

# User Help Document

## 1 Utopia EAM Solutions for MDG™

Utopia EAM Solutions for MDG™ can be used to request, approve, and execute changes to the following Enterprise Asset Management objects, as of Version 7.3, as well as replicate those changes to decentralized systems by means of ALE and IDocs:

- uEQUIP™ for MDG** – Utopia Equipment Master for Master Data Governance
- uFLOC™ for MDG** – Utopia Functional Location Master for Master Data Governance
- uMROBOM™ for MDG** – Utopia MRO Bill of Material for Master Data Governance
- uSRVMSTR™ for MDG** – Utopia Service Master for Master Data Governance
- uMSRPTS™ for MDG** – Utopia Measuring Point for Master Data Governance
- uWRKCTR™ for MDG** -- Utopia Work Center for Master Data Governance
- uTSKLST™ for MDG** – Utopia Task List for Master Data Governance
- uMNTPLN™ for MDG** – Utopia Maintenance Plan for Master Data Governance

In addition to standard functionalities described the Sections below, this release provides the following enhancements for uEQUIP™ and uFLOC™ and uMSRPTS™:

- Classification - Class and Characteristics Functionality
- Creation and replication of delete status
- Linear Asset Management (LAM) Classification
- Linear Asset Management (LAM) attributes with GIS information

## 2 Features

The management of master data usually follows the pattern below:

- You can influence the flow of this process by selecting a workflow. The available workflow templates can be found under [Workflow Templates](#).
- You create a change request (see [Creation of a Change Request](#)).
- The change request undergoes an approval procedure. You can use the function [processing of a Change Request](#).
- You execute the master data change (see [Master Data Processing](#)).
- You replicate the changes (see [Data Replication](#)).
- Simple field mappings with field transformations and complex transformations ([SMT Mapping/Extensibility](#))
- Source and Target Value mapping ([Key Mapping](#))
- DIF ([Data Import Framework](#))

- DRF (**Data Replication Framework**)
- Context Based Adaptation for UI

## 3 Additional Enhancements

### 3.1 User/System Status

The technical objects and the complete processing with notification and order are linked to SAP's general status management. Here, you have to distinguish between the system status and the user status. For certain business processes, the system sets the system statuses internally and automatically as part of its general status management. In addition to the predefined system statuses, you can freely define user statuses that fulfill your requirements to extend or enhance the system statuses.

### 3.2 Enhanced (additional) Search Attributes

Additional search criteria attributes have been added for each object to enhance the search capabilities. These additional attributes allow users more options to refine the criteria used when performing a search.

### 3.3 Enhanced Search Functionality – ALV

Users can save information about column structure, sort criteria, filter conditions, various display options, and so on, in an unlimited number of views. This means users can always display the ALV output with their preferred properties. However, these views are only available to the user who created them. Other users cannot see these views. This form of modification of the ALV output is referred to as 'personalization'.

### 3.4 Multi/Mixed CR Type

This new change request type allows for the creating or changing multiple/mixed records of different objects through MDG in one session as opposed to separate change requests per entity type. As a restriction in the create case, the objects cannot be connected to each other, only in the change case can they be linked. E.g. it is not possible to create a functional location and to create an equipment that references this location at the same time.

### 3.5 Dismantle/Move Equipment

This functionality allows for dismantling equipment from a functional location, and if necessary, to install at a different location. It also allows for removing an assignment of equipment from a superordinate equipment, and if necessary, reassigning to a different

superordinate equipment.

### 3.6 Classification (Class & Characteristics Functionality)

- a. CRUD (Create/Read/Update/Delete) operation is supported with Change request processing. These are dependent attributes of Equipment, Floc and Measuring point
- b. An equipment, a Functional Location, a Service and Measuring point can be classified using the Class and Valuation functionality. Multiple Classes with Equipment class type can be assigned to an Equipment.
- c. Once classes are assigned to the Equipment or Functional Location or Service or Measuring point, values belonging to characteristics can be assigned to the Equipment, FLOC, SERVICE and MSPPOINT. The UI by default loads all mandatory and characteristics with default values and allows the user to add and Delete required Class assignment and assigned values to the Equipment/ Floc/ Service/ MSPoint.
- d. The UI only displays the characteristics that are assigned values, instead of showing all the characteristics of the assigned Classes like ECC does. It helps the user to maintain only required characteristics thus narrowing down the search.
- e. Once Class is assigned to Equipment/Functional Location/Service/Measuring Point, mandatory characteristics and characteristics with default values are automatically populated.
- f. Business rules provided in the OOTB solution help in validating all the ECC Business Rules (As available in the SAP ECC functionality)
- g. Provision for deletion of Class assignments, Business rules makes sure that all the corresponding values are also deleted.
- h. The class assignment will not be deleted in the target system under a hub scenario when deleting all classes. A CLFMAS IDoc does not get triggered in the hub as there are no classes assigned. A work around it to create a placeholder class with no chars and assign that.

### 3.7 Creation and replication of delete/inactive status

- a. Functionality has been added in this version to permit set/reset of the deletion status on Equipment Master, Functional Location, MRO BOM, Maintenance Plan, Measuring Point, Work Center, and Service Master.
- b. Functionality has been added in this version to permit set/reset of the Active/Inactive status on Maintenance Plan and Measuring Point.
- c. The replication of these statuses happen through IDocs and the statuses are accordingly adjusted in the backend ECC system, thus maintaining synchronization of the statuses.

### 3.8 Data Import Framework

- a. Data Import menus are only available in the Data Exchange menu for the Specialist and Steward roles
- b. The DIF feature can be used to load the data into the System along with the classification and LAM data.
- c. For the Data Creation with the internal number range, the upload of

classification and LAM data should be done in the subsequent run of DIF.

- d. Data Import functionality is available for importing to create multiple work centers using xml and csv files with key mapping and without key mapping and, key mapping and value mapping. We have multiple options which includes manual and governance process.

### 3.9 Search

We are having two types of search available. We are having default search as DB and another one is HANA Search. So, in both the search types we can search and with various search criteria and search operators.

(Note: HANA Search is currently out of scope for Service Master)

### 3.10 Copy from Search Results

Create a new object with the Copy functionality by using an existing object. In the Search Results screen, select an existing object and click Copy. The values that were present in the existing object will be automatically copied into a new Change Request for that object. After that you can edit the new Change Request as needed.

**Note:** In the pop-up window after clicking Copy.

1. Equipment Master, Maintenance Plan, and Task List
  - a. Internal Number – Need to leave the field blank. A temporary key will be provided in the new Change Request generated.
  - b. External Number – Need to provide the new external number.
2. Functional Location – Need to leave the field blank and provide the new Label in the Change Request generated.
3. Material BOM – Need to provide the new Material, Alternative BOM (must be = 1), BOM Usage, and Plant.
4. Measuring Point – Need to leave the field blank. A temporary key will be provided in the new Change Request generated.
5. Work Centre – Need to provide the new Work Centre and Plant.

### 3.11 Task List (General Task List, Equipment Task List & Functional Location Task List)

- a. CRUD (Create/Read/Update/Delete) operation is supported with Change request processing.
- b. Each and every change request processed based on workflow approval. After all approvals Task list group will be created in ECC.
- c. For each and every task list type standalone user interfaces are available.
- d. In every task list user can create task list with operations, internal and external processing functions.
- e. In every task list UI, separate forms and overview screens are available as per ECC UI standards.

- f. Fully created equipment and functional location can be used to create equipment task list and Functional task list. MDG solution will validate and allows to create further task list.
- g. Provision for deletion flags allows to mark task list as deleted one.

For Non MDG functions example. Components separate user interfaces

### 3.12 Service Master

- a. CRUD (Create/Read/Update/Delete) operation is supported with Change request processing.
- b. Each and every change request processed based on workflow approval. After all approvals Task list group will be created in ECC.
- c. User can create a service with short / long texts in multiple languages
- d. Provision for deletion flags allows to mark service as deleted one.

### 3.13 Work Center

#### 3.13.1 Mark for deletion

Mark for Deletion set/reset functionality is available through Search results and Mass change. In the search screen, we can select a work center and click mark for deletion button in the toolbar, a new screen will be opened up with all the values disabled except deletion flag indicator. We can save, submit and approve the same.

#### 3.13.2 Setting Lock Indicator

Setting and resetting the lock indicator option is available in the Change WorkCentre. When we try to change an existing work center we would be having all the fields enabled along with lock indicator flag.

#### 3.13.3 Mass Change

For Mass change of Work Center, the applicable fields for each Work Center category only may be entered. We cannot dynamically restrict the Mass Change UI, based on data input, so user has to provide the applicable Field values based on the Work Center Category.

Based on the Work Center Category, if any field is entered which doesn't belong to that category, it will show an error. So that it is suggested to do Mass change based on work center category Values.

#### 3.13.4 File Upload and Data Import Framework

Work Center: While doing File Upload or Data Import with Work Center, the applicable fields for each Work Center category only may be entered in the input file. We cannot dynamically restrict in the Framework, so user has to provide the applicable Field values based on the Work Center Category in the Input files that are being loaded.

Based on the Work Center Category, if any field is entered which doesn't belong to that category, it will show an error.

**3.14 Maintenance Plan:** During File Upload, Attribute WPTXT should be used to update Maintenance Plan description. Field TXTMI is not supported.

**3.15 Functional Location:** During File Upload, the Functional Location Label should be maintained in Attribute FLOC\_REF. Attribute FUNCLOC should be left blank.

### 3.16 Data Replication Framework

- a. Replication framework functionality is available to replicate the data to target systems through Manual replication and DRFOUT and Auto replication.
- b. Manual Data replication menus are only available in the Data Exchange menu for the Specialist and Steward roles

### 3.17 Derivation for MPMI

- Planning data is always derived from reference object in all the scenarios i.e. in Single Object Processing, File Upload and DIF.

## 4 Linear Asset Management (LAM) Functionalities

### 4.1 LAM Attributes

- a. CRUD operation is supported with Change request processing. These are the dependent attributes of Equipment and Floc
- b. LAM attributes can be assigned to Measuring Point if the category is of type Linear and the reference object is also of Linear category.
- c. LAM attributes can be assigned to Maintenance Item, if reference object (Equipment or Functional Location) assigned is of Linear category.

### 4.2 Current LAM functionality supports attributes as follows:

- i. LRP ID
- ii. Start Point
- iii. End point
- iv. Length
- v. Length UOM
- vi. Start Marker
- vii. End Marker
- viii. Distance between Marker and Start Point
- ix. Distance between Marker and End Point
- x. Offset1
  1. Type of Offset1
  2. UOM Offset1
  3. Offset 1
- xi. Offset2

1. Type of Offset2
2. UOM Offset2
3. Offset 2

Derivations for all of the above fields are performed as they normally happen in ECC as part of OOTB solution. LAM Attributes can be added and deleted using single Create or Delete button provided in the UI.

#### 4.3 GIS Information

- a. CRUD operation is supported with Change Request processing. These are dependent attributes of Equipment and Floc
- b. Geo Graphical information system in Utopia SAP MDG EAM720 supports the following attributes.
  - i. Start Latitude
  - ii. Start Longitude
  - iii. End Latitude
  - iv. End Longitude
  - v. Time Zone

These attributes are provided as standard solution in Utopia MDG EAM 720. If customers prefer not to use / hide in UI customizing can be performed on the Utopia delivered UI. Customers can add GIS information with LAM attribute. LAM attributes and GIS fields will work together. All derivations and validations will work as per ECC. Additional validations and derivations can be added using BADI/Enhancements and not offered as part of OOTB.

Customers can implement BADI EAML\_LFE\_SCREEN\_CUST to have GIS fields visible in SAP ECC [Backend]

The above fields perform the derivations that happen in ECC as part of OOTB solution.

#### 4.4 LAM Classification

- a. CRUD operation is supported with Change request processing. These are Dependent attributes of Equipment and Floc Classification
- b. LAM Classification can be added once Class and Values are added to Equipment or FLOC, Provided the Equipment or FLOC category is of type Linear (L).
- c. LAM classification can be added and Deleted from Equipment or Floc.
- d. General Value deletions will trigger, LAM classification deletion i: e once the user deletes the General value, LAM classification also gets deleted by itself.
- e. Lam Classification Supports following attributes
  - i. Characteristics Description
  - ii. Characteristics value
  - iii. Start Point
  - iv. End Point
  - v. Length
  - vi. UoM

Note that the LAM Classification is not part of the MSPOINT object.

The above fields are subject to all validations and derivations that happen in standard SAP ECC and are part of OOTB solution.

**NOTE:** All the functionalities described above are subject to release / restriction notes circulated along with the other Technical Documents for this release.