



PUBLIC

How-To: Enable Dynamic Parallel Approval for Company Code Data in Rule-based Workflow

Applicable Releases:

All

Version 2.1

April 2025

Document History

Document Version	Description
1.0	First official release of this guide
1.1	Updated broken links and search help information
1.2	Updated new SAP Community links (October 2016)
2.0	Complete Update (April 2022)
2.1	Format Update (April 2025)

Table of contents

Business Scenario.....	4
Special Scenario.....	4
Background Information	5
Step by Step Explanation	6
Customizing	6
Create new Change Request Type.....	6
Define Workflow Step	7
Activate Highlighting.....	8
Define Service (Cross Client).....	9
BRF+ Tables	9
Enhancement Spot: USMD_SSW_SERVICE_PROCESSOR	11
Create Enhancement Implementation for USMD_SSW_SYSTEM_METHOD_CALLER	11
Create Enhancement Implementation for USMD_SSW_PARA_RESULT_HANDLER.....	12
Create Enhancement Implementation for USMD_SSW_DYNAMIC_AGENT_SELECT	16
Process	19
Additional Information.....	22
Further Reading.....	22
Information on SAP MDG on SAP S/4HANA	22
SAP Roadmap Explorer	22
Related Information	22
SAP Notes	22

Business Scenario

SAP Master Data Governance 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-F uses the standard workflow templates **WS75700027** and **WS75700040** as default templates. However, the rule-based workflow template **WS60800086** can also be used. This How To Guide describes an example of the account approval process using the decision tables of the rule-based workflow and create parallel approval workflow steps when the parallel number is determined dynamically. The guide shows all relevant customizing and implementation details.

Special Scenario

Generally, when the end user requests a new account, company code data is required, and you can apply several company codes, depending on business requirements. For this, a workflow step is needed to approve all company codes. The workflow continues only when all the company code owners have given their approval.

This How To Guide also addresses the parallel approval requirements for G/L account company codes with the dynamic determination of parallel branches.

Background Information

The Business Add-In (BAI) `USMD_SSW_PARA_RESULT_HANDLER` is used to merge the result of the parallel workflow items. You can use this BAI to implement the result of a parallel workflow merge in the rule-based workflow. The BAI uses the method `HANDLE_PARALLEL_RESULT` to handle and merge the results of the parallel workflows into one result. The input for this BAI is the change request number, current step number, parallel step action table, 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 BAI 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 BAI implementation, having the service name as the input parameter enables you to separate the processing logic based on the service name input. With this BAI you can change the workflow generic-context table in the workflow. This BAI also returns the next workflow step, the action taking place in the workflow step, and the message table.

Requirements

You have defined the filter value Service Name in view `V_USMD201C_SSW`. You need to create a separate implementation for the handling of a specific parallel result.

Standard settings

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

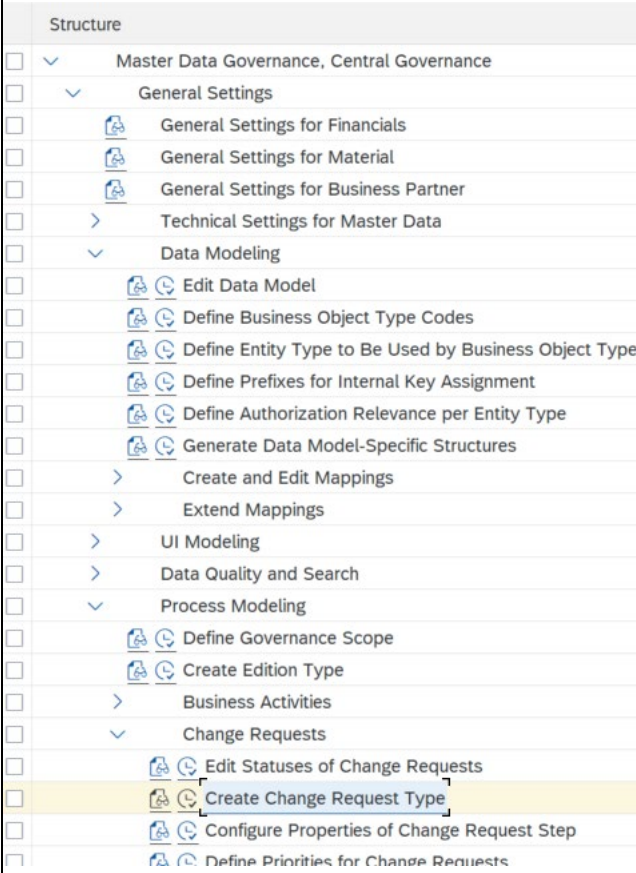
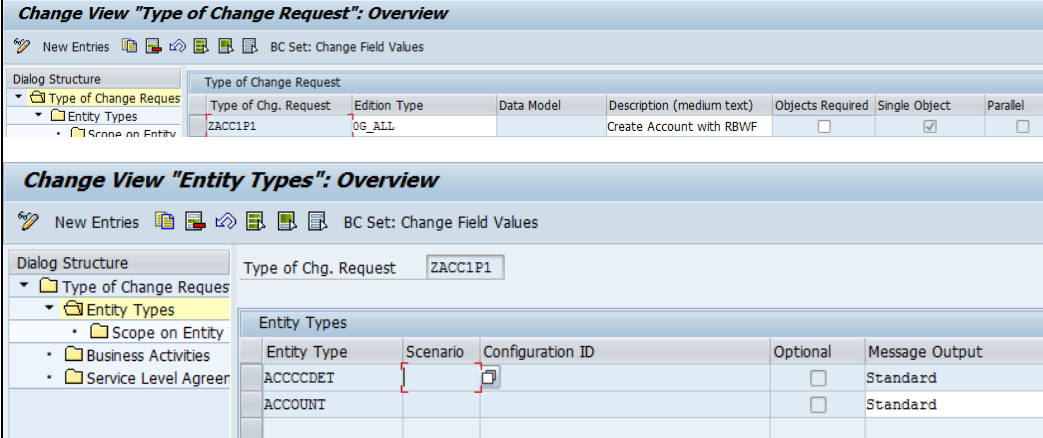
Activities

For information about implementing [BAIs](#) in the context of the [Enhancement Concept](#), see the SAP Library for SAP NetWeaver under [BAIs - Embedding in the Enhancement Framework](#).

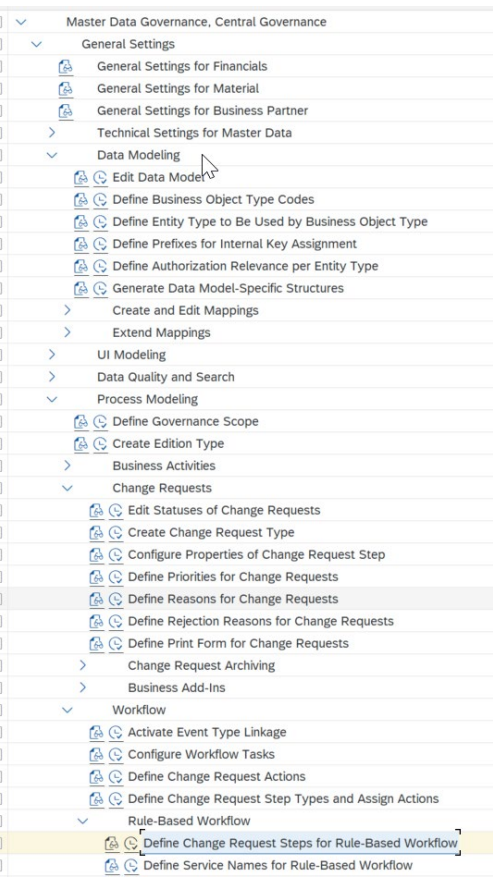
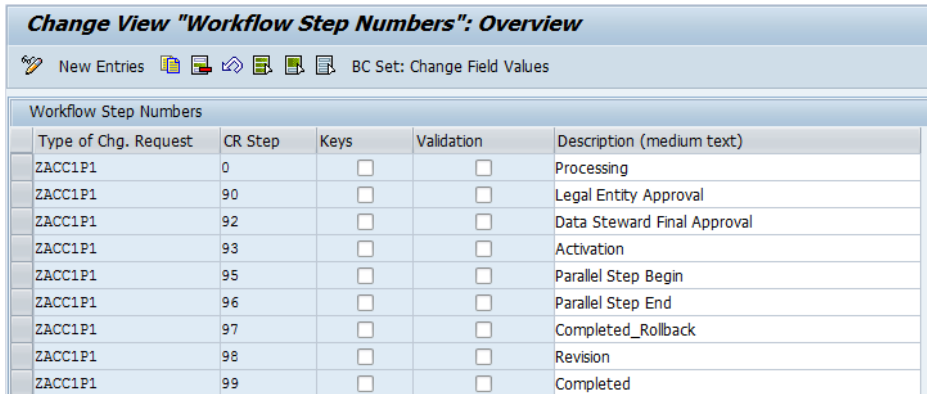
Step by Step Explanation

Customizing

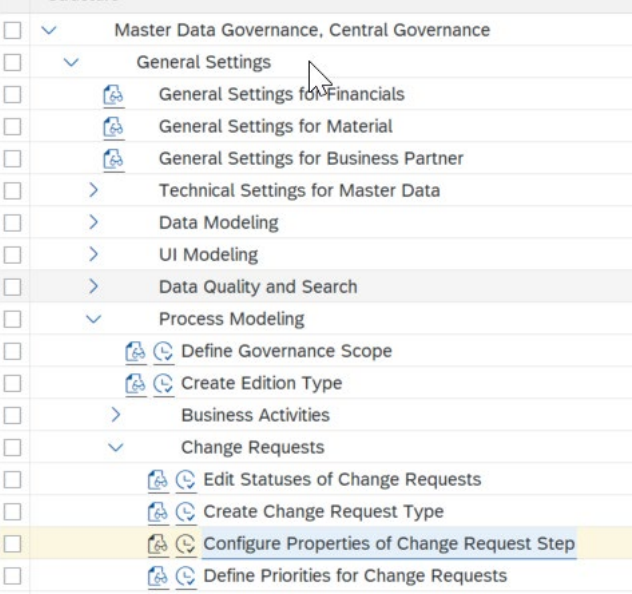
Create new Change Request Type

Step	Explanation	Screenshot
1	Start transaction MDGIMG. Navigate to <i>General Settings > Process Modeling > Change Requests > Change Requests</i>	 <p>The screenshot shows the SAP MDGIMG transaction menu. The 'Change Requests' option is highlighted in yellow. The menu structure is as follows:</p> <ul style="list-style-type: none">Structure<ul style="list-style-type: none">Master Data Governance, Central Governance<ul style="list-style-type: none">General Settings<ul style="list-style-type: none">General Settings for FinancialsGeneral Settings for MaterialGeneral Settings for Business PartnerTechnical Settings for Master DataData Modeling<ul style="list-style-type: none">Edit Data ModelDefine Business Object Type CodesDefine Entity Type to Be Used by Business Object TypeDefine Prefixes for Internal Key AssignmentDefine Authorization Relevance per Entity TypeGenerate Data Model-Specific StructuresCreate and Edit MappingsExtend MappingsUI ModelingData Quality and SearchProcess Modeling<ul style="list-style-type: none">Define Governance ScopeCreate Edition TypeBusiness ActivitiesChange Requests<ul style="list-style-type: none">Edit Statuses of Change RequestsCreate Change Request TypeConfigure Properties of Change Request StepDefine Priorities for Change Requests
2	Mark a similar CR type and press <i>Copy</i> . Change the name and description and press <i>copy all</i> .	 <p>The screenshot shows the SAP MDGIMG transaction. The 'Change View Type of Change Request: Overview' screen is displayed, showing the 'Type of Change Request' table. The 'Type of Chg. Request' is 'ZACC1P1' and the 'Edition Type' is 'OG_ALL'. The 'Description (medium text)' is 'Create Account with RBWF'. The 'Objects Required' checkbox is checked. The 'Single Object' checkbox is checked. The 'Parallel' checkbox is checked.</p> <p>The 'Change View Entity Types: Overview' screen is also displayed, showing the 'Entity Types' table. The 'Entity Type' is 'ACCCDEIT' and the 'Scenario' is 'ZACC1P1'. The 'Configuration ID' is '1'. The 'Optional' checkbox is checked. The 'Message Output' is 'Standard'.</p>

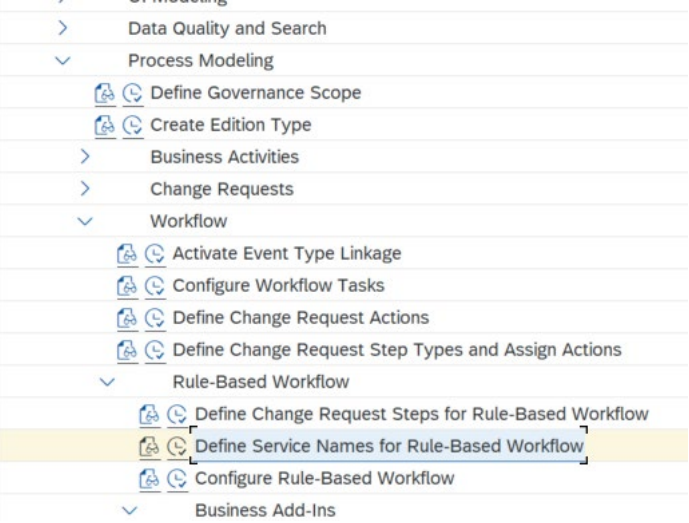
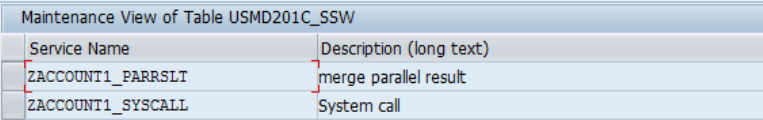
Define Workflow Step

Step	Explanation	Screenshot																																																		
1	Start transaction MDGIMG. Navigate to <i>General Settings > Process Modeling > Workflow > Rule-Based Workflow > Configure Rule-Based Workflow > Define Change Request Steps for Rule-Based Workflow</i> .																																																			
2	Maintain the relevant CR steps.	 <table><thead><tr><th>Type of Chg. Request</th><th>CR Step</th><th>Keys</th><th>Validation</th><th>Description (medium text)</th></tr></thead><tbody><tr><td>ZACC1P1</td><td>0</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Processing</td></tr><tr><td>ZACC1P1</td><td>90</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Legal Entity Approval</td></tr><tr><td>ZACC1P1</td><td>92</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Data Steward Final Approval</td></tr><tr><td>ZACC1P1</td><td>93</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Activation</td></tr><tr><td>ZACC1P1</td><td>95</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Parallel Step Begin</td></tr><tr><td>ZACC1P1</td><td>96</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Parallel Step End</td></tr><tr><td>ZACC1P1</td><td>97</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Completed_Rollback</td></tr><tr><td>ZACC1P1</td><td>98</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Revision</td></tr><tr><td>ZACC1P1</td><td>99</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>Completed</td></tr></tbody></table>	Type of Chg. Request	CR Step	Keys	Validation	Description (medium text)	ZACC1P1	0	<input type="checkbox"/>	<input type="checkbox"/>	Processing	ZACC1P1	90	<input type="checkbox"/>	<input type="checkbox"/>	Legal Entity Approval	ZACC1P1	92	<input type="checkbox"/>	<input type="checkbox"/>	Data Steward Final Approval	ZACC1P1	93	<input type="checkbox"/>	<input type="checkbox"/>	Activation	ZACC1P1	95	<input type="checkbox"/>	<input type="checkbox"/>	Parallel Step Begin	ZACC1P1	96	<input type="checkbox"/>	<input type="checkbox"/>	Parallel Step End	ZACC1P1	97	<input type="checkbox"/>	<input type="checkbox"/>	Completed_Rollback	ZACC1P1	98	<input type="checkbox"/>	<input type="checkbox"/>	Revision	ZACC1P1	99	<input type="checkbox"/>	<input type="checkbox"/>	Completed
Type of Chg. Request	CR Step	Keys	Validation	Description (medium text)																																																
ZACC1P1	0	<input type="checkbox"/>	<input type="checkbox"/>	Processing																																																
ZACC1P1	90	<input type="checkbox"/>	<input type="checkbox"/>	Legal Entity Approval																																																
ZACC1P1	92	<input type="checkbox"/>	<input type="checkbox"/>	Data Steward Final Approval																																																
ZACC1P1	93	<input type="checkbox"/>	<input type="checkbox"/>	Activation																																																
ZACC1P1	95	<input type="checkbox"/>	<input type="checkbox"/>	Parallel Step Begin																																																
ZACC1P1	96	<input type="checkbox"/>	<input type="checkbox"/>	Parallel Step End																																																
ZACC1P1	97	<input type="checkbox"/>	<input type="checkbox"/>	Completed_Rollback																																																
ZACC1P1	98	<input type="checkbox"/>	<input type="checkbox"/>	Revision																																																
ZACC1P1	99	<input type="checkbox"/>	<input type="checkbox"/>	Completed																																																

Activate Highlighting

Step	Explanation	Screenshot
1	<p>Log on to Cross Client Customizing Client.</p> <p>Start transaction MDGIMG. Navigate to <i>General Settings</i> > <i>Process Modeling</i> > <i>Change Requests</i> > <i>Configure Properties of Change Request Step</i></p>	
2	<p>Select the new CR type <i>New Entries</i> and choose User Interface per Change Request Step. Select the Highlighting Indicator for all dialog steps.</p>	

Define Service (Cross Client)

Step	Explanation	Screenshot
1	<p>Log on to Cross Client Customizing Client.</p> <p>Start transaction MDGIMG. Navigate to <i>General Settings</i> > <i>Process Modeling</i> > <i>Workflow</i> > <i>Rule-Based Workflow</i> > <i>Configure Rule-Based Workflow</i> > <i>Define Service Names for Rule-Based Workflow</i>.</p>	
2	<p>Press <i>New Entries</i> and create 3 new entries with the following data: <i>Service Name</i> and <i>Description</i>.</p> <p>Press <i>Save</i>.</p>	 <p>And ZACCOUNT1_DYNAGENT</p>

BRF+ Tables

Start transaction MDGIMG. Navigate to *General Settings* > *Process Modeling* > *Workflow* > *Rule-Based Workflow* > *Configure Rule-Based Workflow*. Enter the newly created change request type and press *Continue*. Set up the BRF+ tables.

Single Value Decision Table

Decision Table: DT_SINGLE_VAL_ZACC1P1 | Active version available

Back | Display | Check | Save | Activate | Delete | More

General

Detail

Additional Actions | Context Overview | Start Simulation

Table Contents

Find: | Next | Previous

CR Previous Step	Previous Action	Condition Alias	New Chng. Req. Step	New CR Status	Merge Type	Merge Parameter	Dyn Agt Sel Service
00 (Processing)	...	100	95 (Parallel Step Begin)	04 (Final Check to Be Performed)	...	...	...
95 (Parallel Step Begin)	...	1	90 (Legal Entity Approval)	2A (Legal Entity To Be Approved)	B (BAD)	ZACCOUNT1_PARRSLT (merge parallel result)	ZACCOUNT1_DYNAGE
90 (Legal Entity Approval)	...	7	99 (Completed)	...	...	...	...
96 (Parallel Step End)	04 (Reject)	3	98 (Revision)	10 (To Revise: Perform Changes)	...	...	...
96 (Parallel Step End)	03 (Approve)	9	92 (Data Steward Final Approval)	...	...	...	...
92 (Data Steward Final Approval)	04 (Reject)	13	98 (Revision)	10 (To Revise: Perform Changes)	...	...	...
92 (Data Steward Final Approval)	03 (Approve)	14	93 (Activation)	05 (Final Check Approved)	...	...	...
98 (Revision)	07 (Resubmit)	11	95 (Parallel Step Begin)	02 (Changes to Be Executed)	...	...	...
98 (Revision)	08 (Withdraw)	12	97 (Completed_Rollback)	...	...	...	...
93 (Activation)	32 (Activation failed)	17	99 (Completed)	10 (To Revise: Perform Changes)	...	...	...
93 (Activation)	31 (Activation successful)	16	99 (Completed)	05 (Final Check Approved)	...	...	...
97 (Completed_Rollback)	...	18	99 (Completed)	06 (Final Check Rejected)	...	...	...

Non-User Agent Decision Table

Decision Table: DT_NON_USER_AGT_GRP_ZACC1P1

Back | Display | Check | Save | Activate | Delete | More

General

Detail

Additional Actions | Context Overview | Start Simulation

Table Contents

Find: | Next | Previous | Table Settings

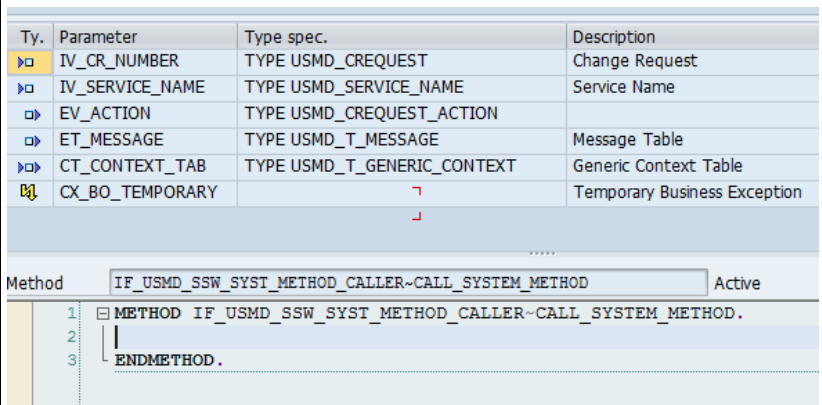
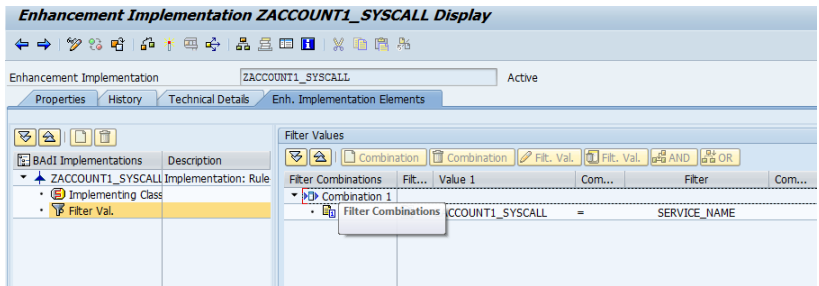
Condition Alias	Agent Group	Process Pattern	Service Name
100	BG1	02 (Synchronous System Method)	ZACCOUNT1_SYSCALL (System call)
7 ; 16 ; 17	BG2	99 (Complete (Sub-)Workflow)	...
14	BG4	05 (Activation (Do Not Bypass Snapsh...	...
12	BG3	08 (Roll Back Change Request)	...

Enhancement Spot: USMD_SSW_SERVICE_PROCESSOR

Create Enhancement Implementation for USMD_SSW_SYSTEM_METHOD_CALLER

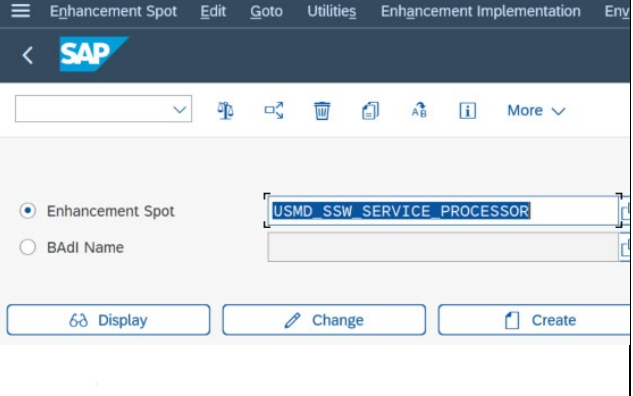
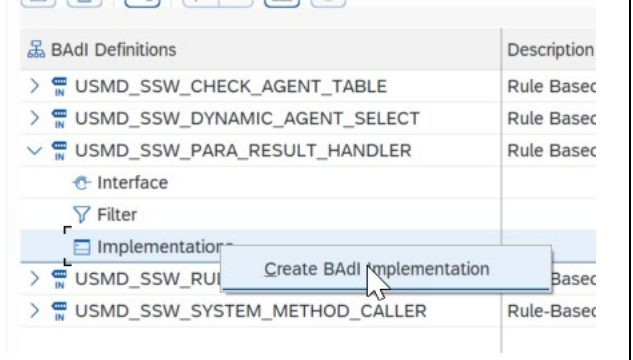
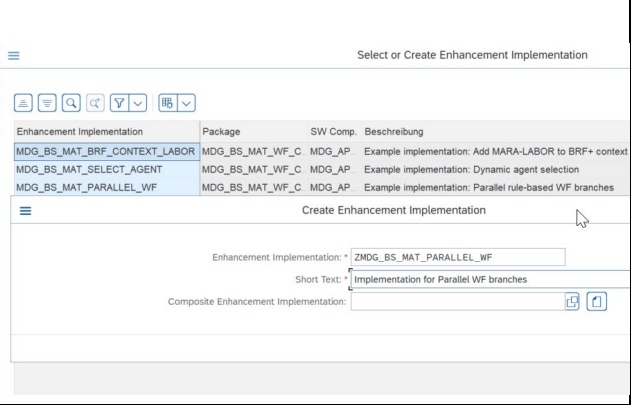
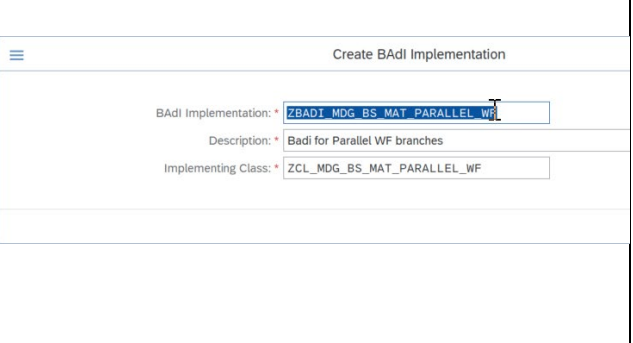
In this chapter a Business Add-In (BAdI) implementation for BAdI USMD_SSW_SYSTEM_METHOD_CALLER is created. You might refer to the BAdI documentation for further details. The service name defined in a previous chapter serves as BAdI filter.

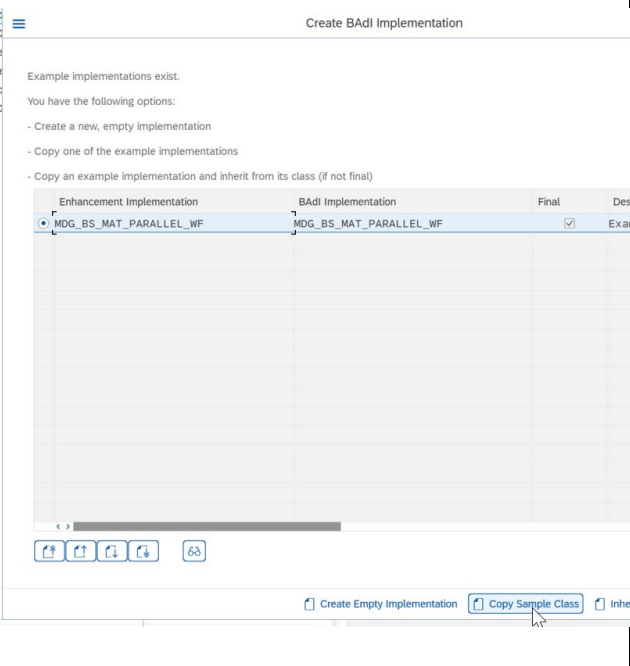
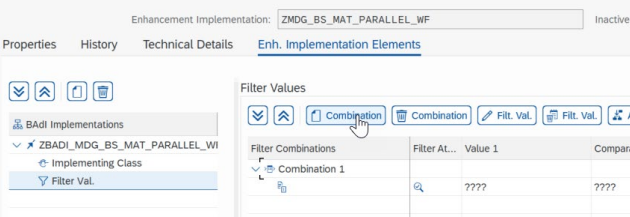
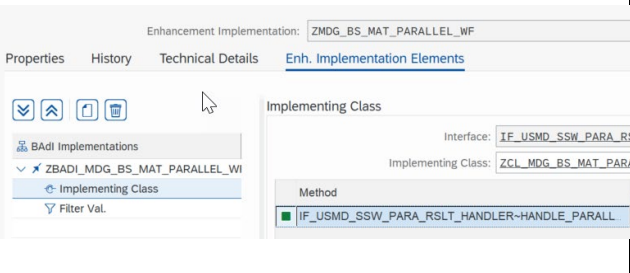
Step	Explanation	Screenshot
	Follow the customizing path.	
1	Or start transaction SE18. Select option <i>Enhancement Spot Name</i> and enter USMD_SSW_SERVICE_PROCESSOR.	
2	Open the context menu on the <i>Implementations for BAdI USMD_SSW_SYSTEM_METHOD_CALLER</i> with right click on and chose <i>Create BAdI Implementation</i> . In pop-up <i>Select or Create Enhancement Implementation</i>	

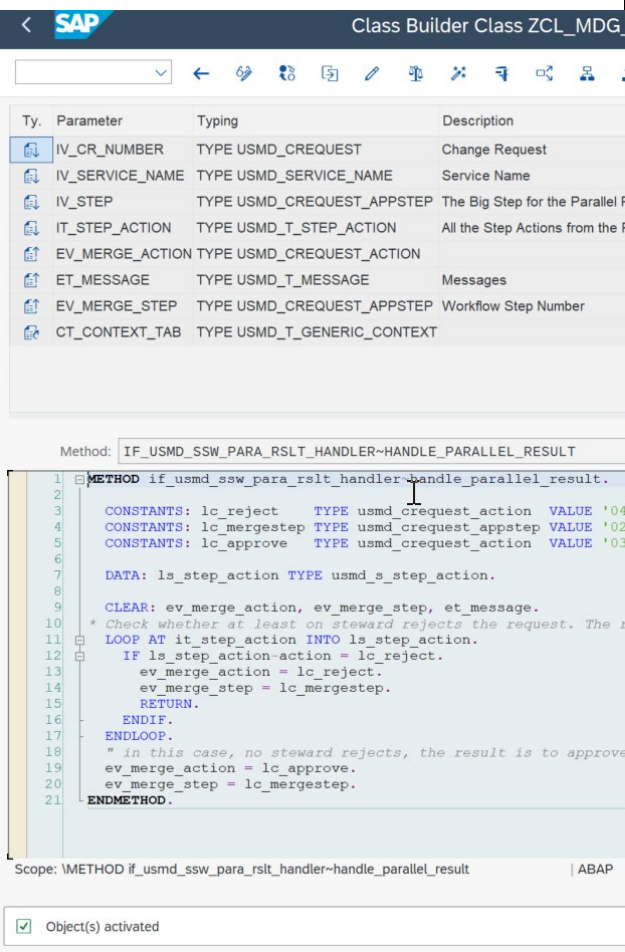
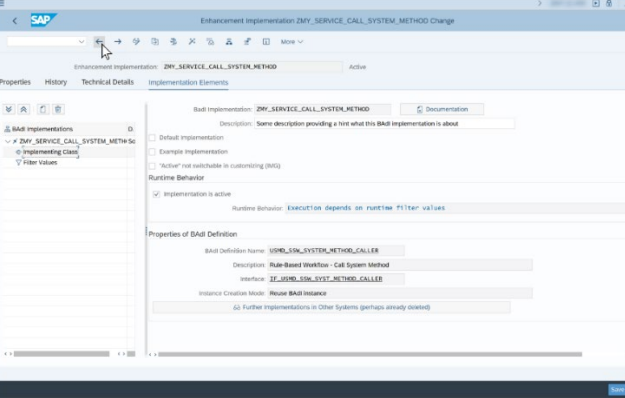
	chose <i>Create Enhancement Implementation</i> .	
3	<p>Create <i>Enhancement Implementation</i>, BAdI Implementation (do not copy any sample class, create empty implementation and empty class),</p> <p>BAdI Implementation and Implementing Class. Leave the implementation of the interface method</p> <p>IF_USMD_SSW_SYST_METHOD_CALLER~CALL_SYSTEM_METHOD empty.</p>	
4	<p>Navigate to the <i>Filter Values</i> for the BAdI implementation and go to edit mode. Create a filter. Double-click the combination or press <i>Value</i>. In pop-up <i>Change Filter Value</i> enter/ select the relevant data.</p> <p>Press <i>Continue</i>.</p> <p>Press <i>Save</i> and <i>Activate</i>.</p>	

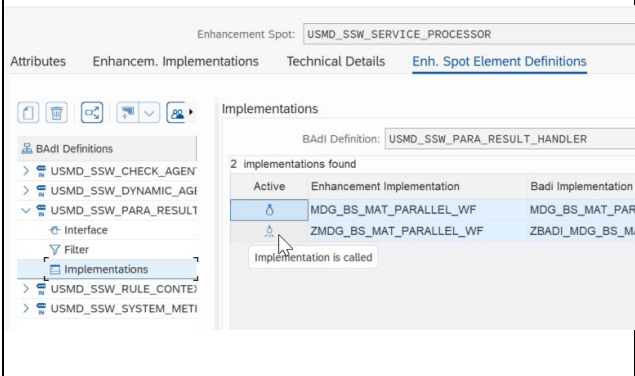
Create Enhancement Implementation for USMD_SSW_PARA_RESULT_HANDLER

In this chapter a Business Add-In (BAdI) implementation for BAdI USMD_SSW_PARA_RESULT_HANDLER is created. The BAdI uses the method `HANDLE_PARALLEL_RESULT` to handle and merge the results of the parallel workflows into one result. You might refer to the BAdI documentation for further details. The service name defined in a previous chapter serves as BAdI filter. The actual implementation of the BAdI method depends on the use case that should be accomplished.

Step	Explanation	Screenshot
1	Start transaction SE18. Select option <i>Enhancement Spot Name</i> and enter USMD_SSW_SERVICE_PROCESSOR Press <i>Display</i> .	
2	Open the context menu on the Implementations for BAdI USMD_SSW_PARA_RESULT_HANDLER with right click on and chose <i>Create BAdI Implementation</i> . In pop-up <i>Select or Create Enhancement Implementation</i> chose <i>Create Enhancement Implementation</i> .	
3	In pop-up <i>Create Enhancement Implementation</i> enter the necessary data. Press <i>Creation of Enhancement</i> . Chose a suitable development package or store the enhancement implementation as local object depending on your needs.	
4	In pop-up <i>Select or Create Enhancement Implementation</i> amongst others the new enhancement implementation is listed. Select it and press <i>Select Specified Enhancement Implementation</i> . In pop-up <i>Create BAdI Implementation</i> enter the necessary data: <i>Press Continue</i> .	

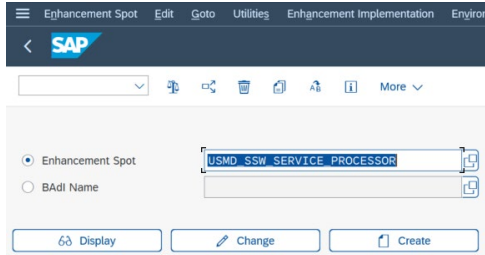
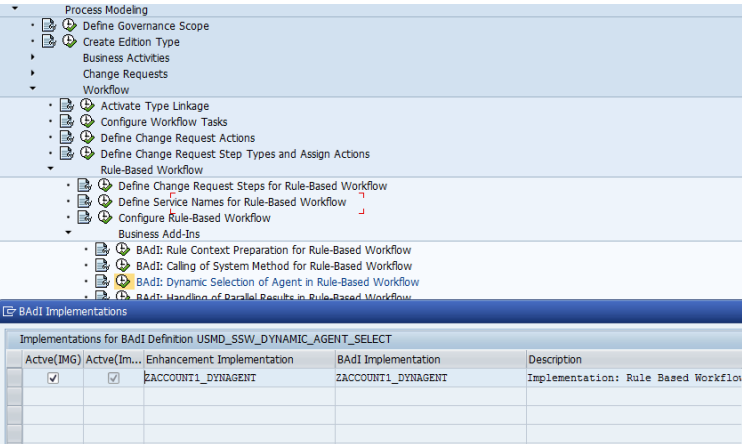
5	<p>In the next pop-up chose enhancement implementation MDG_BS_MAT_PARALLEL_WF and press <i>Copy Sample Class</i>. Press Save.</p>	
6	<p>Navigate to the <i>Filter Values</i> for the BAdI implementation and go to edit mode. Create a filter, matching the service defined in IMG activity <i>Define Service Names for Rule-Based Workflow</i>.</p>	
7	<p>Double-click the combination or press <i>Value</i>. In pop-up <i>Change Filter Value</i> enter/ select the relevant data. Press <i>Continue</i>. Press Save.</p>	<p>ZACCOUNT1_PARRSLT</p>
8	<p>Navigate to <i>Implementing Class</i> and double-click BAdI method IF_USMD_SSW_PARA_RSLT_HANDLER~HANDLE_PARALLEL_RESULT</p>	

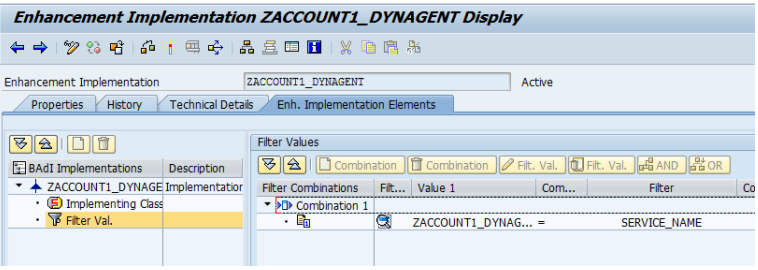
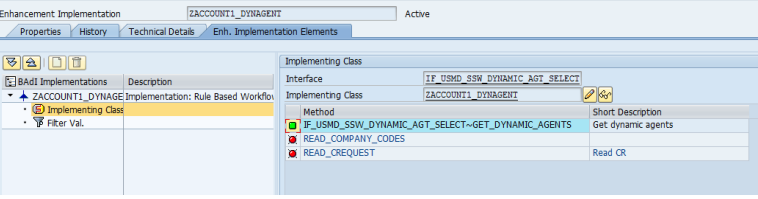
9	<p>Go to edit mode. Change the example implementation according to your needs. Activate the method. In case other objects are still to be adjusted, select them too for activation.</p>	 <p>The screenshot shows the SAP Class Builder interface for the class ZCL_MDG. The Method tab is selected, displaying the method IF_USMD_SSW_PARA_RSLT_HANDLER~HANDLE_PARALLEL_RESULT. The method is currently in Example Implementation mode. The Object(s) activated checkbox is checked, indicating the method is active. The code editor shows the following implementation:</p> <pre> 1 METHOD if_usmd_ssw_para_rslt_handler~handle_parallel_result. 2 3 CONSTANTS: lc_reject TYPE usmd_crequest_action VALUE '04' 4 lc_mergestep TYPE usmd_crequest_appstep VALUE '03' 5 lc_approve TYPE usmd_crequest_action VALUE '03' 6 7 DATA: ls_step_action TYPE usmd_s_step_action. 8 9 CLEAR: ev_merge_action, ev_merge_step, et_message. 10 * Check whether at least on steward rejects the request. The s 11 LOOP AT it_step_action INTO ls_step_action. 12 IF ls_step_action-action = lc_reject. 13 ev_merge_action = lc_reject. 14 ev_merge_step = lc_mergestep. 15 RETURN. 16 ENDIF. 17 ENDLOOP. 18 * in this case, no steward rejects, the result is to approve 19 ev_merge_action = lc_approve. 20 ev_merge_step = lc_mergestep. 21 ENDMETHOD. </pre>
10	<p>Navigate back to Enhancement Implementation ZMDG_BS_MAT_PARALLEL_WF and check the status and the runtime behavior.</p>	 <p>The screenshot shows the SAP Enhancement Implementation ZMDG_BS_MAT_PARALLEL_WF in Active status. The Properties tab is selected, displaying the Implementation Elements section. The Runtime Behavior is set to Execution depends on runtime filter values. The Properties of BAI Definition section shows the BAI Definition Name as ZMDG_BS_MAT_PARALLEL_WF, the Description as Rule-Based Workflow - Call System Method, and the Interface as IF_USMD_SSW_PARA_RSLT_HANDLER.</p>

11	<p>Check the activation status (column Active) for your enhancement implementation. It should be <i>Active</i> or <i>Implementation is called</i>.</p> <p>You might need press <i>Refresh</i> to get the current status.</p>	
----	--	--

Create Enhancement Implementation for USMD_SSW_DYNAMIC_AGENT_SELECT

In this chapter a Business Add-In (BAdI) implementation for BAdI USMD_SSW_DYNAMIC_AGENT_SELECT is created. This BAdI uses the method GET_DYNAMIC_AGENTS to implement dynamic agent selection in the rule-based workflow. You might refer to the BAdI documentation for further details. The service name defined in a previous chapter serves as BAdI filter. The actual implementation of the BAdI method depends on the use case that should be accomplished.

Step	Explanation	Screenshot										
1	<p>Start transaction SE18. Select option <i>Enhancement Spot Name</i> and enter USMD_SSW_SERVICE_PROCESSOR.</p> <p>Press <i>Display</i>.</p>											
2	<p>Or use the MDGIMG. Open the context menu on the Implementations for BAdI USMD_SSW_DYNAMIC_AGENT_SELECT with right click on and chose <i>Create BAdI Implementation</i>.</p> <p>In pop-up <i>Select or Create Enhancement Implementation</i> chose <i>Create Enhancement Implementation</i>.</p>	 <table><tr><th>Active(IMG)</th><th>Active(Im...</th><th>Enhancement Implementation</th><th>BAdI Implementation</th><th>Description</th></tr><tr><td>✓</td><td>✓</td><td>ZACCOONT1_DYNAGENT</td><td>ZACCOONT1_DYNAGENT</td><td>Implementation: Rule Based Workflow</td></tr></table>	Active(IMG)	Active(Im...	Enhancement Implementation	BAdI Implementation	Description	✓	✓	ZACCOONT1_DYNAGENT	ZACCOONT1_DYNAGENT	Implementation: Rule Based Workflow
Active(IMG)	Active(Im...	Enhancement Implementation	BAdI Implementation	Description								
✓	✓	ZACCOONT1_DYNAGENT	ZACCOONT1_DYNAGENT	Implementation: Rule Based Workflow								

3	<p>Navigate to the <i>Filter Values</i> for the BAdI implementation and go to edit mode. Create a filter, matching the service defined in IMG activity <i>Define Service Names for Rule-Based Workflow</i>.</p>	
8	<p>Navigate to <i>Implementing Class</i> and double-click BAdI method IF_USMD_SSW_DYNAMIC_AGT_SELECT ~GET_DYNAMIC_AGENTS.</p>	

Implementation proposal:

Ty.	Parameter	Type spec.	Description
IV	IV_CR_NUMBER	TYPE USMD_CREQUEST	Change Request
IV	IV_SERVICE_NAME	TYPE USMD_SERVICE_NAME	Service Name
ET	ET_MESSAGE	TYPE USMD_T_MESSAGE	Messages
IV	IV_PAR_AGT_GRP_NUM	TYPE USMD_AGENT_GROUP OPTIONAL	Agent Group
CT	CT_NON_USER_AGENT_GROUP	TYPE USMD_T_NON_USER_AGENT_GROUP	
CV	CV_EXP_COMP_HOURS	TYPE INT2	2 byte integer (signed)
CT	CT_USER_AGENT_GROUP	TYPE USMD_T_USER_AGENT_GROUP	
CT	CT_CONTEXT_TAB	TYPE USMD_T_GENERIC_CONTEXT	
CV	CV_NEW_STEP	TYPE USMD_CREQUEST_APPSTEP	Workflow Step Number
CV	CV_NEW_CR_STATUS	TYPE USMD_CREQUEST_STATUS	Status of Change Request
CV	CV_MERGE_TYPE	TYPE USMD_STATUS_MERGE_TYPE	
CV	CV_MERGE_PARAM	TYPE USMD_SERVICE_NAME	

Method	IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_AGENTS	Active
1	METHOD IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_AGENTS.	

The method reads all company codes of the account that are requested by the current change request, and then reads the relevant approver and sets it to the exporting parameter CT_USER_AGENT_GROUP of method IF_USMD_SSW_DYNAMIC_AGT_SELECT~GET_DYNAMIC_AGENTS.

To implement this method, perform the following steps:

1. Retrieve the object list of change request IV_CR_NUMBER by calling the data model method or reading the USMD1213 table.
2. Normally a customer table stores the approvers for company codes. You can find all relevant approvers (by user or organizational unit) using the object list of company codes. Or you have other logic to find the relevant approvers which is not scope of this document.
3. Each entry in CT_USER_AGENT_GROUP represents one branch of parallel approval steps. Enter STEP_TYPE as value 2. AGENT_GROUP should be unique for all entries.

```
IF_USMD_SSW_DYNAMIC_AGT_SELECT-GET_DYNAMIC_AGENTS Active
CLEAR: ls_user_agent.
ls_user_agent_group-agent_group = '10'.
ls_user_agent_group-STEP_TYPE = '2'.
ls_user_agent-user_type = 'S'.
ls_user_agent-user_value = 'POSITION1'.
append ls_user_agent to ls_user_agent_group-USER_AGENT.
APPEND ls_user_agent_group TO ct_user_agent_group.

clear ls_user_agent_group.
ls_user_agent_group-agent_group = '20'.
ls_user_agent_group-STEP_TYPE = '2'.
ls_user_agent-user_type = 'O'.
ls_user_agent-user_value = 'ORGUNIT1'.
append ls_user_agent to ls_user_agent_group-USER_AGENT.
APPEND ls_user_agent_group TO ct_user_agent_group.

clear ls_user_agent_group.
ls_user_agent_group-agent_group = '30'.
ls_user_agent_group-STEP_TYPE = '2'.
ls_user_agent-user_type = 'US'.
ls_user_agent-user_value = 'USER1'.
append ls_user_agent to ls_user_agent_group-USER_AGENT.
APPEND ls_user_agent_group TO ct_user_agent_group.

CV_NEW_STEP = '90'.
ENDMETHOD.
```

In case there is only one company code or only one branch is generated, in order to make the decision table easy, it's recommended to use second branch using dummy system call, like this:

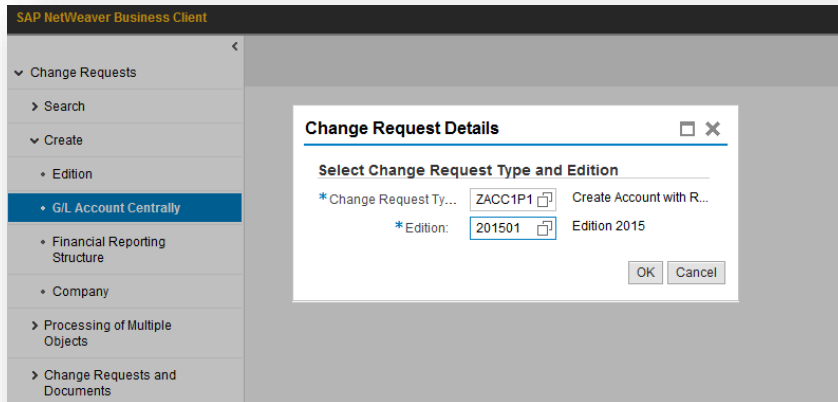
```
clear ls_non_user_agent_group.
ls_non_user_agent_group-agent_group = '20'.
ls_non_user_agent_group-process_pattern = '02'.
ls_non_user_agent_group-service_name = 'ZACCOUNT1_SYSCALL'.
"append ls_user_agent to ls_user_agent_group-USER_AGENT.
APPEND ls_non_user_agent_group TO ct_non_user_agent_group.
*
* clear ls_user_agent_group
```

4. Set the return step as CV_NEW_STEP.

Process

In this chapter the new process is tested. A G/L account is created using the newly created and configured change request type ZACC1P1 and parallel workflow items are created.

Create a new G/L account:



G/L Account: INT/231456, Test Account

Save Submit Show Check Undo Redo

General Data	Process Data
Change Request ID: 2288	Status: Changes to Be Executed
*Description: rule based workflow testing	Current WorkItem: New Change Request
Priority: [v]	Created On/By: 31.03.2014 16:18:38 Kefeng Wang
Due Date: [T]	Changed On/By: 31.03.2014 16:19:36 Kefeng Wang
Reason: [v]	Type of Change Request: Create Account with RBWF
Replication Timing: Manually Started After Release of Edition [v]	

Validity

Account Details Edit

General Data	Administrative Data
Chart of Accounts: INT Sample chart of accounts	New Account: [v]
Account / Name: 231456 Test Account	User Responsible: [v]
Long Text: Test Account for Rule based workflow	Person Responsible: [v]

Control Data	Audit Information
*Account Group: GL General G/L accounts	Created On/By: [v]
*Account Type: Balance Sheet Account [v]	Changed On/By: [v]
P&L Statement Account Ty... [v]	
Functional Area: [v]	

Account Descriptions

Account Consolidation Details

Account in Company Codes New Copy

Actions	Company Code	Company Code Description
Details	0001	MDG Company Code 0001
Details	1000	MDG Company Code 1000
Details	GB01	Country Template GB

Workflow log after submission:

Workflow Log for Change Request 2286					
Related Services					
Status	Legal Entity To Be Approved	Description	rule based workflow testing	Requester	
				Current Processor(s)	Kefeng Wang
View: [Standard View] Print Version Export Background Steps					
Work Item ID	Work Item Description	Processor	Work Item Type	Work Item Status	De
412942	Process Change Request 2286 (rule based workflow testing)		Dialog Step	Ready	
412935	Process Change Request 2286 (rule based workflow testing)		Dialog Step	Ready	
412928	Process Change Request 2286 (rule based workflow testing)		Dialog Step	Ready	

Steps	Created by	Workflow-System	Task ID	Creation Date/Time	Execution Time
MDAF Rule-Based Workflow	Kefeng Wang	412905	1 WS60800086	31.03.2014 - 16:20:49	22s
Get Change Request Type by Change Request Number	Workflow-System	412906	4 TS60807944	31.03.2014 - 16:20:49	
UNTIL Loop			8		
Loop 1					
Loop 2					
Check if there is assigned agent	Workflow-System	412916	14	31.03.2014 - 16:20:50	
Check If Single Agent-Group Processing	Workflow-System	412916	45 TS60807946	31.03.2014 - 16:20:51	
Check if Single/Parallel Processing	Workflow-System	412917	50	31.03.2014 - 16:20:51	
Get Agent Group	Workflow-System	412917	152 TS60807953	31.03.2014 - 16:20:51	
Get Parallel Change Request Group	Workflow-System	412918	157 TS60807955	31.03.2014 - 16:20:51	
MDAF Single Step Workflow New			162	31.03.2014 - 16:20:51	
Loop 2					
MDAF Rule-Based Workflow	Workflow-System	412921	162 WS60800086	31.03.2014 - 16:20:51	26s
MDAF Rule-Based Workflow	Workflow-System	412920	162 WS60800086	31.03.2014 - 16:20:51	26s
MDAF Rule-Based Workflow	Workflow-System	412919	162 WS60800086	31.03.2014 - 16:20:51	27s

Open a work item:

G/L Account: INT/231456, Test Account

Save Approve Reject Show Check Workitems Change Documents Workflow Log Undo Redo

Change Request Edit

General Notes Attachments

General Data

Change Request ID: 2286
Description: rule based workflow testing
Priority:
Due Date:
Reason:
Replication Timing: Manually Started After Release of Edition

Process Data

Status: Legal Entity To Be Approved
Current Workitem: Process Change Request 2286 (rule based workflo...
Created On/By: 31.03.2014 16:18:38 Kefeng Wang
Changed On/By: 31.03.2014 16:20:50 Kefeng Wang
Type of Change Request: Create Account with RBWF
Step Type: Approve Change Request

Afterwards, all parallel work items are approved:

Steps	Created by	Workflow ID	Task ID
MDAF Rule-Based Workflow	Kefeng Wang	412905	1 WS6080008
Get Change Request Type by Change Request Number	Workflow-System	412906	4 TS6080794
UNTIL Loop			8
Loop 1			
Loop 2			
Check if there is assigned agent			14
Check If Single Agent-Group Processing	Workflow-System	412916	45 TS6080794
Check if Single/Parallel Processing			50
Get Agent Group	Workflow-System	412917	152 TS6080795
Get Parallel Change Request Group	Workflow-System	412918	157 TS6080795
MDAF Single Step Workflow New			162
Loop 2			
MDAF Rule-Based Workflow	Workflow-System	412921	162 WS6080008
End of Fork			231
MDAF Rule-Based Workflow	Workflow-System	412920	162 WS6080008
MDAF Rule-Based Workflow	Workflow-System	412919	162 WS6080008
Parallel Step Result Merge	Workflow-System	412955	167 TS6080795
Clear Step-Action Table	Workflow-System	412956	172 TS6080795
Check if the WF is Completed			9
Loop 3			
Loop 4			
Loop 5			
Check if there is assigned agent			14
Check If Single Agent-Group Processing	Workflow-System	412975	45 TS6080794
Check if Single/Parallel Processing			50
Get Process Pattern	Workflow-System	412976	56 TS6080794
Fork to Process Pattern			61
Set Completion Time	Workflow-System	412977	193 TS6080794
Fill Previous Processor			225
Fill Last User Agent			228
Process Change Request 2286 (rule based workflow testing)	Workflow-System	412978	73 TS6080795

G/L Account: INT/231456, Test Account

Save

Approve

Reject

Cancel

Show

Check

Change Documents

Workflow Log

Undo

Redo

Change Request

Edit

General

Notes

Attachments

General Data

Process Data

Change Request ID: 2286

Description: rule based workflow testing

Priority:

Due Date:

Reason:

Replication Timing: Manually Started After Release of Edition

Status: Final Check to Be Performed

Current Workitem: Process Change Request 2286 (rule based workflo...

Created On/By: 31.03.2014 16:18:38

Changed On/By: 31.03.2014 16:24:50

Type of Change Request: Create Account with RBWF

Step Type: Approve Change Request

Additional Information

Further Reading

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](#)

SAP Roadmap Explorer

- Please see the [roadmap for SAP Master Data Governance](#)

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](#)

SAP Notes

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

Note	Description
3372801	Upgrade or Conversion for Master Data Governance, Central Governance
3043582	MDG Customer Connection 2020
3194967	MDG Customer Connection 2021 for S/4HANA 2022
3311039	MDG Customer Connection 2023
3428179	Master Data Governance: Continuous Influence
1619534	How to Create, Enhance and Adapt FPM Applications
1637249	MDG: Information for efficient message processing
2105467	MDG Performance
2561461	Scope of support for SAP Master Data Governance (MDG)
1637249	MDG: Information for efficient message processing