

How To Guide: Impact Analyzer through MDG AIW solution by Prometheus Group

Applies to

MDG AIW solution by Prometheus Group 2021

Summary

This how to guide provides configuration table details and functionality of Impact Analyzer through MDG AIW solution. It also provides higher level scope and integration with Hub and Co-Deployment scenario.

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1. Introduction

Document articulates how to integrate Utopia MDG AIW solution with Operational data for Impact Analyzer Report Functionality.

As part of Utopia's MDG AIW 2021 release supports Impact Analyzer (IA) functionality with limited features.

Furthermore, this document provides all necessary information on integration, scope, configuration details of defining objects and field values, also describes use case scenarios of Impact Analyzer report and restrictions.

2. Terminologies

Important terms and terminology that are used in this document.

Terminology	Description
IA	Impact Analyzer
MDG	Master Data Governance
AIW	Asset Information Workbench
MOCR	Multi Object Change Request

3. Pre-requisite

Customers should ensure that they have Utopia MDG 2021 versions.

- SAP S/4HANA 2021
- Utopia MDG EAM 2021
- Utopia MDG AIW 2021

4. Configuration steps to enable MDG AIW Impact Analyzer

Customer should ensure that they have defined and maintained required input data like, EAM Objects and Field value details.

- A Generic API/ RFC developed to find connected Objects and impact of intended field changes
 - /UGI3/AIW_RISK_ANALYZER
- Configuration Tables provided for

/UGI3/RISK_CONFIG - Define Impact Objects

SAP /UGI3/RISK_CONFIG: Display of Entries Found

Search in Table: /UGI3/RISK_CONFIG Risk Analyzer To

Number of hits: 7

Runtime: 0 Maximum no. of hits 500

Insert Column:

Obj. Type Changed field Risk Object Type Sys.Status Phase SubPhase

<input type="checkbox"/>	EQUIP	MW	BOM			
<input type="checkbox"/>	EQUIP	MW	MPLAN			
<input type="checkbox"/>	EQUIP	MW	NOTIF			
<input type="checkbox"/>	EQUIP	MW	ORDER			
<input type="checkbox"/>	EQUIP	MW	TASKLIST			
<input type="checkbox"/>	TASKLIST	MW	MPLAN			
<input type="checkbox"/>	TASKLIST	MW	ORDER			

✓ A maintenance view exists for table /UGI3/RISK_CONFIG [View details](#)

/UGI3/RISK_CONFIG: This table will be used as the main mapping identifier between the objects being changed and the risk objects to select. It also has an option to exclude Risk objects with specific statuses.

- OBJ_TYPE: Object type that will be changed.
- CHANGED_FIELD: The field that will be changed on the object.
- RISK_OBJ_TYPE: The Risk object type that is needed to be selected as risk object.
- RISK_OBJ_STAT_EXC: Comma separated statuses that Risk Objects need to be

excluded for selection.

- MAX_PHASE: This is the maximum allowed phase to be returned on a Work Order.
- MAX_SUBPHASE: This is the maximum allowed Sub-phase on a Work Order.

/UGI3/FVAL_CONFIG – Define Impact Field Value

SAP /UGI3/FVAL_CONFIG: Display of Entries Found

Search in Table: /UGI3/FVAL_CONFIG Risk Analyzer Fields Value Configurations

Number of hits: 1

Runtime: 0 Maximum no. of hits 500

Insert Column:

Obj. Type Change fld Field_value

<input type="checkbox"/>	EQUIP	MW	PLANP_WC
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/UGI3/FVAL_CONFIG: This table will be used to define specific field changes on the object that will trigger selecting the impacted objects. So that an object to be considered for the risk analyzer, the same field name that is passed in the import parameter, needs to have an entry in this table. There is an option to compare the field value as well if needed.

- OBJ_TYPE: Object type that is being changed
- CHANGED_FIELD: The field that is being changed on the object
- NEW_FIELD_VALUE: The new object field value that is needed to consider this object for Risk obj selection, Comma Separated values.

NOTE:

1. Any Change that needs to trigger the Risk Analyzer on a given Object, will just need to have the field CHANGED_FIELD on both the input parameter of the RFC and the config table the same value. So, for example if the change is adding a Maintenance item, then the change field can be any value that represent adding the item if it matches the configuration change_field.
2. Task list and Bill of Materials objects have special Object Numbers where combination key fields.

5. Impact Analyzer (IA)

Impact (Risk) Analyzer Functionality support from MDG AIW 2021 release.

Possible Input Objects

- Functional location
- Equipment
- Bill of Materials
- Measuring Point
- Task List
- Maintenance Plan

Possible Output Objects

- Equipment
- Measuring Point
- Bill of Materials
- FLOC Task List
- Equipment Task List
- Maintenance plan
- Maintenance orders
- Maintenance Notification.

Additional Features

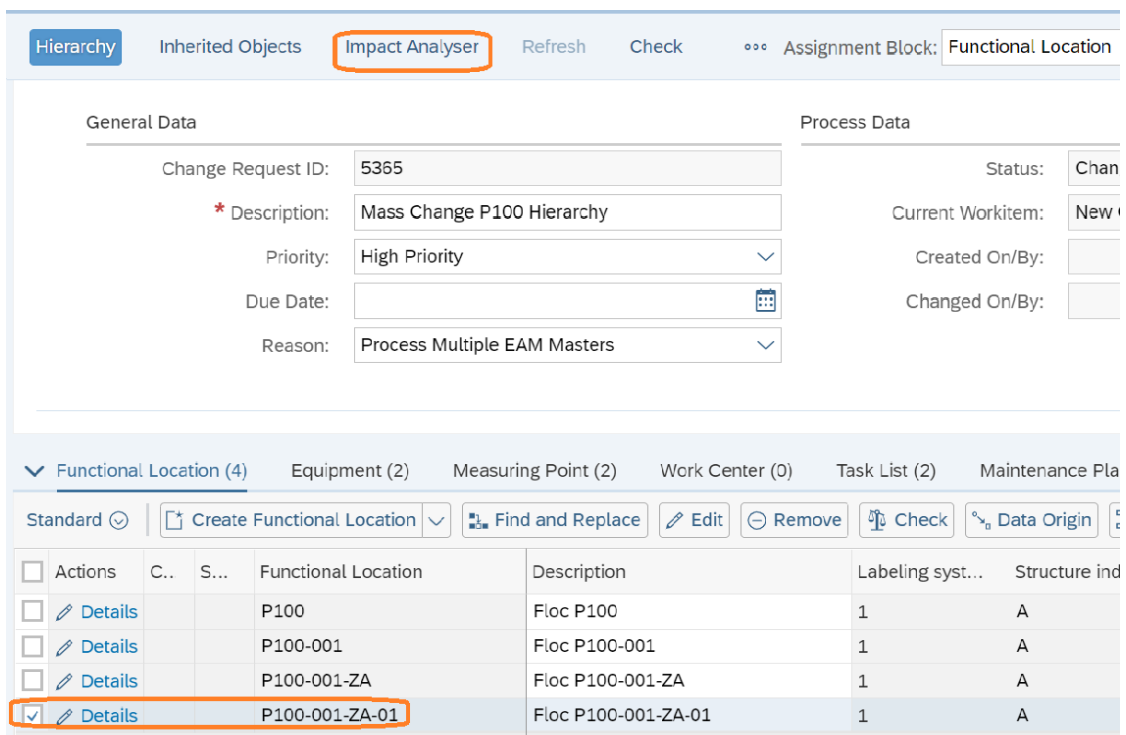
- Provide option to maintain required EAM Object details and Specific field / Group of fields values in Configuration table.
- Supports to view and download the report of Connected dependent objects with grouped or individual attribute value details, example like Change in Maintenance work center in

Equipment Object would impact in Connected or dependent Objects like Task List, Maintenance Plan, Maintenance Order and Notifications.

- It's support only for EAM Active data.
- System should get impacted object details displayed based on defined object attribute value.
- Users should select at least one object record to get the dependent or connected object details display.
- Displaying impacted object list based on source ID assenting order.
- Designed and supports Impact Analyzer data of MDG with Hub and Co-deployment scenarios.
- Popup will provide details of Master data Objects and Transaction data objects from multiple transition S4HANA systems.
- User can perform selection of single or multiple objects
- Impact Analyzer data download option to MS Excel Format
- Sort the Output value columns
- Pending Change Request Number displayed if any connected object locked other Change request.

Reference snapshots

1. Selected Functional Location Object Record



The screenshot shows the SAP MDG Impact Analyzer interface. The 'Impact Analyser' tab is selected. The 'Assignment Block' is set to 'Functional Location'. The 'General Data' section shows the Change Request ID as 5365, Description as 'Mass Change P100 Hierarchy', Priority as 'High Priority', Due Date as empty, and Reason as 'Process Multiple EAM Masters'. The 'Process Data' section shows Status as 'Change', Current Workitem as 'New', Created On/By as empty, and Changed On/By as empty. Below the data sections, there is a table of Functional Location records. The table has columns for Actions, C., S., Functional Location, Description, Labeling syst..., and Structure ind. The records are: P100 (Floc P100), P100-001 (Floc P100-001), P100-001-ZA (Floc P100-001-ZA), and P100-001-ZA-01 (Floc P100-001-ZA-01). The last record, P100-001-ZA-01, is selected and highlighted with a red box.

Actions	C.	S.	Functional Location	Description	Labeling syst...	Structure ind
<input type="checkbox"/> Details			P100	Floc P100	1	A
<input type="checkbox"/> Details			P100-001	Floc P100-001	1	A
<input type="checkbox"/> Details			P100-001-ZA	Floc P100-001-ZA	1	A
<input checked="" type="checkbox"/> Details			P100-001-ZA-01	Floc P100-001-ZA-01	1	A

2. Selected Equipment Master Object Record

SAP AIW Change Request-5365

Hierarchy Inherited Objects **Impact Analyser** Refresh Check ... Assignment Block: Equipment (2)

General Data

Change Request ID: 5365

* Description: Mass Change P100 Hierarchy

Priority: High Priority

Due Date:

Reason:

Process Data

Status: Change

Current Workitem: New C

Created On/By:

Changed On/By:

Functional Location (4) **Equipment (2)** Measuring Point (2) Work Center (0) Task List (2) Maintenance Plan

Standard Create Equipment Find and Replace Edit Remove Check Data Origin Move to

<input type="checkbox"/>	Actions	Chan...	S...	Equipment	Description	Equipment category	Mainten...
<input type="checkbox"/>				19900556	Compressor	M	0001
<input checked="" type="checkbox"/>				19900557	Electric Motor	M	0001

3. Impacted Objects list displayed based on selection for co-deployed scenario.

SAP AIW Change Request-5365

Hierarchy Inherited Objects **Impact Analyser** Refresh Check ... Assignment Block: Equipment (2)

General Data

Change Request ID: 5365

* Description: Mass Change P100 Hierarchy

Priority: High Priority

Due Date:

Reason:

Process Data

Status: Change

Current Workitem: New C

Created On/By:

Changed On/By:

Functional Location (4) **Equipment (2)** Measuring Point (2) Work Center (0) Task List (2) Maintenance Plan

Standard Create Equipment Find and Replace Edit Remove Check Data Origin Move to

<input type="checkbox"/>	Actions	Chan...	S...	Equipment	Description	Equipment category	Mainten...
<input type="checkbox"/>				19900556	Compressor	M	0001
<input checked="" type="checkbox"/>				19900557	Electric Motor	M	0001

SAP AIW Change Request-5365

Hierarchy Inherited Objects **Impact Analyser** Refresh Check ... Assignment Block: Equipment (2)

General Data

Change Request ID: 5365

* Description: Mass Change P100 Hierarchy

Priority: High Priority

Due Date:

Reason:

Process Data

Status: Change

Current Workitem: New C

Created On/By:

Changed On/By:

Functional Location (4) **Equipment (2)** Measuring Point (2) Work Center (0) Task List (2) Maintenance Plan

Standard Create Equipment Find and Replace Edit Remove Check Data Origin Move to

<input type="checkbox"/>	Actions	Chan...	S...	Equipment	Description	Equipment category	Mainten...
<input type="checkbox"/>				19900556	Compressor	M	0001
<input checked="" type="checkbox"/>				19900557	Electric Motor	M	0001

6. Limitation and Restriction

- Impact Analyzer support only for active data.
- Manual activity required to Configuration, select object records, and get report.