How-To Guide: Configure Conditional Workflow for RFM

Applies to

Prometheus Group Solutions for MDG RFM

Summary

This How-To Guide Conditional Workflow implementation for SAP MDG for Retail and Fashion Management, extension by Utopia using BAdI Definition USMD_SSW_DYNAMIC_AGENT_SELECT for flexible user determination.

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Introduction

SAP MDG, Retail and Fashion Management extension for Retail Article by Utopia (MDG-RFM) provides business processes to find, create, change, and mark Article Master data for deletion. It supports the governance Article Master data in a central hub and the distribution to connected operational and business intelligence systems.

The processes are workflow-driven and can include several approval and revision phases, and the collaboration of all users participating in the master data maintenance.

MDG Article Master uses the rule-based workflow. The user agent decision table determines the agents.

This scenario addresses the customer requirement to implement Conditional WF by dynamic agent determination using BAdI Definition USMD_SSW_DYNAMIC_AGENT_SELECT.

Background Information

You can use this BAdI to implement dynamic agent selection in the rule-based workflow. Therefore, in addition to the predefined rules, you can change agent values in the workflow by creating your own programs with this BAdI. This BAdI uses the method GET_DYNAMIC_AGENTS.

The input for this BAdI is the change request number and the service name. By using the change request number, it is possible to access all data within this change request. The input parameter Service Name enables you to use the same BAdI implementation for multiple service names.

You can modify the UI with Context Based Adaptation (CBA) for the different Change Request Types and you can hide the UIBBs that are not to be shown.

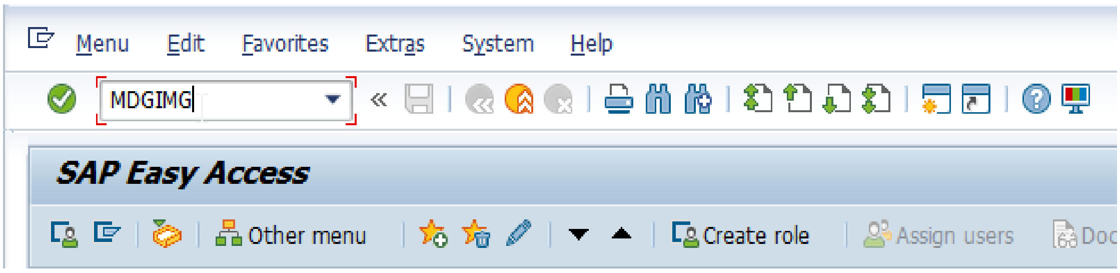
Article Master How to Guide for CBA is as follows:

UGI_RFM_HowToG
uide_ExtendMDGUI(

Steps to Create New CR type

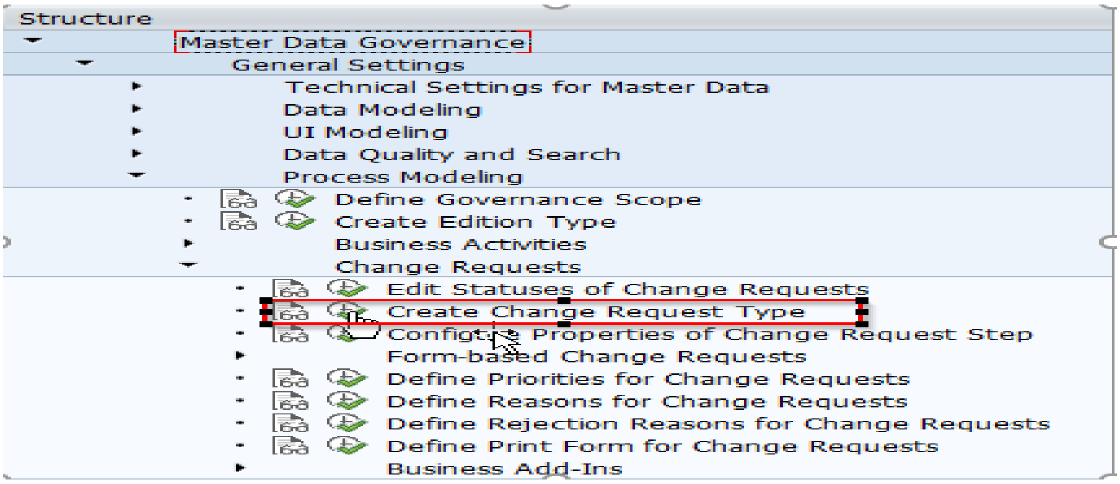
Use the following steps to create a new CR type:

1. Run transaction 'MDGIMG'.



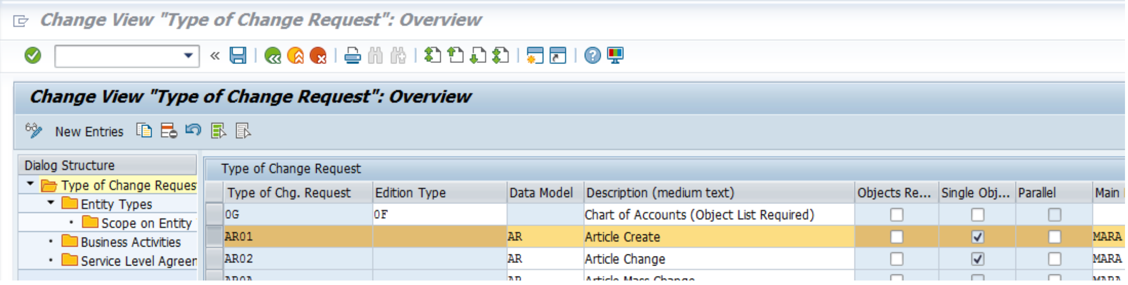
MDGIMG

2. Execute 'Create Change Request Type' by accessing the menu path Master Data Governance > General Settings> Process Modeling> Change Requests> Create Change Request Type.



Structure
- Master Data Governance
  - General Settings
    - Technical Settings for Master Data
    - Data Modeling
    - UI Modeling
    - Data Quality and Search
    - Process Modeling
      - Define Governance Scope
      - Create Edition Type
      - Business Activities
      - Change Requests
        - Edit Statuses of Change Requests
        - Create Change Request Type
        - Configure Properties of Change Request Step
        - Form-based Change Requests
        - Define Priorities for Change Requests
        - Define Reasons for Change Requests
        - Define Rejection Reasons for Change Requests
        - Define Print Form for Change Requests
        - Business Add-Ins

3. Select the Change Request type ‘AR01’ and copy to create Change Request type.

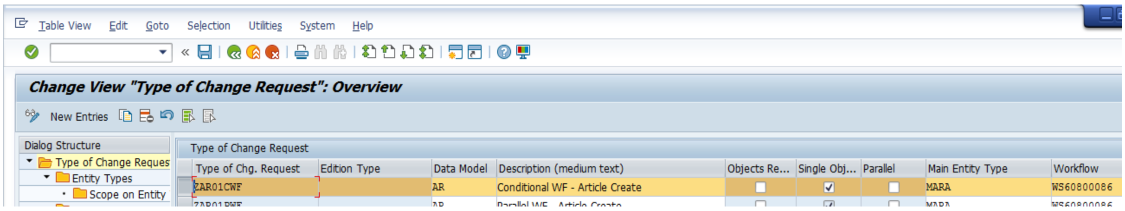


Change View "Type of Change Request": Overview

Type of Change Request

Type of Chg. Request	Edition Type	Data Model	Description (medium text)	Objects Re...	Single Obj...	Parallel	Main
0G	0F		Chart of Accounts (Object List Required)	□	□	□	
AR01		AR	Article Create	□	☑	□	MARA
AR02		AR	Article Change	□	☑	□	MARA
[illegible]		AR	Article Mass Change	□	□	□	MARA

4. Enter ‘ZAR01CWF’ as the type of new Change Request and click Enter. Populate the Workflow field with WS60800086.



Change View "Type of Change Request": Overview

Type of Change Request

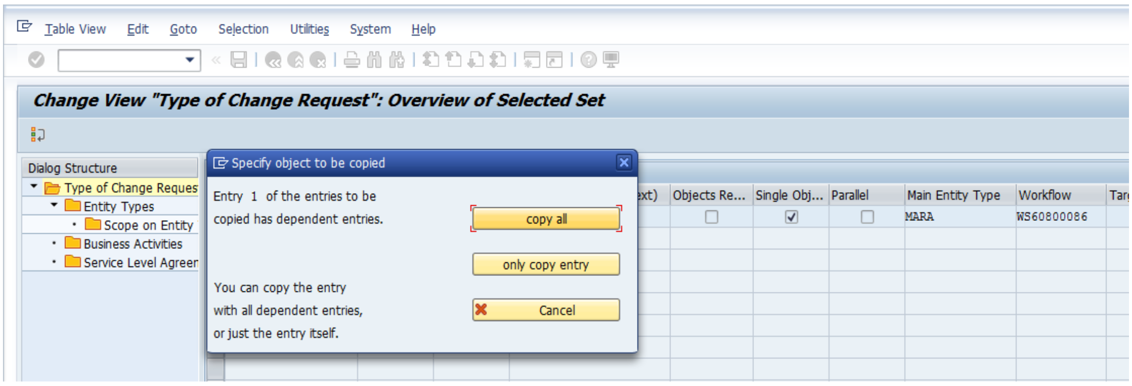
Type of Chg. Request	Edition Type	Data Model	Description (medium text)	Objects Re...	Single Obj...	Parallel	Main Entity Type	Workflow
ZAR01CWF		AR	Conditional WF - Article Create	□	☑	□	MARA	WS60800086
ZAR01PWF		AR	Parallel WF - Article Create	□	☑	□	MARA	WS60800086

A pop-up window is displayed.

Note

Workflow template WS60800086 is assigned to the newly created change request type which is designed to work only with Business Rule Framework (BRF+) and handles Serial approval of technical objects within MOCR.

5. Select ‘copy all’ button in the pop-up window.



Change View "Type of Change Request": Overview of Selected Set

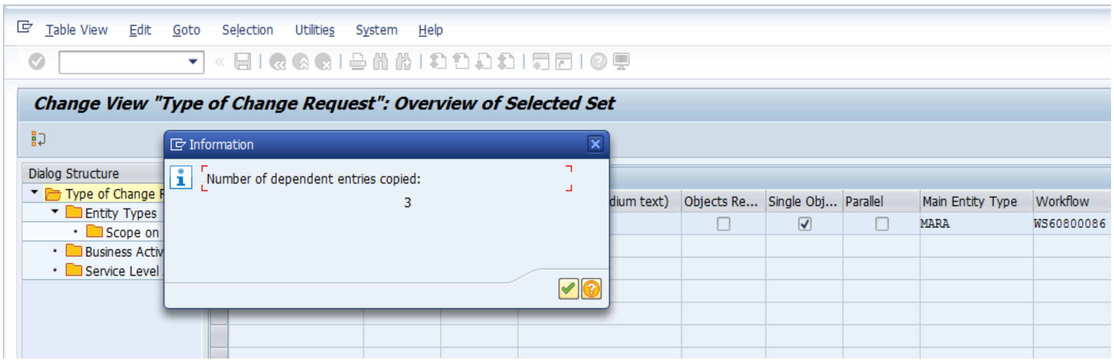
Specify object to be copied

Entry 1 of the entries to be copied has dependent entries.

You can copy the entry with all dependent entries, or just the entry itself.

...xt)	Objects Re...	Single Obj...	Parallel	Main Entity Type	Workflow	Tar
	□	☑	□	MARA	WS60800086	

The following screen is displayed where the number of dependent entries copied are displayed.



Change View "Type of Change Request": Overview of Selected Set

Dialog Structure
- Type of Change R
  - Entity Types
    - Scope on
  - Business Activ
  - Service Level

Number of dependent entries copied:

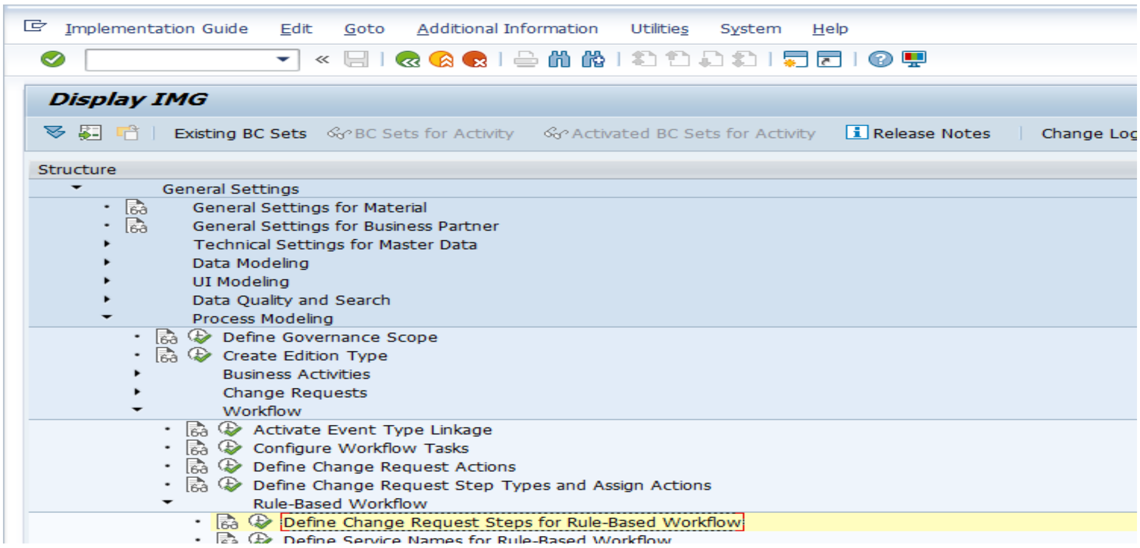
3

...dium text)	Objects Re...	Single Obj...	Parallel	Main Entity Type	Workflow
	☐	☑	☐	MARA	WS60800086

6. Select ✓ to continue.
7. Enter the Customizing request and save the changes.

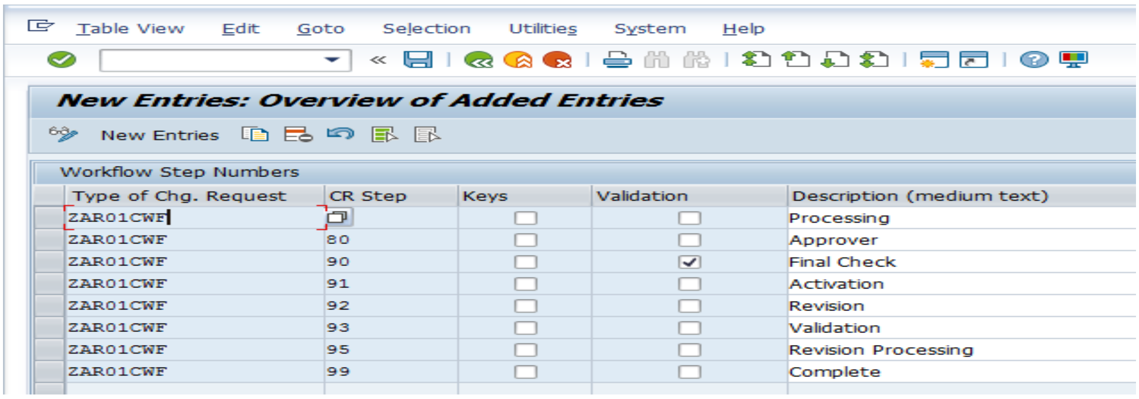
Define Change Request Steps for Rule-Based Workflow

1. Go to “Define Change Request Steps for Rule-Based Workflow” and create the following steps.



Display IMG

Structure
- General Settings
  - General Settings for Material
  - General Settings for Business Partner
  - Technical Settings for Master Data
  - Data Modeling
  - UI Modeling
  - Data Quality and Search
  - Process Modeling
    - Define Governance Scope
    - Create Edition Type
    - Business Activities
    - Change Requests
    - Workflow
      - Activate Event Type Linkage
      - Configure Workflow Tasks
      - Define Change Request Actions
      - Define Change Request Step Types and Assign Actions
      - Rule-Based Workflow
        - Define Change Request Steps for Rule-Based Workflow
        - Define Service Names for Rule-Based Workflow



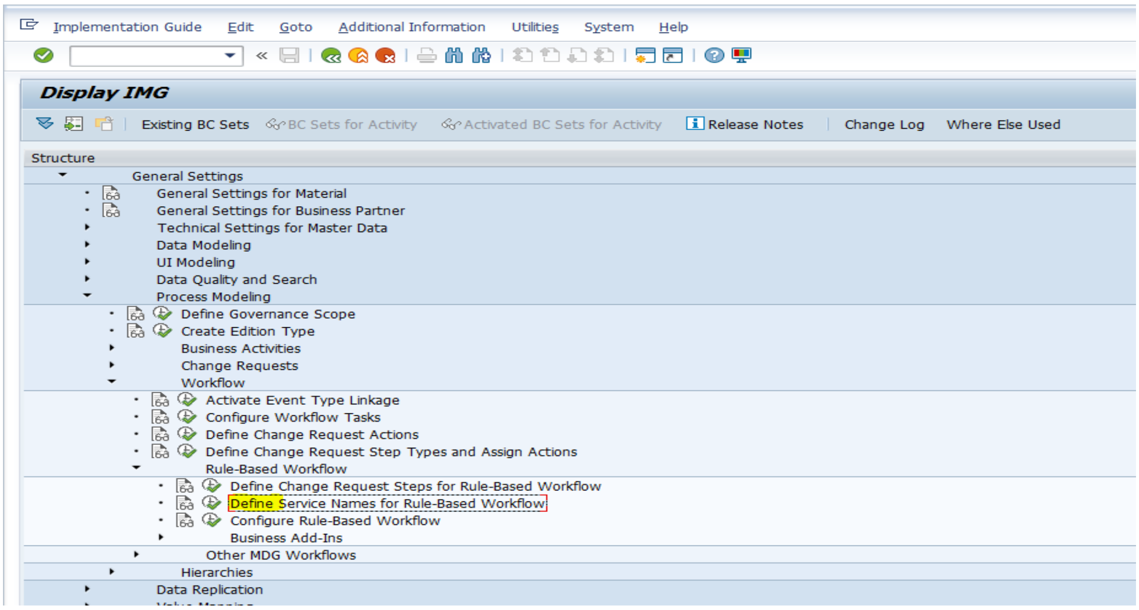
New Entries: Overview of Added Entries

Workflow Step Numbers

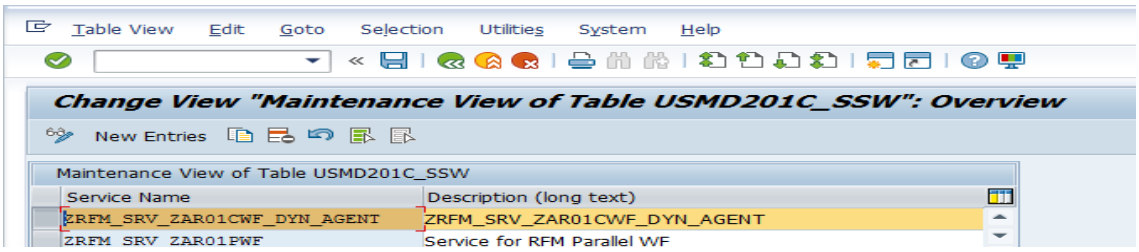
Type of Chg. Request	CR Step	Keys	Validation	Description (medium text)
ZAR01CWF		☐	☐	Processing
ZAR01CWF	80	☐	☐	Approver
ZAR01CWF	90	☐	☑	Final Check
ZAR01CWF	91	☐	☐	Activation
ZAR01CWF	92	☐	☐	Revision
ZAR01CWF	93	☐	☐	Validation
ZAR01CWF	95	☐	☐	Revision Processing
ZAR01CWF	99	☐	☐	Complete

Define Services

1. Define Service. (These are required during the implementation of the BAdIs).



2. Define the following services.



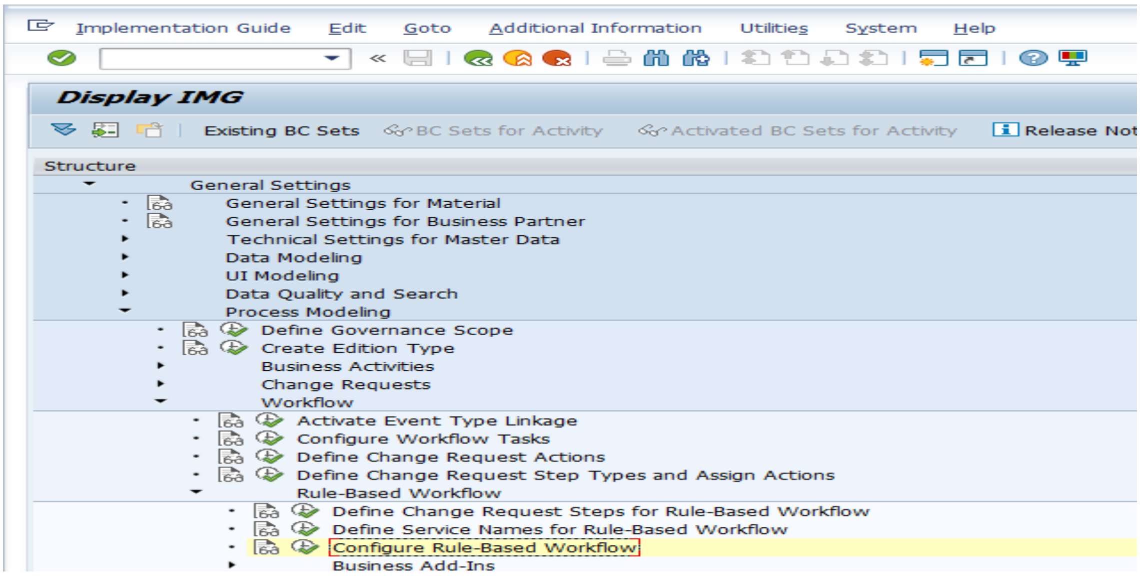
Change View "Maintenance View of Table USMD201C_SSW": Overview

Maintenance View of Table USMD201C_SSW

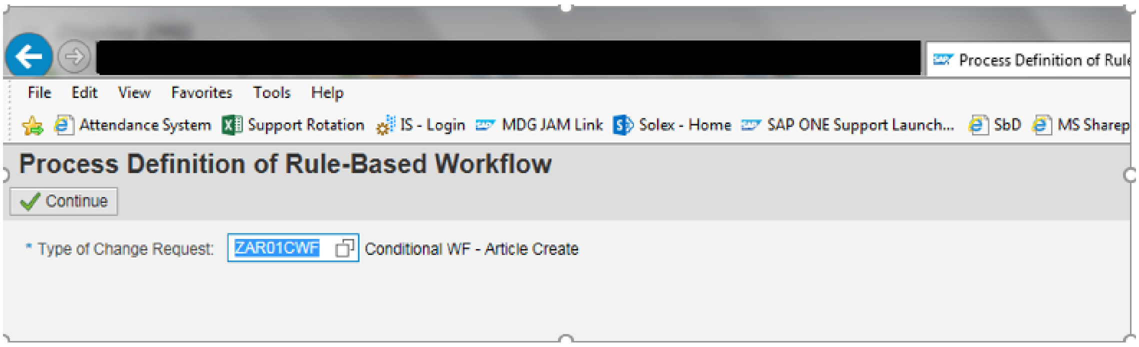
Service Name	Description (long text)
ZRFM_SRV_ZAR01CWF_DYN_AGENT	ZRFM_SRV_ZAR01CWF_DYN_AGENT
ZRFM_SRV_ZAR01PWF	Service for RFM Parallel WF

Configure Rule-Based Workflow

1. In the MDGIMG, navigate to “Configure Rule-Based Workflow”.


Implementation Guide
Edit
Goto
Additional Information
Utilities
System
Help
Display IMG
Existing BC Sets
BC Sets for Activity
Activated BC Sets for Activity
Release Not
Structure
General Settings
General Settings for Material
General Settings for Business Partner
Technical Settings for Master Data
Data Modeling
UI Modeling
Data Quality and Search
Process Modeling
Define Governance Scope
Create Edition Type
Business Activities
Change Requests
Workflow
Activate Event Type Linkage
Configure Workflow Tasks
Define Change Request Actions
Define Change Request Step Types and Assign Actions
Rule-Based Workflow
Define Change Request Steps for Rule-Based Workflow
Define Service Names for Rule-Based Workflow
Configure Rule-Based Workflow
Business Add-Ins

The following screen is displayed:



[redacted]

Process Definition of Rule
File Edit View Favorites Tools Help
Attendance System
Support Rotation
IS - Login
MDG JAM Link
Solex - Home
SAP ONE Support Launch...
SbD
MS Sharep

Process Definition of Rule-Based Workflow

* Type of Change Request: ZAR01CWF Conditional WF - Article Create

2. Enter the newly created CR type and click Continue.
3. Fill the BRF+ decision table.

   You can directly import the excel files attached below.

   - **Single Value Decision Table**.

     DT_SINGLE_VAL_ZAR01CWF.xlsx

   - **User Agent Table**.

     DT_USER_AGT_GRP_ZAR01CWF.xlsx

   Note

   The User agent type and User agent value can be set as per requirement. For example, Organization Unit position or a security role as the recipient has been used.

   SAP user IDs is used in this example.

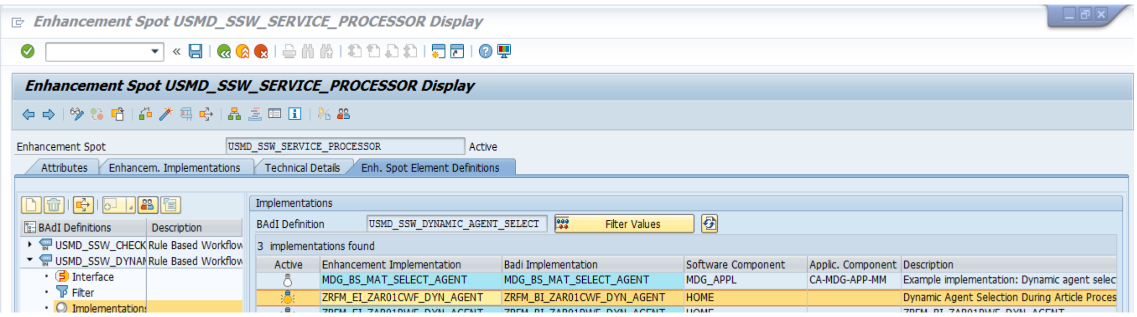
   - **Non-User Agent Table**.

     DT_NON_USER_AGT_GRP_ZAR01CWF.xls

Implementation of the BAdIs

Use the following steps to implement BAdI:

1. Run t-code SE18 display enhancement Spot USMD_SSW_SERVICE_PROCESSOR.



Enhancement Spot USMD_SSW_SERVICE_PROCESSOR Display

Enhancement Spot: USMD_SSW_SERVICE_PROCESSOR Active

BAdI Definitions	Description
USMD_SSW_CHECK	Rule Based Workflow
USMD_SSW_DYNAI	Rule Based Workflow
Interface	
Filter	
Implementation:	

Implementations

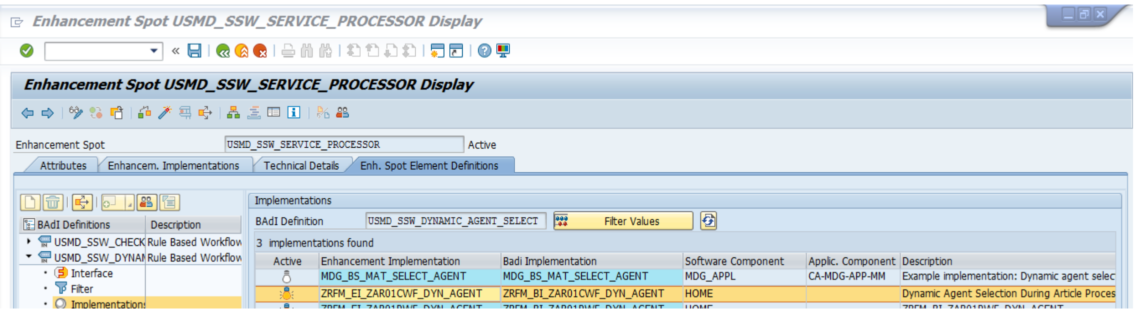
BAdI Definition: USMD_SSW_DYNAMIC_AGENT_SELECT

3 implementations found

Active	Enhancement Implementation	Badi Implementation	Software Component	Applic. Component	Description
	MDG_BS_MAT_SELECT_AGENT	MDG_BS_MAT_SELECT_AGENT	MDG_APPL	CA-MDG-APP-MM	Example implementation: Dynamic agent selec
	ZRFM_EI_ZAR01CWF_DYN_AGENT	ZRFM_BI_ZAR01CWF_DYN_AGENT	HOME		Dynamic Agent Selection During Article Proces
	ZRFM_EI_ZAR01RWF_DYN_AGENT	ZRFM_BI_ZAR01RWF_DYN_AGENT	HOME		ZRFM_BI_ZAR01RWF_DYN_AGENT

2. Create Enhancement Implementation for USMD_SSW_DYNAMIC_AGENT_SELECT.

- Display: Select BAdI DEFINITION > USMD_SSW_DYNAMIC_AGENT_SELECT
- Right click on Implementation, and click on Create BADI Implementation
- Create Enhancement Implementation: ZRFM_EI_ZAR01CWF_DYN_AGENT



Enhancement Spot USMD_SSW_SERVICE_PROCESSOR Display

Enhancement Spot: USMD_SSW_SERVICE_PROCESSOR — Active

BAdI Definitions	Description
USMD_SSW_CHECK	Rule Based Workflow
USMD_SSW_DYNAI	Rule Based Workflow
Interface	
Filter	
Implementations	

Implementations

BAdI Definition: USMD_SSW_DYNAMIC_AGENT_SELECT — Filter Values

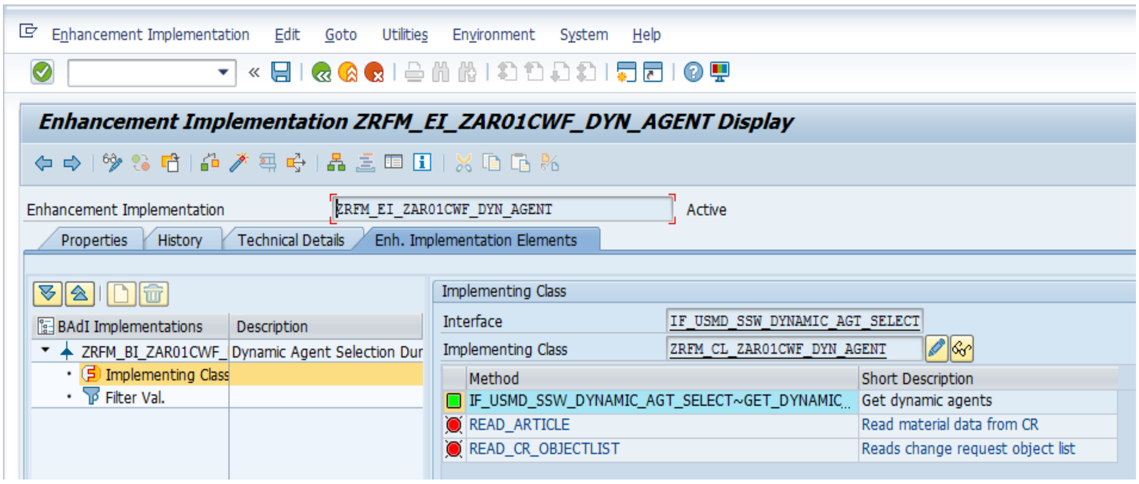
3 implementations found

Active	Enhancement Implementation	Badi Implementation	Software Component	Applic. Component	Description
	MDG_BS_MAT_SELECT_AGENT	MDG_BS_MAT_SELECT_AGENT	MDG_APPL	CA-MDG-APP-MM	Example implementation: Dynamic agent selec
	ZRFM_EI_ZAR01CWF_DYN_AGENT	ZRFM_BI_ZAR01CWF_DYN_AGENT	HOME		Dynamic Agent Selection During Article Proces

3. Create BAdI Implementation.

   BAdI Implementation: ZRFM_BI_ZAR01CWF_DYN_AGENT

   Implementing Class: ZRFM_CL_ZAR01CWF_DYN_AGENT



Enhancement Implementation ZRFM_EI_ZAR01CWF_DYN_AGENT Display

Enhancement Implementation: ZRFM_EI_ZAR01CWF_DYN_AGENT — Active

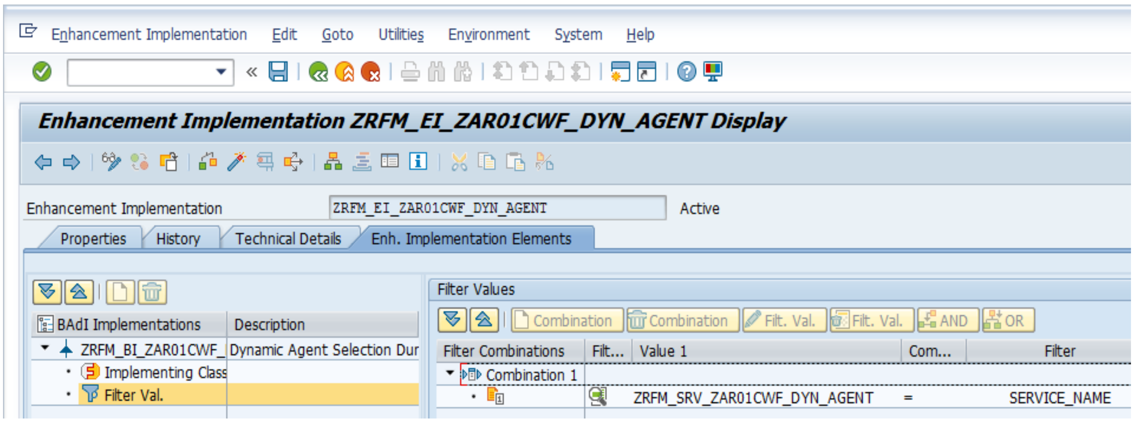
BAdI Implementations	Description
ZRFM_BI_ZAR01CWF_	Dynamic Agent Selection Dur
Implementing Class	
Filter Val.	

Implementing Class

Interface: IF_USMD_SSW_DYNAMIC_AGT_SELECT

Implementing Class: ZRFM_CL_ZAR01CWF_DYN_AGENT

	Method	Short Description
🟩	IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_	Get dynamic agents
🔴	READ_ARTICLE	Read material data from CR
🔴	READ_CR_OBJECTLIST	Reads change request object list



Enhancement Implementation ZRFM_EI_ZAR01CWF_DYN_AGENT Display

Enhancement Implementation: ZRFM_EI_ZAR01CWF_DYN_AGENT — Active

BAdI Implementations	Description
ZRFM_BI_ZAR01CWF_	Dynamic Agent Selection Dur
Implementing Class	
Filter Val.	

Filter Values

Filter Combinations	Filt...	Value 1	Com...	Filter
Combination 1				
		ZRFM_SRV_ZAR01CWF_DYN_AGENT	=	SERVICE_NAME

4. Save and activate.

   In the example, the agent values based on the Article Category us hard coded.

   The source code of the BAdI's Implementation class is attached for reference:

   ZRFM_CL_ZAR01CWF_DYN_AGENT.txt

The CR no. is present as in importing parameter of the class method. You can determine the agents based on some CR attribute value or the entity attribute value.

For the interface method you can use and adapt the code from example enhancement implementation MDG_BS_MAT_SELECT_AGENT (Example implementation: Dynamic agent select). Implementing class is CL_MDG_BS_MAT_SELECT_AGENT that has interface method IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_AGENTS and private method READ_MATERIAL.