|  |  |
| --- | --- |
|  |  |
| Test Script  SAP S/4HANA - 17-09-20 | public |
| Material Replenishment with Kanban - External Procurement (1E3\_DE) |

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# Purpose

The Kanban method for controlling production and material flow is based on the actual stock quantity in production. Material that is required on a regular basis is continually provided in small quantities into production. With Kanban, instead of being pushed through production by higher-level planning, materials are called from the supply source by production at the manufacturing level where they are needed (pull principle). Replenishment or production of a material is only triggered when a higher production level requires the material. This replenishment is triggered directly in production using previously maintained master data.

Kanban replenishment is commonly used in - but not restricted to - repetitive manufacturing environments, when a production process requires that the same or similar products are produced over a certain period at a certain rate per period. The products produced always follow the same sequence through the machines and work centers in production. Routings tend to be simple and do not vary much.

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 |
| Production Planner | SAP\_BR\_PRODN\_PLNR | Production Planning | SAP\_BR\_PRODN\_PLNR |  |
| Production Supervisor - Repetitive Manufacturing | SAP\_BR\_PRODN\_SUPERVISOR\_RPTV | Production Control | SAP\_BR\_PRODN\_SUPERVISOR\_RPTV |  |
| Production Planner - Lean Manufacturing | SAP\_BR\_PRODN\_PLNR\_LEAN\_MFG | Lean Manufacturing Planning | SAP\_BR\_PRODN\_PLNR\_LEAN\_MFG |  |
| Production Operator - Repetitive Manufacturing | SAP\_BR\_PRODN\_OPTR\_RPTV | Production Execution | SAP\_BR\_PRODN\_OPTR\_RPTV |  |
| Production Operator - Lean Manufacturing | SAP\_BR\_PRODN\_OPTR\_LEAN\_MFG | Lean Manufacturing Operations | SAP\_BR\_PRODN\_OPTR\_LEAN\_MFG |  |
| Production Operator - Discrete Manufacturing | SAP\_BR\_PRODN\_OPTR\_DISC | Discrete Manufacturing Execution | SAP\_BR\_PRODN\_OPTR\_DISC |  |
| Warehouse Clerk | SAP\_BR\_WAREHOUSE\_CLERK | Inventory Processing | SAP\_BR\_WAREHOUSE\_CLERK |  |
| Cost Accountant - Production | SAP\_BR\_PRODN\_ACCOUNTANT | Product Costing | SAP\_BR\_PRODN\_ACCOUNTANT |  |
| Inventory Manager | SAP\_BR\_INVENTORY\_MANAGER | Inventory Management | SAP\_BR\_INVENTORY\_MANAGER |  |
| Purchaser | SAP\_BR\_PURCHASER | Operational Purchasing | SAP\_BR\_PURCHASER |  |

## Master Data, Organizational Data, and Other Data

The organizational structure and master data of your company is created in your system during activation. 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:

|  |  |  |  |
| --- | --- | --- | --- |
| Master | Value | Details | Comments |
| Material | FG233 |  |  |
| Material | SG234 |  |  |
| Material | SG233 |  |  |
| Material | RM234 |  |  |
| Material | RM233-1 |  |  |
| Material | RM233-2 |  |  |
| Material | RM233-4 |  |  |
| Material | RM235 |  |  |
| Vendor | 10300002 | Domestic 10 Supplier 2 |  |  |
| Plant | 1010 | Plant 1 DE |  |
| Storage Location | 101A | Std. storage 1 |  |
| Storage Location | 101B | Std. storage 2 |  |
| Storage Location | 101C | Raw mat. sto. loc. |  |
| Storage Location | 101E | Kanban |  |

Bill of Material Structure

This overview shows the bill of material structure and the usage of each component if you have activated all optional enhancements.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Material | Level | Material Type | Unit | Characteristic of Material | Optional Enhancements |
| FG233 | 0 | FERT | PC |  |  |
| SG234 | 1 | SEMI | PC |  |  |
| RM235 | 2 | RAW | PC |  |  |
| SG233 | 1 | SEMI | PC |  |  |
| RM234 | 2 | RAW | PC |  |  |
| RM233-1 | 1 | RAW | PC |  |  |
| RM233-2 | 1 | RAW | PC |  |  |
| RM233-4 | 1 | RAW | PC |  |  |

For more information about creating 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 |
| BNT | Create Product Master of Type "Finished Good" |
| BNS | Create Product Master of Type "Semi-Finished Good" |
| BNR | Create Product Master of Type "Raw Material" |
| BNE | Create Supplier Master |
| 40D | Create Production Supply Area |
| BNJ | Create Production Work Center |
| BNK | Create Material BOM for Production and Sales |
| BNL | Create Routing |
| BLD | Create Production Version |

## Business Conditions

Before this scope item can be tested, the following business condition must be met.

|  |  |
| --- | --- |
| Scope Item | Business Condition |
| BNU - Create Costing Run | You have completed the steps described in this master data script. |
| BEG - Standard Cost Calculation | You have completed the step described in the Test Script BEG. |

## Preliminary Steps

This Business Process Documentation contains process steps that must be completed before you can start to work through the standard Business Process Documentation of selected logistics scenarios.

### Create Info Record

Procedure

If the info record for the material RM233-2, RM233-4 and supplier 10300002 already exist in the system, you can skip this step. Otherwise, you need to create info record for each material or supplier pair.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Comments |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Purchaser. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Create Purchasing Info Record (ME11). | The Create Info Record: Initial Screen displays. |  |
| 3 | Enter Initial Data | Make the following entries and press Enter:   * Supplier: 10300002 * Material: <Material> * Purchasing Org.: 1010 * Plant: 1010   Select the Standard checkbox, then press Enter. | The Create Info Record: General Data screen displays. |  |
| 4 | Choose Purch.Org.Data 1 | Choose Purch.Org.Data 1. | The Create Info Record: Purch. Organization Data 1 screen displays. |  |
| 5 | Enter Item Data | Enter the following values:   * Pl. Deliv. Time: <X Day> * Purch.Group: 001 * Tol. Underdl.: <XX%> * Tol. Overdl.: <XX%> * Standard Qty: <100> * Net Price: <3.75> * Price unit: <1 pc> * Tax Code: V0 * TxValidFrm: <01/01/1900, choose via F4 HELP>   Press Enter. |  |  |
| 6 | Save | Choose Save. | A purchasing info record for consigned procurement is saved. |  |

### Create Scheduling Agreement

Purpose

This activity is used to create the scheduling agreement for the material and supplier combination. For example, material RM233-4 and supplier 10300002, directly or without reference to any preceding purchasing documents like Purchase Requisition, if it has not been maintained yet.

If the scheduling agreement is already present in the system, then feel free to 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 . |  |  |
| 3 | Create Scheduling Agreement | Select Create to create a new scheduling agreement. |  |  |
| 4 | Enter Header Data | Create a new scheduling agreement with the following data:   * Supplier: 10300002 * Agreement type: LPA (SA With Release doc.) * Valid From: <today> * Valid To: <MM/DD/YYYY>, for example, today + 720 day * Purchasing Group: 001 * Purchasing Organization: 1010 |  |  |
| 5 | Add Items to Scheduling Agreement | From the New Scheduling Agreement view, choose the Items facets and select Create. | The New Scheduling Agreement Item view displays. |  |
| 6 | Enter Item Data | On the Items facets view, make the following entries:  In the General Information view   * Plant: 1010 * Material: RM233-4   In the Quantity and Price view   * Target Quantity: 10000 * Net Order Price: <Defaulted from Info record>   In the GR/IR Control view   * Kanban Indicator: Y (Scheduling Agreement for Summarized JIT Call)   In the Output Control view,   * JIT Indicator: 1(Automatically)   Choose Apply at the bottom of the view. |  |  |
| 7 | 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. |  |

### Manage Source List

Purpose

This process step shows you how to maintain the contract as the source.

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 Source Lists (F1859). |  |  |
| 3 | Maintain the Filter of Source List | In the filter, make the following entries:   * Material: RM233-4 * Plant: 1010   Then choose Go. |  |  |
| 4 | Check the Source List | If there is one item that valid in the period, ignore the following steps, if it doesn’t have one item, then continue. |  |  |
| 5 | Create Source List | Choose Create Object (+). | The Source List screen is displayed. |  |
| 6 | Enter the Detail data | Enter the values in the following fields:   * Material: RM233-4 * Plant: 1010   Then choose Generate. |  |  |
| 7 | Generate Source List | In the new line appeared under Source Lists area, enter following parameters and choose Enter:   * Valid From: for example, <today> * Valid to: for example, <end of next year> * Agreement: scheduling agreement that created in the previous preliminary step Create Scheduling Agreement section * Agreement Item: agreement item created before, for example, <10> |  |  |
| 8 | Maintain Parameters | Choose the created source list, on the General Information screen,   * Materials Planning: 2   Choose Apply. |  |  |
| 9 | Save the Source List | Choose Save. | The source list is saved. |  |

### Create Product Cost Collectors

Purpose

This step can only be executed if product cost planning is activated.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Cost Accountant - Production. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Create Product Cost Collectors - Production Versions - Collective (KKF6M). | The Create Multiple Product Cost Collector for Production Versions screen displays. |  |
| 3 | Enter Relevant Values | Make the following entries and choose Execute.   * Plant: 1010 * Order Type: YBMR * Only Repetitive Mfg Mat.: <select>   Caution Once the product cost collector is created, it can't be created again with the same data. |  |  |
| 4 | Select Production Versions | The Select Production Versions screen could display if there is more than one production version or more than one material. | The Select Production Versions screen may display if there is more than one production version or more than one material. |  |
| 5 | Save | Select the row for the production version of materials FG233 and SG233. Choose Save. | The message log displays. |  |
| 6 | Exit | Choose Exit. |  |  |

### Create Preliminary Cost for the Product Cost Collectors

Purpose

In this topic, you create preliminary costs for the product cost collectors.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Cost Accountant - Production. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Create Preliminary Cost Estimate - Product Cost Collectors (MF30). | The Creation of Preliminary Cost Estimates For Product Cost Collectors screen displays. |  |
| 3 | Enter Relevant Values | Make the following entries and choose Execute.   * Costing Date : <Current Date> * Plant: 1010 |  |  |

### Maintain Output Control for Kanban Summarized JIT Call

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad an Administrator. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App (for Cloud system) | Open Output Parameter Determination . |  |  |
| 3 | Access the Customizing Path (for on-premise system) | For SAP S/4HANA on-premise system, access IMG activity IMG > Cross-Application Components > Output Control > Define Business Rules for Output Determination .  Transaction Code: OPD.  Note Please check and make sure Output Control for Summarized JIT Call is activated. Access IMG activity IMG > Cross-Application Components > Output Control > Manage Application Object Type Activation , you should see following entry:   * Application Object Type: SUMMARIZED\_JIT\_CALL   Status: Application Active |  |  |
| 4 | Choose Show Rules for | On the Show Rules for field, choose the triangle button and choose Summarized JIT Call from the dropdown list. |  |  |
| 5 | Choose the Determination Step and Maintain Table Contents | On the Determination Step Field, choose the triangle button.  Choose Channel, and maintain the following entry in Table Contents.  Entry 1 as below:   * Output type: SUMMARIZED\_JIT\_CALL (Summarized JIT Call) * Role: LF * Channel: PRINT (Printout) * Exclusive Indicator: – (false)   Choose Printer Settings, and maintain the following entry in Table Contents.  Entry 1 as below:   * Output type: SUMMARIZED\_JIT\_CALL (Summarized JIT Call) * Role: LF * Print Queue: <your queue> * Number of Copies: 1   To maintain Table Contents.   1. Choose Edit on Output Parameter Determination. 2. Choose Insert New Row if a new row has to be added. 3. Choose the triangle button on the field to be maintained. 4. Choose Direct Value Input on the dropdown list. 5. Input the value. 6. Choose Activate, on the popup screen choose yes to save. 7. Choose Display. |  |  |

### Create Control Cycle for External Kanban Processing

Purpose

In this step, you create a control cycle for classic Kanban that can be used for external procurement with scheduling agreements. In the control cycle, you define the demand source, the supply source and the procedure that must be used to replenish the Kanban material. You also define the number of Kanbans that circulate among the supply source and the demand source, as well as the quantity a Kanban contains.

#### Control Cycle for Classic Kanban: External Processing with Requirements Planning

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on | Log on to the SAP Fiori Launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Kanban Control Cycles (PKMC). | The Manage Kanban Control Cycles (PKMC) displays. |  |
| 3 | Navigate to Create Control Cycle Screen | Make the following entries and choose Display/Change.  Plant: 1010  Choose Create Control Cycle. | The Create Control Cycle screen displays. |  |
| 4 | Enter the selection details | Make the following entries and choose Continue:   * Classic KANBAN: Selected * Material: RM233-4 * Prodn Supply Area: KANBAN\_01 * Lifecycle status: Released | The Control Cycle Maintenance: Change screen displays. |  |
| 5 | Enter the Control Cycle Details | Make the following entries:   * Number of Containers: 2 * Container Quantity: 200 * Maximum Empty Containers: 1 * Number of Load Carriers: 0 * Replenishment Strategy: Select External Procurement: Enter the value PDA7 and choose Enter. The tab changes title from Replenishment strategy to External Procurement. * Agreement.:The Scheduling Agreement you created in previous step * Item Value: 10 * Flow Control * JIT Call Prof.: PD01 * Kanban Calculation. * Calc. Type: 1 * Calc. Profile: PD01 * Print Control * Print Queue: KANBAN\_PRINT | The Purchasing Org and Vendor fields are automatically filled by the system when the Agreement number is entered. |  |
| 6 | Save | Choose Save Control Cycle. | You have created an external Kanban control cycle for material RM233-4. |  |

#### Control Cycle for Event-driven Kanban: External Processing with Purchase Order

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Kanban Control Cycles (PKMC). | The Manage Kanban Control Cycles (PKMC) displays. |  |
| 3 | Navigate to Create Control Cycle Screen | Make the following entries and choose Display/Change.   * Plant: 1010   Choose Create Control Cycle. | The Create Control Cycle screen displays. |  |
| 4 | Enter the Selection Details | Make the following entries and choose Continue:   * Event-driven Kanban: Selected * Material: RM233-2 * Prodn Supply Area: KANBAN\_04 * Lifecycle status: Released | The Control Cycle Maintenance: Change screen displays. |  |
| 5 | Enter the Control Cycle Details | Make the following entries:   * Container Quantity: 100 * Replenishment Strategy: Select External Procurement: Enter the value PD01 and choose Enter.   The tab changes title from Replenishment strategy to External Procurement.   * Purchasing Org: 1010 * Vendor : 10300002 * Print Control * Print Card: 1 * Output Device: <your output device> for example: LOCL |  |  |
| 6 | Save | Choose Save Control Cycle. | You created an external Kanban control cycle for material RM233-2. |  |

### Initialize Material Stock

Purpose

This step describes standard purchasing process. But in real business cases, raw materials are usually purchased from external vendors.

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 | Input Material | Make the following entries and press Enter:   * Material:If you want to execute the whole production process for finished goods FG233, you can post initial stock for other necessary components, for example, RM234, RM233-1, SG234, SG233. * Plant: Plant 1 DE1010 | The stock overview for the material displays. |  |
| 4 | Select Stock | Select the icon next to the stock where you want to add initial stock.  For example:   * Storage Location: 101B * Unrestricted Use Stock | In a dialog box, the Storage Location, Stock Type and Current Quantity fields display per your entries in previous steps. |  |
| 5 | Add Initial Entry | Make the following entries and choose Post:   * Document Date: <Today> * Posting Date: <Today> * Stock Change: Initial Entry * Quantity: <Enter a quantity> |  |  |

# Overview Table

This scope item consists of several process steps provided in the table below.

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/APPs | Expected Results |
| Anonymous Forecast and MRP | | | |
| [Create Planned Independent Requirements](#unique_19) [page ] 22 | Production Planner | Maintain PIRs (F3445) |  |
| [Material Requirements Planning](#unique_20) [page ] 24 | Production Planner | Schedule MRP Runs (F1339) |  |
| [Adjust Planning in Planning Table](#unique_21) [page ] 25 | Production Supervisor - Repetitive Manufacturing | Manage Repetitive Manufacturing (MF50) |  |
| Production-Supply by Changing Kanban Container Status and Using Kanban Board | | | |
| Classic Kanban: External Procurement with Requirements Planning | | | |
| [Check Dependent Requirement of Material RM233-4](#unique_22) [page ] 27 | Production Planner | Monitor Material Coverage (obsolete) - Net Segments (F0247) |  |
| [Release Scheduling Agreement](#unique_23) [page ] 29 | Purchaser | Manage Purchase Scheduling Agreements (F2179) |  |
| [Set Available Kanban to EMPTY](#unique_24) [page ] 30 | Production Operator - Lean Manufacturing | Set Kanban Container Status (F3717) |  |
| Posting the Goods Receipt for External Procurement | | | |
| [Option A: Change the Kanban to FULL](#unique_25) [page ] 33 | Production Operator - Lean Manufacturing | Set Kanban Container Status (F3717) |  |
| [Option B: Goods Receipt for JIT Call](#unique_26) [page ] 34 | Production Operator - Lean Manufacturing | Goods Receipt for JIT Call (PJWE) |  |
| [Precalculation of Kanbans for Future Requirements](#unique_27) [page ] 36 | Production Planner - Lean Manufacturing | Kanban Calculation (PK07) |  |
| [Release Proposal of Kanbans Required for Future Period](#unique_28) [page ] 37 | Production Planner - Lean Manufacturing | Check Kanban Calculation Result (PK08N) |  |
| [Check Changes and Calculation Base in Control Cycle](#unique_29) [page ] 38 | Production Planner - Lean Manufacturing | Manage Kanban Control Cycles (PKMC) |  |
| [Unlock New Kanbans](#unique_30) [page ] 40 | Production Planner - Lean Manufacturing | Unlock Kanban Container (PK09) |  |
| [Alert for Delayed Replenishments - Creation of Replenishment Elements / JIT Calls (Optional)](#unique_31) [page ] 41 | Production Planner - Lean Manufacturing | Display Kanbans: Demand View (PK13N) |  |
| [Alert for Delayed Replenishments - Evaluation of Replenishment Elements / JIT Calls (Optional)](#unique_32) [page ] 43 | Production Planner - Lean Manufacturing | Due Kanban Replenishment Elements (PKAL) |  |
| Event-driven Kanban: External Processing and PDF Print of Kanban Card | | | |
| [Create Event-Driven Kanban](#unique_33) [page ] 45 | Production Planner - Lean Manufacturing | Display Kanbans: Demand View (PK13N) |  |
| [Variant 1: Set Kanban to FULL](#unique_34) [page ] 46 | Production Operator - Lean Manufacturing | Set Kanban Container Status (F3717) |  |
| [Variant 2: Goods Receipt](#unique_35) [page ] 48 | Warehouse Clerk | Post Goods Receipt for Purchasing Document (F0843) |  |
| [Set Available Kanban to EMPTY](#unique_36) [page ] 49 | Production Operator - Lean Manufacturing | Set Kanban Container Status (F3717) |  |
| [Repetitive Manufacturing Backflush](#unique_37) [page ] 51 | Production Operator - Repetitive Manufacturing | Confirm Repetitive Manufacturing (MFBF) |  |
| [Post Processing List of Error Records](#unique_38) [page ] 53 | Production Operator - Repetitive Manufacturing | Reprocess Goods Movements (COGI) |  |
| [Review Manufacturing Object Pages](#unique_39) [page ] 54 | Production Planner | Search |  |

# Test Procedures

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

## Anonymous Forecast and MRP

### Create Planned Independent Requirements

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

Planned Independent Requirements (PIRs) are used to perform demand management functions. A planned independent requirement contains one planned quantity and one date, or a number of planned independent requirements schedule lines, that is, splitting one planned quantity according to dates.

Note Instead of creating a single requirement, sometimes a requirement plan that includes one or more planned independent requirements can be maintained for mass processing. In this case, the requirements are grouped and maintained under a requirement plan number.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner. | 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 and check if only the following entry is assigned:   * Plant 1 DE (1010) * MRP Controller 001(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 screen, make the following entries:   * Plant: 1010 * Period Indicator: Weekly (W) * Version Active: Yes,No * Search: FG233 |  |  |
| 5 | Filter Result | Choose Go to execute. | Material item displays. |  |
| 6 | Select Material Item | Check the material item and choose Edit on the upper right side of the screen. |  |  |
| 7 | Edit PIRs | On the screen, enter quantities per period, for example:   * PIR: 100   And make sure the version is active.   * Version is active: YES |  |  |
| 8 | Save PIRs Draft | Choose Save at bottom right. | The PIRs are saved. |  |

### Material Requirements Planning

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 aim of material requirements planning is to tailor available capacities and receipts on time to suit requirements quantities. You can use MRP or consumption-based planning for this purpose. Single-item multi-level requirement planning is performed for plant 1010.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Schedule MRP Runs (F1339). | The Application Jobs screen displays. |  |
| 3 | Create New Job | Choose Create.  On the New Job screen, make the following entries:  For 1. Template Selection section:   * Job Template: Material Requirement Planning (MRP) * Job Name: <MRP for FG233>   Choose Step 2.  For 2. Scheduling Options section:   * Start Immediately: <select>   Choose Define Recurrence Pattern.  On the Scheduling Information screen, make the following entries:   * Start Immediately: X * Recurrence Pattern: Single Run   Choose OK.  Choose Step 3.  For 3 Parameters section:   * Plant: 1010 * Material: MRP for FG233 * Changed BOM Components: select * Planning Mode: 1   Choose Check at the bottom right.  Choose Schedule. | A message appears: You can go ahead and schedule the job. |  |
| 4 | Refresh Application Jobs List | To check the job’s status, enter MRP for FG233 in the search box and choose Go at the top right section of the screen. | The new job is created and is displayed in the Application Jobs table when refreshed. |  |

### Adjust Planning in Planning Table

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 plan the production of materials on the production lines.

Prerequisite

Requirements planning is performed.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Supervisor - Repetitive Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Repetitive Manufacturing (MF50). | The Planning Table Initial Screen: Change Mode screen displays. |  |
| 3 | Enter Details | Make the following entries and choose Execute.   * Material: FG233 * Plant: 1010 | The Planning Table For Repetitive Manufacturing: Change Model screen displays. |  |
| 4 | Change the Quantity | Change any planned quantities in row 0001 WINDING. | If you want to change the periods in the Planning table, choose More > View > Period > Week (Month or Day) . |  |
| 5 | Save | Choose Save.  Confirm any warning notifications for Storage Locations. | Material production is planned on production lines and the planned orders are fixed. When there are quantity changes, log on to the SAP Fiori launchpad as a Production Planner, open Monitor Material Coverage - Net Segments to check the planned order number. |  |

## Production-Supply by Changing Kanban Container Status and Using Kanban Board

Kanban board is one of the tools that can be used to change the container status, which can provide both demand source (consumer) and supply source (supplier, producer) with a detailed overview of Kanban circulation. In addition, Material Replenishment could be quickly triggered by setting Kanban container status.

### Classic Kanban: External Procurement with Requirements Planning

Purpose

You can perform the automatic Kanban calculation. The system calculates on the basis of existing requirements and your specified calculation parameters, either the number of Kanban containers (cards) that are to circulate in a control cycle or the quantity of material to be procured per Kanban container.

With the number of Kanban containers and the quantity of material per container, the material circulation and the stock of material in the control cycle are defined. To ensure the lowest possible stock of material while simultaneously achieving a secure material supply, the setting of these two values must be optimized. Because the requirement situation often fluctuates considerably in many industries, it is necessary to check and adjust these values with the automatic Kanban calculation on a regular basis.

In this scenario, you precalculate the number of Kanbans you need in a specific period (month) for material RM233-4.

Prerequisites

The Kanban control cycle for material RM233-4 is maintained and independent requirements exist.

#### Check Dependent Requirement of Material RM233-4

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

In this step, you check whether dependent requirements for RM233-4 exist.

Prerequisite

The independent requirement planning for material FG233 is done and a planning run is finished.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Monitor Material Coverage - Net / Individual Segments (F2101). |  |  |
| 3 | Select Material | Mark the checkbox of the following materials, and then choose Manage Materials at bottom right.  Material: RM233-4 | The Material Details screen displays. |  |
| 4 | Check the Dependent Requirement | Review the Dependent Requirement of the material RM233-4, then choose Home. | You've checked the data available for RM233-4. |  |

#### Release Scheduling Agreement

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 release scheduling agreement delivery schedule with forecast schedule.

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. |  |  |
| 3 | Find Scheduling Agreement Number | Find the appropriate scheduling agreement through the search criteria, such as: Supplier 10300002, Agreement Type LPA (SA With Release doc.), Purchasing Organization1010, then choose Go. | The desired scheduling agreement displays on the Manage Scheduling Agreements list page . |  |
| 4 | Release of Schedule at Scheduling Agreement Level | On the Scheduling Agreements list, select the schedule agreement and choose Release in the right upper corner.  Select Release: Forecast and JIT Schedule. In the Release: Forecast and JIT Schedule dialog box, choose Release.  Or  Select Forecast Schedule, in the Release: Forecast Schedule dialog box, choose Release.  And select JIT Schedule, in the Release: JIT Schedule dialog box, choose Release.  In the Release Result Log dialog box, choose Close. | Release of schedule shall be with green status. |  |

#### Set Available Kanban to EMPTY

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

In this step, you set an available Kanban to EMPTY to trigger the external procurement of RM233-4.

Prerequisite

The Kanban control cycle for material RM233-4 is created.

Procedure

It is possible to change Kanban Container's status using different Fiori apps. You may choose one of them to execute the task in this step (set to EMPTY) and the subsequent steps (for example, set to Full) where applicable. Here we provide two options for you, you can choose either one of them.

Option 1:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Set Kanban Container Status (F3717). |  |  |
| 3 | Select the Kanban | Select a Kanban container on the left part of the screen. Choose Value Help icon to open Select: Barcode window. Choose Show Advanced Search to make following entries and press Enter.   * Plant: 1010 * Production Supply Area: KANBAN\_01   From the Items list, choose one of the Kanban for RM233-4 with Current Status WAIT or FULL. | The Kanban you entered is displayed. |  |
| 4 | Check Kanban Information | On the right part of the screen, check following entry:  Target Status: Empty |  |  |
| 5 | Set the Kanban to Empty | On the left part of the screen, choose Save at the bottom. | Setting an available Kanban to EMPTY creates a JIT (Just In Time) call for material RM233-4. |  |

Option 2:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Kanban Board (F4630).  You can find the app under category Production Control - Kanban Monitoring.. |  |  |
| 3 | Search | Make following entries and search and choose Go:  Plant: 1010  Production Supply Area: KANBAN\_01  Material: RM233-4 |  |  |
| 4 | Select Kanban Container | In the Control Cycle, choose one Kanban Container with Status WAIT or FULL. You can check the legend for description of visual elements.  Container Details panel will display at the right side.You can check detailed information. |  |  |
| 5 | Set the Kanban to Empty | Choose Set to EMPTY above the list. | Setting an available Kanban to EMPTY creates a JIT(Just In Time) call for material RM233-4. |  |

#### Posting the Goods Receipt for External Procurement

Purpose

You can post goods receipt for external procurement either by changing the Kanban container to FULL or by posting GR for JIT call. You can choose one of the options to proceed.

##### Option A: Change the Kanban to FULL

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

In this step, you change the status of the Kanban you processed in previous step to FULL for material RM233-4.

Prerequisite

The status of the KANBAN is set to EMPTY previously.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Set Kanban Container Status (F3717). |  |  |
| 3 | Select the Kanban | Select a Kanban container on the left part of the screen. Choose Value Help icon to open Select: Barcode window. Choose Show Advanced Search to make following entries and press Enter.   * Plant: 1010 * Production Supply Area: KANBAN\_01   From the Items list, choose one of the Kanban for RM233-4 with Current StatusEmpty. | The Kanban you entered displays. |  |
| 4 | Check Kanban Information | On the right part of the screen, check following entry:  Target Status: Full |  |  |
| 5 | Set the Kanban to Full | On the left part of the screen, choose Save at the bottom. | Setting the EMPTY Kanban to Full executes a goods receipt in production storage location and a reduction of scheduling line for the amount delivered.  The stock is increased for the Kanban amount.  The scheduling lines are deleted for the delivered amount. |  |

##### Option B: Goods Receipt for JIT Call

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 post goods receipt for JIT call. It is useful especially when you want to post partial quantities of individual items of a summarized JIT call, or for more containers at once.

Prerequisite

The status of the KANBAN is set to EMPTY previously.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Goods Receipt for JIT Call (PJWE). |  |  |
| 3 | Input JIT Call Number | Enter the number of the appropriate production JIT call, and choose Adopt.  JIT Call Number: XXXX  Note If you set the indicator In background, the system automatically executes this goods receipt in background mode. |  |  |
| 4 | Check Quantity | On the Goods Receipt for JIT Call: Item Overview screen, check the quantity for which you want to post the goods receipt and change if necessary. |  |  |
| 5 | Post | Choose Post GR. | The system posts the goods receipt. |  |

#### Precalculation of Kanbans for Future Requirements

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

In this step, you precalculate the Kanbans you need for the next period (month).

Prerequisite

The Kanban control cycle for material RM233-4 is created and dependent requirements for material RM233-4 exist.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Kanban Calculation (PK07). | The Create Change Proposal For Kanban Control Cycles screen displays. |  |
| 3 | Enter the Selection Data | Make following entries and choose Execute.   * Plant: 1010 * Definition of period - From Date: <Today's date> * To date: <Date at least 2 month in future> * Material: RM233-4   In the dialog box, check if a calculation of the Kanban cycle has taken place.  Choose Continue. |  |  |
| 4 | Exit | Choose Home. | You have created a proposal for future requirements of Kanbans for material RM233-4. |  |

#### Release Proposal of Kanbans Required for Future Period

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

In this step, you check the proposal for future Kanban requirements before you release the proposal.

Prerequisite

You have performed a Kanban calculation and a proposal is available.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Check Kanban Calculation Result (PK08N) | The Initial Screen: Check Results of Kanban Calculation screen displays. |  |
| 3 | Enter the Selection Data | Make following entries and choose Enter.   * Plant: 1010 * Material: RM233-4 | The Check Results of Kanban Calculation (Plant 1010) screen displays. |  |
| 4 | Check the Result | If the results are feasible, mark the line and choose More > Edit > Adopt > Next Change > For Selected . The New No. of Kanbans field is filled with the precalculated number. |  |  |
| 5 | Save | Choose Save. | You have accepted the proposal for Kanbans and changed the number of Kanbans in control cycle. |  |

#### Check Changes and Calculation Base in Control Cycle

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

In this step, you check if the changes have been done in control cycle and the details of calculation.

Prerequisite

You have performed a Kanban calculation and released it for material RM233-4.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Manage Kanban Control Cycles (PKMC) | The Manage Kanban Control Cycle screen displays. |  |
| 3 | Enter the selection data | Make following entries and choose Data Selection.   * Plant: 1010 * Supply Area: KANBAN\_01 | The Control Cycle Maintenance: Display screen displays. |  |
| 4 | Check the Field No. of Kanban | Check if the number of Kanbans calculated is written in the control cycle in No. of Kanban field. |  |  |
| 5 | Choose Calculation | Choose Kanban Calculation. | The Kanban Control Cycle Calculation dialog box displays. |  |
| 6 | View on Calculation Data | Make the following entries and choose Enter:   * Evaluation From: <Today's date> * Evaluation to: <Date + 2 month>   Check the requirements existing for the material and the results of Kanban calculation  Choose Continue.  Note If the graphic does not display, you can force it to show by choosing Print, then choosing Cancel. |  |  |
| 7 | Exit | Choose Home. | You have verified that the control cycle is adopted according to the calculation results and have checked the details of Kanban calculation. |  |

#### Unlock New Kanbans

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

If Kanbans are created during Kanban calculation release, their statuses are locked. When they are really needed, they have to be unlocked.

Prerequisite

You have released a Kanban calculation where new kanbans are needed.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Unlock Kanban Container (PK09). | The Unlock Kanbans displays. |  |
| 3 | Enter the Selection Data | Make following entries and choose Execute.   * Plant: 1010 * Supply Area: KANBAN\_01 * Material: RM233-4 |  |  |
| 4 | Unlock Kanbans | Mark the Kanbans with a blocked indicator for material RM233-4 and choose Unlock selected Kanbans.  Confirm the message with Yes. |  |  |
| 5 | Exit | Choose Exit. | You have unlocked the new Kanbans for material RM233-4. They are now ready for use. |  |

#### Alert for Delayed Replenishments - Creation of Replenishment Elements / JIT Calls (Optional)

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

In this step, you set more than the maximum allowed number of Kanbans to EMPTY to force the creation of alerting, in which case causes delayed replenishments.

Prerequisite

The Kanban control cycle for material RM233-4 is created.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Display Kanbans: Demand View (PK13N). | The Kanban Board: Demand Source View, Initial Screen displays. |  |
| 3 | Select the Kanban | Make following entries and choose Enter.   * Plant: 1010 * Production Supply Area: KANBAN\_01 | The Kanban Board: Demand Source View From XX:XX Time screen displays. |  |
| 4 | Check the Control Cycle | Mark the correct line and choose More > Goto > Display Control Cycle . Check the maximum number of empty Kanbans (here is 1).  Choose Back. |  |  |
| 5 | Set More Kanban to EMPTY | Select the line of Kanban and choose Set to Empty.  Make sure that there are in total more empty Kanbans than the number checked two steps ago (in this case at least two). |  |  |
| 6 | Check the Kanban Information | Double-click the empty Kanban to display the replenishment information. |  |  |
| 7 | Exit | Choose Home. | You have set more than the maximum allowed number of Kanbans to EMPTY. This results in alerts concerning delayed replenishment elements. |  |

#### Alert for Delayed Replenishments - Evaluation of Replenishment Elements / JIT Calls (Optional)

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

In this step, you check the alerts caused by previous step.

Prerequisite

The Kanban control cycle for material RM233-4 is created. Also more than the maximum allowed number of Kanbans have the status 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 Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Due Kanban Replenishment Elements (PKAL). | The Delayed Replenishment Elements screen displays. |  |
| 3 | Check All Delayed Replenishment Elements for Material RM233-4 | Make following entries and choose Execute.   * Plant: 1010 * Delivery Date: <Tomorrow's Date> * Trigger Alerts: X * Material : RM233-4   These alerts are caused by the situation that more than the maximum allowed number of Kanbans has the status EMPTY, for example, the replenishment of the Kanbans listed is delayed or the booking in system hasn't taken place yet. | The Delayed Replenishment Elements screen displays. |  |
| 4 | Exit | Choose Home. | You have checked the alerts caused by the fact that more than the maximum allowed number of Kanbans has the status EMPTY. |  |

### Event-driven Kanban: External Processing and PDF Print of Kanban Card

In event-driven Kanban, material provision is not based on a predefined number of Kanbans or a predefined Kanban quantity. Instead, it is based on actual material consumption. The material is not continually provided and replenished at a supply area. It is only replenished when specifically requested. In this case, the material is procured externally with purchase orders.

#### Create Event-Driven Kanban

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

In this step, you create a Kanban for material RM233-2.

Prerequisite

The control cycle for material RM233-2 is created.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Display Kanbans: Demand View (PK13N). | The Kanban Board: Demand Source View, Initial Screen displays. |  |
| 3 | Select the Kanban | Make following entries and choose Enter.  Plant: 1010  Production Supply Area: KANBAN\_04 | The Kanban Board: Demand Source View From XX:XX Time screen displays. |  |
| 4 | Create an Empty Kanban | Mark the line of RM233-2 and choose More > Edit > Create Kanban . | The Generate Event-Driven Kanban screen displays. |  |
| 5 | Enter Details of Kanban | In the Number of Load Carriers field, enter 1 and choose Enter.  Choose Generate Event-Driven Kaban. |  |  |
| 6 | Check the Kanban Information | Double-click the empty Kanban to display the replenishment information and the Purchasing Order. |  |  |
| 7 | Exit | Choose Home. |  |  |

#### Variant 1: Set Kanban to FULL

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

In this step, you set a Kanban to full for material RM233-2.

Prerequisite

The control cycle for material RM233-2 is created and one Kanban has the status Empty. The Purchasing Order is released.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Set Kanban Container Status (F3717). |  |  |
| 3 | Select the Kanban | Select a Kanban container on the left part of the screen. Choose Value Help icon to open Select: Barcode window. Choose Show Advanced Search to make following entries and press Enter.  Plant: 1010  Production Supply Area: KANBAN\_04  From the Items list, choose one of the Kanban for RM233-2 with Current Status Empty. | The Kanban you entered displays. |  |
| 4 | Check Kanban Information | On the right part of the screen, check the following entry:  Target Status: Full |  |  |
| 5 | Set the Kanban to Full | On the left part of the screen, choose Save at the bottom. | The Kanban status is changed to FULL, which automatically results in a goods receipt in the storage location. |  |

#### Variant 2: Goods Receipt

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

In this step, you set a Kanban to full for material RM233-2.

Prerequisite

The control cycle for material RM233-2 is created and one Kanban has the status 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 Warehouse Clerk. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Post Goods Receipt for Purchasing Document (F0843) |  |  |
| 3 | Enter Purchase Order | Enter the purchase order ID and choose Enter.  Purchase Document: <Purchase Order from Create Kanban step> |  |  |
| 4 | Select Item | From the Items section, select the goods receipt item to be posted.  Material: RM233-2  Quantity: <Quantity> | The Post button is activated. |  |
| 5 | Post | Choose Post. | The goods receipt to a purchase order with Kanban indicator automatically results in a status change of the Kanban to Full. This corresponds to the purchase order. |  |

#### Set Available Kanban to EMPTY

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

In this step, you set an available Kanban to Empty. The status change to empty results in an event-driven Kanban process in the deletion of the Kanban.

Prerequisite

The Kanban has the status Full.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Lean Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Set Kanban Container Status (F3717). |  |  |
| 3 | Select the Kanban | Select a Kanban container on the left part of the screen. Choose Value Help icon to open Select: Barcode window. Choose Show Advanced Search to make following entries and press Enter.  Plant: 1010  Production Supply Area: KANBAN\_04  From the Items list, choose one of the Kanban for RM233-2 with Current StatusFull. | The Kanban you entered displays. |  |
| 4 | Check Kanban Information | On the right part of the screen, check the following entry:  Target Status: Empty |  |  |
| 5 | Set the Kanban to Empty | On the left part of the screen, choose Save at the bottom. | By setting an available Kanban to EMPTY, the Kanban is deleted. No stock changes take place in this step. |  |

## Repetitive Manufacturing Backflush

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 step executes multiple activities in a single step, such as finished product goods receipt, backflush of component materials, posting of costs to cost collector and creation of material and journal entries.

Errors can occur in back flushing. For example, there may not be sufficient warehouse stock available or important data, such as the issue storage location may be missing. You then have the following options:

Make corrections immediately in a component overview.

Backlogs are created for the complete requirement quantities of the components with errors.

You can process these backlogs later. If negative stocks are allowed for the material in the storage location, the system posts negative stock quantities in certain circumstances.

Note Goods Movement is 131 for Goods Receipt and 261 for Goods Issue. The Material is FG233 (Finished Product).

Prerequisite

Planned orders must exist.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on | Log on to the SAP Fiori launchpad as a Production Operator - Repetitive Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Confirm Repetitive Manufacturing (MFBF). | The REM Confirmation - Transaction Variant: None screen displays. |  |
| 3 | Enter Selection Data | Make the following entries and choose Enter:  Assembly backflush: X  Make-to-stock:  Planned Order: <Planned order number for FG233 from previous step> | The system proposes Material and Conf. Qty. Change the Conf. Qty as needed. |  |
| 4 | Post | Choose Post with Correction.  Select the production version if prompted. |  |  |
| 5 | Post | Choose Post. | The finished product is received into stock and all components listed in the bill of material are issued from stock.  To view the Material document, log on to the SAP Fiori launchpad as a Warehouse Clerk and open Material Document Overview.   * Debited Accounts: Credited Accounts * Cost collector: Consumption * Inventory: Inventory change * Inventory - Finished Product: Inventory Change - Production * Consumption - Raw Materials: Inventory - Raw Materials and semi-finished goods |  |

## Post Processing List of Error Records

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

To post process backlogs from backflushing, you can use this function to create a list of components that have to be postprocessed.

Prerequisite

Material movements are missing for previous backflush operations.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Operator - Repetitive Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Reprocess Goods Movements (COGI). | The Postprocessing of Error Records from Automatic Goods Movements screen displays. |  |
| 3 | Enter Selection Data | Make the following entries and choose Enter:  Plant: 1010 | The system displays a list of all assemblies that correspond to the selection criteria and that have components to be postprocessed. This list is sorted by assemblies and production versions. If you have to correct the components or if you want to check availability, select the appropriate assembly and choose Change Selected Postprocessing Recs. The system displays the components of the selected assembly. |  |
| 4 | Save | Review the generated list, then choose Save.  Correct any missing material movement for planned orders processed. |  |  |

## Review Manufacturing Object Pages

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 review different object pages available for different roles in the manufacturing process.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Production Planner.  Note You can use any role in section Roles above. | The SAP Fiori launchpad displays. |  |
| 2 | Search Material | Choose the Search icon in the upper right part of the screen.  Make the following entries and choose Search:   * Search: <BOM Header Material>, refer to section Master Data, Organizational Data, and Other Data. | The system displays a list of objects using the selected material. |  |
| 3 | Display Object | In the All field, select an object from the dropdown list and choose the Search icon. | The displaying list of objects is limited to the object type selected. If no object is selected, a message would display instead. |  |
| 4 | Tailor the Result Display | Under the search line, choose an icon (for example, filter, display as table, sort and so on) to filter the results list. | The results list is filtered according to your selections. |  |
| 5 | Repeat Steps | Repeat steps 1 to 5 for any other role in this test script and any other object offered in the search function. | The result list of objects displayed differs by the role you use to log on. |  |

# Appendix

## Process Integration

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

### Succeeding Processes

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

|  |  |
| --- | --- |
| Process | Business Condition |
| BEI - Period-End Closing - Plant (Optional) | These are executed collectively as a part of month-end closing. For more information on the month-end closing procedure, see the Test Script for Period End Closing General Plant.   * Month-end closing can only be executed once a month. |

## Kanban Status - Status Change/Kanban Signal

### Classification of the Processing Status of Kanban Container

The course of Kanban Container processing is controlled and made visible through setting the Kanban Containers to appropriate status. Usually, only the statuses "Empty" and "Full" are used. As a rule, if a material in a Kanban Container has been used and a Kanban Container is then set to "Empty", this Kanban Container status automatically triggers the replenishment process. The source of supply (producer, supplier) receives the signal to fill up the Kanban Container again. When the full Kanban Container arrives back at the demand source (the consumer), the latter sets the Kanban Container to the status "Full" and the goods receipt is posted for the material. Normally, Kanban Container is possible with both statuses "Empty" and "Full".

|  |  |
| --- | --- |
| Status – Description | Business Condition |
| Waiting – 1 | Indicates that although the material has been consumed, the supply source is not yet to supply any more of it. This status is also set if a new Kanban Container has been created.  If a new Kanban Container has been included in the control cycle and no replenishment has yet been triggered, it has the status "Waiting" and can then be set to "Empty" by the demand source (consumer). |
| In Process – 3 / In Transit – 4 | The statuses "In Process" and "In Transit" are set by the supply source (supplier) to inform the demand source (consumer) that the Kanban Containers are either being processed or are in transit.  If you use Kanban Containers with purchase orders, the status of a Kanban Container is automatically set to IN TRANSPORT if an inbound delivery has been generated for the order. |
| Full – 5 | The status "Full" is assigned by the demand source (consumer) upon receipt of the container or if the goods receipt has been posted for the kanban. Exception: Decoupling of Status Change and Goods Receipt Posting. |
| In Use -6 | The status "In Use" is set by the demand source to inform the supply source which Kanban Containers are currently being emptied. (This status can only be set on the kanban board.) |
| Error – 9 | The status "Error" is set only by the system. It is set if an error occurs during the processing of a Kanban Container. This may happen, for instance, if a Kanban Container is set to "Empty" and a purchase order is simultaneously to be created. If the desired vendor is invalid at this time, it does not make sense to resolve the situation in dialog mode here. The status of the Kanban Container is then set to "Error" with an appropriate system message.  If you have specified in Customizing for Kanban that only an error message is to be issued when a certain error occurs, the kanban status is not set to "Error". For more information, see: Error Handling. |
| Empty – 2 | The status "Empty" is set by the demand source (consumer) when the kanban quantity has been consumed. Depending on the replenishment strategy, this immediately triggers replenishment. |

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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