SAP® S/4HANA Utilities extensions for meter to cash processes by PROLOGA

***Mobile On-Site Billing* - Configuration Guide**

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The original text of this document has been written in German. An English language translation has been provided as courtesy. In case of any conflict, it is agreed that the German version is the official original version and text and shall prevail in all respects and that no translated language shall be offered as evidence of the meaning of the German original.

Document History

Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location: http://service.sap.com/instguides -> *SAP Solution Extensions -> S/4HANA Utilities extensions for meter to cash processes -> 1.0*

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

Version	Important Changes
1	Initial version
2	Backend Configuration updated, information about Frontend configuration added

Table 1: Most important document changes

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Glossary

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Note

1 Introduction

SAP® S/4HANA Utilities extensions for meter to cash processes by PROLOGA will support and optimize your business process regarding meter reading and billing & invoicing on-site at the customer location. For that process, all required data are downloaded from SAP® *for Utilities* into the Mobile On-Site Billing solution, thereby transmitting the data to the mobile devices. The meter reading result will be captured on-site at the customer location. Based on the connectivity available, the billing and invoicing process will be performed online in conjunction with the SAP backend, or offline on the mobile device itself.

The deep integration into SAP® *for Utilities* enables a reliable and accurate process of reading, billing and invoicing on-site. It uses the same validation, billing and invoicing rules as defined in the backend system and synchronized into the Mobile On-Site Billing solution.

SAP® S/4HANA Utilities extensions for meter to cash processes by PROLOGA interfaces with a series of mobile devices. Installed at your company, these units form the interface between the meter reader and your SAP® backend system.

An additional mobile application (not included within *SAP® S/4HANA Utilities extensions for meter to cash processes by PROLOGA*) is required in order to provide the full end-to-end process.

This document describes which steps are necessary to put *SAP® S/4HANA Utilities extensions for meter to cash processes by PROLOGA* into operation after you have successfully installed the add-on.

1.1 System overview

Through implementation of the PROLOGA software, there are two different architecture opportunities available:

- The one system architecture: This actually means that the system is going to run within your SAP® instance.
- The two system architecture: This means two separate SAP® systems, where an interface will be used to provide the communication between the PROLOGA middleware and your SAP® backend system.

In the current version of the add-on, the one system architecture is not yet supported.

The content of this current version of this document is limited to:

- the two system architecture
- the configuration required in the SAP® IS-U / CCS backend system

1.2 Authorization Objects

Before starting the configuration of *SAP® S/4HANA Utilities extensions for meter to cash processes by PROLOGA* the authorization object *S_TABU_NAM* has to get assigned to the user for the relevant configuration transactions:

- Transaction */PLGA/MOB_CNNCT_CCNF* (Table /PLGA/VCMOBCCNFG)
- Transaction */PLGA/MOB_CNNCT_CNFG* (Table /PLGA/VMOBCCNFG)
- Transaction */PLGA/MOB_CNNCT_MRN* (Table /PLGA/VMOBMRNOTE)

2 Backend Configuration

2.1 Requirements

A prerequisite for executing the configuration is the successful and correct installation of the add-on *SAP S/4HANA Utilities extensions for meter to cash processes by PROLOGA*.

If you need more information on the Gateway service configuration, please look into standard SAP® documentation: *Installing and Configuring SAP® NetWeaver Gateway 2.0*.

2.2 The Backend Configuration process

2.2.1 Form activation

When the add-on import is finished, the delivered form can be found in the Client 000. You need to make a copy of the forms into the target Client (100, 200…). Start the transaction with *Utilities --> Copy from Client* or use the transaction code *EFRM*:

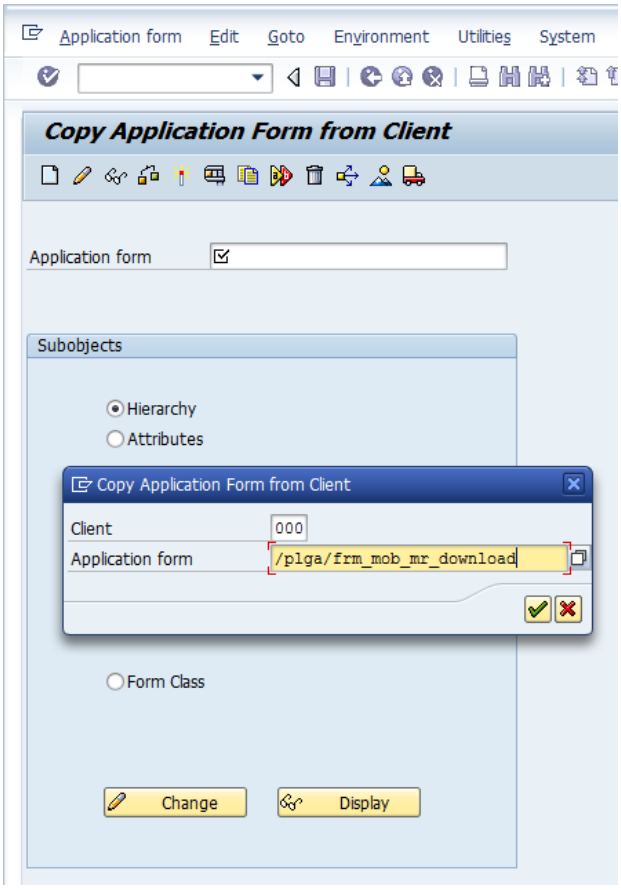


Figure 1: Copy the Application Form

Finally, the application form must be activated through the transaction *EFRM*:

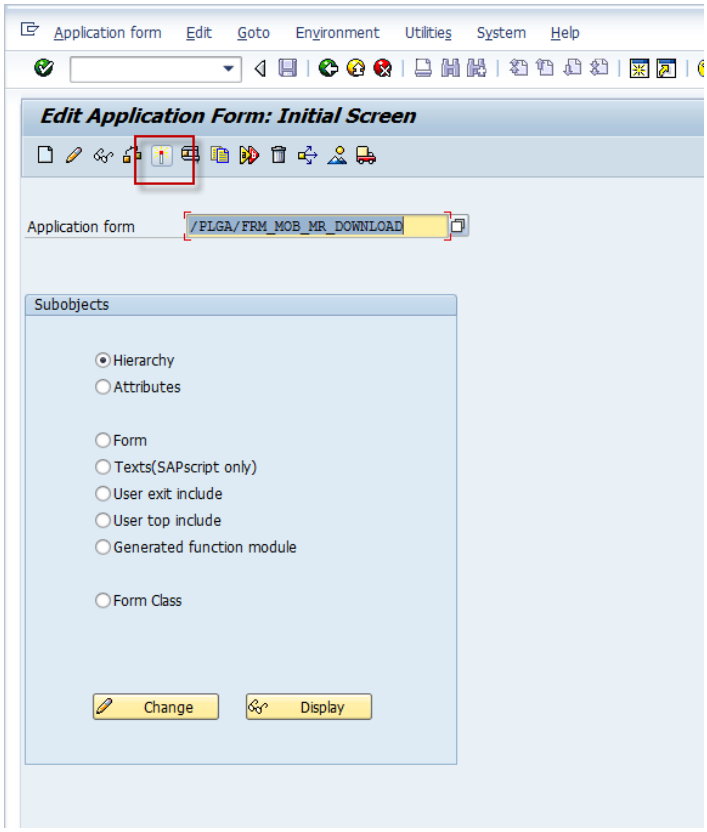


Figure 2: Activation of the Application form

2.2.2 BAdI activation

The BAdI (Classic / Enhancement Implementations) must be activated, because it was delivered in an inactive state (see Figure 3 and Figure 4). The necessary object is:

- */PLGA/MOB_DWNLD_OSB* (Classic BAdI)

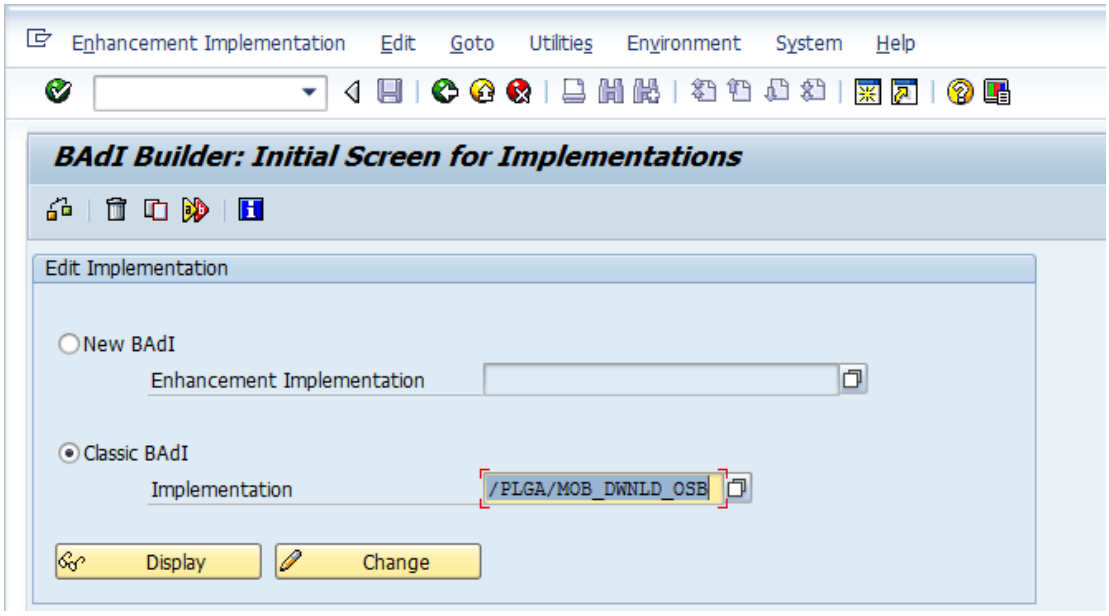


Figure 3: /PLGA/MOB_DWNLD_OSB (Classic BAdI)

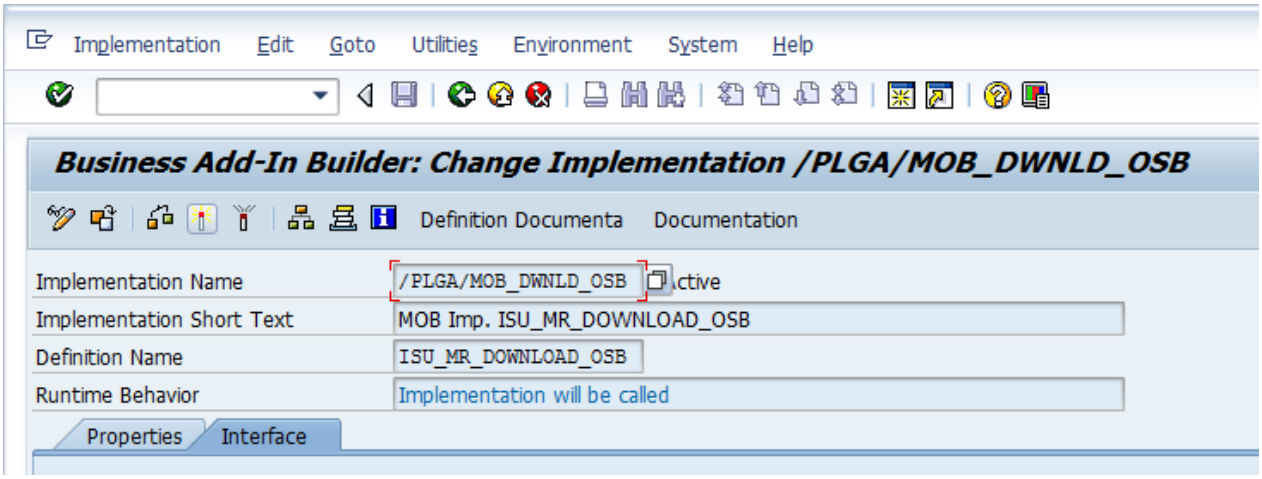


Figure 4: Application form description

2.2.3 Middleware Destination in Backend

This destination will connect the backend system to the *PROLOGA* middleware. This connection provides a channel for the order downloading into the middleware. For the implementation, use the transaction */PLGA/MOB_CNNCT_CNFG* and navigate to the node *New Entries: Details of Added Entries*:

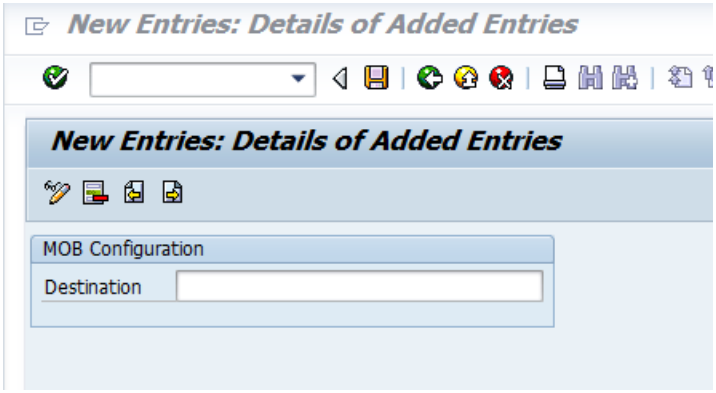


Figure 5: Destinations in MOB side

2.2.4 MOB Connect Customizing in Backend

For the MOB Connect customizing in the backend, use the transaction */PLGA/MOB_CNNCT_CCNF* and navigate to node *New Entries: Details of Added Entries*:

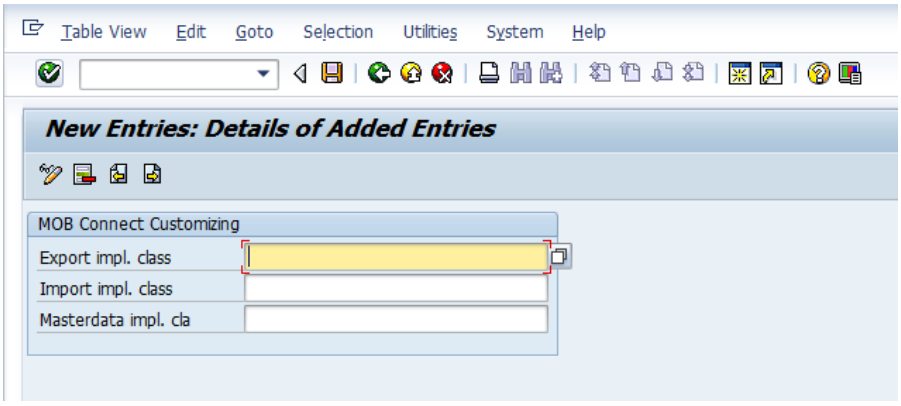


Figure 6: MOB Connect Customizing

In order to connect the SAP® *S/4* backend system with an *ERP* legacy system based on SAP® *Business Suite on HANA*, please use the following classes for your customizing:

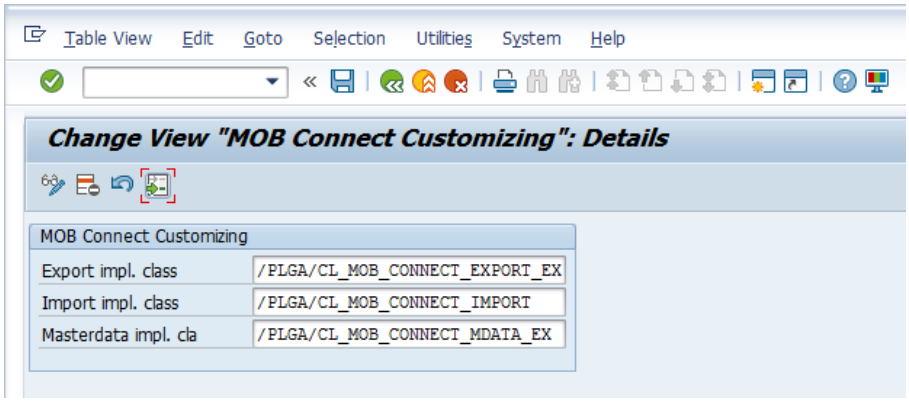
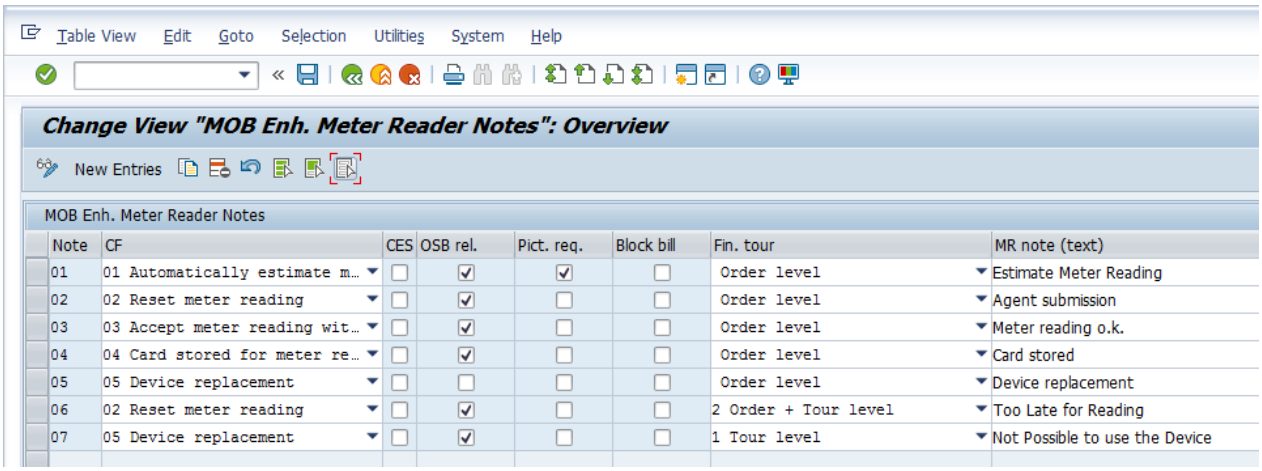


Figure 7: MOB Connect Customizing for connection to legacy system

Both *export classes are example implementations only. They are not valid for a production environment. These export classes have to be implemented project specific.

For the MOB Connect, also the settings in transaction */PLGA/MOB_CNNCT_MRN* are required:



Note	CF	CES	OSB rel.	Pict. req.	Block bill	Fin. tour	MR note (text)
01	01 Automatically estimate m…	☐	☑	☑	☐	Order level	Estimate Meter Reading
02	02 Reset meter reading	☐	☑	☐	☐	Order level	Agent submission
03	03 Accept meter reading wit…	☐	☑	☐	☐	Order level	Meter reading o.k.
04	04 Card stored for meter re…	☐	☑	☐	☐	Order level	Card stored
05	05 Device replacement	☐	☐	☐	☐	Order level	Device replacement
06	02 Reset meter reading	☐	☑	☐	☐	2 Order + Tour level	Too Late for Reading
07	05 Device replacement	☐	☑	☐	☐	1 Tour level	Not Possible to use the Device

Figure 8: Change view "MOB Enh. Meter Reading Notes": Overview

To configure the connection between CCS and MOM systems, use the transaction */PLGA/MOB_CNFG*:

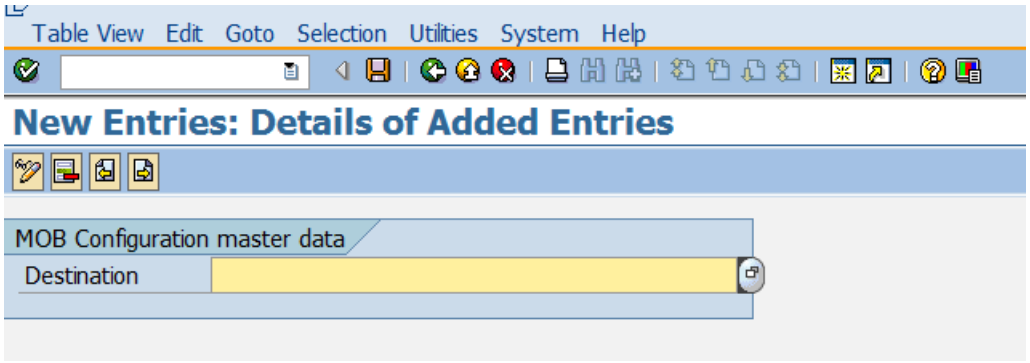
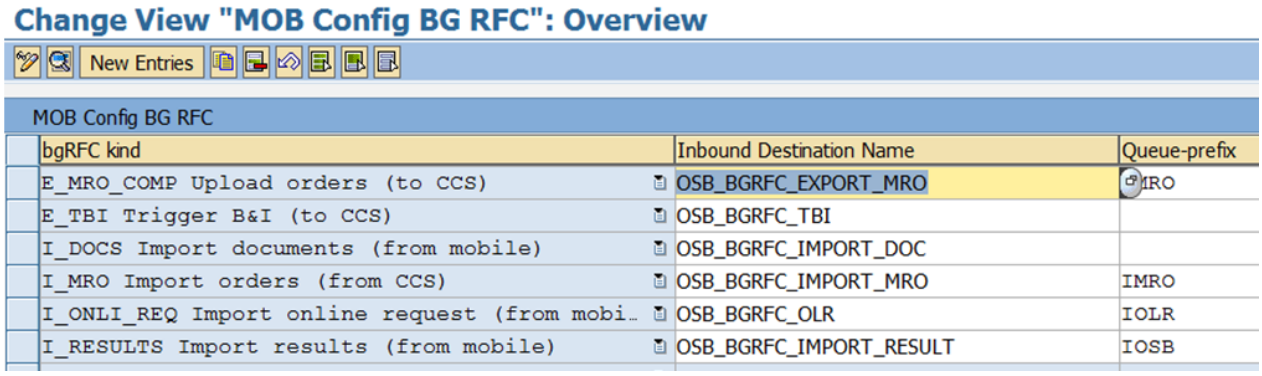


Figure 9: Change view "MOB Enh. Meter Reading Notes": Overview

In this case there are no values, since MOM and CCS are in a single system.

For RFC configuration, transaction */PLGA/MOB_CNFG_BGRFC* has to be used:



bgRFC kind	Inbound Destination Name	Queue-prefix
E_MRO_COMP Upload orders (to CCS)	OSB_BGRFC_EXPORT_MRO	MRO
E_TBI Trigger B&I (to CCS)	OSB_BGRFC_TBI	
I_DOCS Import documents (from mobile)	OSB_BGRFC_IMPORT_DOC	
I_MRO Import orders (from CCS)	OSB_BGRFC_IMPORT_MRO	IMRO
I_ONLI_REQ Import online request (from mobi…	OSB_BGRFC_OLR	IOLR
I_RESULTS Import results (from mobile)	OSB_BGRFC_IMPORT_RESULT	IOSB

Figure 10: Change view "MOB Config BG RFC": Overview

Please, note that the information in column "Inbound Destination Name" is only an example.

It is possible to set up the document processing in */PLGA/MOB_CNFG_DOC* transaction:

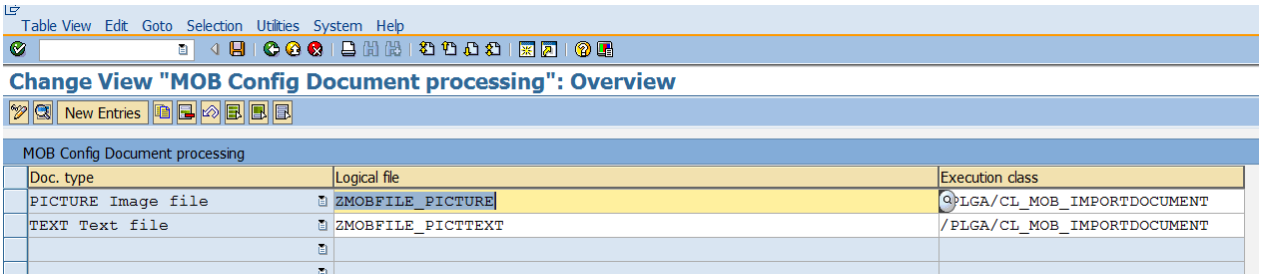


Figure 11: Change view "MOB Config Document processing": Overview

Please, note that the information in column "Logical file" is only an example.

2.2.5 Mob Meter Reader Maintenance

In order to manage the meter readers setting, use transaction */PLGA/MOB_MRMAN*

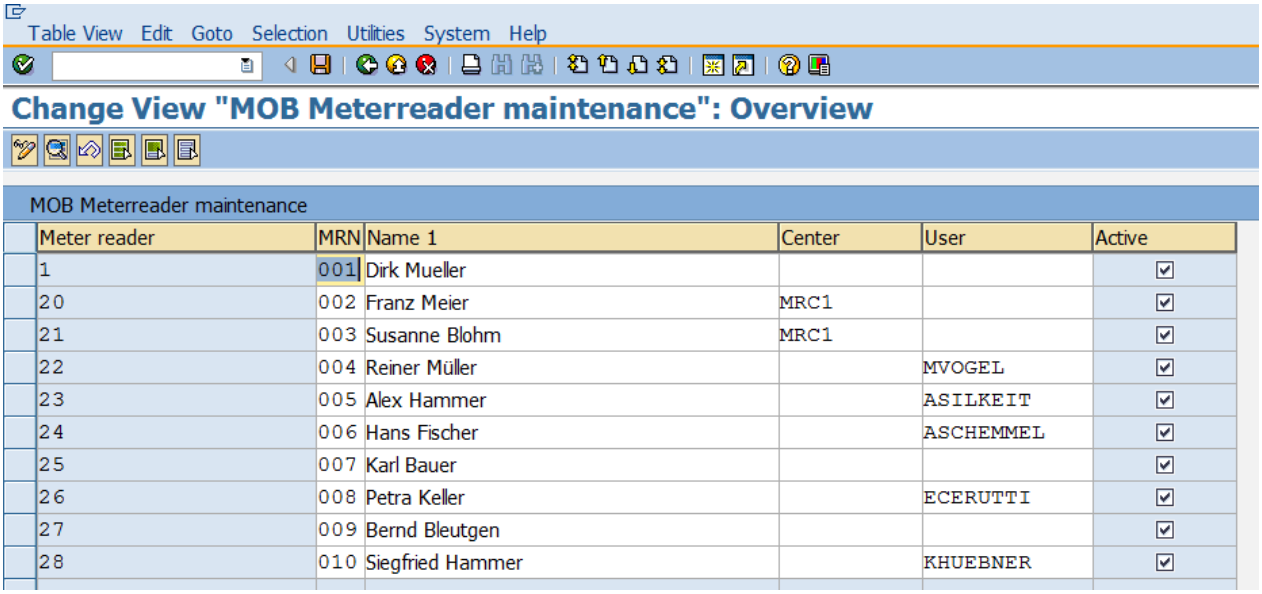


Figure 12: Change view "MOB Meterreader maintenance": Overview

Here it is possible to:

- assign the User Ids to the Meter Readers
- Assign each meter reader to a meter reading center
- Set each meter reader as active or inactive