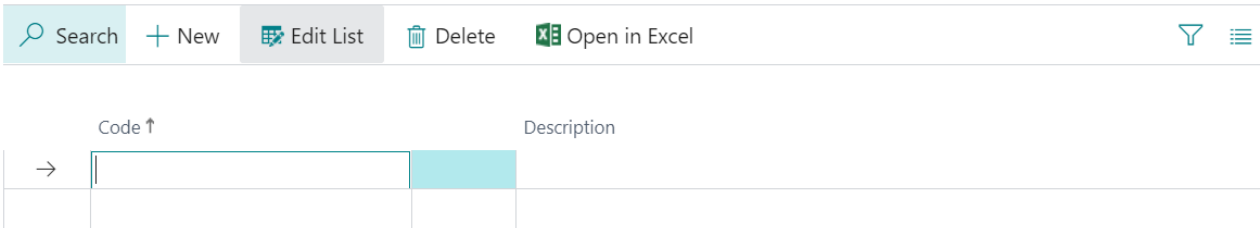
It's possible to define certain extra data values which will be accepted during the import, clicking on the function Extra Data Configuration:

## PLM Extra Data Type Card

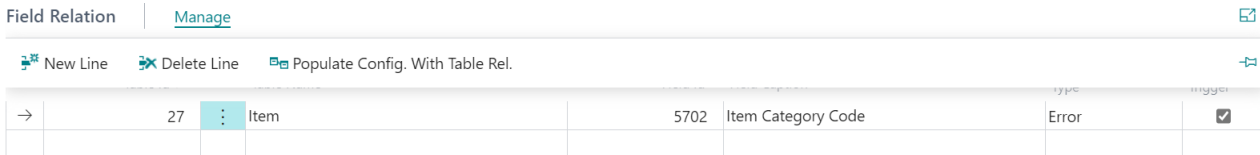
Extra Data Config. | Related Fewer options

In the open table it's possible to fill in manually all values expected during the import:

PLM Config. Extra Data | Work Date: 01/04/2020



To avoid the manual compilation of existing values present in the system, we can use the function **Populate Configuration with Table Related:**



In the opened table we can decide which information of the Item Category Code we would like to display:

### Edit - Table Rel. Descr. Input - ITEM.CAT · 27



Select the field used as description in the extra data config

Description field .....  ...

For example, for the Item Category code we would like to display the Description of the field:

Fields Lookup | 🔍 ⌵ ...



No. ↑	Field Name	Field Caption
→ 1	Code	Code
2	Parent Category	Parent Category
3	Description	Description
9	Indentation	Indentation
10	Presentation Order	Presentation Order
11	Has Children	Has Children
12	Last Modified Date Time	Last Modified Date Time
8000	Id	Id

**OK** Cancel

Click "OK" after selection:

Edit - Table Rel. Descr. Input - ITEM.CAT · 27



Select the field used as description in the extra data config

Description field .....  ...

**OK** Cancel

After the confirmation the Configuration Data Table will be filled in with the existing data:

← PLM Config. Extra Data | Work Date: 01/04/2020

🔍 Search + New 📄 Edit List 🗑️ Delete 📄 Open in Excel

Code ↑	Description
→ FORNITORI	Materiale di cancelleria
MOBILIO	Forniture ufficio
SCRIVANIA	Scrivania per ufficio
SEDIA	Sedia per ufficio
TAVOLO	Tavoli assortiti
VARIE	Varie

We can modify this table eliminating the codes which we are not going to receive during the Import from the PLM.

After that we should activate the flag “Validate Conf. Values”:

### PLM Extra Data Type Card

Extra Data Config. | Related | Fewer options

**General**

Type ..... ITEM.CAT      Validate Conf. Values .....

Description ..... Item category

Field Relation | Manage

Table Id ↑	Table Name	Field Id	Field Caption	Check Message Type	Run Validate Trigger
→ 27	Item	5702	Item Category Code	Error	<input checked="" type="checkbox"/>

So, in the case the PLM will pass the Item Category Code data which is not specified in the PLM Conf. Extra Data Table the system will show us the error message.

### 2.3. Procedure of the Item import

To import the items from the PLM we should go to the PLM Inbound Items Menu:

PLM Inbound Items | Work Date: 01/04/2020      ✓ Saved

Import API Requests | Run Actions | Archive Created | Open in Excel | Actions | Fewer options

And click on the **Import API Requests** function and confirm the action:

Do you want to import new items and BOMs from received API requests?

Yes      No

The table will be populated with all items transferred from PLM:

PLM Inbound Items | Work Date: 01/04/2020      ✓ Saved

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2
→ Insert	<input type="checkbox"/>	<b>Validation Error</b>	3000		Phone Charger	
Insert	<input type="checkbox"/>	<b>Validated</b>	3010		Cable	
Insert	<input type="checkbox"/>	<b>Validated</b>	3020		Supplier	
Insert	<input type="checkbox"/>	<b>Validated</b>	3030		Plug	

**Errors** ▾

Message Type ↑      Field Name      Description

(There is nothing to show in this view)

**Extra Data**

Type      Code

GTIN            031398144359

On the right side the information about the Extra Data is displayed (as we defined in the PLM Extra Data Type card)



After the importing of the API Requests, the data are automatically validated. You can re-validate records again using the following action:

**Actions → Process → Validate**

PLM Inbound Items | Work Date: 01/04/2020

Import API Requests Run Actions Archive Created Open in Excel Actions Fewer options

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2
→ Insert	<input type="checkbox"/>	Waiting	3000		Phone Charger	
Insert	<input type="checkbox"/>	Validated	3010		Cable	
Insert	<input type="checkbox"/>	Validated	3020		Supplier	
Insert	<input type="checkbox"/>	Validated	3030		Plug	

**Errors**

Message Type	Field Name	Description
Warning		Waiting for BOM

**Extra Data**

Type	Code
GTIN	031398144359

The first line of item with the BOM will change the status to “Waiting”

On the right side will be displayed the Warning:

Error Messages | Work Date: 01/04/2020

Search Open Related Record Open in Excel More options

Message Type	Description	Context	Context Field Name	Source	Source Field Name
Warning	Waiting for BOM generating...	APsPLM Ite...			

To create the item with the BOM we need to import its BOM first.

For other lines of items, we can put the flag “Execute Action” and click on **Run Action**.

PLM Inbound Items | Work Date: 01/04/2020

Import API Requests Run Actions Archive Created Open in Excel Actions Fewer options

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2
Insert	<input type="checkbox"/>	Waiting	3000		Phone Charger	
Insert	<input type="checkbox"/>	Validated	3010		Cable	
Insert	<input checked="" type="checkbox"/>	Validated	3020		Supplier	
→ Insert	<input checked="" type="checkbox"/>	Validated	3030		Plug	

It's possible to select all lines to execute the run action massively:

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2	Unit of Measure	Item Category	Replenish... System
✓ Insert	<input checked="" type="checkbox"/>	Validation Error	3000		Phone Charger		PZ	VARIE	Prod. Order
→ ✓ Insert	<input type="checkbox"/>	Validated	3010		Cable		PZ	VARIE	Purchase
✓ Insert	<input type="checkbox"/>	Validated	3020		Supplier		PZ	VARIE	Purchase
✓ Insert	<input type="checkbox"/>	Validated	3030		Plug		PZ	VARIE	Purchase

Click on **Actions → Process → Set Execute Action on Sel.**

PLM Inbound Items | Work Date: 01/04/2020




Import API Requests Run Actions Archive Created Open in Excel Actions Fewer options







Import Process Navigate Archive

- Validate
- Refresh
- Set Execute Action on Sel.
- Run Actions

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2	Unit of Measure	Item Category	Replenish... System
→ ✓ Insert	<input type="checkbox"/>	Validation Error	3000		Phone Charger		PZ	VARIE	Prod. Order
✓ Insert	<input type="checkbox"/>	Validated	3010		Cable		PZ	VARIE	Purchase
✓ Insert	<input type="checkbox"/>	Validated	3020		Supplier		PZ	VARIE	Purchase
✓ Insert	<input type="checkbox"/>	Validated	3030		Plug		PZ	VARIE	Purchase

All lines of items will be selected for execution:





← PLM Inbound Items | Work Date: 01/04/2020 ✓ Saved   

 Import API Requests  Run Actions  Archive Created  Open in Excel | Actions Fewer options  

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2	Unit of Measure	Item Category	Replenish... System
Insert	<input checked="" type="checkbox"/>	<b>Validation Error</b>	3000		Phone Charger		PZ	VARIE	Prod. Order
→ Insert	<input checked="" type="checkbox"/>	<b>Validated</b>	3010		Cable		PZ	VARIE	Purchase
Insert	<input checked="" type="checkbox"/>	<b>Validated</b>	3020		Supplier		PZ	VARIE	Purchase
Insert	<input checked="" type="checkbox"/>	<b>Validated</b>	3030		Plug		PZ	VARIE	Purchase

In our example, two lines were selected and then created:

← PLM Inbound Items | Work Date: 01/04/2020

 Import API Requests  Run Actions  Archive Created  Open in Excel | Actions Fewer options

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2
Insert	<input type="checkbox"/>	<b>Waiting</b>	3000		Phone Charger	
Insert	<input type="checkbox"/>	<b>Validated</b>	3010		Cable	
Insert	<input type="checkbox"/>	<b>Created</b>	3020	Open	Supplier	
→ Insert	<input type="checkbox"/>	<b>Created</b>	3030	Open	Plug	

As we don't have the Release Pro tool activated in this environment the item status after creation will be always "Open".

**So, the Exchange Status of import line can be:**

- **Validated** (after the Validation action)
- **Waiting** (for the items with BOM)
- **Created** (after execution of Run Actions function)
- **Creation Error** (in case problems or inconsistencies occur during creation)
- **Validation Error** (in case problems or inconsistencies occur during validation)





This part of inbound items import from PLM can be skipped since the import of BOMs will automatically process and create the items-components of the BOM.

Note: if during the import of BOMs occur some problems, in this case the inbound items can be controlled and processed from this menu.

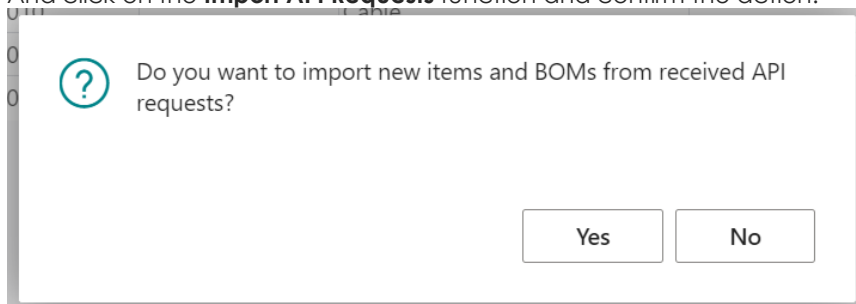
**2.4. Procedure of the BOMs version import**

To import the BOMs from the PLM we should go to the PLM Inbound BOMs Menu:

← PLM Inbound BOMs | Work Date: 01/04/2020

 Import API Requests  Run Actions  Archive Created  Open in Excel | Actions Fewer options

And click on the **Import API Requests** function and confirm the action:



The table will be populated with all BOMs with its components passed from PLM:

← PLM Inbound BOMs | Work Date: 01/04/2020





 Import API Requests
  Run Actions
  Archive Created
  Open in Excel
 | Actions Fewer options

	Request Action	Exe... Acti...	Exchange Status	Line Type	No.	BOM Status	Description
→	▼ <b>Insert</b>	⋮	<input type="checkbox"/> <b>Validated</b>	<b>Productio...</b>	<b>3000</b>		<b>Phone Charger</b>
	Insert		<input type="checkbox"/> Validated	Item	3010		Cable
	Insert		<input type="checkbox"/> Validated	Item	3020		Supplier
	Insert		<input type="checkbox"/> Validated	Item	3030		Plug

After the importing of the API Requests the data are automatically validated. You can re-validate records again using the following action:

**Actions → Process → Validate**

PLM Inbound BOMs | Work Date: 01/04/2020

 Import API Requests
  Run Actions
  Archive Created
  Open in Excel
 | Actions Fewer options

	Request Action	Exe... Acti...	Exchange Status	Line Type	No.	BOM Status	Description
	▼ <b>Insert</b>	⋮	<input type="checkbox"/> <b>Validated</b>	<b>Productio...</b>	<b>3000</b>		<b>Phone Charger</b>
	Insert		<input type="checkbox"/> Validated	Item	3010		Cable
	Insert		<input type="checkbox"/> Validated	Item	3020		Supplier
	Insert		<input type="checkbox"/> Validated	Item	3030		Plug

Now we should select the BOMs which we want to process and click on the function **Run Actions**:


← PLM Inbound BOMs | Work Date: 01/04/2020

 Import API Requests
  Run Actions
  Archive Created
  Open in Excel
 | Actions Fewer options

	Request Action	Exe... Acti...	Exchange Status	Line Type	No.	BOM Status	Description
→	▼ <b>Insert</b>	⋮	<input checked="" type="checkbox"/> <b>Validated</b>	<b>Productio...</b>	<b>3000</b>		<b>Phone Charger</b>
	Insert		<input checked="" type="checkbox"/> Validated	Item	3010		Cable
	Insert		<input checked="" type="checkbox"/> Validated	Item	3020		Supplier
	Insert		<input checked="" type="checkbox"/> Validated	Item	3030		Plug

After the execution of an action the exchange status for all BOMs and its components will be changed from "Validated" to "Created":

← PLM Inbound BOMs | Work Date: 01/04/2020

 Import API Requests
  Run Actions
  Archive Created
  Open in Excel
 | Actions Fewer options

	Request Action	Exe... Acti...	Exchange Status	Line Type	No.	BOM Status	Description
→	▼ <b>Insert</b>	⋮	<input type="checkbox"/> <b>Created</b>	<b>Productio...</b>	<b>3000</b>	<b>Certified</b>	<b>Phone Charger</b>
	Insert		<input type="checkbox"/> Created	Item	3010	New	Cable
	Insert		<input type="checkbox"/> Created	Item	3020	New	Supplier
	Insert		<input type="checkbox"/> Created	Item	3030	New	Plug

BOM Status will be "Certificated" as we defined in the PLM setup:

**BOM**

Version Padding ..... 0000      BOM Modify Action ..... **Recreate** ▾  
 Certify BOM After Cre...       Default Routing Link ... ▾

So, the Exchange Status of improt line can be:

- **Validated** (after the Validation action)
- **Created** (after execution of Run Actions function)
- **Creation Error** (in case problems or inconsistencies occur during creation)
- **Validation Error** (in case problems or inconsistencies occur during validation)

Now if we control the PLM Inbound Items menu, we will see that all items-components of the processed BOM have been created:

← PLM Inbound Items | Work Date: 01/04/2020

Import API Requests   Run Actions   Archive Created   Open in Excel   Actions   Fewer options

Request Action	Exe... Acti...	Exchange Status	Item No.	Item Status	Description	Description 2
→ Insert	<input type="checkbox"/>	<b>Created</b>	3000	Open	Phone Charger	
Insert	<input type="checkbox"/>	<b>Created</b>	3010	Open	Cable	
Insert	<input type="checkbox"/>	<b>Created</b>	3020	Open	Supplier	
Insert	<input type="checkbox"/>	<b>Created</b>	3030	Open	Plug	

From the PLM Inbound BOMs menu we can navigate to the new-created BOM version. **Actions → Navigate →BOM:**

← PLM Inbound BOMs | Work Date: 01/04/2020

Import API Requests   Run Actions   Archive Created   Open in Excel   **Actions**   Fewer options

Import ▾   Process ▾   **Navigate ▾**   Archive ▾

Request Action	Exe... Acti...	Exch. Sts	BOM	Item No.	BOM Status	Description
→ ▾ Insert	<input type="checkbox"/>	<b>Created</b>	<b>Productio...</b>	<b>3000</b>	<b>Certified</b>	<b>Phone Charger</b>
Insert	<input type="checkbox"/>	Created	Item	3010	New	Cable
Insert	<input type="checkbox"/>	Created	Item	3020	New	Supplier
Insert	<input type="checkbox"/>	Created	Item	3030	New	Plug

The BOM version 0001 has been created in the MS-BC:

←     +     ✓ Saved    

# Production BOM Version

Page | More options

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**General**

Version Code ..... 0001 | ...      Status ..... **Certified** ▾  
 Description ..... Phone Charger      Starting Date ..... 01/01/2021   
 Unit of Measure Code ... PZ ▾      Last Date Modified ..... 05/02/2021

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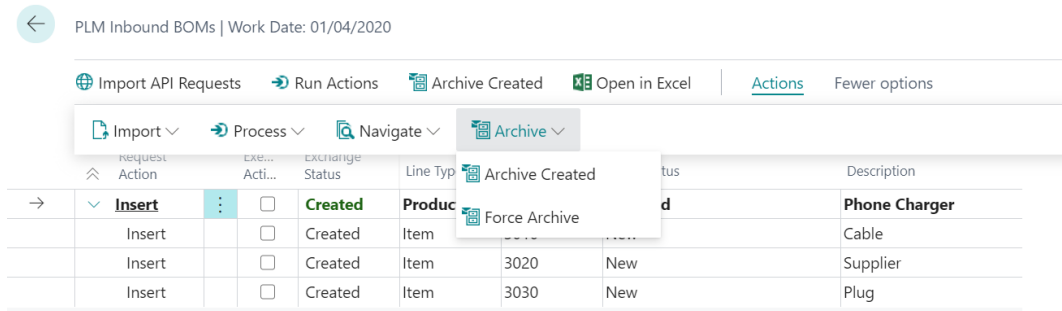
**Lines** | Manage   More options

Type	No.	Description	Quantity per	Unit of Measure Code	Scrap %	Rout Code
→ Item	3010	Cable	1	PZ	0	
Item	3020	Supplier	1	PZ	0	
Item	3030	Plug	1	PZ	0	

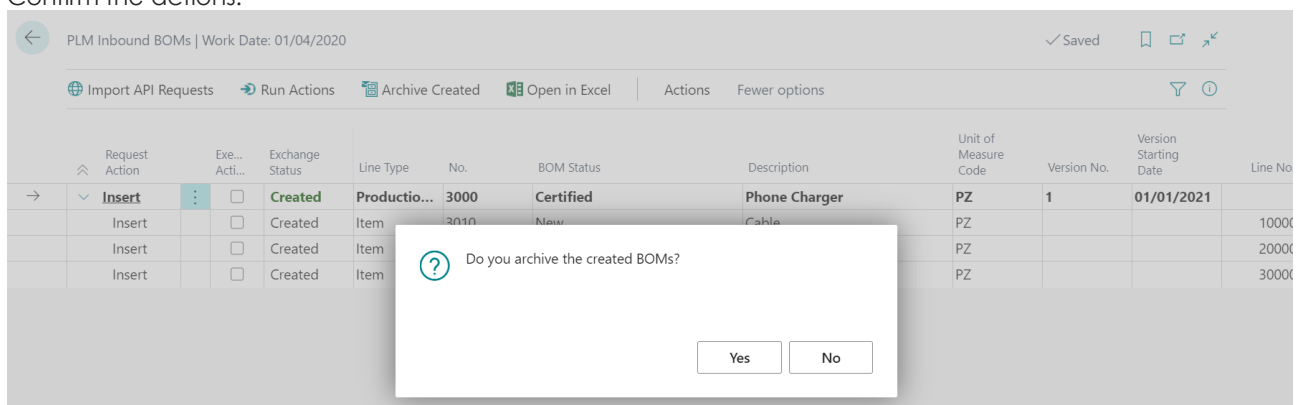
## 2.5. Archiving function

After the importing of the items and BOMs it's possible to archive the import information:

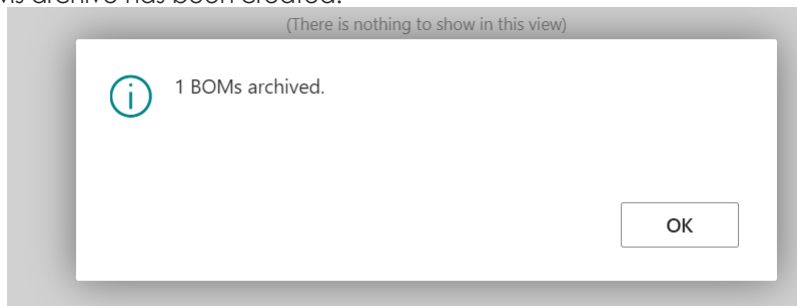
- ✓ Archive Created (for processed created BOMs and Items)
- ✓ Force Archive (for the lines with errors which we do not want to process anymore)



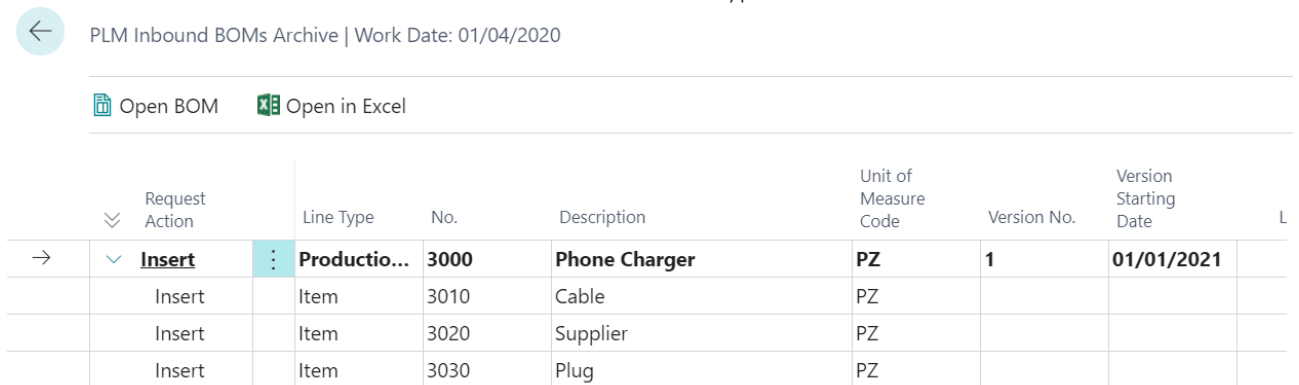
Confirm the actions:



The BOMs archive has been created:




To check the BOMs Archive click on the **Search** function and type PLM Inbound BOMs Archive:



The information in the Archive can't be modified, available only for reading

The same goes for PLM Inbound Items Archive:



 Open in Excel

Request Action	Item No.	Description	Description 2	Unit of Measure	Item Category	Replenish. System
→ <a href="#">Insert</a>	3000	Phone Charger		PZ	VARIE	Prod. Or
Insert	3010	Cable		PZ	VARIE	Purchase
Insert	3020	Supplier		PZ	VARIE	Purchase
Insert	3030	Plug		PZ	VARIE	Purchase

### 3 APP SUBSCRIPTION

Every App feature requires a valid subscription.

At first installation, a trial plan is automatically activated by the system.

After this period, you can subscribe for a product level (feature) using the Alterna Apps page or directly from the system notifications by clicking on the link which opens the product activation wizard.