



Configuration Guide for SAP Asset Information Workbench (AIW) by Utopia for S/4HANA

Release 1.0

Document History

The following table provides an overview of the most important document changes and approvals.

Version	Date	Description	Name
1.0	15/09/2017	Modified version	Sreenivasulu Reddy Zollu; Shaik Fayazoddin; Manjunath

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1. Introduction

This document provides the information required to set up SAP Asset Information Workbench (AIW) by Utopia.

1.1. Purpose

This Configuration Guide provides the information required to set up Master Data Governance (MDG) for Asset Information Workbench by Utopia (AIW).

1.2. Target Audience

This guide is designed to help the following end users:

- Functional and Technical consultants who configure the MDGIMG settings.
- System administrators who deploy and configure SAP Business objects.
- Solution Architects and Application end users who refers to the guide while using the MDG applications.

1.3. Organization

This guide primarily consists of the following sections.

- Introduction
- Prerequisites/ Before You Start
- Configuration Process

2. Prerequisites/ Before You Start

You have successfully installed and configured UGI EAM 730-SP01.

2.1. Prerequisite SAP OSS Notes

Note number	Short text	Application Component
2395896	MDG Read Buffer: Active Data removed from Buffer after Key C	CA-MDG-CMP-AF
2402164	MDG: Read Buffer - Remove Entity	CA-MDG-CMP-AF
2403348	Program termination in Multi-Record processing	CA-MDG-AF
2406084	MDG: Read Buffer - Remove, Delete, Discard of Entities	CA-MDG-CMP-AF
2348105	Remove object from the object list	CA-MDG-AF


2.1.1. Prerequisite EAM Related Utopia OSS Notes

Note number	Short text	Application Component
2488720	Consolidated Post SP01 UGI3 Corrections	XX-PART-UGI
2495493	Consolidated Post UGI730 SP01 Base Corrections	XX-PART-UGI
2499859	Consolidate Port SP01 Note 2	XX-PART-UGI
2518482	Work Center Inbound process fails with Multiple Object Processing	XX-PART-UGI
2518592	Incorrect message handling for Functional Location in equipment	XX-PART-UGI
2523474	Equipment status is not updating properly within MOCR for multiple status update operations	XX-PART-UGI

3. Set Up Workflow

3.1. Set Workflow Task to General

Use the following steps to set the Workflow Task to General:

- Navigate to the transaction code SWDD.
The Workflow Builder is displayed
- Enter Workflow as WS80000008
- Click on 000073-Dialog Processing Task (TS80000022) from the Navigation area
- Click on  Agent assignment for task icon corresponding to Agent Assignment in the Task properties.
The Standard Task: Maintain Agent Assignment screen is displayed.
- Click on the Attributes button.
The Attributes details dialog box is displayed.
- Select the parameter as "General Task" and click Transfer.

3.2. Set Up Search

Refer Configuration Guide UGI EAM 730-SP01

3.3. Adjust Profile Parameters

Refer Configuration Guide UGI EAM 730-SP01

3.4. User Role

To successfully conduct the steps in the configuration process, you must have the following user role assigned in the PFCG transaction:

/UGI7/AIW_REQ: Asset Master Data Governance for AIW: Requester.

Below roles have been created for AIW.

Role Name	Description
/UGI7/AIW_MENU	SAP Asset Information Workbench by Utopia: Menu

Role Name	Description
/UGI7/AIW_REQ	SAP Asset Information Workbench by Utopia: Requester
/UGI7/AIW_SPEC_EQUI	SAP Asset Information Workbench by Utopia: Specialist-Equipment
/UGI7/AIW_SPEC_FUNCLOC	SAP Asset Information Workbench by Utopia: Specialist-Functional Location
/UGI7/AIW_SPEC_MPLAN	SAP Asset Information Workbench by Utopia: Specialist-Maintenance Plan
/UGI7/AIW_SPEC_MSPOINT	SAP Asset Information Workbench by Utopia: Specialist-Measuring Point
/UGI7/AIW_SPEC_PMBOMHDR	SAP Asset Information Workbench by Utopia: Specialist-MRO BOM
/UGI7/AIW_SPEC_TLEQHDR	SAP Asset Information Workbench by Utopia: Specialist-Equipment-Tasklist
/UGI7/AIW_SPEC_TLFLHDR	SAP Asset Information Workbench by Utopia: Specialist-Funloc-Tasklist
/UGI7/AIW_SPEC_TLGNHDR	SAP Asset Information Workbench by Utopia: Specialist-General Tasklist
/UGI7/AIW_SPEC_WORKCNTR	SAP Asset Information Workbench by Utopia: Specialist-Work Centre
/UGI7/AIW_STEW	SAP Asset Information Workbench by Utopia: Steward

3.5. Web Dynpro Applications

Refer Configuration Guide UGI EAM 730-SP01

3.5.1. Web Dynpro Application for POWL

Application: /UGI7/MDG_EAMWB_POWL_INBX is created for serving the POWL Inbox.

Parameters	Value	Type	Description
WDPREFERREDRENDERING	STAND_ONLY	WDUI_HTML_RENDER_MODE	HTML Render Mode
WDUIGUIDELINE	FIORI	WDR_APP_PROP_UIGUIDELINE	UI Guideline

3.5.2. Web Dynpro Component for POWL

Web Dynpro Component: /UGI7/MDG_EAMWB_POWL_INBX (AIW POWL Inbox) is created for serving the POWL Inbox.

Web Dynpro Component	/UGI7/MDG_EAMWB_POWL_I... Active
Description	MDG EAM WorkBench POWL Inbox
Assistance Class	/UGI7/_POWL_WD_PERSONALIZATION

3.5.3. POWL Configuration

Personalization Application Hierarchy is created to describe the context in which one can use the Worklist.

Transaction Code: FPB_MAINTAIN_HIER

Personalization Application ID: /UGI7/_POWL_EAMWB_APPLID

Change View "Personalization Hierarchy": Overview

New Entries [Icons]

Dialog Structure	Personalization Hierarchy				
<ul style="list-style-type: none"> Personalization Hierarchy <ul style="list-style-type: none"> Personalization Chara 	<table border="1"> <tr> <th>Personalization Application</th> <th>Text</th> </tr> <tr> <td>/UGI7/_POWL_EAMWB_APPLID</td> <td>POWL Application for AIW</td> </tr> </table>	Personalization Application	Text	/UGI7/_POWL_EAMWB_APPLID	POWL Application for AIW
Personalization Application	Text				
/UGI7/_POWL_EAMWB_APPLID	POWL Application for AIW				

Display View "Personalization Characteristics": Overview

[Icons]

Dialog Structure

- Personalization Hierarchy
 - Personalization Chara

Personaliz. App: /UGI7/_POWL_EAMWB_APPLID

Field Name	InputHelp	Grp Value	Interval	Single Val	Ref. Data Element
DEFAULT_QUERY	<input type="checkbox"/>	N None	M Multiple	M Multip...	POWL_QUERY_TY
LAYOUT	<input type="checkbox"/>	N None	M Multiple	M Multip...	POWL_LAYOUT_TY

3.5.4. Maintain POWL Query definition

Transaction Code: POWL_QUERY

Define the Standard Queries (content for Personal worklist)

Query ID: /UGI7/_POWL_EAMWB_QUERY_ID

Description: POWL Query for AIW

POWL type ID: /UGI7/_POWL_EAMWB_TYPE_ID

Edit Table Views: Initial Screen

[Icons] New Entries [Icons] Check [Icons] Authorizations

View: Query definition

Query ID	Description
/UGI7/_POWL_EAMWB_QUERY_ID	POWL Query for AIW

Edit Table Views: Initial Screen

New Entries [Icons] Query Parameters Query Settings Layout varia

Query ID: /UGI7/_POWL_EAMWB_QUERY_ID

View: Query definition

Description: POWL Query for AIW

POWL Type ID: /UGI7/_POWL_EAMWB_TYPE_ID

Sync. call

Layout: [Empty]

Refresh Type: 2 On Every Page Visit

3.5.5. Maintain POWL categories

Transaction Code: POWL_CAT

Define Categories. The categories are used on the portal interface as an organizational structuring element for the queries. Queries that are assigned to a category appear together in the same block.

Category: /UGI7/_POWL_EAMWB_CATEGORY

Description: POWL Query for AIW

Change View "Category definition": Overview

New Entries [Icons] BC Set: Change Field Values

Category	Description
/UGI7/_POWL_EAMWB_CATEGORY	POWL Query for AIW

Change View "Category definition": Details

New Entries [Icons] BC Set: Change Field Values

Category: /UGI7/_POWL_EAMWB_CATEGORY

Category definition

Description: POWL Query for AIW

3.5.6. Maintain POWL Query Role assignment

Transaction Code: POWL_QUERYR

Define Query Visibility at Role level and assign a query to a role in this activity.

Application: /UGI7/_POWL_EAMWB_APPLID

Query Id: /UGI7/_POWL_EAMWB_QUERY_ID

Category: /UGI7/_POWL_EAMWB_CATEGORY

Change View "View: Query - Role assignment": Overview

New Entries [Icons] Check

View: Query - Role assignment		
Application	Query ID	Category
/UGI7/_POWL_EAMWB_APPLID	/UGI7/_POWL_EAMWB_QUERY_ID	/UGI7/_POWL_EAMWB_CATEGORY

Change View "View: Query - Role assignment": Details

New Entries [Icons] Check

Application: /UGI7/_POWL_EAMWB_APPLID

Role: [Empty]

Query ID: /UGI7/_POWL_EAMWB_QUERY_ID

View: Query - Role assignment	
Category	/UGI7/_POWL_EAMWB_CATEGORY
Description	POWL Query for AIW
Category sequence no	1
Query sequence no	1
Tab sequence no	1
<input checked="" type="checkbox"/> Activate	

3.5.7. Maintain POWL Type definition

Transaction Code: POWL_TYPE

POWL Type ID: /UGI7/_POWL_EAMWB_TYPE_ID

Description: Type ID for AIW

Feeder class: /UGI7/CL_MDG_EAM_WB_POWL_FEEDR

Change View "View: Type definition": Overview

New Entries [Icons] Check

View: Type definition

POWL Type ID	Description
/UGI7/_POWL_EAMWB_TYPE_ID	Type ID for AIW

Change View "View: Type definition": Details

New Entries [Icons] Check

POWL Type ID: /UGI7/_POWL_EAMWB_TYPE_ID

View: Type definition

Description: Type ID for AIW

Feeder class: /UGI7/CL_MDG_EAM_WB_POWL_FEEDR

Sync. call

No Msg. Wrapping

3.5.8. Maintain POWL Type Role assignment

Transaction Code: POWL_TYPER

Define visibility of worklist type at role level to make worklist type visible for user role or user group.

Application: /UGI7/_POWL_EAMWB_APPLID

POWL Type ID: /UGI7/_POWL_EAMWB_TYPE_ID

Description: Type Id for AIW.

Change View "View: Type - Role assignment": Overview

New Entries [Icons] Check

View: Type - Role assignment

Application	R.. POWL Type ID	Description
/UGI7/_POWL_EAMWB_APPLID	/UGI7/_POWL_EAMWB_TYPE_ID	Type ID for AIW

Change View "View: Type - Role assignment": Details

New Entries Check

Application

Role

POWL Type ID

View: Type - Role assignment

Description

3.6. Active Services in SICF

To use the POWL Application the following service needs to be activated:

Path: /default_host/sap/bc/webdynpro/ugi7/

Define Services

Create Host/Service External Aliases System Monitor Active

Filter Details

Virtual Host Service Path

ServiceName

Description

Lang. Ref.Service:

Apply Reset Fine-Tune

Virtual Hosts / Services	Documentation	Referen
<ul style="list-style-type: none"> • plmi ▶ plmpcv ▶ plmu ▶ sap ▶ sloap ▶ SPE ▶ srmerp ▶ ugi ▼ ugi7 <ul style="list-style-type: none"> • EAMWB_APP • MDG_EAMWB_POWL_INBX 	<ul style="list-style-type: none"> Namespace Namespace Namespace NAMESPACE SAP Namespace Wed Dynpro Applications for Consolidator ... Namespace Namespace Namespace Asset Information Workbench Application MDG Asset Information Workbench POWL... 	

Create/Change a Service

Path
 Service Name Service (Active)
 Lang. [Other Languages](#)


Description
 Description 1
 Description 2
 Description 3

[Service Data](#) | [Logon Data](#) | [Handler List](#) | [Error Pages](#) | [Administration](#)

Service Options
 Web Service
 Ignore inherited settings
 Load Balancing
 SAP Authoriz.
 Session Timeout (HH:MM:SS)
 Compression

Interactive Options
 GUI Interface [GUI Configuration](#)
 Support Accessibility

Create/Change a Service

68 

Path

Service Name Service (Active) Altern. Name: MDG_EAMWB_POW...

Lang.

Description

Description 1

Description 2

Description 3

Service Data | Logon Data | Handler List | Error Pages | Administration

Service Options

Web Service

Ignore inherited settings

Load Balancing

SAP Authoriz.

Session Timeout (HH:MM:SS)

Compression

Interactive Options

GUI Interface

Support Accessibility

3.7. Number Ranges

Refer Configuration Guide UGI EAM 730-SP01.

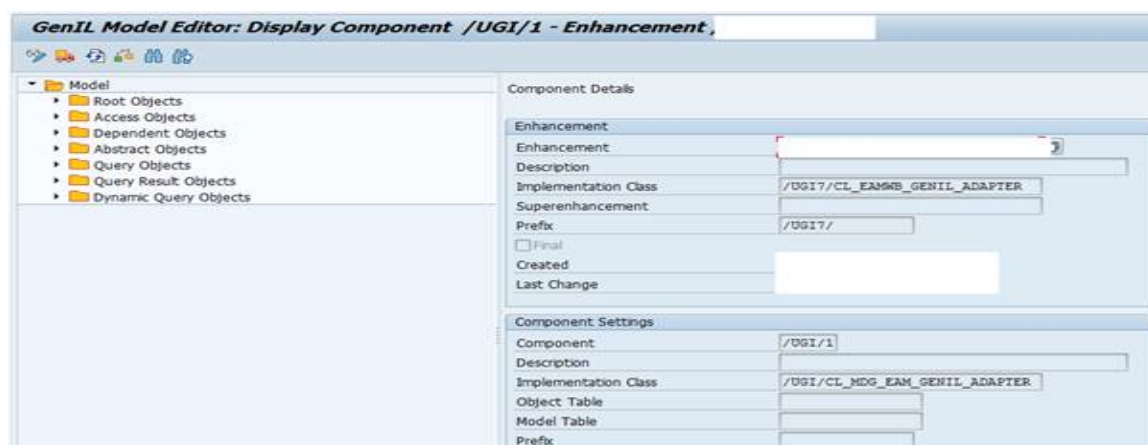
3.8. GenIL (Generic Interaction Layer) Component Adjustments

Refer Configuration Guide UGI EAM 730-SP01.

3.8.1. GenIL (Generic Interaction Layer) Component Adjustments

This section describes how to create GenIL enhancement in customer(Y/Z) namespace and save. Use the following steps to create the GenIL enhancement and save:

1. Execute transaction GENIL_MODEL_BROWSER
2. Create an enhancement with component /UGI/1 and the following details:
Prefix: optional
Enhancement class: /UGI7/CL_EAMWB_GENIL_ADAPTER
Component Enhancement class: /UGI/CL_MDG_EAM_GENIL_ADAPTER



i Note

In case, a Z Customer Enhancement of the /UGI/1 GenIL component exist, then a Super Enhancement needs to be created to the current Existing Z Enhancement with the same settings above.

/ugi7/ enhancement needs to be a super enhancement of customer enhancement or vice versa.

3.9. Prerequisite Notes

Refer Configuration Guide UGI EAM 730-SP01.

3.9.1. Specific Prerequisite Notes

Refer Configuration Guide UGI EAM 730-SP01.

3.10. Prerequisite BC-Set activation

Refer Configuration Guide UGI EAM 730-SP01.

3.10.1. BC-Set for AIW

BC Set ID	BC Set Description
/UGI7/ASSETWB_CRYPES	Change Request Types for AIW
/UGI7/ASSETWB_HANDLER_ACTIVATION	Activate Handler Class for UGI enhancements
/UGI7/ASSETWB_POWL	Bc Set for POWL configurations
/UGI7/ASSETWB_REASON_REJREASONS	Reasons and Rejection Reasons for AIW
MDGAG_BC	BCV Content for MDG Framework

3.10.2. BC-Set for HANA Search

Refer Configuration Guide UGI EAM 730-SP01.

4. Configuration Process

This section describes the minimal set of customizing steps and recommended check activities required to perform the following activities:

4.1. Common for all objects

Process Multiple EAM Masters

4.2. Activate the Data Model U1

Refer Configuration Guide UGI EAM 730-SP01.

4.3. Activate Business Configuration Set

Refer Configuration Guide UGI EAM 730-SP01.

4.4. Activate BC-Sets for Change Request Types

Refer Configuration Guide UGI EAM 730-SP01.

4.5. Navigate User Interface

- Link Log. Actions with UI Application and Bus. Act.: Standard Definition
- Link Logical Actions with Business Activity: Standard Definition

4.5.1. Link Log. Actions with UI Application and Bus. Act.: Standard Definition

Refer Configuration Guide UGI EAM 730-SP01.

4.5.1.1. AIW specific Entries

Add the following entries in mentioned path and save.

MDGIMG > General Setting > Process Modelling > Business Activities > Link Log. Actions with UI Applications and Bus Act: Standard Definition.

BO Type	Log.Action	Current UI application name	Current UI Configuration	Target UI Application Name	Target UI Configuration	Bus.Acty
1230	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_MSPOINT	UMSA
183	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_EQUI	UEQA
185	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_FUNCLOC	UFLA
1223	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_MPMI	UMPA
493	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_WORKCNTR	UWCA
237	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_PMBOMHDR	UMBA
/UGI/TL	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_TASKLIST	UTLA
/UGI/TLEQ	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_TASKLIST_EQ	ETLA
/UGI/TLFL	MASS	USMD_EDITION_CREQUEST	/UGI7/EAMWB_USMD_CREQ	USMD_OVP_GEN	/UGI/USMD_U1_OVP_TASKLIST_FL	FTLA

4.5.2. Link Logical Actions with Business Activity: Standard Definition

Refer Configuration Guide UGI EAM 730-SP01.

4.6. Verify UI Modeling (Optional)

UI configuration activities are relevant only if you want to change the UI, or if the U1 data model has been enhanced.

In this customizing activity, you can specify if and where the system hides the entity types for the data model U1.

Verify the pre-delivered field properties for the data model U1 in Customizing under ► General Settings ► UI Modeling ► Define Field Properties for UI.

The Web Dynpro application and the application configuration in the PFCG role combine with settings made in Customizing to determine the UI displayed.

You must verify the UI modeling for the data model U1 and the following Web Dynpro applications and related configurations:

Application	Application Configuration	UI Configuration
/UGI7/EAMWB/APP	/UGI7/EAMWB/APP	/UGI7/EAMWB_OVP_COMP

4.7. Set Up Search

Refer Configuration Guide UGI EAM 730-SP01.

4.7.1. Create the Search View

Refer Configuration Guide UGI EAM 730-SP01.

4.8. Verify Data Quality, Search Settings and Duplicate Check

Refer Configuration Guide UGI EAM 730-SP01.

4.8.1. Configuration of the duplicate check for HANA search

Refer Configuration Guide UGI EAM 730-SP01.

4.9. Verify Remaining Process Modeling Settings

Refer Configuration Guide UGI EAM 730-SP01.

4.9.1. Mixed Multi-Object Change Request (MOCR)

To proceed further please verify that the business activity (UAIW) is configured in your system and that they are assigned to the default data model U1.

4.9.1.1. UAIW Mixed Mass Processing

For more information, see Customizing for Master Data Governance under ► General Settings ► Process Modeling ► Business Activities ► Create Business Activity.

Create new change request types for data model U1, or validate after import using business configuration sets (BC-Sets).

For more information, see Customizing for Master Data Governance under **General Settings** > **Process Modeling** > **Change Requests** > **Create Change Request Type**.

The following table shows the proposed change request types for data model U1. Only the relevant columns are included.

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
AIWEAM0P	U1	Asset Information Workbench Parallel	No	<leave empty>	WS80000007
AIWEAM0S	U1	Asset Information Workbench Serial	No	<leave empty>	WS80000010

The MOCR is a special workflow process in AIW wherein more than one 'Type 1' entity of different technical object is encompassed within same change request. Here, each technical object (grouped under same type) is routed to different approver group. This is possible using Business Rule Framework (BRF+) configurations.

The following settings should exist in the Entity Types, subfolder of the change request types:

Entity Type	Scenario	Configuration ID	Optional	Message Output
EQUI	<leave empty>	<leave empty>	No	Standard
FUNCLOC	<leave empty>	<leave empty>	No	Standard
MPLAN	<leave empty>	<leave empty>	No	Standard
MSPOINT	<leave empty>	<leave empty>	No	Standard
PMBOMHDR	<leave empty>	<leave empty>	No	Standard
TLEQHDR	<leave empty>	<leave empty>	No	Standard
TLFLHDR	<leave empty>	<leave empty>	No	Standard
TLGNHDR	<leave empty>	<leave empty>	No	Standard
WORKCNR	<leave empty>	<leave empty>	No	Standard

To the change request type, add the following Business Activity:

Business Activity	Description
UAIW	Asset Information Workbench

4.10. Configuration Change Request Settings

Refer Configuration Guide UGI EAM 730-SP01.

4.10.1. Configuration Variant Splitter

Refer Configuration Guide UGI EAM 730-SP01.

4.11. Configure Workflow Tasks

There are two types of change requests with the following approval types:

- Serial Approval

- Parallel approval

4.11.1. AIW Parallel/Serial Workflow Process flow (4 step BRF+)

- Parallel workflow: You can configure parallel workflow to approve work items without specific order Workflow template 'WS8000007' is assigned to the MOCR parallel change request type "AIWEAM0P".
- Serial Workflow: You can configure Serial workflow to approve work item in specific pre-defined order. Workflow template 'WS8000010' is assigned to the MOCR serial change request type" AIWEAM0S".

Either you can configure both parallel workflow and serial workflow at once or any one independently

4.11.1.1. Link Change Request type to Workflow Template

Customizing activity using transaction path MDGIMG ► General Settings ► Process Modeling ► Change Requests ► Create Change Request Type ►.

Workflow template 'WS8000007' is assigned to the parallel MOCR change request type and Workflow template 'WS8000010' for serial MOCR change request type as displayed in the following screen.

Change View "Type of Change Request": Overview

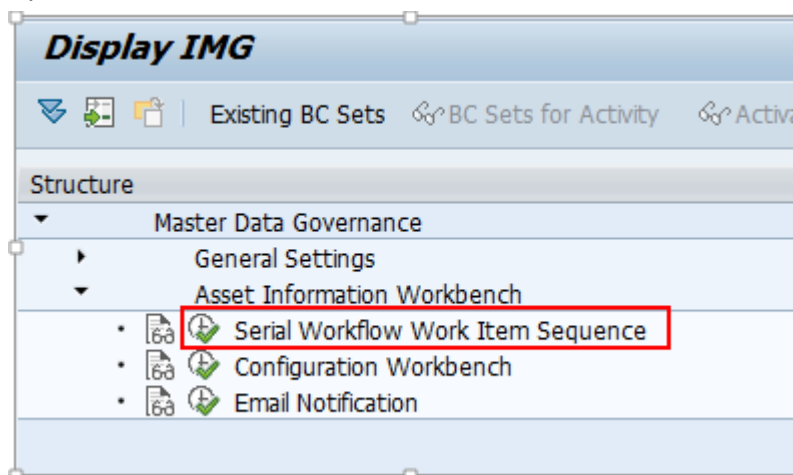
New Entries | BC Set: Change Field Values

Type of Chg. Request	Edition Type	Data Model	Description (medium text)	Objects Re...	Single Obj...	Parallel	Main Entity Type	Workflow
AIWEAM0P		U1	Asset Information Workbench Parallel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		WS8000007
AIWEAM0S		U1	Asset Information Workbench Serial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		WS8000010

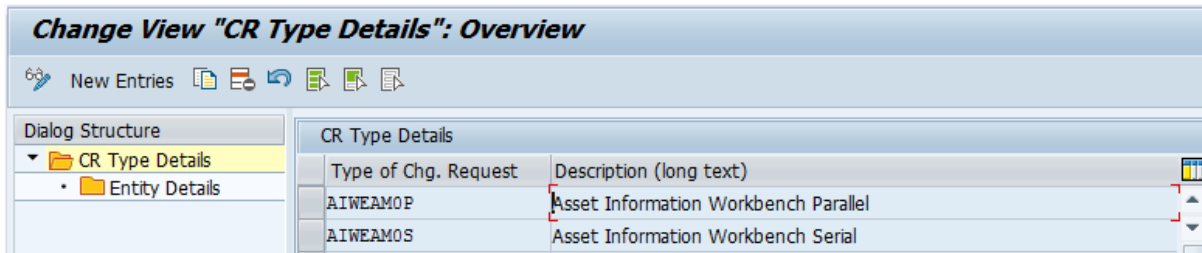
4.11.2. Configure Workflow work item Serial Order- Only for Serial Workflow

Use the following steps to configure workflow item Serial order:

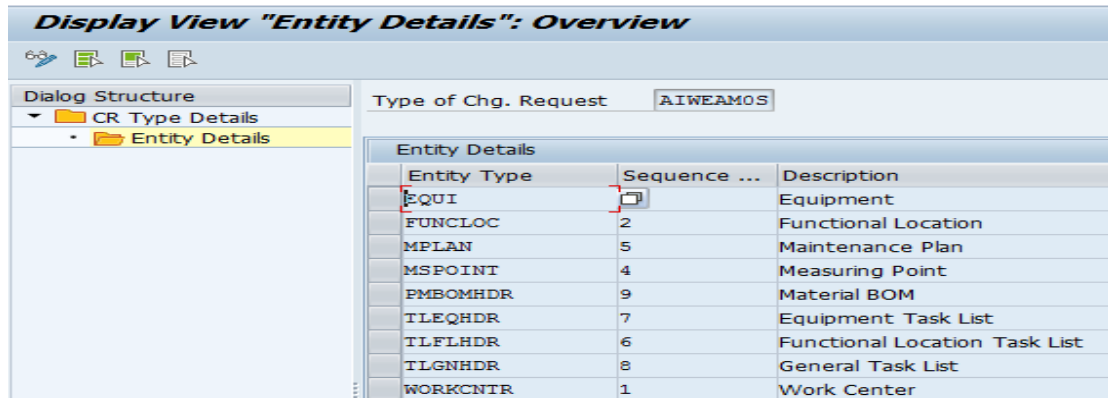
1. Go to transaction MDGIMG ► Asset Information Workbench ► Serial Workflow Work Item Sequence



2. Click new and enter the CR type as displayed in the following screen.



- In Entity details, enter the entity type and Sequence in expected serial order as displayed in the following screen.



4.11.2.1. Workflow Step Numbers

Customizing activity using transaction path MDGIMG ► General Settings ► Process Modeling ► Workflow ► Rule-Based Workflow ► Define Change Request Steps for Rule-Based Workflow.

For 2,3 or 4 step BR+ controlled MOCR workflow separate CR steps need to be defined for each technical object in AIW.

The following table displays a list of workflow step numbers defined for change request type 'AIWEAM0P'.

You can use same set of entries defined below for "AIWEAM0S".

Type of CR	CR Step	Key	Validation	Description
AIWEAM0P	0			Processing
AIWEAM0P	20			Equipment Revision Processing
AIWEAM0P	21			Functional Location Revision Processing
AIWEAM0P	22			Measuring Points Revision Processing
AIWEAM0P	23			Work Center Revision Processing
AIWEAM0P	24			Maintenance Plan Revision Processing
AIWEAM0P	25			General Task List Revision Processing
AIWEAM0P	26			Func. Loc. Task List Revision Processing
AIWEAM0P	27			Equipment Task List Revision Processing
AIWEAM0P	28			MRO BOM Revision Processing
AIWEAM0P	40			Equipment Specialist
AIWEAM0P	41			Functional Location Specialist
AIWEAM0P	42			Measuring Points Specialist
AIWEAM0P	43			Work Center Specialist
AIWEAM0P	44			Maintenance Plan Specialist

Type of CR	CR Step	Key	Validation	Description
AIWEAM0P	45			General Task List Specialist
AIWEAM0P	46			Func. Loc. Task List Specialist
AIWEAM0P	47			Equipment Task List Specialist
AIWEAM0P	48			MRO BOM Specialist
AIWEAM0P	60			Equipment Stewart
AIWEAM0P	61			Functional Location Stewart
AIWEAM0P	62			Measuring Points Stewart
AIWEAM0P	63			Work Center Stewart
AIWEAM0P	64			Maintenance Plan Stewart
AIWEAM0P	65			General Task List Stewart
AIWEAM0P	66			Func. Loc. Task List Stewart
AIWEAM0P	67			Equipment Task List Stewart
AIWEAM0P	68			MRO BOM Stewart
AIWEAM0P	80			Final Check
AIWEAM0P	91			Activation
AIWEAM0P	92			Withdraw
AIWEAM0P	93			Validation
AIWEAM0P	95			Revision Processing
AIWEAM0P	99			Complete

4.11.2.2. Change Request Actions (MOCR Specific)

Using MOCR specific action Activate & Launch New MOCR you can activate current MOCR and using same MOCR data it will create one new CR.

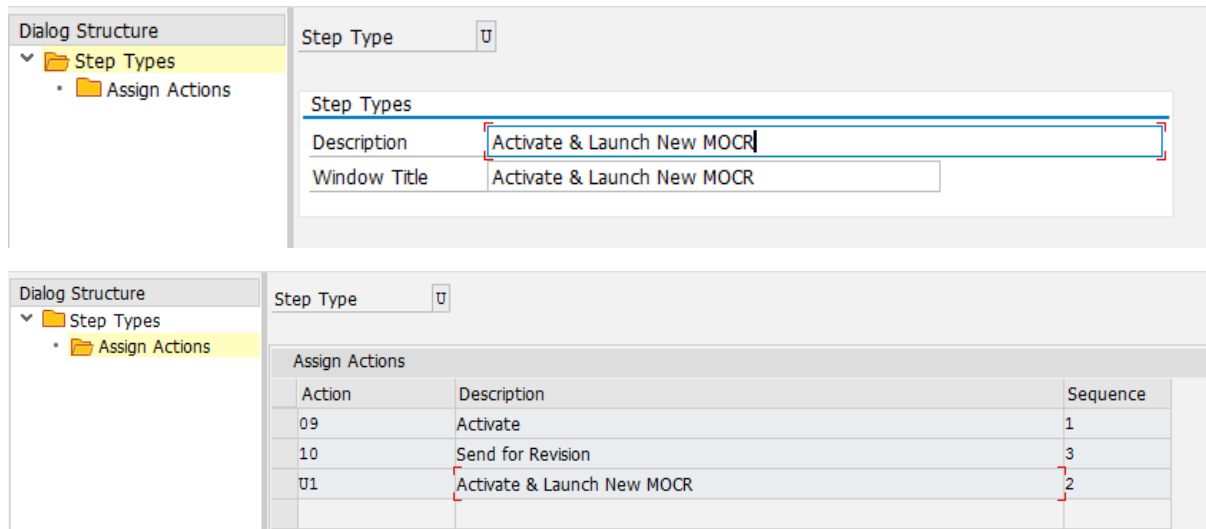
Customizing activity using transaction path MDGIMG ► General Settings ► Process Modeling ► Workflow ► Define Change Request Actions.

AIW specific Custom Action 'U1' is defined to handle 'Activate & Launch New MOCR' functionality of the workflow process.

4.11.2.3. Change Request Step Types and Assign Actions (MOCR Specific)

Customizing activity using transaction path MDGIMG ► General Settings ► Process Modeling ► Workflow ► Define Change Request Step Types and Assign Actions.

This configuration defines the buttons displayed in the UI during workflow approval process when step type 'U' is configured in BRF+.



4.12. Set Up the Rule-Based Workflow

MOCR is designed to use only BRF+ controlled workflow to determine next approver, workflow step, assign CR status and execute background actions.

The standard MDG framework offers BRF+ application that can be configured for each change request type from the following menu path(MDGIMG).

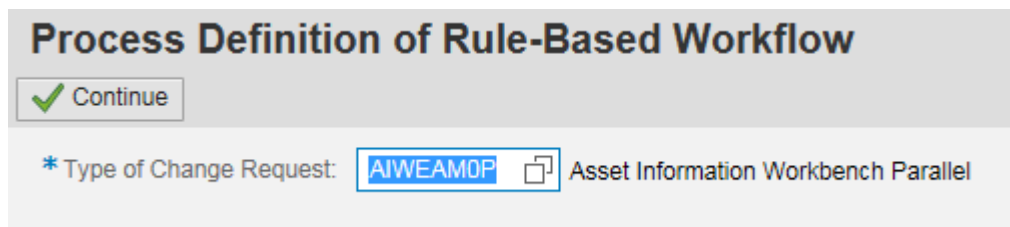
Customizing activity using transaction path MDGIMG ► General Settings ► Process Modeling ► Workflow ► Rule-Based Workflow ► Configure Rule-Based Workflow.

This will launch the Process Definition of Rule-Based Workflow in web browser. Below configuration is applicable for both Parallel and Serial workflow. We have captured the steps for parallel workflow only.

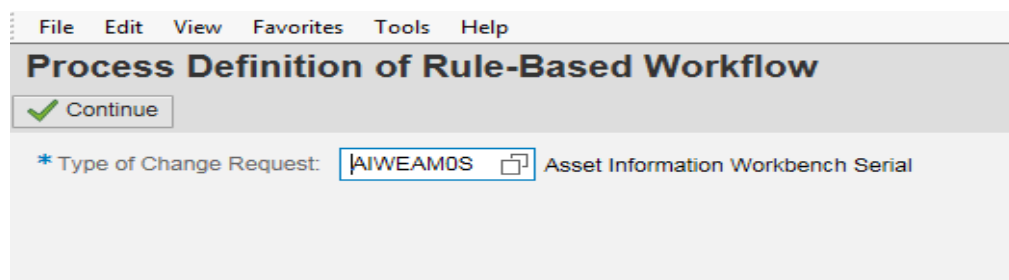
4.12.1. Configure Rule-Based Workflow

Use the following steps to configure rule-based workflow:

1. Launch the application and enter the change request type 'AIWEAM0P' and click 'Continue' button.



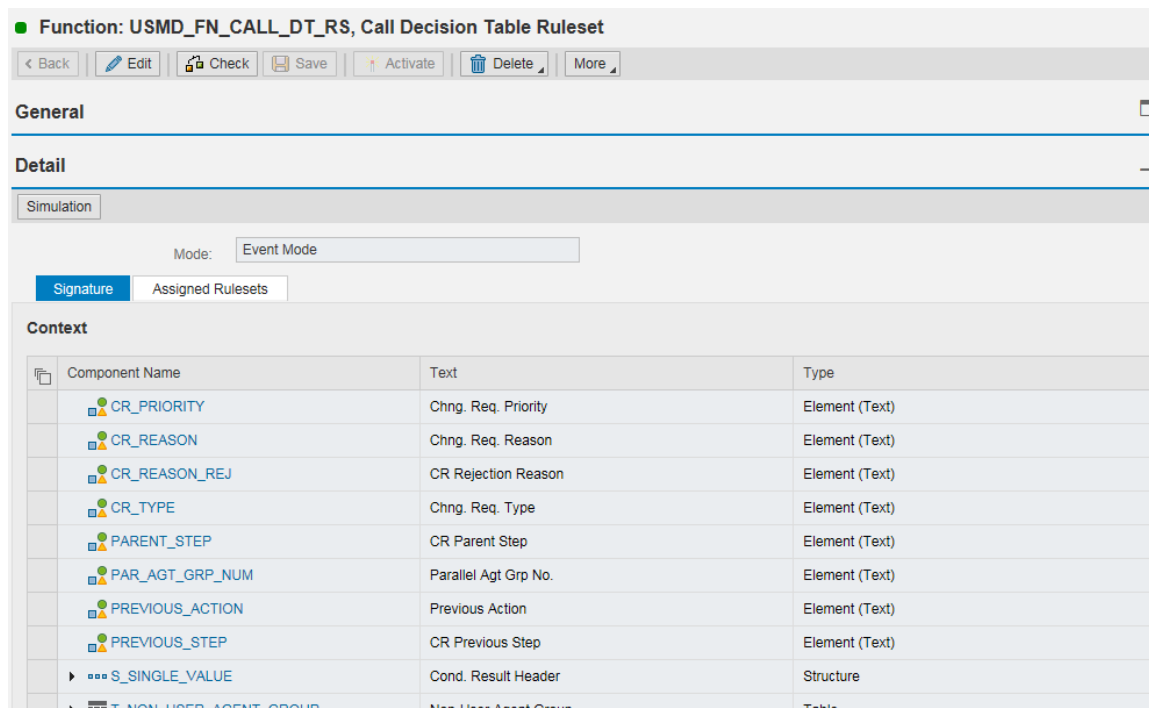
In case of Serial Workflow, enter the Change request type as displayed in the following screen and follow same process.



The Business Rule Framework Plus screen is displayed.

To route change request objects based on the 'Entity Type' (Type 1) within a CR, the 'Entity type' field should be included as a parameter to the BRF+ function, use the following steps:

- Expand the Trigger Function from the Catalog Structure on the left pane and double-click on Function to Call Ruleset as displayed in the screen.



Function: USMD_FN_CALL_DT_RS, Call Decision Table Ruleset

Mode: Event Mode

Signature Assigned Rulesets

Component Name	Text	Type
CR_PRIORITY	Chng. Req. Priority	Element (Text)
CR_REASON	Chng. Req. Reason	Element (Text)
CR_REASON_REJ	CR Rejection Reason	Element (Text)
CR_TYPE	Chng. Req. Type	Element (Text)
PARENT_STEP	CR Parent Step	Element (Text)
PAR_AGT_GRP_NUM	Parallel Agt Grp No.	Element (Text)
PREVIOUS_ACTION	Previous Action	Element (Text)
PREVIOUS_STEP	CR Previous Step	Element (Text)
S_SINGLE_VALUE	Cond. Result Header	Structure
T_NON_USER_AGENT_GROUP	Non-User Agent Group	Table

- Click on the Edit button on the toolbar.
- Click on Add New Data Object button.
The Create Object dialog box is displayed.
- Select "Element" from the drop-down list.
- Enter Name as "USMD_ENTITY" and select the Binding Type as "Bind to DDIC Element" from the drop-down list and click Create and Navigate to Object as displayed in the following screen:

Create Object
☐ ✕

▼ **General data**

Type:

* Name:

Short Text:

Text:

Application:

▼ **Element**

Properties

Define Data Binding

Binding Type:

Element Attributes

Length:

Define Element

Element Type:

Bind to DDIC element (Data Dictionary)

Bind to existing BRFplus element

No Binding

Create
Create And Navigate To Object
Cancel

The following screen displays the details of parameter 'USMD_ENTITY' and it is being part of the BRF+ function interface. This screen displays the technical details of the added parameter.

■
Element (Text): USMD_ENTITY, Entity type

< Back
Edit
Check
Save
Activate
Delete
More

General

General Texts Documentation

Name: Access Level:

ID: Storage Type:

Detail

Properties Domain Values Additional Properties

Define Data Binding

Binding Type: Refresh Binding

DDIC Element: Where-Used List

DDIC Description:

Element Attributes

Length:

Convert to Uppercase:

Define Element Properties

Element Type:

Allowed Comparisons:

You can view the added parameter in the Function to Call Ruleset screen.

● **Function: USMD_FN_CALL_DT_RS, Call Decision Table Ruleset**

General

Detail

Simulation

Mode:

Context

Component Name	Text	Type
CR_REASON_REJ	CR Rejection Reason	Element (Text)
CR_TYPE	Chng. Req. Type	Element (Text)
PARENT_STEP	CR Parent Step	Element (Text)
PAR_AGT_GRP_NUM	Parallel Agt Grp No.	Element (Text)
PREVIOUS_ACTION	Previous Action	Element (Text)
PREVIOUS_STEP	CR Previous Step	Element (Text)
▸ S_SINGLE_VALUE	Cond. Result Header	Structure
▸ T_NON_USER_AGENT_GROUP	Non-User Agent Group	Table
▸ T_USER_AGENT_GROUP	User Agent Group	Table
USMD_ENTITY	Entity type	Element (Text)

The AIW workflow uses the following decision tables for Rule Based Workflow

- Single Value Decision Table
- User Agent Decision Table
- Non-User Agent Decision Table

7. Single Value Decision Table

This is the master workflow table. This table lists the workflow steps and references the other two tables when necessary.

Single value decision table gets executed first from the BRF+ function to determine the next CR step and CR status based on the current step and action. Shown below is the screenshot of BRF+ rules configured for Step 4 workflow approval process.

Before configuring the single value decision table, the field 'USMD_ENTITY' defined in previous step is included as one of the mandatory decision parameter.

Use the following steps to include the field 'USMD_ENTITY' as a mandatory decision parameter:

- Expand Decision tables, and double-click on Single Value Decision table.

The Table Contents are displayed.

Detail

Export To Excel | Context Overview | Start Simulation

Table Contents

Find: Next Previous Table Settings

Entity Type	CR Previous Step	Previous Action	Chng. Req. Priority	Chng. Req. Reason
=EQUI (Equipment)	=00 (Processing)			
=FUNCLOC (Functional Location)	=00 (Processing)			
=MSPOINT (Measuring Point)	=00 (Processing)			
=WORKCNTR (Work Center)	=00 (Processing)			
=MPLAN (Maintenance Plan)	=00 (Processing)			
=TLGNHDR (General Task List)	=00 (Processing)			
=TLFLHDR (Functional Location T	=00 (Processing)			
=TLEQHDR (Equipment Task List	=00 (Processing)			
=PMBOMHDR (Material BOM)	=00 (Processing)			
=EQUI (Equipment)	=70 (Equipment Process	=05 (Finalize Processing)		
=EQUI (Equipment)	=70 (Equipment Process	=06 (Send for Revision)		
=FUNCLOC (Functional Location)	=72 (Functional Location	=05 (Finalize Processing)		
=FUNCLOC (Functional Location)	=72 (Functional Location	=06 (Send for Revision)		
=MSPOINT (Measuring Point)	=74 (Measuring Points Pr	=05 (Finalize Processing)		
=MSPOINT (Measuring Point)	=74 (Measuring Points Pr	=06 (Send for Revision)		



DT_SINGLE_VAL_AI
WEAM0P.xlsx

- Download the attached Excel file from the link [EAM Help Portal](#) on Utopia’s website.
- Click Table Settings button from the Table Contents.

The Table Settings dialog box is displayed.

- Locate the USMD_ENTITY parameter in the Condition Columns and move it to the first row within the list of columns.

Table Settings □ ×

Result Data Object

Settings: Return all matches found
 Return initial value if no match is found
 Return Exception for partial match

Result Data Object: **Cond. Result Header**

Table Check Settings

Overlap Check Settings: Application Default
 Completeness Check Settings: Application Default

List of Columns

Condition Columns

Column Name	Text	Optional for Processing	Mandatory Input	Column Accessibility
USMD_ENTITY	Entity Type	<input type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)
PREVIOUS_STEP	CR Previous Step	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Full Access (Changes...)
PREVIOUS_AC...	Previous Action	<input type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)
CR_PRIORITY	Chng. Req. Priority	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)
CR_REASON	Chng. Req. Reason	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)
CR_REASON_REJ	CR Rejection Reason	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)
PARENT_STEP	CR Parent Step	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)
PAR_AGT_GRP...	Parallel Agt Grp No.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Full Access (Changes...)

Result Columns

Column Name	Text	Action Column	Mandatory Input	Column Accessibility
-------------	------	---------------	-----------------	----------------------

8. User Agent Decision Table

This decision table contains a list of user assignments to workflow tasks.

The BRF+ application feeds the results of single value decision table to user agent table. If the next change request step is dialog (user action required), then the next approver is determined based on the value of condition alias in single value decision table. The dialog user could be a SAP user / Position / Role etc.

The following screen displays the user agent decision table maintained for 4 step BRF+ WF.

Detail

Export To Excel | Context Overview | Start Simulation

Table Contents

Find: Next Previous Table Settings

Condition Alias	User Agt Grp No.	Step Type	User Agent Type	User Agent Value
=3	001	4 (Revise Change Request)	SU (Special User (Initiator/Last-St	INIT
=40	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_EQUI
=41	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_FUNCLOC
=42	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_MSPOINT
=43	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_WORKCNTR
=44	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_MPLAN
=45	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_TLGNHDR
=46	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_TLFLHDR
=47	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_TLEQHDR
=48	001	2 (Approve Change Request)	AG (Role)	/JG17/AIW_SPEC_PMBOMHDR
=11	001	U (Activate & Launch New MOCR	AG (Role)	/JG17/AIW_STEW



DT_USER_AGT_GRP_
AIWEAM0P.xlsx

- Download the attached Excel file from the link [EAM Help Portal](#) on Utopia's website.
9. Non-User Agent Decision Table

This decision table contains a list of system tasks.

The results of Single Value Decision Table are passed to the Non-User Agent Decision Table to determine the background step details of the next workflow step.

The following screen displays the decision table set up for change request type 'AIWEAM0P'.

Detail

Export To Excel Context Overview Start Simulation

Table Contents

Find: Next Previous Table Settings

Condition Alias	Agent Group	Process Pattern	Service Name
=2	001	06 (Activation (Bypass Snapshot))	
=6	001	99 (Complete (Sub-)Workflow)	
=8	001	08 (Roll Back Change Request)	



DT_NON_USER_AGT
_GRP_AIWEAM0P.xls

- Download the attached Excel file from the link [EAM Help Portal](#) on Utopia's website.

4.13. Choose where you want to run SAP MDG

You can run SAP Master Data Governance in either of the following environments:

- SAP NetWeaver Portal
- SAP NetWeaver Business Client

4.13.1. SAP NetWeaver Portal

Refer Configuration Guide UGI EAM 730-SP01

4.13.2. SAP NetWeaver Business Client

If you are running SAP Master Data Governance on the SAP NetWeaver Business Client (and not on the SAP NetWeaver Portal), you need to create, define, and configure the roles for the Business Client in the SAP ERP system. The role /UGI7/AIW_REQ needs to be created using the transaction code PFCG. This role contains all authorizations needed to create and follow up change requests for AIW.

4.14. Configure Process Quality Metrics (Optional)

For the priorities, reasons, or rejection reasons for change requests, there are example values available.

To start, choose Activate and maintain the default settings.

The codes can be used later for change request analytics (process quality analysis). They also can be used to influence the workflow-driven processes. For example, depending on the priority of a change request, you can mark it for special processing.

To update any of the Process Quality Metrics (PQM), perform the following activity in Customizing for Master Data Governance under ► General Settings ► Process Modeling ► Change Requests ► Define Priorities / Reasons / Rejection Reasons for Change Requests.

4.14.1. Change Request Priorities

Priority	Description
1	High Priority
2	Medium Priority
3	Low Priority

4.14.2. Change Request Reasons

Type of Change Request	Reason	Description
AIWEAM0P	01	Process Multiple EAM Masters
AIWEAM0S	01	Process Multiple EAM Masters

4.14.3. Change Request Rejections

Type of Change Request	Reason for Rejection	Description
AIWEAM0P	01	Incomplete information
AIWEAM0P	02	Does not suit business requirements
AIWEAM0P	03	No proper Justification

Type of Change Request	Reason for Rejection	Description
AIWEAM0S	01	Incomplete information
AIWEAM0S	02	Does not suit business requirements
AIWEAM0S	03	No proper Justification

4.15. Workflow Templates for SAP Asset Information Workbench by Utopia

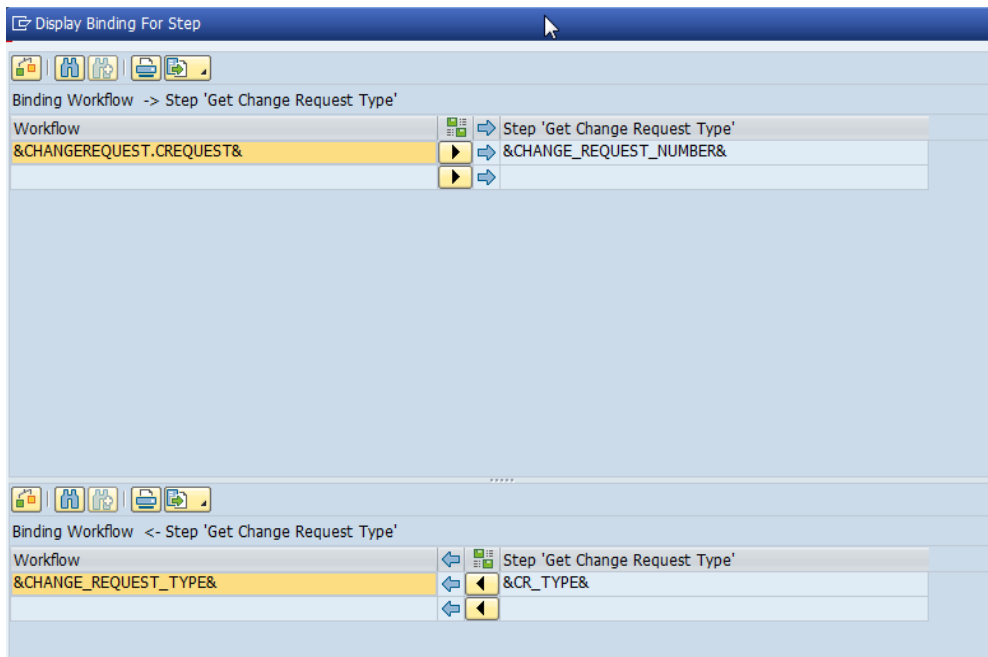
AIW is delivered with two possible workflow scenarios (Parallel and Serial). This section describes about the parallel workflow approval process of AIW. Two custom workflow templates are created for this scenario and the following section provides detailed description.

4.15.1. WS80000007 – Mixed Multi-Object Change Request Change Request WF

This workflow template consists of the following steps:

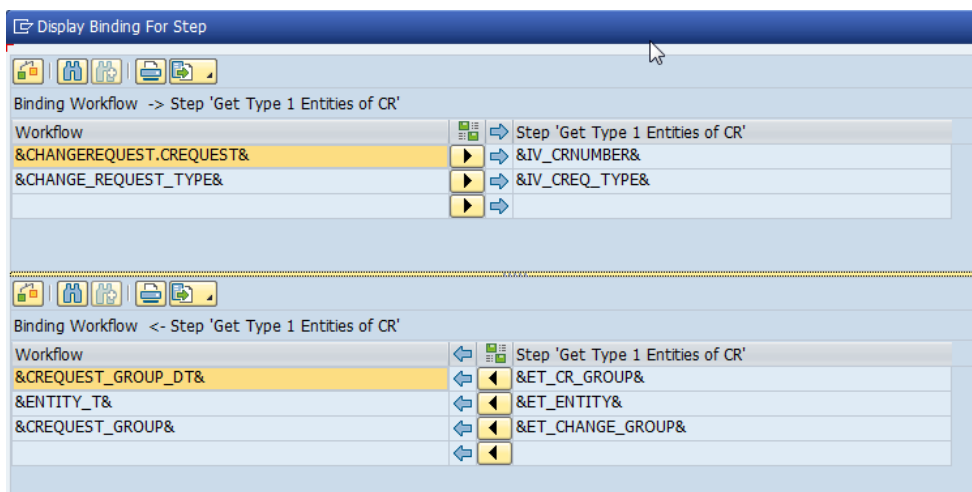
1. Start workflow
The MOCR workflow is started when a user submits a MOCR.
2. Get Change Request Type

This background task determines the change request type based on the change request number by executing the class method 'GET_CR_TYPE' of class 'CL_USMD_WF_SSW'. The following screen is the binding between task and workflow container. Standard Task 'TS60807944' is used at this workflow step '000334'.



3. Get TYPE 1 Entities

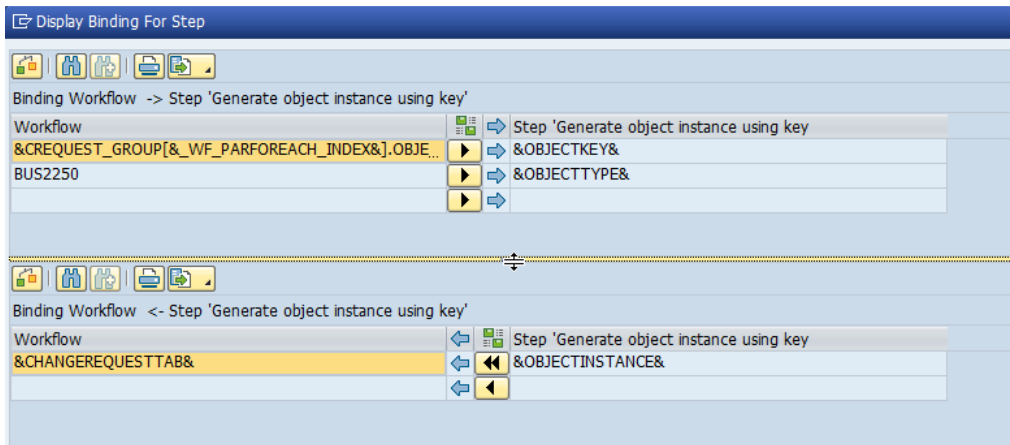
This background step retrieves all type 1 entities in MOCR into workflow container. This is done by executing the method 'GET_CREQUEST_ENTITIES' of class 'UGI7/USMD_WF_SSW'. Custom task 'TS80000008' (step 000240) is created for this purpose. The following screen displays the binding between task and workflow container.



4. Generate object instance using key

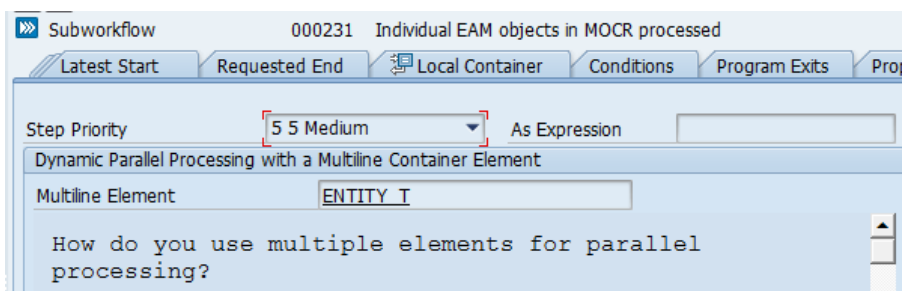
This background step creates one instance of business object 'BUS2250' for each type 1 entity group determined in step (b) above and updates the workflow container. This is achieved by creating parallel instance for each entry in workflow container 'CREQUEST_GROUP' and calling the method 'GENERICINSTANTIATE' of business object 'SYSTEM' of the standard task

'TS01200205' (step 000240). The following screen is the binding between task and workflow container.

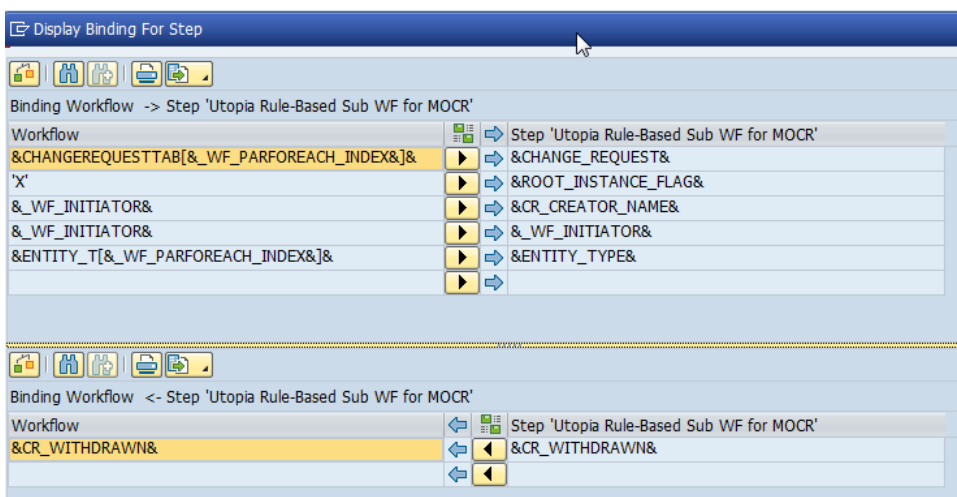


5. MDG BRF+ (Parallel processing of Technical objects in MOCR)

This step calls the workflow 80000008(step 000231) as sub-workflow for each type 1 entity type determined in steps (c) in parallel by processing each element in container 'ENTITY_T' Refer to the following screen.



The following screen displays the binding between workflow template '80000007' & '80000008'.



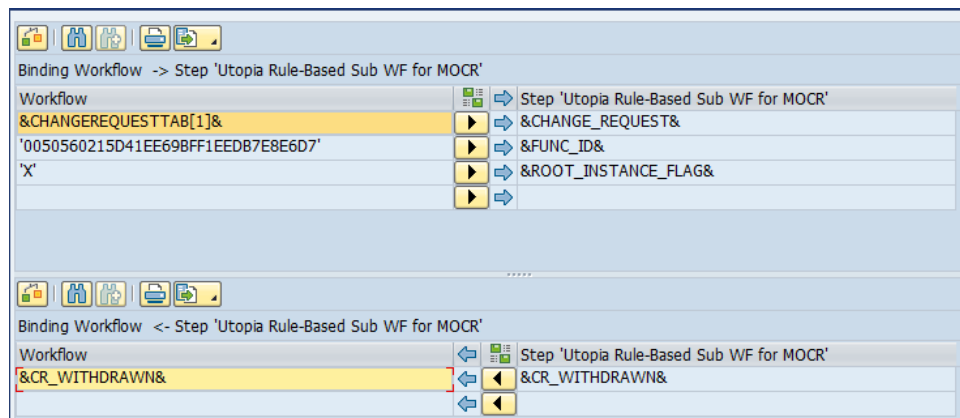
Index [&WF_PARFOREACH_INDEX&] is used to access each element in container 'ENTITY_T'.

The main workflow 80000007 waits until all instance of sub-workflow is complete.

6. Activation of MOCR (Step 000338)

This step gets executed only when step (e) above is complete & 'CR_WITHDRAWN' flag is not set in the workflow container. This step launch template 80000008 as sub-workflow to perform the final gate keeper activation step. Once template '80000008' is complete the parent workflow '80000007' gets complete.

The following screen displays the binding between workflow template '80000007' & '80000008'. The BRF+ application ID is passed in the task container as a binding so the workflow template '80000008' knows which template to process when executed.



4.15.2. WS80000008 - Utopia Rule-Based Sub WF for MOCR

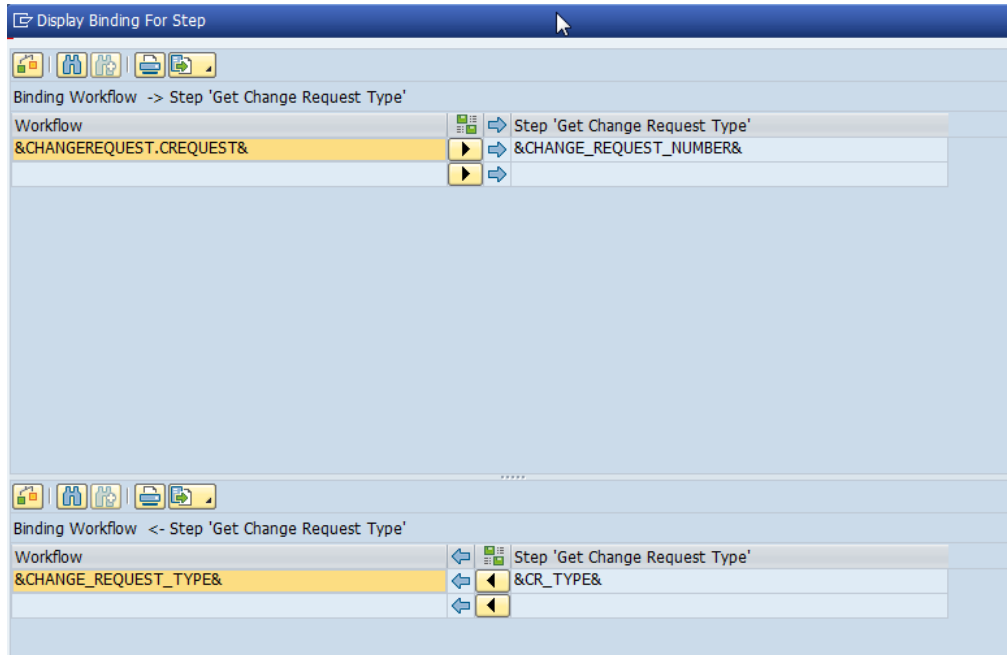
Use the following steps involved in this workflow template:

1. Start workflow

The Utopia rule-based workflow is started as sub-workflow from template WS80000007 for each 'Type 1' entity group in parallel.

2. Get Change Request Type

This background task determines the change request type based on the change request number by executing the class method 'GET_CR_TYPE' of class 'CL_USMD_WF_SSW'. In the following screen, the binding between task and workflow container is displayed. Standard Task 'TS60807944' is used at this workflow step '000004'.



Parameter	Type	Associated Type	Description
IV_CR_NUMBER	Importing	USMD_CREQUEST	Change Request
RV_CR_TYPE	Returning	USMD_CREQUEST_TYPE	Type of Change Request

3. Check assignment of processor to workflow

The system checks whether a processor is assigned to the workflow (with or without a user name).

If a processor is assigned, the system provides the values, users or methods that are needed for processing the task in the next workflow step.

If a processor is not assigned, the system launches BRFplus. When the workflow container 'FUNC_ID' is not assigned then the workflow template executes the task 'TS80000011' else the task 'TS80000010'.

TS80000011

This task calls the method 'FIND_PATH_PROCESSOR' of class '/UGI7/USMD_WF_SSW'. The following screen displays the binding between task and workflow container:

Binding Workflow -> Step 'Path and Processor Finder'	
Workflow	Step 'Path and Processor Finder'
&GENERIC_CONTEXT&	&CT_CONTEXT_TAB&
&MESSAGE_TAB&	&CT_MESSAGE&
&STEP_ACTION.ACTION&	&IV_ACTION&
&_WF_INITIATOR&	&IV_CR_CREATOR&
&CR_PRIORITY&	&IV_CR_PRIORITY&
&CR_REASON&	&IV_CR_REASON&
&CR_REASON_REJ&	&IV_CR_REASON_REJ&
&CHANGE_REQUEST_TYPE&	&IV_CR_TYPE&
&ENTITY_TYPE&	&IV_ENTITY_TYPE&
&PARENT_STEP&	&IV_PARENT_STEP&
&PAR_AGT_GRP_NUM&	&IV_PAR_AGT_GRP_NUM&
&STEP_ACTION.STEP&	&IV_STEP&
&CHANGE_REQUEST.CREQUEST&	&IV_CR_NUMBER&

Binding Workflow <- Step 'Path and Processor Finder'	
Workflow	Step 'Path and Processor Finder'
&GENERIC_CONTEXT&	&CT_CONTEXT_TAB&
&MESSAGE_TAB&	&CT_MESSAGE&
&STEP_RESULT_MERGE_HANDLER&	&ES_STEP_RSLT_MERGE_HANDLER&
&NON_USER_AGENT&	&ET_NON_USER_AGENT&
&USER_AGENT&	&ET_USER_AGENT&
&CR_STATUS&	&EV_CR_STATUS&
&EXP_COMP_HOURS&	&EV_EXP_COMP_HOURS&
&STEP_ACTION.STEP&	&EV_NEXT_STEP&

TS8000021

This task calls the method 'FIND_EAM_PATH_PROCESSOR' of class 'UGI7/USMD_WF_SSW'. The following screen displays the binding between task and workflow container.

Binding Workflow -> Step 'Find Path & Processor in MOCR Main WF'	
Workflow	Step 'Find Path & Processor in MOCR Main'
&GENERIC_CONTEXT&	&CT_CONTEXT_TAB&
&MESSAGE_TAB&	&CT_MESSAGE&
&_WF_INITIATOR&	&IV_CR_CREATOR&
&CR_PRIORITY&	&IV_CR_PRIORITY&
&CR_REASON&	&IV_CR_REASON&
&CR_REASON_REJ&	&IV_CR_REASON_REJ&
&CHANGE_REQUEST_TYPE&	&IV_CR_TYPE&
&ENTITY_TYPE&	&IV_ENTITY_TYPE&
&FUNC_ID&	&IV_FN_ID&
&PARENT_STEP&	&IV_PARENT_STEP&
&PAR_AGT_GRP_NUM&	&IV_PAR_AGT_GRP_NUM&
&CHANGE_REQUEST.CREQUEST&	&IV_CR_NUMBER&
&STEP_ACTION.STEP&	&IV_STEP&
&STEP_ACTION.ACTION&	&IV_ACTION&

Binding Workflow <- Step 'Find Path & Processor in MOCR Main WF'	
Workflow	Step 'Find Path & Processor in MOCR Main'
&GENERIC_CONTEXT&	&CT_CONTEXT_TAB&
&MESSAGE_TAB&	&CT_MESSAGE&
&STEP_RESULT_MERGE_HANDLER&	&ES_STEP_RSLT_MERGE_HANDLER&
&NON_USER_AGENT&	&ET_NON_USER_AGENT&
&USER_AGENT&	&ET_USER_AGENT&
&CR_STATUS&	&EV_CR_STATUS&
&EXP_COMP_HOURS&	&EV_EXP_COMP_HOURS&
&STEP_ACTION.STEP&	&EV_NEXT_STEP&

Parameter	Type	Associated Type	Description
IV_CR_NUMBER	Importing	USMD_CREQUEST	Change Request
IV_CR_TYPE	Importing	USMD_CREQUEST_TYPE	Type of Change Request
IV_STEP	Importing	USMD_CREQUEST_APPSTEP	Workflow Step Number
IV_ACTION	Importing	USMD_CREQUEST_ACTION	Action on User Interface of Change Request
IV_PARENT_STEP	Importing	USMD_CREQUEST_APPSTEP	Boolean Variable (X=true, -=false, space=unknown)
IV_PAR_AGT_GRP_NUM	Importing	USMD_AGENT_GROUP	
IV_CR_PRIORITY	Importing	USMD_PRIORITY	Priority
IV_CR_REASON	Importing	USMD_REASON	Reason
IV_CR_REASON_REJ	Importing	USMD_REASON_REJ	Reason for Rejection
IV_CR_CREATOR	Importing	SWP_INITIA	Initiator of workflow instance
IV_ENTITY_TYPE	Importing	USMD_ENTITY	Entity Type
ET_USER_AGENT	Exporting	USMD_T_USER_AGENT_GROUP	
ET_NON_USER_AGENT	Exporting	USMD_T_NON_USER_AGENT_GROUP	
ES_STEP_RSLT_MERGE_HANDLER	Exporting	USMD_S_STEP_RSLT_MERGE_HANDLER	
EV_CR_STATUS	Exporting	USMD_CREQUEST_STATUS	Status of Change Request
EV_NEXT_STEP	Exporting	USMD_CREQUEST_APPSTEP	Workflow Step Number
EV_EXP_COMP_HOURS	Exporting	INT2	2-byte integer (signed)
CT_MESSAGE	Changing	USMD_T_MESSAGE	Messages
CT_CONTEXT_TAB	Changing	USMD_T_GENERIC_CONTEXT	Generic Context Table

The system uses the values defined in the BRFPplus decision tables to determine the next workflow step and to assign a processor, with or without a user name. The value and the action of the next step depend on what is defined in the decision table for the previous step and what the previous action was. If the current workflow instance is the main workflow, the system also refreshes the status of the change request.

4. Determine whether single processing or parallel processing of change request is required.

The system determines the number of users or user groups to which the change request needs to be sent. For example, it might be necessary that the change request be sent for approval to users in the purchasing and accounting departments.

Single Processing

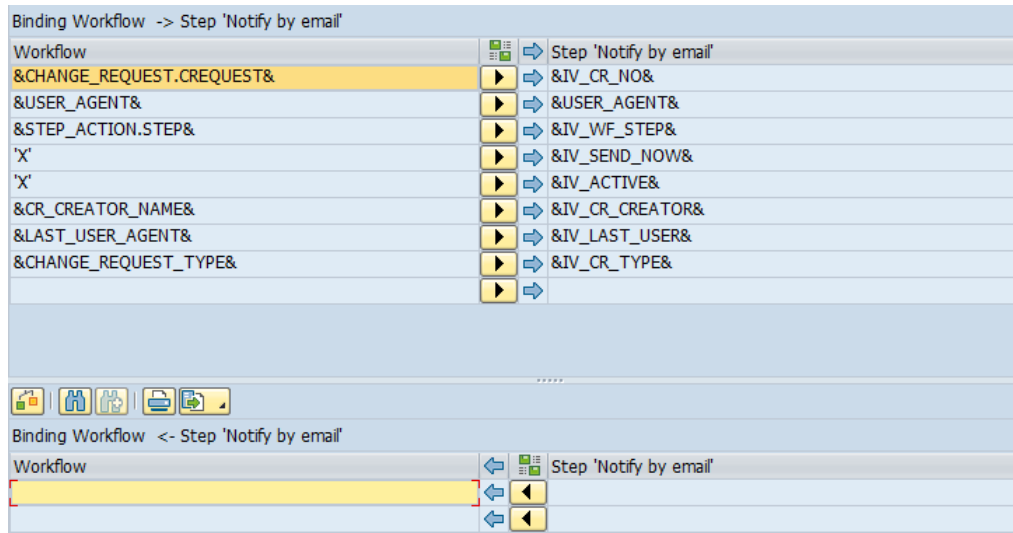
If single processing is necessary, the system, for example, sends the change request to a user and retrieves the relevant processing templates defined in the decision table for the next workflow step. For example, when the change request is created, the next step might determine that the change request be sent to the master data steward for approval.

The following task(s) exists within single processing:

TS8000007: (Notify by Email)

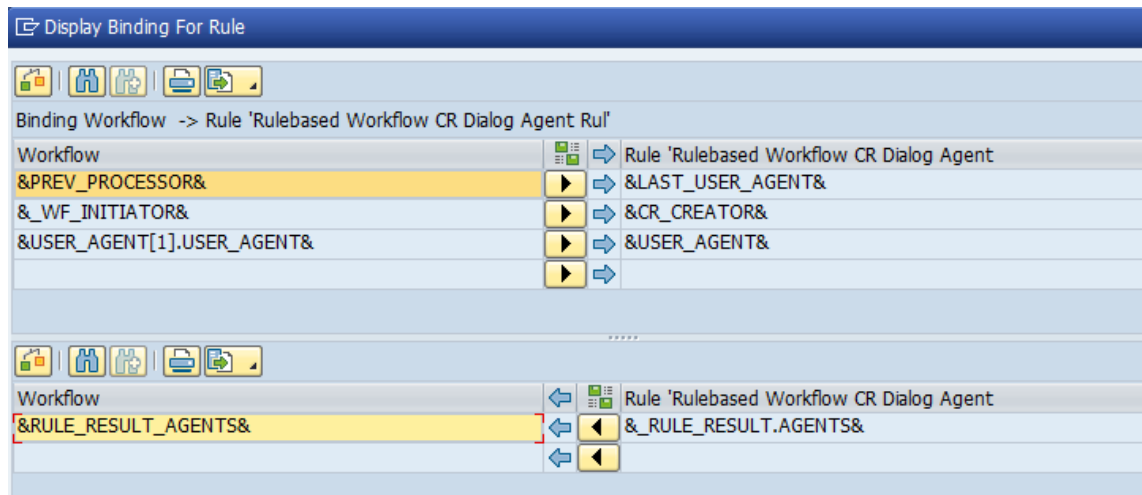
This task notifies the approver & other recipients based on the entries maintained in table view '/UGI7/V_EM_CONF' for the current workflow step type (determined from BRF+ application) by email. This is done by calling the method 'NOTIFY_APPROVERS' of class '/UGI7/USMD_WF_SSW'.

The following screen displays the binding between workflow and task container.



TS8000022: (Notify by Email)

This task creates the dialog work item for approver by processing the rule '60800140' and executing the method 'PROCESS' of business object 'BUS2250'. The following screen displays the rule and task binding.



Display Binding For Step

Binding Workflow -> Step 'MOCR Approval Item'

Workflow	Step 'MOCR Approval Item'
&USER_AGENT[1].STEP_TYPE&	&STEP_TYPE&
&CR_CREATOR_NAME&	&CR_CREATOR_NAME&
&STEP_ACTION.STEP&	&APPSTEP&
&WITEXT&	&WITEXT&
&CHANGE_REQUEST&	&_WI_OBJECT_ID&

Binding Workflow <- Step 'MOCR Approval Item'

Workflow	Step 'MOCR Approval Item'
&STEP_ACTION.ACTION&	&ACTION_RESULT&
&LAST_USER_AGENT&	&PROCESSOR&
&CHANGE_REQUEST&	&_WI_OBJECT_ID&

Parallel Processing

Parallel processing of objects within a group of technical objects is not applicable for AIW MOCR workflow. Yet this section exists in workflow template since the template '80000008' is a copy of standard workflow 'WS60800086'.

1. Activation of MOCR

Standard task 'TS60808002' gets executed when the final gate keeper opts 'Activate CR' or 'Activate & Launch New MOCR'. This task commits the MOCR data from staging area to active ECC database (hub / co-deploy model). At this point the MOCR data is ready for operational use.

2. Launch Sequence CR

This step executes the method 'LAUNCH_SEQUENCE_CR' of class '/UGI7/USMD_WF_SSW' in the task 'TS80000027'. This method copies all 'Type 1' entities in the current MOCR to a new MOCR in draft mode. Shown below is the binding between Workflow and task container

Display Binding For Step

Binding Workflow -> Step 'Launch Sequence CR'

Workflow	Step 'Launch Sequence CR'
&CHANGE_REQUEST.CREQUEST&	&IV_CREQUEST&

Binding Workflow <- Step 'Launch Sequence CR'

Workflow	Step 'Launch Sequence CR'
&SEQUENCE_CR&	&EV_NEW_CR&
&LAUNCH_SEQUENCECR&	&EV_SUCCESS&
&MESSAGE_TAB&	&ET_MESSAGE&

3. Check workflow completion

The system checks whether the indicator for completing a workflow has been set. If this is the case, the system completes the workflow. Otherwise, the system returns to step 3 and starts again.

Parameter	Type	Associated Type	Description
IV_CREQUEST	Importing	USMD_CREQUEST	Change Request
EV_SUCCESS	Exporting	BOOLE_D	Flag set when CR launched
EV_NEW_CR	Exporting	USMD_CREQUEST	Change Request
ET_MESSAGE	Exporting	USMD_T_MESSAGE	Messages

4.16. Email or Notifications Configuration

This section describes about Emails or Notifications sent out to actual recipients of the work item and additional recipient(s) in AIW.

The Email functionality is designed to support any Change Request Type and Workflow Step Types defined in MDGIMG configuration. The emails sent out are not actual workitem(s) but notifications for designated processor of the work item and any additional recipients to be notified at a BRF+ workflow step.

4.16.1. Disclaimer

- The Email functionality is designed to work only for AIW BRF+ controlled workflow(s).
- This will not replace Extended notifications defined in SAP.

4.16.2. Email Configuration

The following section describes the configuration that drives the email functionality.

4.16.2.1. Transparent Table

Table '/UGI7/EMAIL_CONF' stores the configuration detail of who should be notified, at what workflow step & the corresponding email template. The following screen displays the structure of table.

Field	Key	Ini...	Data element	Data Type	Length	Deci...	Short Description
MANDT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MANDT	CLNT	3	0	Client
USMD_CREQ_TYPE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	USMD_CREQUEST_TYPE	CHAR	8	0	Type of Change Request
USMD_CR_STYPE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	USMD_CREQUEST_AS_TYPE	CHAR	1	0	Change Request Step Type
USER_ROLE	<input type="checkbox"/>	<input type="checkbox"/>	/UGI7/RECEIVER_ROLE	INT1	3	0	Receiver Role
USER_TYPE	<input type="checkbox"/>	<input type="checkbox"/>	USMD_AGENT_TYPE	CHAR	2	0	Agent Type
USER_VALUE	<input type="checkbox"/>	<input type="checkbox"/>	USMD_AGENT_VALUE	CHAR	100	0	Agent Value
USMD_EMAIL_SUBJECT	<input type="checkbox"/>	<input type="checkbox"/>	/UGI7/EMAIL_SUB_OBJ	CHAR	60	0	Email Subject
USMD_EMAIL_BODY	<input type="checkbox"/>	<input type="checkbox"/>	/UGI7/EMAIL_BODY_OBJ	CHAR	60	0	Email Body

The fields are listed in detail in the following table:

Field	Description
USMD_CREQ_TYPE	MDG Change Request Type
USMD_CR_STYPE	Workflow step type (Approve / Revise / Process)
USMD_ROLE	Could be 'Approver' or 'Notify Only'
USMD_TYPE	Recipient type - could be 'US' / 'AG' / 'S' / 'C' / 'O' / 'SU'
USMD_VALUE	Recipient value for the type maintained in 'USMD_TYPE'
USMD_EMAIL_SUBJECT	Email subject – name of the text object
USMD_EMAIL_BODY	Email body – name of the text object

4.16.2.2. Maintenance View

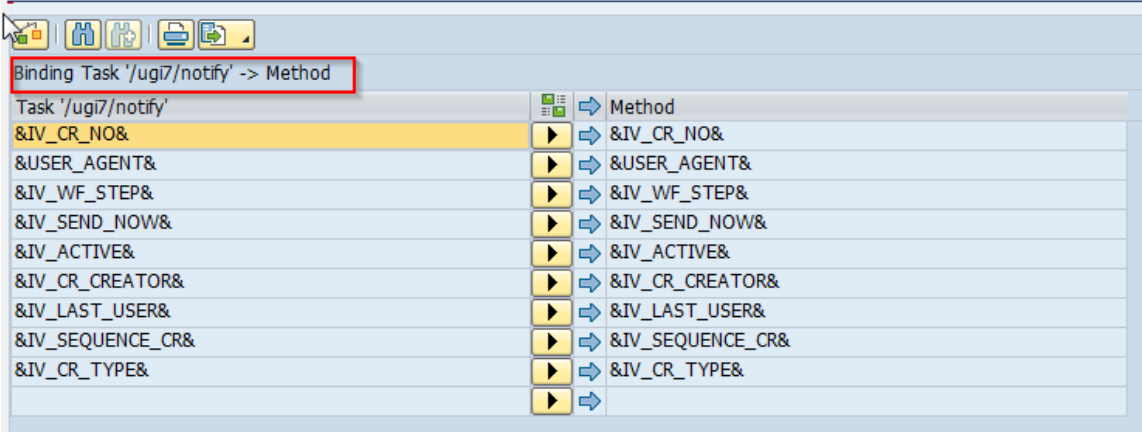
Maintenance view '/UGI7/V_EM_CONF' is created to add new / change configuration of the emails in the table '/UGI7/EMAIL_CONF'. This view can be accessed using the transaction code 'SM30'.

4.16.3. Technical Details

This section of the document explains in detail about the technical developments made for the email functionality in AIW.

4.16.3.1. Standard Task - TS 90000001

The task 'TS 90000001' executes the method 'NOTIFY_APPROVERS' of the class '/UGI7/USMD_WF_SSW' to send email notification during change request workflow approval process. The task passes the following parameters from workflow container to class method.



Task '/ugi7/notify'	Method
&IV_CR_NO&	&IV_CR_NO&
&USER_AGENT&	&USER_AGENT&
&IV_WF_STEP&	&IV_WF_STEP&
&IV_SEND_NOW&	&IV_SEND_NOW&
&IV_ACTIVE&	&IV_ACTIVE&
&IV_CR_CREATOR&	&IV_CR_CREATOR&
&IV_LAST_USER&	&IV_LAST_USER&
&IV_SEQUENCE_CR&	&IV_SEQUENCE_CR&
&IV_CR_TYPE&	&IV_CR_TYPE&

4.16.3.2. Standard Text(s)

Standard text objects are created from transaction code 'SE61' in language 'EN' for email subject and body for different workflow step types. These text objects were assigned in table '/UGI7/EMAIL_CONF' to be processed by the send email task of the workflow.

Text Object	Description
/UGI7/EAM_SWN_SUBJECT_PROCES	Subject of the email notification used in workflow step type 'Process / Approve'
/UGI7/EAM_SWN_SUBJECT_SEQCR	Subject of the email notification used in Sequence launch of CR.
/UGI7/EAM_SWN_BODY_PROCESS	Email content used in workflow step type 'Process / Approve'
/UGI7/EAM_SWN_BODY_PROCE_REJ	Email content used in workflow step type 'Revise'

Text Object	Description
/UGI7/EAM_SWN_BODY_SEQCR	Email content used in sequence launch of MOCR

4.16.3.3. Class Method to Send Email Notification

Class Method: /UGI7/USMD_WF_SSW->NOTIFY_APPROVERS

This method sends email notification to the recipients maintained in table '/UGI7/EMAIL_CONF' in 'HTML' format.

The following describes the logic of the notification process:

- Determine the email configuration maintained for the change request type and workflow step type from table '/UGI7/EMAIL_CONF'.
- Determine the SAP user id, for each recipient maintained in table (apart from user type 'US')
- Call the method 'SEND_MAIL' for the recipients determined in above step.

METHOD: SEND_MAIL

- Determine email ID of the SAP user by calling the method 'GET_EMAIL_ID' (from user profile)
- Method 'GET_VARIABLES_NOTIFICATIONS' return the contents related to Change Request & Workflow step to be embed in Email notification.
- Method 'GET_TEXT_FROM_REPOSITORY' reads the text objects associated to the current workflow step type and replaces the text symbols (place holders) with the CR content determined in above step (b).
- Once Email subject and body is built the program sends the email by calling the method 'SEND' of class 'CL_BCS'.

4.16.4. Dependencies

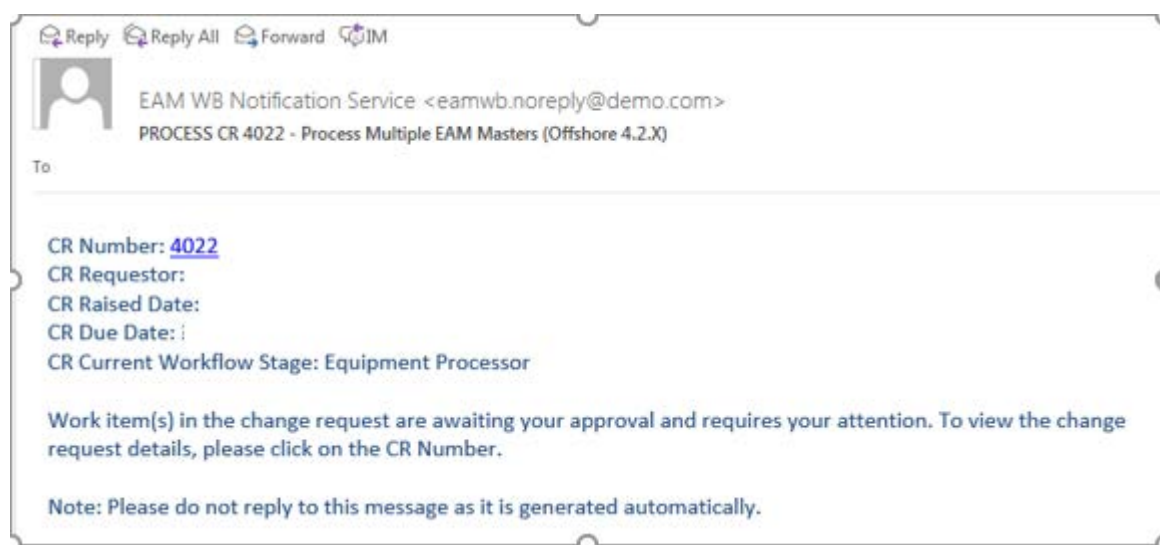
The following list of objects that should exist for the email functionality to work without issues.

- The text objects maintained in table '/UGI7/EMAIL_CONF' should be valid (i.e. created).
- Email address should be maintained in user profile of the SAP user.
- SMTP nodes should be configured in transaction code 'SCOT'.

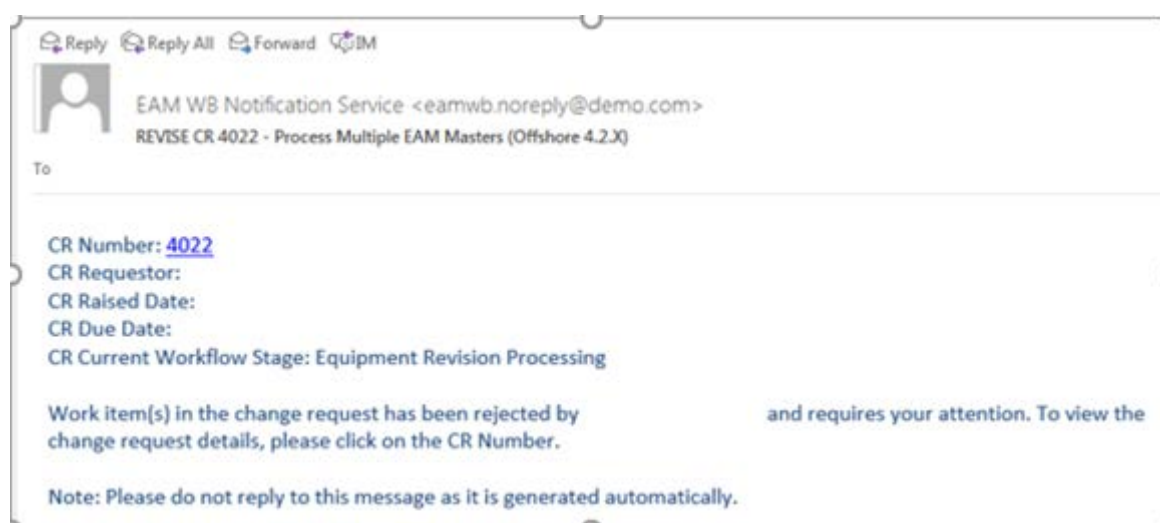
4.16.5. Sample Emails / Notifications

This section displays sample emails and notifications.

4.16.5.1. Approve or Process Change Request



4.16.5.2. Revise Change Request



4.17. System Compatibility

You can install AIW only below configuration.

- MDG 9.0
- UGI EAM 730-SP01

4.18. Final Steps

SAP and Utopia recommend regenerating the data model again at the end of these setup steps to ensure clear code generation.

Note: Before you can run all Master Data Governance processes like Create Equipment, you need to assign the data model U1 to your user. Alternatively, the user administrator can maintain the following Personalization Parameter for your user profile: SAP Master Data Governance R_FMDM_MODEL.

If there are other data models active in your system, such as Financials (OG), Material Master (MM), or Business Partner/Customer/Supplier (BP) additional entries may appear in this list.