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| Test Script  SAP S/4HANA - 18-09-20 | public |
| Prediction of Delivery Date for Purchase Order Items (3FY) |

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# Purpose

Materials required for production are supplied by multiple suppliers. A delay in delivery can impact on-time production at the plant and cause rescheduling of assembly lines, which are very costly. Indirect material delay also causes interruption in supporting employees with required products or services. The Machine Learning algorithms identify the supplier delays based on the multiple situations and predict the chances of delay.

During creation of purchase orders or purchase requisitions, the lead time from the material master sometimes doesn't consider the processing and approval time.

This document provides a detailed procedure for testing this scope item after solution activation, reflecting the predefined scope of the solution. Each process step, report, or item is covered in its own section, providing the system interactions (test steps) in a table view. Steps that are not in scope of the process but are needed for testing are marked accordingly. Project-specific steps must be added.

# Prerequisites

This section summarizes all the prerequisites for conducting the test in terms of systems, users, master data, organizational data, other test data and business conditions.

## System Access

The test should be conducted with the following system:

|  |  |
| --- | --- |
| System | Details |
| System | Accessible via the SAP Fiori launchpad. Your system administrator provides you with the URL to access the various apps assigned to your role. |

## Roles

Assign the following business roles to your individual test users. Alternatively, if available, you can create business roles using the following spaces with pages and predefined apps for the SAP Fiori launchpad and assign the business roles to your individual test users.

Note These roles or spaces are examples provided by SAP. You can use them as templates to create your own roles or spaces.

For more information about business roles, refer to Assigning business roles to a user in the [Administration Guide to Implementation of SAP S/4HANA with SAP Best Practices](https://help.sap.com/viewer/S4HANA2020_AdminGuide) .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name (Role) | ID (Role) | Description (Space) | ID (Space) | Log On |
| Analytics Specialist | SAP\_BR\_ANALYTICS\_SPECIALIST |  |  |  |
| Purchaser | SAP\_BR\_PURCHASER | Operational Purchasing | SAP\_BR\_PURCHASER |  |

## Business Conditions

Follow the procedures described in the following scope items for creating the corresponding business data if needed.

|  |  |
| --- | --- |
| Scope Item | Business Condition |
| J45 - Procurement of Direct Materials | Follow the scope item to create the corresponding business data. |

# Overview Table

This scope item consists of several process steps provided in the following table:

If your system administrator has enabled spaces and pages on the SAP Fiori launchpad, the homepage will only contain the essential apps for performing the typical tasks of a business role.

You can find all other apps not included on the homepage using the search bar.

If you want to personalize the homepage and include the hidden apps, navigate to your user profile and choose Settings > App Finder .

|  |  |  |  |
| --- | --- | --- | --- |
| Process Step | Business Role | App/Transaction | Expected Results |
| [Train Predictive Model](#unique_7) [page ] 6 | Analytics Specialist | Predictive Models (F1837) | The model is trained successfully. |
| [Monitor Purchase Order Items](#unique_8) [page ] 8 | Purchaser | Monitor Purchase Order Items (F2358) | The app is running correctly. |

# Test Procedures

This section describes test procedures for each process step that belongs to this scope item.

## Train Predictive Model

Purpose

You can use Predictive Models (F1837) to administrate the life cycle of a predictive model with your own data. Train a model to produce a model version, retrain model versions, validate, and activate predictive models in order to return a predictive result.

Please refer to the documentation on SAP Help Portal to perform the steps and gain more detailed information like the Model Status and Model Version Report.

[SAP S/4HANA](https://help.sap.com/s4hana) > English (under Product Assistance) > Cross Components > Analytics > Predictive Analytics integrator (PAi) > Predictive Models App .

### Train a Model

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

Your modeling context has been created. You would like to create a model from the existing template based on the predictive scenario options defined by the application developer. Each application has a specific predictive scenario. Choose the corresponding predictive scenario and perform the following test steps for each application.

* Monitor Purchase Order Items: SUPLRDELIVPREDICT

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1. | Log On | Log on to the SAP Fiori launchpad as an Analytics Specialist. | The SAP Fiori launchpad is displayed. |  |
| 2. | Access the App | Open the Predictive Models (F1837) app. | The Predictive Models screen is displayed. |  |
| 3. | Select Predictive Scenario | Select the predictive scenario (for example, SUPLRDELIVPREDICT) and click it. | The predictive scenario has been selected. |  |
| 4. | Choose Model | Select the radio button to choose the model you want to train. | The Train button is enabled. |  |
| 5. | Train the Model | Choose Train.  On the Train Model screen, make the necessary entries and choose Train.  To go to the model version list, choose the model. | A new model version with status Training has been added. |  |

### Set a Model Version to Active

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The active model version is the version that is used to generate predictions when the modeling context is queried.

You can only activate a model version with the status Ready.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1. | Log On | Log on to the SAP Fiori launchpad as an Analytics Specialist. | The SAP Fiori launchpad is displayed. |  |
| 2. | Access the App | Open the Predictive Models (F1837) app. | The app is displayed. |  |
| 3. | Select Model Version | Select the corresponding predictive scenario, modeling context, and model. In the model version list, select the checkbox of the model version. | The model version is selected. |  |
| 4. | Activate | Choose Activate. | The model version status changes to Active.  The procedure is updated with the model version associated with its modeling context. |  |

## Monitor Purchase Order Items

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

You can check the Predicted Delivery Date only when the predictive model has been successfully trained and set to active.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1. | Log On | Log on to the SAP Fiori launchpad as a Purchaser. | The SAP Fiori launchpad is displayed. |  |
| 2. | Access the App | Open the Monitor Purchase Order Items (F2358) app. | The app is displayed. |  |
| 3. | Check Data | Apply some filter criteria and choose Go to check if the data in chart and table are filtered accordingly.  Extra fields can be added or removed via Adapt Filters. | The data is filtered and displayed. |  |
| 4. | Trigger Prediction for Delivery Date | In the following Purchase Order Items table, select the purchase orders you want to trigger prediction for delivery date and choose Predict Delivery Date.  Note Prediction only works for purchase orders with Delivery Date field populated. | The predicted result is displayed in the Predicted Delivery Date field. |  |
| 5. | Check Details for Supplier Delivery | Once the delivery date is predicted, you could choose the predicted value to check for more details about supplier delivery. | More details are displayed in the Supplier's Delivery Reliability dialog box. |  |
| 6. | Filter by Delivery Delay Forecast | In the filter bar, there's a filter field Predicted Delivery you can use to filter data based on the predictions for delivery date. | The data is filtered based on the predictions for delivery date. |  |

Typographic Conventions

|  |  |
| --- | --- |
| Type Style | Description |
| Example | Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.  Textual cross-references to other documents. |
| Example | Emphasized words or expressions. |
| EXAMPLE | Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE. |
| Example | Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools. |
| Example | Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation. |
| <Example> | Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system. |
| EXAMPLE | Keys on the keyboard, for example, F2 or ENTER. |

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