



PUBLIC

# SAP Intelligent Product Recommendation

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

The information contained herein may be changed without prior notice. Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platforms, directions, and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, and they should not be relied upon in making purchasing decisions.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

See [www.sap.com/copyright](http://www.sap.com/copyright) for additional trademark information and notices.

# Table of contents

*Step1 - Login to SAP Intelligent Product Recommendation .....3*

*Step 2 - Create an Engineered Dataset and upload data. ....4*

*Step 3 - Create a Machine Learning model. ....10*

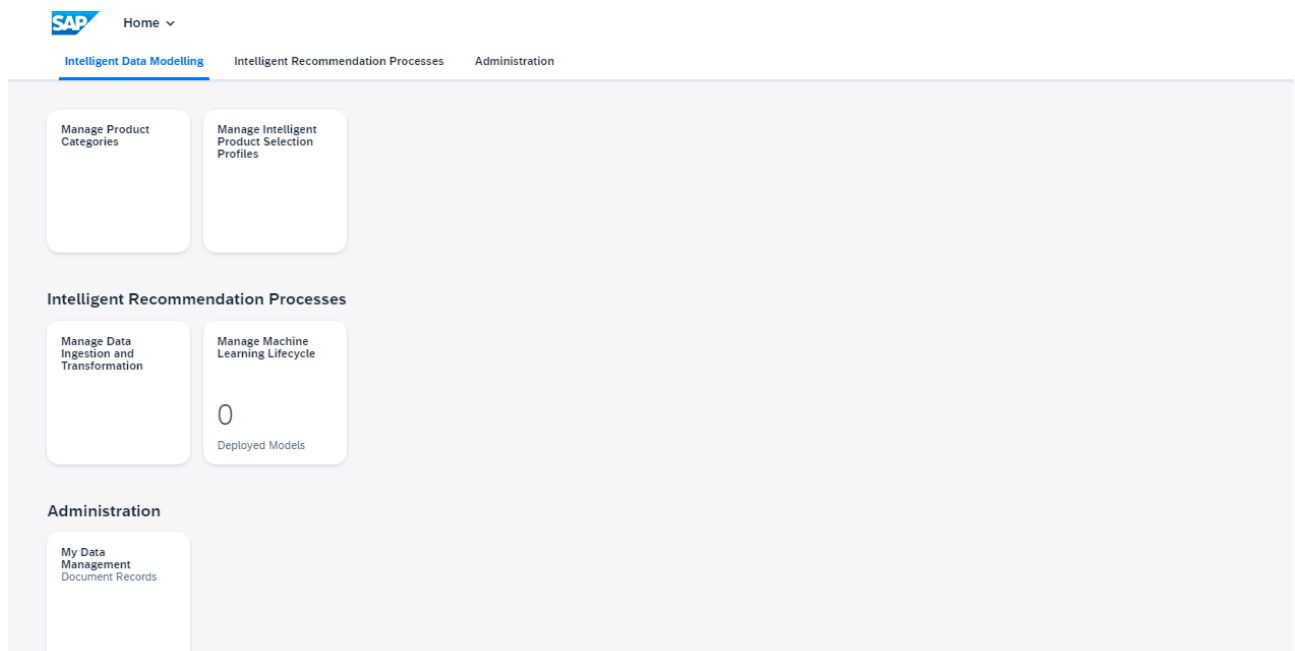
*Next steps (For your information, not part of the exercise. You can directly go to step 4 to try out the Runtime UI which is already prepared for you).....16*

*Step 4 - Launch the Runtime UI and run inferences.....20*

## Step 1

### Login to SAP Intelligent Product Recommendation

1. Open [SAP Intelligent Product Recommendation](#) FLP. (User credentials will be provided in the hands-on session)



**As a preparatory step, the Design-time - Data Modelling activities have already been performed.**

**This essentially means the following -**

1. In the Manage Product Categories app, a Product Manager (PM) defined the Product Categories that the PM is selling, e.g., Industrial Trucks, Cranes, etc. For each Product Category, the PM also defined the types of Solutions available, e.g., under Product Category Industrial Trucks the seller might be selling larger Fork Trucks, and the comparatively smaller Pallet Jacks.
2. In the Product Selection Profile app, a Product Manager maps the operational needs attributes of the business user, to the technical configuration attributes of the product. E.g., when working with Industrial trucks, the product manager would want the buyers to express their operational needs in terms of the max. rack height in the warehouse, the type of surface to run on, any noise restrictions applicable, etc. Also, each type of Solution could have different product configuration attributes. E.g., for a Fork Truck these could be the Fork Size, Wheel Type, Power source, etc.

**Note: The Design-time - Data Modelling activities, will setup the data to be used for Schema creation in SAP Data Attribute Recommendation service.**

## Step 2

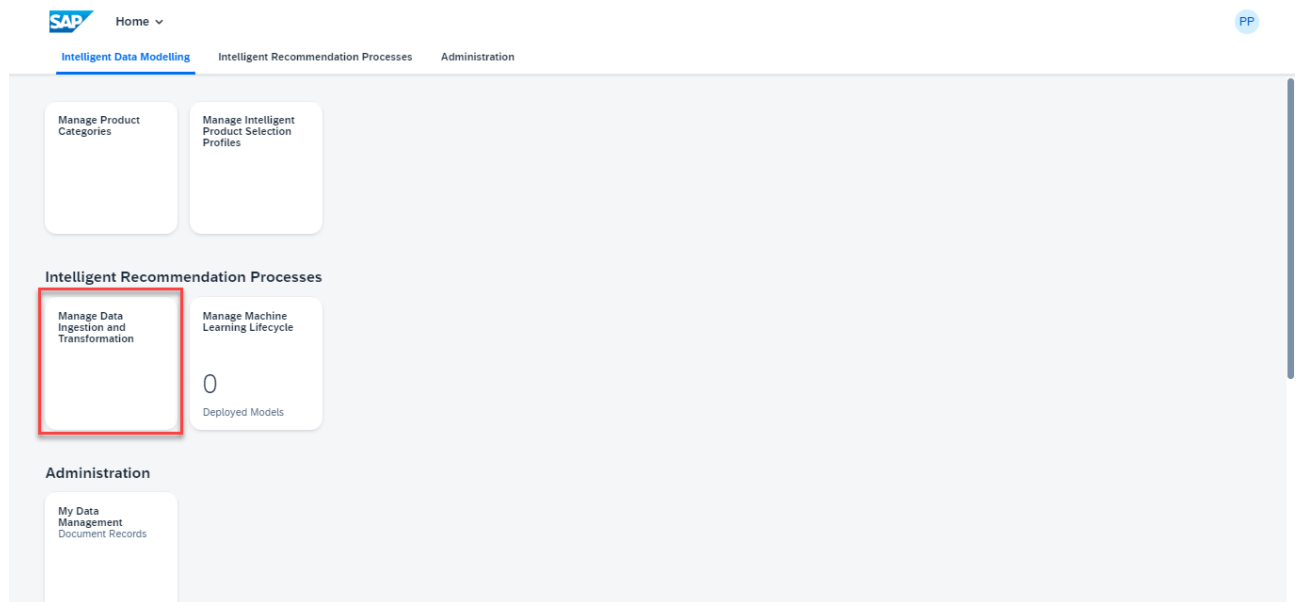
### Create an Engineered Dataset and upload data.

The following steps are to prepare your data for machine learning trainings to get the best product recommendations.

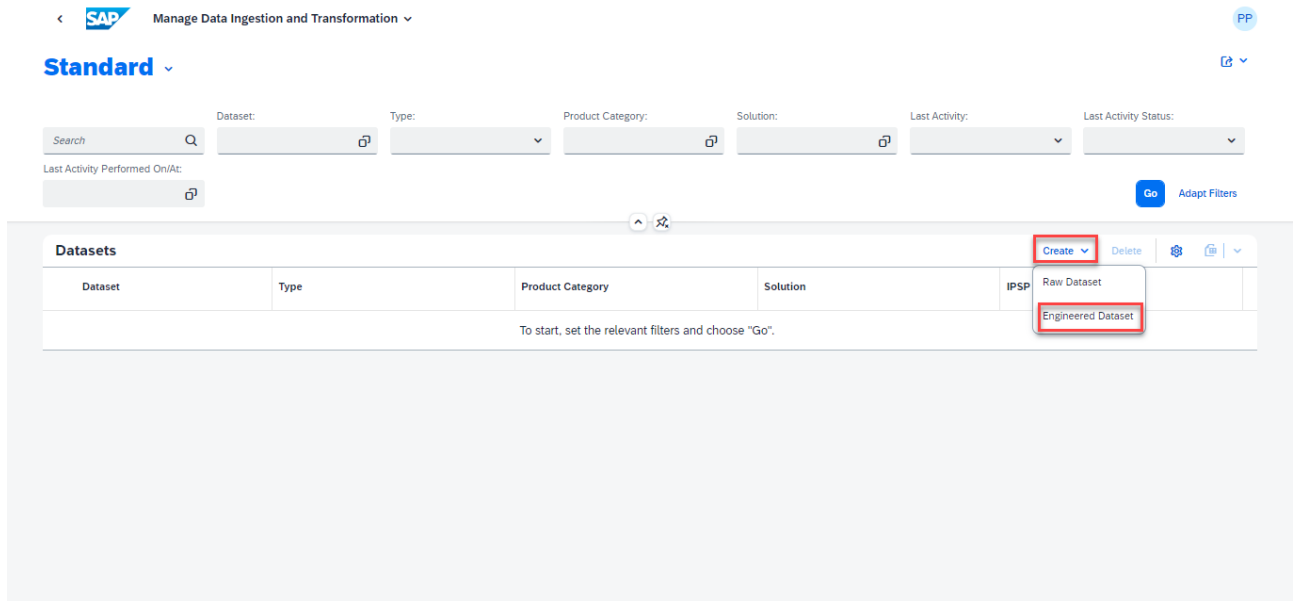
Uploading a document lets you transfer your modified or fresh data to SAP Intelligent Product Recommendation.

Importing document makes your data available for machine learning trainings.

1. Open “**Manage Data Ingestion and Transformation**” application.

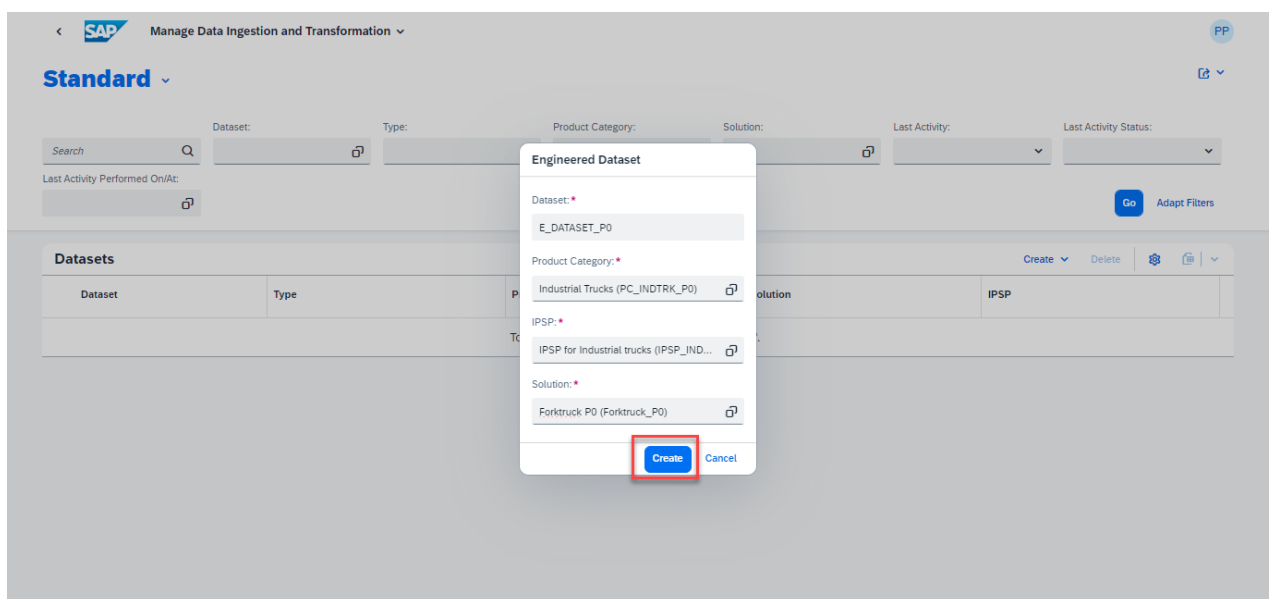


2. Click **“Create”** and choose **“Engineered Dataset”**.



3. Enter the following details and click **“Create”**.

- ☐ **Dataset:** **“E\_DATASET\_<UserID>”** with your User ID. **Ex:** If your User ID is P0, search E\_DATASET\_P0.
- ☐ **Product Category:** **“PC\_INDTRK\_<UserID>”** with your User ID. **Ex:** If your User ID is P0, search PC\_INDTRK\_P0.
- ☐ **IPSP:** **“IPSP\_INDTRK\_<UserID>”** with your User ID. **Ex:** If your User ID is P0, search IPSP\_INDTRK\_P0.
- ☐ **Solution:** **“Forktruck\_<UserID>”** with your user ID. If your User ID is P0, search Forktruck\_P0.



4. Click **“Upload Document”** in the details page and select the file **“E\_DATASET\_<UserID>”** with your User ID. **Ex:** If your User ID is P0, select **“E\_DATASET\_P0”**.

(Download the CSV file from [here](#).)

Replace the **CONFIG\_PRODUCT FL001\_P0** with **FL001\_<your user id suffix>**.

Replace the **CONFIG\_PRODUCT PJ001\_P0** with **PJ001\_<your user id suffix>**.

Example, if your user id suffix is P25 then rename the products as **FL001\_P25** and **PJ001\_P25**.

Save the file as **E\_DATASET\_<your user id suffix>.csv**

The screenshot shows the SAP Manage Data Ingestion and Transformation interface. On the left, the 'Datasets (1)' list shows 'E\_DATASET\_P0' with details: Type: Engineered, Product Category: Industrial Trucks (PC\_INDTRK\_P0), Solution: Forktruck P0 (Forktruck\_P0), IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Last Activity: , Last Activity Status: . The main panel displays the details for 'E\_DATASET\_P0', including Dataset Type, Product Category, Solution, Last Activity, and Last Activity Status. The 'Document Staging Area' tab is active, showing a table with columns: Document Name, Document Size, Document Status, and Action. The 'Upload Document' button is highlighted with a red box. The 'Activity Log' tab is also visible, showing a table with columns: Activity, Status, Document Name, Performed By, and Performed On/At.

This screenshot shows the same SAP interface as the previous one, but with the 'Upload Document' dialog box open. The dialog box has a 'Document Upload' field with a red box around it, containing the text 'E\_DATASET\_P0.csv'. Below the field are 'Upload' and 'Cancel' buttons. The background interface is dimmed, showing the 'E\_DATASET\_P0' dataset details and the 'Document Staging Area' tab.

5. Click **“Upload”**.

**SAP Manage Data Ingestion and Transformation**

**Standard**

Search: [ ] Dataset: [ ]

Type: [ ] Product Category: [ ]

Solution: [ ] Last Activity: [ ]

Last Activity Status: [ ] Last Activity Performed On/At: [ ]

**Go** **Adapt Filters**

**Datasets (1)** **Create** **Delete** **Adapt Filters**

**Dataset**

**E\_DATASET\_P0**

Type: Engineered  
Product Category: Industrial Trucks (PC\_INDTRK\_P0)  
Solution: Forktruck P0 (Forktruck\_P0)  
IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0)  
Last Activity:  
Last Activity Status:

**E\_DATASET\_P0**

Dataset Type: Engineered  
Product Category: Industrial Trucks (PC\_INDTRK\_P0)  
IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0)  
Solution: Forktruck P0 (Forktruck\_P0)

Last Activity: --  
Performed On/At: --

**Last Activity Status**  
Created By: user\_p0@ipr.com  
Created On: Oct 12, 2023, 3:12:39 PM

**Document Staging Area**

**Items**

Document Upload: \*  
E\_DATASET\_P0.csv

**Upload** **Cancel**

**Activity Log**

**Items**

Activity	Status	Document Name	Performed By	Performed On/At
No items available.				

**SAP Manage Data Ingestion and Transformation**

**Standard**

Search: [ ] Dataset: [ ]

Type: [ ] Product Category: [ ]

Solution: [ ] Last Activity: [ ]

Last Activity Status: [ ] Last Activity Performed On/At: [ ]

**Go** **Adapt Filters**

**Datasets (1)** **Create** **Delete** **Adapt Filters**

**Dataset**

**E\_DATASET\_P0**

Type: Engineered  
Product Category: Industrial Trucks (PC\_INDTRK\_P0)  
Solution: Forktruck P0 (Forktruck\_P0)  
IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0)  
Last Activity: Document Upload  
Last Activity Status: **In Process**

**E\_DATASET\_P0**

Dataset Type: Engineered  
Product Category: Industrial Trucks (PC\_INDTRK\_P0)  
IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0)  
Solution: Forktruck P0 (Forktruck\_P0)

Last Activity: Document Upload  
Performed On/At: Oct 12, 2023, 3:07:50 PM

**Last Activity Status**  
**In Process**

Created By: user\_p0@ipr.com  
Created On: Oct 12, 2023, 3:03:44 PM

**Document Staging Area** **Activity Log**

**Items**

Document Name	Document Size	Document Status	Action
No items available.			

**Activity Log**

**Items (1)**

Activity	Status	Document Name	Performed By	Performed On/At
Document Upload	<b>In Process</b>		user_p0@ipr.com	Oct 12, 2023, 3:07:50

**SAP Manage Data Ingestion and Transformation**

**Standard**

Search  Dataset:

Type:  Product Category:

Solution:  Last Activity:

Last Activity Status:  Last Activity Performed On/At:

**Go** Adapt Filters

**Datasets (1)** Create Delete

Dataset
<b>E_DATASET_P0</b> Type: Engineered Product Category: Industrial Trucks (PC_INDTRK_P0) Solution: Forktruck P0 (Forktruck_P0) IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0) Last Activity: Document Scan Last Activity Status: In Process

**E\_DATASET\_P0**

Dataset Type: Engineered  
 Product Category: Industrial Trucks (PC\_INDTRK\_P0)  
 IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0)  
 Solution: Forktruck P0 (Forktruck\_P0)  
 Created By: user\_p0@lpr.com  
 Created On: Oct 12, 2023, 3:03:44 PM

Last Activity: Document Scan  
 Performed On/At: Oct 12, 2023, 3:08:00 PM  
**Last Activity Status: In Process**

**Document Staging Area** Activity Log

**Items (1)** Search Generate Document Upload Document Delete

Document Name	Document Size	Document Status	Action
E_DATASET_P0.csv	2.88 MB	Scanning for Viruses	Upload

**Activity Log**

**Items (2)** Search

Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	In Process	E_DATASET_P0.csv	user_p0@lpr.com	Oct 12, 2023, 3:08:00

6. Refresh the browser until the “**Last Activity Status**” is set to “**Completed**”.

**SAP Manage Data Ingestion and Transformation**

**Standard**

Search  Dataset:

Type:  Product Category:

Solution:  Last Activity:

Last Activity Status:  Last Activity Performed On/At:

**Go** Adapt Filters

**Datasets (1)** Create Delete

Dataset
<b>E_DATASET_P0</b> Type: Engineered Product Category: Industrial Trucks (PC_INDTRK_P0) Solution: Forktruck P0 (Forktruck_P0) IPSP: IPSP for Industrial trucks (IPSP_INDTRK_P0) Last Activity: Document Scan Last Activity Status: Completed

**E\_DATASET\_P0**

Dataset Type: Engineered  
 Product Category: Industrial Trucks (PC\_INDTRK\_P0)  
 IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0)  
 Solution: Forktruck P0 (Forktruck\_P0)  
 Created By: user\_p0@lpr.com  
 Created On: Oct 12, 2023, 3:03:44 PM

Last Activity: Document Scan  
 Performed On/At: Oct 12, 2023, 3:08:00 PM  
**Last Activity Status: Completed**

**Document Staging Area** Activity Log

**Items (1)** Search Generate Document Upload Document Delete

Document Name	Document Size	Document Status	Action
E_DATASET_P0.csv	2.88 MB	Available for Import	Upload

**Activity Log**

**Items (2)** Search

Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	Completed	E_DATASET_P0.csv	user_p0@lpr.com	Oct 12, 2023, 3:08:00 PM
Document Upload	Completed	E_DATASET_P0.csv	user_p0@lpr.com	Oct 12, 2023, 3:07:50 PM



7. Click **“Document Staging Area”** and click the **Import icon** for the CSV file uploaded in the previous step.

The screenshot shows the SAP Manage Data Ingestion and Transformation interface. On the left, there are filters for Dataset, Type, Product Category, Solution, Last Activity, and Last Activity Status. The main area displays the dataset **E\_DATASET\_P0** with details: Type: Engineered, Product Category: Industrial Trucks (PC\_INDTRK\_P0), Solution: Forktruck P0 (Forktruck\_P0), IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Last Activity: Document Scan, and Last Activity Status: Completed. Below this, the **Document Staging Area** is highlighted with a red box. It contains a table with one item: **E\_DATASET\_P0.csv**, 2.88 MB, Available for Import. An **Import icon** (a square with an upward arrow) is highlighted with a red box. To the right, the **Activity Log** shows a table with two activities: Document Scan and Document Upload, both completed.

Document Name	Document Size	Document Status	Action
E_DATASET_P0.csv	2.88 MB	Available for Import	

Activity	Status	Document Name	Performed By	Performed On/At
Document Scan	Completed	E_DATASET_P0.csv	user_p0@lpr.com	Oct 12, 2023, 3:08:00 PM
Document Upload	Completed	E_DATASET_P0.csv	user_p0@lpr.com	Oct 12, 2023, 3:07:50 PM

8. Click **“OK”** in the warning dialog. The **“Document Status”** changes to **“Importing Document”**.

The screenshot shows the same SAP interface as before, but with a **Warning** dialog box overlaid. The dialog contains the text: "Importing document will overwrite existing data. Do you want to continue?". There are two buttons: **OK** (highlighted with a red box) and **Cancel**. The background interface is dimmed, showing the dataset details and the Document Staging Area.

The screenshot shows the SAP Manage Data Ingestion and Transformation interface. On the left, the 'Standard' filter panel is visible. The main area displays the dataset 'E\_DATASET\_P0' with details: Type: Engineered, Product Category: Industrial Trucks (PC\_INDTRK\_P0), Solution: Forktruck P0 (Forktruck\_P0), IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Last Activity: Document Import, and Last Activity Status: In Process. Below this, the 'Document Staging Area' shows a table with one item: 'E\_DATASET\_P0.csv' (2.88 MB) with a status of 'Importing Document'. The 'Activity Log' section shows a table with three activities: 'Document Import' (In Process), 'Document Scan' (Completed), and 'Document Upload' (Completed).

9. Refresh the browser until the “Document Status” is “Document Imported”.

The screenshot shows the same SAP interface as before, but the dataset 'E\_DATASET\_P0' now has a 'Last Activity Status' of 'Completed'. In the 'Document Staging Area', the status of 'E\_DATASET\_P0.csv' has changed to 'Document Imported'. The 'Activity Log' table remains the same, showing the 'Document Import' activity as 'Completed'.

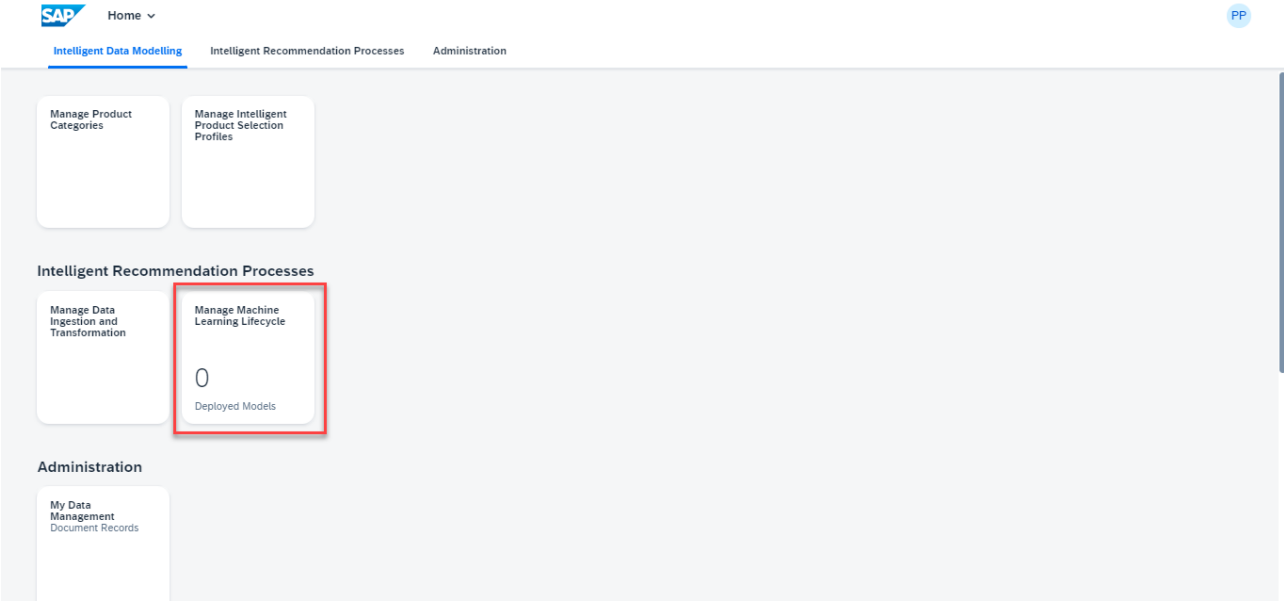
**Note:** Step 2 will setup the data that will be used for generating the training dataset that will be uploaded to SAP Data Attribute Recommendation service.

## Step 3

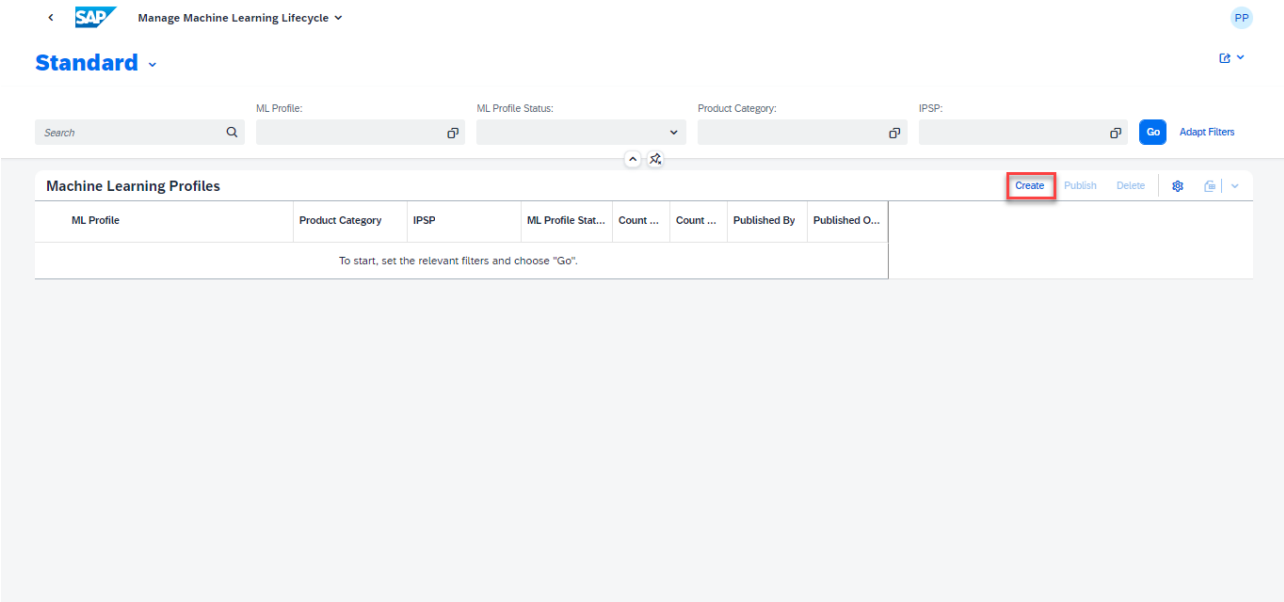
### Create a Machine Learning model.

This application is to create, train, and deploy ML models to check their predictive performances. The ML Specialist can then select the best match for their requirements.

1. Open “Manage Machine Learning Lifecycle” application.

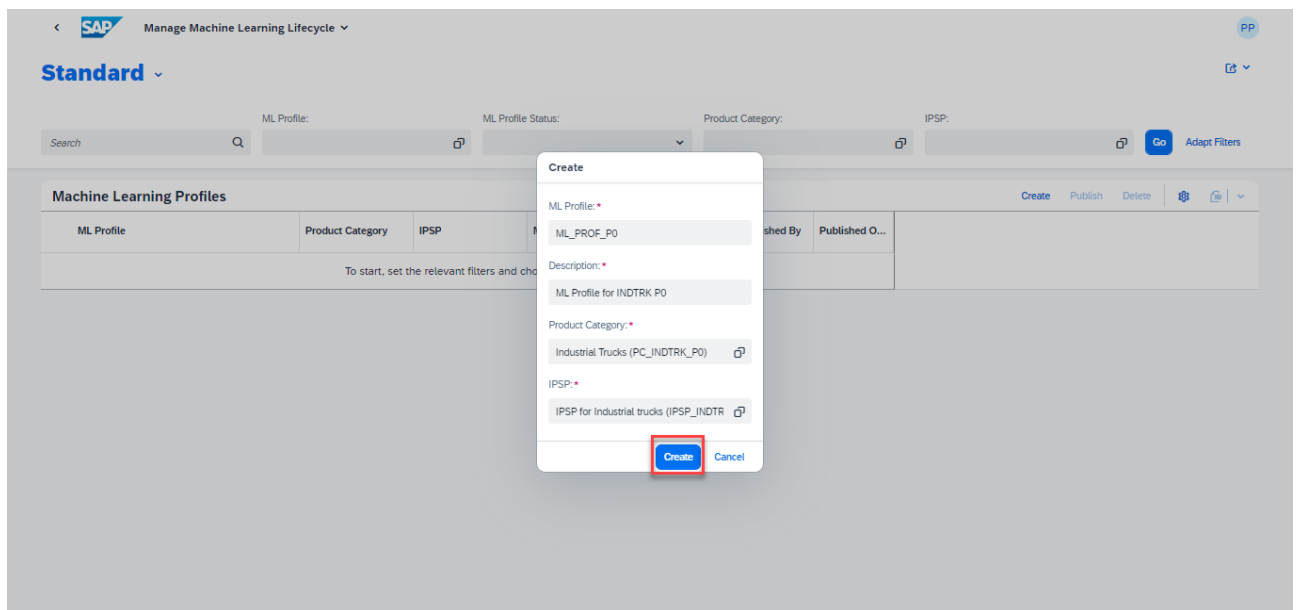


2. Click “Create”.



3. Enter the following details and click **Create** in the dialog.

- ☐ **ML Profile:** “**ML\_PROF\_<UserID>**” with your User ID. **Ex:** If your User ID is P0, search “ML\_PROF\_P0”.
- ☐ **Description:** “**ML Profile for INDTRK <UserID>**” with your User ID. **Ex:** If your User ID is P0, search “ML Profile for INDTRK P0”.
- ☐ **Product Category:** “**PC\_INDTRK\_<UserID>**” with your User ID. **Ex:** If your User ID is P0, search PC\_INDTRK\_P0.
- ☐ **IPSP:** “**IPSP\_INDTRK\_<UserID>**” with your User ID. **Ex:** If your User ID is P0, search IPSP\_INDTRK\_P0.



4. Navigate to the details page of the **“Target”** – **“Forktruck\_<UserID>”**. **Ex:** If your User ID is P0, navigate to **“Forktruck\_P0”**.

The screenshot shows the SAP Manage Machine Learning Lifecycle interface. On the left, the 'ML\_PROF\_P0' profile is displayed with details: Product Category: Industrial Trucks (PC\_INDTRK\_P0), IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Published By: --, and Published On/At: --. The 'ML Profile Status' is 'Created'. Below this is a 'Determination Model Overviews (2)' table:

Target	Has a Deployed ML Model	
Forktruck P0 (Forktruck_P0)	No	[Red box around 'No']
Industrial Trucks (PC_INDTRK_P0)	No	>

On the right, the 'Forktruck\_P0' target details are shown. The 'ML Model' section has a table with columns: ML Model, Type, Dataset, and ML Model Status. The table is empty, showing 'No items available.' The 'Create' button in the ML Model section is highlighted with a red box.

5. Click **“Create”**.

This screenshot is identical to the previous one, showing the SAP Manage Machine Learning Lifecycle interface. The 'ML\_PROF\_P0' profile and 'Forktruck\_P0' target details are the same. The 'Determination Model Overviews (2)' table and 'ML Model' section are also the same. The 'Create' button in the ML Model section is highlighted with a red box.

6. Enter a Description, select the Dataset from the dropdown (created in the earlier step 4.3) and click **“Create”**.

The screenshot shows the SAP Manage Machine Learning Lifecycle interface. On the left, the 'ML\_PROF\_P0' profile is visible with its status 'Created'. The main area displays the 'Forktruck\_P0' model. A 'Create' dialog box is open, showing the following details:

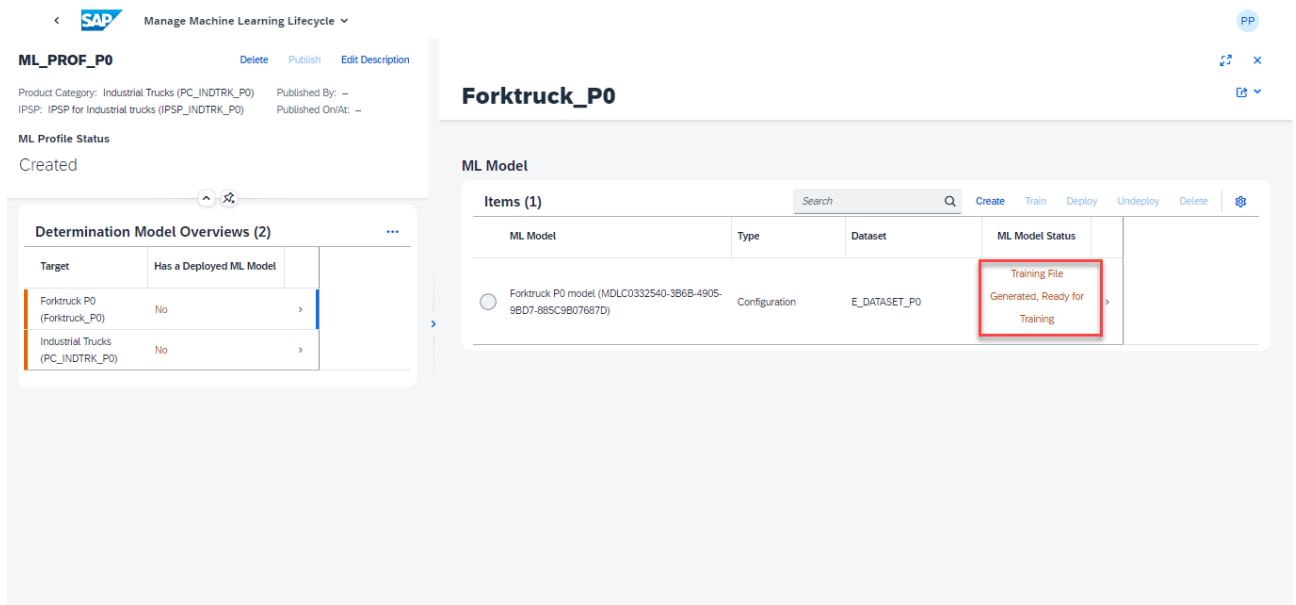
- ML Model: MDLC0332540-386B-4905-9BD7-885C9B07687D
- Description: Forktruck P0 model
- Dataset: E\_DATASET\_P0 X

The 'Create' button is highlighted with a red box.

The screenshot shows the same SAP Manage Machine Learning Lifecycle interface. The 'Forktruck\_P0' model is now listed in the 'ML Model' table. The status 'Generating Training file' is highlighted with a red box.

ML Model	Type	Dataset	ML Model Status
Forktruck P0 model (MDLC0332540-386B-4905-9BD7-885C9B07687D)	Configuration	E_DATASET_P0	Generating Training file

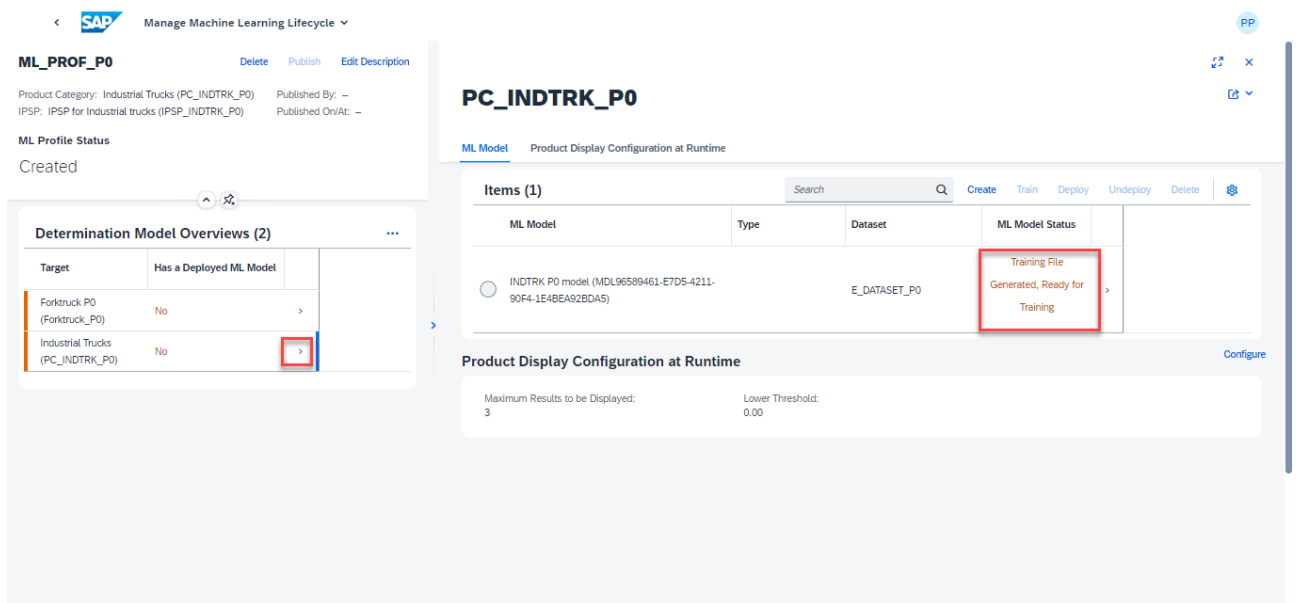
7. Refresh the browser until the “**ML Model Status**” is “**Training File Generated, Ready for Training**”.



The screenshot shows the SAP ML Model lifecycle interface for a model named **Forktruck\_P0**. On the left, the **ML\_PROF\_P0** profile is shown with its status as **Created**. The main panel displays the **ML Model** details for **Forktruck\_P0**. A table lists the model's status as **Training File Generated, Ready for Training**, which is highlighted with a red box. The table also shows the model's ID, type (Configuration), and dataset (E\_DATASET\_P0).

ML Model	Type	Dataset	ML Model Status
Forktruck P0 model (MDLC032540-386B-4905-9BD7-865C9B07687D)	Configuration	E_DATASET_P0	Training File Generated, Ready for Training

8. Similarly create a ML Model for **PC\_INDTRK\_<UserID>**



The screenshot shows the SAP ML Model lifecycle interface for a model named **PC\_INDTRK\_P0**. On the left, the **ML\_PROF\_P0** profile is shown with its status as **Created**. The main panel displays the **ML Model** details for **PC\_INDTRK\_P0**. A table lists the model's status as **Training File Generated, Ready for Training**, which is highlighted with a red box. The table also shows the model's ID, type (Configuration), and dataset (E\_DATASET\_P0). Below the table, the **Product Display Configuration at Runtime** section is visible, showing settings for maximum results and lower threshold.

ML Model	Type	Dataset	ML Model Status
INDTRK P0 model (MDL96589461-E7D5-4211-90F4-1E4BEA92BDA5)	Configuration	E_DATASET_P0	Training File Generated, Ready for Training

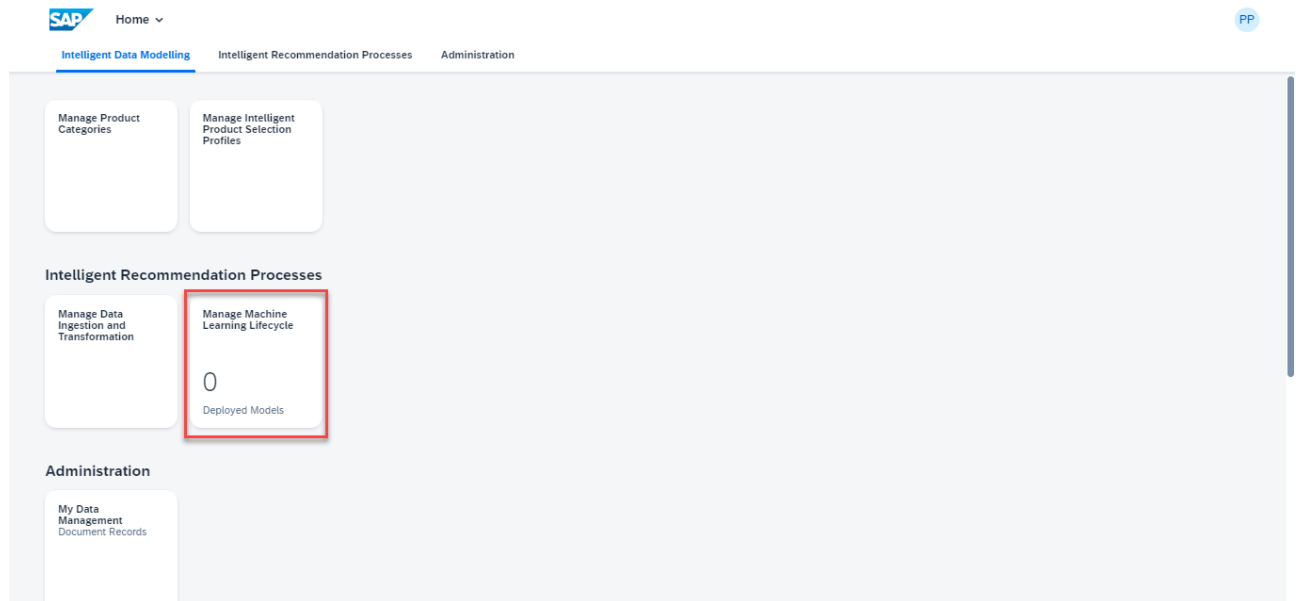
**Product Display Configuration at Runtime**

Maximum Results to be Displayed: 3  
Lower Threshold: 0.00

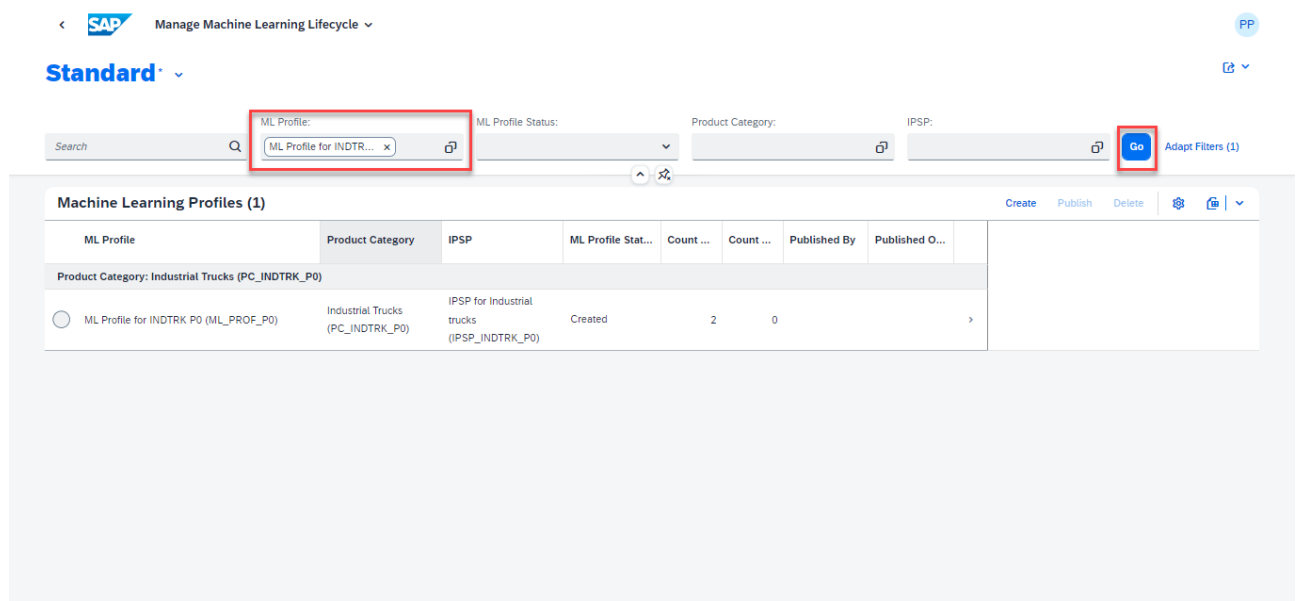
*Next steps (For your information, not part of the exercise. You can directly go to step 4 to try out the Runtime UI which is already prepared for you)*

*Train and deploy the ML model.*

1. Navigate to “**Machine Learning Lifecycle**” application.



2. Search for profile “**ML\_PROF\_P0**” and click “**Go**”.





3. Navigate to the details page by clicking the arrow.

< **SAP** Manage Machine Learning Lifecycle ▾

**Standard** ▾

Search  ML Profile:  ML Profile Status:  Product Category:  IPSP:  **Go** Adapt Filters (1)

**Machine Learning Profiles (1)** Create Publish Delete

ML Profile	Product Category	IPSP	ML Profile Stat...	Count ...	Count ...	Published By	Published O...
Product Category: Industrial Trucks (PC_INDTRK_P0)							
<input type="radio"/> ML Profile for INDTRK P0 (ML_PROF_P0)	Industrial Trucks (PC_INDTRK_P0)	IPSP for Industrial trucks (IPSP_INDTRK_P0)	Created	2	0		

4. Navigate to the details page of the Solution “**Forktruck\_P0**”.

< **SAP** Manage Machine Learning Lifecycle ▾

**ML\_PROF\_P0** Delete Publish Edit Description

Product Category: Industrial Trucks (PC\_INDTRK\_P0) Published By: —  
IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0) Published On/At: —

**ML Profile Status**  
Created

**Determination Model Overviews (2)** ...

Target	Has a Deployed ML Model
Forktruck P0 (Forktruck_P0)	No
Industrial Trucks (PC_INDTRK_P0)	No

**Forktruck\_P0** ^ v ↗ ✕

**ML Model** Create Train Deploy Undeploy Delete

**Items (1)**

ML Model	Type	Dataset	ML Model Status
<input type="radio"/> Forktruck P0 model (MDLC0332540-3B6B-4905-9B07-885C9B07687D)	Configuration	E_DATASET_P0	Training File Generated, Ready for Training

5. Select the ML Model and click **“Train”**. The **“ML Model Status”** changes to **“Training”**.

The screenshot shows the SAP ML Model lifecycle interface. On the left, the 'ML\_PROF\_P0' profile is displayed with details: Product Category: Industrial Trucks (PC\_INDTRK\_P0), IPSP: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Published By: --, and Published On/At: --. Below this, the 'Determination Model Overviews (2)' table shows two targets: 'Forktruck P0 (Forktruck\_P0)' and 'Industrial Trucks (PC\_INDTRK\_P0)', both with 'Has a Deployed ML Model' set to 'No'. On the right, the 'Forktruck\_P0' ML Model is shown. The 'ML Model' table has one item: 'Forktruck P0 model (MDLC0332540-3B6B-4905-9B07-885C9B07687D)' with Type 'Configuration' and Dataset 'E\_DATASET\_P0'. The 'ML Model Status' column shows 'Training File Generated, Ready for Training'. The 'Train' button is highlighted with a red box.

The screenshot shows the same SAP ML Model lifecycle interface as above, but the 'ML Model Status' column now shows 'Training'. The 'Train' button is still highlighted with a red box.

6. Refresh the browser until the **“ML Model Status”** is **“Trained”**.
7. Click on **“Deploy”** to deploy the model. The **“ML Model Status”** changes to **“Deploying”**.
8. Refresh the browser until the **“ML Model Status”** is **“Deployed”**.

9. Repeat these steps for the ML model associated with the Target **“PC\_INDTRK\_P0”** to deploy the associated ML model.

10. Publish the ML Profile by clicking the **“Publish”** button.

The screenshot shows the SAP Manage Machine Learning Lifecycle app. At the top, there's a search bar and filters for ML Profile, ML Profile Status, Product Category, and IPSP. Below this is a table titled 'Machine Learning Profiles (1)'. The table has columns: ML Profile, Product Category, IPSP, ML Profile Stat..., Count..., Count..., Published By, and Published O... The first row is highlighted in blue and contains the following data: ML Profile for INDTRK P0 (ML\_PROF\_P0), Industrial Trucks (PC\_INDTRK\_P0), IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Published, 2, 2, user\_p0@ipr.com, and Oct 13, 2023, 7:39:21 PM. The 'Published' button in the table is highlighted with a red box.

11. Go to the **“Manage Intelligent Product Selection Profiles”** app.

The screenshot shows the SAP Manage Intelligent Product Selection Profiles app. At the top, there's a search bar and filters for IPSP, Product Category, IPSP Status, Created On/At, and Description Sync Status. Below this is a table titled 'Profiles (1)'. The table has columns: IPSP, Product Category, IPSP Status, Description Sync Status, Created By, Created On/At, Changed By, and Changed On/At. The first row is highlighted in blue and contains the following data: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Industrial Trucks (PC\_INDTRK\_P0), Active, Not Started, user\_p0@ipr.com, Oct 11, 2023, 6:45:30 PM, user\_p0@ipr.com, and Oct 13, 2023, 7:39:43 PM. The 'Active' button in the table is highlighted with a red box.

12. Activate the IPSP by clicking the **“Activate”** button.

The screenshot shows the SAP Manage Intelligent Product Selection Profiles app. At the top, there's a search bar and filters for IPSP, Product Category, IPSP Status, Created On/At, and Description Sync Status. Below this is a table titled 'Profiles (1)'. The table has columns: IPSP, Product Category, IPSP Status, Description Sync Status, Created By, Created On/At, Changed By, and Changed On/At. The first row is highlighted in blue and contains the following data: IPSP for Industrial trucks (IPSP\_INDTRK\_P0), Industrial Trucks (PC\_INDTRK\_P0), Active, Not Started, user\_p0@ipr.com, Oct 11, 2023, 6:45:30 PM, user\_p0@ipr.com, and Oct 13, 2023, 7:39:43 PM. The 'Active' button in the table is highlighted with a red box.

**Note: Step 3 will use the APIs offered by SAP Data Attribute Recommendation service for training ML models, getting the model metrics and to deploy them.**

## Step 4

### Launch the Runtime UI and run inferences.

You can embed the runtime UI in configure, price, quote (CPQ), or e-commerce business processes.

1. Open [SAP Intelligent Product Recommendation Runtime UI](#) and select the **“Product Category”**, **“Attributes”** and click on **“Show Products”**.

**Needs Attributes**

Select a product category and attributes below to help us recommend the best fit products to you. ×

Product Category: Industrial Trucks (PC...

**Attributes**

Isle Width : <span>10</span>	Customer Priority : <span>ENVIRON_IMPACT</span>	Warehouse Size: <span>20000</span>
Max Pal Weight : <span>100</span> LBR	Type of Surface : <span>AS</span>	Max Rack Height : <span>20</span>
Pallet Movement : <span>10</span>	Ceiling Height : <span>50</span>	Warehouse Noise : <span>NO</span>

Show Products

## 2. Choose the recommended product.

Needs Attributes

Modify

Product Category: \*

Industrial Trucks (PC...

Attributes

Isle Width :  
10

Max Pal Weight :  
100 LBR

Pallet Movement :  
10

Customer Priority :  
ENVIRON\_IMPACT

Type of Surface :  
AS

Ceiling Height :  
50

Warehouse Size:  
20000

Max Rack Height :  
20

Warehouse Noise :  
NO

Matching Products

Discard and Return

Products (2)

Product ID	Product Description	Confidence Score
FL001_P0	Fork Truck FTK	0.81 >
PJ001_P0	Side Loader SLD	0.18 >

## 3. View the recommended product configuration.

Needs Attributes

Modify

Product Category: \*

Industrial Trucks (PC...

Attributes

Isle Width :  
10

Max Pal Weight :  
100 LBR

Pallet Movement :  
10

Customer Priority :  
ENVIRON\_IMP...

Type of Surface :  
AS

Ceiling Height :  
50

Warehouse Size:  
20000

Max Rack Height :  
20

Warehouse Noise :  
NO

Matching Products

Discard and Return

Products (2)

Product ID	Product Description	Confidence Score
FL001_P0	Fork Truck FTK	0.81 >
PJ001_P0	Side Loader SLD	0.18 >

Fork Truck FTK

Confidence Score: 0.81  
Product ID: FL001\_P0

Configuration Details

Counter Weight VXX:  
(3000) KGM  
Wheel Type VXX :  
(P)  
Powersource VXX :  
(ELEC)  
Fork Size VXX :  
(L)

Accept

**Note: Step 4 will use the APIs offered by SAP Data Attribute Recommendation service for sending inference requests.**