PUBLIC

How-To: Flexible User Determination Using BAdI USMD_SSW_DYNAMIC_AGENT_SELECT

Applicable Releases:

From MDG 7.0 and from SAP S/4HANA 1511

Version 1.4

April 2024

Document History

Document Version	Description
1.0	First official release of this guide
1.1	Note 1700197
1.2	Note 1837696
1.3	More detailed explanation of BRF+-tables and BAdI-parameters
1.4	Adapt template

1 Business Scenario

SAP Master Data Governance (MDG) provides business processes to find, create, change, and mark master data for deletion. It supports the governance of 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 offers change request (CR)-based processing of master data with integrated workflow, staging, approval, activation, and distribution.

Using the rule-based workflow, the user agent decision table determines the agents. This scenario addresses the customer requirement to have a more flexible user determination dependent on own coding.

2 Background Information

A BAdI is used to add customer specific coding and tables.

You can use this BAdI to implement dynamic agent selection in the rule-based workflow. Therefore, in addition to rules that have been predefined, with this BAdI you can change agent values in the workflow by creating your own programs. 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. For example, when two service names are used in the configuration of the same change request workflow, and the user wants to create only one BAdI implementation, having the service name as the input parameter enables you to separate the processing logic based on the service name input.

Requirements

You have defined the filter value *Service Name* in the view `V_USMD201C_SSW`. You need to create a separate implementation for your specific dynamic agent selection step.

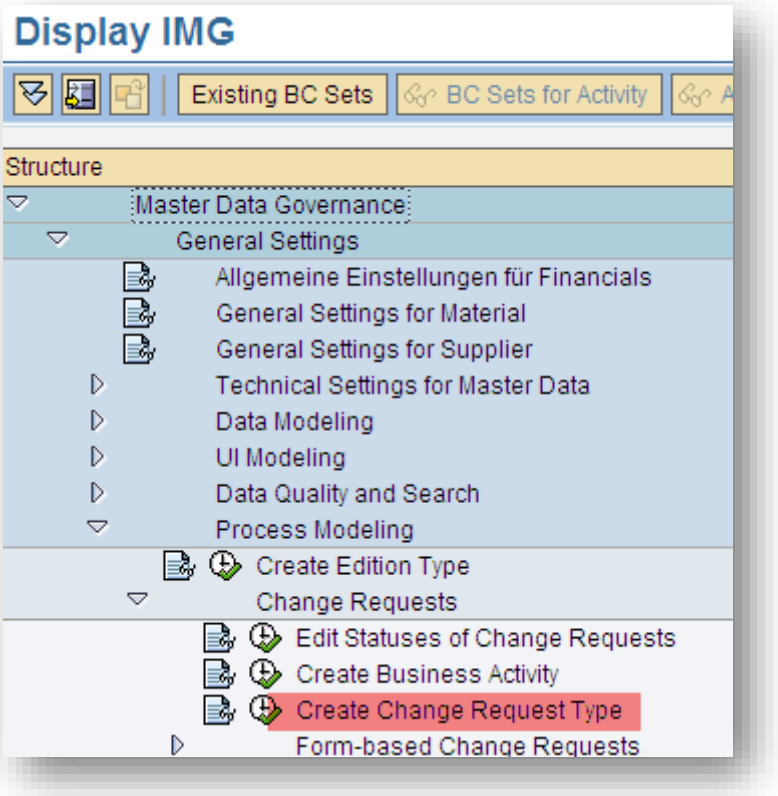
Standard settings

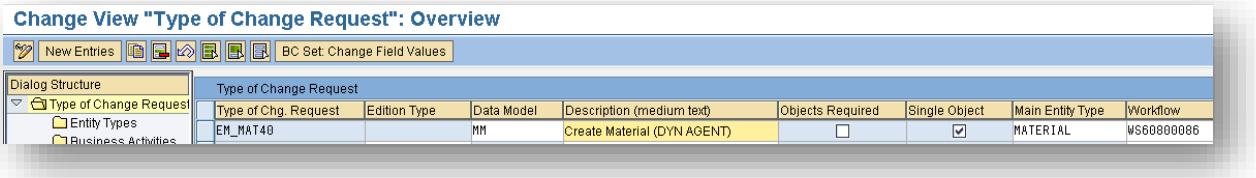
For more information about the standard settings (filters, single or multiple uses), see the *Enh. Spot Element Definitions* tab in the BAdI Builder (transaction `SE18`). No default BAdI implementation is preactivated in the standard system. The BAdI is filter dependent. The BAdI is not designed for multiple uses.

3 Step by Step Procedure

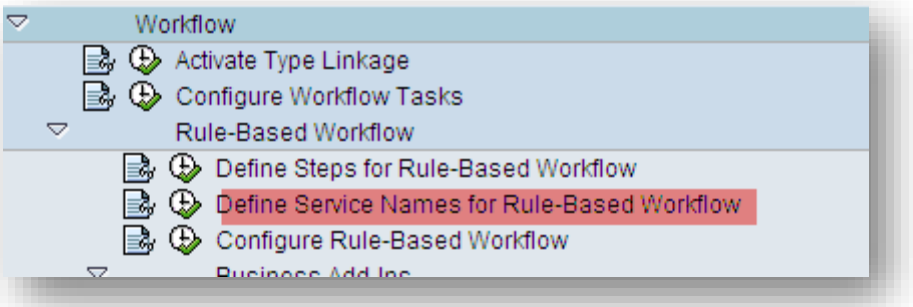
3.1 Customizing

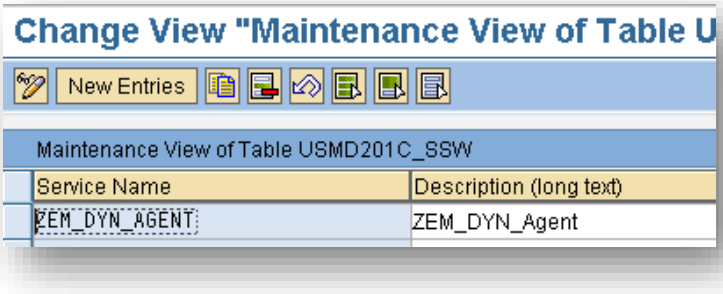
3.1.1 Create new change request type





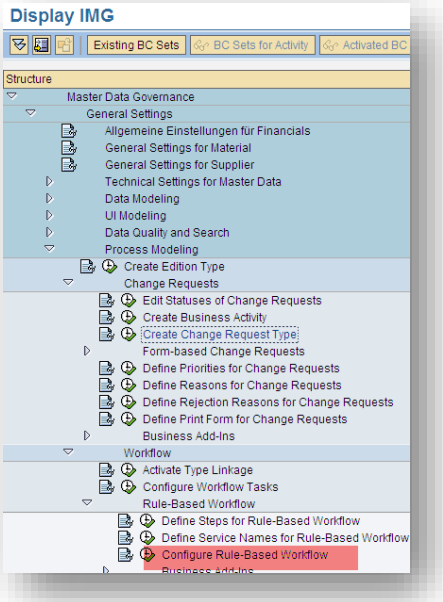
3.1.2 Define Service Names



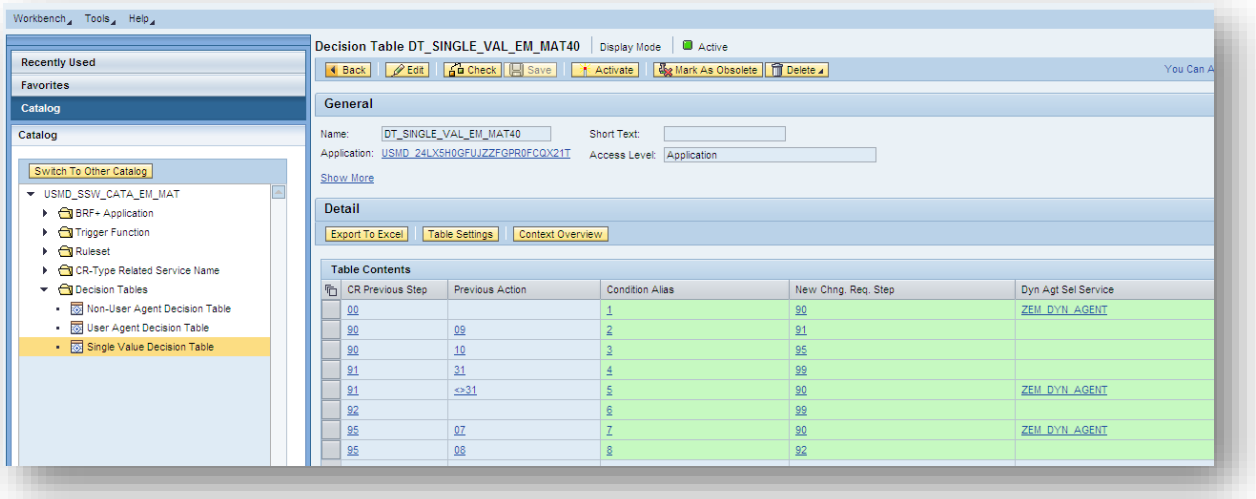


3.1.3 BRF+ tables

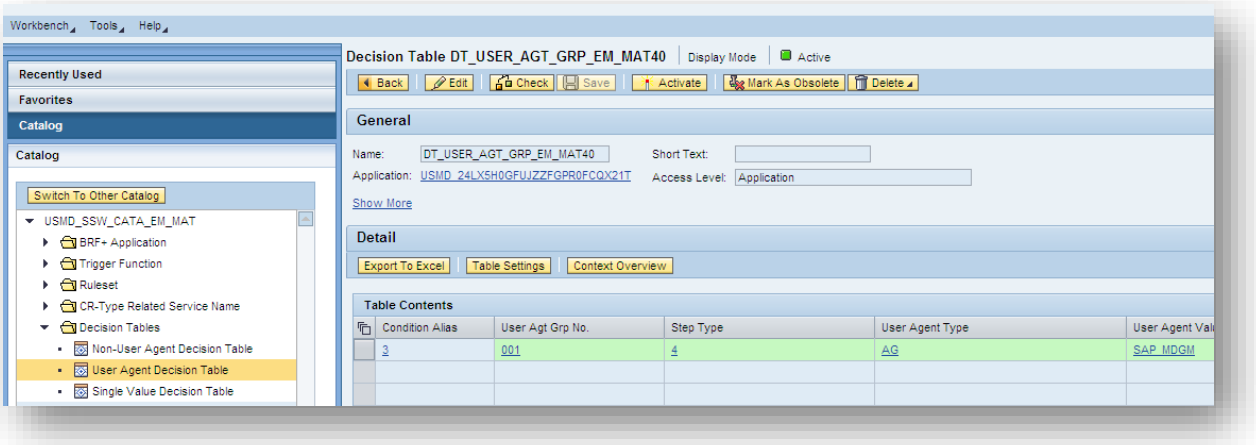
Use Customizing or transaction `USMD_SSW_RULE` - Process Definition of RBWF.



Single Value Decision Table

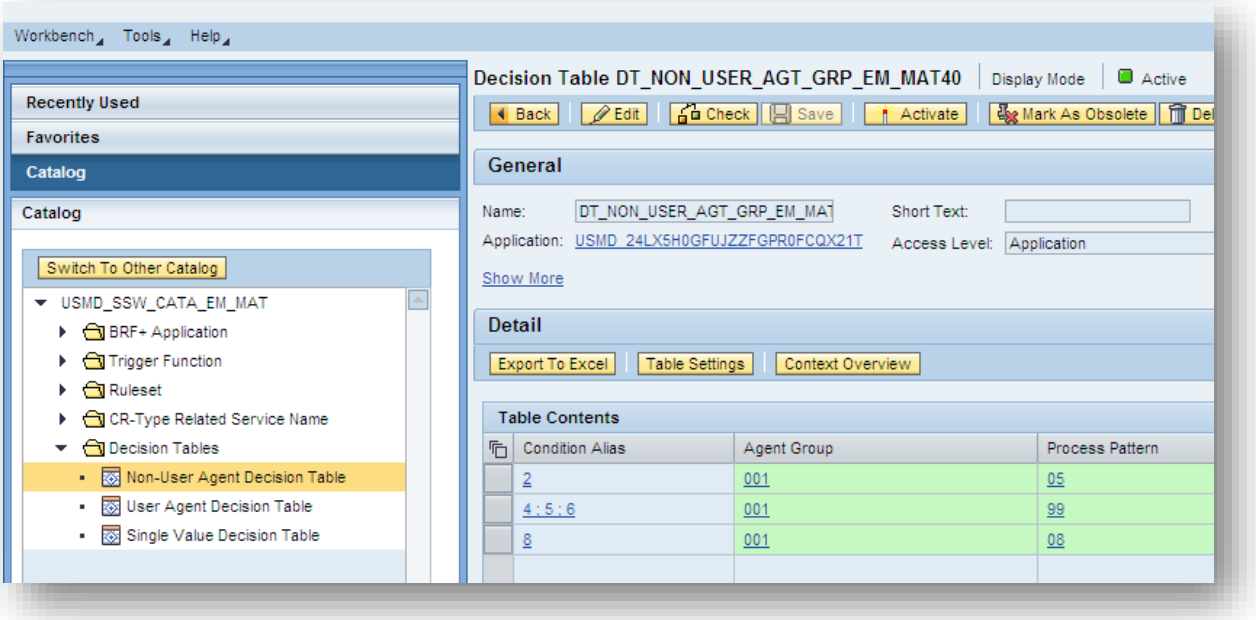


User Agent Decision Table



If the condition alias is not used elsewhere within single value decision table without dynamic agent selection service it is not necessary to add an entry into the user agent decision table. In this case the BAdI-method GET_DYNAMIC_AGENTS is called with empty parameter CT_USER_AGENT_GROUP and has to be filled within the BAdI (don't forget to fill fields AGENT_GROUP and STEP_TYPE). If one or more entries are defined parameter CT_USER_AGENT_GROUP is filled with these entries and you are responsible to process them as required within the BAdI-method.

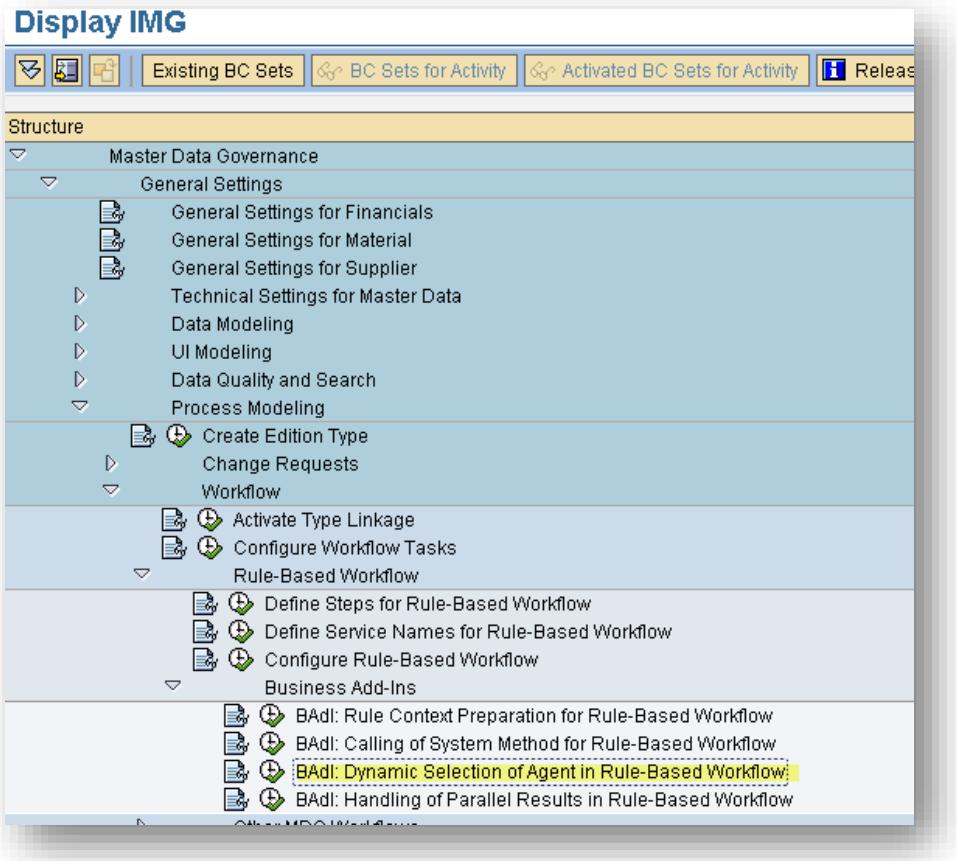
Non-User Agent Decision Table



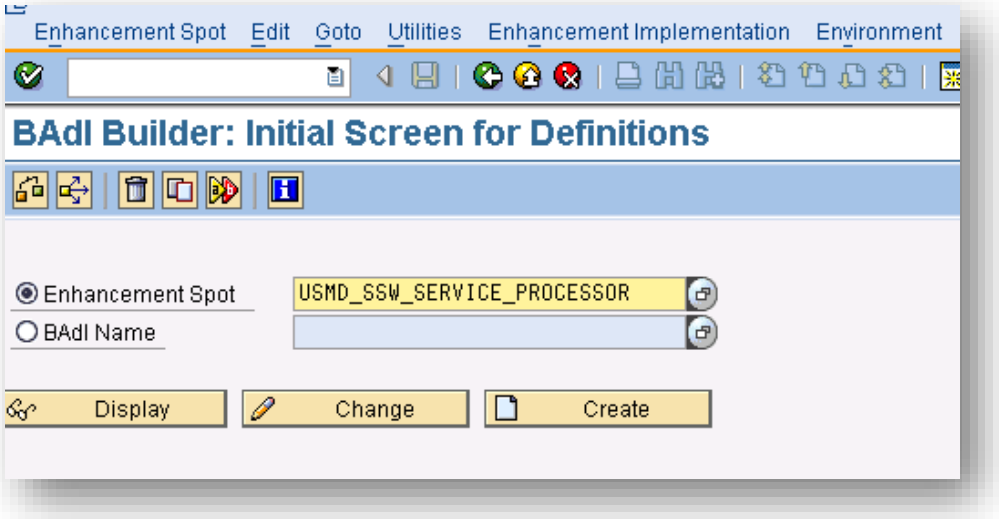
Decision table is not relevant for dynamic user agent selection service!

3.2 Enhancement Spot USMD_SSW_SERVICE_PROCESSOR

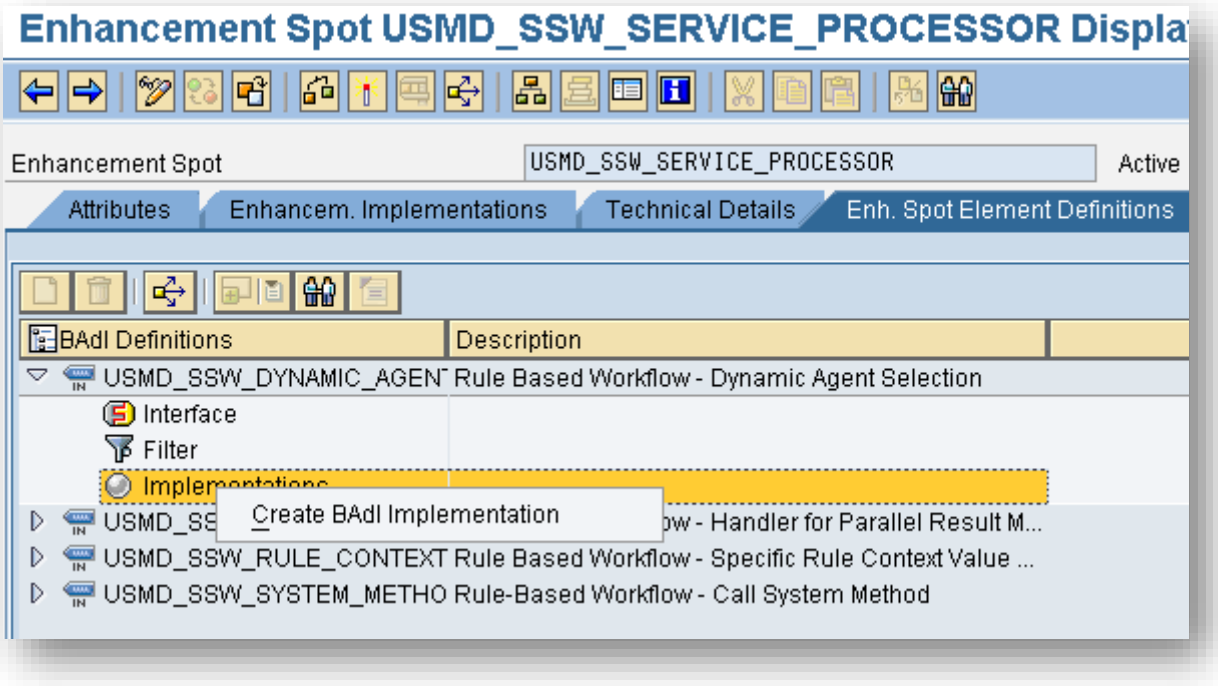
Customizing:

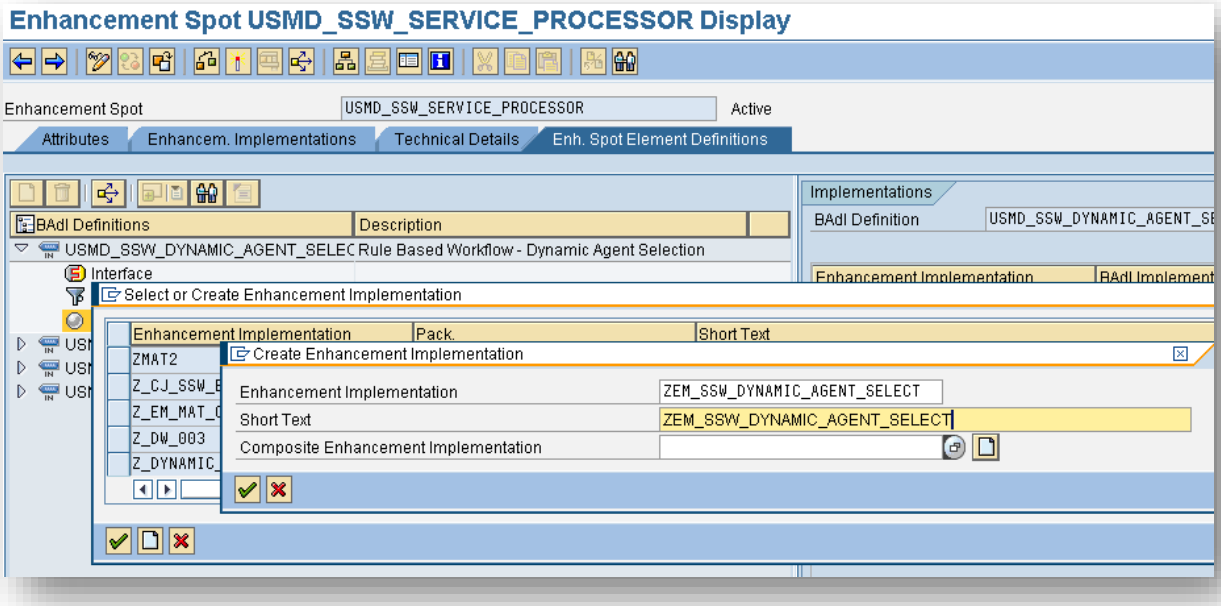


Or Transaction SE18 - Business Add-Ins: Definitions

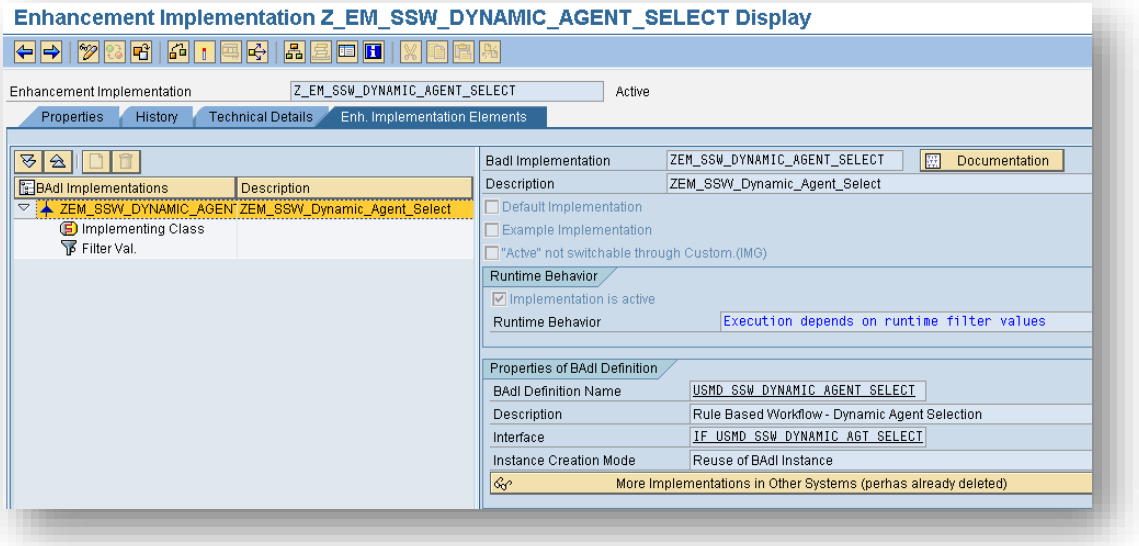


3.2.1 Create Enhancement Implementation

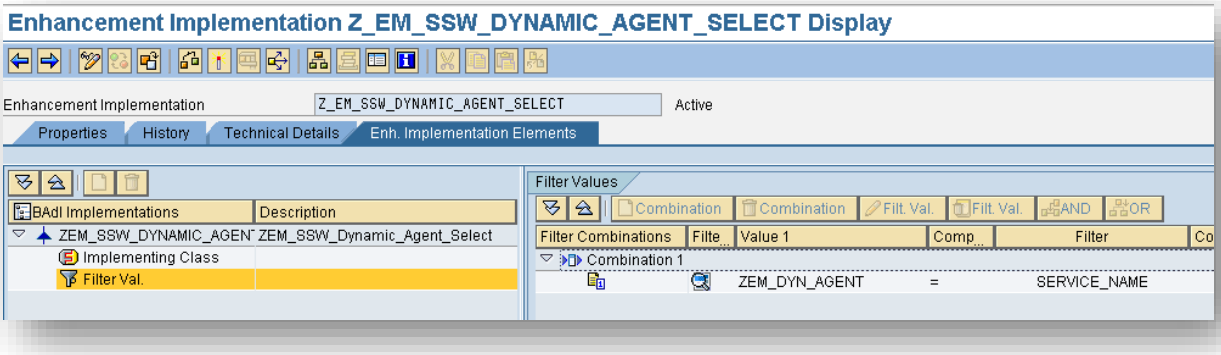




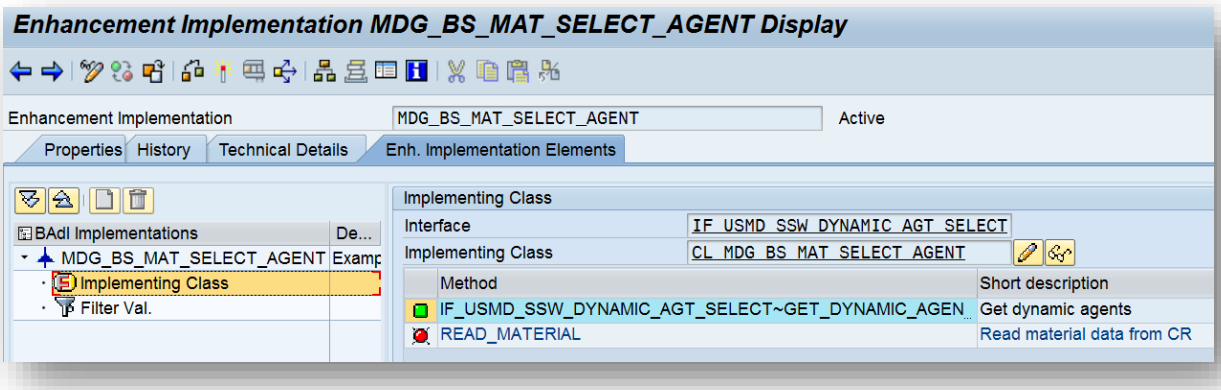
3.2.2 Create BAdI Implementation



3.2.3 Create Filter

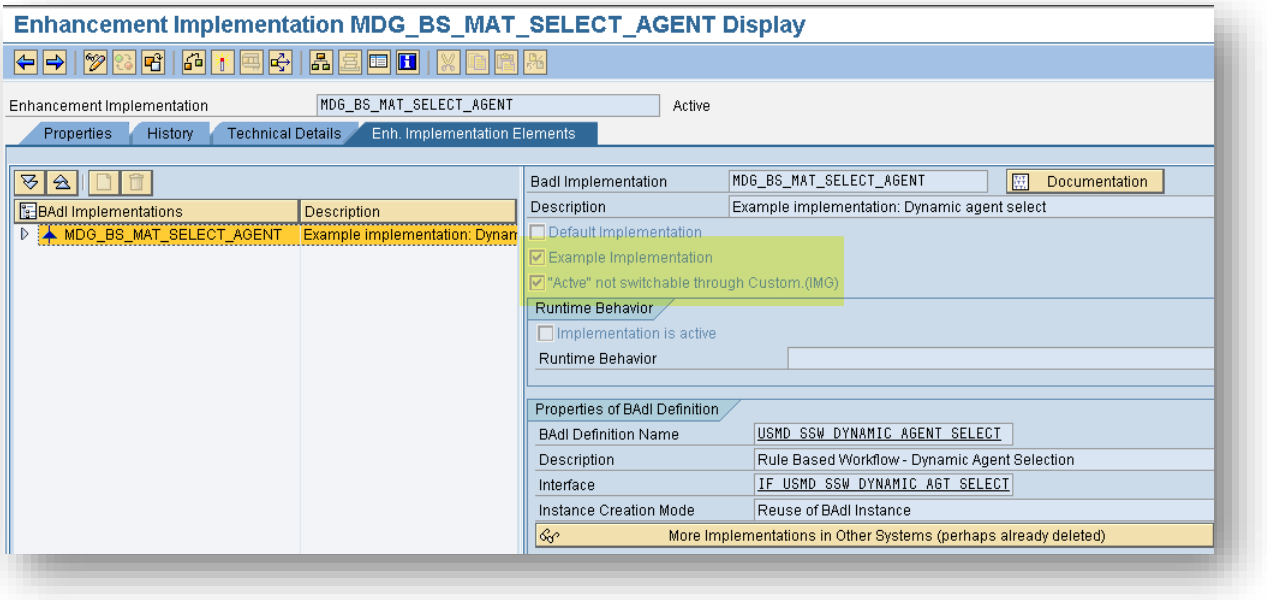


3.2.4 Method IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_AGENTS

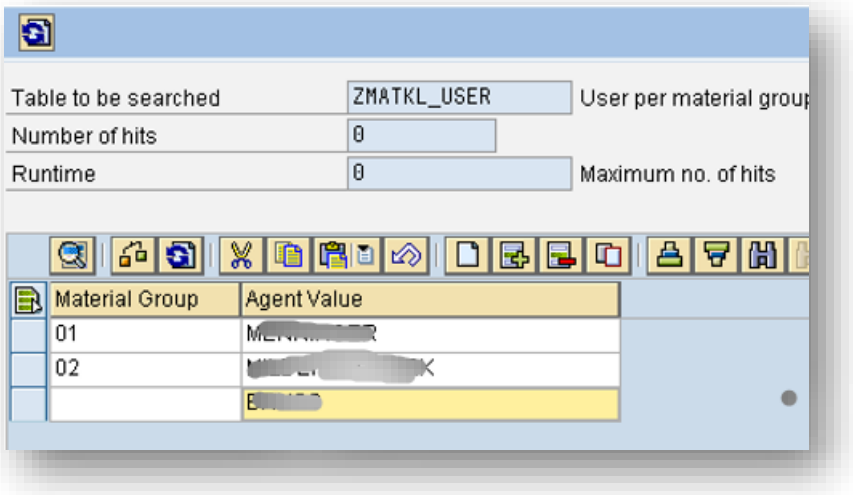


For the interface method you can use and adapt the code from example enhancement implementation MDG_BS_MAT_SELECT_AGENT (Example implementation: Dynamic agent select). Implementing class is

CL_MDG_BS_MAT_SELECT_AGENT that has interface method IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_AGENTS and private method READ_MATERIAL.



3.2.5 Maintain your Z-Table



3.3 Check Workflow Log

You can check with Transaction SWI6 if the synchronous system method was successful.
www.sap.com.

4 Additional Information

4.1 Further Reading

4.1.1 Information on SAP MDG on SAP S/4HANA

- Exchange knowledge: SAP Community | Q&A | Blog
- Try SAP Master Data Governance on S/4HANA for free: Trial Version
- Try SAP Master Data Governance on S/4HANA on the SAP Cloud Appliance Library: S/4HANA 2022 FPS1
- Learn more: Latest Release | Help Portal | How-to Information | Key Presentations

4.1.2 SAP Roadmap Explorer

- Please see the roadmap for SAP Master Data Governance

4.1.3 Related Information

- Learn more: Floorplan Manager for Web Dynpro ABAP | How to Adapt FPM | FPM Blog | How-to Information | Service Mapping Tool | SAP S/4HANA Cookbook CVI

4.2 SAP Notes

In addition to the detailed explanations written in this document, please see the following SAP Notes for further important information.

Note	Description
1597746	Example coding for WF
1700197	Rework example BAdI implementations
1837696	BAdI enhancement with inactive data for change request
3134600	MDG-M: Supported fields in Data Model MM
1806108	Functional restrictions in MDG-M in MDG7 (incl. SP02)
2129261	Functional restrictions in MDG-M in MDG8
2284745	Functional Restrictions in MDG for Material with SAP Master Data Governance 9.0
2461516	Functional Restrictions in MDG for Material with SAP Master Data Governance 9.1
2656693	Functional Restrictions in MDG for Material in SAP Master Data Governance 9.2 and on SAP S/4HANA 1809
2816571	Functional Restrictions in MDG for Material on SAP S/4HANA 1909
2948873	Functional Restrictions in MDG for Material on SAP S/4HANA 2020
3070012	Functional Restrictions in MDG for Material on SAP S/4HANA 2021
3219945	Functional Restrictions in MDG for Material on SAP S/4HANA 2022
3374998	Functional Restrictions in MDG for Material on SAP S/4HANA 2023