

Introduction:

Functional Locations (FLocs) are the Plant Maintenance equivalent of the RE portfolio and can be classified into three types:

- A. Real Estate Flocs: Every Architectural Object created in Real Estate automatically generates a linked Functional Location. These objects represent a physical view and allow equipment to be assigned to a location
- B. Building Components: For owned buildings valued at over USD100,000, the building must be componentized, or broken down into several sub-assets. Each of these sub-assets is linked to a Building Component FLoc, which are created manually and represent the financial view
- C. Land/Infrastructure Components: Similar to Building components, any Infrastructure object valued over \$100,000 must be capitalized. However, multiple infrastructure objects within the same type (e.g. Protection, Energy etc.) can be grouped to meet the \$100,000 threshold – each individual Land/Infrastructure becomes a component and is then linked to a sub-asset.
 - Unlike Building Components, Land/Inf Components
 - are created directly in Real Estate as individual Infrastructure objects, therefore the FLoc does not need to be created manually
 - require that a higher-level/parent “Infrastructure System” object is created in RE, then all FLoc components must be realigned to be subordinate to the new FLoc on the Functional Location side

Both newly created RE Flocs and Components require manual updates to a number of fields. This user guide will walk you through all the fields that require updating.

Trigger

You would use these steps in the following circumstances: An architectural Real Estate object is created and you need to update the Functional Location.

Roles

The role that performs these steps is the RE01 – Facilities Planner.

Prerequisites

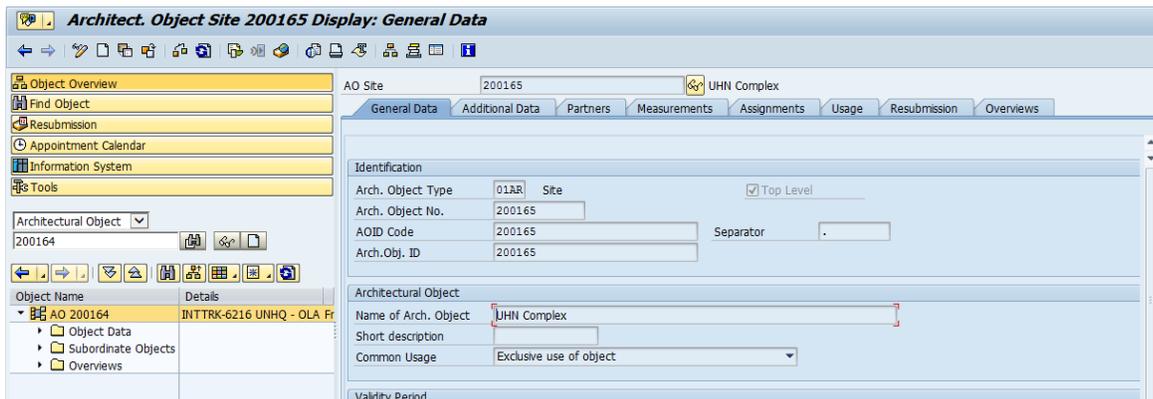
RE architectural objects are created

Transaction Codes

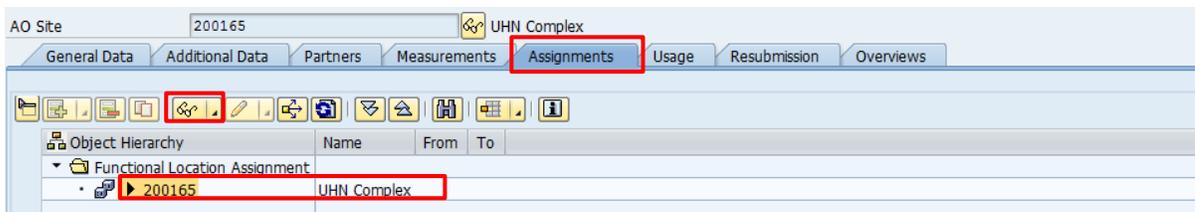
- RE80 – Real Estate Navigator
- IL02 – Change Functional Location (individual)
- IL03 – Display Functional Locations
- IH01 – Display Functional Location Structure

Step-by-Step Instructions. Case A.1. Architectural Object: Site

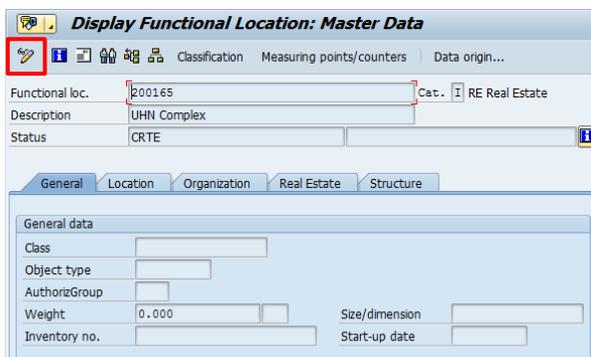
1. Create the new Site in RE with all relevant information required:



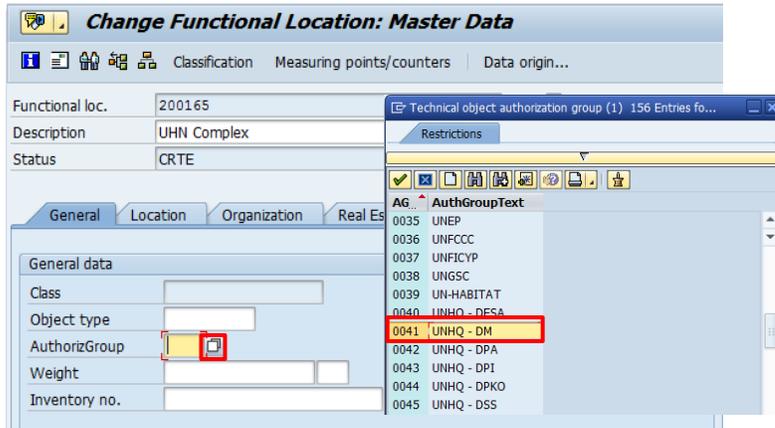
2. On save, Functional Location will be automatically created. Navigate to the Func Loc from IL03, (display functional location), or on the Assignments tab of the AO, click on the FLoc line and then the glasses:



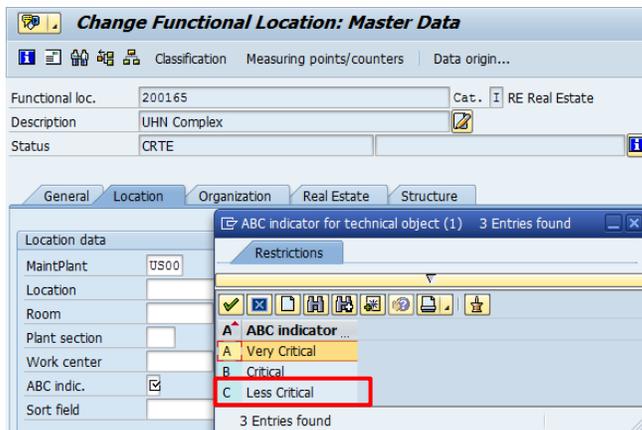
3. Enter into change mode:



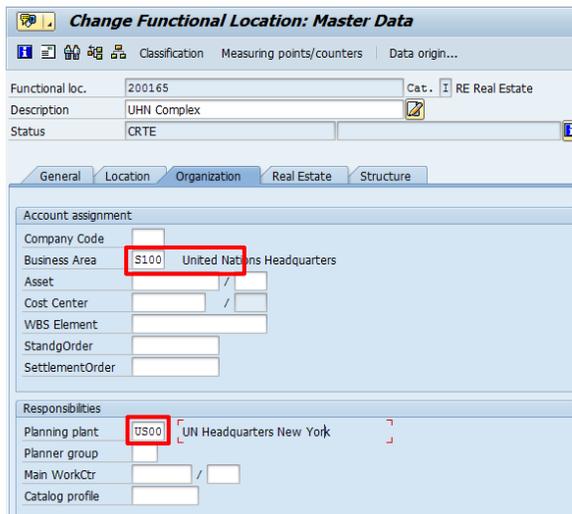
- On the General tab, click into the AuthorizGroup and select the matchcode to view all options. Select the correct Authorization Group:



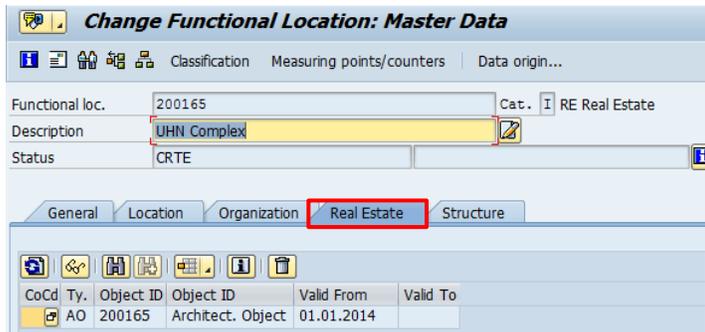
- On the Location tab, enter in the ABC indicator:



- On the Organization tab, enter in the Business Area and Planning Plant:

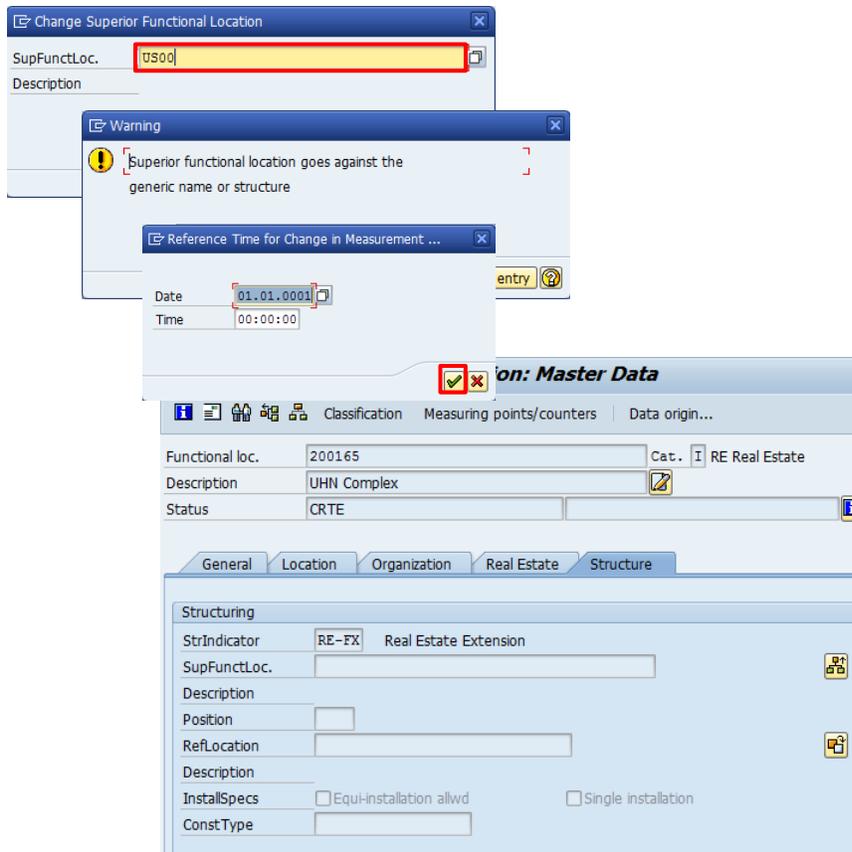


7. Click on the Real estate tab to verify the linkage is to the correct RE object:



8. On the Structure tab, click on the Change Superior hierarchy button and assign the higher level Functional Location

a. For Sites, this will be the Maintenance Plant. Click through any warnings/pop up windows. Do **not** check the Equi-installation allowed box:



9. When all changes are complete, save to adopt changes

Step-by-Step Instructions. Case A.2. Architectural Objects: Land / Building / Floor / Room

1. For Land, Buildings, Floors and Rooms, the information will automatically derive from the higher level Site Functional Location if it has been maintained. If not, double check each tab as detailed above. Verify all fields are correct before navigating to the Structure tab. Make sure to check the Equi-installation allowed box to allow for equipment to be installed:

The screenshot shows the 'Change Functional Location: Master Data' window in SAP. The 'Structure' tab is active, displaying the following fields:

- Functional loc.: 200165.001.01
- Description: Building A Floor 1
- Status: CRTE
- StrIndicator: RE-FX (Real Estate Extension)
- SupFunctLoc.: 200165.001
- Description: Building A
- Position: [Empty]
- RefLocation: [Empty]
- InstallSpecs: Equi-installation allowed, Single installation
- ConstType: [Empty]

2. When all changes are complete, save to adopt changes

Step-by-Step Instructions. Case B. Building Components Functional Locations

Building Components have a strict nomenclature: <Site>.<Building>.<Category>.<Component>
e.g.200169.003.EX.SS

All Categories and Components are listed in the table below:

Category	Naming Convention	Component
Exterior	*.EX.FB	Foundations & Basements
	*.EX.SS	Superstructure
	*.EX.EC	Exterior Closure
Roofing	*.RF.RF	Roofing
Interior	*.IN.IC	Interior construction, staircases & finishes
Services	*.SV.CS	Conveying systems
	*.SV.PB	Plumbing
	*.SV.HV	HVAC
	*.SV.F	Fire Protection
	*.SV.EL	Electrical & low-voltage systems

* Denotes the higher level building AOID e.g. 100000.001.EX.FB

1. To create the Building Component, the Facilities Planner should navigate to IL01, Create Functional Location and enter in
 - o New Building Component ID: for example: 200169.003.EX.SS
 - o StrIndicator: RE-FX
 - o FunctLocCat: I
 - o Copy From> FunctLocation: (optional this FLoc is a copy of an already existing FLoc)
 - o SupFunctLoc: Higher-level building AOID (in this example 200169.003)

Once all fields are maintained, hit enter:

2. If the warning message below appears, disregard and hit enter again:

Superior functional location goes against the generic name or structure

3. On the General tab, enter in the Description and the Authorization Group if the field has not been derived. Click on the Classification button:

Create Functional Location: Master Data

Classification Measuring points/counters Data origin...

Functional loc. 200169.003.EX.SS Cat. I RE Real Estate
 Description Main Building-Exterior-SS
 Status CRTE

General Location Organization Structure

General data

Class
 Object type
 AuthorizGroup 0081 UNHQ - OLA
 Weight Size/dimension
 Inventory no. Start-up date

Reference data

AcquistnValue Acquisition date

Manufacturer data

Manufacturer ManufCountry
 Model number Constr.yr/mth
 ManufPartNo.
 ManufSerialNo.

4. In the Assignments table, enter in class ZFLCOMPONENT:

Create Functional Location: Classification

Object

Functional loc. 200169.003.EX.SS
 Description Main Building-Exterior-SS
 Class Type 003 Functional Location

Assignments

Class	Description	St...	S.. I...	Itm
ZFLCOMPONENT		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Entry / 12

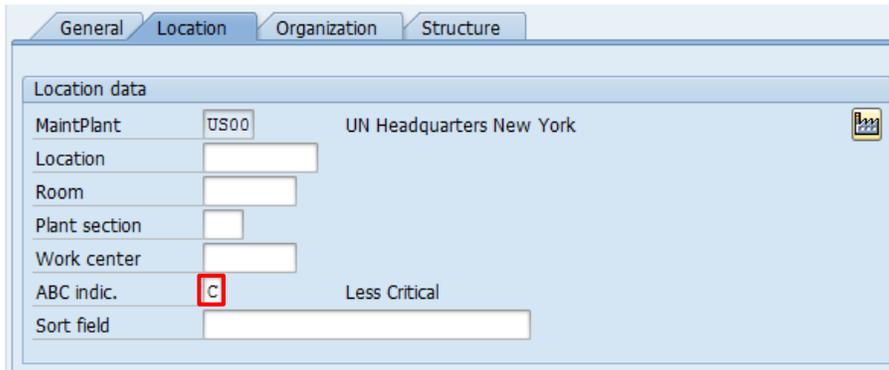
5. On hitting enter, a new table will be populated at the bottom of the screen. These can be left blank. Click back to return to the main screen:

Values for Class ZFLCOMPONENT - Object 200169.003.EX.SS

General

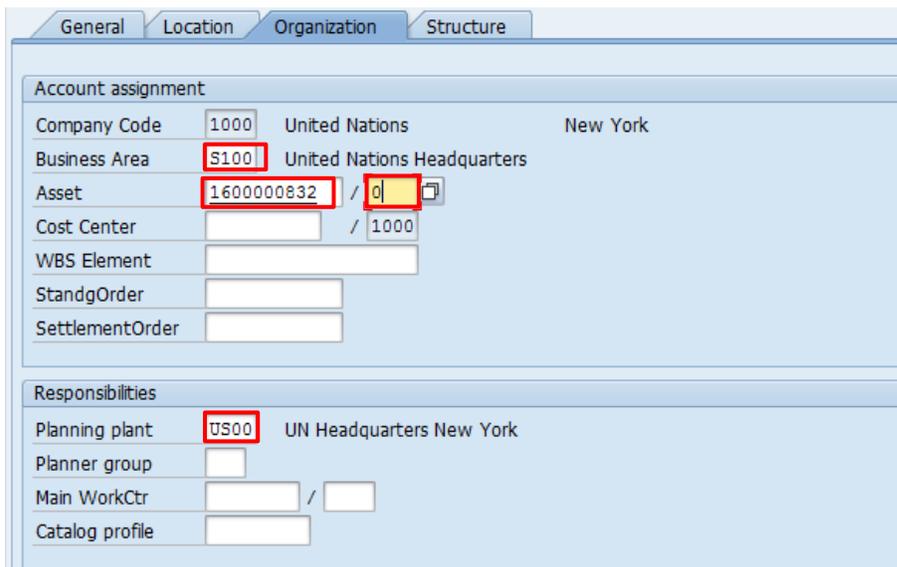
Characteristic Description	Value
Component Value (USD)	
Component Depreciation...	
Capitalisation Date	
Component Useful Life	
Date of Valuation	

6. On the Location tab, enter in the ABC indicator (usually kept as C, less critical):



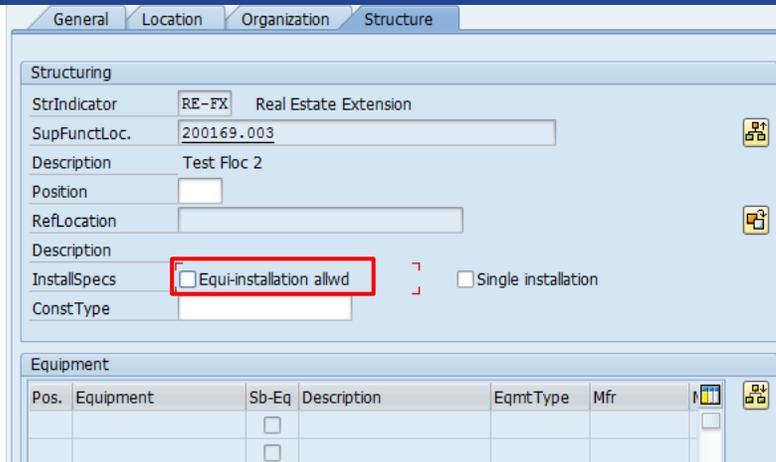
The screenshot shows the SAP 'Location data' form with the 'Location' tab selected. The 'ABC indic.' field is highlighted with a red box and contains the letter 'C'. The text 'Less Critical' is displayed next to it. Other fields include 'MaintPlant' (US00), 'Location', 'Room', 'Plant section', 'Work center', and 'Sort field'.

7. On the Organization tab, ensure the Business Area, Asset, Asset Subnumber and Planning Plant have been maintained. Work with your Fixed Assets colleagues for the correct Asset and subnumber to be referenced here:



The screenshot shows the SAP 'Organization' form with the 'Organization' tab selected. The 'Account assignment' section includes fields for 'Company Code' (1000), 'Business Area' (S100), 'Asset' (1600000832), and 'Cost Center' (/ 1000). The 'Responsibilities' section includes 'Planning plant' (US00). The 'Asset' field is highlighted with a red box, and the 'Cost Center' field is highlighted with a yellow box.

8. Note that there is no Real Estate tab (unlike RE Functional Locations) since Building Components are not linked to RE objects. On the Structure tab, ensure that the SupFuncLoc field has been filled with the higher-level building, and make sure the Equip-Installation Allowed checkbox is **not** checked. Equipment should never be installed against a building component:

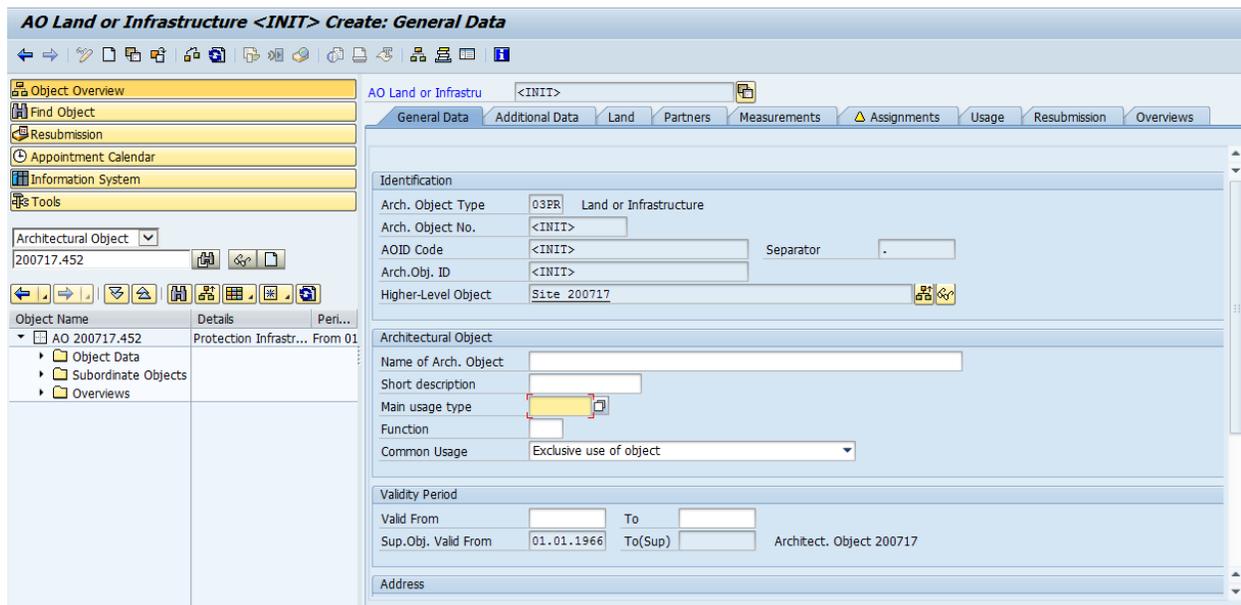


9. Click save to create the Building Component:

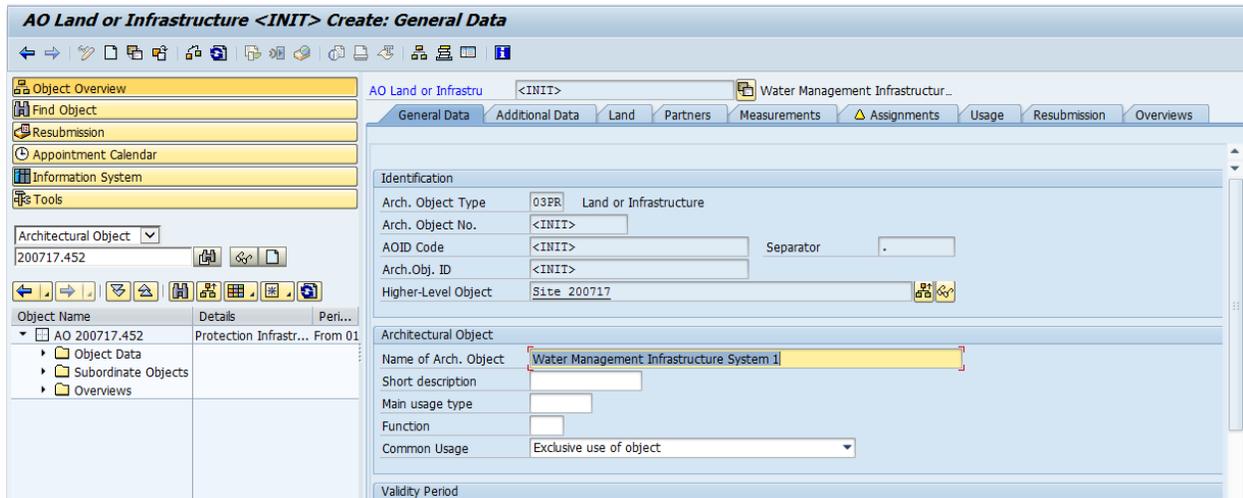


Step-by-Step Instructions. Case C. Land / Infrastructure Component Functional Locations

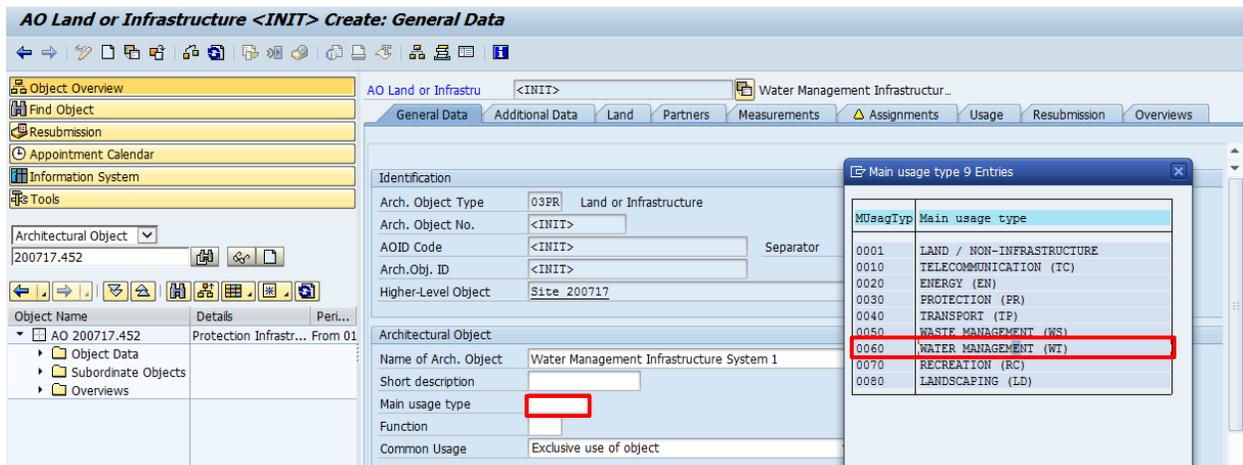
1. When Land/Infrastructure is componentized, a higher-level/parent “Infrastructure System” object must be created in Real Estate before the Functional Locations can be realigned. In RE80, create a new Land object:



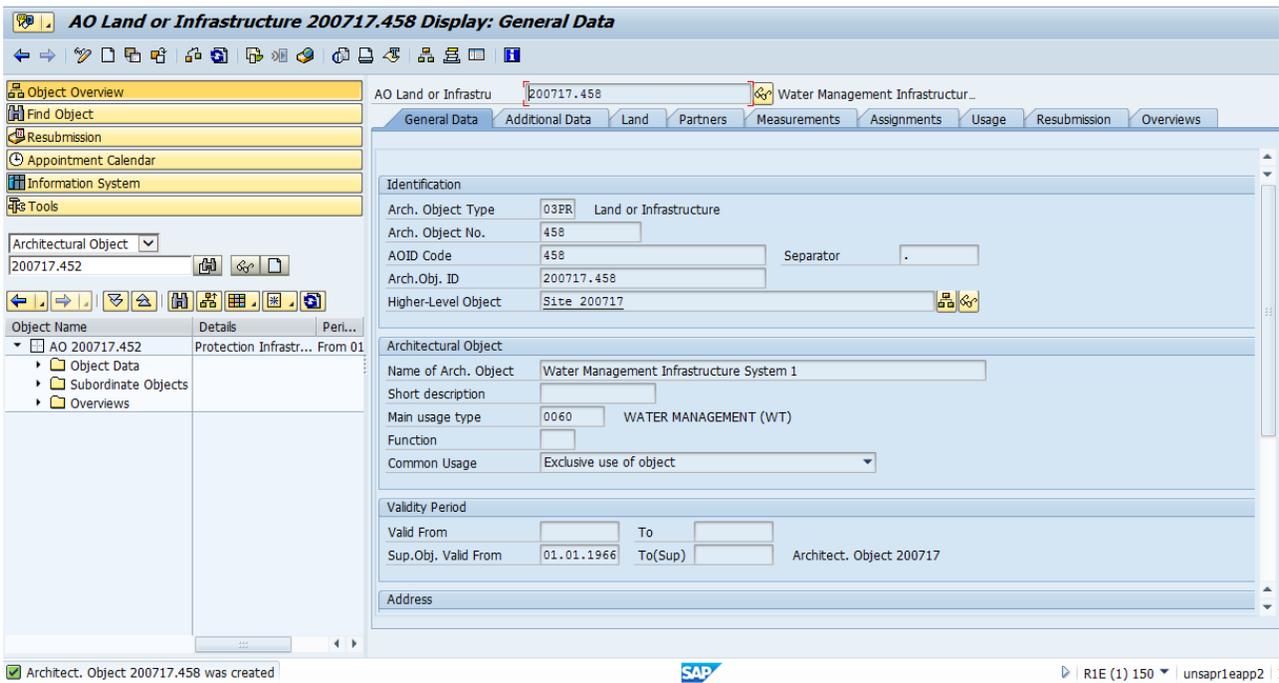
Enter in the name which matches the Main Usage type, followed by “Infrastructure System”, e.g. Water Management Infrastructure System. If there are multiple componentized infrastructure systems, follow the name with 1, 2 etc.:



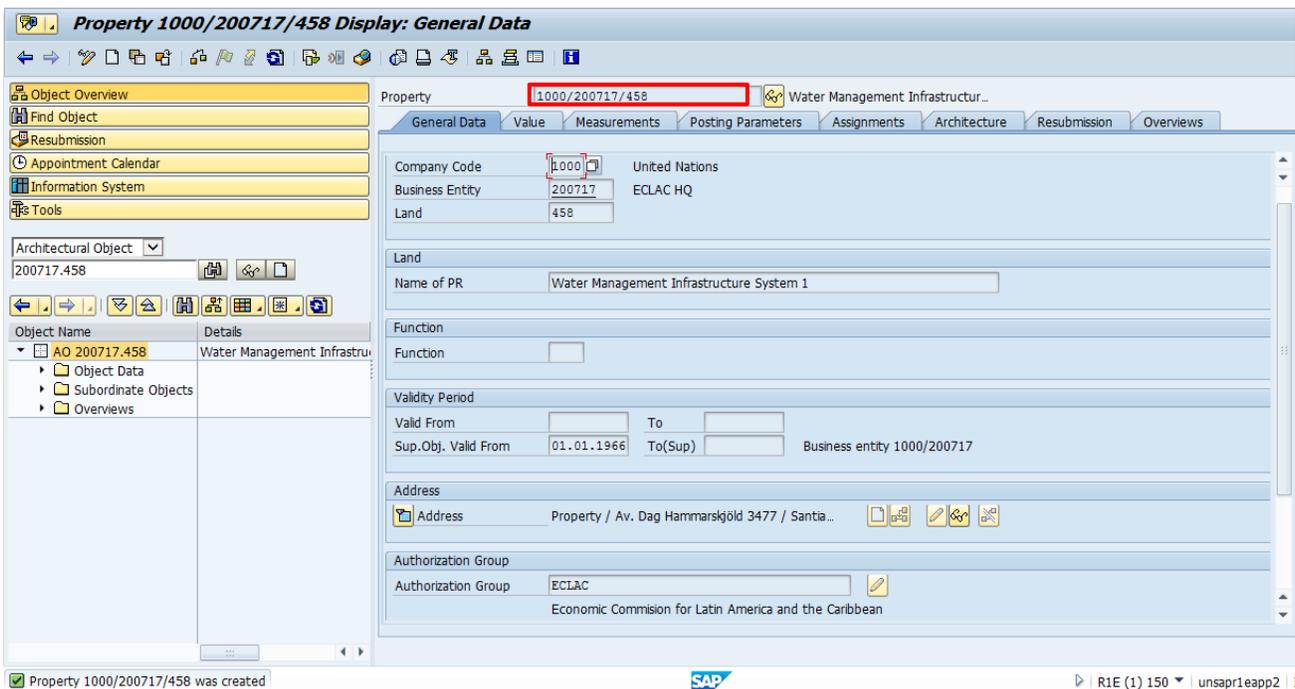
Select the Main Usage type, leave Function field blank and set User Status to REQS:



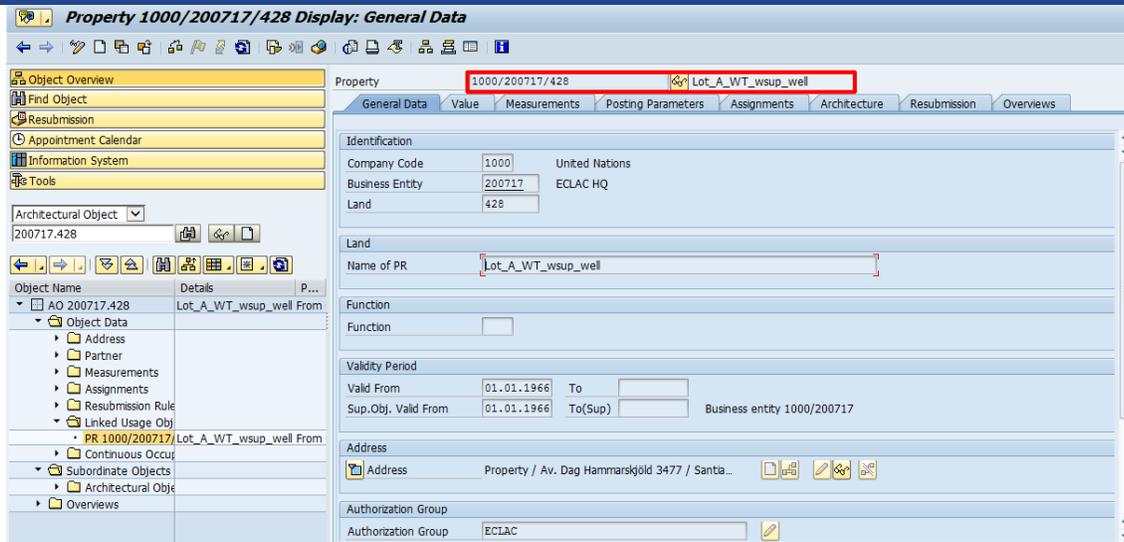
Ensure all other required fields like the Partners have been maintained, then save to create the RE AO:



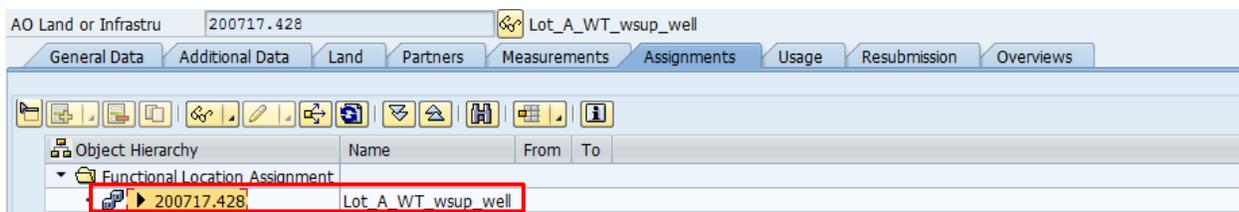
2. Create the corresponding Usage Object:



3. Create all subordinate componentized Infrastructure RE AOs, maintaining the function field and other detailed information, then set the User Status to REQS:



4. OAs noted previously, every time the AO is saved, a corresponding Functional Location is automatically generated:



5. Facilities Planner should now enter each object and approve the AOs, and approve & release the UOs:



6. Work with your Fixed Asset team to ensure all assets (to be linked to Land/Inf UO) & sub-assets (to be linked to Land/Inf component FLocs) have been created. Once created, link the parent asset to the Land/Inf Usage Object.
7. Then link each sub-asset to a corresponding Land/Inf component Functional Location.
8. Update the Functional Location hierarchy by navigating to each Land/Inf component, and changing the superior Functional Location to the newly created parent "Infrastructure System AO"

Change Functional Location: Master Data

Classification Measuring points/counters Data origin...

Functional loc. 200717.428 Cat. I RE Real Estate

Description Lot_A_WT_wsup_well

Status CRTE

General Location Organization Real Estate Structure

Structuring

StrIndicator RE-FX Real Estate Extension

SupFunctLoc. 200717

Description ECLAC HQ

Position

RefLocation

Description

InstallSpecs Equi-installation allwd Single installation

ConstType

Click through any warnings/pop-ups:

Warning

! Superior functional location goes against the generic name or structure

New entry

Superior FLoc has now been changed:

Change Superior Functional Location

SupFunctLoc. 200717.458

Description Water Management Infrastructure System 1

Find superior location

Reference Time for Change in Measurement ...

Date 02.09.2015

Time 16:07:56

RefLocation

Description

InstallSpecs Equi-installation allwd Single installation

ConstType

Save to adopt changes, then repeat for all other FLocs

9. Navigate to IH01, and enter in the higher level Site:

Functional Location Structure: Selection

Functional Location: 200717

Valid From: 02.09.2015

Explosion

Display Levels Above:

Display Levels Below: 1

Location hierarchy

Equipment installed

Equipment hierarchy

Expand Constrctn Type

BOM explosion

Explosion of IBase

Permits

Deleted Objects

10. Execute the selection, then scroll down to check the functional locations have been restructured correctly. Expanding the drop downs of the higher-level/parent Infrastructure Systems show that all subordinate Inf components are correctly aligned:

Functional Location Structure: Structure List

Levels above Expand whole

Functional loc.	200717	Valid From	02.09.2015
Description	ECLAC HQ		
▼	200717.452	Protection System 1	
•	200717.409	Lot_A_PR_barr_bm_gate	
•	200717.410	Lot_A_PR_barr_ent_gate	
•	200717.411	Lot_A_PR_barr_tnst	
•	200717.415	Lot_A_PR_pact	
•	200717.439	Lot_A_PR_barr_bm_gate	
•	200717.440	Lot_A_PR_barr_ent_gate	
•	200717.444	Lot_A_PR_pact	
▼	200717.453	Energy Infrastructure System	
•	200717.402	Lot_A_EN_elect_dist_und	
•	200717.403	Lot_A_EN_elect_dist_board	
•	200717.404	Lot_A_EN_elect_subst	
•	200717.405	Lot_A_EN_elect_earth	
•	200717.406	Lot_A_EN_elect_gen	
•	200717.433	Lot_C_EN_elect_dist_board	
•	200717.434	Lot_C_EN_elect_subst	
•	200717.436	Lot_A_EN_elect_gen	
▼	200717.454	Protection Infrastructure System 2	
•	200717.412	Lot_A_PR_fenc_wall_ms	
•	200717.413	Lot_A_PR_fenc_wire	
•	200717.414	Lot_A_PR_grd-pt	
•	200717.441	Lot_A_PR_fenc_wall_ms	
•	200717.442	Lot_A_PR_fenc_wire	
•	200717.443	Lot_A_PR_grd-pt	
▶	200717.455	Landscaping Infrastructure System	
▶	200717.456	Transport Infrastructure System 1	
▶	200717.457	Waste Management Infrastructure System	