|  |  |
| --- | --- |
|  |  |
| Test Script  SAP S/4HANA - 18-09-20 | public |
| Material Requirements Planning (J44\_DE) |

Table of Contents

[1 Purpose 3](#_Toc51342798)

[2 Prerequisites 4](#_Toc51342799)

[2.1 System Access 4](#_Toc51342800)

[2.2 Roles 4](#_Toc51342801)

[2.3 Master Data, Organizational Data, and Other Data 5](#_Toc51342802)

[2.4 Preliminary Steps 5](#_Toc51342803)

[2.4.1 Create Scheduling Agreement 6](#_Toc51342804)

[2.4.2 Prerequisite for Material Exception (Optional) 8](#_Toc51342805)

[2.4.2.1 Manage Team and Responsibilities 8](#_Toc51342806)

[2.4.2.2 Manage Situation Types 10](#_Toc51342807)

[2.4.3 Prerequisite for Handover of Purchase Requisition (Optional) 12](#_Toc51342808)

[2.4.3.1 Assign MRP Group 0011 to TG0011 12](#_Toc51342809)

[3 Overview Table 14](#_Toc51342810)

[4 Test Procedure 16](#_Toc51342811)

[4.1 Manage PIRs for Material TG0011 & TG0012 16](#_Toc51342812)

[4.2 Monitor Material Coverage 18](#_Toc51342813)

[4.2.1 Run Material Requirements Planning (MRP) 18](#_Toc51342814)

[4.2.2 Evaluate MRP Result 19](#_Toc51342815)

[4.2.2.1 Evaluate MRP Result (Purchase Requisitions) 19](#_Toc51342816)

[4.2.2.2 Evaluate MRP Result (Delivery Schedule) 22](#_Toc51342817)

[4.3 Display MRP Run Master Data Issues 24](#_Toc51342818)

[4.4 Display MRP Run Key Figures 25](#_Toc51342819)

[4.5 Material Exception (Optional) 26](#_Toc51342820)

[4.5.1 Clear Initial Stock 26](#_Toc51342821)

[4.5.2 Clear Existing Purchase Requisitions 28](#_Toc51342822)

[4.5.3 Manage PIRs for Material TG0099 29](#_Toc51342823)

[4.5.4 Run Material Requirements Planning (MRP) and Firm Purchase Requisition 30](#_Toc51342824)

[4.5.5 Increase Stock for TG0099 31](#_Toc51342825)

[4.5.6 Detect MRP Situations 33](#_Toc51342826)

[4.5.7 Check and React to Material Exception 34](#_Toc51342827)

[4.5.8 Reduce Stock for TG0099 36](#_Toc51342828)

[5 Appendix 38](#_Toc51342829)

[5.1 Process Chains 38](#_Toc51342830)

[5.1.1 Preceding Processes 38](#_Toc51342831)

[5.1.2 Succeeding Processes 38](#_Toc51342832)

# Purpose

This process enables your material requirements planning (MRP) department to automate the procurement planning. The main function of material requirements planning is to guarantee material availability and to avoid delays in order fulfillment. The planning run checks availability of each material and, in case of shortages, creates purchase requisitions or delivery schedules if a scheduling agreement exists. Remaining shortages are displayed in the MRP app where the material planner can analyze the situation.

Procurement lead time can be longer than the time available to fulfill a demand. For this reason, you must procure the material in advance and cover your demand from stock. This process starts by creating forecast demands that are interpreted as expected customer demand. The MRP schedule runs. The system creates purchase requisitions or scheduling lines that trigger external procurement.

Optionally, purchase requisition hand over and MRP material exceptions can be handled.

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

|  |  |
| --- | --- |
| System | Details |
| System | Accessible via 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 |
| Material Planner - External Procurement | SAP\_BR\_MATL\_PLNR\_EXT\_PROC | Material Planning - External Procurement | SAP\_BR\_MATL\_PLNR\_EXT\_PROC |  |
| Master Data Specialist - Product Data | SAP\_BR\_PRODMASTER\_SPECIALIST | Product | SAP\_BR\_PRODMASTER\_SPECIALIST |  |
| Purchaser | SAP\_BR\_PURCHASER | Operational Purchasing | SAP\_BR\_PURCHASER |  |
| Business Process Specialist | SAP\_BR\_BUSINESS\_PROCESS\_SPEC | Business Process Management | SAP\_BR\_BUSINESS\_PROCESS\_SPEC |  |
| Inventory Manager | SAP\_BR\_INVENTORY\_MANAGER | Inventory Management | SAP\_BR\_INVENTORY\_MANAGER |  |

## Master Data, Organizational Data, and Other Data

The organizational structure and master data of your company has been created in your system during implementation. The organizational structure reflects the structure of your company. The master data represents materials, customers, and vendors, for example, depending on the operational focus of your company.

Use your own master data to go through the test procedure. If you have installed an SAP Best Practices Baseline Package, you can use the following Baseline Package scenario data:

Material

|  |  |  |  |
| --- | --- | --- | --- |
| Master | Value | Details | Comments |
| Material | TG0011 | Trading Good 0011,PD,Regular Proc. | Used for MRP procedure without scheduling agreement |
| Material | TG0012 | Trad. Good 0012,Reord. Pt.,Regular Proc. | Used for MRP procedure with scheduling agreement |
| Material | TG0099 | Trading Good 0099,PD,Regular Proc. | Used for Material Situation Handling |

Org. Data

|  |  |  |  |
| --- | --- | --- | --- |
| Master | Value | Details | Comments |
| Plant | 1010 | Plant 1 DE |  |
| Vendor | 10300001 | Domestic 10 Supplier 1 |  |
| Vendor | 10300002 | Domestic 10 Supplier 2 |  |
| Company Code | 1010 | Company Code 1010 |  |
| Purchasing Organization | 1010 | Purch. Org. 1010 |  |

For more information on creating these master data objects, see the following [Master Data Scripts (MDS)](https://support.sap.com/content/dam/SAAP/Sol_Pack/BP_OP_ENTPR/BP_OP_ENTPR_S4HANA2020_7_Master_Data_EN_XX.htm)

Table 1: Master Data Script Reference

|  |  |
| --- | --- |
| Master Data ID | Description |
| BNF | Create Product Master of Type "Trading Good" |

## Preliminary Steps

In this section, you are provided a detailed step-by-step description of technical or other prerequisites.

### Create Scheduling Agreement

Purpose

This process step shows you how to create the scheduling agreement for the material/supplier combination, if it has not been maintained yet. If the scheduling agreement is already present in the system you can skip this step.

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 displays. |  |  |
| 2 | Access the App | Open Manage Purchase Scheduling Agreements (F2179). |  |  |  |
| 3 | Create Scheduling Agreement | Select Create to create a scheduling agreement. | The Scheduling Agreement screen displays. |  |  |
| 4 | Enter Header Data | Under General Information tab, create a scheduling agreement with the following data:   * Supplier: 10300001 * Agreement type: SA With Release doc * Valid To: MM/DD/YYYY (For example:01/01/2099) * Purchasing Organization: 1010 * Purchasing Group: 001 * Target Value: <For example, 200000 EUR> |  |  |  |
| 5 | Enter Header Notes | Navigate to the Notes tab, enter notes in some or all of the of the Header Notes elements for the ones mentioned below:   * Header text * Header note * Pricing types * Deadlines * Terms of delivery * Shipping instructions * Terms of payment * Warranties * Penalty for breach of contract * Guarantees * Contract riders (clauses) * Asset * Other contractual stipulation * Inbound Delivery * Vendor memo (general) * Vendor memo (pur. org.) |  |  |  |
| 6 | Add Items to Scheduling Agreement | Choose the Items tab and choose Create. | The Scheduling Agreement Item screen displays. |  |  |
| 7 | Enter Item Data | Make the following entries under General Information tab:   * Plant: 1010 * Material: TG0012   In Quantity and Price tab, enter the following data:   * Target Quantity Material: 120 000 * Net Order Price: ４０００ * Order Price Unit: 1   In Output Control tab, make the following entry:   * Creation Profile: S001   Choose Apply at the bottom of the view. |  |  |  |
| 8 | Enter Item Notes | Enter notes in some or all of the of the Header Notes elements for the ones mentioned below:   * Item text * Info record PO text * Material PO text * Delivery text * Info record note * ES Master Agreements (MA) * ES Requests f. Proposals (RFP) * Sequence Number LP   Choose Apply at the bottom of the view. |  |  |  |
| 9 | Save | Return to the New Scheduling Agreement header view and choose Save at the bottom of the view.  Make a note of the schedule agreement number. | A schedule agreement is created. |  |  |

### Prerequisite for Material Exception (Optional)

#### Manage Team and Responsibilities

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

This process step shows you how to link the list of users who are supposed to receive material exception notifications.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Business Process Specialist. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Teams and Responsibilities (F2412). | The Manage Teams and Responsibilities screen displays. |  |
| 3 | Check Existing Teams | Make following entries and choose Go:   * Type: SMRPT   In Teams area, choose again the row of the filtered teams, check if MRPMaterial= TG0099 is maintained on Teams screen. If so, then the team is created already and please skip the following steps; if not maintained, then continue the following steps.  Note If no filtered teams display in Teams area, please continue the following steps to create it. | If there is no entry for Plant 1 DE on the Area of Responsibility screen, choose Add to select it and then choose OK.  For other plant entries on the Area of Responsibility screen, choose Delete to remove them and then choose OK. |  |
| 4 | Create Teams | Choose Create and make the following entries:   * Name: MRP MAT EXCEPTIONS TEAM * Status: Ready to Use * Type: SMRPT   Go to the Responsibility Definitions section, and make the following entries:   * MRP Controller: 001 * MRP Material: TG0099 * MRP Plant: 1010   Go to the Team Owners area, and choose Create.  On the Select: Team Owner screen, search the employee you defined by following the note below, select the searched item and choose OK.  For On-Premise system, make sure that your system user has its own employee number and is assigned correctly. For detailed procedure about how to create employee number and how to assign employee number to system user, refer to <https://help.sap.com/viewer/S4HANA_1909_AdminGuide> Administration Guide for the Implementation of SAP Best Practices for SAP S/4HANA (1909 FPS0) in Chapter Implementation > Activating your solution > Carrying out post-activation steps > Creating approvers > Creating an employee & Assigning a user to an employee & Business partner synchronization . If you have any question that related with employee creation or assignment, create a BCP ticket on the component PA-PA-XX. | Then user MatlPlnrExtProc can receive the notification to handle the critical situation. |  |
| 5 | Save Team | Choose Save. | The team has been created. |  |

#### Manage Situation Types

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

This process step shows you how to configure the situation type by using template.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Configuration Expert - Business Process Configuration. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Situation Types (F2947) . | The Manage Situation Types (F2947) screen displays. |  |
| 3 | Check Existing Situation Types | Select Ready-to-Use Situation Types tab. Make the following entries and choose Go:   * Name (In search box): MRP Material Exceptions   Choose again the row of the filtered Ready-to-Use Situation Types and check whether types related to MRP Material Exceptions already exist. If so, skip step 4 and only maintain Start Batch Job in step 5; if not, continue the following steps.  Note If no filtered teams displays, please continue the following steps to create it. |  |  |
| 4 | Copy Standard Situation Template | On the Manage Situation Types screen, There are Standard Template and Ready-to-Use Situation Types two tabs.  Choose Standard Templates tab and choose Go to search the Standard Situation Templates: SAP\_PP\_MRP\_MATERIAL\_EXCEPTION  Check the box before standard situation template: SAP\_PP\_MRP\_MATERIAL\_EXCEPTION and choose Copy. |  |  |
| 5 | Create Custom Situation Template | It creates a Ready-to-Use Situation Type.  On the Situation Type screen, make the following entries:   * ID: ZTEST\_MRP\_EXCEPTIONS   This field is the Unique Identifier of a Ready-to-Use Situation Type. The ID of a Ready-to-Use Situation Type should start with 'Z'. ID is a Mandatory Field and can't be left blank.   * Name: MRP Material Exceptions   In the Notification Recipients field, make the following entry:   * Member Function: MRP Planning   In the Situation Monitoring field, make the following entry:   * Monitor Instances: Yes   In the Batch Job Scheduling field, make the following entries:   * Time Zone: UTC * Start Batch Job At: <Time you want your team members to get notification> (For example, if you want to let your team members receive the notifica-tion at UTC 8:00, then enter UTC 8:00. But due to system clock settings issue, there maybe a 30 minutes lag, so they get the notification around UTC 8:30.)   Choose Save . | The situation has been created. |  |
| 6 | Enable Situation Template | Choose Yes for the pop-up message: Do you want to enable situation type? | The situation is enabled. |  |

### Prerequisite for Handover of Purchase Requisition (Optional)

#### Assign MRP Group 0011 to TG0011

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

This process step shows you how to assign MRP group to TG0011.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Master Data Specialist - Product Data. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Change Material (MM02). |  |  |
| 3 | Specify Material | On the Change Material (Initial Screen), enter following data and choose Continue:   * Material: TG0011   In the Select View(s) dialog box, choose MRP 1, and press Enter.  In the Organization Levels dialog box, make the following data and press Enter:   * Plant: 1010 | The Change Material TGXXXX (Material general) screen displays. |  |
| 4 | Assign MRP Group | On the General Data tab, make the following entry and choose Save:   * MRP Group: 0011 External procurement (PReq Handover) | The material change is saved. |  |

# Overview Table

The Material Requirements Planning (J44) 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 | Transaction/App | Expected Results |
| [Manage PIRs for Material TG0011 & TG0012](#unique_12) [page ] 16 | Material Planner - External Procurement | Maintain PIRs (F3445) | PIRs for TG0011 & TG0012 are created. |
| Monitor Material Coverage | | | |
| [Run Material Requirements Planning (MRP)](#unique_13) [page ] 18 | Material Planner - External Procurement | Monitor Material Coverage (F2101) | MRP runs for TG0011 and TG0012. |
| Evaluate MRP Result | | | |
| [Evaluate MRP Result (Purchase Requisitions)](#unique_14)  [page ] 19 | Material Planner - External Procurement | Monitor Material Coverage (F2101) | MRP results are reviewed for material without scheduling agreement (TG0011). |
| [Evaluate MRP Result (Delivery Schedule)](#unique_15) [page ] 22 | Material Planner - External Procurement | Monitor Material Coverage (F2101) | MRP results are reviewed for material with scheduling agreement (TG0012). |
| [Display MRP Run Master Data Issues](#unique_16) [page ] 24 | Material Planner - External Procurement | Display MRP Master Data Issues (F1425A) | The Display MRP Master Data Issues list displays. |
| [Display MRP Run Key Figures](#unique_17)  [page ] 25 | Material Planner - External Procurement | Display MRP Key Figures (F1426) | The Display MRP Key Figures list displays. |
| Material Exception (Optional) | | | |
| [Clear Initial Stock](#unique_18) [page ] 26 | Inventory Manager | Manage Stock (F1062) |  |
| [Clear Existing Purchase Requisitions](#unique_19) [page ] 28 | Material Planner - External Procurement | Check Material Coverage (F0251) |  |
| [Manage PIRs for Material TG0099](#unique_20) [page ] 29 | Material Planner - External Procurement | Maintain PIRs (F3445) |  |
| [Run Material Requirements Planning (MRP) and Firm Purchase Requisition](#unique_21) [page ] 30 | Material Planner - External Procurement | Check Material Coverage (F0251) |  |
| [Increase Stock for TG0099](#unique_22) [page ] 31 | Inventory Manager | Manage Stock (F1062) |  |
| [Detect MRP Situations](#unique_23) [page ] 33 | Material Planner - External Procurement | Detect MRP Situations (F1240) |  |
| [Check and React to Material Exception](#unique_24) [page ] 34 | Material Planner - External Procurement | Notification |  |
| [Reduce Stock for TG0099](#unique_25) [page ] 36 | Inventory Manager | Manage Stock (F1062) |  |

# Test Procedure

In this procedure, two MRP procedures are covered. One MRP procedure is for material(TG0011) without scheduling agreement, the other MRP procedure is for material (TG0012) with schedule agreement. Please follow the steps to test both subscenarios independently.

## Manage PIRs for Material TG0011 & TG0012

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

This process step shows you how to create the planned independent requirements directly for material TG0011 and TG0012.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Maintain PIRs (F3445). |  |  |
| 3 | Check Default Area of Responsibility | On the Maintain PIRs screen, choose your user name and choose the App Settings icon. On the MRP Settings screen, choose Area of Responsibility.  Check if only the following entry is assigned:  Plant 1 DE / 001 (MRP Controller 001)  Choose AOR status button of this entry if not assigned, choose AOR status button of the corresponding entry to unassign any other entry then choose Back. |  |  |
| 4 | Select | On the Maintain PIRs (F3445) screen, make the following entries:  Plant: 1010  Period Indicator: Monthly(M)  Version Active: Yes, No  Search: TG0011 |  |  |
| 5 | Filter Result | Choose Go to execute. | Material item displays. |  |
| 6 | Select Material Item | Check the material item, and choose Edit in the upper right. |  |  |
| 7 | Edit PIRs | On the Edit PIRs screen, enter quantities per period, for example:   * PIR: 200 for next 12 periods * Version is Active: YES |  |  |
| 8 | Save PIRs Draft | Choose Save at bottom right. | The PIRs are saved. |  |
| 9 | Repeat Steps | Go back and repeat steps 4–8 for TG0012. In step 7, enter quantities per period, for example: PIR: 1000 for next 12 periods |  |  |

## Monitor Material Coverage

### Run Material Requirements Planning (MRP)

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

This process step shows you how to start MRP run for both material with scheduling agreement and material without scheduling agreement.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Monitor Material Coverage (F2101). | The Monitor Material Coverage (F2101) screen displays. |  |
| 3 | Select Material and Show Shortages | In the Materials tab, enter the following entries and choose Go.  Material: TG0011  Material: TG0012  Select 2 filtered rows and choose Manage Materials. | The Material Details screen displays. |  |
| 4 | Start MRP Run for Material without Scheduling Agreement | Choose Material TG0011 on left Materials screen.  On the screen Material Details, choose Start MRP Run. | The MRP run in progress notification pop-out first, then MRP Run completed notification pop-out. |  |
| 5 | Start MRP Run for Material with Scheduling Agreement | Repeat step 4 for Material TG0012. | The MRP run in progress notification pop-out first, then MRP Run completed notification pop-out. |  |

### Evaluate MRP Result

#### Evaluate MRP Result (Purchase Requisitions)

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

This process step shows you how to evaluate MRP results for material without scheduling agreement.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Monitor Material Coverage (F2101). |  |  |
| 3 | Select Material and Show Shortages | In the Materials tab, enter the following entry and choose Go.  Materil: TG0011  Select the filtered row and choose Manage Materials. | The Material Details screen displays. |  |
| 4 | Verify Purchase Requisitions that are Available | In the Stock/Requirements List, purchase requisitions are shown as MRP results.  Look for rows with PurRqs items to check more details. | The MRP has created purchase requisitions that can be used for the Procurement of Direct Materials test script.  You could click PurRqs item, choose Open, and click Purchase Requisition to display more details for PR. |  |
| 5 | Handover of Purchase Requisition (Optional) | Check the PurRqs items with Handover Pending icon and choose Hand Over.  If you want to handover more than one purchase requisition at a time, you could use Hand Over Purchase Requisitions (F4795) app. Refer to relevant steps at the end of this section. | The icon turns to Handed Over. |  |
| 6 | Rescheduling Check (Optional) | In the Stock/Requirements List, the Rescheduling column displays the rescheduling status of the following MRP Elements.   * PurReq * Purchase Orders * Planned Orders * Production Orders * Process Orders   If necessary actions can be performed, below Icons in the Rescheduling column are displayed via pushing buttons. Push the buttons and corresponding actions perform directly.   * Reschedule in (Bring operation forward if the receipt element lies after the requirement date) * Reschedule out (Postpone operation, if the receipt element lies before the requirement date) * Plan Process according to schedule * Cancel Process * Excess Stock * Excess in individual segment | Corresponding actions perform. |  |
| 7 | Check Planning Details (Optional) | In the Shortage Definition dropdown menu, choose MRP Standard, then select Table View. In the Available column, select an exception highlighted with a red status  Shortage Definition: MRP Standard  View Button: Table View | The Material Shortage screen displays.  View buttons are located in the upper right of the Stock/Requirements List |  |
| 8 | Change Style and Version of the Material Detail List | On the Material Shortage screen, explore the display options (Table view/Chart view) by selecting an icon located in the upper right. | Go back twice to Monitor Material Coverage - Net and Individual Segments screen, navigate to row of material: TG0011, click against red/green charts in Stock Availability column.  The Projected Stock screen displays the Availability per date. You can click Check Material Coverage to go to the same Material Details list as in the previous step. |  |
| 9 | Restore MRP group for TG0011 (Optional) | Log on to the SAP Fiori launchpad as a Master Data Specialist - Product Data.  Open Manage Product Master Data (F1602).  Make the following entry and press Enter:   * Material: TG0011   Click on your material mast data and choose Change Material.  On the Change Material (Initial Screen), in the Select View(s) dialog box, choose MRP 1 and choose Continue (Enter) icon.  In the Organization Levels dialog box, make the following entry, and choose Continue (Enter) icon:   * Plant: 1010   On the General Data tab, make the following entry and choose Save:   * MRP Group: <blank> | Material TG0011 MRP group is restored. |  |

Hand Over Purchase Requisitions (Optional)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Hand Over Purchase Requisitions (F4795). |  |  |
| 3 | Filter Result | Choose following entries as filter, and choose Go:   * Status Description: Handover Pending * Materil: TG0011 |  |  |
| 4 | Mass Handover | Select the Purchase Requisitions you want, choose Hand Over. Then choose Yes in the dialog box. | A message appears: Handover was successful |  |

#### Evaluate MRP Result (Delivery Schedule)

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

This process step shows you how to evaluate MRP results for material with scheduling agreement.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Monitor Material Coverage (F2101). |  |  |
| 3 | Select Material and Show Shortages | In the Materials tab, enter the following entry and choose Go.  Material: TG0012  Select the filtered row and choose Manage Materials. | The Material Details screen displays. |  |
| 4 | Verify Schedule Lines that are Available | In the Stock/Requirements List, the MRP results show as schedule lines.  Look for rows with SchLne items to show more details. | The MRP created schedule lines.  You could click SchLne item, choose Open…, and click Delivery Schedule / Scheduling Agreement to display more details.  If you click Delivery Schedule, the screen Display Sch. Agmt Schedule: Item Overview shows, choose schedule agreement item and then click Delivery Schedule to display delivery schedule information.  If you click Scheduling Agreement, the screen Display Scheduling Agreement: Item Overview shows. |  |
| 5 | Check Delivery Schedule Button | Click Delivery Schedule on the bottom of screen to view Delivery Schedule. | The screen Scheduling Agreement Delivery Schedule showed.  The SchLne items display with deviation chart and quantity. |  |
| 6 | Check Planning Details (Optional) | In the Shortage Definition dropdown menu, choose MRP Standard, then select the Table View button. In the Available column, select an exception highlighted with a red status  Shortage Definition: MRP Standard  View Button: Table View | The Material Shortage screen displays.  View buttons are located in the upper right of the Stock/Requirements List |  |
| 7 | Change Style and Version of the Material Detail List | On the Material Shortage screen, explore the display options (Table view/Chart view) by selecting an icon located in the upper right. | Go back twice to Monitor Material Coverage - Net and Individual Segments screen, navigate to row of material: TG0012, click against red/green charts in Stock Availability column.  The Projected Stock screen displays the Availability per date. In the button line, you can click Check Material Coverage. You would go to the same Material Details list as in the previous step. |  |

## Display MRP Run Master Data Issues

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

This process step shows you how to check MRP Run Master Data Issues.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Display MRP Master Data Issues (F1425A) |  |  |
| 3 | Check the Issues | Select the issue to display the details. | If there are any issues, choose the issue to display the details of the error. |  |

## Display MRP Run Key Figures

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

This process step shows you how to check the key figures of the MRP run.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Display MRP Key Figures (F1426). | The MRP Key Figures list displays. |  |
| 3 | Select MRP Run | Open the log with name Material Requirements Planning (MRP).  Select the row with your user and the specific log name, i. e. Material Requirements Planning (MRP) job description. | The details of MRP run displays. |  |

## Material Exception (Optional)

### Clear Initial Stock

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

This process step shows you how to ensure TG0099’s stock is empty.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as an Inventory Manager. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Stock (F1062). | The Manage Stock (F1062) screen displays. |  |
| 3 | Specify Material | Make the following entries and choose Enter:   * Material: TG0099 * Plant: 1010 | The Stock overview for the product displays. |  |
| 4 | Clear Stock | If current stock of TG0099 is zero, please skip this step.  On the screen, you can check Storage Location, Unrestricted-Use Stock, Blocked Stock, Stock in Quality Inspection.  Choose the Unrestricted - Use Stock icon.   * Stock Change: Scrapping * Quantity: <=“Current Quantity“> * Cost Center: <Cost Center>, for example, 10101301 | Unrestricted-Use Stock is 0.000 PC. |  |

### Clear Existing Purchase Requisitions

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

This process step shows you how to ensure TG0099’s purchase requisitions is empty.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Check Material Coverage (F0251) | The Monitor Material Coverage screen displays. |  |
| 3 | Select Material and Show Shortages | In the Find Material dialog box, enter the following entries and choose OK.   * Material: TG0099 * Plant: 1010 * Shortage definition: MRP Standard | The Material Details screen displays. |  |
| 4 | Clear Purchase Requisitions | Delete existing PurRqs. | There is no purchase requisitions. |  |

### Manage PIRs for Material TG0099

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

This process step shows you how to create the planned independent requirements directly for material TG0099.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Maintain PIRs (F3445). |  |  |
| 3 | Check Default Area of Responsibility | On the Maintain PIRs screen, choose your user name and choose the App Settings icon. On the MRP Settings screen, choose Area of Responsibility.  Check if only the following entry is assigned:  Plant 1 DE / 001 (MRP Controller 001)  Choose AOR status button of this entry if not assigned, choose AOR status button of the corresponding entry to unassign any other entry then choose Back. |  |  |
| 4 | Select | On the Maintain PIRs (F3445) screen, make the following entries:   * Plant: 1010 * Period Indicator: Monthly(M) * Version Active: Yes, No * Material: TG0099 |  |  |
| 5 | Filter Result | Choose Go to execute. | Material item displays. |  |
| 6 | Check Material Item | Select the line with TG0099.  Check the material item, if a PIR for a future data already exists, skip the following steps. If not, continue the steps. |  |  |
| 7 | Edit PIRs | Choose Edit in the upper right. On the Edit PIRs screen, enter quantities per period, for example:   * PIR: 100 for next period in the future * Version is Active: YES | PIR for a data in the future is entered |  |
| 8 | Save PIRs Draft | Choose Save on bottom right. | The PIRs are saved. |  |

### Run Material Requirements Planning (MRP) and Firm Purchase Requisition

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

This process step shows you how to start MRP run for material with scheduling agreement.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Check Material Coverage (F0251). | The Check Material Coverage (F0251) screen displays. |  |
| 3 | Select Material AND | In the Find Material dialog box, enter the following entries and choose OK.   * Material: TG0099 * Plant: 1010 * Shortage definition: MRP Standard | The Material Details screen displays. |  |
| 4 | Run MRP to Create Purchase Requisition | Choose Start MRP Run at the bottom right. | The MRP run in progress notification pop-out first, then MRP Run completed notification pop-out. |  |
| 5 | Firm Purchase Requisition | Check the generated PurRqs. Select Edit from Action dropdown list, and change the delivery date to firm it. | The Purchase requisition has been changed notification pop-out first, then the PurRqs are locked. |  |

### Increase Stock for TG0099

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

This process step shows you how to increase stock and make it more than PIR.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as an Inventory Manager. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Stock (F1062). | The Manage Stock (F1062) screen displays. |  |
| 3 | Specify Material | Make the following entries and choose  Enter:   * Material: TG0099 * Plant: 1010 | The Stock overview for the product displays. |  |
| 4 | Increase Stock | Choose Unrestricted - Use Stock icon,   * Stock Change: <Initial Entry> * Quantity: 200 (for example, make it more than PIR) | Unrestricted-Use Stock is more than PIR. |  |

### Detect MRP Situations

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

This process step shows you how to run job for MRP material exception.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Detect MRP Situations (F1240)。  Note If the App is not available by default, please use the App finder to add it to the SAP Fiori launchpad. | The Application Jobs screen displays. |  |
| 3 | Enter Basic Parameters for New Job | Choose + (New) above the table.  On the New Job screen, make the following entries:   * Job Template: MRP Situation Handling Template * Job Name: MRP for TG0099   Parameters:   * Material: TG0099 * MRP Controller: 001 * Plant: 1010 |  |  |
| 4 | Enter Scheduling Parameters for New Job | Choose Define Recurrence Pattern.  On the Scheduling Information screen, make the following entries:   * Start Immediately: x * Recurrence Pattern: Single Run |  |  |
| 5 | Schedule New Job | On the New Job screen, choose Schedule at bottom right section. | The new job is created and displays in the table of Application Jobs. |  |
| 6 | Refresh Application Jobs List | To check the status of the job you created, choose Go on the top right section of the screen. | The Application Jobs table is refreshed. |  |
| 7 | Verify the Job Results | To see the outcome of the job, choose the icon in Results column. | A Documents screen should list the purchase requisition created in chapter 4.5.4 Run MRP and firm Purchase Requisition for cancellation. |  |

### Check and React to Material Exception

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

By the prerequisite step, notification will be automatically sent to responsible team members. The detection process is automatically triggered by the system on a regular basis based on the Batch Job Scheduling parameters maintained in section Create Situation Types and indicates material exception situations to the material planner (usually within one hour). This process step shows you how to check and react to material exception.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Material Planner - External Procurement. | The SAP Fiori launchpad displays. |  |
| 2 | Check Notifications | On the home screen, choose the Notifications icon in the upper right corner. | The following notification displays:  Cancel process: PurchReq 1xxxxxx-000010 Material TG0099 Plant 1010.  It enables the material planner to proactively take further action. |  |
| 3 | Navigate to Manage Material Coverage App | Choose the detailed notification line Cancel process: PurchReq 1xxxxxx-000010 Material TG0099 Plant 1010., it navigates to Manage Material Coverage screen. | The Manage Material Coverage screen for discontinued product displays. |  |
| 4 | Delete Purchase Requisition | On the Manage Material Coverage screen, select Delete from Action dropdown list. | The purchase requisition detected by the MRP Material Exception job disappears. |  |
| 5 | Dismiss the MRP Material Exception | Choose Dissmiss in the yellow notification box and pick a reason for dismissing the situation. | The situation has been dismissed. |  |
| 6 | Close the Notification Message | On the home screen, choose the Notifications icon in the upper right corner and choose the cross sign in the upper right corner to close the notification message.  (You may need to repeat this step for notifications on the same purchase requisition and material issued for days earlier than today.) | The notification for the resolved MRP Material Exception disappears from the list. |  |

### Reduce Stock for TG0099

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

This process step shows you how to decrease stock and make it less than PIR.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as an Inventory Manager. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Stock (F1062). | The Manage Stock (F1062) screen displays. |  |
| 3 | Specify Material | Make the following entries and choose Enter:   * Material: TG0099 * Plant: 1010 | The Stock overview for the product displays. |  |
| 4 | Reduce Stock | On the screen, you can check Storage Location, Unrestricted-Use Stock, Blocked Stock, Stock in Quality Inspection.  Choose the Unrestricted - Use Stock icon,   * Stock Change: Scrapping * Quantity: <= "Current Quantity"> (make it less than PIR) * Cost Center: <Cost Center>, for example, 10101301 | Unrestricted-Use Stock is less than PIR. |  |

# Appendix

## Process Chains

The process to be tested in this test case is part of a chain of integrated processes.

### Preceding Processes

Complete the following business processes and conditions before you start with the test steps:

|  |  |
| --- | --- |
| Process | Business Condition |
| Master Data Maintenance |  |

### Succeeding Processes

After completing the activities in this test case, you can continue testing the following business processes:

|  |  |
| --- | --- |
| Process | Business Condition |
| J45 - Procurement of Direct Materials | A purchase requisition is created as part of the Material Requirements Planning (J44) test script. This purchase requisition is converted into a purchase order in the Procurement of Direct Materials (J45) process. |

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. |

|  |
| --- |
|  |
| www.sap.com/contactsap |
| © 2020 SAP SE or an SAP affiliate company. All rights reserved.  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.  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. |

