

## **Implementation Guide EAM**

Enterprise Asset Management Web UI  
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**CUSTOMER**

# **EAM Web UI Implementation Guide**

**Adapting EAM Web UI**



# Document History

Version	Date	Change
2.0	20th Aug 2014	First Released version
2.5	4th Feb 2015	New: 4 Object-based Navigation, 8 Asset Viewer 3.10 Assigning Different Search Helps Minor Changes: Links to documentation and SCN, Switch of Screenshot, Wiring in 3.4, 5.2.1 BAdI Implementation for Side Panels
2.6	27th May 2015	New: 3.11 Creating Quick Help 8.4 New View in Asset Viewer, 6.4 Unplanned Confirmation, 6.5 Cross-system MOC request, 9 Working with POWLs, 15.9 Port Numbers Minor Changes: Links to SAP Library and SCN added, order of chapters rearranged, small format changes
Remark		Up to Version 2.5 the screen shots were done with SAP-Theme SAP_CORBU, from version 2.6 screen shots are done with SAP-Theme SAP_BLUECRYSTAL
2.7	11th August 2015	New: 2.6 ICF, 6.6 URL Parameters, 7 Adding Customer Fields, 9.3 Configuration and Performance of POWLs Minor Changes: Note number and blog information for After Event Recording, links to notes.
2.8	25th January 2018	Reworked links to documentation, new: 2.1 Quick start; enhanced: 2.6 (ICF services), new: 2.6.1, 2.7 (WD applications), 2.8 (WD UIBBs), new structure in 2.9, new 3.2.2 (customizing for List UIBBs), enhanced: 6.6.3 URL parameters Measuring Point, Measurement Document, Maintenance Item; new 8.5 AV Inactive objects; new 12 (doc attachment, thumbnail), enhanced 13.1.2 warranty check in BAdI, new 13.3.6 replaced user exits

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## Abbreviations

BF	Business Function
NWBC	NetWeaver Business Client
SP	Support Package
EAM	Enterprise Asset Management
PM	Plant Maintenance
PFCG	Profile Generator
UIBB	User Interface Building Block
IDR	Identification Region
FPM	Floorplan Manager
BAdI	Business Add-In
ATS	Advanced Table Service
QV	Quick View
WDA	Web Dynpro Application
CHIP	Collaborative Human Interface Part
API	ABAP Programming Interface
POWL	Personal Object Work List
OBN	Object-based Navigation
DDIC	Data Dictionary (ABAP)
SCN	SAP Community Network ( <a href="http://scn.sap.com">scn.sap.com</a> )
ICF	Internet Communication Framework
UI	User Interface

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# 1 Introduction

The goal of this document is to describe how you can adapt and enhance the SAP EAM Web UI. It provides a good overview of the many options the EAM Web UI has to offer for your daily business and explains how you can easily tailor it to your company's specific requirements.

This document does not, however, attempt to provide a complete and detailed description of all the various possibilities and enhancements that are available, but rather uses basic examples to illustrate how to use the available enhancement technologies. The examples chosen are meant to be representative for similar enhancements in multiple areas of the application. In several cases, links to more detailed descriptions are provided.

The document is closely related to the EAM functions in the SAP ERP release starting from EHP7 based on SAP NetWeaver 7.40. However, most of the content and concepts described here are independent of the EAM release. A follow-on version of this document will contain adjusted screen shots as well as revised descriptions where required.

## 2 Getting Started with SAP Web User Interface for Plant Maintenance (PM)

This chapter provides some basic information concerning EAM Web UI.

### 2.1 EAM Web UI Quick Start

Assuming you already have got an installation of at least SAP Business Suite EHP7 and you want to try out to create and manage data on the SAP Web UI for Plant Maintenance, you need to perform the following steps:

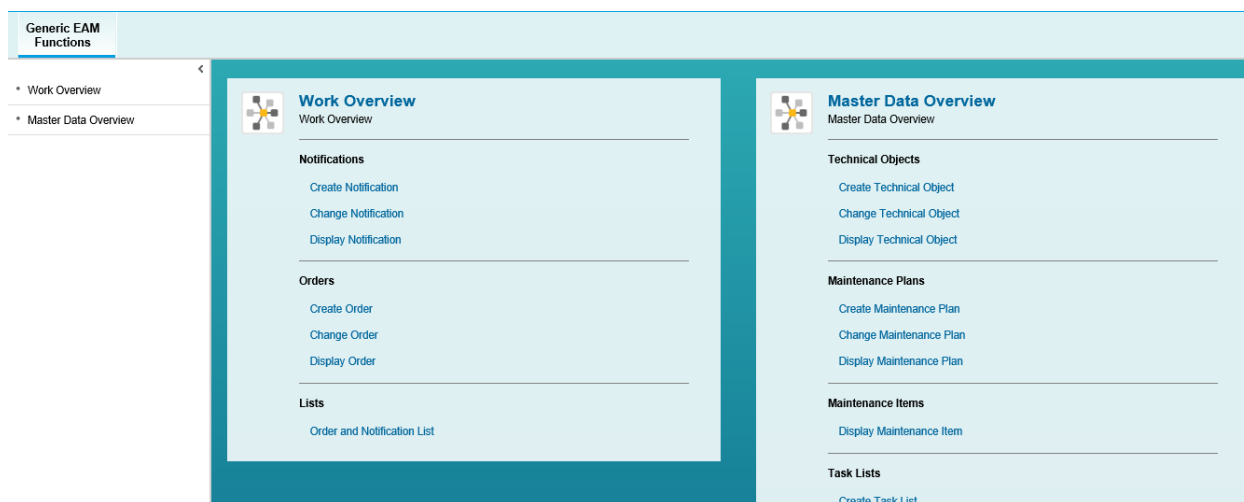
**Step 1:** Make sure that the business functions *Simplified Management of EAM Functions* ... (at least number 1 to 5) are activated. You can check this in transaction `SFW_BROWSER`.

**Step 2:** Check if the services for EAM Web Dynpro are activated (transaction `SICF`, path `/sap/bc/webdynpro/sap/`)

**Step 3:** Assign the PFCG role `SAP_COCKPIT_GENERIC_FUNC2` to your user (transaction `PFCG`)

**Step 4:** Start transaction `NWBC` from SAPGUI and check if the roles assigned to you are displayed in the browser window

**Step 5:** Select the PFCG role `SAP_COCKPIT_GENERIC_FUNC2`. You can now access the EAM functions for a maintenance planner on the launchpad:



**Step 6:** Check if the enterprise search connectors for EAM objects are in place (transaction `ESH_COCKPIT`)

This guide provides more detailed information and links to further documentation for each of the steps.



## 2.2 Release

The functionality described in this guide is available in Software Component EA-APPL 617 as of SAP enhancement package 7 for SAP ERP 6.0 SP05. Nevertheless, most of the configuration settings described in this document are possible in lower releases as well.

When your system is on SAP enhancement package 8 for SAP ERP 6.0 the functionality is taken over into Software Component SAP\_APPL.

For more information about how to find out the release and SP level of your system, see chapter 15.5.

## 2.3 SAP NetWeaver Business Client and SAP Logon

All applications described in this guide are running on NWBC 4.0 PL10 (or higher) and require SAP Logon 730 Final Release Patch Level 6.

For more information about NWBC, see

- o [SAP NetWeaver Business Client](#) (Content in SAP Community Network)
- o [SAP NetWeaver Business Client](#) (SAP Library documentation)
- o [FAQ document](#) (Content in SAP Community Network)
- o SAP Note [900000 - Netweaver Business Client - FAQ](#)

## 2.4 Required Business Functions (BF)

If you want to create and manage data in the Plant Maintenance (PM) component on the SAP Web UI for Plant Maintenance, you at least have to activate business function *Simplified Management of EAM Functions 2* (LOG\_EAM\_SIMPLICITY\_2). The business function *Simplified Management of EAM Functions 3* (LOG\_EAM\_SIMPLICITY\_3) provides you with enhanced functions for planning and performing maintenance tasks and enables you to use several functions in maintenance orders, notifications, task lists, and maintenance plans on the Web UI that up to now were only available in the respective SAP GUI transactions. In addition, you can use quickviews and side panels to get further information about maintenance objects and create personalized list views to select and process maintenance documents efficiently.

For more information about the Simplicity Business Functions in EAM, see:

- o *Simplified Management of EAM Functions 2*
- o *Simplified Management of EAM Functions 3*
- o *Simplified Management of EAM Functions 4*
- o *Simplified Management of EAM Functions 5*
- o *Simplified Management of EAM Functions 6*
- o *Simplified Management of EAM Functions 7*

For more information about checking your business function status, see chapter 15.3.

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## 2.5 PFCG Roles

You can use the features provided with the business functions in the [SAP NetWeaver Business Client](#) (NWBC) with the PFCG roles [Maintenance Worker](#) (SAP\_COCKPIT\_EAMS\_MAINT\_WORKER2) and [Generic EAM Functions](#) (SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2).

- The PFCG role [Maintenance Worker](#) enables the maintenance worker to access all the information relevant to his or her work, and to confirm work completed.
- The PFCG role [Generic EAM Functions](#) enables the maintenance planner to create and change PM master data as well as to plan and execute all relevant maintenance activities.

You can also use the features provided with the business functions in SAP NetWeaver Portal with the business packages [Business Package for Maintenance Worker 1.61](#) and [Business Package for Generic EAM Functions 1.61](#).

To log on to the system with SAP NetWeaver Business Client using these roles, see 15.1.

For more information, see [SAP NetWeaver Business Client](#).

## 2.6 Internet Communication Framework (ICF)

The HTTP-requests for the EAMS Web Dynpro applications are handled by the Internet Communication Framework (ICF). Refer to the program documentation or to the SAP Library for detailed information about the [Internet Communication Framework](#).

To check whether the respective EAMS services are active, call transaction `SICF` ([Maintain Service](#)) (1). You find all active services in the DEFAULT\_HOST folder under path `/sap/bc/webdynpro/sap/` (2). In this example, the service for [Maintenance Plan and Maintenance Item List](#) is not active (gray), whereas the [Order and Notification Information Center](#) service is active (black) (3). To activate a service, open the context menu of the service by positioning the cursor on the respective line and clicking the right mouse button. Then choose [Activate Service](#) in the context menu. You also find the menu entry in the menu under [Service/Host -> Activate \(Shift + F11\)](#).

**Maintain service** 1

Create Host/Service

Filter Details

Virtual Host	DEFAULT_HOST	Service Path	/sap/bc/webdynpro/sap/
ServiceName			
Description			
Lang.	EN English	Ref.Service:	

Apply Reset Fine-Tune

Virtuelle Hosts / Services	Documentation	Referenz Service
<ul style="list-style-type: none"> <li>default_host           <ul style="list-style-type: none"> <li>sap               <ul style="list-style-type: none"> <li>bc                   <ul style="list-style-type: none"> <li>webdynpro                       <ul style="list-style-type: none"> <li>sap                           <ul style="list-style-type: none"> <li>EAMS_WDA_MPOS_MPLAN_OIF</li> <li>EAMS_WDA_ONL_IC_OVP</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>	VIRTUAL DEFAULT HOST SAP NAMESPACE; SAP IS OBLIGED NOT T... BASIS TREE (BASIS FUNCTIONS) Web Dynpro (WD) Runtime NAMESPACE SAP	

2 3

If you start an EAMS Web Dynpro application and the system raises the following error message, the corresponding service has not been activated yet.

## Service cannot be reached

### What has happened?

URL call was terminated because the corresponding service is not available.

#### Note

The termination occurred in system with error code **403** and for the reason **Forbidden**.

### What can I do?

Please select a valid URL.

HTTP 403 - Forbidden

Your SAP Internet Communication Framework Team

If you create your own Web Dynpro application, the service is created automatically.

The following table provides the most important ICF-services that have to be activated when using the EAM Web UI functionality:

Application Name	ICF Service
<i>Maintenance Planner:</i>	
Order and Notification Information Center	EAMS_WDA_ONL_IC_OVP
Master Data Information Center	EAMS_WDA_MD_IC_OVP
Maintenance Notification	EAMS_WDA_ORDNTF_OIF
Maintenance Order	EAMS_WDA_ORDNTF_OIF
Technical Object	EAMS_WDA_TECHOBJ_OIF
Maintenance Plan	EAMS_WDA_MPLAN_OIF_V2
Maintenance Item	EAMS_WDA_MPOS_OIF
Task List	EAMS_WDA_TL_OIF_V2
Measuring Point	EAMS_WDA_MP_OIF
Measurement Document	EAMS_WDA_MD_OIF
Object Networks	PLMN_WDA_LINK_OIF
Linear Reference Pattern	EAML_WDA_LRP_OIF
Work Permit	WCM_WDA_WP
Safety Certificate	WCM_WDA_SCT
<i>Lists:</i>	
Order and Notification List	EAMS_WDA_ONL_OIF
Order Operation List	EAMS_WDA_OOL_OIF
Technical Object List	EAMS_WDA_TECHOBJ_POWL
Maintenance Plan and Item List	EAMS_WDA_MPOS_MPLAN_OIF
<i>Maintenance Worker :</i>	
Information Center	EAMS_WDA_INFOCENTER
Job List	EAMS_WDA_JOBLIST_OIF
Job Confirmation (List)	EAMS_WDA_CONF_OIF
Confirm Job	EAMS_WDA_JOBPC_OIF
Confirm Unplanned Job	EAMS_WDA_JOBUC_OIF
Display Jobcard	EAMS_WDA_JOB_PREVIEW_OIF
Display Job	EAMS_WDA_JOB_OIF

However, you might need to activate other ICF services in addition, such as EAMS\_WDA\_SEARCH and EAMS\_WDA\_SEARCH\_QS for Search, EAMS\_WDA\_SERVICE for the EAMS Service, EAMS\_WDA\_THUMBNAIL for using Thumbnails, ABP\_LAUNCHPAD for Launchpad functionality and EAMWS\_WDA\_SML\_OIF for worker safety. See also

note [1433187](#). For adapting the Web Dynpro applications additional services need to be active which are listed in the following section 2.6.1.

## 2.6.1 Working with the Floorplan Manager Workbench

The Floorplan Manager Workbench (FPM Workbench) provides you with a set of tools that you commonly need when working with FPM applications. It brings these tools together on one web page so you don't have to spend time searching for them in the FPM framework. To start the FPM workbench, you enter `FPM_WB` in the transaction field of the SAPGUI.

For more information about the FPM Workbench, see [FPM Workbench: Useful Tools in One Place](#) in the SAP Library.

Before you can work with the FPM Workbench, you have to activate the ICF service `FPM_WB` in the `DEFAULT_HOST` folder under path `/sap/bc/webdynpro/sap/`.

The following picture shows the workbench with its link sections.

**FPM Workbench 1**

Workbench Tools: Map Directory Index Tree

- Configuration Tools**  
Configuration Tools Specific to FPM  
Quick Links:
  - Edit FPM Configuration (FLUID) **2**
  - Edit FPM Customizing (FLUID) **3**
  - Start FPM Hierarchy Browser **4**
  - Customize Message Mapping **5**
  - Customize Message Categories **6**
- Wizards for Creating Applications**  
Wizards for Quick and Easy Creation of FPM Applications  
Quick Links:
  - Wizard for Creating Empty FPM Applications **10**
  - Wizard for Creating FPM Applications Based on BOL Components **10**
  - Wizard for Creating FPM Apps Based on BICS Queries **10**
  - Wizard for Creating FPM Apps Based on Business Entities **10**
  - Wizard for Creating FPM Apps on Business Entities (CRUD) **10**
- Context Based Adaptations**  
Maintenance Tools for Context-Based Adaptations  
Quick Links:
  - Maintain Schema for Context-Based Adaptations **7**
  - Enable FPM Applications for Context-Based Adaptations **8**
- Web Dynpro Tools**  
Generic Web Dynpro Configuration Tools for Editing, Analysis and Clean-up  
Quick Links:
  - Analyze Personalization and Customizing **11**
  - Analyze Configuration **11**
  - Edit Configuration (Generic Editor) **2**
  - Edit Customizing (Generic Editor) **3**
  - Configure Application **12**
  - Web Dynpro Trace Tool **13**
  - Analyze Application or Application Configuration **14**
  - Administration of Configuration Drafts **15**
  - UI Theme Designer **16**
- Demo and Test Applications**  
Demo, Test and Sample Applications  
Quick Links:
  - FPM Test Suite **9**

The links allow you to navigate to the corresponding applications. The ICF-services you need for the Web Dynpro applications are listed in the following table. The number behind the link corresponds with the number in the table for the service names. All services listed below are located in the `DEFAULT_HOST` folder under path `/sap/bc/webdynpro/sap/` except for the last one.



Number	Service Name
1	FPM_WB
2	CONFIGURE_COMPONENT
3	CUSTOMIZE_COMPONENT
4	FPM_CFG_HIERARCHY_BROWSER
5	SAP GUI for HTML – no service needed
6	SAP GUI for HTML – no service needed
7	SAP GUI for HTML – no service needed
8	FPM_CFG_CBA_ENABLER
9	FPM_TESTSUITE -> all necessary services for the suite start with FPM_TEST_*
10	FPM_CFG_BO_MODEL_ACT
11	WD_ADMIN_CONFIGURATION
12	CONFIGURE_APPLICATION
13	WD_TRACETOOL
14	WD_ANALYZE_CONFIG_APPL
15	WD_ADMIN_CONFIG_DRAFT
16	THEMING in path /default_host/sap/bc/

## 2.7 Overview of EAM Web Dynpro Applications and Configurations

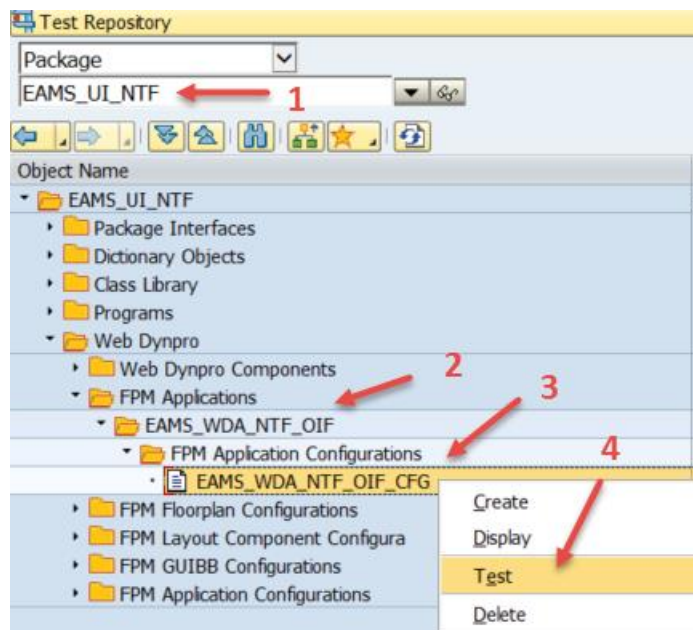
This chapter provides you with an overview about applications on the SAP Web user interface for Plant Maintenance, based on the Floorplan Manager Framework.

For detailed information about the architecture of the FPM and the additionally used PLM Framework, see [Floorplan Manager for Web Dynpro ABAP 7.4 SP08 SAP\\_UI SP10](#) and the SAP Wiki [Service Provider Infrastructure \(SPI\)](#).

Most of the EAM Web Dynpro applications are built in a similar way based on the Web Dynpro component called *Floorplan for Object Instances* (FPM\_OIF\_COMPONENT) which defines the layout and processing of the data. The *Master Data Information Center* and the *Order and Notification Center* are built on the Floorplan for Overview Pages (FPM\_OVP\_COMPONENT).

Each application consists of an application and a configuration part. Without the corresponding configuration the application cannot be started.

The following example shows the Web Dynpro application for creating, changing and displaying notifications in package EAMS\_UI\_NTF (1) with its application name EAMS\_WDA\_NTF\_OIF (2) and the corresponding application configuration name EAMS\_WDA\_NTF\_OIF\_CFG (3). To start the application, choose the *Test* entry in the context menu of the configuration name.



The following table lists the EAM applications with the corresponding configurations depending on the PFCG role. For more information on roles see chapter 2.5.

**Role for Maintenance Planner** (SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2)

Launchpad Link Name	Application Name	Configuration Name
Order and Notification Information Center	EAMS_WDA_ONL_IC_OVP	EAMS_WDA_ONL_IC_OVP_CFG
Create/Change/Display Notification	EAMS_WDA_ORDNTF_OIF	EAMS_WDA_ORDNTF_OIF_CFG
Create/Change/Display Order	EAMS_WDA_ORDNTF_OIF	EAMS_WDA_ORDNTF_OIF_CFG
Order and Notification List	EAMS_WDA_ONL_OIF	EAMS_WDA_ONL_OIF_CFG
Master Data Information Center	EAMS_WDA_MD_IC_OVP	EAMS_WDA_MD_IC_OVP_CFG
Create/Change/Display Technical Object	EAMS_WDA_TECHOBJ_OIF	EAMS_WDA_TECHOBJ_OIF_CFG_V2
Create/Change/Display Maintenance Plan	EAMS_WDA_MPLAN_OIF_V2	EAMS_WDA_MPLAN_OIF_CFG_V2
Display Maintenance Item	EAMS_WDA_MPOS_OIF	EAMS_WDA_MPOS_OIF_CFG_V2
Create/Change/Display Task List	EAMS_WDA_TL_OIF_V2	EAMS_WDA_TL_OIF_CFG_V2
Create/Change/Display Measuring Point	EAMS_WDA_MP_OIF	EAMS_WDA_MP_OIF_CFG
Create/Display Measurement Document	EAMS_WDA_MD_OIF	EAMS_WDA_MD_OIF_CFG
Create/Change/Display Object Network	PLMN_WDA_LINK_OIF	PLMN_WDA_NW_OIF_CFG

Create/Change/Display Linear Reference Pattern	EAML_WDA_LRP_OIF	EAML_WDA_LRP_OIF_CFG
Change Safety Measure List	EAMWS_WDA_SML_OIF	EAMWS_WDA_SML_OIF_CFG
Technical Object List	EAMS_WDA_TECHOBJ_POWL	EAMS_WDA_TECHOBJ_POWL_CFG
Maintenance Plan and Maintenance Item List	EAMS_WDA_MPOS_MPLAN_OIF	EAMS_WDA_MPLAN_MPOS_OIF_CFG

#### Role for Maintenance Worker (SAP\_COCKPIT\_EAMS\_MAINT\_WORKER2)

Launchpad Link Name	Application Name	Configuration Name
Job List	EAMS_WDA_JOBLIST_OIF	EAMS_WDA_JOBLIST_TAB_OIF_CF2
Job Confirmation	EAMS_WDA_CONF_OIF	EAMS_WDA_CONF_OIF_CFG
Information Center	EAMS_WDA_INFOCENTER	EAMS_WDA_INFOCENTER_CFG
Create/Change/Display Notification	EAMS_WDA_ORDNTF_OIF	EAMS_WDA_ORDNTF_OIF_MW_CFG
Display Measurement Document	EAMS_WDA_MD_OIF	EAMS_WDA_MD_OIF_CFG
Display Technical Object	EAMS_WDA_TECHOBJ_OIF	EAMS_WDA_TECHOBJ_OIF_MW_CFG_V2
Display Measuring Point	EAMS_WDA_MP_OIF	EAMS_WDA_MP_OIF_MW_CFG
Display Task List	EAMS_WDA_TL_OIF_V2	EAMS_WDA_TL_OIF_MW_CFG_V2
Display Maintenance Plan	EAMS_WDA_MPLAN_OIF	EAMS_WDA_MPLAN_OIF_MW_CFG
Display Maintenance Item	EAMS_WDA_MPOS_OIF	EAMS_WDA_MPOS_OIF_MW_CFG

## 2.8 FPM Screen Layout and User Interface Building Blocks (UIBBs)

When you start an application on the SAP Web user interface for Plant Maintenance you enter the number of the maintenance document you want to display or change or you create a new object. The following example of the [Display Notification](#) application shows how the screen of Web Dynpro applications is laid out:

The [Identification Region](#) (IDR) on the top of the screen shows general information on the current object, such as the object type or the status. The IDR is always visible at the top of the page even if you change the tabs below. Above the IDR you can access several menu buttons for changing from display to editing mode or vice versa, for refreshing the screen, setting the status, selecting [Additional Functions](#) or functions from the [You-can-also](#) menu.

You can arrange the elements beneath the IDR corresponding to your business needs. There are three different types of the so-called [User Interface Building Blocks](#) (UIBBs) which are located on the different tab pages of the Web Dynpro applications:

- List UIBBs display data as a list. In personalization mode, you can rearrange the table columns via drag and drop or allow horizontal scrolling.
- Tabbed UIBBs typically display detail data for a specific entry of the list UIBB selected by the user.

- Form UIBBs show data in a one or two column layout. Group titles indicate the affiliation of the field data.

## 2.9 Additional Documentation

For fast access to SAP Notes via an internet browser use URL address

<http://service.sap.com/sap/support/notes/<notenumber>>. Add the respective note number in placeholder <notenumber>.

### 2.9.1 EAM Functionality and Business Function Documentation

- For more information about carrying out plant maintenance tasks on the SAP Web UI, see [Web User Interface for SAP Plant Maintenance \(PM\)](#).
- To get an overview about the released features in EAM Simplicity have a look at the [Innovation Discovery](#) tool.
- The Business Function documentation for the Simplified Management of EAM can be found in the SAP Library: [Simplified Management of EAM Functions](#), [Simplified Management of EAM Functions 2](#), [Simplified Management of EAM Functions 3](#), [Simplified Management of EAM Functions 4](#), [Simplified Management of EAM Functions 5](#), [Simplified Management of EAM Functions 6](#), [Simplified Management of EAM Functions 7](#).

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## 2.9.2 SAP Community Network (SCN)

- A useful source of information around Web Dynpro ABAP is the [Web Dynpro ABAP and Floorplan Manager Community](#).
- The entrance page for the [Enterprise Asset Management Community](#) in the SCN leads to blogs, guides and answers around EAM.
- Questions and answers around the SAP Business Client (SAP BC) formerly known as SAP NetWeaver Business Client (NWBC) are collected in the [SAP Business Client \(SAP BC\) Community](#).

## 2.9.3 Adapting Web Dynpro ABAP

- For general information about Web Dynpro, see SAP Help Portal documentation about [Web Dynpro ABAP](#), where several topics are covered like [FPM Developer Tools](#), [Quickviews](#) and [Context Menus](#).
- Two important documents for developing Web Dynpro ABAP can be downloaded here: [Floorplan Manager for Web Dynpro ABAP 7.4 SP08 SAP\\_UI SP10](#) and [Floorplan Manager Cookbook](#) (also known as FPM Developer's Guide 7.4 SP2).
- For developing in EAM applications the [Service Provider Infrastructure \(SPI\)](#) - SAP Wiki is an important source of knowledge, especially the following chapters of the WIKI
  - o [Enhancing the Generic Feeder Classes](#)
  - o [Launchpad and Navigation Wiki](#) - FPM SPI Integration
  - o [SPI Services and Tools](#) - learn to use the Metadata Browser and the Service Provider Browser
- In SAP Note [1619534 - How to Create, Enhance and Adapt FPM Applications](#) you are guided to current documentation about the background of FPM Adaptation depending on SAP NetWeaver releases.
- See also document in SCN: [How to Create, Enhance, and Adapt Floorplan Manager Applications \(FPM\)](#).

## 2.9.4 Miscellaneous

If you want to create your own theme for the user interface, refer to [UI Theme Designer](#) in the SAP Library and read the SCN Blog [UI Theme Designer for Web Dynpro ABAP](#).

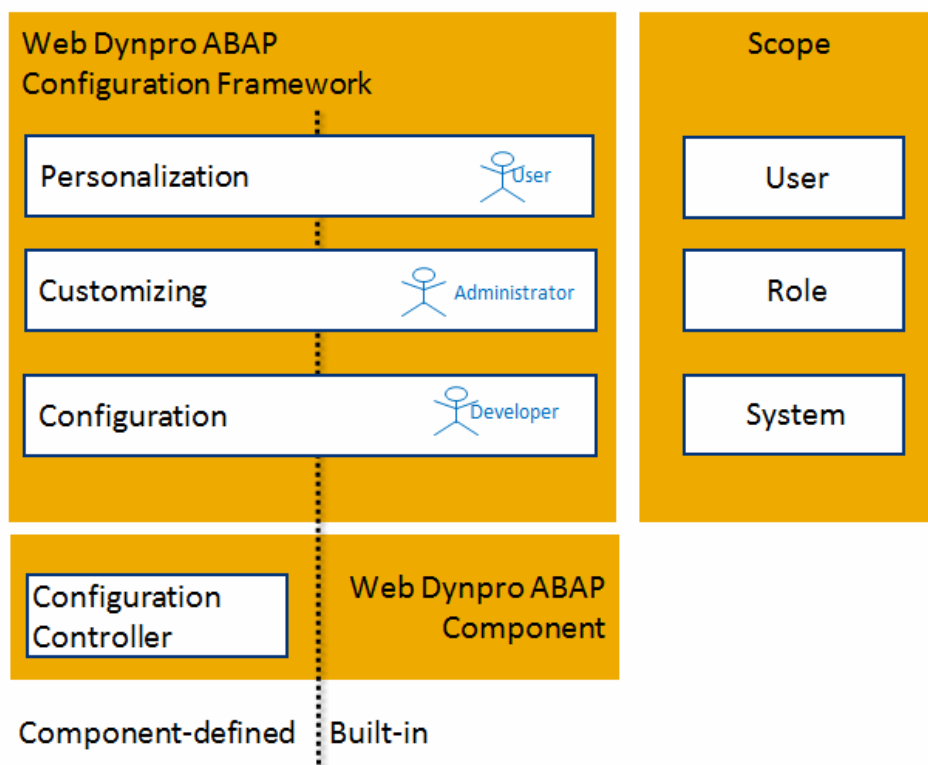


### 3 Changing the Web Dynpro Configuration

Depending on your business requirements, the requirements of the application user interface can vary greatly. Applications that are created with the help of Web Dynpro ABAP can be adapted in different ways and by different target groups.

For more information about adapting FPM applications, see [Adapting FPM Applications](#).

The following figure shows the layers of the [Web Dynpro ABAP Configuration Framework](#).



- The **expert** (developer) models the Web Dynpro application. This includes the programming and basis configuration. Changes to the configurations that are made in the expert mode are stored directly in the Web Dynpro ABAP development layer.  
For more information about expert mode, see chapter 5.
- The **administrator** configures the settings in customizing on client level or for a defined group of users. This includes hiding or swapping table columns, changing label texts, setting default values, and much more. An administrator can also add further UI elements that require no programming. This includes showing the company logo or adding explanatory text.  
All changes in administrator mode are modification-free changes, so no coding is changed. The changes are saved as an independent delta of the configuration and are transported in the system landscape via a transport link.
- The **individual user** then adjusts some settings of the application to suit his or her own specific needs (personalization). If not explicitly deactivated by the administrator, users can show and hide UI elements and

swap table columns.

For more information about personalization mode, see chapter 4.

For more information about the different modes, see [Fitting Web Dynpro Applications to Your Needs](#).

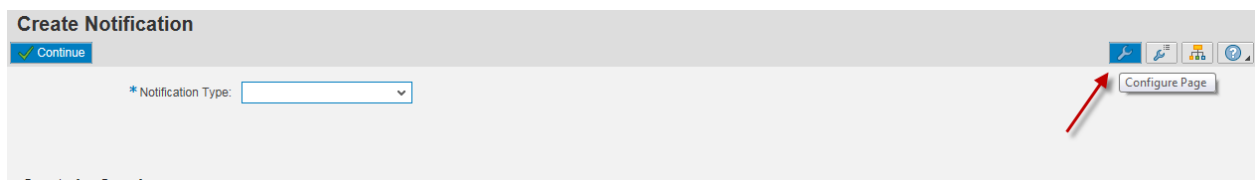
## 3.1 Creating and Changing the Customizing of Applications and UIBBs

The changes to the UIBB described in this chapter are performed on client-level in administration mode. All changes are saved as an independent delta of the configuration in the customizing layer. The authorization objects S\_DEVELOP or S\_WDR\_P13N are necessary.

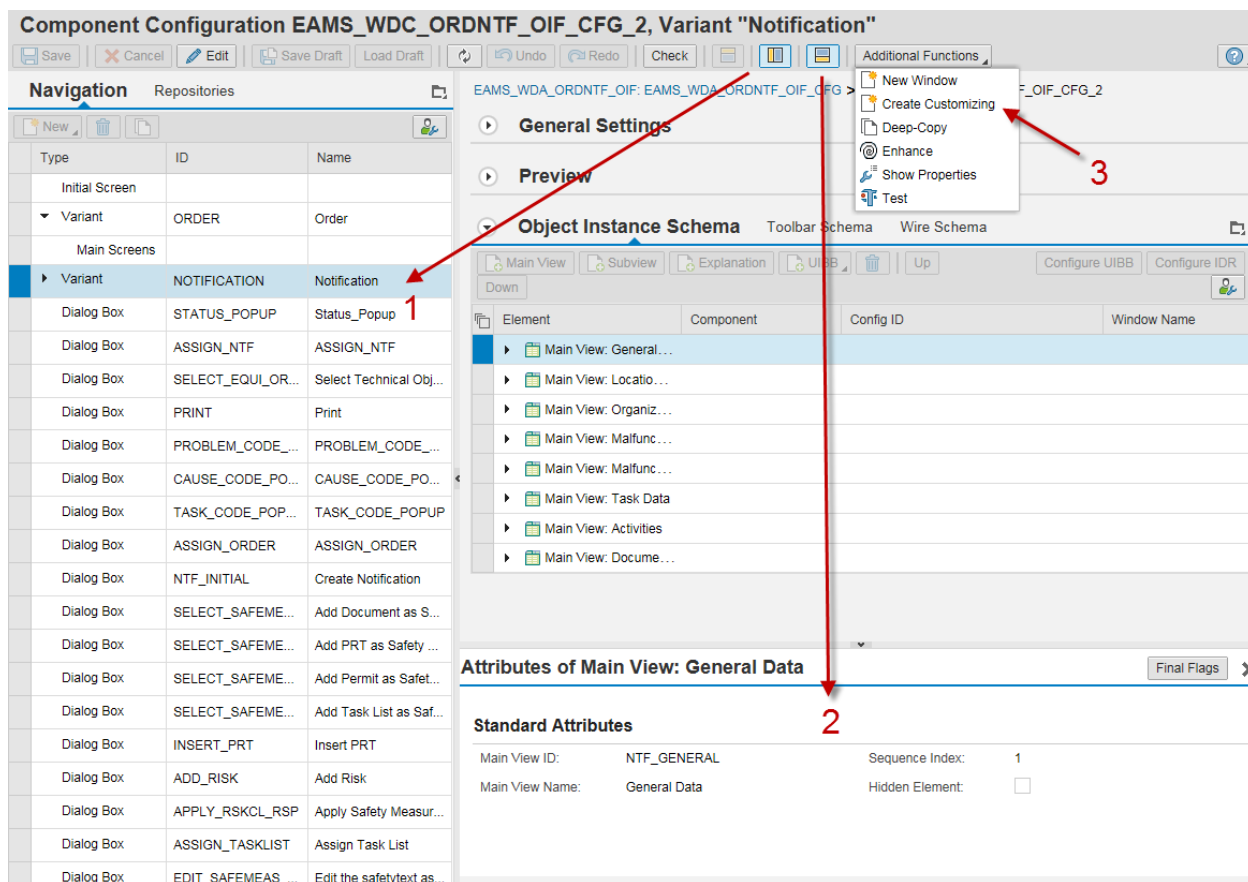
Before you can work in administration or expert mode you have to set the user parameter FPM\_CONFIG\_EXPERT to 'A' (administration mode) or 'X' (expert mode) in your own user data (transaction SU3). If this user parameter is set, some new icons are shown in the upper right corner of the Web Dynpro application. By choosing these pushbuttons, you can start the configuration directly in the respective Web Dynpro application.



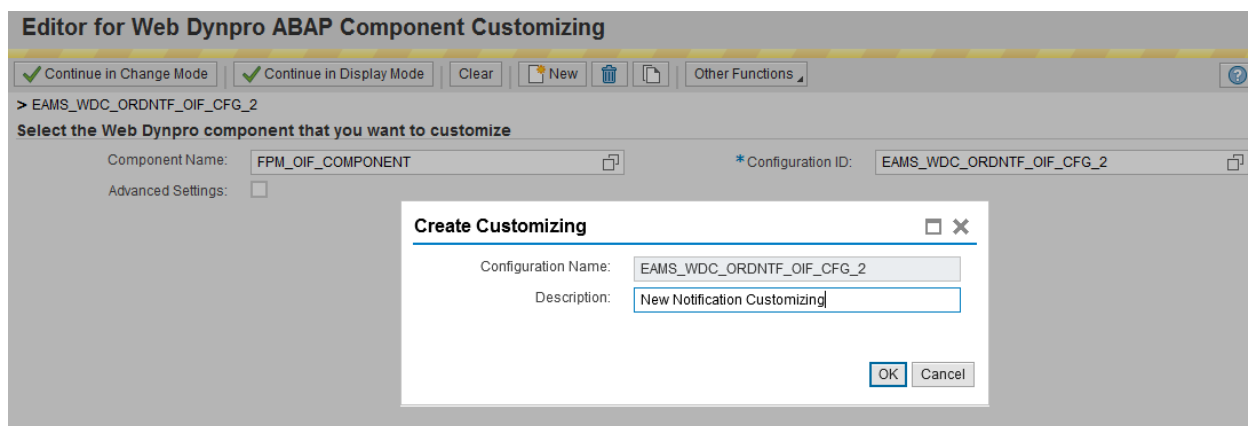
If you want to make changes to the UI of the **whole application**, e.g. hide tabs, you can access the configuration by choosing the pushbutton [Configure Page](#) on the entry screen of the application:



In the configurator you can open a navigation and repository screen area on the left-hand side, where all screens and dialog boxes of the application are listed (1). To work on individual screen elements, such as tabs or UIBBs, you mark the respective line in the [Object Instance Schema](#). By choosing the pushbutton [Attributes](#) you open the corresponding attributes screen area at the bottom (2). In the attributes you can select the checkbox for hiding elements, for example. To create a new customizing for the whole application, you choose [Create Customizing](#) in the dropdown menu of the pushbutton [Additional Functions](#) (3).



You are now in customizing mode of the configuration, which is indicated by a yellow line at the top of the screen. The changes you make are on client-level and affect all users. You can enter a description in the popup for creating a new customizing for the application. When you have confirmed the popup with the **OK** button, a transport request popup appears, where you can select a transport request for the new customizing.



If you want to make changes to **specific UIBBs**, such as add new fields to a specific screen area, you start your UIBB configuration by choosing the pushbutton **Show Configurable Areas** (1). The system highlights every UIBB in blue (2a, 2b). If you put the cursor in one of the highlighted areas, a new icon is shown in the upper right corner (3).

**Create Notification: %00000000001**

Save | Check Entries | Status Information | Set System Status | Additional Functions

Notification %00000000001 Notification type M1, Maintenance Request System Status OSNO

General Data Location Data Organizational Data **Malfunction Data** Task Data Activities Documents

Malfunction Start Date/Time: 12.06.2014 08:44:38 Malfunction End Date/Time: 00:00:00  
 Breakdown: Breakdown Duration: 0.00 H Hour  
 Reported By: SAXM Kleber, Melanie

**Damages**  
 Add Damages

You directly access the configuration of the respective UIBB by clicking on this icon. In this example you open the UIBB configuration for EAMS\_WDF\_NTF\_HEAD\_MALFUNC\_CFG. When you enter the UIBB again after having already created an individual customizing for the respective screen, the system issues a warning message that customizing already exists for that UIBB (1). The component configuration is displayed without the customizing changes. To delete or change the component customizing, select the pushbutton *Additional Functions* and choose *Edit Customizing* or *Delete Customizing* (2) from the dropdown menu.

**Component Configuration EAMS\_WDC\_NTF\_HEAD\_MALFUNC\_CFG**

Save | Cancel | Edit | Save Draft | Load Draft | Undo | Redo | Check | Additional Functions

Customizing exists

**Repositories**

Fields  
 Buttons  
 Button Name: Button Label:  
 Feeder Action Action Text  
 <Button Row> <Button Row>  
 <Button Choice> <Button Choice>  
 ASSIGN\_EXIST\_ORD ASSIGN\_EXIST\_ORD  
 ASSIGN\_TASKLIST ASSIGN\_TASKLIST  
 CHANGE\_ORD\_ASSIGN CHANGE\_ORD\_ASSIGN  
 COMPLETE COMPLETE  
 CREATE\_ORD\_FOR\_NTF CREATE\_ORD\_FOR\_NTF  
 DELETE\_ORD\_ASSIGN DELETE\_ORD\_ASSIGN  
 FRW\_DELETE Delete  
 FRW\_INSERT Insert  
 FRW\_UPDATE Update  
 GET\_ALL\_ACTIVITIES GET\_ALL\_ACTIVITIES  
 HAS\_ERROR\_301\_OCCURRED HAS\_ERROR\_301\_OCCURRED  
 HEADER\_AUTH\_CHECK\_TRAN HEADER\_AUTH\_CHECK\_TRAN  
 IN\_PROCESS\_AGAIN IN\_PROCESS\_AGAIN  
 IS\_NTF\_COMPLETED IS\_NTF\_COMPLETED  
 LINK\_TO\_ORDER  
 LINK\_TO\_TL  
 LINK\_TO\_TO  
 LINK\_TO\_TO\_BUTTON  
 POSTPONE POSTPONE  
 PUT IN PROCESS PUT IN PROCESS

**Preview**

Malfunction Start Date/Time: 00:00:00 Malfunction End Date/Time: 00:00:00  
 Breakdown: Breakdown Duration: 0.00 H Hour  
 Reported By:

General Settings **Form UIBB Schema** Menu Schema Quickview Schema

Element	Display Type	Field Name	Row	Label	Group Title	Tooltip	Label Visibi...	UI Elem
Group								
M...			1					
Input Field		STRMLFN...		Malfunction S...	Malfunction...	Malfunction...	Is Visible	
Input Field		STRMLFNT...		Malfunction S...	Malfunction...	Malfunction...	Is Not Visible	
M...			1					
Checkbox		BREAKDO...	2	Breakdown	Breakdown...	Breakdown...	Is Visible	
M...			2					
Input Field		EAUSZT		Breakdown D...	Breakdown...	Breakdown...	Is Visible	
Input Field		UNIT		Breakdown D...	Breakdown...	Breakdown...	Is Not Visible	

**Attributes of Group**

Standard Attributes

Group Title: Sequence Index: 1 Group Type: Full Width, 2 Columns Context Menu ID:

## 3.2 Swapping Fields and Adding New Fields

### 3.2.1 Customizing for Form UIBBs

On the SAP Web UI you can easily change the position of fields on the screen. The following example shows how to proceed: On the *Malfunction Data* tab in the notification you want to swap the positions of the field *Malfunction End Date/Time* and the checkbox *Breakdown* on the screen:

**Create Notification: %000000000001**

Create Notification: %000000000001 | Status Information | Set System Status | Additional Functions

Notification %000000000001 | Notification type M1, Maintenance Request | System Status OSNO | User Status INIT

General Data | Location Data | Organizational Data | **Malfunction Data** | Task Data | Documents

Malfunction Start Date/Time: 10.05.2014 16:28:38 | Malfunction End Date/Time: 00:00:00

Breakdown: ☐ | Breakdown Duration: 0,00 H Hour

Reported By: SAXM Kleber, Melanie

In order to change the position of the fields, you have to create a new customizing or change the existing one. The customizing mode of the configuration is indicated by the yellow line at the top of the screen (1).

For more information about creating and changing the customizing for UIBBs, see chapter 3.1.

When you click on a field in the preview, the corresponding line in the *Form UIBB Schema* is marked (2) and you can move the respective element with the pushbuttons *Up* and *Down* to the new position. Alternatively you can move the fields directly in the *Preview* and swap their positions via drag and drop (3). The system adjusts the list in the *Form UIBB Schema* accordingly.

It is not only possible to change the positions of fields that are already displayed on the screen, but you can also add fields to the screen. All available fields are listed in the repository (4) and you can easily add them to the screen by copying them directly to the *Preview* via drag and drop. The system then adds the new fields to the *UIBB Schema* as well.

**Component Customizing EAMS\_WDC\_NTF\_HEAD\_MALFUNC\_CFG**

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

**Repositories** X EAMS\_WDA\_ORDNTF\_OIF: EAMS\_WDA\_ORDNTF\_OIF\_CFG > OIF: EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2 > Form UIBB: EAMS\_WDC\_NTF\_HEAD\_MALFUNC\_CFG

Fields

Filter: All Fields

Search:

DDIC:

Field	Label
ABCINDIC	ABC indicator
ABCTX	ABC indicator text
ADR_FLAG	Address exists
ASSEMBLY	Assembly
ASSET_NO	Asset
ASSET_NO_T...	Description
BREAKDOWN	Breakdown
BUS_AREA	Business Area
BUS_AREA_T...	Business area description
CATPROFILE	Catalog Profile
CAT_TYPE	Catalog coding
CHANGED_AT	Time of change
CHANGED_BY	Changed by
CHANGED_B...	Name

**Preview**

Malfunction Start Date/Time: 00:00:00 Breakdown: ☐

Malfunction End Date/Time: 00:00:00 Breakdown Duration: 0,00

Reported By:

**Form UIBB Schema** Menu Schema Quickview Schema

Element	Field Name	Display Type	Label
Group			
Melting Group			
Melt. Group Elem...	STRMLFNDATE	Input Field	Malfunction Start Date/Time
Melt. Group Elem...	STRMLFNTIME	Input Field	Malfunction Start Time
Element: BREAKDO...	BREAKDOWN	Checkbox	Breakdown
Melting Group			
Melt. Group Elem...	ENDMLFNDATE	Input Field	Malfunction End Date/Time
Melt. Group Elem...	ENDMLFNTIME	Input Field	Malfunction End Time

In this example the field `CHANGED_BY` is added to the preview (2a) and also to the list of the *UIBB Schema* (2b).

**Component Customizing EAMS\_WDC\_NTF\_HEAD\_MALFUNC\_CFG**

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

**Repositories** X EAMS\_WDA\_ORDNTF\_OIF: EAMS\_WDA\_ORDNTF\_OIF\_CFG > OIF: EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2 > Form UIBB: EAMS\_WDC\_NTF\_HEAD\_MALFUNC\_CFG

Fields

Filter: All Fields

Search:

DDIC:

Field	Label
ABCINDIC	ABC indicator
ABCTX	ABC indicator text
ADR_FLAG	Address exists
ASSEMBLY	Assembly
ASSET_NO	Asset
ASSET_NO_T...	Description
BREAKDOWN	Breakdown
BUS_AREA	Business Area
BUS_AREA_T...	Business area description
CATPROFILE	Catalog Profile
CAT_TYPE	Catalog coding
CHANGED_AT	Time of change
CHANGED_BY	Changed by

**Preview**

Malfunction Start Date/Time: 00:00:00 Breakdown: ☐

Malfunction End Date/Time: 00:00:00 Breakdown Duration: 0,00

Reported By:

Changed by:

**Form UIBB Schema** Menu Schema Quickview Schema

Element	Field Name	Display Type	Label
Group			
Melting Group			
Element: BREAKDOWN	BREAKDOWN	Checkbox	Breakdown
Melting Group			
Melting Group			
Melting Group			
Element: CHANGED_BY	CHANGED_BY	Input Field	Changed by

When you make customizing changes in administrator mode, these changes are on client-level and affect all users. When the users choose the *Malfunction Data* tab in the notification, they now know who last changed the data.

**Create Notification: %00000000001**

Save Check Entries Status Information Set System Status Additional Functions

Notification %00000000001 Notification type M1, Maintenance Request System Status OSNO

General Data Location Data Organizational Data **Malfunction Data** Task Data Activities Documents

Malfunction Start Date/Time: 12.06.2014 10:52:12 Breakdown: ☐

Malfunction End Date/Time: 00:00:00 Breakdown Duration: 0.00 H Hour

Reported By: SAXM Kleber, Melanie Changed by:

**Damages**

Add Damages

N...	Damage Code Gr...	Damage...	Description of Damage Code	Damage Description	Long Text	Object Part Code...	Object Pa...	Description of Object Part C...
------	-------------------	-----------	----------------------------	--------------------	-----------	---------------------	--------------	---------------------------------

## 3.2.2 Customizing for List UIBBs

List UIBBs display data in list format. You can hide or rearrange table columns for all users working in the same client. As an example, you want to create a new default view for the *Operation Data* list UIBB of the *Maintenance Order* application. Therefore you enter the customizing mode (1) of the list UIBB EAMS3\_WDC\_ORD\_OPER\_LI (2). On the right hand you see a *Preview* (3) and further down the *List UIBB Schema* (4) with all columns listed. You can change their order by dragging them to the right place in the *Preview* or by using the *Up* and *Down* button in the *List UIBB Schema*.

If you need additional columns in the *List UIBB Schema* you can get them from the left side (*Repositories, Columns*) (5) with drag and drop. You can also remove columns that you do not need by taking them back from the *List UIBB Schema* to the Repository via drag and drop (6). When you press *Save* (7) you are asked for a transport request.

SAP

Component Customizing EAMS3\_WDC\_ORD\_OPER\_LI

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

Column DESCRIPTION is fixed and will be ignored (Fit to Table Width is active) - Display Help

Repositories

Columns

Filter: All Fields

Search:

DDIC Type:

Field Name Field Label

ACTTYPE\_TXT Name

ACT\_END\_DATE Actual finish (date)

ACT\_END\_TIME Actual finish (time)

ACT\_START\_DATE Actual start (date)

ACT\_START\_TIME Actual start (time)

AGMT\_ITEM Princ. agreement item

AGREEMENT Outline agreement

ASSEMBLY\_EXT... Material Number

ASSEMBLY\_GUID GUID (External)

ASSEMBLY\_VER... Version Number

BASE\_UOM\_ISO ISO code

BUS\_AREA Business Area

BUS\_AREA\_TXT Business area description

CALC\_KEY Calculation key

CALC\_KEY\_TXT Short Descript.

COMPLETE No Remaining Work

Buttons

EAMS\_WDA\_ORDNTF\_OIF: EAMS\_WDA\_ORDNTF\_OIF\_CFG > OIF: EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2 > Tabbed UIBB: EAMS3\_WDC\_ORD\_OPER\_TAB > List UIBB: EAMS3\_WDC\_ORD\_OPER\_LI

General Settings

Preview

Assign Visual Instructions Display Visual Instructions Assign Task List Create Task List

Assign Operations to an Object

D...	Standard text key	L	P	N	S...	T...	D...	A...	D...	C	P	P	V	I	N	U	Execution Factor
																	0
																	0
																	0

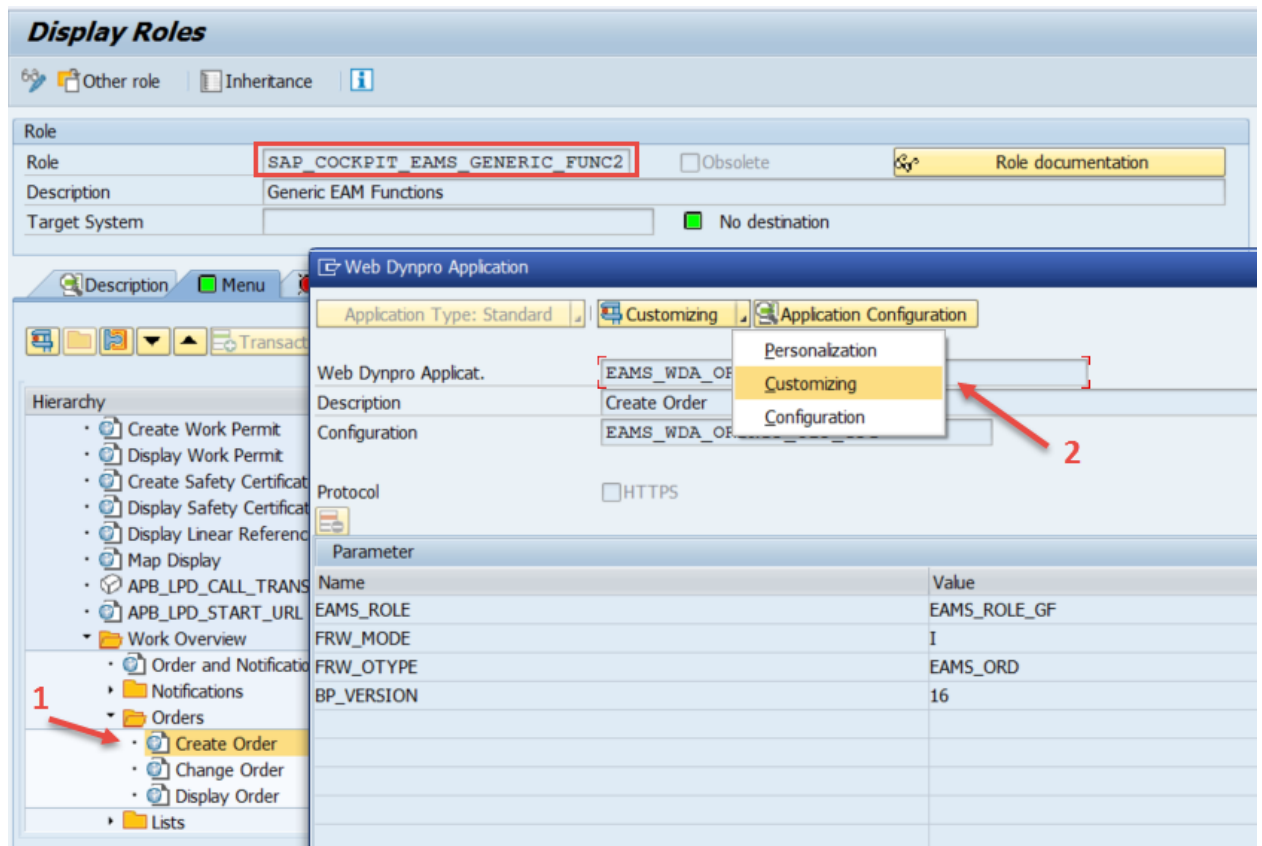
List UIBB Schema

Column Up Down

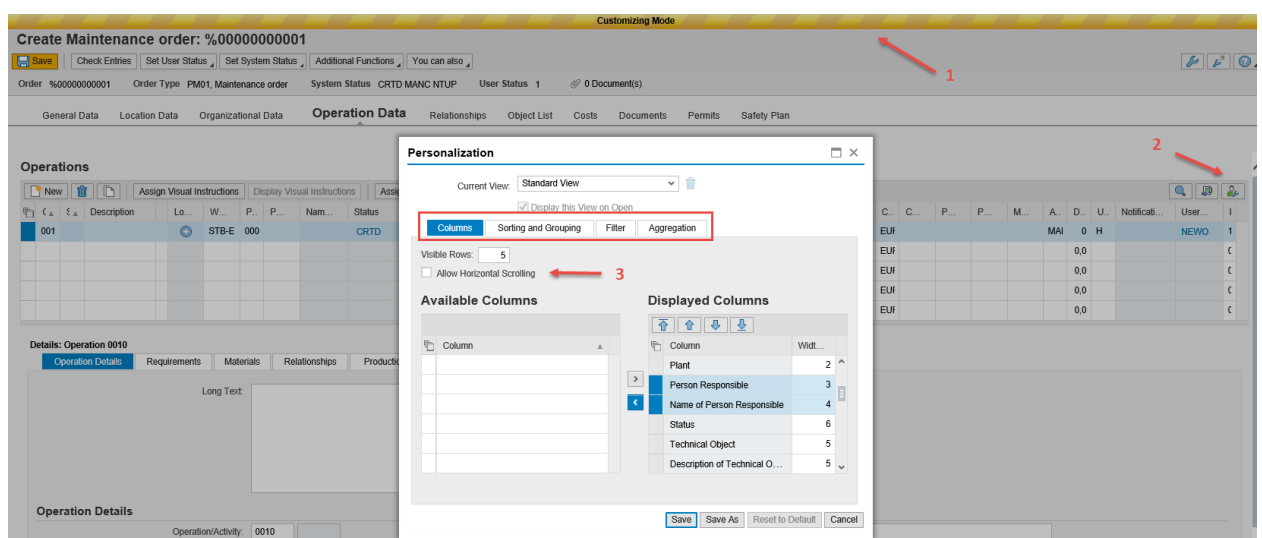
Element	Display Type	Header	Tooltip	Header Tooltip
Column: ACTIVITY	Input Field	Operation	Operation Number	
Column: SUB_ACTI...	Input Field	Suboperation	Suboperation Number	Suboperation Number
Column: DESCRIPTI...	Input Field	Description	Operation Description	Operation Description
Column: STANDAR...	Input Field	Standard text key		
Column: LONGTEXT...	Image	Long Text	<LONGTEXT_ACTION_TOOLT	
Column: WORK_CNTR	Input Field	Work Center	Work Center	
Column: PLANT	Input Field	Plant	Plant	

A second way to make personalized view variants available for all users is starting the application in customizing mode out of the PFCG-role. This is done by choosing role SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2 in transaction

PFCG. On the tab page [Menu](#) select the folder [Work Overview](#) -> [Orders](#) -> [Create Order](#) (1) and open the [Details](#) context menu. The popup shows a dropdown menu on the second menu button where you select [Customizing](#) (2).



This opens the [Create Order](#) application in customizing mode (1). Enter the mandatory field values until you reach the tab page [Operation Data](#). Choose the button [Personalize](#) in the [Operations](#) List UIBB to customize the layout for the current view or to save it as a new view. Additionally you can group and sort columns, or filter and aggregate values. You can also [Allow Horizontal Scrolling](#) (3) in the list UIBB which is off by default. When you press [Save](#) or [Save As](#) you are asked for a transport request.





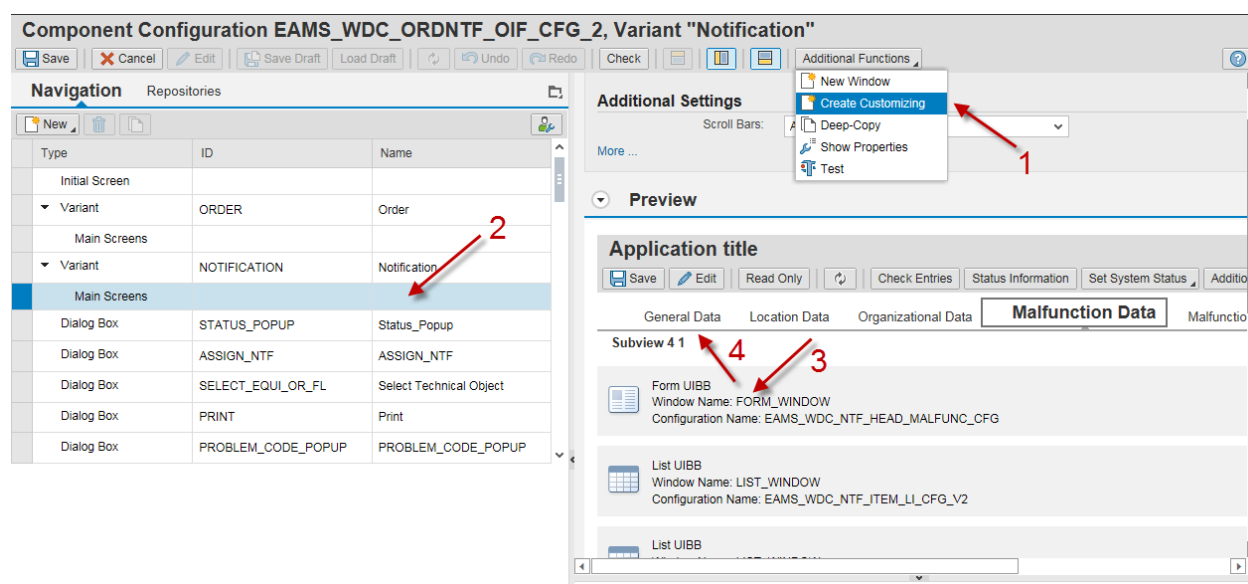
### 3.3 Adding an Existing UIBB to a Tab

For detailed documentation, see [Adding an Existing UIBB to an Application](#) on SAP Help Portal.

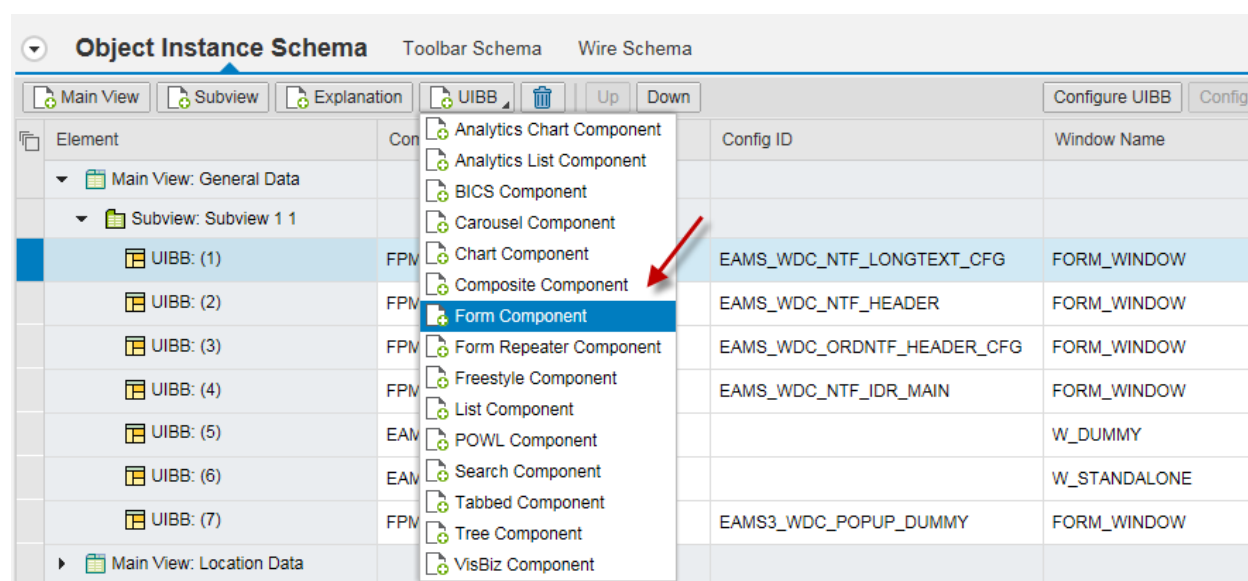
To add an existing UIBB to a tab, you directly access the configuration of the respective UIBB by choosing the pushbutton [Configure Page](#) on the entry screen of the application.

For more information about creating and changing the customizing for UIBBs, see chapter 3.1.

In this example, the malfunction header data UIBB (3) (EAMS\_WDC\_NTF\_HEAD\_MALFUNC\_CFG) will be moved from the *Malfunction Data* tab to the *General Data* tab (4) of the notification (2). This is done also via customizing (1):



Create a new customizing and open the *Object Instance Schema* and select the *Main View: General Data*, where the existing UIBB will be copied. Open the *UIBB* dropdown menu and choose *Form Component*, since the *Malfunction Data* UIBB is a Form UIBB.



A new Form UIBB is added to the *Subview* List of the *Main View: General Data* and can be seen in the preview. Enter the configuration name of the malfunction header data UIBB in the attributes of the new UIBB:

Form UIBB  
Window Name: FORM\_WINDOW  
No Configuration Name

**Attributes of UIBB: FORM\_WINDOW** Final Flags

**Standard Attributes**

Component:	FPM_FORM_UIBB_GL2	Sequence Index:	8
Window Name:	FORM_WINDOW	Stretching:	
Config ID:	EAMS_WDC_NTF_HEAD_MALFUNC_CFG	Hidden Element:	<input type="checkbox"/>
Column:	0	Instance ID:	

Determine where the new UIBB is displayed on the screen. In this example, the malfunction header data will be displayed beneath the UIBB *Longtext*.

Element	Component	Config ID	Window Name
Main View: General Data			
Subview: Subview 1 1			
UIBB: (1)	FPM_FORM_UIBB	EAMS_WDC_NTF_LONGTEXT_CFG	FORM_WINDOW
UIBB: (2)	FPM_FORM_UIBB	EAMS_WDC_NTF_HEAD_MALFUNC_CF	FORM_WINDOW
UIBB: (3)	FPM_FORM_UIBB	EAMS_WDC_NTF_HEADER	FORM_WINDOW
UIBB: (4)	FPM_FORM_UIBB	EAMS_WDC_NTF_HEADER_CFG	FORM_WINDOW

Save your customizing settings and restart the application: The malfunction header data has been moved to the tab *General Data*.

Create Notification: %000000000001

Save Check Entries Status Information Set System Status Additional Functions

Notification %000000000001 Notification type M1, Maintenance Request System Status OSNO

**General Data** Location Data Organizational Data Malfunction Data Task Data Activities Documents

Long Text:

Malfunction Start Date/Time: 12.06.2014 13:52:21 Malfunction End Date/Time: 00:00:00

Breakdown: Breakdown Duration: 0,00 H Hour

Reported By: SAXM Kleber, Melanie

General Data

## 3.4 Rearranging and Hiding UIBBs

If you want to rearrange or hide UIBBs, access the configuration by choosing the pushbutton [Configure Page](#) on the entry screen of the respective application. Create a new customizing for the application or change the existing customizing and work in customizing mode.

For more information about creating and changing the customizing of applications, see chapter 3.1

Determine which UIBB you want to change and mark the respective line (2) in the [Object Instance Schema](#) (1).

If you want to **move the UIBB** to another position, you can do this by clicking on the [Up](#) and [Down](#) pushbuttons (3). In our example, we will move the Long Text UIBB.

If you want to **hide the UIBB** choose the pushbutton [Attributes](#) and open the corresponding attributes screen area. Select the checkbox [Hidden Element](#) (4) in the attributes of the UIBB.

**Component Customizing EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2, Variant "Notification"**

**Navigation** Repositories

Type	ID	Name
Initial Screen		
Variant	ORDER	Order
Main Screens		
Variant	NOTIFICATION	Notification
Main Screens		
Dialog Box	STATUS_POPUP	Status_Popup
Dialog Box	ASSIGN_NTF	ASSIGN_NTF
Dialog Box	SELECT_EQUI_OR_FL	Select Technical Object
Dialog Box	PRINT	Print
Dialog Box	PROBLEM_CODE_POPUP	PROBLEM_CODE_POPUP
Dialog Box	CAUSE_CODE_POPUP	CAUSE_CODE_POPUP
Dialog Box	TASK_CODE_POPUP	TASK_CODE_POPUP
Dialog Box	ASSIGN_ORDER	ASSIGN_ORDER
Dialog Box	NTF_INITIAL	Create Notification
Dialog Box	SELECT_SAFEMEAS_DIR	Add Document as Safety Measure
Dialog Box	SELECT_SAFEMEAS_PRT	Add PRT as Safety Measure
Dialog Box	SELECT_SAFEMEAS_PRMT	Add Permit as Safety Measure
Dialog Box	SELECT_SAFEMEAS_TL	Add Task List as Safety Measure
Dialog Box	INSERT_PRT	Insert PRT
Dialog Box	ADD_RISK	Add Risk
Dialog Box	APPLY_RSKCL_RSP	Apply Safety Measure to List of F

**Object Instance Schema** Toolbar Schema Wire Schema

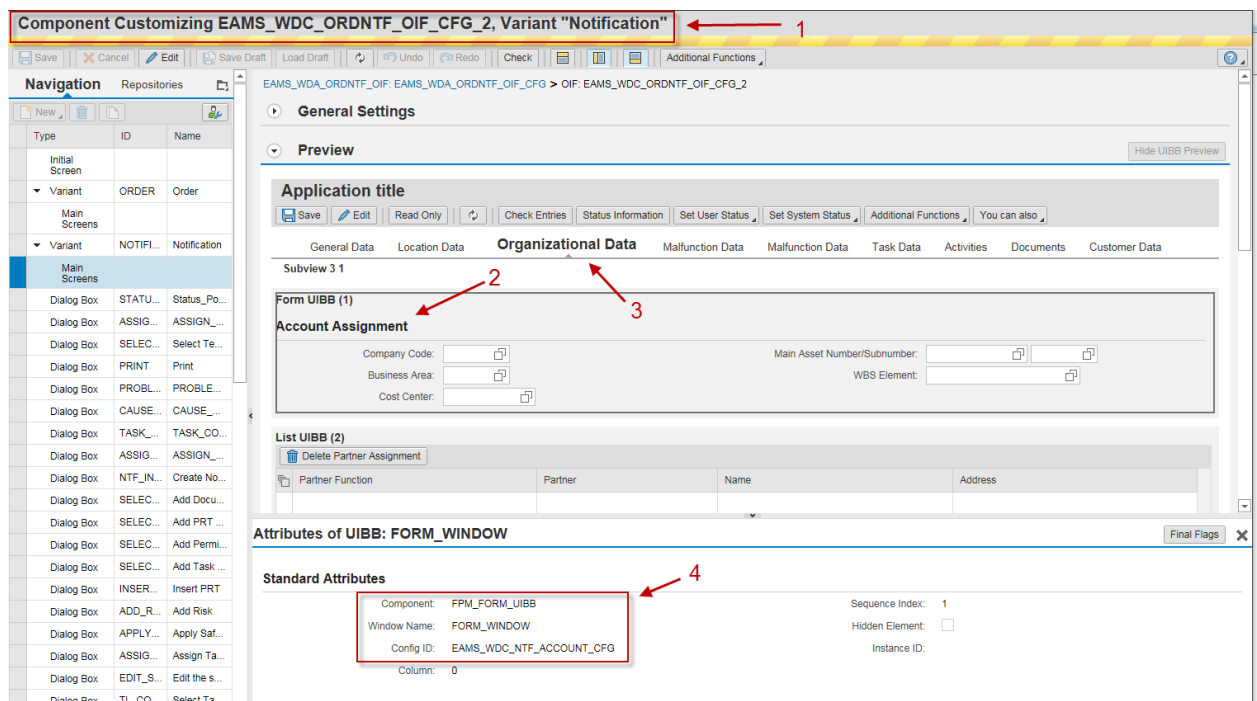
Element	Component	Config ID	Window Name
UIBB: (1)	FPM_FORM_UIBB	EAMS_WDC_NTF_LONGTEXT_CFG	FORM_WINDOW
UIBB: (2)	FPM_FORM_UIBB	EAMS_WDC_NTF_HEADER	FORM_WINDOW
UIBB: (3)	FPM_FORM_UIBB	EAMS_WDC_ORDNTF_HEADER_CFG	FORM_WINDOW
UIBB: (4)	FPM_FORM_UIBB	EAMS_WDC_NTF_IDR_MAIN	FORM_WINDOW
UIBB: (5)	EAMS_WDC_STATUS_POPUP		W_DUMMY
UIBB: (6)	EAMS_WDC_DIR_ATTACH		STANDALONE
UIBB: (7)	FPM_FORM_UIBB_GL2	EAMS3_WDC_POPUP_DUMMY	FORM_WINDOW
Main View: Location Data			
Main View: Organizational Data			
Main View: Malfunction Data			

**Attributes of UIBB: FORM\_WINDOW** Final Flags

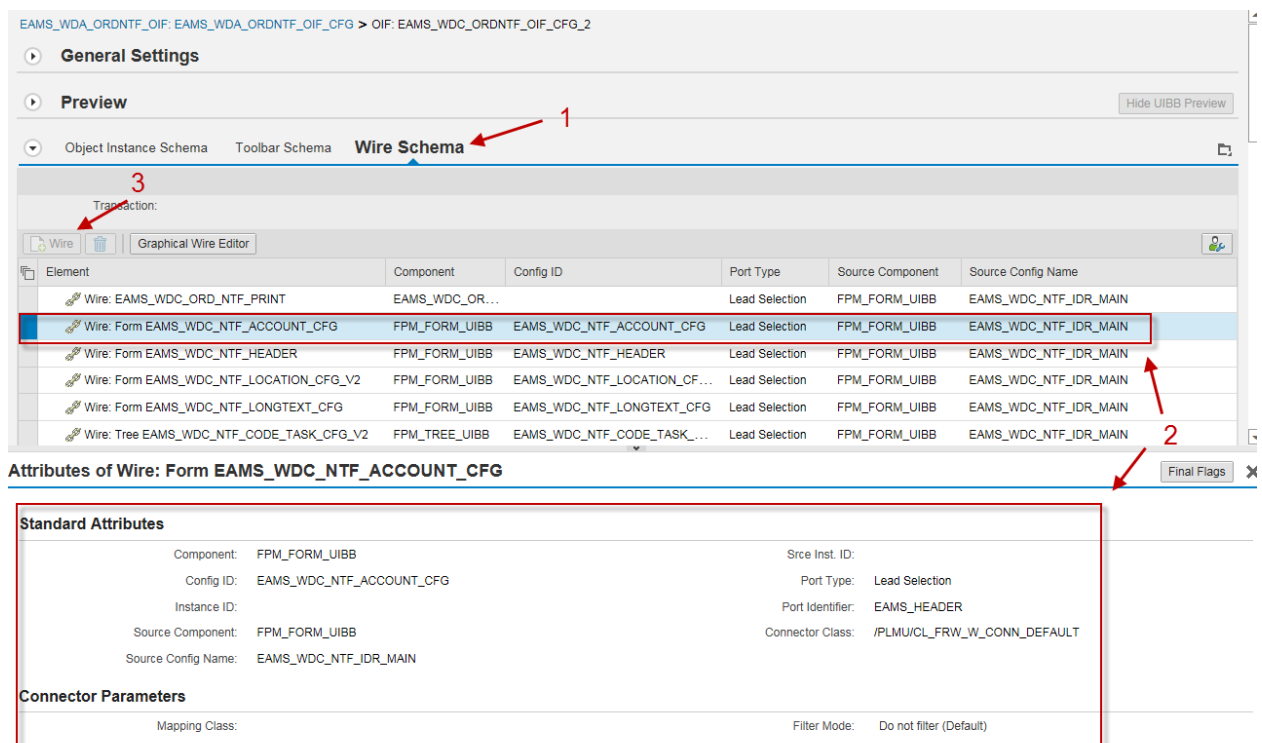
**Standard Attributes**

Component:	FPM_FORM_UIBB	Sequence Index:	1
Window Name:	FORM_WINDOW	Stretching:	
Config ID:	EAMS_WDC_NTF_LONGTEXT_CFG	Hidden Element:	<input checked="" type="checkbox"/>
Column:	0	Instance ID:	

If you have moved a UIBB from one tab to another, the wiring of the UIBB might not be set properly. This can result in fields not opening when the edit or create mode of the application is set. Here we shall take a look at UIBB [Account Assignment](#) (2) located on tab [Organizational Data](#) (3) in the [Component Customizing](#) for the notification (1). The attributes show Component, Window Name and Config ID (4).



To check or enhance the wiring of this UIBB, switch to tab *Wire Schema* (1) in the customizing mode of the configuration. Look for the Config ID of the UIBB and make sure that all fields of this line are filled according to the screen shot (2). If the line does not exist, create it using button *Add Wire* (3). You must always enter the standard connector class as /PLMU/CL\_FRW\_W\_CONN\_DEFAULT. The identification region UIBB (EAMS\_WDC\_NTF\_IDR\_MAIN) is often reliable as a source configuration because it delivers the header data of the application and is available for every tab.



## 3.5 Rearranging and Hiding Tabs

If you want to rearrange or hide tabs, access the configuration by choosing the pushbutton [Configure Page](#) on the entry screen of the respective application. Create a new customizing for the application or change the existing customizing and work in customizing mode.

For more information about creating and changing the customizing of applications, see chapter 3.1

Select the tab you want to hide in the [Navigation](#) screen area. In this example, the tab [Organizational Data](#) (1) will be hidden. Open the [Attributes](#) screen area and select the checkbox [Hidden Element](#) (2) in the attributes (1a) of the view for [Organizational data](#).

**Component Customizing EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2, Variant "Notification"**

Navigation Repositories

Type	ID	Name
Initial Screen		
Variant	ORDER	Order
Main Screens		
Variant	NOTIFICATION	Notification
Main Screens		
Dialog Box	STATUS_POPUP	Status_Popup
Dialog Box	ASSIGN_NTF	ASSIGN_NTF
Dialog Box	SELECT_EQUIL_OR_FL	Select Technical Object
Dialog Box	PRINT	Print
Dialog Box	PROBLEM_CODE_POPUP	PROBLEM_CODE_POPUP
Dialog Box	CAUSE_CODE_POPUP	CAUSE_CODE_POPUP
Dialog Box	TASK_CODE_POPUP	TASK_CODE_POPUP
Dialog Box	ASSIGN_ORDER	ASSIGN_ORDER
Dialog Box	NTF_INITIAL	Create Notification
Dialog Box	SELECT_SAFEMEAS_DIR	Add Document as Safety M
Dialog Box	SELECT_SAFEMEAS_PR1	Add PRT as Safety Measur
Dialog Box	SELECT_SAFEMEAS_PR1	Add Permit as Safety Meas
Dialog Box	SELECT_SAFEMEAS_TL	Add Task List as Safety Me

**General Settings** Final Flags Floorplan Settings

**Additional Settings**

Scroll Bars: Automatic

**Preview**

**Application title**

Save Edit Read Only Check Entries Status Information Set System Status

General Data Location Data **Organizational Data** Malfunction Data

**Subview 3 1**

Form UIBB  
Window Name: FORM\_WINDOW  
Configuration Name: EAMS\_WDC\_NTF\_ACCOUNT\_CFG

**Attributes of Main View: Organizational Data** Final Flags

**Standard Attributes**

Main View ID: NTF\_ORGANIZATION Sequence Index: 3  
Main View Nam.: Organizational Data Hidden Element: ☒

Save your customizing settings and restart the application. In the notification, the tab [Organizational Data](#) is hidden, so that the tab [Malfunction Data](#) now immediately follows the tab [Location Data](#):

**Create Notification: %000000000001**

Create Notification: %000000000001

Save Check Entries Status Information Set System Status Additional Functions

Notification %000000000001 Notification type M1, Maintenance Request System Status OSNO

**General Data** Location Data Malfunction Data Task Data Activities Documents

To change the sequence of tabs in an application, use the sequence index in the [Attributes](#) screen area (1). In this example, the tabs [Task Data](#) and [Activities](#) will be positioned directly after the tab [General Data](#). Mark the tab that

you want to move in the *Preview* screen area and change the sequence index in the *Attributes* accordingly. In our example, the *Task Data* sequence index has already been changed to *2* and the system shows the tab right after the *General Data* tab (1). The sequence index for *Activities* (2) is currently changed to *3* (3):

'. A 'Final Flags' button is also visible."/>

**Preview** Show UIBB Preview

**Application title**

Save Edit Read Only Check Entries Status Information Set System Status Additional Functions You can also

General Data Task Data Location Data Organizational Data Malfunction Data Malfunction Data **Activities** Documents

List UIBB  
Window Name: LIST\_WINDOW  
Configuration Name: EAMS3\_WDC\_NTF\_ACTV\_LI

Form UIBB  
Window Name: FORM\_WINDOW

**Attributes of Main View: Activities** Final Flags

**Standard Attributes**

Main View ID: VW\_NTF\_ACTV Sequence Index: 3  
Main View Name: Activities Hidden Element: ☐

Save your customizing settings and restart the application. Since the tab *Organizational Data* is hidden and the tab sequence is changed, the tabs in the notification look like this:

**Create Notification: %000000000001**

Create Notification: %000000000001 Save Check Entries Status Information Set System Status Additional Functions

Notification %000000000001 Notification type M1, Maintenance Request System Status OSNO

**General Data** Task Data Activities Location Data Malfunction Data Documents

Long Text:

## 3.6 Defining a Field as a Required Entry Field

If you want to define a specific Web UI field as a required entry field, you have to change the properties of this field. To do so, you need to implement two Business Add-Ins (BAdIs) in enhancement spot /PLMB/ES\_SPI:

- In the BAdI /PLMB/EX\_SPI\_PROPERTIES\_ACCESS (*Adjustment of Properties for Service Provider Access Methods*) you define the field properties and define the field as a required entry field.
- In the BAdI /PLMB/EX\_SPI\_APPL\_ACCESS (*Adjustment of Data for Service Provider Access Methods*) you can implement the checks and error messages for the required entry field.

If you do not need to define your own error messages, you can select the *Check Mandatory* checkbox in the *General Settings* of the UIBB configuration.

The screenshot shows the 'General Settings' tab of the UIBB configuration. It includes sub-tabs for 'Final Flags', 'Feeder Class', and 'Feeder Class Parameters'. Under 'Additional Settings', there are three dropdown menus: 'Layout Type' (set to 'Standard Layout'), 'UI Guideline Version' (set to 'Default Guideline'), and 'Context Menu ID'. To the right, there is a 'Check Mandatory' checkbox, which is highlighted with a red rectangle, and a 'No Automatic Event after F4 Help' checkbox.

If you select this checkbox, the system checks on Web Dynpro level if user entries exist for all required entry fields. If user entries are missing, the system issues standard error messages.

## 3.7 Rearranging, Hiding, and Adding Actions

### 3.7.1 Rearranging and Hiding Actions

You can easily rearrange buttons on the Web UI in the customizing of an application. To do so, access the configuration by choosing the pushbutton *Configure Page* on the entry screen of the application.

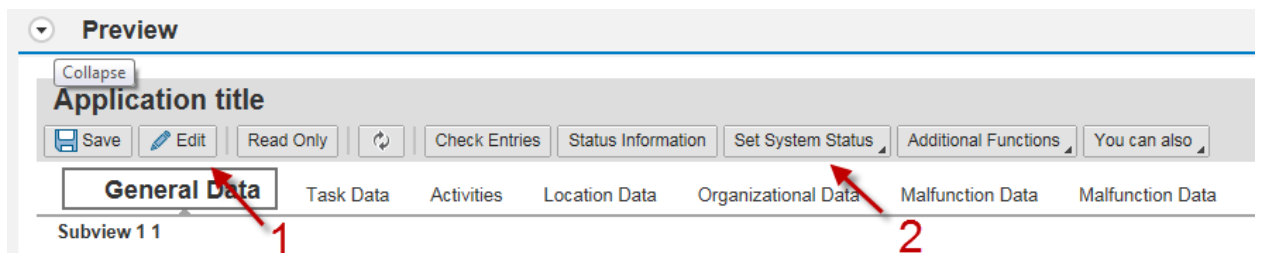
For more information about creating and changing the customizing of the whole application, see chapter 3.1

In the third section of the component configuration, choose the tab *Toolbar Schema*. In the *Toolbar Schema* you get an overview of all toolbar elements of a specific application with their labels and tooltips. You can change the sequence and specify whether specific toolbar elements should be visible or enabled.

To **change the sequence of the buttons** in the toolbar, you mark the line with the corresponding toolbar element and move it with the pushbuttons *Up* and *Down* (1) to the new position. The trash can (2) deletes the line completely and deactivates the respective toolbar element on the Web UI screen. If you want to add preconfigured actions or your own buttons, choose the pushbutton *Add Toolbar Element* (3).

Object Instance Schema <b>Toolbar Schema</b> Wire Schema					
<div> <div>Toolbar Element</div> <div>Up</div> <div>Down</div> </div>					
Element	Enabled	Label	Tooltip	Visibility	
Toolbar					
Activation Function:...	<input checked="" type="checkbox"/>	Save		Is Visible	
Button: Check	<input checked="" type="checkbox"/>	Check Entries		Is Visible	
Button: Edit	<input type="checkbox"/>			Is Visible	
Button: Status Inform...	<input checked="" type="checkbox"/>	Status Information	Display Status Information	Is Visible	
Button-Choice: Additi...	<input checked="" type="checkbox"/>	Additional Functions	Additional Functions	Is Visible	
Button-Choice: Set S...	<input checked="" type="checkbox"/>	Set System Status	Set System Status	Is Not Visible	
Button: Read Only	<input checked="" type="checkbox"/>			Is Visible	
Button: Refresh	<input checked="" type="checkbox"/>			Is Visible	
You can Also: You ca...		You can also		Is Visible	

To **hide or deactivate a toolbar element** you make the following settings: To hide an element, you set the *Visibility* to *Is Not Visible*. To deactivate the element, you deselect the checkbox in the table column *Enabled*. In this example you want to deactivate the button for *Edit* (1) and hide the button (and dropdown menu) *Set System Status* (2):



You therefore deselect the checkbox *Enabled* (1) for the *Edit* button and set the *Visibility* of the toolbar element *Button-Choice: Set System Status* to *Is Not Visible* (2):

Object Instance Schema <b>Toolbar Schema</b> Wire Schema					
<div> <div>Toolbar Element</div> <div>Up</div> <div>Down</div> </div>					
Element	Enabled	Label	Tooltip	Visibility	
Toolbar					
Activation Function:...	<input checked="" type="checkbox"/>	Save		Is Visible	
Button: Check	<input checked="" type="checkbox"/>	Check Entries		Is Visible	
Button: Edit	<input type="checkbox"/>			Is Visible	
Button: Status Inform...	<input checked="" type="checkbox"/>	Status Information	Display Status Information	Is Visible	
Button-Choice: Additi...	<input checked="" type="checkbox"/>	Additional Functions	Additional Functions	Is Visible	
Button-Choice: Set S...	<input checked="" type="checkbox"/>	Set System Status	Set System Status	Is Not Visible	
Button: Read Only	<input checked="" type="checkbox"/>			Is Visible	
Button: Refresh	<input checked="" type="checkbox"/>			Is Visible	
You can Also: You ca...		You can also		Is Visible	



## 3.7.2 Creating and Adding Actions

If you want to create or add **actions that affect the UI**, you have to define these actions in the feeder class of the UI. You implement UI-specific actions in method `AFTER_GET_DATA` and execute the modification in the feeder class as an *Enhancement Implementation*. To find out the feeder class, see chapter 3.8

If you want to create or add **actions that affect back-end data**, you need to implement two Business Add-Ins (BADIs) in enhancement spot `/PLMB/ES_SPI`:

- In the BAdI `/PLMB/EX_SPI_METADATA` (*Enrichment of Node Definition*) you can create additional nodes or enhance a standard node with your own actions or queries. In the BAdI method `ENRICH_NODE_DEFINITION` you can define a new action and specify a unique name for it in the changing parameter `CT_METADATA_NODE`.
- In the BAdI `/PLMB/EX_SPI_APPL_ACCESS` (*Adjustment of Data for Service Provider Access Methods*) you implement the new action. You implement the new logic in BAdI method `BEFORE_ACTION`. You have to set the changing parameter `CV_SKIP_STANDARD` to 'X' to avoid dumps in the SPI-framework.

After you have defined the actions in the feeder class or BAdI, the action is displayed as a toolbar element in the actions list of the *Toolbar Schema* and can be added to the Web UI screen in the *Component Customizing*.

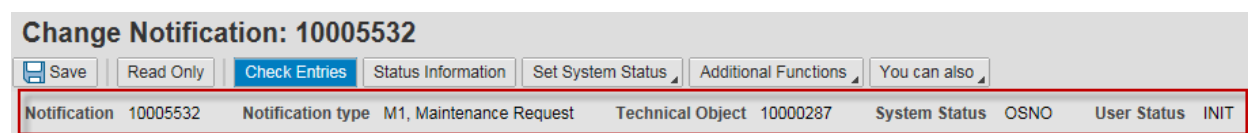
For more information about the UI configuration, see [Adding a New Button to the Toolbar in an Application](#).

For more information about the SPI BADIs, see [SPI Enhancements](#).

## 3.8 Changing the Identification Region (IDR)

On the Web UI, the system usually shows important application information, such as technical names of assigned objects and statuses, in an identification region. The information shown is not dependent on the tab you are currently working on.

For more information about the identification region, see [Identification Region \(IDR\) of GAF and OIF Applications](#) in the SAP Library.



You cannot enhance or change the information shown in the identification region in customizing, but rather have to do modifications in method `/PLMU/IF_FRW_G_AFTER_GET_DATA~AFTER_GET_DATA` in the feeder class of the corresponding application. You can find out the name of the respective feeder class by clicking on the *Configure Page* and accessing the component configuration of the application. In this example you select the notification variant (1). In the *Preview* section you find all UIBBs that are part of the *General Data* tab on the Web UI screen. Select the UIBB that has *IDR* in the configuration name (2) and open the configuration with *Configure UIBB*.

**Component Configuration EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2, Variant "Notification"**

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

**Navigation** Repositories

Type	ID	Name
Initial Screen		
Variant	ORDER	Order
Main Screens		
Variant	NOTIFICATION	Notification
Main Screens		
Dialog Box	STATUS_POPUP	Status_Popup
Dialog Box	ASSIGN_NTF	ASSIGN_NTF
Dialog Box	SELECT_EQUI_OR_FL	Select Technical Object
Dialog Box	PRINT	Print
Dialog Box	PROBLEM_CODE_POPU	PROBLEM_CODE_POPU

**General Settings** Final Flags Floorplan Settings

**Additional Settings**

Scroll Bars: Automatic

**Preview**

**Application title**

Save Edit Read Only Check Entries Status Information Set System Status Additional Functions

**General Data** Location Data Organizational Data Malfunction Data Malfunction Data

**Subview 1 1**

- Form UIBB  
Window Name: FORM\_WINDOW  
Configuration Name: EAMS\_WDC\_NTF\_LONGTEXT\_CFG
- Form UIBB  
Window Name: FORM\_WINDOW  
Configuration Name: EAMS\_WDC\_NTF\_HEADER
- Form UIBB  
Window Name: FORM\_WINDOW  
Configuration Name: EAMS\_WDC\_ORDNTF\_HEADER\_CFG
- Form UIBB  
Window Name: FORM\_WINDOW  
Configuration Name: EAMS\_WDC\_NTF\_IDR\_MAIN
- Component Name: EAMS\_WDC\_STATUS\_POPUP  
Window Name: W\_DUMMY  
No Configuration Name

When you open the configuration EAMS\_WDC\_NTF\_IDR\_MAIN (1) the **Preview** section is empty (2). On the tab **General Settings** you can click on the **Feeder Class** button (3) to see the feeder class name (4). In transaction SE24 (**Class Builder**), you can open the feeder class in change mode and do the respective changes.

**Component Configuration EAMS\_WDC\_NTF\_IDR\_MAIN**

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

EAMS\_WDA\_ORDNTF\_OIF: EAMS\_WDA\_ORDNTF\_OIF\_CFG > OIF: EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2 > Form UIBB: EAMS\_WDC\_NTF\_IDR\_MAIN

**Preview**

**General Settings** Form UIBB Schema Menu Schema Quickview Schema

Final Flags Feeder Class Feeder Class Parameters

**Additional Settings**

Layout Type: Standard Layout Check Mandatory: ☐

**Edit Feeder Class**

**Feeder Class**

\* Feeder Class: CL\_EAMS\_UI\_FD\_NTF\_IDR

Edit Parameters Cancel

If you know the name of the corresponding feeder class, you can also modify the information shown in the identification region with Business Add-In (BADl) / PLMU/EX\_FRW\_CONSUMER\_APPCC (**OIF Application Controller**). For more information about BADls, see chapter 13.1.

You can also define your own IDR feeder class, which changes the reference to the IDR instance.

## 3.9 General Settings for LIST UIBBs (powered by ATS)

In the Business Function *Simplified Management of EAM Functions 3* (LOG\_EAM\_SIMPLICITY\_3) the system uses the generic design template *List ATS* (advanced table service) *component* to display data in lists. The List ATS component offers enhanced functions for personalizing lists and sorting, grouping, filtering, and aggregating data. Furthermore, you can see your search results highlighted in the table, export tables to spreadsheets, and save your personal table settings as your own personal view.

As an administrator you can hide or disable functions in each tabular list, such as the functions for adding up table entries or exporting tables to a spreadsheet. To access the general settings of a list UIBB, select the *Show Configurable Areas* pushbutton, then put the cursor in one of the highlighted areas and select the icon in the upper right corner.

The screenshot shows the 'Create Notification' screen for notification %00000000001. The 'Task Data' tab is active, displaying a table with columns: Nu..., Code Group, Code, Descriptio..., Task Text, Task Status, Function of Person Re..., Long Text, Person Responsible ID, Person Resp..., Planned S..., and Planned... The table contains several rows with '0000' in the first column. A red arrow points to the 'Show Configurable Areas' button in the top right corner.

In this example you create or edit the customizing for the list UIBB EAMS3\_NTF\_TASK\_LI\_CFG\_V2 on the tab *Task Data* in the notification. In the section *Table Services* you can modify the settings. In our example the search functionality and the data aggregation are currently disabled, whereas exporting data to a spreadsheet and creating personalized views are enabled for the users.

The screenshot shows the 'Component Customizing' screen for EAMS3\_WDC\_NTF\_TASK\_LI\_CFG\_V2. The 'Table Services' section is highlighted with a red box. The settings are as follows:

Section	Setting
Filtering	Column Header
Aggregation	Disabled
Search Function	Disabled
Sorting / Grouping	Sort and Group - Column Header and Personalization
Export to Spreadsheet	Enabled (Button in List Toolbar)
Enable Creation of New Views	Enabled (Button in List Toolbar)

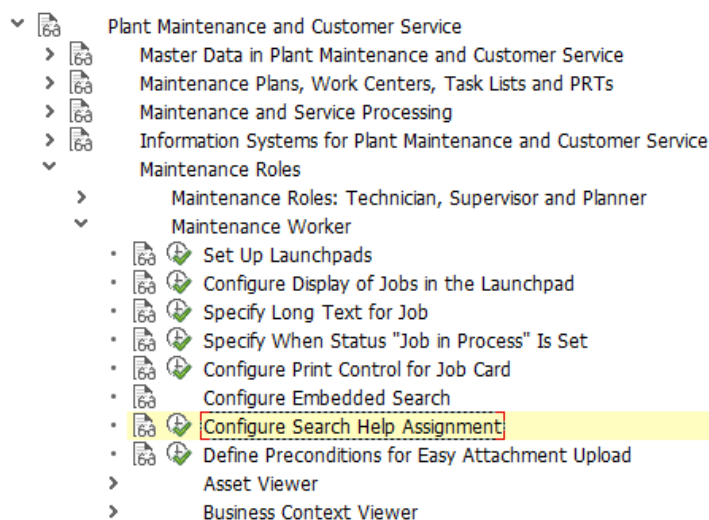
The 'Accessibility Settings' section shows 'Accessibility Description' as 'Overview of Tasks' and 'ARIA Landmark' as 'None'. The 'Preview' section at the bottom shows a table with columns: N, Code, Code, Description of Task Code, Task Text, Task Sta, Function of Per, Long Text, Person Respon, Person, Plans, and Plans.

## 3.10 Assigning a Different Search Help to a Web Dynpro Field

On the SAP Web UI for Plant Maintenance you can replace the SAP standard search help for every single field with an individual search help. In our example you want to change the SAP standard search criteria for the responsible work center on the *General Data* tab page in the notification. The SAP standard search criteria are the fields *Plant*, *Work Center*, *Description* and *Language Key*. You want to additionally provide the search criterion *Work Center Category*.

The screenshot shows the 'Create Notification: %000000000001' screen. The 'General Data' tab is active. A 'Search: Work center' dialog box is open, showing search criteria: Plant, Work center, Description, and Language Key. The 'Work center' field in the 'Responsibilities' section is highlighted with a red box, and a red arrow points to it from the dialog box.

To change the search help criteria for a field you have to assign a new search help object to the respective field in customizing for *Plant Maintenance and Customer Service* under *Maintenance Roles* → *Maintenance Worker* → *Configure Search Help Assignment* (view `V_EAMSC_UI_SHLP` in transaction `SM30`).



Since a field can be used in several structures you always assign the new search help (3) to a combination of the technical name of the field (2) and the data structure that contains this field (1).

**Display View "Configuration for search help assignment": Overview**

Configuration for search help assignment

Table Name	Field Name	From DMZ	Search Help Name
1	2		3

To assign a new search help to a UI field you have to determine the following data:

- the technical name of the field
- the data structure that contains the field
- the new search help (you can either assign an existing one or create a new one)

### Specifying the Technical Name of the Field

In a first step you have to find out the technical name of the field to which you want to assign a new search help. In this example you open the [Create Notification](#) Application in NWBC and choose the [Show Configurable Areas](#) button (1). Then you start the configuration of the UIBB in which the field [Work Center](#) is located (2).

**Create Notification: %000000000001**

Save Check Entries Status Information Set System Status Additional Functions You can also

Notification %000000000001 Notification type M1, Maintenance Request System Status OSNO

**General Data** Location Data Organizational Data Malfunction Data Task Data Activities Documents

Long Text:

**General Data**

Coding: Description: Priority: Required Start Date/Time: 13.10.2014 12:21:49 Required End Date/Time: 00:00:00 Technical Object: Material: Assembly: Task List: Assign Task List Assigned Order: Assign Order Serial Number: Technical Object Type:

**Responsibilities**

Work Center: Planning Plant: Planner Group: Work Center Plant: Person Responsible: Reported by: SAXM Kieber, Melanie

Enter the component configuration screen of the UIBB. In the section *Attributes* (1) you can identify the technical name of the field *Work Center* (2) as WORK\_CNTR (4).

**Component Configuration EAMS\_WDC\_NTF\_HEADER**

Save Cancel Edit Save Draft Load Draft Undo Redo Check Additional Functions

**General Data**

Coding: Description: Priority: Required Start Date/Time: 00:00:00 Required End Date/Time: 00:00:00 Technical Object: Display Technical Object Technical Object Type: Serial Number:

Material: Assembly: Task List: Assign Task List Remove Task List Assigned Order: Assign Order Remove Order

**Responsibilities**

Work Center: Work Center Plant: Planning Plant: Person Responsible: Planner Group: Reported by:

General Settings **Form UIBB Schema** Menu Schema Quickview Schema

Element	Child Element	Up	Down
Element			
Group: General Data			
Melting Group			
Melt. Group Element	Input Field		

**Attributes of Melt. Group Element: WORK\_CNTR**

**Standard Attributes**

Field Name: WORK\_CNTR Display Type: Input Field

## Specifying the Data Structure that Contains the Field

To find out the technical name of the structure, start the Z-report as described in Appendix 15.10. On the entry screen of the report you have to enter the **Field Name** and the **Application Building Block ID (ABBID)**.

For EAM maintenance notifications the application building block ID is `EAMS_NTF`. The following table lists the most important application building block IDs, which are the IDs for so-called 'nodes' in WEB UI.

ABBID	Description
EAMS_DIR	EAMS: Document Information Repository
EAMS_EQUI	EAMS: Equipment
EAMS_FL	EAMS: Functional Location
EAMS_JOB	EAMS: Job List
EAMS_MAT	Material
EAMS_MD	Measurement Document
EAMS_MP	Measuring Point
EAMS_MPLAN	Maintenance Plan
EAMS_MPOS	Maintenance Plan Items
EAMS_MP_MI	Maintenance Plan and Item List
EAMS_NTF	EAMS: Notification
EAMS_OBJK	Object Lists
EAM_ORDNTF	EAMS: Order Notification
EAMS_ORD	EAMS: Order
EAMS_ORDCO	EAMS: Order Confirmation
EAMS_TL	Task List
EAMS_TLOP	Task List Operation

You can look up the whole list of EAM application building blocks in customizing *for Plant Maintenance and Customer Service* under *Maintenance Roles → Maintenance Worker → Asset Viewer → Settings for BO Framework and Navigation → BO Framework → Define Application Building Blocks* (or in view `/PLMB/V_SPI_ABB` in transaction `SM30`).

To figure out the data structure that contains the field *Work Center* you enter the application building block `EAMS_NTF` and the technical name of the field `WORK_CNTR` on the entry page of the report.





**Create PM Notification: Maintenance Request**

Notification: \$00000000001 M1

Notific. Status: OSNO

Order:

Reference object:

Functional loc.:

Equipment:

Assembly:

Subject:

Coding:

Description:

Responsibilities:

Planner group: / 0001

Main WorkCtr: 1

Position resp.:

Person respons.:

Reported by:

Notif.date: 17.11.2014 10:11:51

Start/End Dates:

Main work center for maintenance tasks (1)

Work Center Category:

Plant: 0001

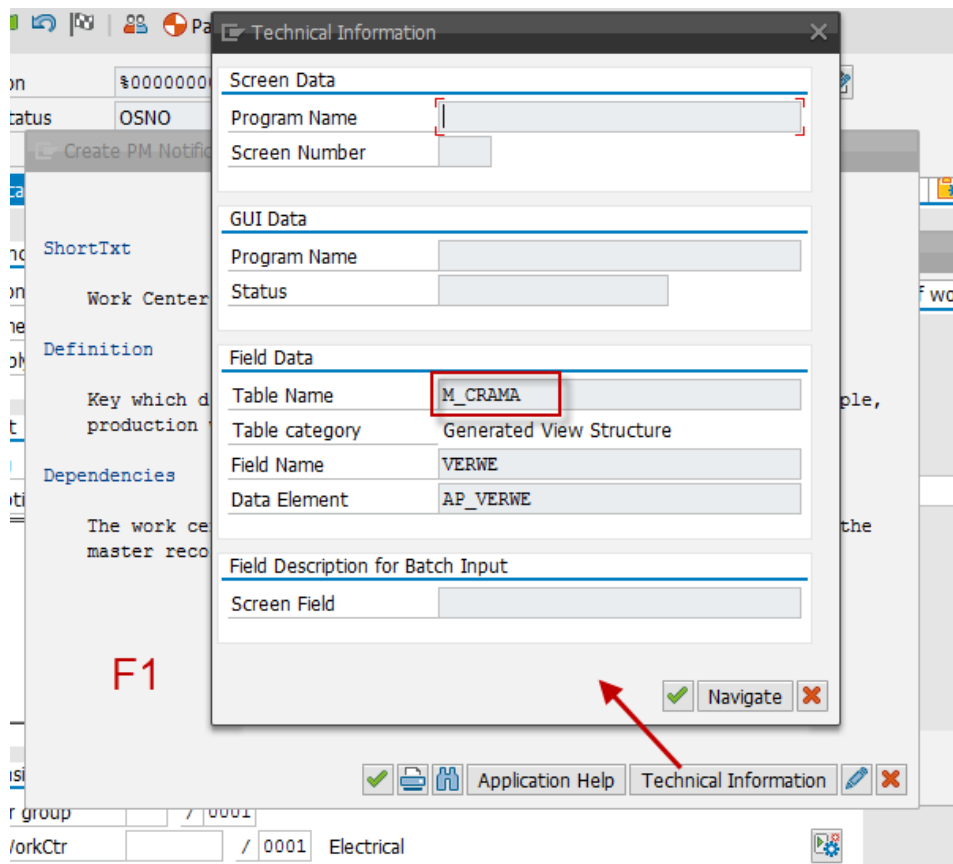
Work center:

Description:

Language Key: EN

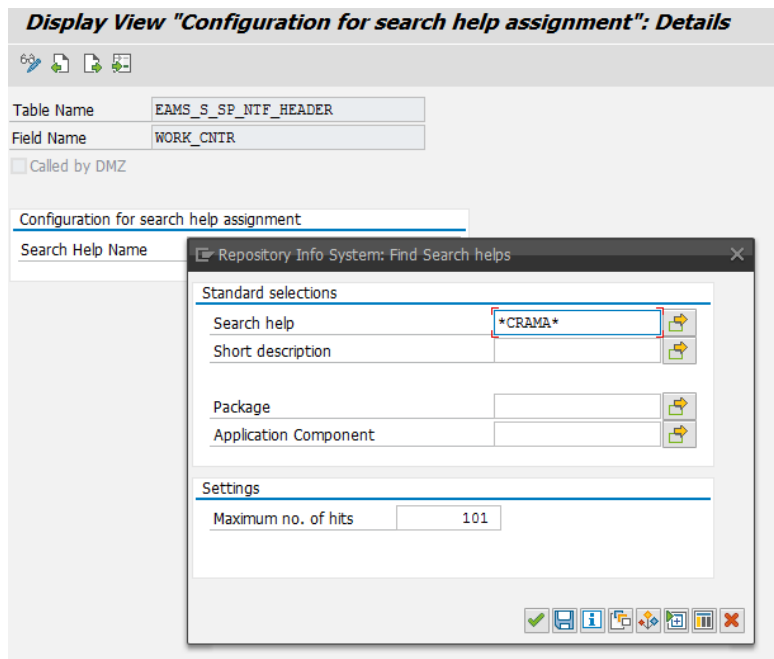
Maximum No. of Hits: 50

Choose the [Technical Information](#) button in the field help. You find the technical name of the search help object in the field [Table Name](#). In this example the search help is M\_CRAMA.

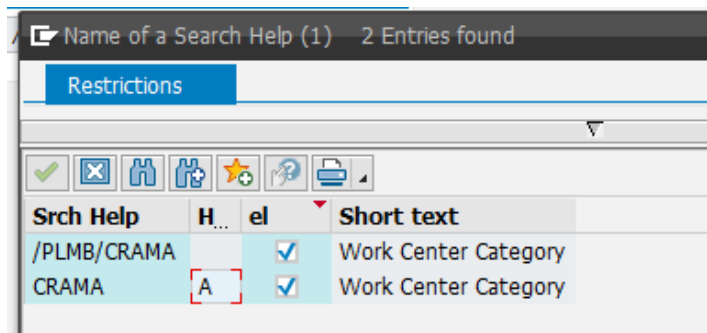


After you have worked out the technical name of the field, the data structure that contains the field and the search help object you can assign the new search help to the respective field in customizing (view `V_EAMSC_UI_SHLP` in transaction `SM30`).

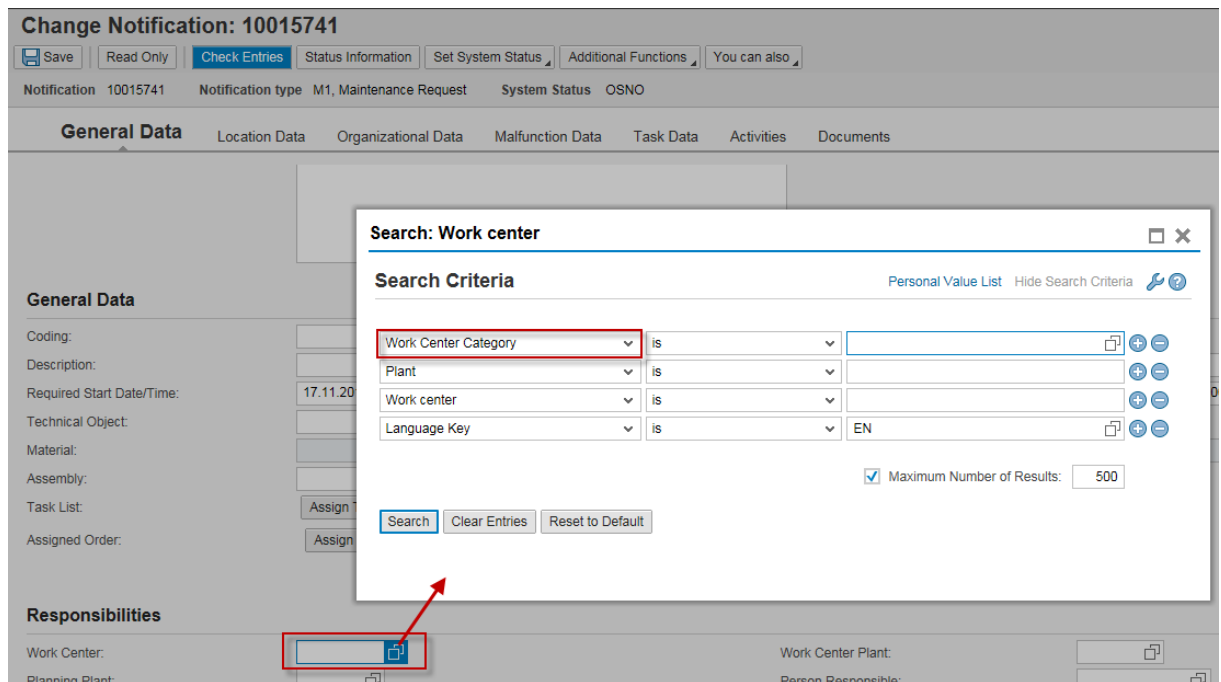
In this example you enter the field name `WORK_CNTR` and the data structure `EAMS_S_SP_HEADER`. As the search help `M_CRAMA` cannot be assigned, we look for a similar one by using the generic search.



You can choose one of the two valid search helps that show the same search popup in Web Dynpro.



After you have saved your customizing settings, the new search help including the search criterion *Work Center Category* is displayed in the search help for the *Work Center* field.

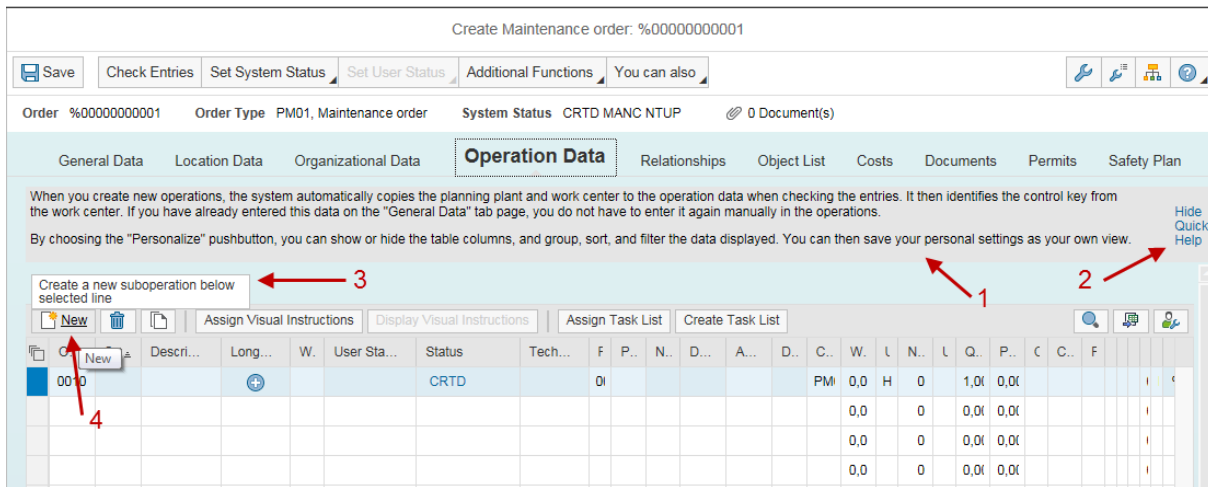


For more information about Search Helps, see [ABAP Dictionary Search Help](#).

For more information about how to integrate different types of search helps in Web UI, see the example component [DEMO\\_VALUE\\_HELP](#).

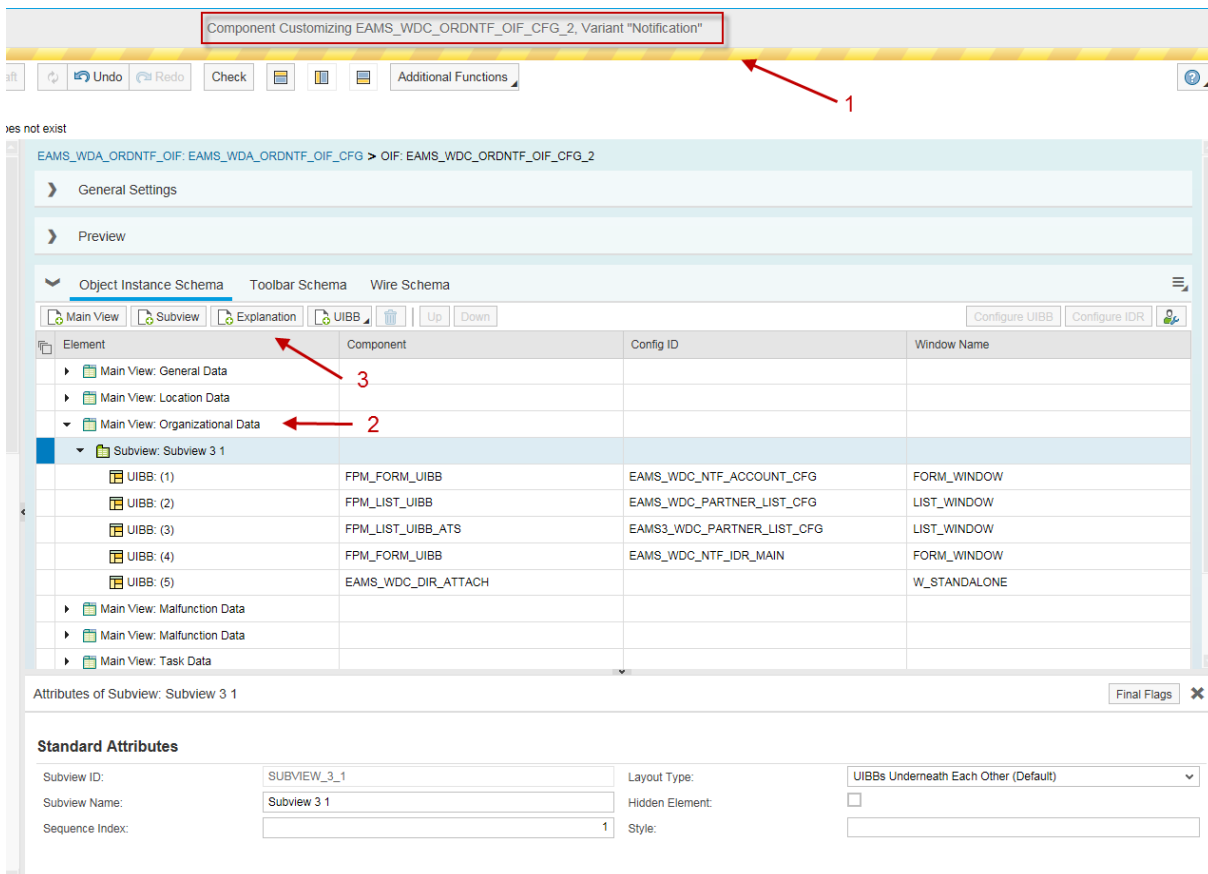
## 3.11 Creating Quick Help

You can provide individual help texts for the users of an EAM WEB UI application. The example shows standard quick help for the [Operation Data](#) tab page delivered by SAP. The quick help can be displayed above the corresponding application (1) and be hidden by choosing [Hide Quick Help](#) (2). You can create your own quick help for a whole application, for a specific tab page, and even for individual pushbuttons. Quick help for pushbuttons can have up to 255 characters and appears as a separate small window when you hover over an object (3), similar to a tooltip. Button texts and field labels are underlined if quick help is available (4).



### 3.11.1 Adding Quick Help for a Tab Page

To add quick help for the *Organizational Data* tab of a notification, for example, you open the customizing of the respective application (1) in change mode. In the *Object Instance Schema* you select the respective view; in this example the line with *Main View: Organizational Data* (2) is selected. Choose *Add Explanation* (3) and a new table row for the explanation is inserted in the *Subview* folder.



Now you select the new table row *Explanation* and provide a name for the documentation object in the *Explanation* attributes (here ZZDOCU\_NTF\_ORG\_DATA). Then you save your customizing and include it in a transport request.

Element	Component	Config ID	Window Name
Main View: General Data			
Main View: Location Data			
Main View: Organizational Data			
Subview: Subview 3 1			
Explanation			
UIBB: (1)	FPM_FORM_UIBB	EAMS_WDC_NTF_ACCOUNT_CFG	FORM_WINDOW
UIBB: (2)	FPM_LIST_UIBB	EAMS_WDC_PARTNER_LIST_CFG	LIST_WINDOW
UIBB: (3)	FPM_LIST_UIBB_ATS	EAMS3_WDC_PARTNER_LIST_CFG	LIST_WINDOW

**Attributes of Explanation: Explanation Subview 3 1**

**Standard Attributes**

Text: Explanation Subview 3 1

Docu. Object: ZZDOCU\_NTF\_ORG\_DATA

The documentation object ZZDOCU\_NTF\_ORG\_DATA with your quick help text is automatically created in *Document Maintenance* (transaction SE61) as a *General Text*. You select *General text* as the respective document class, enter the object name, and choose *Change*. Now you can write your own quick help text, either with the *SAPscript* text editor or with a Graphical PC editor. Finally you save your document in a package and activate it for translation.

**Document Maintenance: Initial Screen**

Worklist Authorizations

**Settings**

Document Class: General text

Language: English

**Document**

Name: ZZDOCU\_NTF\_ORG\_DATA

Display Change Create

Now the document can be translated into any language in the *Translation Editor* (transaction SE63). In the command field, enter **TX** (1) (the abbreviation for the object type) and choose **Enter**. Or choose *Translation -> ABAP Objects -> Long Texts (Documentation) -> C6 F1 Help -> TX General Texts* from the menu. The initial screen changes to *ABAP Documentation: General Texts* (2). Enter the object name (3) and choose the appropriate language direction (4). Then choose **Edit** (5).

The screenshot shows the SAP 'ABAP Documentation: General Texts' screen. At the top, there's a menu bar with 'Translation', 'Edit', 'Goto', 'System', and 'Help'. Below it is a toolbar with various icons. The main area has a title bar 'ABAP Documentation: General Texts' (2). Underneath, there are two tabs: 'Display Transport Object' and 'Technical Information'. The 'Object' section contains an 'Object Name' field with the value 'ZZDOCU\_NTF\_ORG\_DATA' (3). The 'Translation' section has 'Source Language' set to 'enUS' (English US) and 'Target Language' set to 'deDE' (German DE) (4). At the bottom, there is an 'Edit' button (5) and a 'Source/Target Language' button.

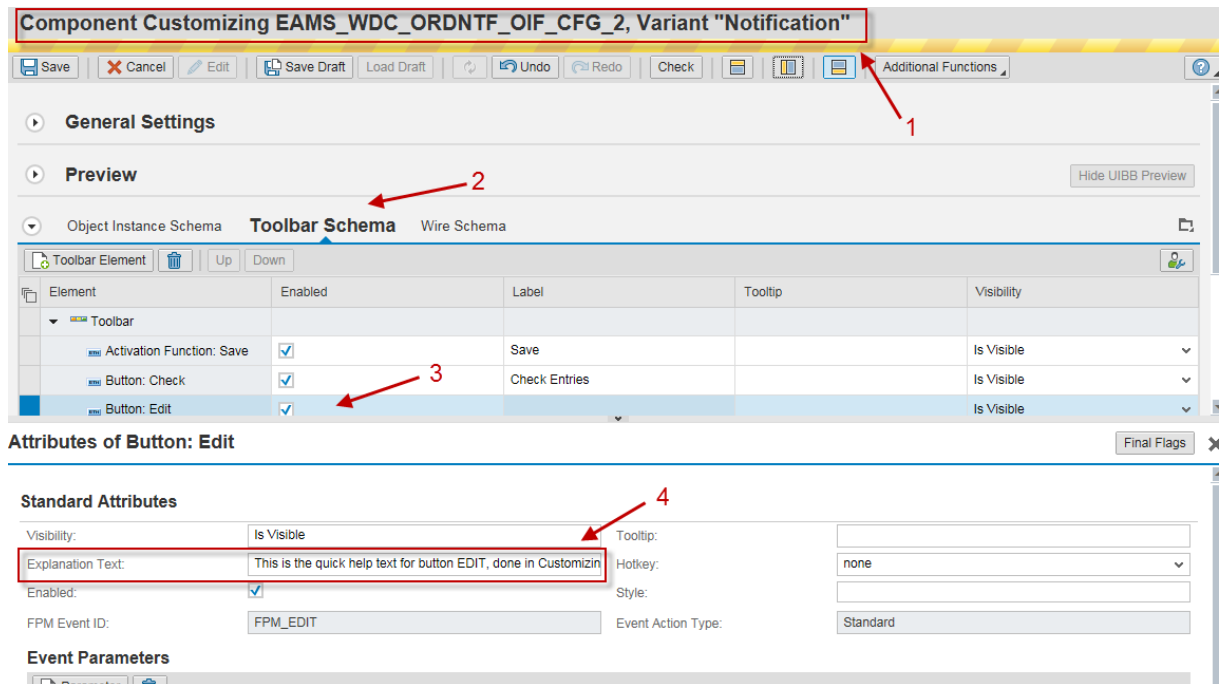
When you now open a notification, the Quick Help appears above the *Organizational Data* tab.

The screenshot shows the SAP notification screen for 'Notification %00000000001'. The notification type is 'M1, Maintenance Request' and the system status is 'OSNO'. The 'Organizational Data' tab is active, displaying a Quick Help text box that reads: 'This text is created as Quick Help text in Customizing, which shows up in Notification Organizational Data.' Below this, the 'Account Assignment' section shows fields for 'Company Code', 'Business Area' (0001, Central Finance US), and 'Cost Center'. The 'Partners' section is also visible, showing a table with columns for 'Partner Function', 'Partner', 'Name', and 'Address'.

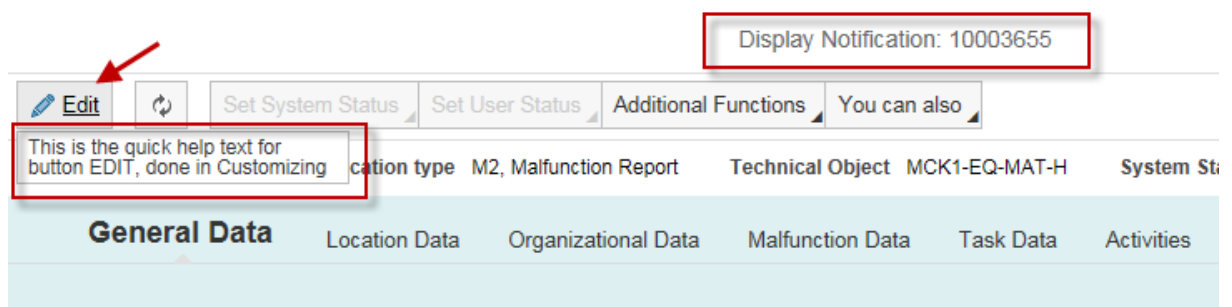
For more information on this type of quick help, see [Explanation UI Element](#).

### 3.11.2 Adding Quick Help for a Menu Button

In this example, you want to provide an explanation text for the *Edit* pushbutton in the toolbar above the application. To provide quick help texts for individual pushbuttons, you have to change the component customizing. Since you want to create quick help for a pushbutton in the toolbar of the notification, you access the *Notification* customizing in change mode (1) and choose the *Toolbar Schema* (2). Then you select the table row *Button: Edit* (3) and by doing so, you open the attributes of this button. In the attribute *Explanation Text* you can enter a text containing up to 255 characters directly in the input field (4). Save the customizing.



When you display a notification in the customized client, you see the underlined *Edit* button text, indicating that quick help for this pushbutton exists. If you hover over the button, your individual quick help text is displayed.



For more information about this type of quick help, see [Explanation Property](#).

For more information about help texts in general, see [Help Texts for Web Dynpro Applications](#).

For more information about how to create Quick Help texts, see [Quick Help](#).

For explanations about translating texts in Web Dynpro applications, see blog [\\*\\* TEAM FPM \\*\\* - All about Translation and Texts of FPM applications](#) in SCN.



## 4 Personalization on User Level

On the SAP Web UI for Plant Maintenance you can personalize the applications you are working with according to your needs. Your personalized settings are only valid for the respective user in the current system and therefore are not transported to other systems.

In this example you want to personalize the notification screen. You do not want the screen areas *Long Text* and *Responsibilities* to be displayed and you also want to hide the two *Coding* fields:

**Display Notification: 10004213**

Display Notification: 10004213

Notification 10004213 Notification type M1, Maintenance Request Technical Object SB System Status OSNO

**General Data** Organizational Data Malfunction Data Task Data Activities Documents

Long Text:

**General Data**

Coding: [ ]

Description: [ ]

Priority: [ ]

Required Start Date/Time: 01.07.2014 14:13:36

Required End Date/Time: [ ] 00:00:00

Technical Object: SB Clarification plant

Technical Object Type: Functional Location

Material: [ ]

Serial Number: [ ]

Assembly: [ ]

Task List:

Assigned Order:

**Responsibilities**

Work Center: STB-M Mechanical

Work Center Plant: 0001 Budapest

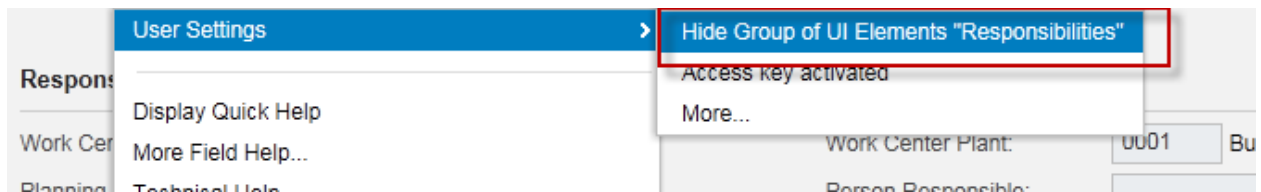
Planning Plant: 0001 Budapest

Person Responsible: [ ]

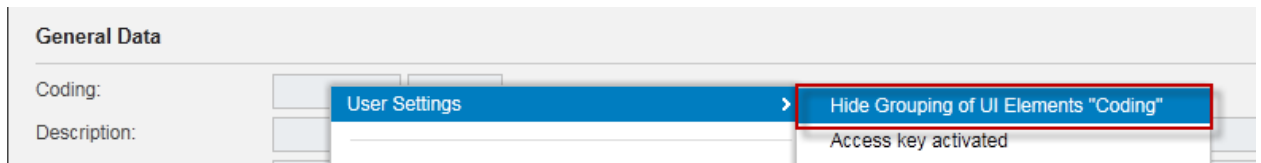
Planner Group: STB IH-Planner 010

Reported by: SAXM Kleber, Melanie

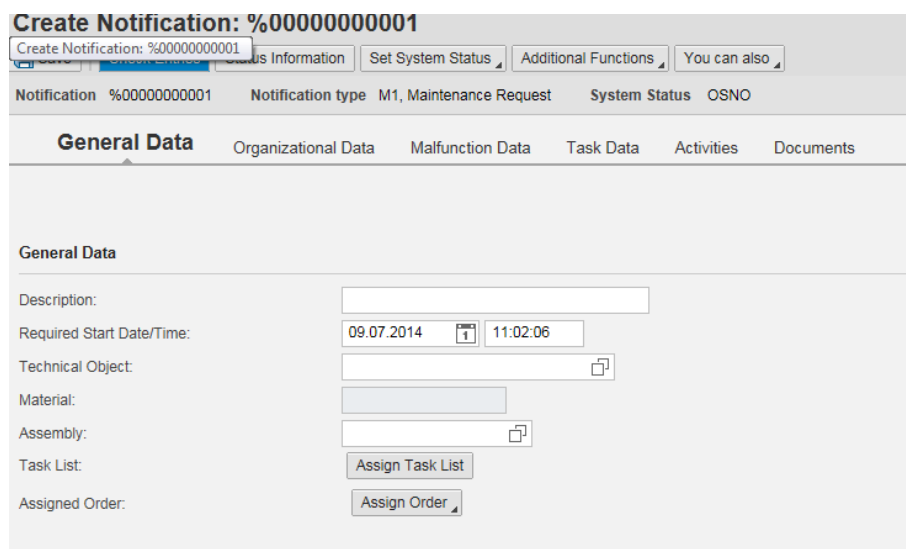
To hide screen areas or specific fields, you open the respective application in any mode (*Create / Change / Display*). In this example you access the notification and open the context menu of the *Responsibilities* screen area by positioning the cursor in this screen area and clicking the right mouse button. Now you choose *Hide Group of UI Elements "Responsibilities"* in the *User Settings* menu.



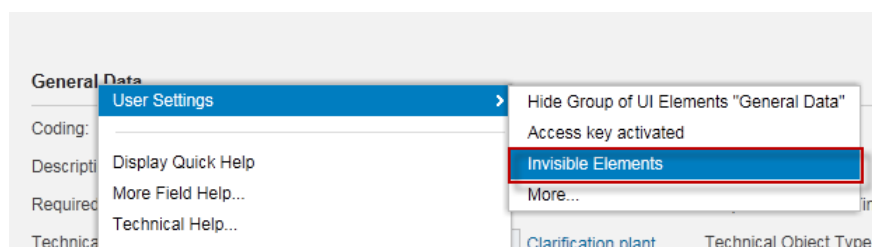
To hide the *Coding* fields, you open the context menu of this specific field group and choose the respective entry in the *User Settings* menu:



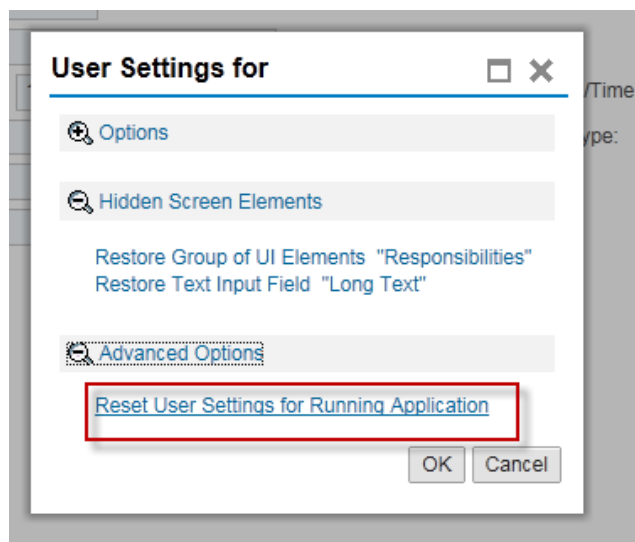
After having personalized the *General Data* tab as described above, the system only shows the screen areas and fields you want to work with:



If you want to revoke your personalized settings, open the context menu again and choose *User Settings* → *Invisible Elements*.



On the popup you can either select a single hidden screen element or reset your personalized user settings for the whole application in *Advanced Options*.



For more information on personalization, see [Personalizing Web Dynpro Applications](#) in the SAP Library for Netweaver 7.4.

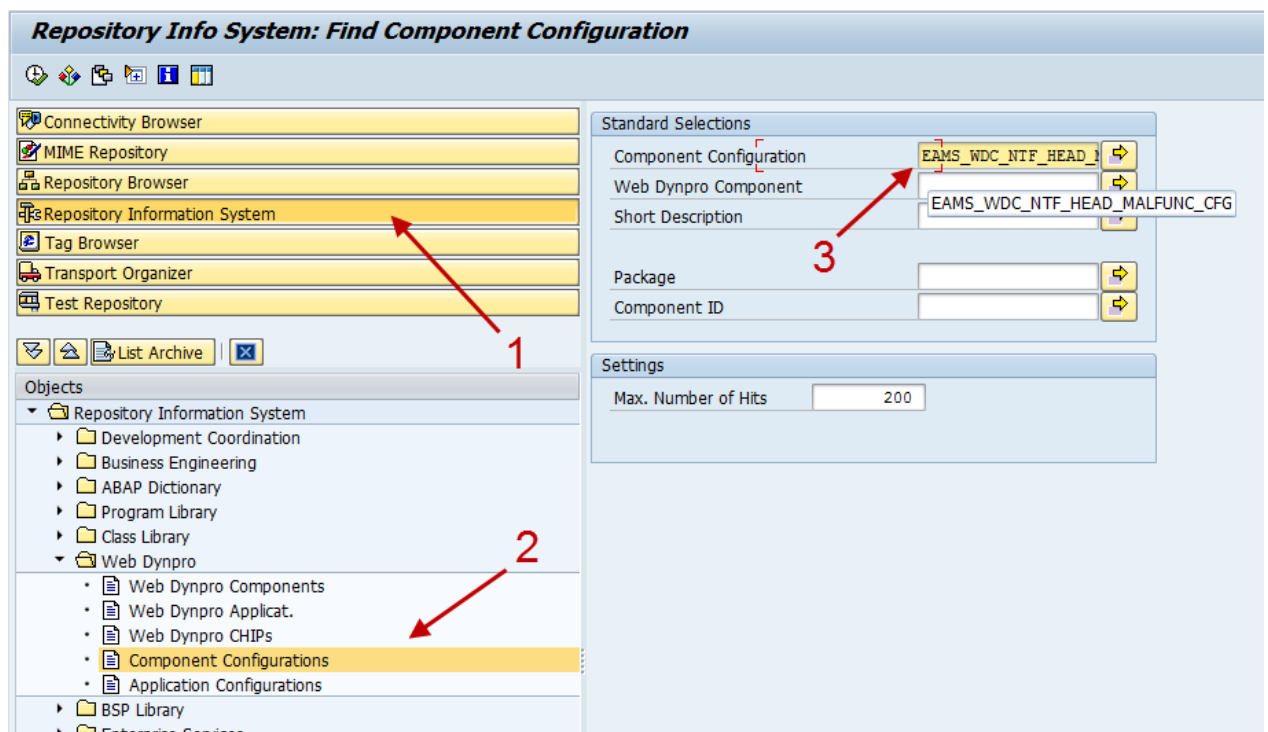
## 5 Adapting Applications in Expert Mode

Working in expert mode allows you to make changes to an application on development or configuration level. These changes are modifications if the corresponding configuration has been delivered by SAP. Changes to the configurations that are made in expert mode are stored directly in the Web Dynpro ABAP development layer and are therefore overwritten when a new release or enhancement package is imported.

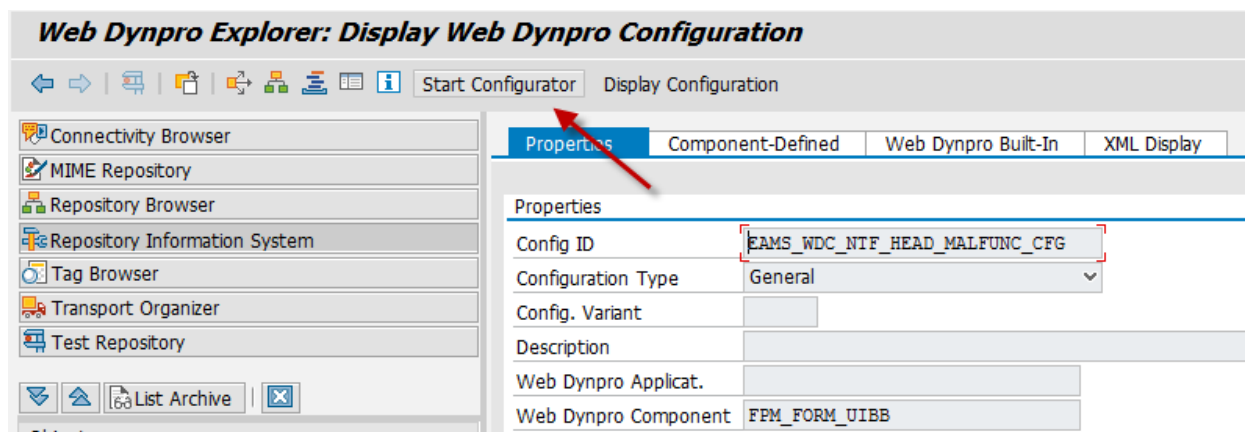
In expert mode you can create several 'versions' of the same application. Different user groups or countries can work with different versions of an application. This enables you to model a very simple version of the notification for a specific user group, while a different user group works with a more complex version.

### 5.1 Copying a UIBB

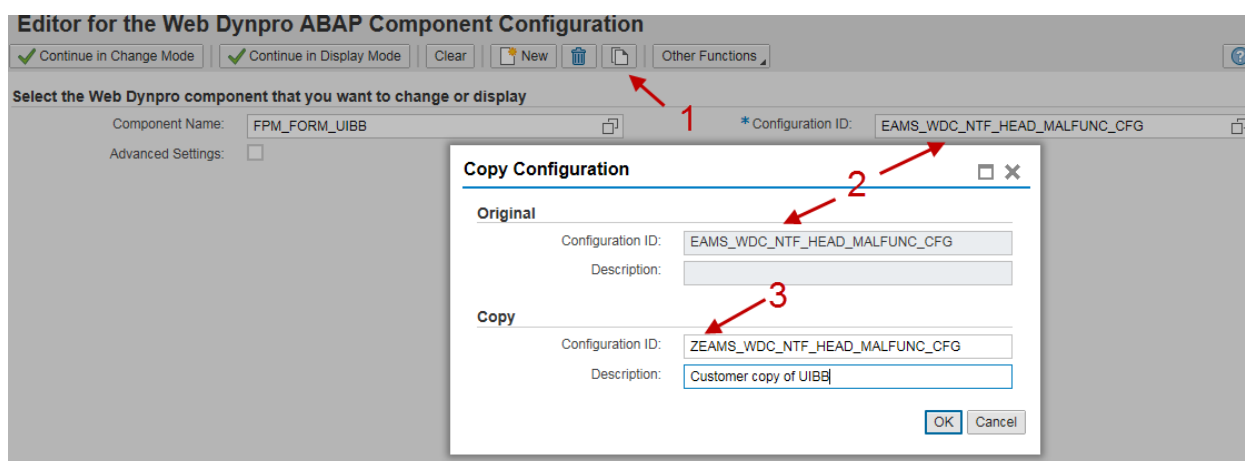
In expert mode you can copy a UIBB and thus create several 'versions' of that specific UIBB. You start the UIBB configuration by calling the transaction `SE80` (*Object Navigator*). Here select *Repository Information System* (1), then select *Component Configurations* in folder *Web Dynpro* (2) and enter the configuration name you want to copy (3), e.g. `EAMS_WDC_NTF_HEAD_MALFUNC_CFG`. Execute the search with F8 or button *Execute*.



To display or change the configuration, double-click on the result and press the button *Start Configurator*.

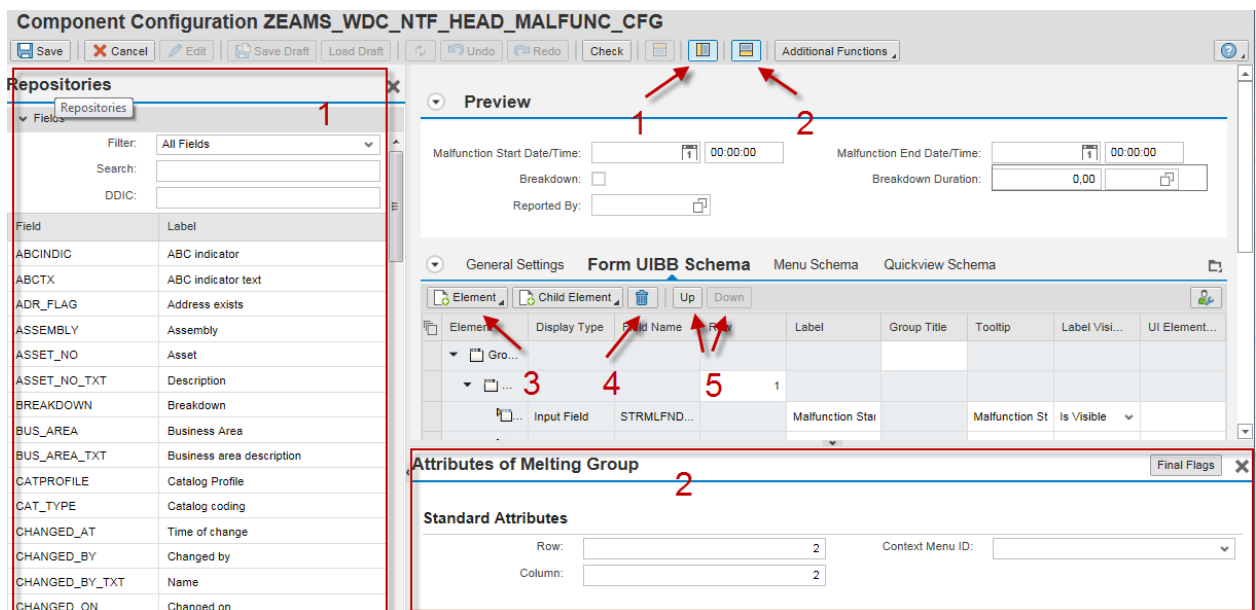


To create your own configuration, copy the existing configuration in the customer namespace. The fields *Component Name* and *Configuration ID* are filled automatically. When you press the copy button (1) a popup opens and asks for the name and description for the new configuration in the customer namespace (3).



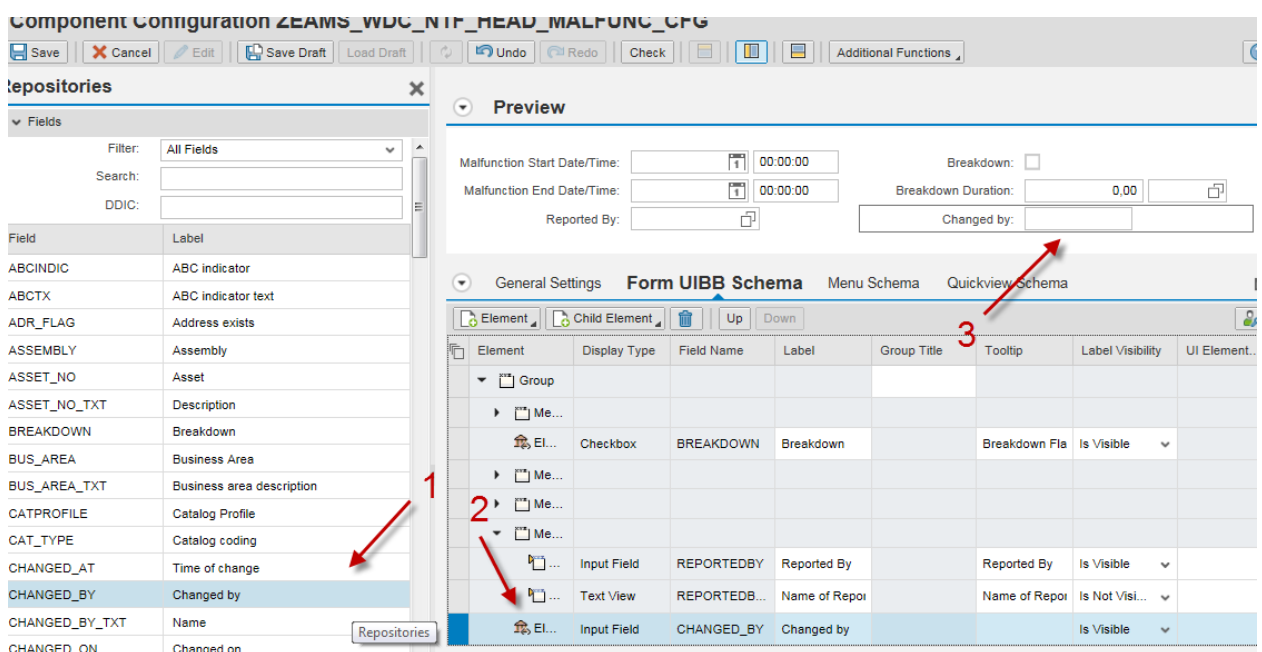
When you confirm the new configuration in the popup by choosing *OK*, you start the component configuration of the copied UIBB. The component configuration tool works similarly to the component customizing tool as described in chapter 3.1

In the configurator you can open a repository screen area on the left-hand side (1), open the corresponding *Attributes* screen area, add (3) and delete (4) individual screen elements, as well as change the position of screen elements by using the *Up* and *Down* buttons (5).



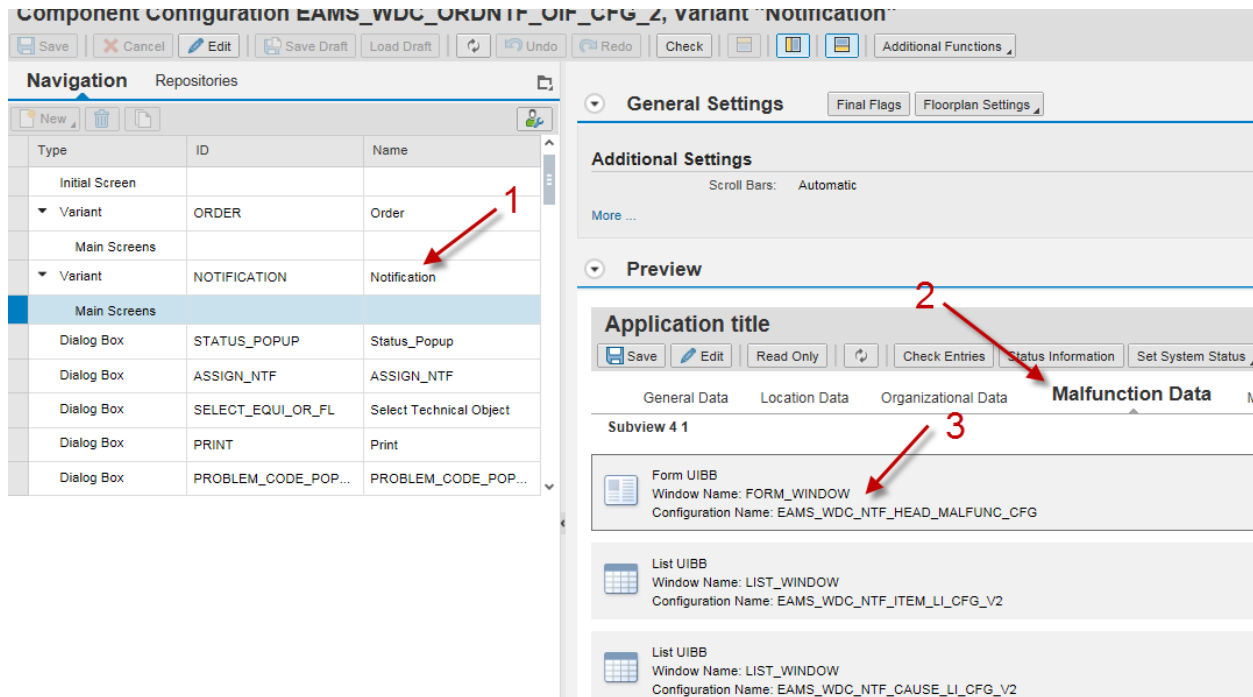
In the **Preview** you see how the fields are displayed on the Web UI screen. When you click on a field, the corresponding line in the **Form UIBB Schema** is marked.

If you want to add a field to the screen, choose the respective element in the repository (1) and copy it directly to the **Preview** or to the element list in the **Form UIBB Schema** (2). The new screen element is displayed in the **Preview** and the element list while the position of the element still can be adjusted (3). In this example the field **CHANGED\_BY** is added to the **Malfunction Data** tab in the notification and the users now see who last changed the data.



You can now decide in which application you want to replace the existing UIBB with your new version. To find out where this UIBB is used, display the UIBB in transaction **SE80** and choose **Utilities** → **Where-Used List**.

Select one configuration and open it in the Component Configurator and replace the configuration. In this example, open the Component Configurator for EAMS\_WDC\_ORDNTF\_OIF\_CFG\_2. In the *Navigation* screen area select the screens of the Notification (1). Then select the *Malfunction Data* tab in the *Preview* (2). Now you see the configuration that you want to replace with your own configuration (3).



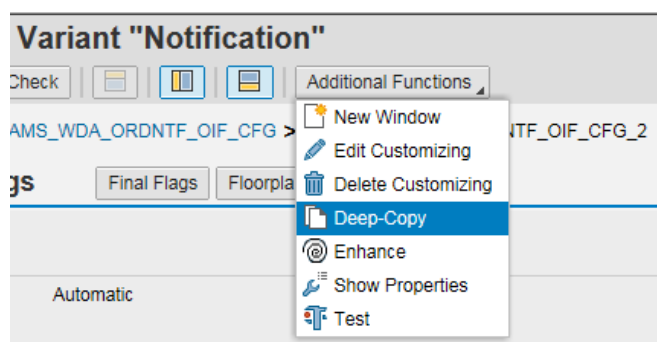
## 5.2 Copying and Simplifying an Application (Notification)

It is also possible to copy an entire application (such as for notifications) in the customer namespace.

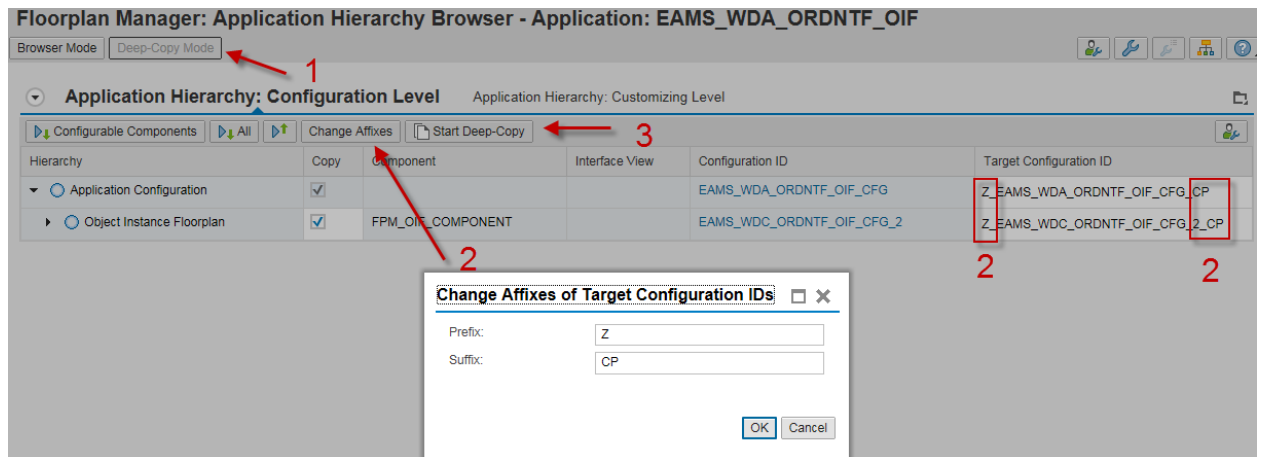
For more information about the Deep-Copy mode, see [Application Hierarchy Browser for Floorplan Manager](#).

In this example you want to copy the notification application in EAM Web UI into the customer namespace to create a more simplified version. You then want to make this simplified version available in the context-menu of the Asset Viewer.

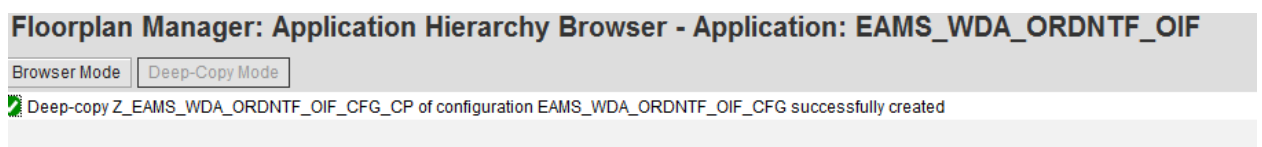
Start the application that you want to copy - in this example *Display Notification* - and choose the pushbutton *Configure Page* on the entry screen. In the Component Configurator choose *Deep-Copy* from the *Additional Functions* dropdown menu.



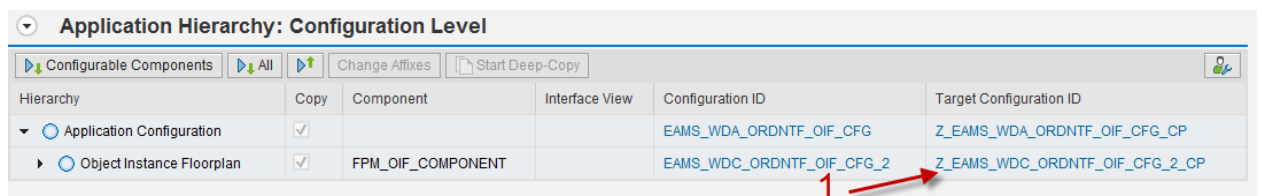
The application opens in deep-copy mode (1). After you have selected a prefix and suffix (2) for the target configuration ID and have entered a package assignment, you can start copying (3).



Once the application has been copied successfully, the system issues a confirmation message.

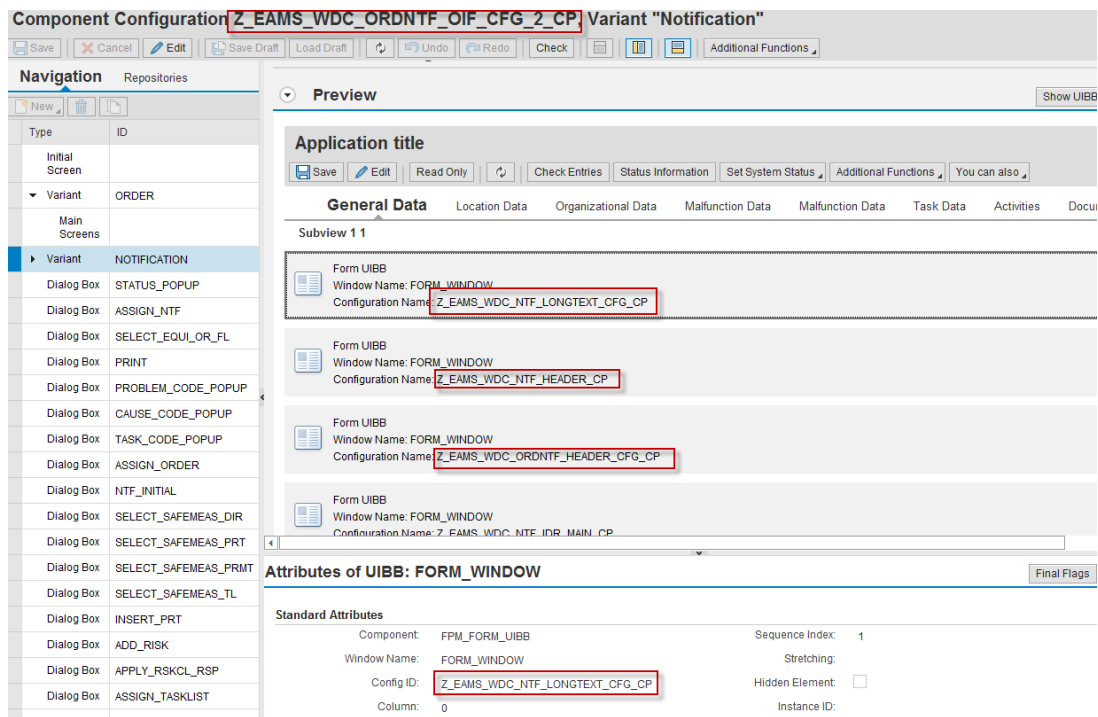


For adapting the copied application to your needs, enter the component configuration (1). It is also possible to select the component configuration in transaction SE80 as shown in 5.1.

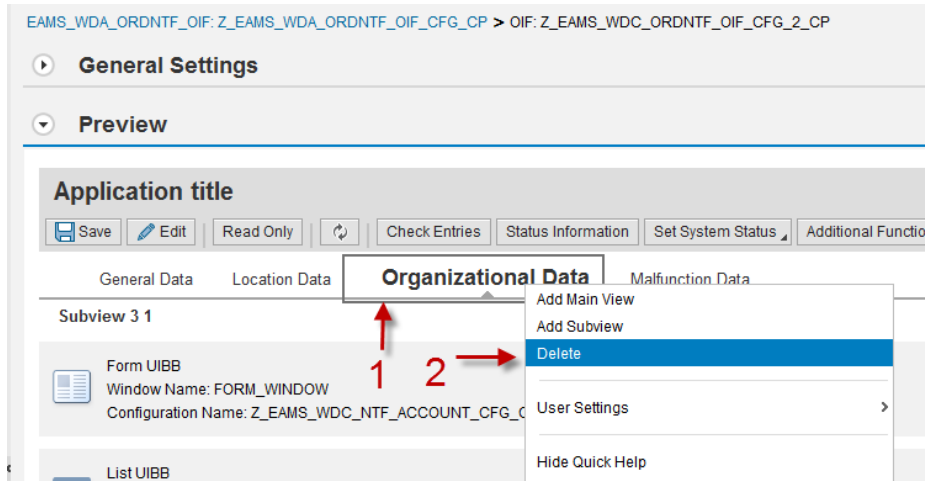


Now all UIBB configurations of that specific application have been copied to the Z-namespace and you can adapt each UIBB individually. In this example we want to configure a very simplified notification variant, so we delete or hide all UIBBs that the user should not be able to work with. Our simplified notification will only contain the main tab *General Data* with the long text and the *General Data* UIBB.

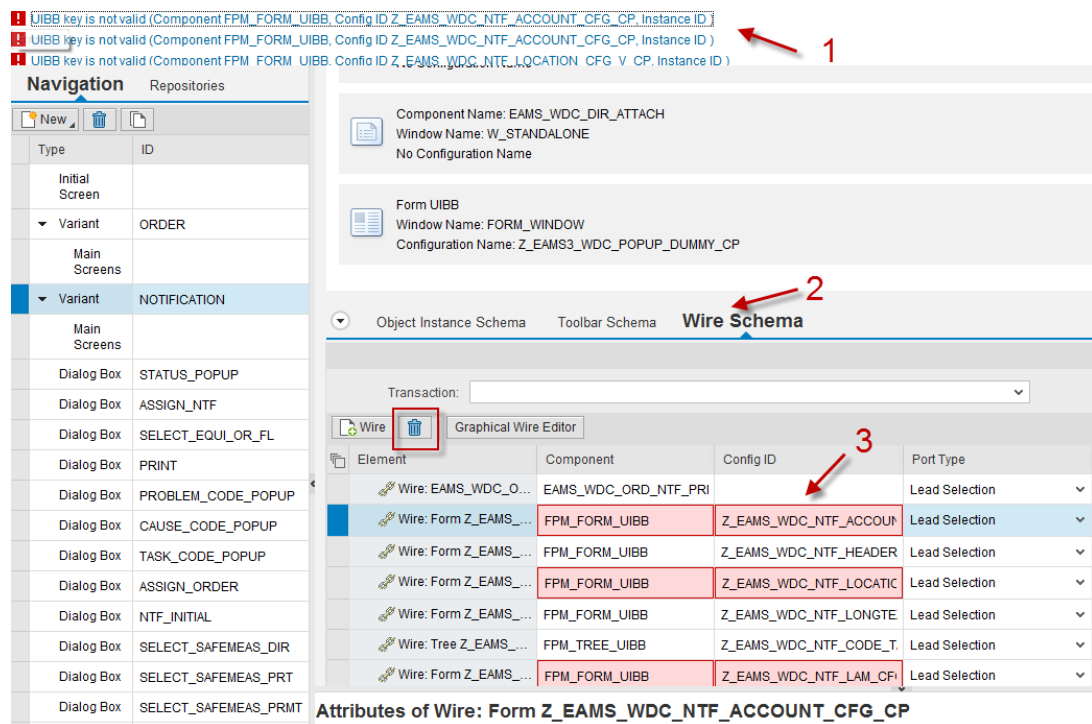




By choosing *Delete* in the context menu (2) of the tab titles (1), all tabs except for the *General Data* tab are deleted in the *Preview*.



If you get error messages concerning deleted UIBBs (1), go to the *Wire Schema* (2) and delete the superfluous wiring (3).



**Hint:** For this configuration, the configuration ID of side panel /BCV/SIDEPANEL in *General Settings* (see chapter 15.7) was removed.

For information about enhancing the wiring of an application, refer to chapter 3.4.

For more information about wiring in general, see [Wiring - Transferring Information between UIBBs](#).

## 5.2.1 Side Panel Tags in Copied Applications

Side panel tags are created for the Web UI applications delivered by SAP in BAdI /PLMU/EX\_FRW\_SIDEPANEL in enhancement spot /PLMU/ES\_FRW\_SIDEPANEL. Implementations of this BAdI react on filter values for the combination of Web Dynpro application name (WD\_APPLICATION\_NAME) and component configuration name (WDAPPLICATIONCONFIGURATIONID), as long as SAP Note 2099004 has not yet been implemented. After applying this note, only the Web Dynpro application name is relevant for calling the BAdI implementation. The filter parameter value for the notification is, for example, EAMS\_WDA\_NTF\_OIF, and the side panel tags are created for all component configurations of the notification. If you have created your own Web Dynpro application, add the application name to the filter values to avoid dumps.

For more information on side panel integration in SPI Framework, see chapter [Side-Panel Integration](#).

## 5.2.2 Adding the Simplified Notification to the PFCG Role

After having copied an application, you have to add the new application to the PFCG role. In this example we want to add the simplified notification that was configured in chapter 5.2 to the PFCG role Z\_NOTIFICATION (from chapter 10.1.1). Open this role in change mode (1), mark the correct folder in the *Role Menu* and then choose the

pushbutton *Web Dynpro Application* on the *Menu* tab (3). On the popup enter the Web Dynpro application name (4) and the Z-configuration name in the field *Application Config.* (5). Then maintain the necessary parameters for creating a notification (6).

Role	
Role	Z_NOTIFICATION
Description	Role for notification Web Dynpro and SAPGUI
Target System	No destination

Web Dynpro Application	
Application Type:	Standard
Web Dynpro Applicat.:	EAMS_WDA_ORDNTF_OIF
Description	Create simplified Z-Notification
Application Config.:	Z_EAMS_WDA_ORDNTF_OIF_CFG_CP
Protocol	<input type="checkbox"/> HTTPS
Parameter	
Name	Value
FRW_MODE	
EAMS_ROLE	EAMS_ROLE_GF
FRW_OTYPE	EAMS_NTF

Now start NWBC with role `Z_NOTIFICATION`, to see how it looks:

**SAPGUI Notification**

**Web Dynpro Notification**

**Overview**

- Create simplified Z-Notification
- Maintenance Order/Notification

When you now choose this menu entry, the first screen appears for specifying the notification type.

## 5.2.3 Creating a Simplified Notification from the Context Menu

You can also add your modified application versions to the context menu of technical objects in the Asset Viewer. In this example you want to add an entry to the context menu so that the user can create a notification of type *M1*

using the simplified version for creating notifications. The steps are similar to the launchpad customizing described in chapter 6.2.3. To do this, add a new application with the following parameters, in instance/role EAMS/CM\_EQUI:

**Change Launchpad - Role: EAMS Instance: CM\_EQUI (EN)**

Link Text: Create simplified Z-Notification

Description:

Application Type: Object Based Navigation

Business Object: eam\_notification

Operation: create

System Alias: SAP\_ERP\_Manufacturing

Show Advanced (Optional) Parameters

In the application-related parameters some additional settings are required for the notification type and the Z-configuration.

**Change Launchpad - Role: EAMS Instance: CM\_EQUI (EN)**

Application - Deactivation by User: ☐

Application Alias: EAMS\_ROLE=EAMS\_ROLE\_GF&FRW\_MO...

Target App. Parameters: EAMS\_ROLE=EAMS\_ROLE\_GF&FRW\_MODE=I&FRW\_OTYPE=EAMS\_NTF&QMART=M1&WDconfigurationID=Z\_EAMS\_WDA\_ORDNTF\_OIF\_CFG\_CP

OBN Type: Object-Based Navigation

Proxy Class:

Additional Information:

EDM Event ID:

When you call the technical object of a notification in the Asset Viewer and open the context menu, the system shows the new launchpad entry. A notification then opens in creation mode with type **M1** and the simplified configuration you have created.

**Asset Viewer : Technical Object STB-1000-DF01**

Technical Object Options Refresh Synchronize Navigator Settings Additional Functions

Technical Object STB-1000-DF01

Equipment STB-1000-DF01 Object Description Electric pump 001

**Structure** **General Data** Orders/Not

Object	Object ID	Description
STB-1000-DF01	Electric pump 001	

Basic Data

Display Technical Object

Display Technical Object (IE03)

Display Technical Object in Asset Viewer

Create Notification w. type M1

Create simplified Z-Notification

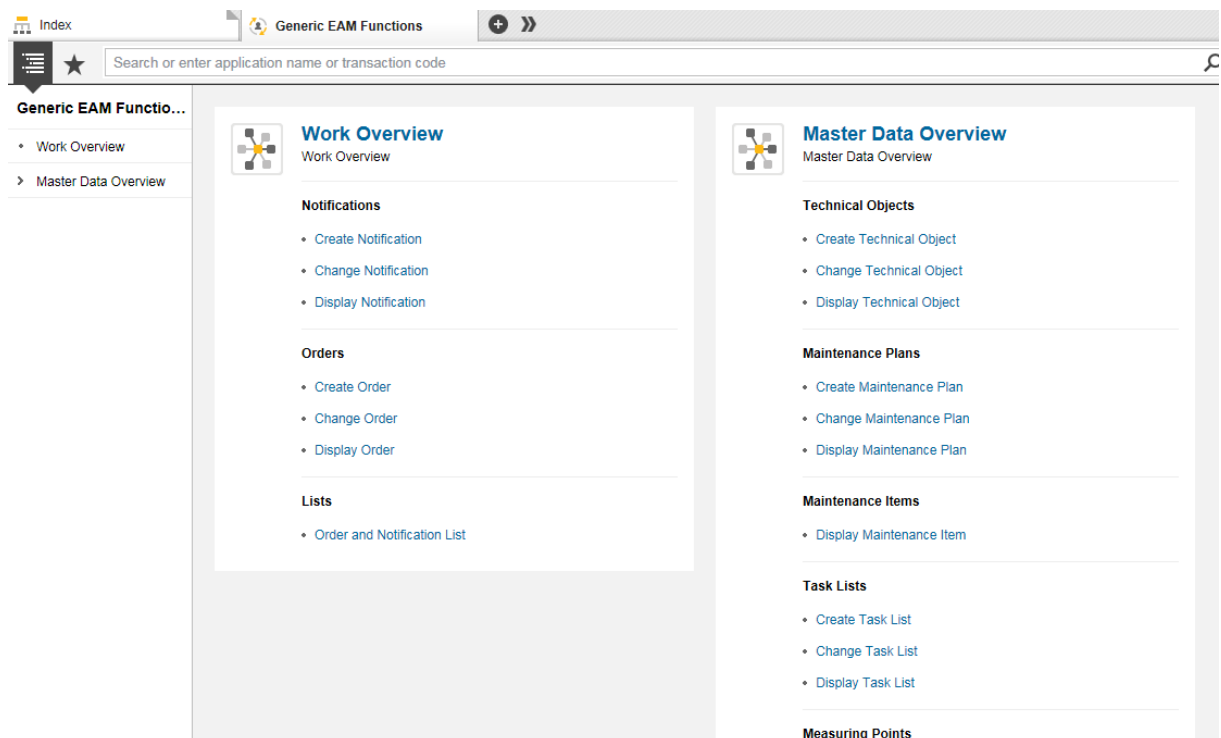
## 6 Object-Based Navigation and Launchpads

### 6.1 Object-Based Navigation (OBN) in EAM Web UI

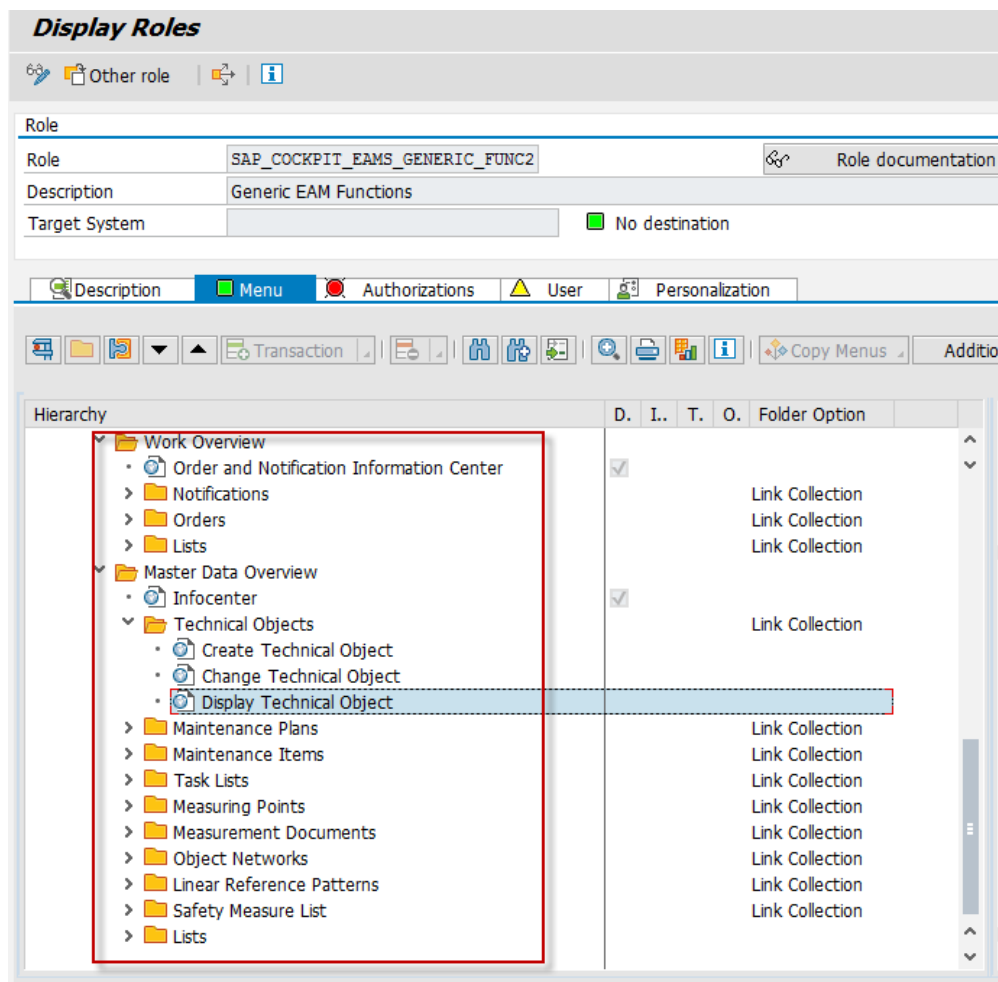
Object-based navigation (OBN) offers Portal and SAP NetWeaver Business Client (NWBC) users an additional method of navigation, which is role-dependent and based on business objects from productive back-end systems.

Object-based navigation is based on business object IDs concatenated with operations or methods to guarantee stable navigation. To ensure correct navigation in the two SAP standard EAM roles for the maintenance planner (SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2) and the maintenance worker (SAP\_COCKPIT\_EAMS\_MAINT\_WORKER2), all EAM applications are listed in the respective role menu twice: Once for accessing the application directly from the role's Launchpad and one for accessing the application by choosing a link or a menu entry in another application.

After launching the NWBC with role SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2, the applications you see on the entry screen are grouped under [Work Overview](#) and [Master Data Overview](#).

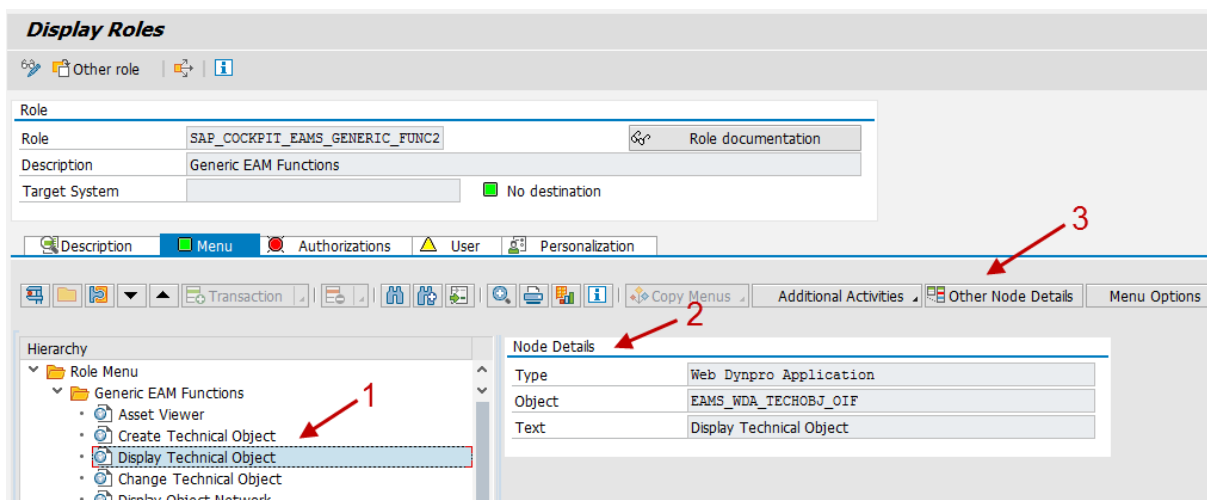


Open the respective role (SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2) in transaction PFCG and select the [Menu](#) tab page. You can see these two folders comprising the corresponding applications that can be found on the launchpad.

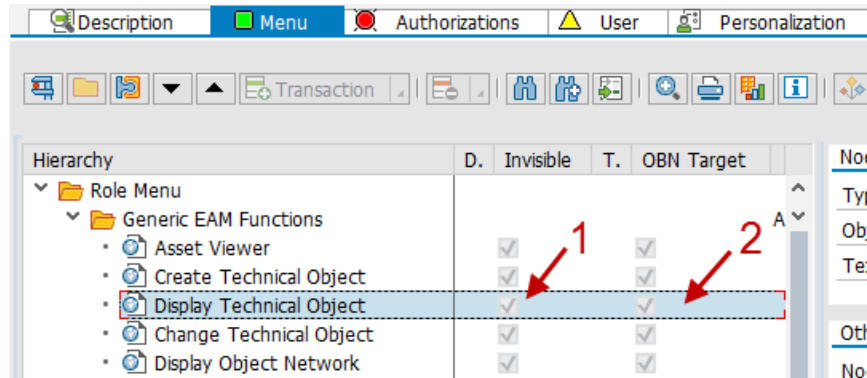


If you scroll up to the top of the hierarchy, you will find in folder *Generic EAM Functions* all applications a second time with different attributes.

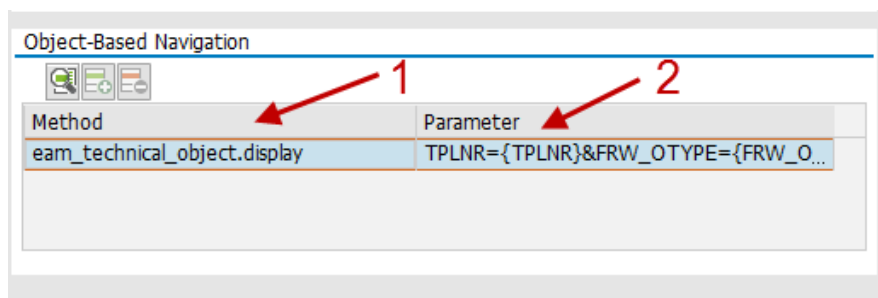
To be able to see the additional attributes, double-click on the respective application (for example *Display Technical Object* (1)) to display the *Node Details* (2) and then choose *Other Node Details* (3).



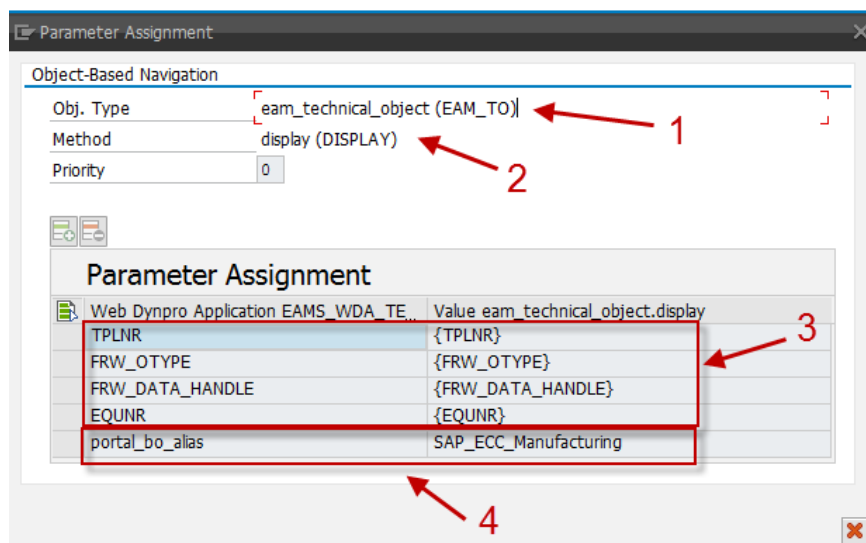
The role entry *Display Technical Object* has the attributes *Invisible* (1) and *OBN Target* (2). This means that although this text cannot be seen within the respective links in other applications, this is the name of the target application to which the links lead.



Additionally the system displays two more group boxes: *Other Node Details* and *Object-Based Navigation*. In the *Method* table column (1) of the *Object-Based Navigation* group-box the system displays a combination of the business object ID (eam\_technical\_object) and the method (display), separated by a dot. In the table column *Parameter* (2) you can find all the parameters necessary for calling the navigation target.



To display further details of the parameter assignment, select the button with the magnifying glass. All the parameters that have to be filled with values when the navigation target is called are displayed on the popup.





The following paragraph describes how to find the parameters in the system. Since the parameter assignment is made for a combination of object type and method, you first need to find out the technical name of object type and method, for example, if you want to create new navigation targets.

### Object Type and Method (1 + 2)

You find the EAM objects with the corresponding methods in the *Business Object Builder* (transaction SWO1). All EAM object types start with EAM\*, so you can use the input help to find out the name of the relevant object type and display it. Expand the hierarchy node *Methods* to display all methods belonging to the respective object type (in this example, the method `eam_technical_object.display`).

### Parameters and their assignment (3)

To find out which parameters are needed for the object based navigation entry in the PFCG-role, select the respective method and choose the *Parameters* button in the toolbar. In the parameter overview for method *Display* you can find the four import parameters that were also displayed in the *Parameter Assignment* popup (3) of transaction PFCG.

**Object Type EAM\_TO: Display Parameters for Method DISPLAY**

Other View Program Exceptions

Overview					
Parameter	Obj. Type	First Release	Imp.	Man.	Exp.
EQUNR	EAM_TO	702	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TPLNR	EAM_TO	702	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRW_OTYPE	EAM_TO	702	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRW_DATA_HANDLE	EAM_TO	702	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The technical name of the piece of equipment or of the functional location is copied to the application in the parameters EQUNR or TPLNR. The parameter FRW\_OTYPE indicates whether the application is opened in *Display*

(D), [Change](#) (C) or [Create](#) (I) mode. The parameter `FRW_DATA_HANDLE` indicates whether it is a single or mass transaction.

#### Portal\_bo\_alias (4)

The `Portal_bo_alias` contains an RFC-connection name which points to the local or a remote system. The alias is needed especially for the portal roles (also called PCD-roles).

An essential prerequisite for fully functional object-based navigation is that links to other objects work when they are called from inside a Web UI application. In this example, the OBN entry [Display Technical Object](#) (`eam_technical_object.display`) is used whenever you open a maintenance order and click on the technical object description (1).

**Display Maintenance order: 4010793**

Order: 4010793  
0 Document(s)

Description: EAMT Test Order    Order Type: PM01, Maintenance order    Technical Object: EAMT-EQ-MAINT

**General Data**    Location Data    Organizational Data    Operation Data    Relationships    Ob

Long Text:

**General Data**

Description: EAMT Test Order    Priority:

Required Start: 06.11.2014    Required t

Technical Object: EAMT-EQ-MAINT    [EAM: Test Equipment](#)    Technical

Material:    [Technical Object Description](#)    al Nun

Assembly:    System C

Assigned Notification: 10014981 EAMT Test Order

Task List:

If the respective OBN entry is part of the user's role, the user can click on the link and the WEB UI application for displaying technical objects opens in a new tab of the NWBC.

If you would also like to provide links to non-OBN targets, such as transactions, external URLs, and Web Dynpro applications from other components, you have to copy the following OBN entries from SAP standard roles to the respective roles in your namespace:

<ul style="list-style-type: none"> <li>• <a href="#">APB_LPD_CALL_TRANSACTION</a></li> <li>• <a href="#">APB_LPD_START_URL</a></li> </ul>	<table> <tr> <td>✓</td><td>✓</td></tr> <tr> <td>✓</td><td>✓</td></tr> </table>	✓	✓	✓	✓
✓	✓				
✓	✓				

## 6.2 Launchpad Customizing

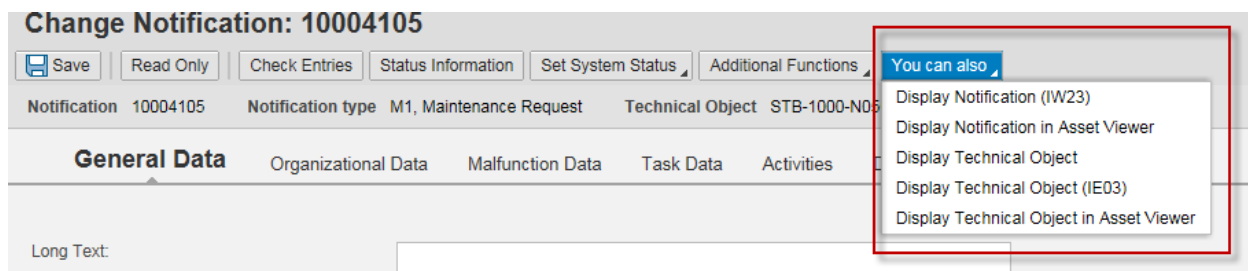
Launchpads are available in each Floor Plan Manager (FPM) application either as *You can also* menu (YCA) maintained in the corresponding component configuration or as related links (RL).

You can define appropriate launchpads for each object type (for example for a technical object or a notification) in customizing for *Plant Maintenance and Customer Service under Maintenance Roles → Maintenance Worker → Asset Viewer → Settings for BO Framework and Navigation → Navigation, Parameter Mapping, and Services →*

- Assign the Navigation Target (view / PLMU / FRW\_NAV)  
In this customizing activity you specify navigation targets for generic navigation, such as the left-hand mouse click or buttons.
- Define the Context menu (view / PLMU / FRW\_CTXM)  
In this customizing activity you specify the context menus for each object type.

### 6.2.1 Adjusting the 'You Can Also' Menu (YCA)

On the Web UI the user usually can access the button *You can also* and can choose additional transactions from a dropdown menu. From the notification, for example, the user can navigate to the technical object assigned to the notification or display the notification and technical object in the Asset Viewer.



As an administrator you can specify which additional transactions are available in the dropdown menu of the *You can also* button.

First, you have to find out where these menu entries are defined. To do so, access the component configuration by choosing the pushbutton *Configure Page* on the entry screen of the application. Select the *You can also* button in the navigation and repository screen area and open the *Toolbar Schema*. In the attributes of this toolbar element you find the role name and instance name of the *You can also* button. In this example the role name EAMS and the instance of the *You can also* menu YCA\_NOTIF are displayed.

For more information about creating and changing the customizing of applications, see chapter 3.1.

**Hint:** In general, all launchpad roles in EAM start with EAMS\*. The instances for *You can also* menus begin with YCA\_\* and the context menus begin with CM\_\*.

Object Instance Schema **Toolbar Schema** Wire Schema

Toolbar Element Up Down

Element	Enabled	Label	Tooltip	Visibility
Activation Function: S...	<input checked="" type="checkbox"/>	Save		Is Visible
Button: Check	<input checked="" type="checkbox"/>	Check Entries		Is Visible
Button: Edit	<input checked="" type="checkbox"/>			Is Visible
Button: Status Inform...	<input checked="" type="checkbox"/>	Status Information	Display Status Information	Is Visible
Button-Choice: Additi...	<input checked="" type="checkbox"/>	Additional Functions	Additional Functions	Is Visible
Button-Choice: Set S...	<input checked="" type="checkbox"/>	Set System Status	Set System Status	Is Visible
Button: Read Only	<input checked="" type="checkbox"/>			Is Visible
Button: Refresh	<input checked="" type="checkbox"/>			Is Visible
<b>You can Also: You ca...</b>		You can also		Is Visible

**Attributes of You can Also: You can also** Final Flags X

Standard Attributes

Label:	You can also	Role:	EAMS
Visibility:	Is Visible	Instance:	YCA_NOTIF
Event Action Type:	Standard		

Next you open the transaction [Overview of Launchpads](#) (2) LPD\_CUST (1). In the overview list select the line of the respective *You can also* menu, in our example Role EAMS and Instance YCA\_NOTIF (3). Choose the glasses button to see further details (4).

Launchpad Edit Goto System Help

LPD\_CUST

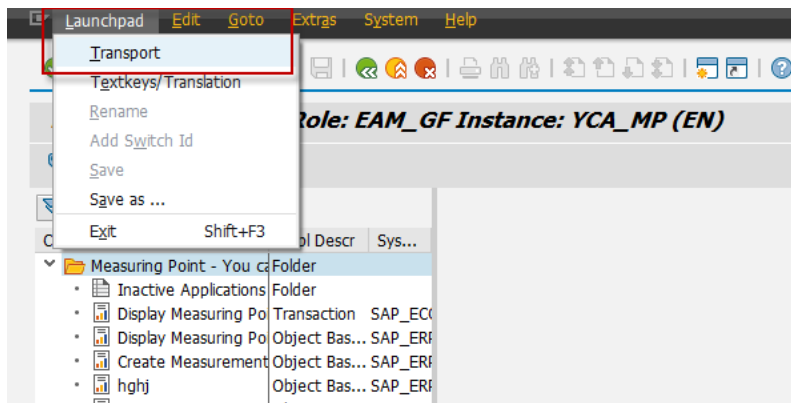
**Overview of Launchpads**

Extended List Show Documentation

Role	Instance	Description	Re...	E...	FP...	Ch...	D...	User Name	Date
EAMS	YCA_MPOS	Maintenance Item - You can also						SAP	26.07.2010
EAMS	YCA_NOTIF	Notification - You can also						SAP	07.02.2011
EAMS	YCA_ORDER	Order - You can also						SAP	07.02.2011
EAMS	YCA_TL	Task List - You can also						SAP	29.06.2010

Depending on the application, the corresponding parameters have to be maintained in the launchpad. If you want to create additional menu entries, you have to create your own customizing version. You can reset this individual customizing version back to the SAP standard version at any time.

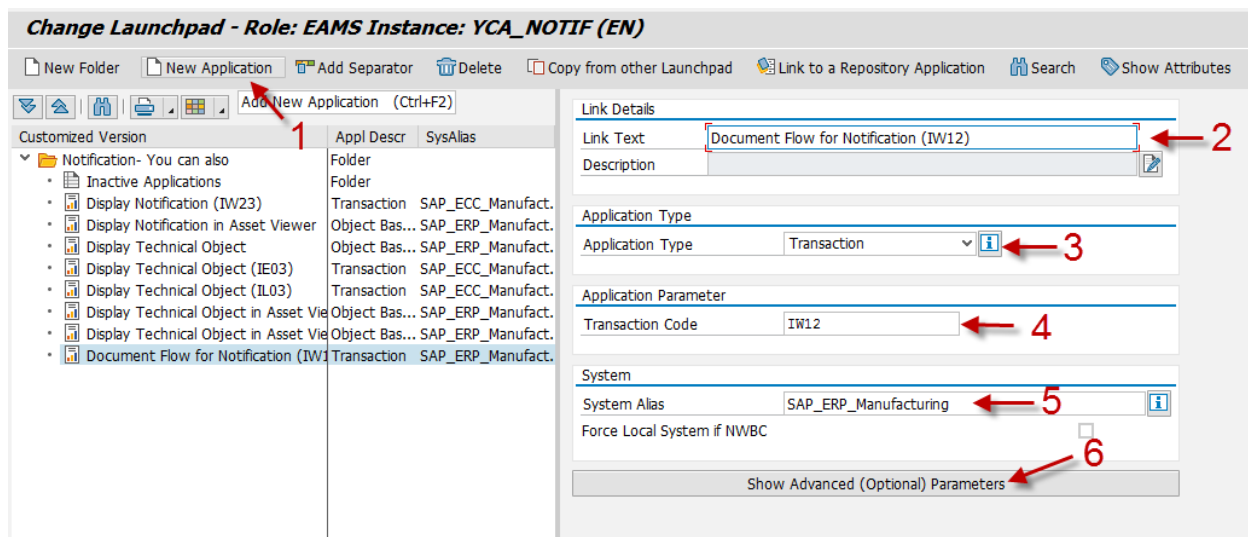
Note that there is not an automatic transport connection for launchpad customizing. The entries have to be copied manually in a transport request by choosing [Launchpad](#) → [Transport](#).



## 6.2.2 Adding a Transaction to the 'You Can Also' Menu (YCA)

For each application you can enhance the dropdown menu of the *You can also* button with additional transactions. In this example the user will be able to navigate to the document flow of the displayed notification when they open the dropdown menu of the *You can also* button. The respective transaction is IW12.

To add this transaction to the *You can also* menu of the notification, call transaction LPD\_CUST in change mode and change the role/instance EAMS YCA\_NOTIF by clicking on the *Change* button. In the left screen area, the system displays all menu entries of the *You can also* menu. Choose *New Application* to add a new menu entry (1) and maintain the menu entry name in the field *Link Text* (2). Choose the application type *Transaction* (3) and enter the transaction code IW12 (4) and the system alias SAP\_ERP\_MANUFACTURING (5). You can maintain further parameters by clicking on the *Show Advanced (Optional) Parameters* pushbutton (6).



In the advanced parameters you map the application data the user is currently working on to selection input parameters in the transaction you want to link to (1). These input parameters allow the system to skip the entry page of the linked transaction so that the user directly navigates to the information they want to access. In this example the user wants to see the document flow of the notification they are currently working on. The notification number therefore must be recognized by the system as an input parameter when the user calls

transaction IW12 from the *You can also* menu. You make these settings in the parameter mapping. In addition, you have to choose *Skip Initial Screen if Possible* from the dropdown menu of the field *Entries Once Started* (2).

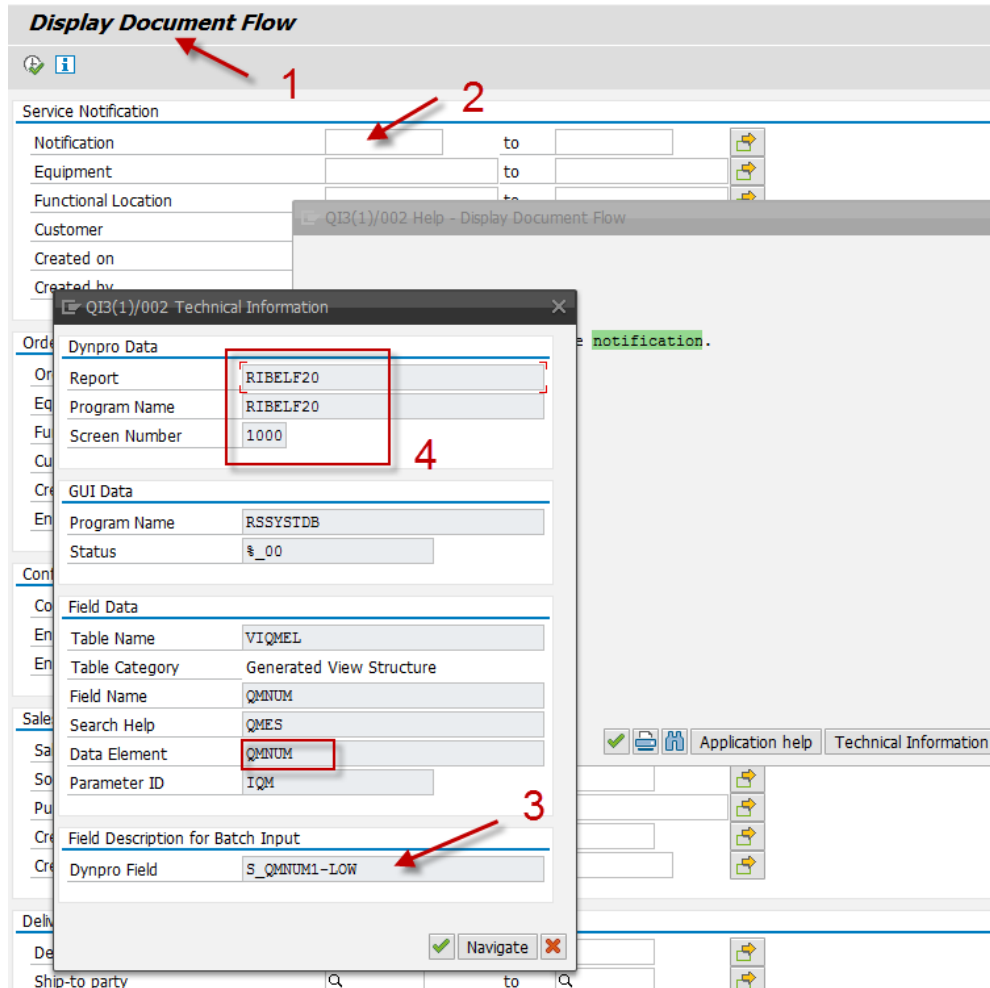
By choosing the button *Parameter Mapping* you access the following entry screen:

In addition to the program and the dynpro number, you must also maintain the source parameter and the target parameter. In our example the notification number is mapped as the input parameter to the *Document Flow* transaction. To find out the names of the parameters, you call transaction IW12 (1) and place the cursor in the field for which the input parameter is to be provided. In this example you place the cursor in the field *Notification* (2). Then you press *Help* (F1) and then F9 to access the technical information of the field:

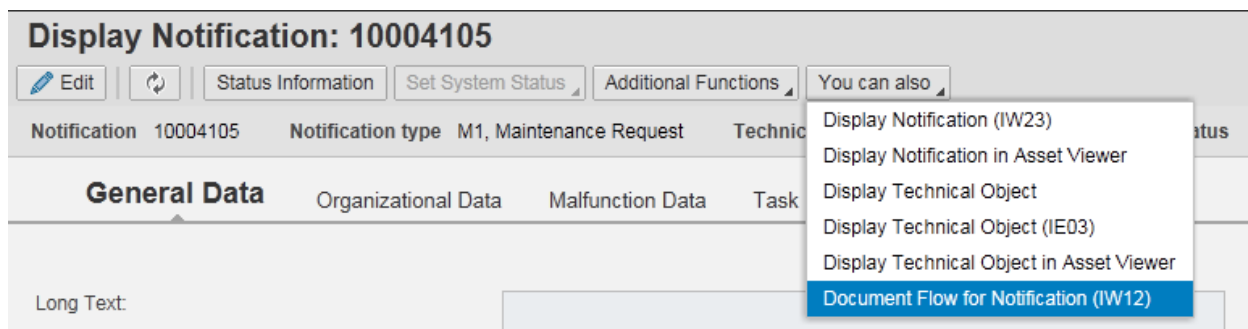
In the group box *Dynpro Data* you find the *Program Name* and the *Screen Number* that you need to maintain the fields *Program* and *Dynpro Number* on the *Parameter Mapping* screen (4).

In the group box *Field Data* you find the technical name of the *Data Element* that you maintain as the *Source Parameter* in the *Parameter Mapping* screen. In our example this data element is QMNUM which as a source parameter provides the system with the current notification number.

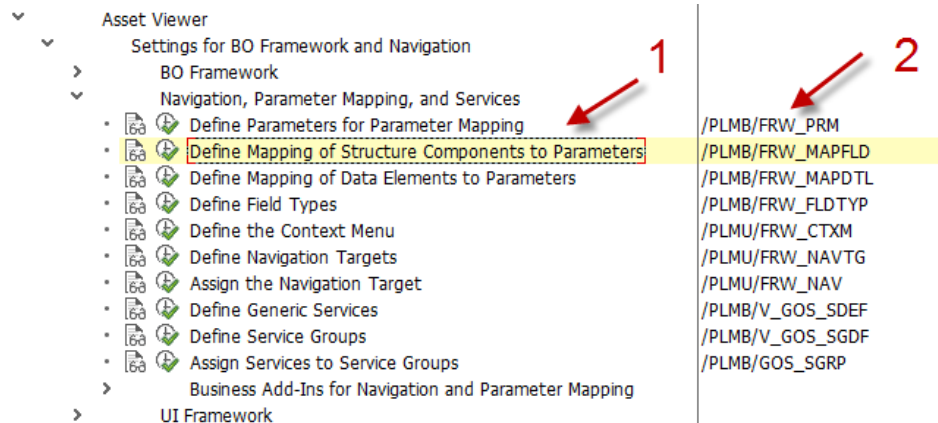
In the group box *Field Description for Batch Input* you find the technical name of the *Dynpro Field* that you maintain as the *Target Parameter* in the *Parameter Mapping* screen (3). In our example this dynpro field is S\_QMNUM-LOW which as a target parameter provides the system with the current notification number.



When you have finished the parameter mapping and saved your new entry, this entry is shown in the dropdown menu of the *You can also* button. By selecting this entry in the notification, the user navigates directly to the document flow of the notification they are currently working on without seeing the entry page of transaction IW12.



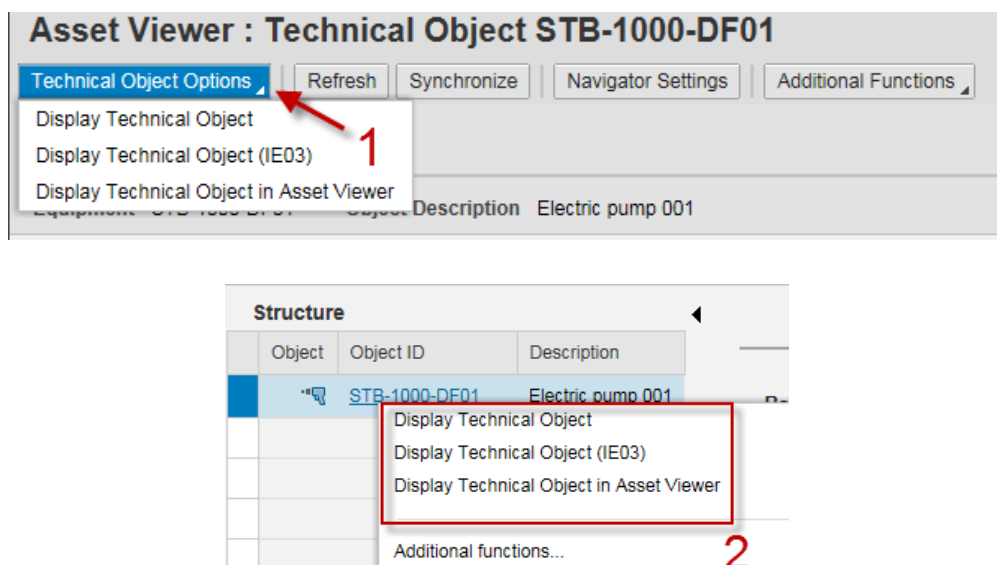
You can find important information about parameters and their mapping in customizing for the *Asset Viewer* under *Settings for BO Framework and Navigation* → *Navigation, Parameter Mapping, and Services*. Here you find the IMG activities (1) and views (2) for creating your own parameter mapping to be used for launchpad navigation.



For detailed information about Navigation, see: <http://wiki.scn.sap.com/wiki/display/SPI/Navigation>.

## 6.2.3 Adding an Entry to the Context Menu in Asset Viewer

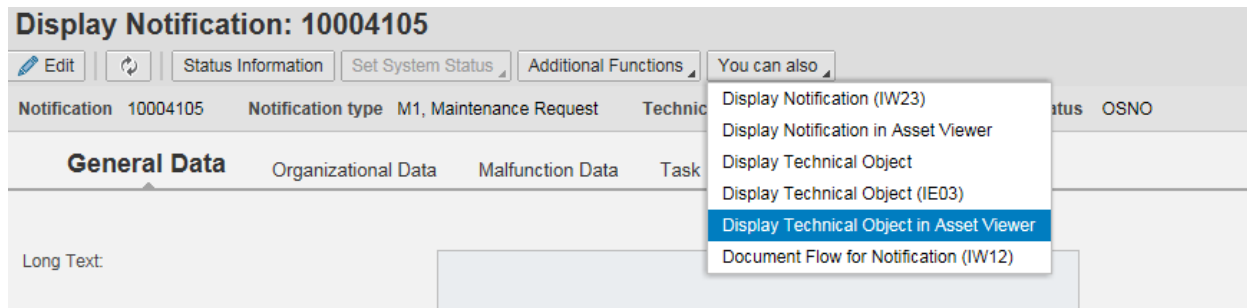
When you display technical objects in the Asset Viewer you can open context menus and access further information, such as the master data of the technical object, by navigating to other transactions or applications. You can open the menu in the header toolbar as a dropdown menu of the *Technical Object Options* button (1) or as a context menu with a right mouse click on the technical object that is displayed in the *Structure* table (2).



For more information, see [Context Menus in the Asset Viewer](#).



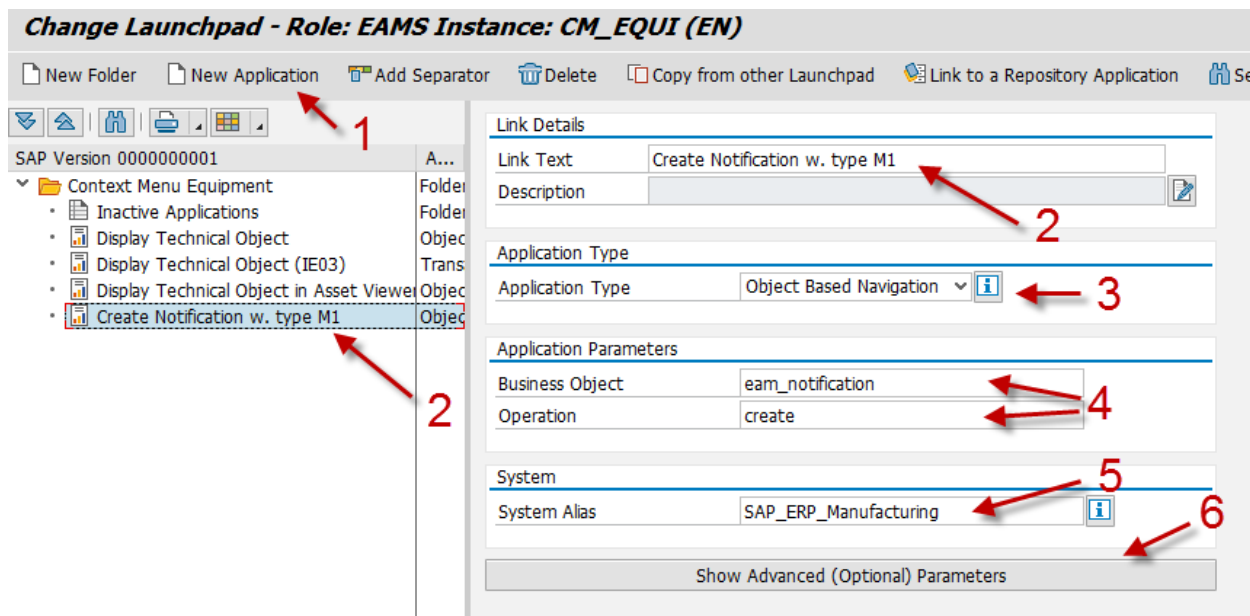
In this example the user will be able to create a notification with type *Maintenance Request* (M1) directly from the context menu for a technical object that is currently displayed in the Asset Viewer. From the notification you can call the affected piece of equipment in the Asset Viewer directly from the *You can also* menu:



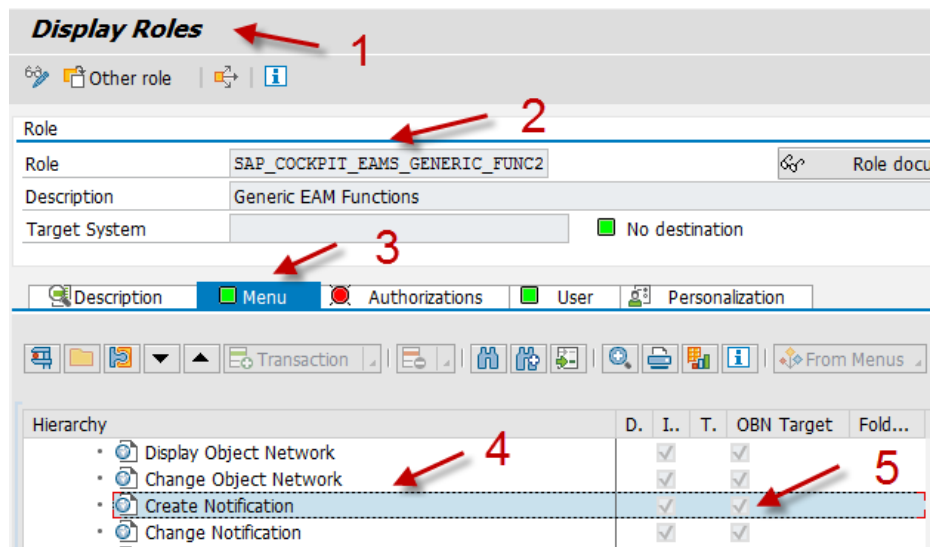
To add new entries to the context menu of a technical object in the Asset viewer, call transaction `LPD_CUST` (*Launchpad Overview*) in change mode and change the role/instance `EAMS/CM_EQUI` by clicking on the *Change* button. In the left screen area the system displays all menu entries of the *Context Menu Equipment*.

**Hint:** The naming convention for roles that you want to connect to a context menu is to use the prefix `CM` (context menu).

Choose *New Application* to add a new menu entry (1) and maintain the menu entry name in the field *Link Text* (2). Choose the application type *Object Based Navigation* (3). To find out the *Application Parameters* (4) and the *System Alias* (5) you have to navigate to transaction `PFCG` for role maintenance, which is described in the next section. Afterwards, you have to maintain further parameters by clicking on the *Show Advanced (Optional) Parameters* pushbutton (6).

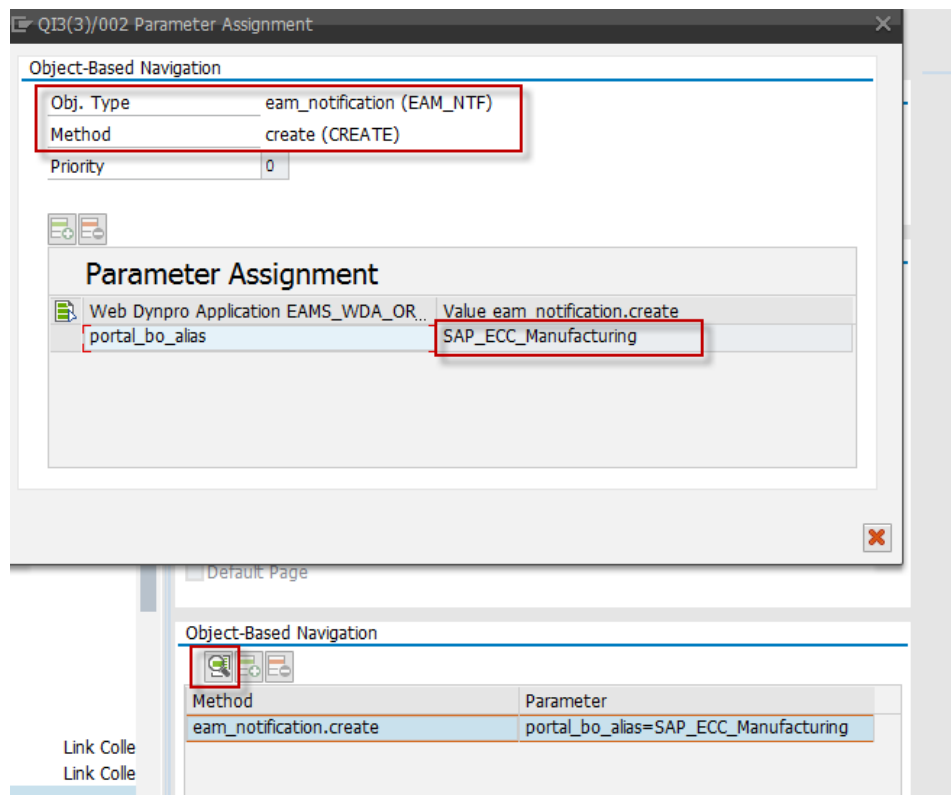


When you call the role `SAP_COCKPIT_EAMS_GENERIC_FUNC2` (2) in transaction `PFCG` (1) you find the application *Create Notification* (4) on the tab *Menu* (3). Choose the *Other Node Details* pushbutton to get further information. Now you see, for example, that the checkbox *OBN Target* is selected for this application (5).



When you choose the button *Select Method* in the group box *Object-Based Navigation*, you find the information about the object type, the method, and the system alias.

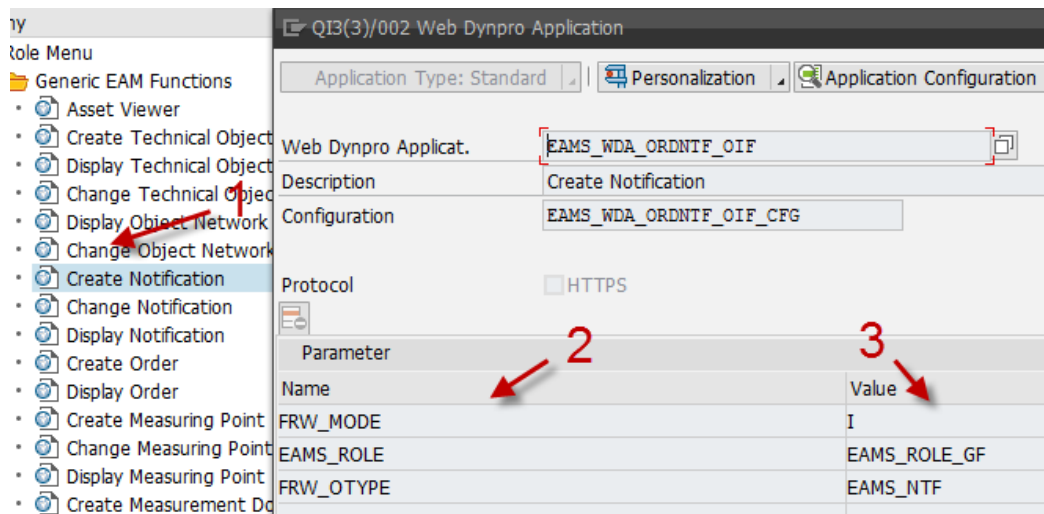
- You find the *Obj. Type* and the *Method* that you need to maintain as the *Business Object* and *Operation* in the *Application Parameters* of the Launchpad Role.
- In the group box *Parameter Assignment* you find the value for the *Web Dynpro Application* that you need to maintain as the *System Alias* in the Launchpad Role.



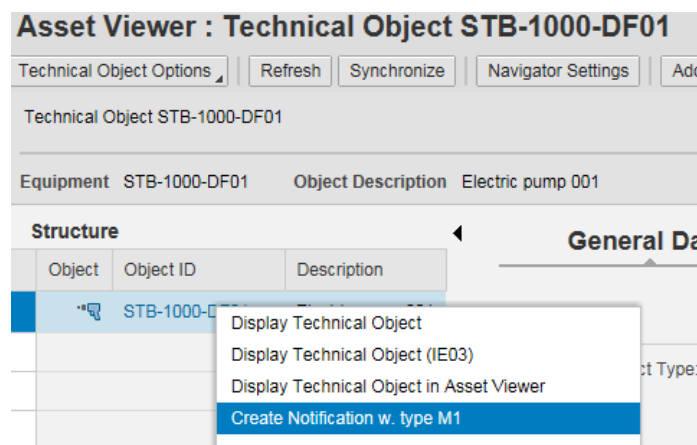
When you have maintained the [Application Parameters](#) and the [System Alias](#) in the launchpad, you have to maintain the advanced parameters by clicking on the [Show Advanced \(Optional\) Parameters](#) pushbutton. You must maintain the [Target App. Parameters](#) (the rest is optional). In addition, you can provide the system with fixed parameter values (1), such as [M1](#) for the notification type (QMART).

The screenshot shows the 'Hide Advanced (Optional) Parameters' dialog box. The 'Advanced Parameters (Optional)' section is expanded. Under 'Application - Deactivation by User', there is a checkbox 'Application cannot be removed from Launchpad'. The 'Application-Related Parameters' section includes 'Application Alias' and 'Target App. Parameters' (set to 'EAMS\_ROLE=EAMS\_ROLE\_GF&FRW\_MO...'). Below this is a text area (labeled with a red arrow and '1') containing the parameter string 'EAMS\_ROLE=EAMS\_ROLE\_GF&FRW\_MODE=I&FRW\_OTYPE=EAMS\_NTF&QMART=M1'. The 'OBN Type' is set to 'Object-Based Navigation'. The 'Alternative Names for PFCG-Based OBN' section includes 'Business Object' and 'Operation' fields. The 'Alternative Application for Browser-Only Environment' section includes an 'Application' field.

You can find the information about the target parameters in the role menu of transaction `PFCG`. In this example, call the role `SAP_COCKPIT_EAMS_GENERIC_FUNC2` and choose the [Menu](#) tab. In the [Role Menu](#) choose [Details](#) from the context menu of a selected line (1). The parameters that are listed in the detail view (2, 3) are the target parameters that you need to enter in the [Advanced Parameters](#) of the launchpad. In the field [Target App. Parameters](#) of the launchpad, enter the technical name of the parameter and the corresponding value and connect them using the '=' sign (e.g. `EAMS_ROLE=EAMS_ROLE_GF`). If there are several target parameters to maintain, use the '&' sign to separate the parameter-value pairs.



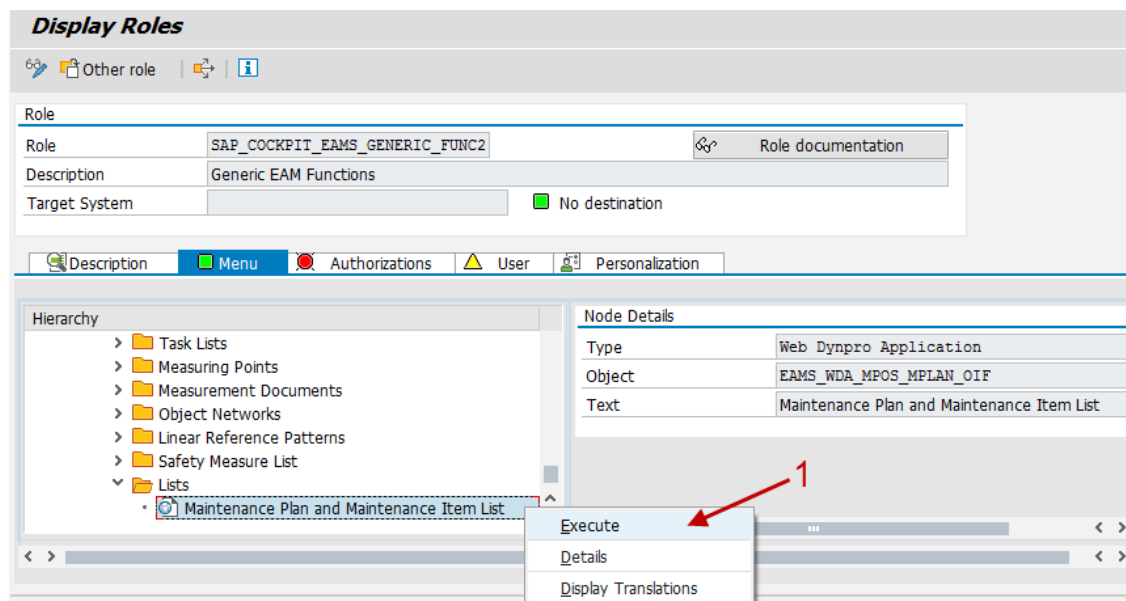
After you have maintained the advanced parameters and saved your changes to the Launchpad Role Definition, the user can see a new entry in the context menu of the technical object in the Asset Viewer. If the user chooses the new option *Create Notification w. type M1*, they open a notification in creation mode with type M1 and the technical object they are currently displaying.



## 6.3 Alternative Navigation Targets for Browser Environment

Sometimes Web UI applications are called neither in a portal environment nor within a Net Weaver Business Client, but via direct URL links to the application. In this case the system has no direct access to a role with OBN entries and therefore navigation to other applications does not work. To enable navigation, nevertheless, you have to specify alternative navigation targets in customizing for the Launchpad (transaction `LPD_CUST`).

As an example, you want to open the *Maintenance Plan and Item List* in a browser environment. You display the role `SAP_COCKPIT_EAMS_GENERIC_FUNC2` in transaction `PFCG`, choose *Master Data Overview* → *Lists* in the *Hierarchy*, select the *Maintenance Plan and Maintenance Item List* and choose *Execute* (1) in the context menu.



The system displays the *Maintenance Plan and Maintenance Item List*. Even though some list entries (for example, the maintenance plans, the maintenance items and the technical objects) are displayed as links, these links do not work.

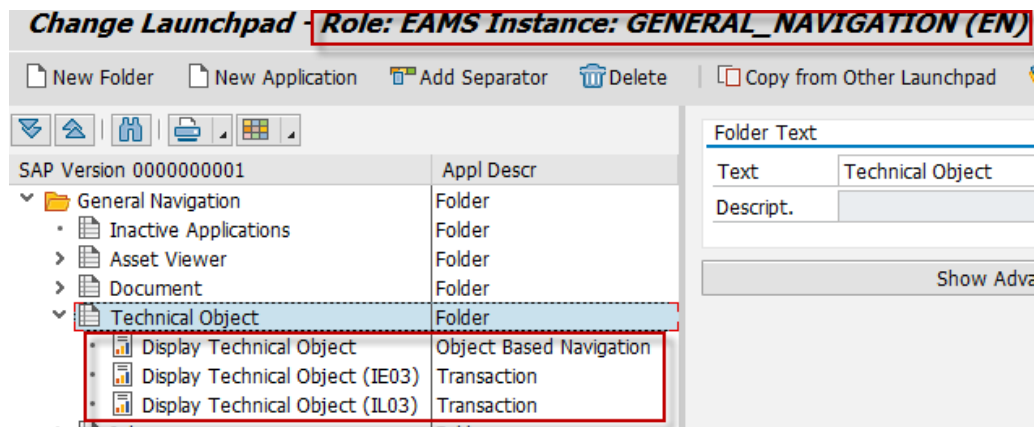
Maintenance Plan and Maintenance Item List

Maintenance Plan and Item List - Default (84)

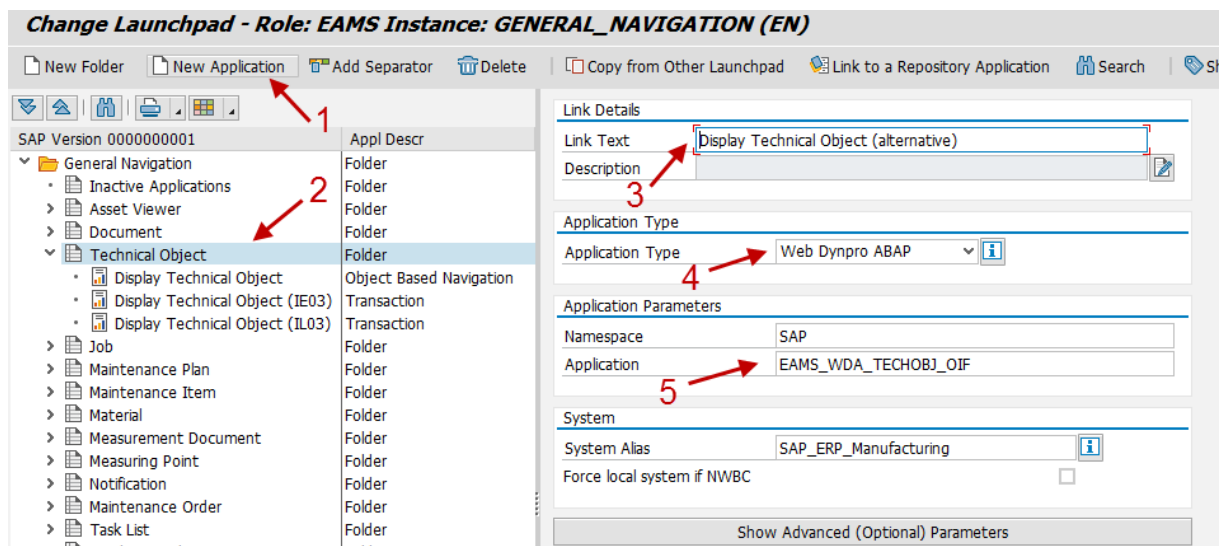
View: [Standard View] Set Maintenance Plan Status Maintenance Plan Mass Change Maintenance Item Mass Change Print Version Export Refresh

Changed	Maintenance Plan	Maint. Plan Text	Maint. Item	Maint. Item Text	Strategy	Maint. Plan Category	Cycle Start	Maint. Plan Status	Tech. Object
	192	bb	423	rjsf	A	PM	27.05.2014	CRTD	MCK-EQ-LEVEL1-1
	201	MFF100 1 WK Blowdown C	441	MFF100 1 WK Blowdown C		PM	22.05.2014	CRTD	EX-172
	202	SCOLA Feed Meter Rounds 1 MON	442	SCOLA Feed Meter Rounds 1 MON		PM	28.04.2014	CRTD	EX-182
	203	mfa6184 Daily checks	443	mfa6184 Daily checks		PM	29.05.2014	CRTD	EX-74
	202	SCOLA Feed Meter Rounds 1 MON	461	SCOLA Pressure Meter Rounds 1 MON		PM	28.04.2014	CRTD	BRC-SCO-SACC
	211	dfghdhdgh	481	dfghdhdgh	A	PM		CRTD	MCK-AG1
	212	new plan for user exits	482	new item for user exits		PM		CRTD	MCK-LINEAR
	221	Pump Maintenance	501	Pump Maintenance	A	PM	24.07.2014	CRTD	STB2-TAG
	91	RS	521	new lrw,		PM	01.11.2013	CRTD	MCK-LINEAR
	231	Test H1	541	Test H1		PM	13.10.2014	CRTD	H1

If you want the technical object links to work, you have to specify an alternative navigation target in customizing for the launchpad (transaction `LPD_CUST`). Open the launchpad in change mode for role `EAMS` and instance `GENERAL_NAVIGATION`. Three navigation targets have already been specified in the folder *Technical Object*. The first one opens the Web UI application as described in the OBN section above. The following two are the SAPGUI transactions for displaying a piece of equipment (`IE03`) and a functional location (`IL03`).



If you want links to the technical object to also work in a browser-only environment, you have to specify an additional entry for this alternative navigation option. Select the folder *Technical Object* (2) and then click on *New Application* (1). Enter the link text (3) and choose *Web Dynpro ABAP* (4) as *Application Type* to open the Web UI application for the technical object.



In the next step, you have to assign the application and the corresponding configuration name. You can find out the application and configuration name in the details of the OBN entries of the SAP standard PFCG roles.

**Display Roles**

Other role | |

Role	SAP_COCKPIT_EAMS_GENERIC_FUNC2	Role documentation
Description	Generic EAM Functions	
Target System	<input checked="" type="checkbox"/> No destination	

Description
 Menu
 Authorizations
 User
 Personalization

**Hierarchy**

- Create Technical Object
- Display Technical Object**
- Change Technical Object
- Display Object Network
- Change Object Network
- Create Notification
- Change Notification
- Display Notification

**Web Dynpro Application**

Application Type: Standard | Personalization | Application Configuration

Web Dynpro Applicat.	EAMS_WDA_TECHOBJ_OIF
Description	Display Technical Object
Configuration	EAMS_WDA_TECHOBJ_OIF_CFG_V2

Now you enter the Web Dynpro application name EAMS\_WDA\_TECHOBJ\_OIF in the *Application Parameters* section (5). To specify the configuration, open the section *Show Advanced (Optional) Parameters* and enter configuration ID EAMS\_WDA\_TECHOBJ\_OIF\_CFG\_V2 in the corresponding field.

**Change Launchpad - Role: EAMS Instance: GENERAL\_NAVIGATION (EN)**

New Folder
 New Application
 Add Separator
 Delete
 Copy from Other Launchpad
 Link to a Repository Application
 Search

Force local system II NWBC

SAP Version 0000000001	Appl Descr
General Navigation	Folder
Inactive Applications	Folder
Asset Viewer	Folder
Document	Folder
Technical Object	Folder
Display Technical Object	Object Based Navigation
Display Technical Object (IE03)	Transaction
Display Technical Object (IL03)	Transaction
Display Technical Object (alternative)	Web Dynpro ABAP
Job	Folder
Maintenance Plan	Folder
Maintenance Item	Folder

Hide Advanced (Optional) Parameters

Advanced Parameters (Optional)

Application - Deactivation by User

Application cannot be removed from Launchpad ☐

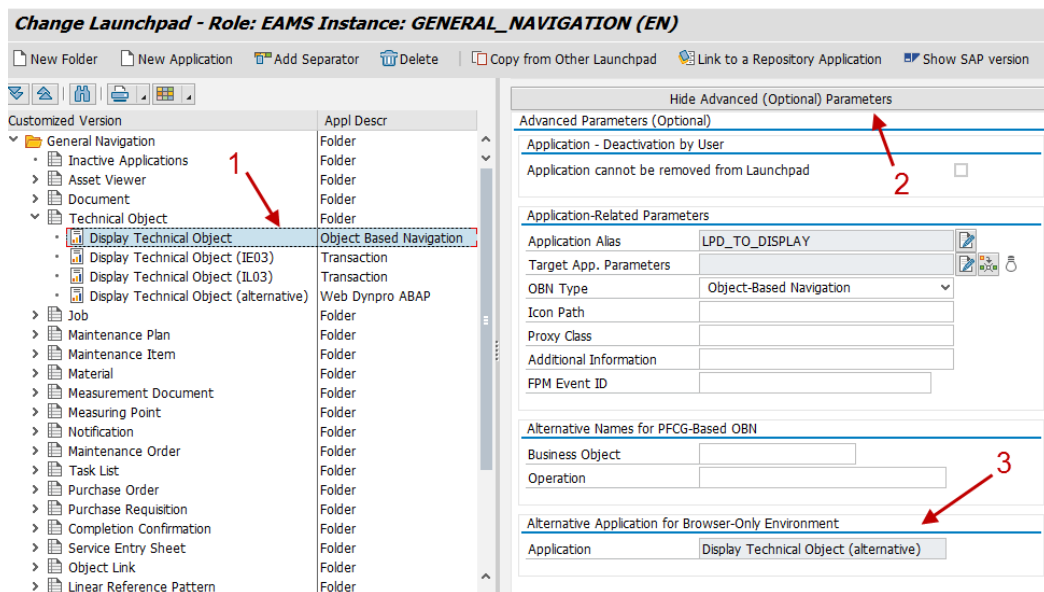
**Application-Related Parameters**

Application Alias	
Target App. Parameters	
Configuration	EAMS_WDA_TECHOBJ_OIF_CFG_V2

Suspend/Resume ☐

Icon Path

Now you have created the alternative navigation option *Display Technical Object (alternative)*, you have to add it to the existing OBN entry *Display Technical Object* in the launchpad. To do this, open the OBN entry (1) in change mode and go to the *Advanced Parameters* (2). In the section *Alternative Application for Browser-Only Environment*, enter the Web Dynpro ABAP entry you have just created for displaying technical objects in Web UI (3) and save your changes.



When a technical object is selected in the Web UI application *Maintenance Plan and Maintenance Item List* running in a browser environment, a second browser window opens with the technical object application.

For more information about launchpads, see [Launchpads](#) in SAP Library.

## 6.4 Example for Enhancing the ‘You can Also’ Menu (YCA) with Unplanned Confirmation

You want your maintenance planners to be able to confirm unplanned jobs while displaying or editing technical objects. For this reason, you want to add a new entry to the *You can also* menu of the technical object. Unlike the descriptions in chapter 6.2.2 where the *You can also* menu was enhanced by a new SAP GUI transaction, you now have to add object-based navigation. Furthermore, the unplanned confirmation is usually only used by the maintenance worker and therefore included in the SAP\_COCKPIT\_EAMS\_MAINT\_WORKER2 role but not in the planner’s role SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2. Make sure you have SAP Note [2129222 - Unplanned confirmation for technical object in planning plant](#) applied to your system.

Proceed as follows to integrate the unplanned confirmation in the *You can also* menu of the *Generic Functions* PFCG role:

Open customizing for the launchpad (transaction LPD\_CUST). In table column *Role* you can see which launchpads are included in the **Generic Functions** PFCG role (EAM\_GF) and which ones belong to the **Maintenance Worker** PFCG role (EAM\_MW).

As you want to enable the maintenance planner to confirm unplanned jobs, you make your changes to the *You can also* menu of the technical object in the *Generic Functions* role EAM\_GF. Depending on whether you want to enhance the *You can also* menu in the equipment or in the functional location, choose instance YCA\_EQUI or YCA\_FLOC. In this example, you are creating a new launchpad entry for the equipment, so you change (2) instance YCA\_EQUI (1) of role EAM\_GF.



Overview of Launchpads					
<a href="#">New Launchpad</a>   <a href="#">New Repository</a>   <a href="#">Show more columns</a>   <a href="#">Show Documentation</a>					
Role	Instance	Description	Re...	E...	FP...
EAMS	YCA_NOTIF	Notification - You can also			
EAMS	YCA_ORDER	Order - You can also			
EAMS	YCA_TL	Task List - You can also			
EAM_GF	YCA_EQUI	Equipment - You can also			
EAM_GF	YCA_FL	Functional Location - You can also			
EAM_GF	YCA_MP	Measuring Point - You can also			
EAM_MW	YCA_EQUI	Equipment - You can also			
EAM_MW	YCA_FL	Functional Location - You can also			
EAM_MW	YCA_JOB_NTF	Job (Notification) - You can also			
EAM_MW	YCA_JOB_ORD	Job (Order) - You can also			
EAM_MW	YCA_MP	Measuring Point - You can also			

You create a new application (1) and determine the name of the new menu entry in the field *Link Text* (2). In this example, the system will display the new menu entry *Confirm Unplanned Job* in the *You can also* menu of the equipment, so you enter this text as link text. Furthermore, you have to determine the *Application Type* (3) and the *Application Parameters* (4). In this example, the application type is *Object Based Navigation*, the business object is *eam\_job* and the operation is *confirm\_unplanned*. For more information about how to figure out the appropriate application parameters and the system alias, see chapter 6.1.

After you have made all required entries and chosen *Continue* the new menu entry is displayed in the list of menu entries on the left hand side (5). With drag and drop you can change the position of this new menu entry in the dropdown menu of the *You can also* button.

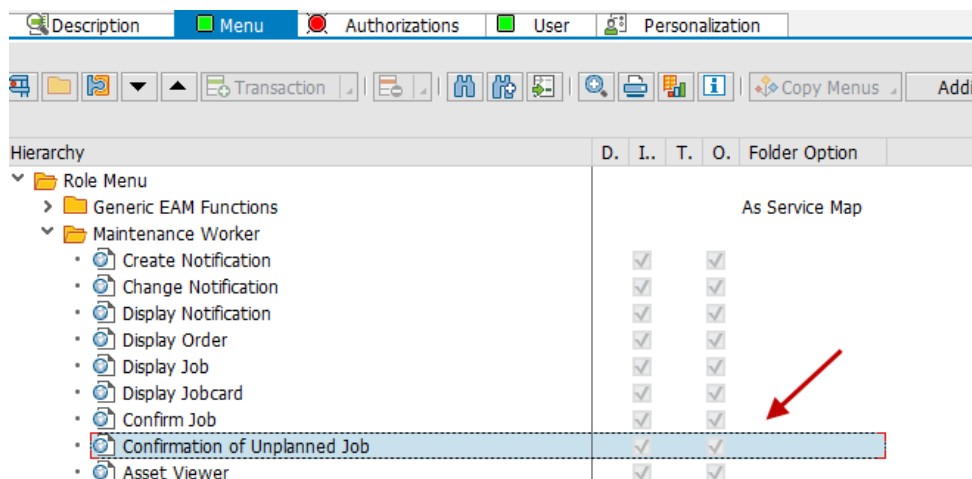
Change Launchpad - Role: EAM_GF Instance: YCA_EQUI (EN)	
<a href="#">New Folder</a>   <a href="#">New Application</a>   <a href="#">Add Separator</a>   <a href="#">Delete</a>   <a href="#">Copy from Other Launchpad</a>   <a href="#">Link to a Repository Application</a>	
Customized Version	Link Details
<ul style="list-style-type: none"> <li>Equipment - You can also           <ul style="list-style-type: none"> <li>Inactive Applications</li> <li>Display Technical Object (IE03)</li> <li>Display Technical Object in Asset View</li> <li><b>Confirm Unplanned Job</b></li> <li>Create Measuring Point</li> <li>Create Counter</li> <li>Create Measuring Point/Counter with</li> <li>Create Notification</li> <li>Create Order</li> </ul> </li> </ul>	Link Text: <input type="text" value="Confirm Unplanned Job"/> Description: <input type="text"/> Application Type: <input type="text" value="Object Based Navigation"/> Application Parameters: <input type="text" value="eam_job"/> Operation: <input type="text" value="confirm_unplanned"/>

In the next step, you add the corresponding *System Alias* (1) and maintain the *Advanced (Optional) Parameters*. Enter an *Application Alias* (LPD\_JOBUC\_CONFIRM) (2) and open the editor (3) for specifying the *Target Application Parameters*. The parameters *EAMS\_ROLE* and *FRW\_MODE* and their values correspond to the parameters in the PFCG-role, which is also described in chapter 6.1.

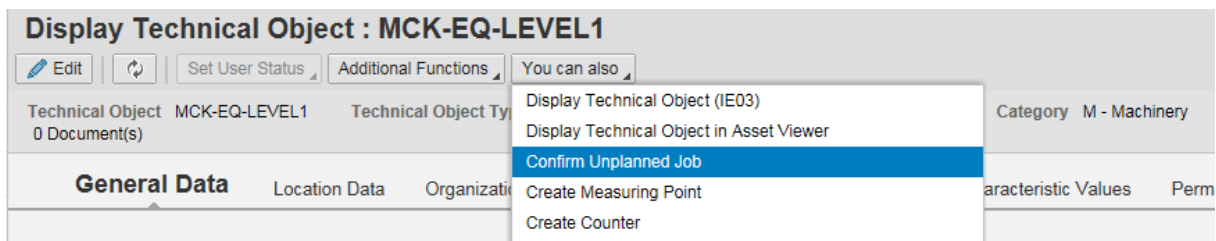
In this example, the parameter for the maintenance order type (AUFART) is additionally set to PM01. This causes the initial screen to be skipped because the system automatically sets the order type to PM01 (3). Enter *Object-Based Navigation* in field *OBN Type* (4) and save the launchpad.

System	
System Alias	SAP_ERP_Manufacturing <span style="float: right;">1</span>
Hide Advanced (Optional) Parameters	
Advanced Parameters (Optional)	
Application - Deactivation by User	
Application cannot be removed from Launchpad <input type="checkbox"/>	
Application-Related Parameters <span style="float: right;">2</span>	
Application Alias	LPD_JOBUC_CONFIRM
Target App. Parameters	EAMS_ROLE=EAMS_ROLE_MW&FRW_M... <span style="float: right;">3</span>
<div style="border: 1px solid red; padding: 2px;">EAMS_ROLE=EAMS_ROLE_MW&amp;FRW_MODE=I&amp;AUFART=PM01</div>	
Li 1, Co 1	Ln 1 - Ln 1 of 1 lines
OBN Type	Object-Based Navigation <span style="float: right;">4</span>
Proxy Class	
Additional Information	
FPM Event ID	
Alternative Names for PFCG-Based OBN	
Business Object	
Operation	
Alternative Application for Browser-Only Environment	
Application	

After having added the new menu entry to the *You can also* menu of the generic function launchpad role (EAM\_GF), you add the object-based navigation entry to the PFCG role for all users who you want to be able to confirm unplanned jobs.



If you now log on with your copy of role `SAP_COCKPIT_EAMS_GENERIC_FUNC2` and display a piece of equipment, you find the additional menu entry *Confirm Unplanned Job* in the dropdown menu of the *You can also* button.



If you select the new menu entry, you navigate to the unplanned job confirmation. As you have set the parameter `AUFART` to `PM01`, the system skips the initial confirmation screen and sets the *Order Type* to `PM01` (2). In the confirmation, the system adopts the technical object (1) and its corresponding data, such as the work center and the maintenance activity type, as default values. You can now enter working hours in the area *Confirmation of Time Data* (3).

Confirm Unplanned Job										
<input type="button" value="Save"/> <input type="button" value="Save and Complete"/> <input type="button" value="Check Entries"/> <input type="button" value="Add Malfunction Data"/> <input type="button" value="Attach New Document"/>										
<input checked="" type="checkbox"/> Entries have been checked										
Order Type	PM01	Order Type Description	Maintenance order							
Confirmation Data										
Comments										
Order Data										
Planning Plant	0001	Werk	0001							
Technical Object	MCK-EQ-LEVEL1			MCK1 Equipment level 1			Maintenance Activity Type	001	Inspection	
Operation Data										
* Work Center: STB-M				Work Center Plant: 0001						
STB Mechanik										
Assign Additional Work Centers				Additional Work Centers Assigned						
Confirmation Data										
Measurement Readings										
Confirmation of Time Data										
<input type="button" value="Get Remaining Work"/> <input type="button" value="Person Respons..."/>										
	Person Respons...	Person Respons...	Actual Work	Unit	Start Date	Start Time	End Date	End Time	No Remaining...	Remaining Work
			3,00	H	27.04.2015	07:00:00	27.04.2015	13:04:25	<input type="checkbox"/>	0,0
			0,00			00:00:00		00:00:00	<input type="checkbox"/>	0,0

Additionally, you can add all the material that you consumed:

Confirmation of Material Used									
Material	Description	Quantity	Unit	Plant	Storage location	Batch	Valuation Type	Movement Type	
MCK-ERSATZT...	MCK Spare Part	3,000	EA	0001				261	
		0,000						261	
		0,000						261	
		0,000						261	
		0,000						261	

When you save the confirmation, the number of the created order is displayed in the status line. The order and the confirmation are displayed in the document flow of the respective order but there are no goods movement documents yet. You can create goods movement documents in transaction [Predefined Confirmation Processes](#) (CO1P) by selecting the [Backflushing](#) checkbox. For further information, see also blog in SDN [After Event Recording](#).

Moreover, you can create launchpad customizing for the purpose of integrating the [Unplanned Confirmation](#) function into the context menu of a technical object. Then your planners can also navigate to the confirmation of an unplanned job when they display the technical object in the Asset Viewer. To add the confirmation to the context menu of a piece of equipment, create launchpad customizing for the role EAMS, instance CM\_EQUI. Proceed as described above and maintain slightly different target application parameters.

Application-Related Parameters

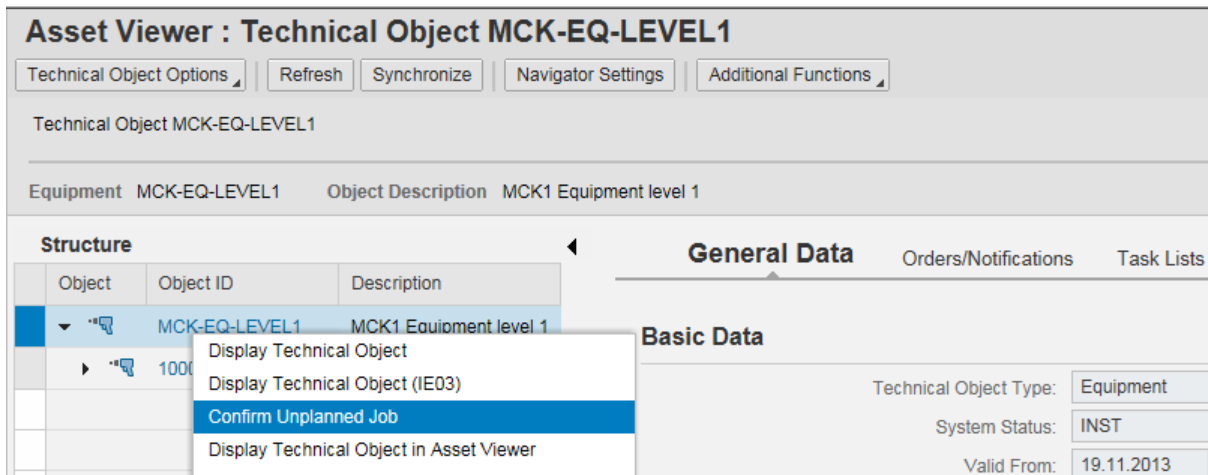
Application AliasLPD\_JOBUC\_CONFIRM

Target App. ParametersEAMS\_ROLE=EAMS\_ROLE\_MW&FRW\_M...

EAMS\_ROLE=EAMS\_ROLE\_MW&FRW\_MODE=I&FRW\_OTYPE=EAMS\_JOB&AUFA  
RT=PM01

Li 1, Co 1Ln 1 - Ln 2 of 2 lines

After having saved your launchpad, the system displays the new menu entry [Confirm Unplanned Job](#) if you open the context menu with a right mouse click.



## 6.5 Example for Cross-System Navigation (Management of Change Requests)

An example for cross-system navigation out of an EAM Web Dynpro application might be the creation of a change request for an EAM object such as a technical object or an order. These change requests are processed with the Management of Change (MOC) add-on in the same or in an external system.

For more information about this add-on, see [SAP Management of Change](#).

For the launchpad customizing described here, we assume that the Management of Change add-on version 1.0 Feature Pack 01 is installed in an external system (MOC). The EAM applications run in a system called EAM.

In our example, you want to enable your planners to create change requests while displaying or editing functional locations. You therefore have to create an additional menu entry in the *You can also* menu and in the context menu. To do this, proceed as follows:

1. Create an ABAP connection and a HTTP-connection to the MOC system in the EAM system (transaction SM59). For more information on how to determine the port number for the HTTP connection, see section 15.9 in the appendix.
2. Add the object-based navigation target for creating change requests from the MOC role (for example, SAP\_COCKPIT\_MOC\_MAIN) to your EAM role in the EAM system.
3. Enhance the functional location launchpad customizing for the context menu (role EAMS / instance CM\_FL) or for the *You can also* menu (role EAM\_GF / instance YCA\_FL).

For a detailed description including screen shots, see the attachment to SAP Note [2140452 - Create Change Request with Reference Object via WDA Parameter](#).

## 6.6 Launching EAM Applications Using URL Parameters

You can use URL parameters in EAM Web Dynpro applications to set default values in the PFCG role or to compose URL-addresses that start applications directly in a browser, for example. There are three types of URL parameters you can add to a URL address:

- **SAP URL parameters**, such as *as sap-client* or *sap-language*, are applicable for all Web Dynpro applications and always start with prefix *sap-*.
- **Web Dynpro URL parameters**, such as *sap-wd-client* or *sap-wd-configId*, are applicable for all browser-based applications and always start with prefix *sap-wd-*.
- **Application-specific URL parameters**

You can find lists of all SAP URL parameters and Web Dynpro URL parameters in the SAP Library topic [URL Parameters and Application Parameters](#).

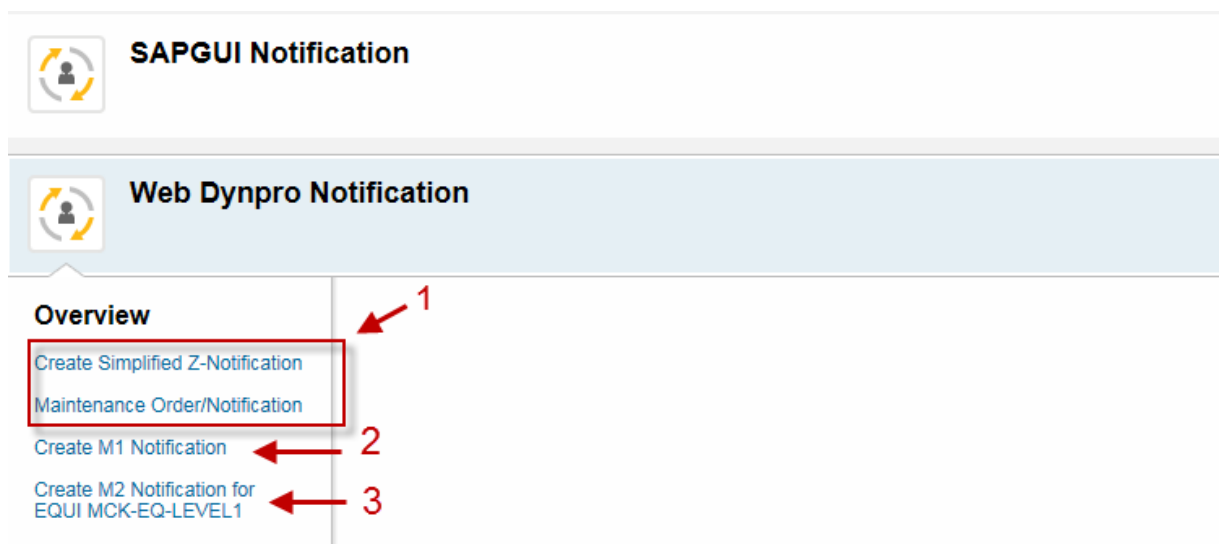
## 6.6.1 Using Application-Specific URL Parameters for PFCG-Role Entries

With application-specific URL parameters you can provide links in the launchpad menu that directly take the user to Web Dynpro applications with certain preset default values. For example, you can provide several links for creating notifications with different default values. By choosing one of the links, the user might be then directed to the screen for creating a specific type of notification or even to the screen for creating a notification in which notification type and equipment are already preset.

In the following example we use the role `Z_NOTIFICATION`, which we have already created for side panels (chapter 10.1.1) and enhanced with the entry for *Create Simplified Z-Notification* (1) in chapter 5.2.2. We want to provide two additional links on the launchpad:

- When the user clicks on *Create M1 Notification* (2), the notification type will be set to *M1* and the first entry screen will be skipped.
- When the user clicks on *Create M2 Notification for EQUI MCK-EQ-LEVEL1* (3), the notification type will be set to *M2* and the piece of equipment will already be entered as the technical header object. The first screen will be skipped.

To create these two additional links we have to enhance the PFCG-role entry with several URL parameters.



To create the entry *Create M1 Notification*, you open the role `Z_NOTIFICATION` in change mode (transaction `PFCG`) and add the respective Web Dynpro application (1) to the role. The technical name and the configuration

name of the Web Dynpro application for creating notifications is identical to the standard SAP Web Dynpro application. Then you specify the description (2) that is displayed as the link text in the launchpad menu. The first three parameters are copied from the SAP standard entry. Since you want the link to directly open the screen for creating a notification with notification type *M1*, you set the value *M1* (3) as the default for parameter *QMART*.

**Change Roles**

Role: Z\_NOTIFICATION  
Description: Role for notification Web Dynpro and SAPGUI  
Target System: No destination

Menu: **Web Dynpro Application**

Web Dynpro Applicat.: EAMS\_WDA\_ORDNTF\_OIF  
Description: **Create M1 Notification** (2)  
Configuration: EAMS\_WDA\_ORDNTF\_OIF\_CFG

Protocol: ☐ HTTPS

Parameter	Value
FRW_MODE	I
EAMS_ROLE	EAMS_ROLE_GF
FRW_OTYPE	EAMS_NTF
<b>QMART</b>	<b>M1</b> (3)

When the user now selects the new launchpad menu entry *Create M1 Notification* (1), the first screen is automatically skipped, because the mandatory field *Notification Type* on the entry screen is already set to *M1* (2). The user is immediately directed to the *General Data* tab page.

**Web Dynpro Notifica...**

Create Notification: %000000000001

Notification %000000000001 Notification type M1, Maintenance Request System Status OSNO User Status INIT 0 Document(s)

**General Data** Location Data Organizational Data Malfunction Data Task Data Activities Documents

Long Text:

**General Data**

Coding:

\* Description:

Priority:

Required Start Date/Time: 21.07.2015 08:45:47 Required End Date/Time: 00:00:00

For the second launchpad menu entry *Create M2 Notification for EQUI MCK-EQ-LEVEL1* you add the Web Dynpro application for creating notifications to the role a second time. This time you set the notification type (QMART) to *M2*. Since you want a specific piece of equipment to be proposed as the technical header object when the user chooses this new launchpad menu entry, you specify the value of the parameter *EQUNR* as *MCK-EQ-LEVEL1*.

**Change Roles**

Role: **Z\_NOTIFICATION**

Description: **Role for notification Web Dynpro and SAPGUI**

Target System: **No destination**

Menu Configuration:

- Web Dynpro Application: **EAMS\_WDA\_ORDNTF\_OIF**
- Description: **Create M2 Notification for EQUI MCK-EQ-LEVEL1**
- Configuration: **EAMS\_WDA\_ORDNTF\_OIF\_CFG**
- Protocol: ☐ HTTPS
- Parameter Table:
 

Name	Value
FRW_MODE	I
EAMS_ROLE	EAMS_ROLE_GF
FRW_OTYPE	EAMS_NTF
QMART	M2
EQUNR	MCK-EQ-LEVEL1

By selecting the new menu link (1), a Web Dynpro notification of type M2 (2) opens, in which the technical object (3) is populated with values derived from the role parameters.

**Web Dynpro Notification**

- Create Simplified Z-Notification
- Maintenance Order/Notification
- Create M1 Notification
- Create M2 Notification for EQUI MCK-EQ-LEVEL1**

Create Notification: 10033331

Notification: 10033331 | Notification type: **M2, Malfunction Report** | Technical Object: **MCK-EQ-LEVEL1** | System Status: OSNO | 0 Document(s)

**General Data**

Long Text:

**General Data**

Coding: [ ] [ ]

\* Description: [ ]

Required Start Date/Time: 28.07.2015 09:32:48

Technical Object: **MCK-EQ-LEVEL1** | **MCK Equipment level 1**

Material: MCK\_FERT\_BATCH\_S Serialmaterial MCK with batch

Assembly: [ ]

Task List: Assign Task List

Priority: [ ]

Required End Date/Time: [ ] 00:00:00

Technical Object Type: **Equipment**

Serial Number: [ ]



For more information about all the EAM Web UI specific parameters, see section 6.6.3 below.

## 6.6.2 Starting WEB Dynpro Applications in a Browser

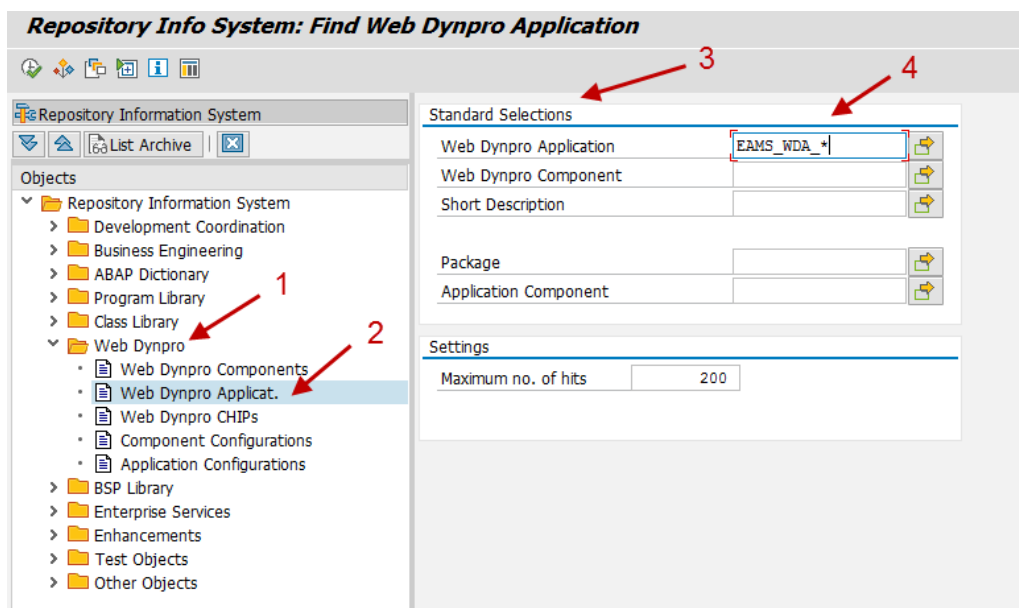
If you want to launch an EAM Web Dynpro application via a URL address, you compose this URL address using two parts: one to start the Web Dynpro application and one that consists of various parameters and parameter values, including the application configuration ID.

The entire URL address therefore follows this scheme:

**<schema>://<host>.<domain>.<extension>:<port>/sap/bc/webdynpro/<namespace>/<application name>?<parameter name>=<parameter value>**

In the following example, you want to start the EAM application *Display Technical Object* via a URL address.

First you have to figure out the URL to start the EAM application. To do so, you start the *Object Navigator* (transaction SE84), open the *Web Dynpro* (1) folder, and select *Web Dynpro Applications* (2). By double-clicking on it, you open a search screen (3) where you enter the prefix *EAMS\_WDA\_\** (4) as the search string. WDA is the abbreviation for Web Dynpro Application.



In the results list, you select the Web Dynpro application for technical objects *EAMS\_WDA\_TECHOBJ\_OIF*. In the *Administrative Data* group box the system displays the URL that you need to start the corresponding Web Dynpro application. This URL replaces the first part of the URL scheme up to the part with the parameters:

**<schema>://<host>.<domain>.<extension>:<port>/sap/bc/webdynpro/<namespace>/<application name>?<parameter name>=<parameter value>**

[https://hostxx.companyxx.com:12345/sap/bc/webdynpro/sap/eams\\_wda\\_techobj\\_oif?<parameter name>=<parameter value>](https://hostxx.companyxx.com:12345/sap/bc/webdynpro/sap/eams_wda_techobj_oif?<parameter name>=<parameter value>)

### Web Dynpro Explorer: Display Web Dynpro Application

Application: EAMS\_WDA\_TECHOBJ\_OIF Saved

Properties Parameters

Description: Technical Object

Component: FPM\_OIF\_COMPONENT

Interface View: FPM\_WINDOW

Plug Name: DEFAULT

Help Links

Authorization Check

☒ Check for Application

☐ Check for Application and Application Configuration

Handling of Messages

☒ Show Message Component on Demand

☐ Always Display Message Component

Administrative Data

Created By	SAP	Created on	28.01.2009
Last Changed By	SAP	Changed On	17.06.2015
Package	EAMS_UI_TECHOBJ		
Language	EN		
URL	https:// hostxx.companyxx.com:12345 /sap/bc/webdynpro/sap/eams_wda_tec..		

For more information about the <port> value, see chapter 15.9.

Next you have to figure out **the respective URL parameters including the application configuration**. To do so, you open the corresponding PFCG role (transaction `PFCG`), which in this example is `SAP_COCKPIT_EAMS_GENERIC_FUNC2` (1), and then select *Display Technical Object* (2). In the *Node Details* group box the system displays the application name of the object (4) so you can double-check if this is the application you want to open via a URL address.

Role

Role	<u>SAP_COCKPIT_EAMS_GENERIC_FUNC2</u>	Role documentation
Description	Generic EAM Functions	
Target System	No destination	

Description Menu Authorizations User Personalization

Hierarchy

- Role Menu
  - Generic EAM Functions
    - Asset Viewer
    - Create Technical Object
    - Display Technical Object (2)
      - Execute
      - Details (3)
      - Display Translations
    - Change Technical Object
    - Display Object Network
    - Change Object Network
    - Create Notification

Node Details

Type	Web Dynpro Application
Object	<u>EAMS_WDA_TECHOBJ_OIF</u>
Text	Display Technical Object (4)

Other Node Details

Node ID	28
Application Alias	

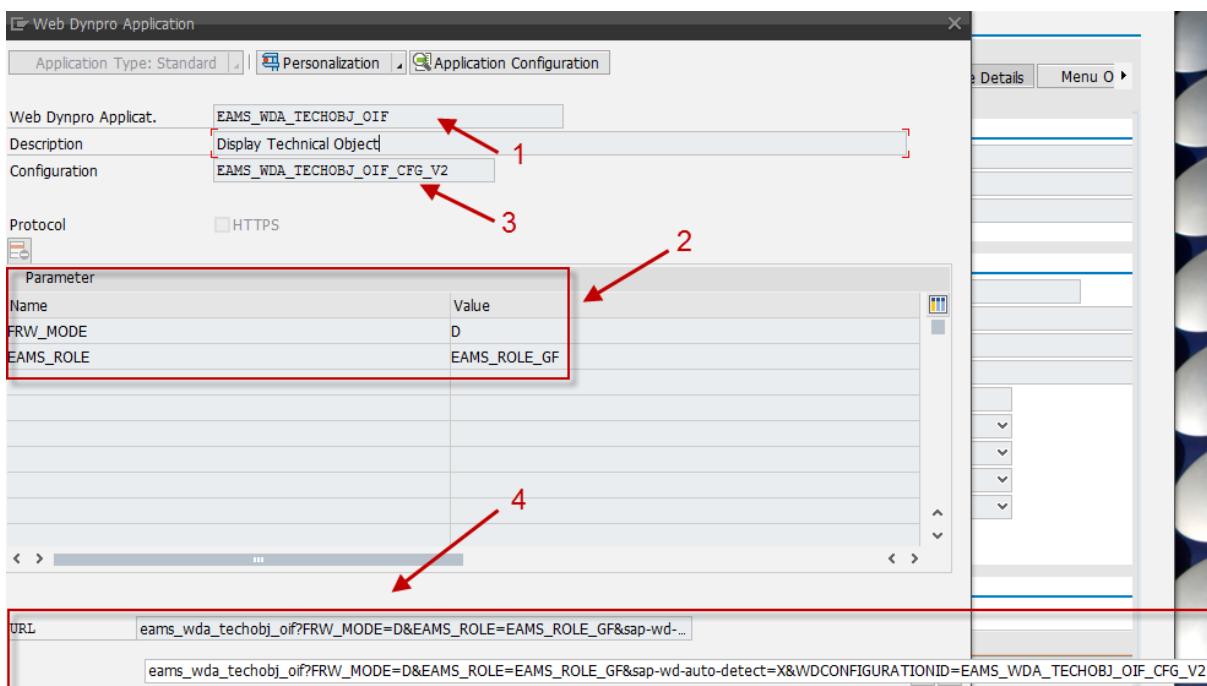
To figure out the second part of the URL you choose *Details* (3) in the context menu of the *Display Technical Object* entry. On the popup, the system displays the application name `EAMS_WDA_TECHOBJ_OIF` (1), the configuration name `EAMS_WDA_TECHOBJ_OIF_CFG_V2` (3), and the following fractional URL address (4):

`eams_wda_techobj_oif?FRW_MODE=D&EAMS_ROLE=EAMS_ROLE_GF&sap-wd-auto-detect=X&WDCONFIGURATIONID=EAMS_WDA_TECHOBJ_OIF_CFG_V2`

Hint: Usually you can only see part of the URL in the URL field. However, the system displays the whole URL in the tooltip.

This URL consists of the following parts:

- Application name: `EAMS_WDA_TECHOBJ_OIF` (1)
- Application-specific parameters, specified in the Parameter group box (2) with the corresponding parameter values: `FRW_MODE=D&EAMS_ROLE=EAMS_ROLE_GF`  
Parameters and their values are connected by an = .  
Parameter/ -value pairs are connected by an AND sign (&).
- Web Dynpro URL parameter: `sap-wd-auto-detect=X`
- Configuration parameter `WDCONFIGURATIONID` with the configuration ID `EAMS_WDA_TECHOBJ_OIF_CFG_V2` (2) as corresponding parameter value.



Finally, you combine the first part of the URL for starting the application with the second part containing the parameters and the corresponding parameter values including the configuration name. The complete URL address looks like this:

`https://hostxx.companyxx.com:12345/sap/bc/webdynpro/sap/eams_wda_techobj_oif?FRW_MODE=D&EAMS_ROLE=EAMS_ROLE_GF&sap-wd-auto-detect=X&WDCONFIGURATIONID=EAMS_WDA_TECHOBJ_OIF_CFG_V2`

If you now paste this address in a browser, you will be directed to the logon screen of the corresponding system, if not yet logged on. On the initial screen of the *Display Technical Object* application you have to select a technical object type and enter the name of the technical object that you want to be displayed.

Now you can add further URL parameters to your URL address. For example, if you want to skip the initial screen of the application, you can specify the technical object type (`FRW_OTYPE`) and the equipment number (`EQUNR`) as URL parameters and include them and the corresponding values in the URL address.

[`FRW\_OTYPE=EAMS\_EQUI&EQUNR=MCK-EQ-LEVEL1`](#)

SAP also provides general URL parameters for all browser-based SAP front-end technologies and general URL parameters for Web Dynpro applications. Besides the application-specific URL parameters, you can also add SAP URL parameters and URL parameters for Web Dynpro to your URL address. If you add further URL parameters to your URL, the sequence of the parameters is not important.

Hint: When an application is started via a URL in a browser, the object-based navigation might not work for all targets (such as the [You can also](#) menu, context menu, and links). In this case see chapter 6.3 for alternative navigation targets.

### 6.6.3 List of Application-Specific URL Parameters for EAM

The application-specific URL parameters for the EAM Web Dynpro applications are listed in the following section and sorted by application. The application and configuration IDs are in brackets behind the application name. Some of the valid parameter values are mentioned in brackets behind the parameter description. The prerequisite for being able to use the complete list of EAM-specific URL parameters is SAP Note [2146884 - EAMS Web UI: URL parameters for EAM Web Dynpro applications](#).

[Display / Change Technical Object](#)

[`\(EAMS\_WDA\_TECHOBJ\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_TECHOBJ\_OIF\_CFG\_V2\)`](#)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (C: Change / D: Display)
EQUNR	Equipment
TPLNR	Functional Location

[Create Equipment \(EAMS\\_WDA\\_TECHOBJ\\_OIF?WDCONFIGURATIONID=EAMS\\_WDA\\_TECHOBJ\\_OIF\\_CFG\\_V2\)](#)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
FRW_OTYPE	Object Type (EAMS_EQUI: Equipment)
EQTYP	Technical Object Category
Optional:	
EQUNR	Equipment (if unspecified -> automatic numbering)
REF_EQ	Reference Technical Object
REF_MAT	Reference Material
VALID_FROM	Valid From Date (if unspecified -> system date), Date format: YYYYMMDD

### Create Functional Location

(EAMS\_WDA\_TECHOBJ\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_TECHOBJ\_OIF\_CFG\_V2)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
FRW_OTYPE	Object Type (EAMS_FL: Functional Location)
FLTYP	Technical Object Category
STR_IND	Structure Indicator
TPLNR	Functional Location
Optional:	
REF_TECOBJ	Reference Technical Object
REF_FLOC	Reference Location

### Display / Change Notification

(EAMS\_WDA\_ORDNTF\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_ORDNTF\_OIF\_CFG)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (C: Change / D: Display)
FRW_OTYPE	Object Type (EAMS_NTF: Notification)
QMNUM	Notification Number

### Create Notification (EAMS\_WDA\_ORDNTF\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_ORDNTF\_OIF\_CFG)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
FRW_OTYPE	Object Type (EAMS_NTF: Notification)
QMART	Notification Type
Optional:	
EQUNR	Equipment
TPLNR	Functional Location
REF_QMNUM	Notification to be Copied
COPY_DOCL	Copy Document Links, Yes = X

### Display / Change Maintenance Order

(EAMS\_WDA\_ORDNTF\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_ORDNTF\_OIF\_CFG)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (C: Change / D: Display)

Parameter Name	Parameter Description
FRW_OTYPE	Object Type (EAMS_ORD: Order)
AUFNR	Order Number

*Create Maintenance Order (EAMS\_WDA\_ORDNTF\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_ORDNTF\_OIF\_CFG)*

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
FRW_OTYPE	Object Type (EAMS_ORD: Order)
AUFART	Order Type
PLANPLANT	Planning Plant
Optional:	
EQUNR	Equipment
TPLNR	Functional Location
PRIORITY	Priority
ASSEMBLY	Assembly
BUS_AREA	Business Area
EAMS_REF_AUFNR	Reference Order
EAMS_REF_VORNR	Reference Operation
EAMS_FOLLOW_UP_ORDER	Checkbox for Follow-On Order, Yes = X
EAMS_COPY_OPR	Checkbox for Copy Operations, Yes = X
COPY_MAT	Checkbox for Copy Components, Yes = X
COPY_RELS	Checkbox for Copy Relationships, Yes = X
COPY_DOCL	Checkbox for Copy Document Links, Yes = X
COPY_SRULE	Checkbox for Copy Settlement Rules, Yes = X
COPY_DESCR	Checkbox for Copy Descriptions, Yes = X

When no technical object is specified, the planning plant is mandatory, otherwise the planning plant is derived from the technical object.

*Display / Change Task List (EAMS\_WDA\_TL\_OIF\_V2?WDCONFIGURATIONID=EAMS\_WDA\_TL\_OIF\_CFG\_V2)*

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (C: Change / D: Display)
Direct Access:	
TL_CC	Task List Direct Access (Format:

Parameter Name	Parameter Description
	Type/Group/Counter, e.g. A/22/3 or E/71/2)
General Task List:	
PLNTY	Task List Type (A: General Task List)
PLNNR	Task List Group
Optional:	
PLNAL	TL Group Counter (if there are several counters a selection popup opens)
Technical Object Task List by Group:	
PLNTY	Task List Type (E: Equipment Task List, T: Functional Location Task List),
PLNNR, PLNAL (optional)	Task List Group, optional: Task List Counter
Technical Object Task List by Technical Object:	
PLNTY	Task List Type (X: Technical Object Task List),
TEC_OBJ_NO	Name of Technical Object
TEC_OBJ_TYPE	Technical Object Type (EAMS_EQUI: Equipment, EAMS_FL: Functional Location)

When no counter (`PLNAL`) is specified in the URL, but more than one exists, a popup for choosing the appropriate counter is shown. You can also specify a key date (`KEY_DATE=YYYYMMDD`), on which the task list is shown or changed. If no date is set, the system date is used.

#### Create General Task List (`EAMS_WDA_TL_OIF_V2? WDCONFIGURATIONID=EAMS_WDA_TL_OIF_CFG_V2`)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
PLNTY	Task List Type (A: General Task List)
PLANPLANT	Planning Plant
STATUS	Status
Optional:	
PLNNR	Task List Group (if unspecified, a new group with counter 1 is created)
PLNAL	Task List Counter
KEY_DATE	Key Date (format: YYYYMMDD)
PROFILE	Profile
TL_DIR_REF	Task List to be Copied

Parameter Name	Parameter Description
COPY_PERMITS	Copy Permits, Yes = X
COPY_REF_DESCR	Copy Task List Descriptions, Yes = X
COPY_REF_DOCS	Copy Document Links, Yes = X
COPY_REF_RELS	Copy Relationships, Yes = X

When a profile with status is specified, the parameter `STATUS` is not mandatory.

#### Create Technical Object Task List

([EAMS\\_WDA\\_TL\\_OIF\\_V2?WDCONFIGURATIONID=EAMS\\_WDA\\_TL\\_OIF\\_CFG\\_V2](#))

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
PLNTY	Task List Type (X: Technical Object Task List)
TEC_OBJ_NO	Name of Technical Object
TEC_OBJ_TYPE	Technical Object Type (EAMS_EQUI: Equipment, EAMS_FL: Functional Location)
STATUS	Status
Optional:	
PROFILE	Profile
KEY_DATE	Key Date (format: YYYYMMDD)
TL_DIR_REF	Task List to be Copied
COPY_PERMITS	Copy Permits, Yes = X
COPY_REF_DESCR	Copy Task List Descriptions, Yes = X
COPY_REF_DOCS	Copy Document Links, Yes = X
COPY_REF_RELS	Copy Relationships, Yes = X

When a profile with status is specified, the parameter `STATUS` is not mandatory.

#### Display/ Change Maintenance Plan

([EAMS\\_WDA\\_MPLAN\\_OIF\\_V2?WDCONFIGURATIONID=EAMS\\_WDA\\_MPLAN\\_OIF\\_CFG\\_V2](#))

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (C: Change / D: Display)
WARPL	Maintenance Plan



### Create Maintenance Plan

(EAMS\_WDA\_MPLAN\_OIF\_V2?WDCONFIGURATIONID=EAMS\_WDA\_MPLAN\_OIF\_CFG\_V2)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
MPTYP	Maintenance Plan Category (NO: Notification, PM: Maintenance Order)
MPLANTYPE	Maintenance Plan Type (SINGLE TIM: Single Cycle (Time-Based), SINGLE PER: Single Cycle (Performance-Based), MULTI COUN: Multiple Counter, STRATEGY: Strategy)
STRATEGY	Strategy (mandatory with Maintenance Plan Type STRATEGY)

### Display Maintenance Item (EAMS\_WDA\_MPOS\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_MPOS\_OIF\_CFG\_V2)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (D: Display)
WAPOS	Maintenance Item

If you want to enable a direct navigation from the maintenance plan to a specific maintenance item, implement note [2414112 - EAMS: URL Parameter for Maintenance Item](#).

### Display/ Change Measuring Point (EAMS\_WDA\_MP\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_MP\_OIF\_CFG)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (C: Change / D: Display)
POINT	Measuring Point

### Create Measuring Point (EAMS\_WDA\_MP\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_MP\_OIF\_CFG)

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
EAMS_MPTYPE	Measuring Point/ Counter (0: Measuring Point / 1: Counter)
MPOTY	Reference Object Type (IEQ: Equipment, IFL: Functional Location, IME: Rental Unit)
EQU NR or TPLNR	Reference Object (Technical Object ID)
REAL_EST_TYPE	Reference Object is a Real Estate Type (IL: Settlement Unit, IB: Building, IM: Rental Object)
REAL_EST_ID	Real Estate Object ID

If you want to use the URL parameters for creating a measuring point or a measurement document, check if note [2329879](#) is implemented.

Make the following entries in the URL:

- Reference Object Type (MPOTY) is IEQ -> use EQUNR
- Reference Object Type (MPOTY) is IFL -> use TPLNR
- Reference Object Type (MPOTY) is IME -> use a combination of REAL\_EST\_TYPE and REAL\_EST\_ID.

*Display Measurement Document (EAMS\_WDA\_MD\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_MD\_OIF\_CFG)*

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (D: Display)
MDOCM	Measurement Document

*Create Measurement Document (EAMS\_WDA\_MD\_OIF?WDCONFIGURATIONID=EAMS\_WDA\_MD\_OIF\_CFG)*

Parameter Name	Parameter Description
FRW_MODE	Framework Mode (I: Insert)
EAMS_BASIS_MREAD	Basis for Measurement Reading (0: Measuring Point / 1: Reference Object)
MPOTY	Reference Object Type (IEQ: Equipment, IFL: Functional Location, IME: Rental Unit)
EQUNR or TPLNR	Reference Object (Technical Object ID)
REAL_EST_TYPE	Reference Object is a Real Estate Type (IL: Settlement Unit, IB: Building, IM: Rental Object)
REAL_EST_ID	Real Estate Object ID

Make the following entries in the URL:

- Reference Object Type (MPOTY) is IEQ -> use EQUNR
- Reference Object Type (MPOTY) is IFL -> use TPLNR
- Reference Object Type (MPOTY) is IME -> use a combination of REAL\_EST\_TYPE and REAL\_EST\_ID.

In most of the applications, the initial screen is skipped automatically if the data you have to enter on the initial screen is embedded in the URL address. An exception is the [Create Order](#) application. If you compose a URL address for this application and want to skip the initial screen, you have to explicitly set the SKIP\_INITIAL\_SCREEN parameter to X.

The parameter EAMS\_ROLE with its values EAMS\_ROLE\_GF (for the Generic Functions role) or EAMS\_ROLE\_MW (for the Maintenance Worker role) mainly controls the entries in the [Additional Functions](#) and [You can also](#) menus, including the possibility to execute follow-up actions of the respective application.

## 7 Adding Customer Fields to EAM Applications

In some of your EAM Web Dynpro applications you might need to display additional fields or fields that you have created in your customer namespace in addition to the SAP standard fields. After you have defined additional fields and determined where the system is to display these fields, the user can enter values and save their changes. You can define additional fields on the EAM Web Dynpro in technical objects, maintenance orders, maintenance notifications, and task lists.

There are two different possibilities for adding additional fields:

- You can add fields that you have created in your customer namespace.  
These fields are then available in the field selection of the corresponding Web Dynpro application and can be included in specific user interface building blocks (UIBBs) in Customizing. The system displays your customer fields on the appropriate tab pages of the screen areas you select.
- You can add additional fields that you have defined in Customizing.  
These fields are then available at operation level in maintenance orders and task lists on the tab page called *Additional Fields* in the *Operation Details*.

The following chapters describe how to proceed. First all necessary steps for adding customer-specific fields are described in detail using the maintenance notification as an example. Then some additional information is given for adding customer-specific fields to maintenance orders, task lists, and technical objects. Finally, the last subchapter describes how to add additional fields in orders and task lists on operation level.

### 7.1 Adding Customer Fields to a Notification

If you work with customer-specific fields in notifications and have therefore already used the customer include `CI_QMEL` of table `QMEL` to add your fields in SAP GUI transactions, you can provide these customer-specific fields on the Web UI as well.

You append your additional customer fields to the relevant SAP tables and structures to make them visible on the WEB UI. Furthermore, you can implement a BAdI to process further checks and modify field values.

#### Prerequisites

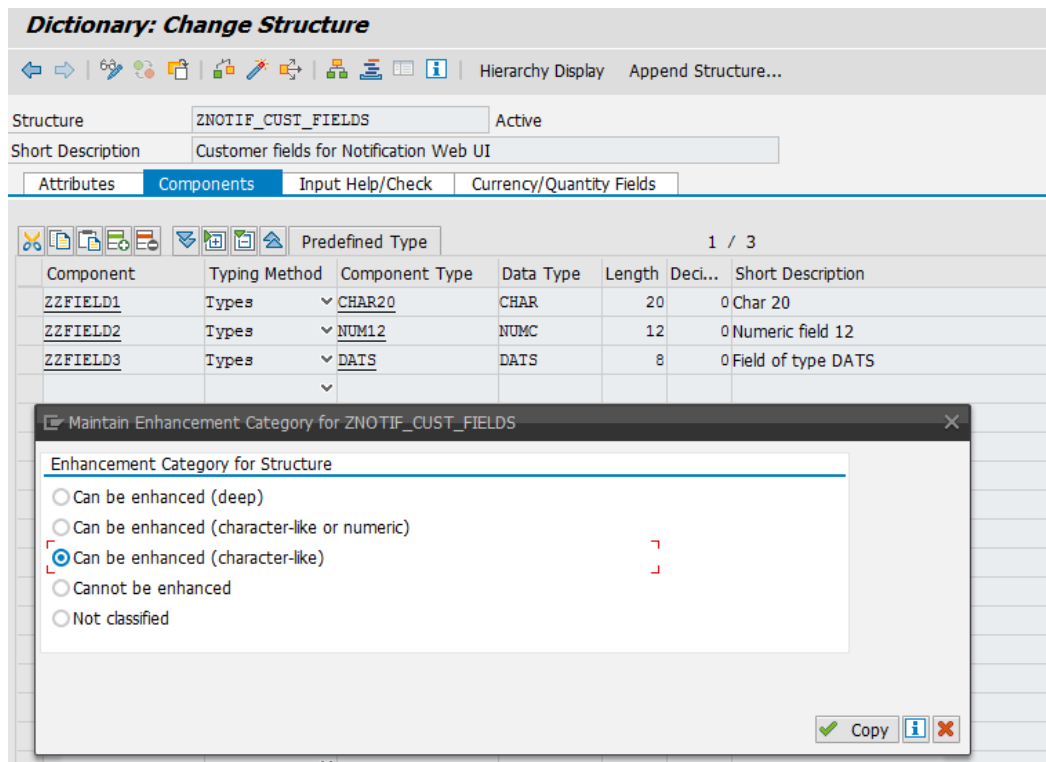
You have implemented the following SAP Notes in your system:

- [2108975](#) Maintenance of Customer Fields via Notification BAPIs (with preparation SAP Note [2151416](#))
- [2110216](#) for preparing the Web UI (with preparation SAP Note [2193536](#))

#### Creating a Structure in the Customer Namespace

First you create a structure in the customer namespace and add your customer-specific fields to this structure. In the next step, you add the entire structure to the respective dictionary objects.

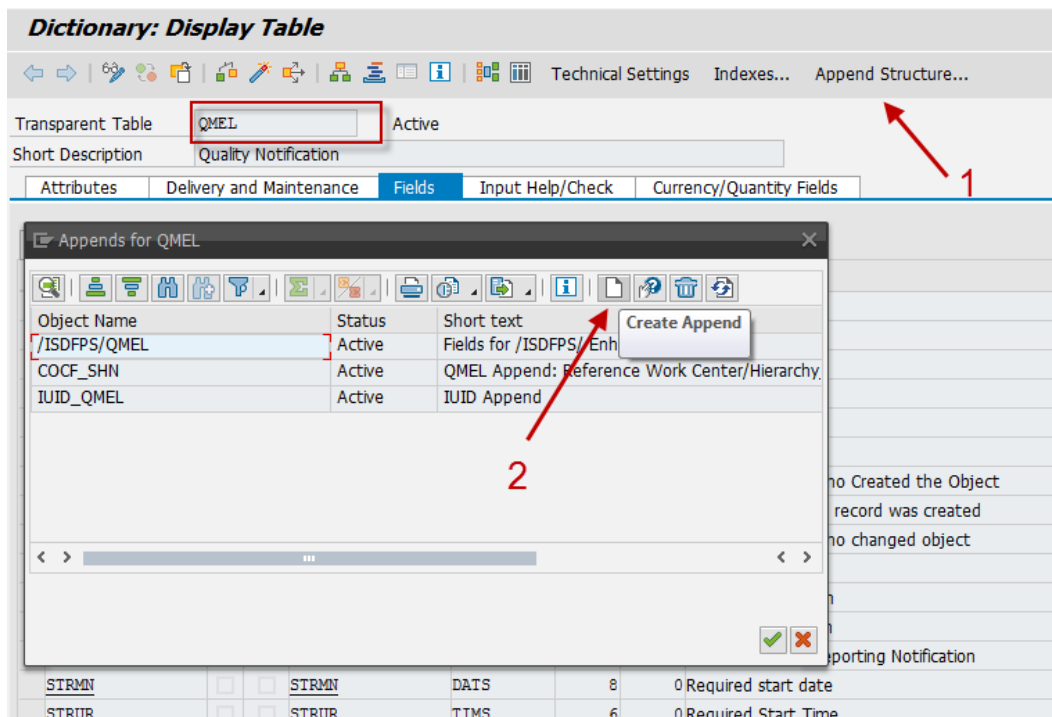
In this example we create the structure `ZNOTIF_CUST_FIELDS` and add three additional fields of different data types. We set the *Enhancement Category* for this structure to *Can Be enhanced (character-like)*.



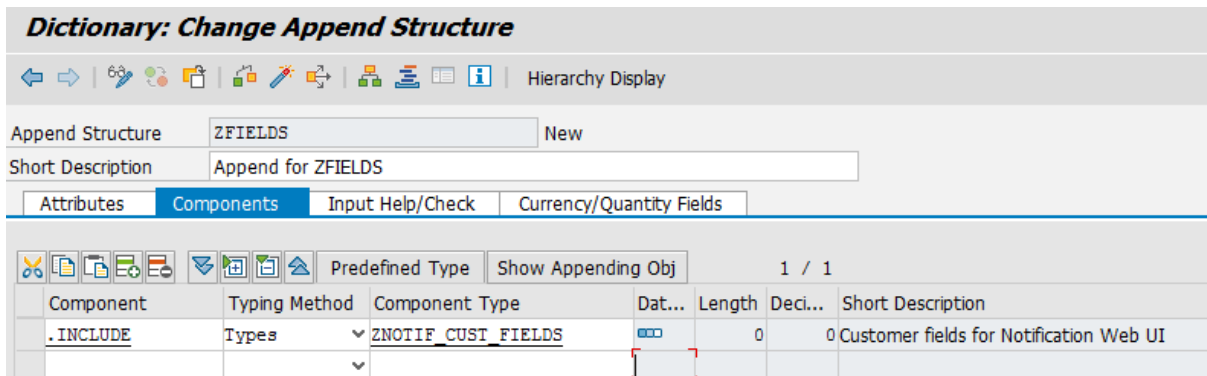
Then we assign the structure to a package and activate it.

### Adding the Customer Structure to the Notification Header

If you want to add your fields to the notification header, you have to append the structure containing customer fields (ZNOTIF\_CUST\_FIELDS) to table type QMEL. To do so, you display data type QMEL in the ABAP Dictionary (transaction SE11), click on [Append Structure...](#) and then click on the [Create Append](#) pushbutton in the popup (2).



After you have specified the technical name of the append structure (here ZFIELDS), you provide a short description and select the *Components* tab page to include your newly created structure ZNOTIF\_CUST\_FIELDS as the include component. Maintain the enhancement category for this append as *Can Be enhanced (character-like)*. Then you save and activate the append structure. Finally you have to check if the main table type (QMEL) is also activated.



In the same way, you create append structures including the structure ZNOTIF\_CUST\_FIELDS for all dictionary objects listed in the following table:

#### Dictionary objects to be enhanced with customer fields for Notification Header

Name	Type	Description
QMEL	Table Type	Quality Notification
BAPI_TE_QMEL	Structure	BAPI Table Extension for QMEL

Name	Type	Description
EAMS_S_SP_NTF_HEADER	Structure	Business Object Notification – Header Data
EAMS_S_BO_NTF_HEADER	Structure	Business Object Notification – Header Data
RIQS5	Structure	PM/SM/QM Notifications: I/O data for creating notification

If you have already added fields to the customer include `CI_QMEL`, do not add them a second time to table `QMEL`. Make sure that the fields have exactly the same technical name in the structures `RIQS5` and `BAPI_TE_QMEL` as well as in the structures `EAMS_S_SP_NTF_HEADER` and `EAMS_S_BO_NTF_HEADER`.

### Displaying the Customer Fields on the UI

Once you have appended your customer-specific fields to the header table `QMEL` and the corresponding structures, you specify where the fields are displayed in the maintenance notification. Generally, you can display these fields on the tab pages [General Data](#), [Location Data](#), [Organizational Data](#), or [Malfunction Data](#). You can choose the exact position on any of the tab pages by changing the customizing of the respective Web Dynpro component configuration (see chapter 3.1):

- `EAMS_WDC_NTF_HEADER` (tab [General Data](#), group [General Data](#) or [Responsibilities](#))
- `EAMS_WDC_NTF_LOCATION_CFG_V2` (tab [Location Data](#), group [Location Data](#))
- `EAMS_WDC_NTF_HEAD_MALFUNC_CFG` (tab [Malfunction Data](#))
- `EAMS_WDC_NTF_ACCOUNT_CFG` (tab [Organizational Data](#), group [Account Assignment](#))

In this example, you want to display the three Z-fields on [the Organizational Data](#) tab page in the group [Account Assignment](#). To do so, you create a customizing (1) for the UIBB `EAMS_WDC_NTF_ACCOUNT_CFG` (2). The repository on the left-hand side provides a list of all fields that are available for the maintenance notification header. In addition to the SAP standard fields the list also contains the three new Z-fields of the structure `ZNOTIF_CUST_FIELDS` (3), so that you can select and add them to the UIBB.

For more information about creating and changing a customizing for a UIBB, see chapter 3.1.

The screenshot displays the 'Component Customizing' window for `EAMS_WDC_NTF_ACCOUNT_CFG`. The top bar shows the component name and a red arrow labeled '2' pointing to it. Below the bar, the 'Repositories' list on the left contains various fields, with a red box and arrow labeled '3' highlighting the Z-fields: `ZZFIELD1` (Char20), `ZZFIELD2` (Length), and `ZZFIELD3` (Date in Format YYYYMMSS...). The 'Preview' section on the right shows the 'Account Assignment' form with fields for Company Code, Main Asset Number/Subnumber, Business Area, WBS Element, and Cost Center. A red arrow labeled '1' points to the 'Form UIBB' dropdown in the top right corner of the preview area.

On the Form UIBB Schema tab page you create a new group in which the Z-fields are displayed. You can choose the group title, layout, field labels, and other parameters.

**Preview**

**Account Assignment**

Company Code:  Main Asset Number/Subnumber:

Business Area:  WBS Element:

Cost Center:

**Group for User Fields**

Text Field:  Number Field:

Date Field:

General Settings **Form UIBB Schema** Menu Schema Quickview Schema

Element Child Element Up Down

**Attributes of Group: Group for User Fields** Final Flags X

**Standard Attributes**

Group Title:  Context Menu ID:

Sequence Index:  Style:

Group Type:

Finally, you save your customizing settings in a transport request.

## 7.2 Adding Fields to Notification Items

### Adding the Customer Structure to the Notification Items

If you want to add fields to the notification item data, that is the [Damages](#), you create append structures including the structure with your customer-specific fields for all dictionary objects listed in the following table:

#### Dictionary objects to be enhanced with customer fields for Notification Items

Name	Type	Description
QMFE	Table Type	Quality notification - items
BAPI_TE_QMFE	Structure	BAPI Table Extension for QMFE
EAMS_S_SP_NTF_ITEM	Structure	Business Object Notification – Items
EAMS_S_BO_NTF_ITEM	Structure	Business Object Notification – Items
RFC_VIQMFE	Structure	PM/SM/QM Notifications: I/O Data for Creating

Name	Type	Description
		Notification

### Displaying the Customer Fields on the UI

You can display the fields appended to notification item table QMFE only on the *Malfunction Data* tab page in the details of a selected damage on the *Damage Details* tab (component configuration EAMS\_WDC\_NTF\_MALFUNC\_DETAIL).

**Component Customizing EAMS\_WDC\_NTF\_MALFUNC\_DETAIL**

**Repositories**

Field	Label
DESCRIPT	Item text
DL_CAT_TYP	ObjectParts
DL_CODE	Object part code
DL_CODEGRP	Object part
D_CAT_TYP	Problems
D_CODE	Damage Code
D_CODEGRP	Problem
EAMS_ITEMKEY	Item Number
EAMS_QMNUM	Notification
HAS_LONGTEXT	Long text
LONGTEXT_ACTION	Char
LONGTEXT_ACTION_ICON	
LONGTEXT_ACTION_TOOL...	Char
TXT_OBJPTCD	Txt ObjectPartCode
TXT_PROBCD	Txt problem code
ZZFIELD1	Char20
ZZFIELD2	Length
ZZFIELD3	Date in Format YYYYMMSS in 8 Characters

**Preview**

**Damaged Object**

Object Part:

**Damage Description**

Damage Code:

Damage Description:

**User Fields**

Text Field:

Number Field:

Date Field:

**Form UIBB Schema**

Element	Display Type	Column	Label	Tooltip
Group: Damaged Object		1		
Group: Damage Descripti...		2		
Group: User Fields		1		
Element: ZZFIELD1	Input Field		Text Field	
Element: ZZFIELD2	Input Field		Number Field	
Element: ZZFIELD3	Input Field		Date Field	

## 7.3 BAdI for Checks on Customer Fields in Notification

The validity of the data entered in the customer fields is not proven until you implement checks in *BAdI: Modification of Data in Notification BAPIs* (IWON\_NOTIFICATION) in enhancement spot ES\_IWON\_NOTIFICATION. You can implement this BAdI via the IMG for *Plant Maintenance and Customer Service* under *System Enhancements and Data Transfer -> Business Add-Ins*.

The default implementation ensures the correct mapping of customer-specific header and item fields in the notification BAPIs. We therefore recommend that you create your own implementation and insert a copy of the implementing class CL\_IM\_IWON\_NOTIFICATION with additional checks for the customer-specific fields. To raise error messages, fill the changing parameter CT\_RETURN.



## 7.4 Adding Customer Fields to the Maintenance Order Header

### Prerequisite

You have implemented the following SAP Note in your system:

- [2110216](#) for preparing the Web UI (with preparation SAP Note [2193536](#))

### Adding the customer structure to the maintenance order header

If you want to add fields to the maintenance order header data, you create append structures including the structure with your customer-specific fields for all dictionary objects listed in the following table:

#### Dictionary objects to be enhanced with customer fields for the Maintenance Order Header

Name	Type	Description
AUFK, AFKO and/or AFIH	Table Type	Order Header Data
CAUFVTAB	Structure	Maps Database View CAUFV as Internal Table
EAMS_TE_CAUFV	Structure	EAMS table extension for order header (AUFK/AFKO/AFIH)
EAMS_S_SP_ORD_HEADER	Structure	Business Object Order - Header Data
EAMS_S_BO_ORD_HEADER	Structure	Business Object Order - Header Data
IBAPI_CAUFVD_UPDATE	Structure	ALM Order BAPIs: Extended Update Structure for Order Header

AUFK, AFKO or AFIH: The fields can be added to one of the tables or be spread over several tables. If you have already used `CI_AUFK`, make sure the fields have exactly the same technical name in the structures for data handling.

**CAUTION:** Unlike in the other structures, the fields in structure `IBAPI_CAUFVD_UPDATE` must have component type `BAPIUPDATE`.

Append Structure	ZCUST_ORD_IBAPI_CAUFV	Active				
Short Description	cust fields order ibapi					
Attributes	Components	Entry help/check				
Currency/quantity fields						
Predefined Type Show Appending Obj 1 / 3						
Component	Typing Method	Component Type	Data Type	Length	Deci...	Short Description
ZZFIELD1	1 Types	BAPIUPDATE	CHAR	1	0	Updated information in related user data field
ZZFIELD2	1 Types	BAPIUPDATE	CHAR	1	0	Updated information in related user data field
ZZFIELD3	1 Types	BAPIUPDATE	CHAR	1	0	Updated information in related user data field

### Displaying the customer fields on the UI

Once you have appended your customer-specific fields to the order header tables, you specify where the fields are displayed in the maintenance order. Generally, you can display these fields on the tab pages [General Data](#), [Location Data](#), [Organizational Data](#), or [Costs](#). You can choose the exact position on any of the tab pages by changing the customizing of the respective Web Dynpro component configuration (see chapter 3.1):

- `EAMS_WDC_ORD_HEADER_CFG_V2` (tab [General Data](#), group [General Data](#) or [Responsibilities](#))

- EAMS\_WDC\_ORD\_LOCATION\_CFG\_V2 (tab [Location Data](#), group [Location Data](#))
- EAMS\_WDC\_ORD\_COSTS\_ESTI\_CFG (tab [Costs](#))
- EAMS\_WDC\_ORD\_ACCOUNT\_CFG (tab [Organizational Data](#), group [Account Assignment](#))

For more information about displaying additional user fields in maintenance order operations, see section 7.10.

## 7.5 BAdI for Checks on Customer Fields in Maintenance Order

The validity of the data entered in the customer fields is not proven until you implement checks in [BAdI: Adapt Transferred Data to BAPI](#) (IBAPI\_ALM\_ORD\_MODIFY) in enhancement spot IBAPI\_ALM\_ORD\_MODIFY. You can implement this BAdI via the IMG for [Plant Maintenance and Customer Service](#) under [System Enhancements and Data Transfer](#) -> [Business Add-Ins](#).

The EAMS implementation ensures the correct mapping of customer-specific header fields in the maintenance order BAPIs. We therefore recommend that you create your own implementation and insert a copy of the implementing class CL\_EAMS\_IM\_ALM\_ORD\_MODIFY with additional checks for the customer-specific fields.

## 7.6 Adding Customer Fields to the Task List Header

### Prerequisite

You have implemented the following SAP Note in your system:

- [2110216](#) for preparing the Web UI (with preparation SAP Note [2193536](#))

### Adding the customer structure to the task list header

If you want to add fields to the task list header, you create append structures including the structure with your customer-specific fields for all dictionary objects listed in the following table:

#### Dictionary objects to be enhanced with customer fields for the Task List Header

Name	Type	Description
PLKO	Table Type	Task list - header
EAM_S_HDR_INS	Structure	Task List API: Header data insert structure
EAMS_S_SP_TL_HEADER	Structure	Task List Basic Data
EAM_S_PLKOD_UP	Structure	Task List API: Update flags for TL header data change

If you have already added fields to the customer includes CI\_PLKO and/or CI\_TASKLIST, do not add them a second time to table PLKO. Make sure that the fields have exactly the same technical name in the structures listed above for data handling.

**CAUTION:** Unlike in the other structures, the fields in structure EAM\_S\_PLKOD\_UP must have component type BAPIUPDATE.

## Displaying the customer fields on the UI

You can display the fields appended to the task list header table only on the *General Data* tab page. You can choose the exact position by changing the customizing of the respective Web Dynpro component configuration `EAMS_WDC_TL_HEADER_CFG2` (tab *General Data*).

For more information about displaying additional user fields in task list operations, see section 7.10.

## 7.7 BAdI for Checks on Customer Fields in Task List Header

The validity of the data entered in the customer fields is not proven until you implement checks in *BAdI: Adjustment of Data for Service Provider Access Methods* (`/PLMB/EX_SPI_APPL_ACCESS`) in enhancement spot `/PLMB/ES_SPI`. You can implement this BAdI via the IMG for *Plant Maintenance and Customer Service* under *System Enhancements and Data Transfer* -> *Business Add-Ins*.

The filter values for the implementation are `APPLICATION_BUILDING_BLOCK = EAMS_TL` and `NODE_NAME = EAMS_HEADER`.

## 7.8 Adding Customer Fields to Technical Objects

### Prerequisites

You have implemented the following SAP Notes in your system:

- [2146575](#) for Enhancing Technical Object BAPIs
- [2147458](#) for Preparing the WEB UI for Technical Objects

### Adding the customer structure to pieces of equipment

If you want to add fields to pieces of equipment, you create append structures including the structure with your customer-specific fields for all dictionary objects listed in the following table:

#### Dictionary objects to be enhanced with customer fields for Pieces of Equipment

Name	Type	Description
EQUI	Table Type	Equipment master data
EAMS_TE_EQUI	Structure	EAMS table extension for equipment
EAMS_S_BO_EQUI_BASIC_DATA	Structure	Business Object Functin Location Basic Data
EAMS_S_SP_EQUI_BASIC_DATA	Structure	Business Object Equipment Basic Data
ITOBAPI_MODIFY_EQ	Structure	PM: Modifiable Equipment Data Through API Interfaces
ITOBAPI_CREATE_EQ	Structure	PM: Createable Equipment Data Using API Interfaces

If you have already added fields to the customer include `CI_EQUI`, do not add them a second time to table `EQUI`. Make sure that the fields have exactly the same technical name in the structures listed above.

If you want to add fields to functional locations, you create append structures including the structure with your customer-specific fields for all dictionary objects listed in the following table:

**Dictionary objects to be enhanced with customer fields for Functional Locations**

Name	Type	Description
IFLOT	Table Type	Functional Location (Table)
EAMS_TE_IFLOT	Structure	EAMS table extension for functional location
EAMS_S_BO_FL_BASIC_DATA	Structure	Business Object Function Location Basic Data
EAMS_S_SP_FL_BASIC_DATA	Structure	Business Object Function Location Basic Data
ITOBAPI_MODIFY_FL	Structure	PM: Functional Location Data Changeable Using API Interfaces
ITOBAPI_CREATE_FL	Structure	PM: Functional Location Data Creatable Using API Interfaces

If you have already added fields to the customer include `CI_IFLOT`, do not add them a second time to table `IFLOT`. Make sure that the fields have exactly the same technical name in the structures listed above.

**Displaying the customer fields on the UI**

Once you have appended your customer-specific fields to the equipment table `EQUI` or functional location table `IFLOT` and the corresponding structures, you specify where the fields are displayed in the technical object application. Generally, you can display these fields on the tab pages *General Data*, *Location Data*, *Organizational Data*, or *Structure*. You can choose the exact position on any of the tab pages by changing the customizing of the respective Web Dynpro component configuration (see chapter 3.1).

The following Web Dynpro component configurations are valid for **pieces of equipment**:

- `EAMS_WDC_EQUI_GENDAT_CFG` (tab *General Data*, group *Manufacturer Data* or *Reference Data*)
- `EAMS_WDC_EQUI_GENDAT_LCTN_CFG` (tab *Location Data*, group *Location Data*)
- `EAMS_WDC_EQUI_GENDAT_STRUC_CFG` (tab *Structure*, group *Structuring*)
- `EAMS_WDC_EQUI_GENDAT_ORG_CFG` (tab *Organizational Data*, group *Account Assignment* or *Responsibilities*)

The following Web Dynpro component configurations are valid for **functional locations**:

- `EAMS_WDC_FL_GENDAT_CFG` (tab *General Data*, group *Manufacturer Data* or *Reference Data*)
- `EAMS_WDC_FL_GENDAT_LCTN_CFG` (tab *Location Data*, group *Location Data*)
- `EAMS_WDC_FL_GENDAT_STRUC_CFG` (tab *Structure*, group *Structuring*)
- `EAMS_WDC_FL_GENDAT_ORG_CFG` (tab *Organizational Data*, group *Account Assignment* or *Responsibilities*)

## 7.9 BAdI for Checks on Customer Fields in Technical Objects

The validity of the data entered in the customer fields is not proven until you implement checks in *BAdI: Customer Fields in BAPIs for Technical Objects* (`BADI_EAM_ITOB_BAPI_CUST_FIELDS`) in enhancement spot `ES_EAM_ITOB_BAPI_CUST_FIELDS`. You can implement this BAdI via the IMG for *Plant Maintenance and Customer Service* under *System Enhancements and Data Transfer* -> *Business Add-Ins*.

The EAMS implementation ensures the correct mapping of customer-specific fields in the technical object BAPIs. We therefore recommend that you create your own implementation and insert a copy of the implementing class `CL_EAMS_IM_ITOB_CUST_FIELDS` with additional checks for the customer-specific fields.

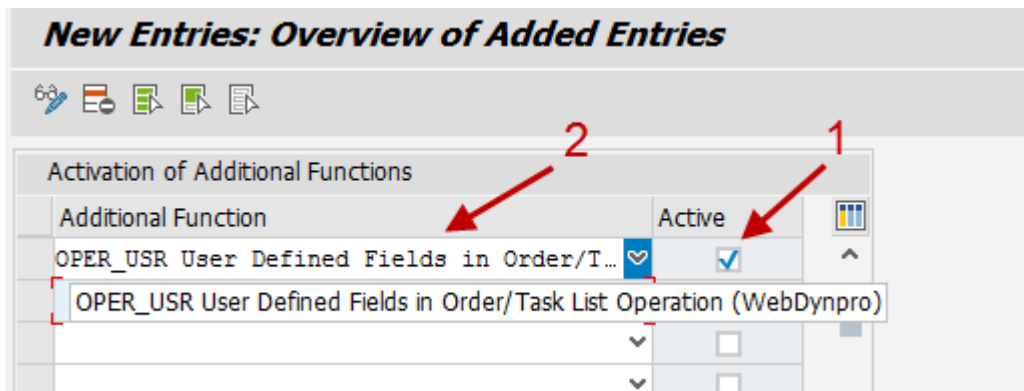
## 7.10 Displaying Customer Fields in Order Operations and Task List Operations

You can define additional fields for maintenance orders and task lists at operation level that users can choose to display and in which they can enter values. Unlike than the procedure described above for customer fields on order and task list header level, you do not insert Z-fields and display them at operation level by changing the customizing of the respective UIBB. On operation level you use predefined text fields, quantity fields, value fields, date fields, and checkboxes in IMG activity [Define User Fields](#) and assign your customer-specific field names in all relevant log-on languages.

### Prerequisites

You have implemented the following SAP Note in your system:

- 2110216 for preparing the Web UI (with preparation SAP Note 2193536)
- You have activated (1) the customizing parameter [User Defined Fields in Order/Task List Operation \(Web Dynpro\)](#) (`OPER_USR`) (2) in Customizing for [Plant Maintenance and Customer Service under System Enhancements and Data Transfer](#) → [Activate Functions for Enterprise Asset Management](#) (view `V_EAM_ACT_FUNC` in [View Maintenance](#) (SM30)):



### Defining field keys and assigning field names in Customizing

First you **specify field keys** in Customizing for [Plant Maintenance and Customer Service under Maintenance Plans, Work Centers, Task Lists and PRTs -> Task Lists -> Operation Data](#) → [Define User Fields](#). Assign IDs and names to each field key in all required log-on languages. Every field key you define here is displayed in the [Field Key](#) input help in the operation detail data of orders **and** task lists.

Then you specify which **fields** you want the system to display when a user chooses a field key. The values entered in the details for a field key represent one user field of a special type (text, quantity, value, date or checkbox). The value entered is used as the label for the user field in the UI, so you have to maintain the field names in all relevant log-on languages. User fields without a value will not be shown in the order and task list operations.

**Change View "User fields": Details**

New Entries

Field key: Z000001 User-defined fields

Text	Text 1	Text 2
Text	Text 7	Text 8
Quantity	Quantity 1	Quantity 3
Value	Value 3	Value 5
Date	Date 1	Date 3
Checkboxes	Indicator 1	Indicator 3

Authorization object

If you have already set up user fields for order and task list operations for the SAPGUI transactions, you don't have to make these Customizing settings a second time.

### Setting a Default Field Key

If you want the user to have a field key displayed by default for the **maintenance order application**, you can proceed as follows:

Create a profile and enter the respective field key in the maintenance order profile in Customizing for *Plant Maintenance and Customer Service under Maintenance and Service Processing -> Maintenance and Service Orders -> Functions and Settings for Order Types -> Create Default Value Profiles for General Order Data*.

**Change View "Default Values for PM/CS Orders": Details**

New Entries

Profile Network

Network profile	0000001
Description	PM: Standard profile

Operation parameters

Field key	Z000001
Calculation key	1

You can also specify different profiles for different order type / plant combinations in Customizing for *Plant Maintenance and Customer Service -> Maintenance and Service Processing -> Maintenance and Service Orders -> Functions and Settings for Order Types -> Default Values for Task List Data and Profile Assignments*. Specify the maintenance order profile for the respective plant / order type combination:

**Change View "Screen Ref. Object, General Profiles, Task List Presettin**

New Entries

Plant 0001

Order Type ZTST

Screen Ref. Object, General Profiles, Task List Presetting

Short Text Profile for user fields on operation

ExternProfile 0000002

Mat.Profile 0000002

MaintProfile Z0000001

Act/op UoM H

☐ OperSelection

☐ WrkCtrSelect

☐ Renumber

☐ Incl.once.comp.

☐ Oper. sorting

If you want the user to have a field key displayed by default for the **task list application**, you can proceed as follows:

Create a profile and enter the respective field key (2) in the maintenance task list profile (1) in Customizing for *Plant Maintenance and Customer Service under Maintenance Plans, Work Centers, Task Lists and PRTs -> Task Lists -> Control Data -> Define Profiles with Default Values*.

**Change View "Maintenance Task List Profile Data": Details of Selected**

Application I Maintenance task lists

Profile PM01 Ext. proc. profile for Plant Maintenance

General

Oper./act. increment 0100

Group PM

Field key ZUSER

Rel. view

Name NETWORK

### User Fields for Operations on the UI

Once you have made the required Customizing settings, the system displays the new *Additional Fields* tab page (2) in the *Details* (1) area of order operations and task list operations. If you choose the *Additional Fields* tab page, you can select a field key from the respective input help (3). The system then shows all fields that have been maintained in Customizing for the respective field key (4).

The screenshot displays the 'Operation Data' section of the SAP EAM Web UI. At the top, there are tabs for General Data, Location Data, Organizational Data, Operation Data (active), Relationships, Object List, Costs, Documents, Permits, and Safety Plan. Below these is a table of operations. The first row shows operation '0010' with status 'CRTD'. A red arrow labeled '1' points to the 'O...' column header. Below the table, the 'Details: Operation 0010' section is shown with several sub-tabs: Operation Details, Requirements, Materials, Relationships, Production Resources/Tools, External Data, Limits, Service Packages, and Additional Fields. A red arrow labeled '2' points to the 'Additional Fields' tab. Within this tab, there is a 'Field key:' dropdown menu currently set to 'User-defined fields', highlighted by a red arrow labeled '3'. Below this dropdown is a large form area containing various input fields for text, quantity, value, date, and indicator. A red arrow labeled '4' points to this form area. The form includes fields for Text 1 (text 1), Text 2 (text3), Text 7, Text 8, Quantity 1 (30,000), Quantity 3 (0,000), Value 3 (0,000), Value 5 (0,000), Date 1 (01.01.2015), Date 3 (02.02.2015), and Indicator 1 (checkbox).

It is not necessary to create a customizing of the respective UIBB. The number and type of the additional fields for the operations is the same as in SAPGUI transactions for order and task list.

**CAUTION:** If the user changes a field key of an operation, any values that have already been entered are deleted.



## 8 Asset Viewer

The Asset Viewer is a display tool in the software component PLMWUI that enables simple navigation through complex object relations on an integrated user interface. You can display the objects and navigate flexibly both within them and in the hierarchical object structure. You can display most of the EAM objects, such as notifications, orders, task lists and technical objects, in the Asset Viewer.

### 8.1 Working with the Asset Viewer Based on the PLM Object Navigator

As the Asset Viewer is integrated into the EAM application, you can use the Asset Viewer to display EAM objects such as notifications, orders and task lists as well as maintenance-related objects such as technical objects, materials and measurement documents. In applications for displaying, changing and/or creating individual object types, you start the Asset Viewer by choosing the respective option in the *You can also* menu.

In this example, you want to use the Asset Viewer to display the technical object assigned to the notification.

The screenshot shows the 'Create Notification' interface for notification %000000000001. The notification type is 'M1, Maintenance Request'. The 'Additional Functions' menu is open, showing the 'You can also' sub-menu. The option 'Display Technical Object in Asset Viewer' is highlighted with a red box. Below the menu, the 'General Data' tab is active, showing a 'Long Text' field and a 'Technical Object' field containing 'STB-1000-DF01', which is also highlighted with a red box. The description of the technical object is 'Electric pump 001 with const type'.

The Asset Viewer provides two areas of information. On the left-hand side, a structure view (1) displays the structure list of the technical object. On the right-hand side, the Object Navigator (2) provides all the data belonging to the object selected in the structure view on several views displayed as tab pages.

**Asset Viewer : Technical Object STB-1000-DF01**

Technical Object Options | Refresh | Synchronize | Navigator Settings | Additional Functions

Technical Object STB-1000-DF01

Equipment STB-1000-DF01 Object Description Electric pump 001 with const type

**Structure**

Object	Object ID	Description
STB-1000-DF01		Electric pump 001 with const type
STB-BOM-CONSTTYPE		STB Material with BOM Construction Type

**Task List and Operations**

Select All | Deselect All | Expand from Selection | Show Details | Additional Functions

Object ID	Object Description	Equipment	Description	Functional Loc.	Description	Work center	PRT Indicator	Control key
E/8/1								
E/8/2			STB test EQUI task list					

Depending on the object type of the object, the Asset Viewer displays different tab pages on the right-hand side. In this example, there is a material beneath the piece of equipment. If the user selects this material in the structure list (1), the Asset Viewer displays tab pages in the Object Navigator (2) that differ from those of the equipment.

**Asset Viewer : Material STB-BOM-CONSTTYPE**

Material Options | Refresh | Synchronize | Navigator Settings | Additional Functions

Technical Object STB-1000-DF01 > Material STB-BOM-CONSTTYPE

Material STB-BOM-CONSTTYPE Object Description STB Material with BOM Construction Type Material Type HALB

**Structure**

Object	Object ID	Description
STB-1000-DF01		Electric pump 001 with const type
STB-BOM-CONSTTYPE		STB Material with BOM Construction Type

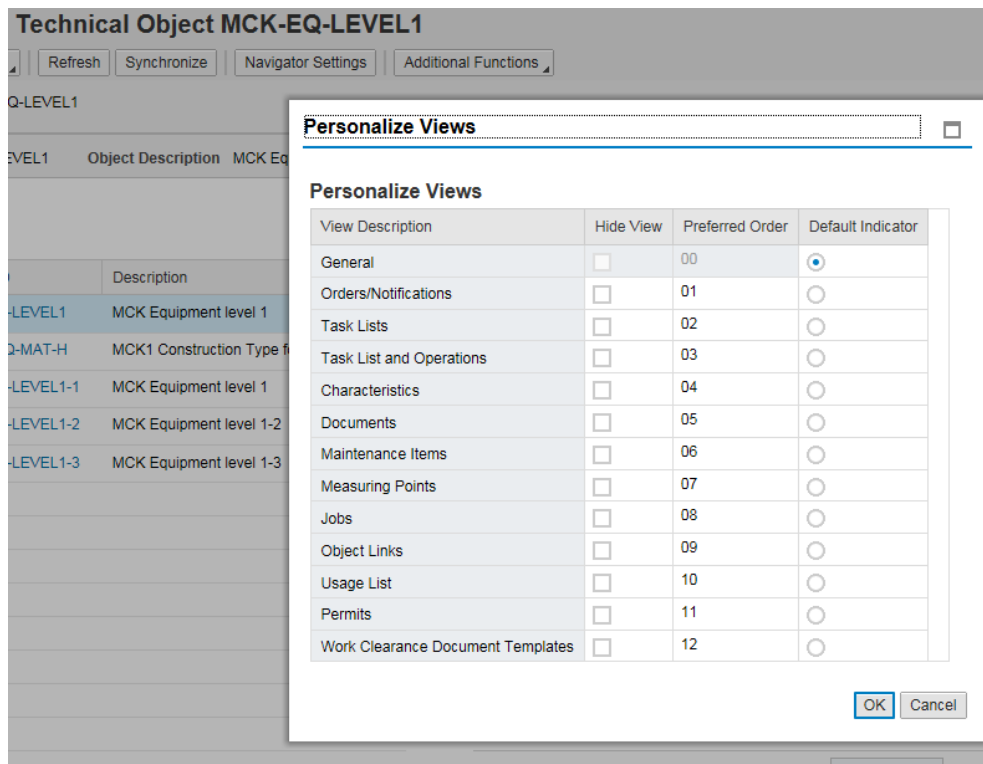
**General Data** | **Characteristics** | **Structure** | **Linked Documents** | **Where-Used List**

Select All | Deselect All | Expand from Selection | Show Details | Additional Functions

Object ID	Object Description	Component	Quantity	Unit of Meas.	Ch
STB-BOM-CONSTTYPE/0001/4/1			1,000	PX	

Some of the views are homogenous lists that display one type of information (for example, the task lists for a technical object) others consist of heterogeneous lists with different types of information (for example, orders and notifications). In heterogeneous lists, the table entries can have sub-objects. You can access more detailed information for these objects by selecting the table entry and choosing *Show Details*. The details open on the right-hand lower part of the screen.

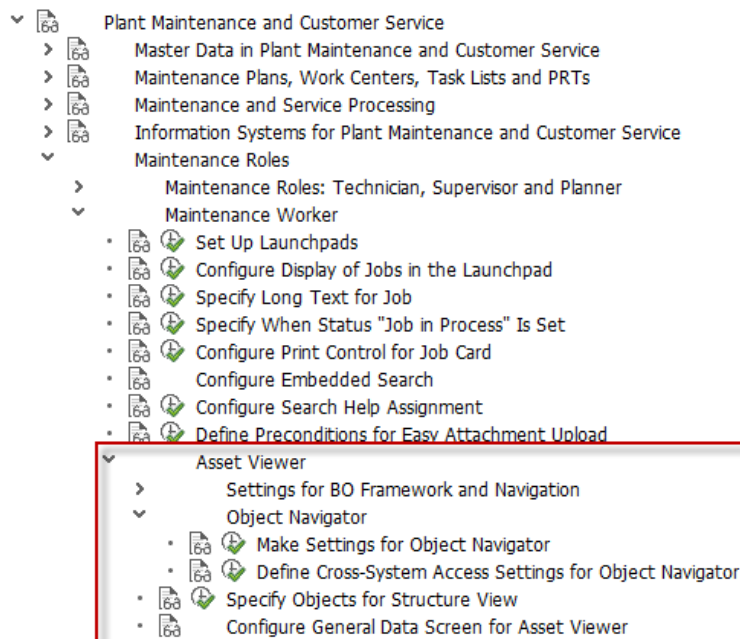




## 8.2 Customizing Settings for the Asset Viewer

In customizing you can make settings for the object types that you display on the Object Navigator screen, as well as which tab pages are displayed for each object type and how the relations between objects in these views are displayed. You can also make additional settings, such as add or remove fields in lists, change the sequence of views or restrict views in view variants.

You can change the settings for the Asset Viewer in customizing for [Plant Maintenance and Customer Service under Maintenance Roles -> Maintenance Worker -> Asset Viewer](#).



## 8.2.1 Specifying Objects Displayed in the Structure View

In the IMG activity *Specify Objects for Structure View* (also accessible using transaction SM30 and view name EAMS\_V\_OBJTYPE), you can define which object types can be displayed in the structure view. Additionally, you can restrict the display of objects by using the authorization object EAMS\_SV. To do so, assign the authorization object EAMS\_SV to the user and maintain values for object types not to be displayed.

Even if the user is not authorized to display certain objects in the Asset Viewer, you can, nevertheless, specify that the system displays an “unauthorized object” line for each object. In this case, the user will then be informed that there are more objects assigned but not displayed for authorization reasons. The system only displays these “unauthorized object” lines if you select the checkbox *Active* for object type EAMS\_AUTH.

**Change View "Specify Objects for Structure View": Overview**

New Entries

OTYPE	Description of Object Type	Object Class Name	Active
EAMS_AUTH	Object Without Display Authorization	CL_EAMS_SV_NOAUTH	<input type="checkbox"/>
EAMS_EQUI	Technical Object	CL_EAMS_SV_EQUI	<input checked="" type="checkbox"/>
EAMS_FL	Technical Object	CL_EAMS_SV_FL	<input checked="" type="checkbox"/>
EAMS_MAT	Material	CL_EAMS_SV_MAT	<input checked="" type="checkbox"/>
EAMS_SGAP	Structure Gap	CL_EAMS_SV_SGAP	<input checked="" type="checkbox"/>
PLM_MAT	Material	CL_EAMS_SV_MAT	<input checked="" type="checkbox"/>

## 8.2.2 Changing the Order of Views Depending on the Object Type

In the IMG activity *Make Settings for Object Navigator* (also accessible using transaction SM34 and view cluster name /PLMB/VC\_NAV), you can adjust the sequence of the tab pages depending on the object type. If you double-click on the menu entry *Object Types*, you open a list of object types with the corresponding classes.

In this example, you want to change the sequence of tab pages shown when the user displays a piece of equipment in the Asset Viewer. You therefore choose the object type EAMS\_EQUI from the list and double-click on the menu entry *View Layout*.

Object Type	Description of Object Type	Class
EAMS_DIR_O	Originals of DIR	CL_EAMS_NAVO_DIR_ORIG
<b>EAMS_EQUI</b>	<b>Technical Object</b>	CL_EAMS_NAVO_EQUI
EAMS_FL	Technical Object	CL_EAMS_NAVO_FL
EAMS_TOP	Technical Object	CL_EAMS_NAVO_TOP

In the *View Layout* (1), all views (displayed as tab pages) belonging to the selected object type are listed. In this example, you can specify the order of views for object type EAMS\_EQUI (2). If you define a default view, this view is always displayed as the first tab page. If you do not specify a special default view, the system displays the *General Data* view as default view. The *General Data* view is always available and is customized differently (see section 8.3). In this example, you want the *Orders/Notifications* view to be displayed as a second tab page directly after the *General Data* tab. You therefore assign position number 1 to the tab page EQUI\_ASG\_ORDNTF.

View Name	Default	Preferred Order
EQUI_ASG_CHAR	<input checked="" type="radio"/>	4
EQUI_ASG_DIR	<input type="radio"/>	5
EQUI_ASG_JOB	<input type="radio"/>	8
EQUI_ASG_MP	<input type="radio"/>	7
EQUI_ASG_MPOS	<input type="radio"/>	6
EQUI_ASG_OLNK	<input type="radio"/>	9
EQUI_ASG_ORDNTF	<input type="radio"/>	1
EQUI_ASG_RPRM	<input type="radio"/>	11
EQUI_ASG_TL	<input type="radio"/>	2
EQUI_ASG_TL_TLOP	<input type="radio"/>	3
EQUI_ASG_USGLIST	<input type="radio"/>	10
EQUI_ASG_WCDT	<input type="radio"/>	12

## 8.2.3 Adding Additional Fields to Heterogeneous Lists

In this example, you want to enhance the number of order-relevant fields displayed as table columns on the tab page *Orders/Notifications*. You therefore select the object type EAMS\_ORD (order) and choose the *Columns of heterogeneous List* entry (1) in the *Dialog Structure*. Choose *New Entries* (2) to add new fields and then open the

input help of the [Data Element](#) column that displays all available fields for the selected order view. In this example, you want to display the order type on the tab page [Orders/Notifications](#), so you select the field AUFART from the input help list. The system then displays this new table column in the list of columns for the selected view EAMS\_ORD.

**Change View "Columns of heterogeneous List": Overview**

Obj. Type: **EAMS\_ORD**

Columns of heterogeneous List

Data Element	Description
/PLMB/GOS_OTYPE_DESC	Description of Object Type
/PLMB/NAV_DISPLAY_KEY_DESC	Object Description
<b>AUFART</b>	<b>Order Type</b>
EAMS_TEC_OBJ	Technical Object
EAMS_TEC_OBJ_DESC	Technical Object Description
EAMS_TEC_OBJ_TYPE	Technical Object Type
INGRP	Planner group
IWERK	Planning plant
PRIOK	Priority
RAUMNR	Room
STORT	Location
SWERK	Maintenance plant

Diagram Structure:

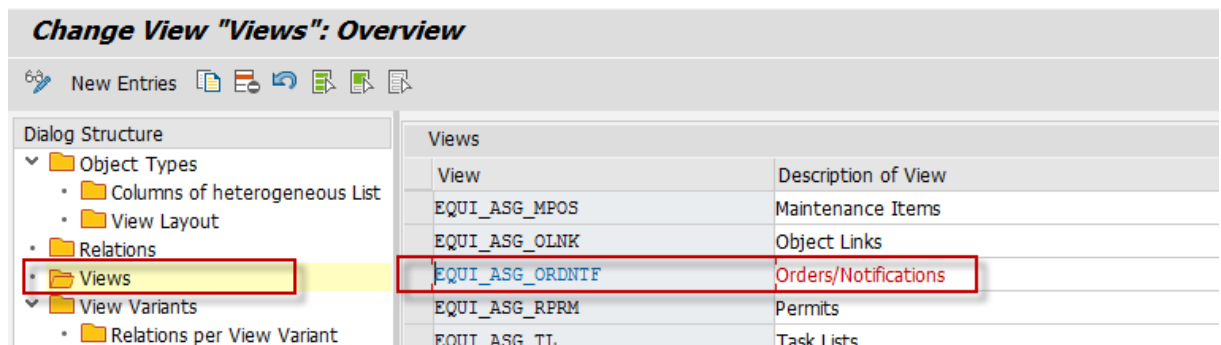
- Object Types
  - Columns of heterogeneous List
  - View Layout
- Relations
- Views
- View Variants
  - Relations per View Variant
  - View Variant Ranking
  - Preferred Order of columns of a heterogeneous List
  - Parameters not Considered for Personalization

If you now display a piece of equipment in the Asset Viewer and display the assigned orders and notifications, the order type is displayed on the [Orders/Notifications](#) tab page.

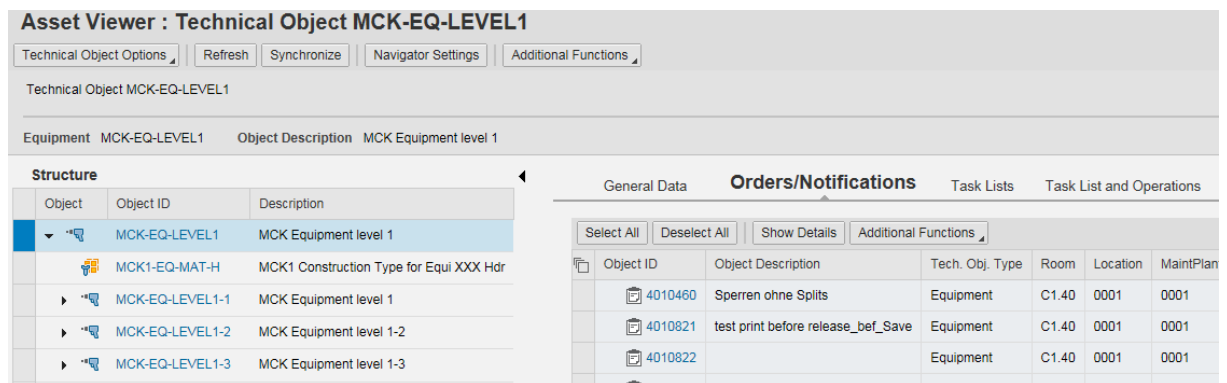
General Data <b>Orders/Notifications</b> Task Lists Task List and Operations Characteristics Documents Maintenance Items										
Select All Deselect All Show Details Additional Functions										
Object ID	Object Description	Tech. Obj. Type	Room	Location	MaintPlant	Planning plant	Object Type	Order Type	Tech. Object	
10016190		Equipment	B119		0001	0001			MCK-SIDEPANEL	
4010580		Equipment	B119	0001	0001	0001		PM01	MCK-SIDEPANEL	
4011248		Equipment	B119	0001	0001	0001		PM01	MCK-SIDEPANEL	
4011341		Equipment	B119	0001	0001	0001		PM01	MCK-SIDEPANEL	
4011342		Equipment	B119	0001	0001	0001		PM01	MCK-SIDEPANEL	

## 8.2.4 Defining View Variants per Role

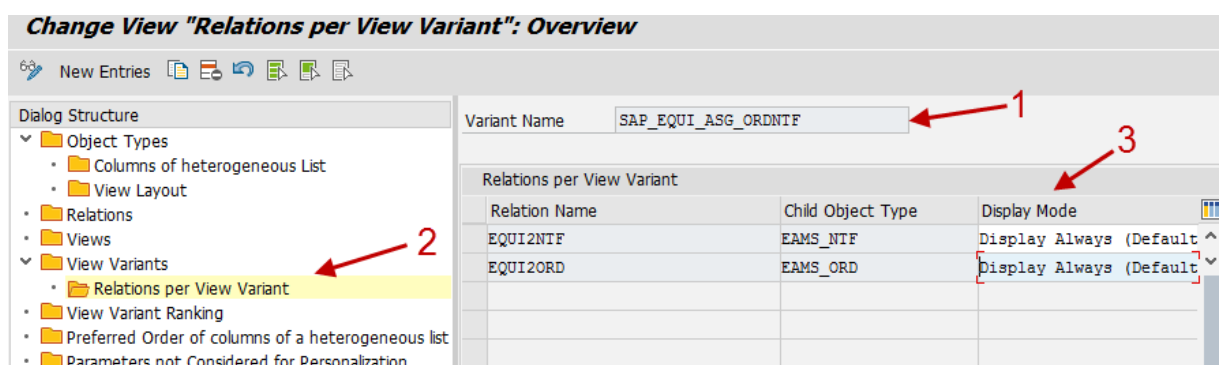
Choose [Views](#) in the [Dialog Structure](#) to obtain an overview of all the views available in the Object Navigator.



For each view at least one view variant is defined, where its relations and the visibility of data is specified. In this example, we want to change the view EQUI\_ASG\_ORDNTF, which displays all related orders and notifications belonging to a piece of equipment.

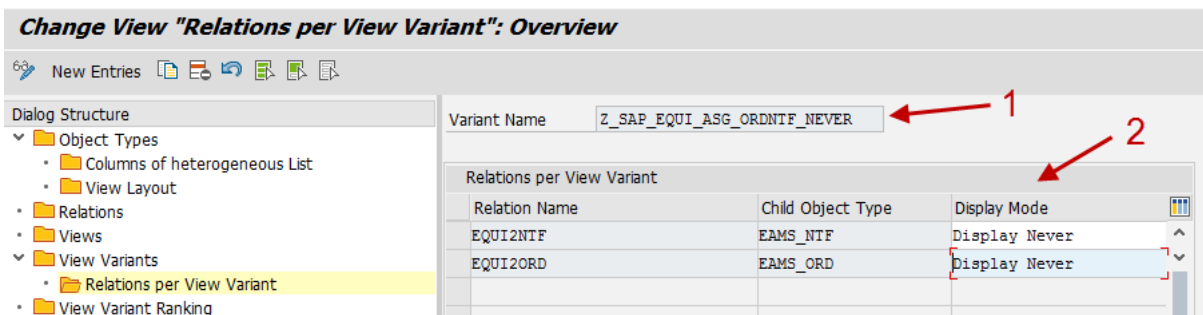


To change the visibility of data in this view, choose *View Variants* in the *Dialog Structure* and select the corresponding view variant SAP\_EQUI\_ASG\_ORDNTF (1). Then choose *Relations per View Variant* (2). The default setting for this view variant specifies that relations from pieces of equipment to notifications and to orders are always displayed (3) in the Asset Viewer.



To prevent a user from displaying information about notifications and orders when displaying a piece of equipment in the Asset Viewer, create an additional view variant in the customer namespace (1) by copying the SAP standard view variant. In the *Relations* overview you can change the display option in the column *Display Mode* to *Display Never* (2).





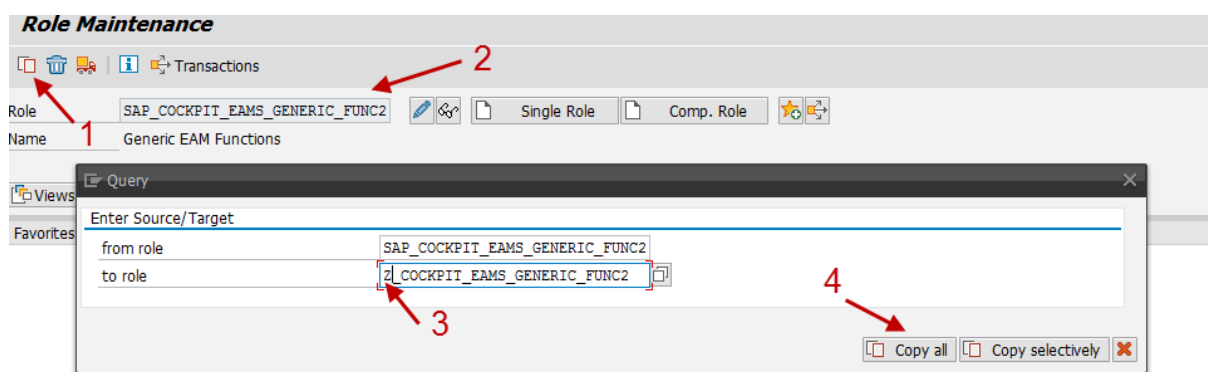
By creating different view variants, you can define which groups of users are authorized to see which information in the Asset Viewer.

In this example the tab page *Orders/Notifications* would be empty, because all relations are set to *Display Never*.

## 8.2.5 Changing the Authorization for Displaying Views in the Asset Viewer

To assign view variants to a group of users, you need to maintain the authorization object `PLM_LAYOUT` in the user's role in transaction `PFCG`. In this example, we assign the newly created view variant `Z_SAP_EQUI_ASG_ORDNTF_NEVER` to our user's role.

In a first step, you have to create a new user-group specific role by copying (1) the SAP standard role `SAP_COCKPIT_EAMS_GENERIC_FUNC2` (2). You create the new role in the Z-namespace (3) and save your entries (4).



After you have created the new role, you can specify the authorizations. On the tab page *Authorizations* (1) of the role `Z_COCKPIT_EAMS_GENERIC_FUNC2`, you can change the authorization objects (2).

### Change Roles

Other role |

---

Role

Role:  Role do

Description:

Target System:  No destination

---

Description Menu **Authorizations** User Personalization

---

Created

User	SAXM
Date	21.11.2014
Time	15:55:05

Last Changed

User	SAXM
Date	21.11.2014
Time	15:55:05

---

Information About Authorization Profile

Profile Name:

Profile Text:

Status:

---

Maintain Authorization Data and Generate Profiles

Change Authorization Data 2

Change authorization data

Before you can maintain the authorization objects, you have to specify the organizational levels for the role in a popup.

Maint.: 28 Unmaint. org. levels 88 open fields, Status: Changed

Z\_COCKPIT\_EAMS\_GENERIC\_FUNC2 Generic EAM Functions - Asset Viewer Layout

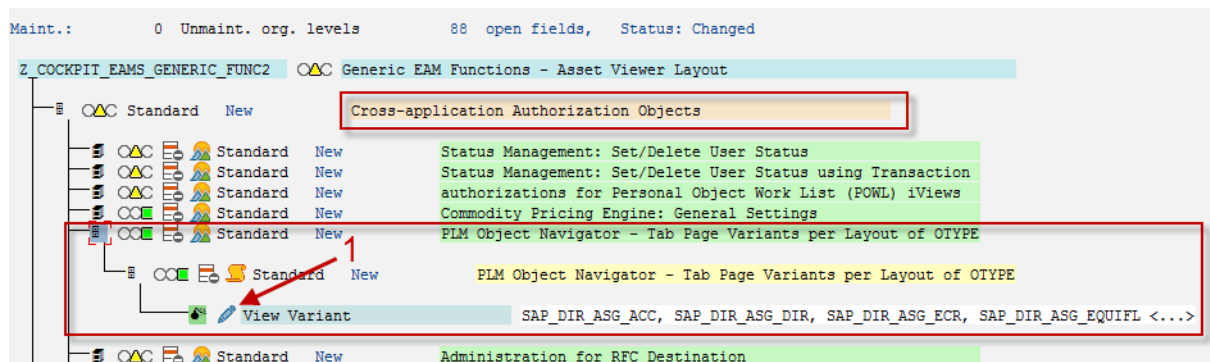
Cross-application Authorization Objects

Define Organizational Levels

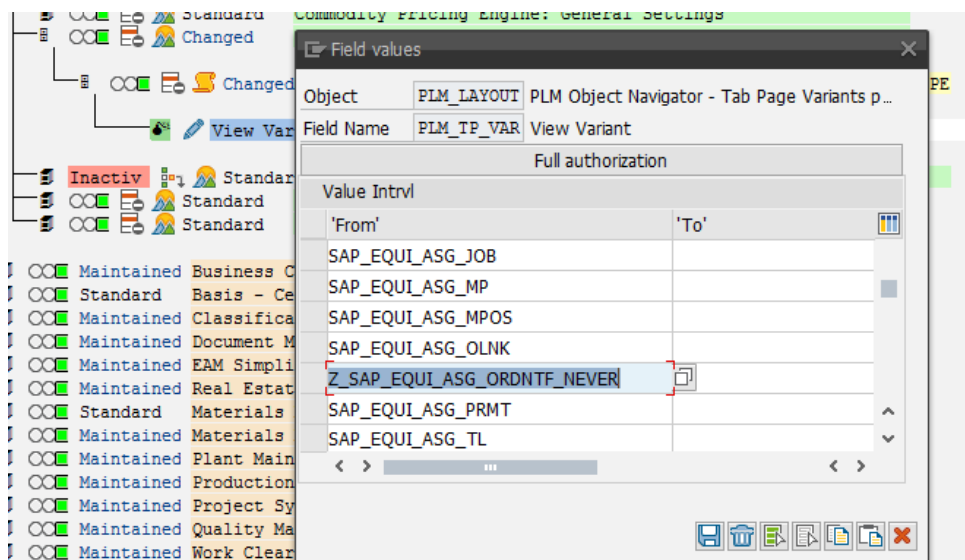
Maintain the values for the organizational levels of the role.

Field Vals of OrgLevels	'From'	'To'	Mo...	C..
Work Center				
Company Code				
Purchasing Group				
Purchasing Organization				
Maintenance planning plant				
Controlling Area				
Maintenance plant				
Plant				

In the section *Cross-Application Authorization Objects*, find the authorization object *PLM Object Navigator - Tab Page Variants per Layout of OTYPE* (PLM\_LAYOUT). Choose the pencil icon (1) to make changes to the views variants.



All view variants that are assigned to the selected role are listed in a popup. You have already created the view variant Z\_SAP\_EQUI\_ASG\_ORDNTF\_NEVER to prevent some user groups from displaying information about notifications and orders when displaying a piece of equipment in the Asset Viewer. You now replace the SAP standard view SAP\_EQUI\_ASG\_ORDNTF with the new view variant Z\_SAP\_EQUI\_ASG\_ORDNTF\_NEVER.



Save your changes and generate the profile for this role. If you have not already done so, you have to assign users who are not allowed to display notification and order data to the role Z\_COCKPIT\_EAMS\_GENERIC\_FUNC2.

If users now log on with role Z\_COCKPIT\_EAMS\_GENERIC\_FUNC2 and open a piece of equipment in the Asset Viewer, they can still display the tab page Orders/Notifications, but no data is shown.

**Asset Viewer : Technical Object MCK-EQ-LEVEL1**

Technical Object Options Refresh Synchronize Navigator Settings Additional Functions

Technical Object MCK-EQ-LEVEL1

Equipment MCK-EQ-LEVEL1 Object Description MCK Equipment level 1

Structure		
Object	Object ID	Description
▼	MCK-EQ-LEVEL1	MCK Equipment level 1
▼	MCK1-EQ-MAT-H	MCK1 Construction Type for Equi XXX Hdr
▶	MCK-EQ-LEVEL1-1	MCK Equipment level 1
▶	MCK-EQ-LEVEL1-2	MCK Equipment level 1-2

General Data **Orders/Notifications** Task

Select All Deselect All Show Details

Object ID	Object Description	Tech. Obj. Type	Room	Loc
No objects assigned				

If you do not want the users to display an empty tab page, you can also hide views for an individual user group. In authorization object `PLM_LAYOUT`, delete all the view variants that should be hidden. View variants that are not contained in the profile are not displayed as tab pages. In this example, you only want five views (tab pages) to be available when the user displays a piece of equipment in the Asset Viewer. You therefore delete all view variants except for these five:

**Display Role: Authorizations**

Maint.: 0 Unmaint. org. levels 0 open fields, Status: Unchanged

**Z COCKPIT\_EAMS\_GENERIC\_FUNC2** Generic EAM Functions - Asset Viewer Layout

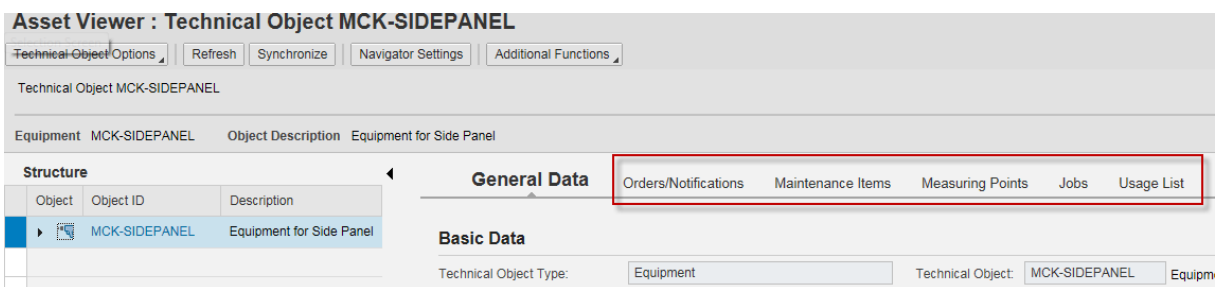
Changed Cross-application Authorization Objects

- Maintained Status Management: Set/Delete User Status
- Maintained Status Management: Set/Delete User Status using Transaction
- Maintained authorizations for Personal Object Work List (POWL) iViews
- Standard Commodity Pricing Engine: General Settings
- Changed PLM Object Navigator - Tab Page Variants per Layout of OTYPE
- Changed PLM Object Navigator - Tab Page Variants per Layout of OTYPE
- View Variant SAP\_EQUI\_ASG\_JOB, SAP\_EQUI\_ASG\_MP, SAP\_EQU...

**Field values**

Object	PLM_LAYOUT	PLM Object Navigator - Tab Page Variants p...
Field Name	PLM_TP_VAR	View Variant
Value Intrvl		
'From'		'To'
SAP_EQUI_ASG_JOB		
SAP_EQUI_ASG_MP		
SAP_EQUI_ASG_MPOS		
SAP_EQUI_ASG_USGLIST		
Z_SAP_EQUI_ASG_ORDNTF_N...		

When the user now logs on with role `Z_COCKPIT_EAMS_GENERIC_FUNC2`, these five views are displayed as tab pages in accordance with their order in customizing. Additionally, the *General Data* View is displayed independently from the view variant values in the role.



**Hint:** To check which values are available in the user's authorization buffer, start transaction SU56 after the user has executed the Asset Viewer application and navigate to the authorization object PLM\_LAYOUT.

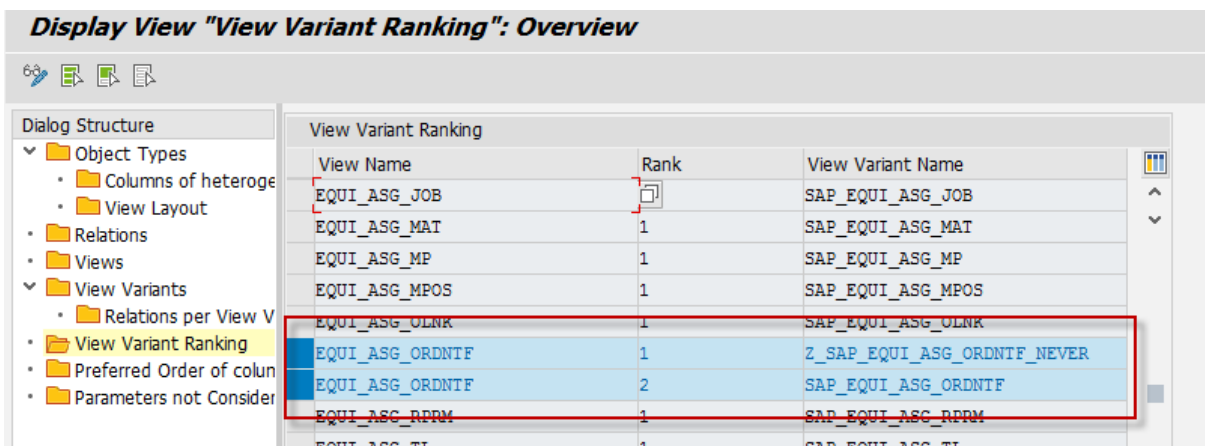
## 8.2.6 View Variant Ranking

If you have assigned several roles to the same user, and therefore defined different view variants for the same view, you can specify which view variant is displayed as default.

In the IMG activity *Make Settings for Object Navigator* (view cluster /PLMB/VC\_NAV), choose the menu entry *View Variant Ranking* in the *Dialog Structure*. In this menu entry, all views are listed with their corresponding view variants. You can specify which view variant is the default for a view by using the numbering in table column *Rank*. In this example, you have assigned a user group to the following roles:

- SAP standard role SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2 displaying all data in all views
- The role in the customer namespace Z\_COCKPIT\_EAMS\_GENERIC\_FUNC2 with the restricted view variant for the *Orders/Notifications* view

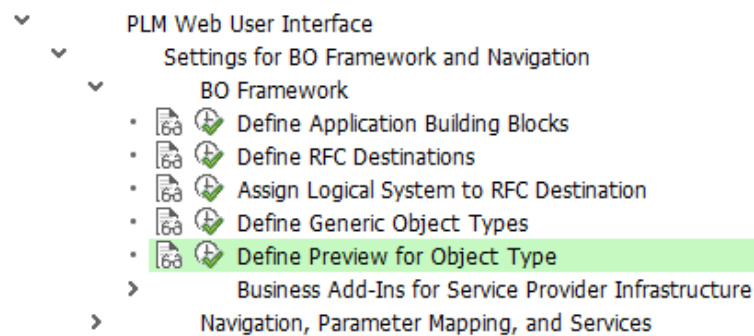
The view variant Z\_SAP\_EQUI\_ASG\_ORDNTF\_NEVER has the lower ranking number and is therefore the preferred one. This means that even users who are additionally authorized to display all order and notification data (because the SAP standard view variant SAP\_EQUI\_ASG\_ORDNTF is assigned to their authorization object PLM\_LAYOUT) cannot display any data on the *Orders/Notifications* view. As long as the restricted view variant Z\_SAP\_EQUI\_ASG\_ORDNTF\_NEVER is specified as the preferred one, the system does not consider any other view variants.



## 8.3 Customizing of the General Data View

The system always displays the *General Data* view as the default view as long as there is no other view explicitly defined as default. You can configure the *General Data* view to suit your requirements but you cannot hide it.

You can find the IMG activity to configure the *General Data* view in customizing for *Product Lifecycle Management (PLM)* under *PLM Web User Interface -> Settings for BO Framework and Navigation -> BO Framework*.



You can also access the customizing view `/PLMU/FRW_PREVW` directly by entering transaction code SM30. For object type `EAMS_EQUI`, the following entry exists with configuration ID `EAMS_WDC_EQUI_PRVW_TAB_CFG`. The WD Component Name indicates that the *General Data* view contains several parts because it is a tabbed UIBB.

**Display View "Object Type Dependent Preview": Details**

Object Type:

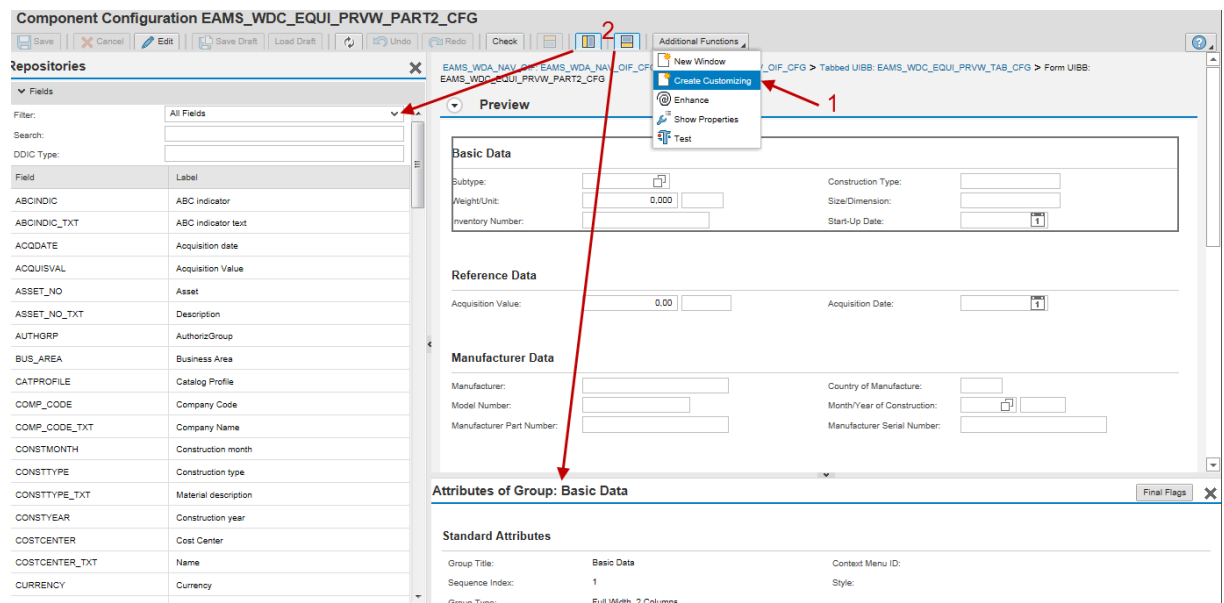
Object Type Dependent Preview

WD Component Name	<input type="text" value="FPM_TABBED_UIBB"/>
WD Window Name	<input type="text" value="TABBED_WINDOW"/>
Config ID	<input type="text" value="EAMS_WDC_EQUI_PRVW_TAB_CFG"/>
Configuration Type	<input type="text" value="General"/>
Configuration Variant	<input type="text" value=""/>

To access the configuration of the *General Data* view for the selected object, open the Asset Viewer and select it (1). When you choose the pushbutton *Show Configurable Areas* (2), you see that the view consists of three separate UIBBs.

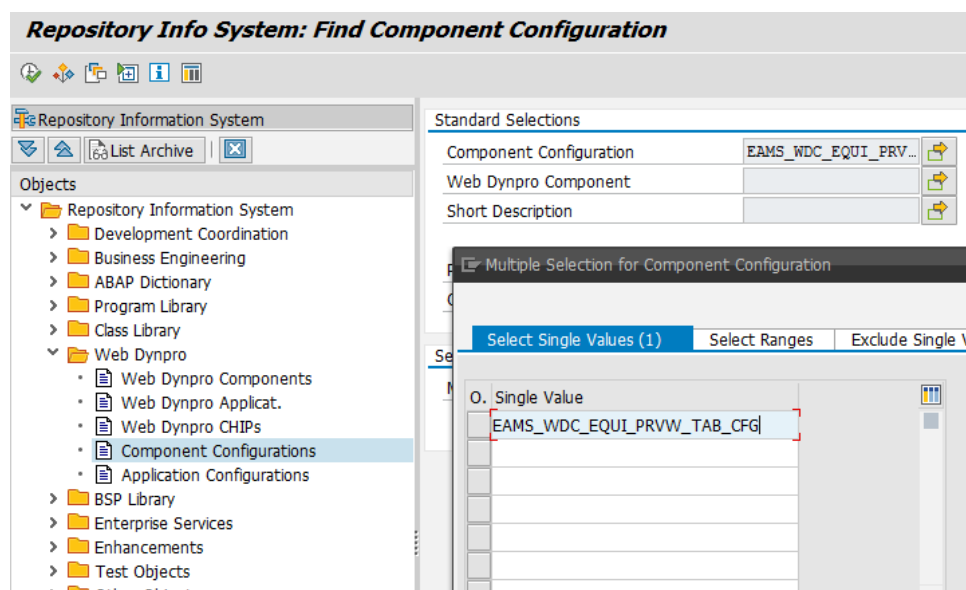
You can change any of the UIBBs by double-clicking. In this example, you want to configure UIBB3 and therefore open the component configuration screen of configuration `EAMS_WDC_EQUI_PRVW_PART2_CFG` (1). To create or change customizing for the *General Data* view, choose *Continue in Display Mode* (2).

Now you can create or change customizing for the *General Data* view by choosing *Additional Functions* → *Create Customizing* (or *Change Customizing* if customizing settings already exist for this view). You can specify which fields should be displayed and which ones should be hidden by using the icons *Navigation & Repository* and *Attributes* (2).



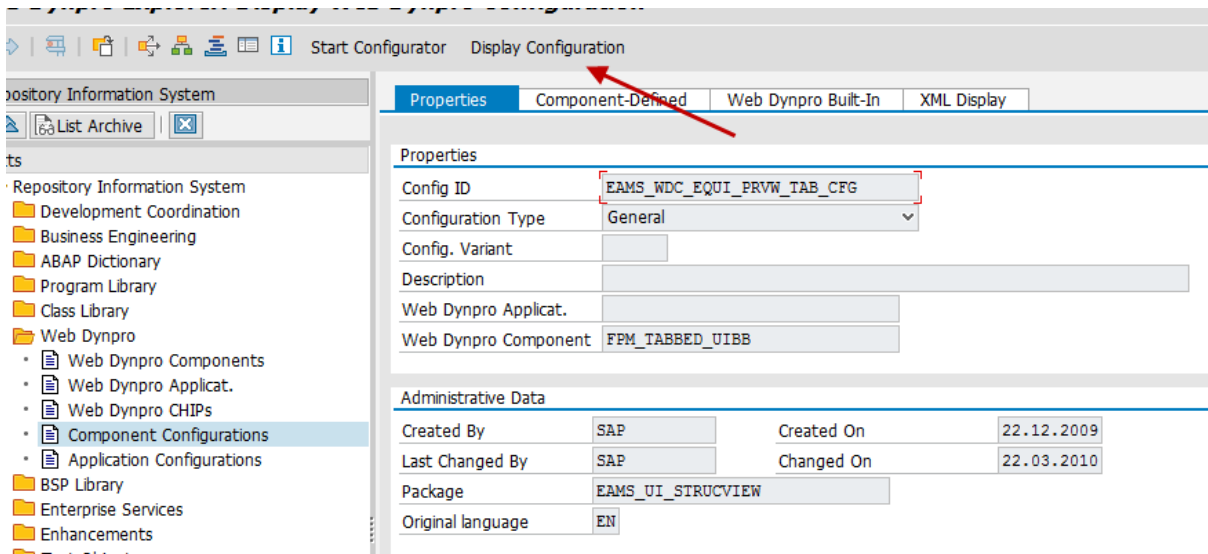
Customizing for UIBBs works in a similar way to customizing for notifications described in chapter 3.1 ff.

To access the complete configuration `EAMS_WDC_EQUI_PRVW_TAB_CFG`, go to the Object Navigator of the ABAP Workbench (transaction code `SE84`), choose Component Configurations in the folder Web Dynpro and enter the configuration name.

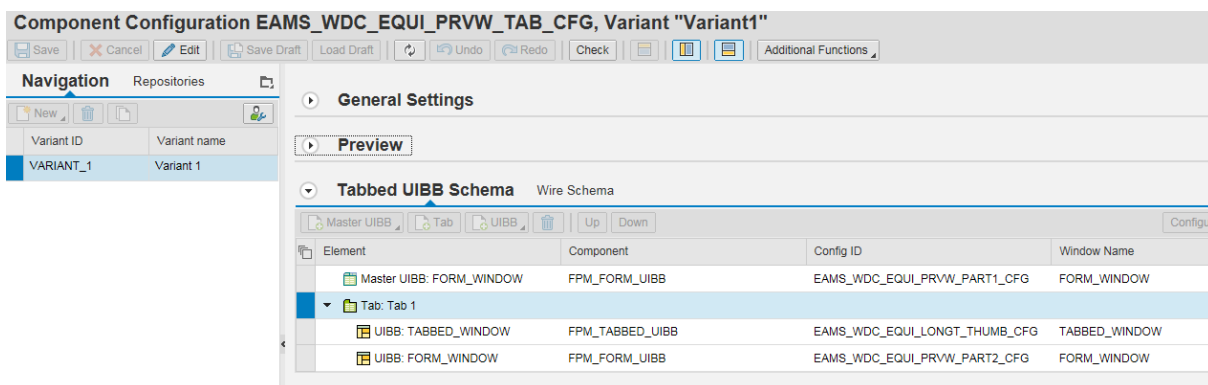


Double-click the configuration and view it by choosing *Display Configuration*.





In the section *Tabbed UIBB Schema* on the right-hand side, three sub-configurations for this component configuration are listed: `EAMS_WDC_EQUI_PRVW_PART1_CFG`, `EAMS_WDC_EQUI_LONGT_THUMB_CFG` and `EAMS_WDC_EQUI_PRVW_PART2_CFG`. You can add other UIBBs or delete existing ones by making customizing settings for this component configuration.



For more information about the Asset Viewer, see [Asset Viewer](#) and [Object Navigator](#) in the SAP Library. To change the context menu of the structure view, refer to the example in chapter 6.2.3.

## 8.4 Adding New Views in Asset Viewer

### Adding a New View to an Object in the Object Navigator

You can enhance the Asset Viewer with additional customer-specific or SAP standard objects that are not yet displayed. To create new views, you need basic ABAP development knowledge and must have the authorization to create classes and methods.

In this example, you also want to display real estate measurement data when you select a functional location in the structure view of the Asset Viewer. This measurement data will appear on the right side of the Asset Viewer on a separate tab page with the title *Measurements*.

The *Measurements* view is a homogenous list. This means that the measurement attributes are displayed without a hierarchy:

Asset Viewer : Technical Object RM S852/H1-1.01

Technical Object Options

Refresh

Synchronize

Navigator Settings

Additional Functions

Technical Object FL S852/H1-1 > Technical Object BU S852/H1 > Technical Object FL S852/H1-3 > Technical Object RM S852/H1-1.01

Functional Location RM S852/H1-1.01    Object Description H1, Stockwerk 01, Raum 01

Structure

Object	Object ID	Description
▼	BU S852/H1	Haus 1, Büros
▼	FL S852/H1-1	Stockwerk 1
	RM S852/H1-1.01	H1, Stockwerk 01, Raum 01
	RM S852/H1-1.02	H1, Stockwerk 01, Raum 02
	RM S852/H1-1.03	H1, Stockwerk 01, Raum 03
	RM S852/H1-1.04	H1, Stockwerk 01, Raum 04
▶	FL S852/H1-2	Stockwerk 2
▶	FL S852/H1-3	Stockwerk 3

General Data

Orders/Notifications

Measurements

Task List and Operations

Characteristics

Doc

Select All

Deselect All

Object ID	MeasType	Med. Meas. Type	Meas.Amt	Capacity	Units in	Meas.Valid From	MeasValid To
S852/H1-1.01	A001	Total Area	40,0000		M2	01.01.2003	
S852/H1-1.01	A003	Usable Space	40,0000		M2	01.01.2003	
S852/H1-1.01	A101	Office Space	40,0000		M2	01.01.2003	
S852/H1-1.01	A200	Residential/Usable Space	40,0000		M2	01.01.2003	
S852/H1-1.01	M001	Room Capacity in Persons	3,0000		PRS	01.01.2003	

To include this view into the Asset Viewer, proceed as follows:

1. Create a class for the new object type with super class CL\_EAMS\_NAVO\_SUP.
2. Create a class for the relationship between functional location and measurements with super class CL\_EAMS\_NAVR\_SUP.
3. Create DDIC objects.
4. Redefine the methods.
5. Complete the Customizing for the new tab page.

### Create a Class for the New Object Type 'Measurements of Real Estate'

First, create a new class for the new object in the *Class Builder* (transaction SE24). This new class should belong to the super class CL\_EAMS\_NAVO\_SUP in which the interface class /PLMB/IF\_NAVO is included. Assign the new class, the name of which starts with a 'Z', to a package and include it in a transport request. Then save and activate the class.

**Class Builder: Display Class ZCL\_EAMS\_NAVO\_MEAS\_RE**

Class/Interface ZCL\_EAMS\_NAVO\_MEAS\_RE Implemented / Active

Properties	Interfaces	Friends	Attributes	Methods	Events	Types	Aliases
Interface	Abstract	Final	Model...	Description			
/PLMB/IF_NAVO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NAV - Object Type Interface			

### Create a Class for the New Relationship

Secondly, create a new class for the new relationship between functional location and measurements in the *Class Builder* (transaction SE24) or copy an existing class. The new class belongs to the super class

**Class Builder: Display Class ZCL\_EAMS\_NAVR\_FL2MEASUREMENTS**

Class/Interface: **ZCL\_EAMS\_NAVR\_FL2MEASUREMENTS** Implemented / Active

Properties | **Interfaces** | Friends | Attributes | Methods | Events | Types | Aliases

Interface | Abstract | Final | Model... | Description

/PLMB/IF_NAVR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NAV - Relation Interface
---------------	--------------------------	--------------------------	--------------------------	--------------------------

Thirdly, create three DDIC structures in the *ABAP Dictionary* (transaction `SE11`): the Object ID structure, the Navigator ID structure and the Navigator Attributes structure for the new object type *Measurements of Real Estate* (`ZRE_MEAS`).

Structure	ZMEAS_RE_S_ID	Active
Short Description	RE: Measurement ID for Asset Viewer	
Attributes	Components	Entry help/check
Currency/quantity fields		

Predefined Type

1 / 3

Component	Typing Method	Component Type	Data Type	Length	Deci...	Short Description
INTRENO	Types	RECAINTRENO	CHAR	13	0	Internal Key of Real Estate Object
MEAS	Types	REBDMEAS	CHAR	4	0	Measurement Type
VALIDTO	Types	REBDMEASVALIDTO	DATE	8	0	Date: Measurement Valid To

Structure: ZMEAS\_RE\_S\_ID\_NAV\_INT\_EXT Active

Short Description: NAV: Include Structure for common INT ID and RE Measurements

Attributes Components Entry help/check Currency/quantity fields

1 / 4

Component	Typing Method	Component Type	Data Type	Length	Deci...	Short Description
<u>.INCLUDE</u>	Types	▼ <u>/PLMB/S_NAV_INTID</u>	<u>INT4</u>	0		0 NAV - Internal ID structure, INTID is key without LogSys
<u>INTID</u>	Types	▼ <u>/PLMB/NAV_INTID</u>	<u>INT4</u>	0		0 Internal ID
<u>NAV_LOGSYS</u>	Types	▼ <u>/PLMB/FRW_NAVIGATION_LOGSYS</u>	<u>CHAR</u>	10		0 Logical System for Navigation
<u>.INCLUDE</u>	Types	▼ <u>ZMEAS_RE_S_ID</u>	<u>INT4</u>	0		0 RE: Measurement ID for Asset Viewer

The Navigator Attributes structure (ZMEAS\_RE\_S\_ID\_NAV\_ATTR) contains all the fields of a measurement line that will be displayed in the view on the right-hand side of the Asset Viewer. In addition, this structure contains the internal ID structure components for the logical system and two further fields, one for a display key and the other for its description.

Structure

ZMEAS\_RE\_S\_ID\_NAV\_ATTR

Active

Short Description



NAV: Attributes for RE Measurements on FL

Attributes

Components

Entry help/check

Currency/quantity fields

  Predefined Type

1 / 13

Component	Typing Method	Component Type	Data Type	Length	Deci...	Short Description
<u>.INCLUDE</u>	Types	<u>/PLMB/S_NAV_INTID</u>	<u>INT4</u>	0	0	NAV - Internal ID structure, INTID is key without LogSys
<u>INTID</u>	Types	<u>/PLMB/NAV_INTID</u>	<u>INT4</u>	10	0	Internal ID
<u>NAV_LOGSYS</u>	Types	<u>/PLMB/FRW_NAVIGATION_LOGSYS</u>	<u>CHAR</u>	10	0	Logical System for Navigation
<u>DISPLAY_KEY</u>	Types	<u>/PLMB/NAV_DISPLAY_KEY</u>	<u>CHAR</u>	255	0	Concatenated Semantic Key for Display Purposes
<u>DESCRIPTION</u>	Types	<u>/PLMB/NAV_DISPLAY_KEY_DESC</u>	<u>CHAR</u>	255	0	Display Key Description
<u>MEAS</u>	Types	<u>REBDMEAS</u>	<u>CHAR</u>	4	0	Measurement Type
<u>XMEAS</u>	Types	<u>REBDXMEAS</u>	<u>CHAR</u>	30	0	Name of Measurement Type - Medium-Length
<u>MEASVALUE</u>	Types	<u>REBDMEASVALUE</u>	<u>QUAN</u>	17	4	Measurement Amount: Available
<u>MEASVALUECMPL</u>	Types	<u>REBDMEASVALUECMPL</u>	<u>QUAN</u>	17	4	Measurement Amount: Capacity
<u>MEASUNIT</u>	Types	<u>REBDMEASUNIT</u>	<u>UNIT</u>	3	0	Measurement Unit
<u>VALIDTO</u>	Types	<u>REBDMEASVALIDTO</u>	<u>DATS</u>	8	0	Date: Measurement Valid To
<u>VALIDFROM</u>	Types	<u>REBDMEASVALIDFROM</u>	<u>DATS</u>	8	0	Date: Measurement Valid From
<u>MEASSUMINFO</u>	Types	<u>REBDMEASSUMINFO</u>	<u>CHAR</u>	132	0	Icon: Measurement Is a Total Measurement

Furthermore, you require three **sorted** table types with a primary key definition. The third table type has the fields of structure ZMEAS\_RE\_S\_ID as primary key fields.

Table Type Name	Line Type	Primary key
ZMEAS_RE_T_ID_NAV_ATTR	ZMEAS_RE_S_ID_NAV_ATTR	INTID
ZMEAS_RE_T_NAV_ID_INT_KEY	ZMEAS_RE_S_ID_NAV_INT_EXT	INTID
ZMEAS_RE_T_NAV_ID_EXT_KEY	ZMEAS_RE_S_ID_NAV_INT_EXT	INTRENO, MEAS, VALIDTO

## Redefine and Implement Methods of the Super Classes

For this example, the following methods were implemented in the super class:

Method	Description
CONSTRUCTOR	CONSTRUCTOR
SET_DDIC_NAMES	Set DDIC names
MAP_EXT2INT	Map external key to internal key
GET_OBJECT_ATTRIBUTES	Get attributes for a list of objects

You have to redefine these methods to add the object - or relation-specific coding. The methods described here were implemented for this example, for other objects it might be necessary to implement additional methods of the super class.

The following methods are in the class for the navigation object (ZCL\_EAMS\_NAVO\_MEAS\_RE):

In method SET\_DDIC\_NAMES you enter the structure and table type names that you created in a previous step.

Method	SET_DDIC_NAMES	Active
1	<b>METHOD</b> set_ddic_names.	
2		
3	ms_ddic_names-key_s = 'ZMEAS_RE_S_ID'.	
4	ms_ddic_names-intid_key_s = 'ZMEAS_RE_S_ID_NAV_INT_EXT'.	
5	ms_ddic_names-intid_attr_s = 'ZMEAS_RE_S_ID_NAV_ATTR'.	
6	ms_ddic_names-intid_attr_t = 'ZMEAS_RE_T_ID_NAV_ATTR'.	
7		
8	ms_ddic_names-intid2key_t = 'ZMEAS_RE_T_NAV_ID_INT_KEY'.	
9	ms_ddic_names-key2intid_t = 'ZMEAS_RE_T_NAV_ID_EXT_KEY'.	
10		
11	mv_object_type_name = 'ZRE_MEAS'.	
12		
13	<b>ENDMETHOD.</b>	

You have to redefine the method `CONSTRUCTOR`. This method contains several method calls and the data creation.

Method	CONSTRUCTOR	Active
1	<b>METHOD</b> CONSTRUCTOR.	
2		
3	<i>* call of empty constructor of superclass is required</i>	
4	super->constructor( ).	
5		
6	set_ddic_names( ).	
7		
8	<b>CREATE DATA</b> mt_intid_attr <b>TYPE</b> (ms_ddic_names-intid_attr_t).	
9	<b>CREATE DATA</b> mt_intid2key <b>TYPE</b> (ms_ddic_names-intid2key_t).	
10	<b>CREATE DATA</b> mt_key2intid <b>TYPE</b> (ms_ddic_names-key2intid_t).	
11		
12	get_bo_reference( ).	
13		
14	<b>ENDMETHOD.</b>	

The method `MAP_EXT2INT` is used for to map the internal and external key of the object. You have to adapt the measurement structures and fields.

Method	MAP_EXT2INT	Active
1	<code>METHOD map_ext2int.</code>	
2		
3	<code>FIELD-SYMBOLS:</code>	
4	<code>&lt;lt_key2intid&gt; TYPE zmeas_re_t_nav_id_ext_key,</code>	
5	<code>&lt;ls_key_intid&gt; TYPE data,</code>	
6	<code>&lt;ls_key&gt; TYPE zmeas_re_s_id.</code>	
7		
8	<code>ASSIGN is_key TO &lt;ls_key&gt;.</code>	
9	<code>ASSIGN mt_key2intid-&gt;* TO &lt;lt_key2intid&gt;.</code>	
10		
11	<code>READ TABLE &lt;lt_key2intid&gt; ASSIGNING &lt;ls_key_intid&gt;</code>	
12	<code>WITH KEY</code>	
13	<code>intreno = &lt;ls_key&gt;-intreno</code>	
14	<code>meas = &lt;ls_key&gt;-meas</code>	
15	<code>validto = &lt;ls_key&gt;-validto.</code>	
16		
17	<code>IF sy-subrc = 0.</code>	
18	<code>MOVE-CORRESPONDING &lt;ls_key_intid&gt; TO es_intid_key.</code>	
19	<code>ELSE.</code>	
20	<code>CLEAR es_intid_key.</code>	
21	<code>ENDIF.</code>	
22		
23	<code>ENDMETHOD.</code>	

If you want to display measurement data on the right-hand side in the Asset Viewer, you have to redefine and implement the method `GET_OBJECT_ATTRIBUTES`. The importing parameter `IT_OBJECT_KEY` contains the key fields of the object (here a functional location) that you have marked in the structure view and for which you want to display the corresponding measurement data on the new tab. The data declaration at the beginning of the method can be implemented in a similar way:

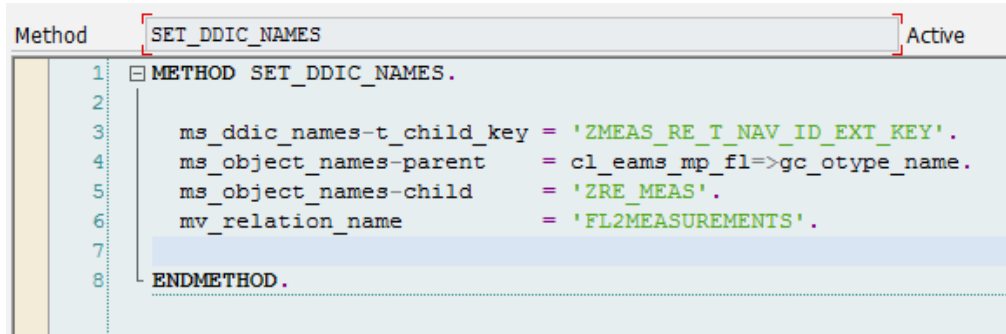
Method	GET_OBJECT_ATTRIBUTES	Active
1	<code>METHOD get_object_attributes.</code>	
2		
3	<code>* data declaration</code>	
4	<code>DATA:</code>	
5	<code>ls_intid_attr TYPE zmeas_re_s_id_nav_attr,</code>	
6	<code>ls_meas_key TYPE vibdmeas,</code>	
7	<code>lt_node_data TYPE TABLE OF vibdmeas,</code>	
8	<code>ls_text TYPE tivbdmeast.</code>	
9		
10	<code>FIELD-SYMBOLS:</code>	
11	<code>&lt;ls_meas_key&gt; TYPE vibdmeas,</code>	
12	<code>&lt;lt_intid_attr&gt; TYPE zmeas_re_t_id_nav_attr,</code>	
13	<code>&lt;lt_key2intid&gt; TYPE zmeas_re_t_nav_id_ext_key,</code>	
14	<code>&lt;ls_key2intid&gt; TYPE zmeas_re_s_id_nav_int_ext.</code>	
15		
16	<code>ASSIGN mt_intid_attr-&gt;* TO &lt;lt_intid_attr&gt;.</code>	
17	<code>ASSIGN mt_key2intid-&gt;* TO &lt;lt_key2intid&gt;.</code>	

The measurement data for the output, such as measurement data and texts, is collected in internal table `<lt_intid_attr>`. In addition, method `CREATE_IDR_DATA` is called at the end of this method to store IDR data in the buffer.

If a class for reading the added business object already exists, you can create an instance of this class in method `GET_BO_REFERENCE`.

The following methods are in the class for the relationship between the functional location and the measurements (ZCL\_EAMS\_NAVR\_FL2MEASUREMENTS):

The method SET\_DDIC\_NAMES has to be supplied with DDIC and relationship names.

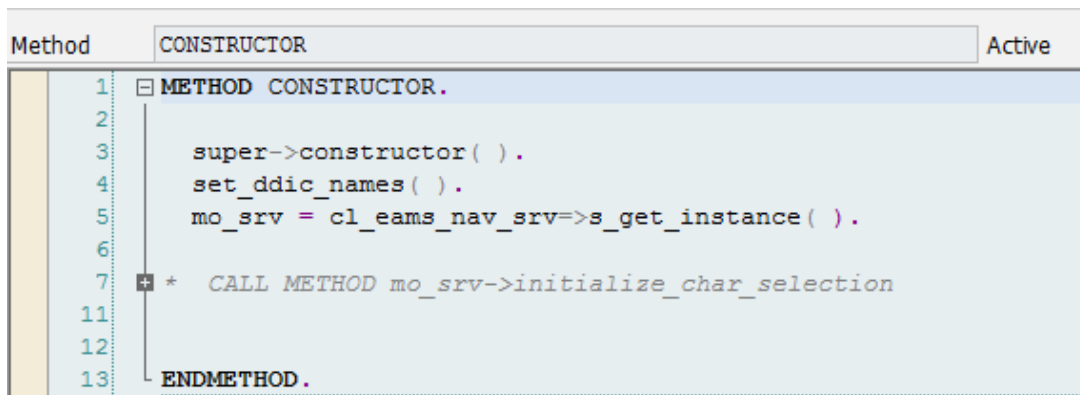


```

Method SET_DDIC_NAMES Active
1 METHOD SET_DDIC_NAMES.
2
3   ms_ddic_names-t_child_key = 'ZMEAS_RE_T_NAV_ID_EXT_KEY'.
4   ms_object_names-parent   = cl_eams_mp_fl=>gc_otype_name.
5   ms_object_names-child    = 'ZRE_MEAS'.
6   mv_relation_name         = 'FL2MEASUREMENTS'.
7
8 ENDMETHOD.

```

A few method calls are performed in the CONSTRUCTOR method. The method call SET\_DDIC\_NAMES is a requirement.



```

Method CONSTRUCTOR Active
1 METHOD CONSTRUCTOR.
2
3   super->constructor( ).
4   set_ddic_names( ).
5   mo_srv = cl_eams_nav_srv=>s_get_instance( ).
6
7   * CALL METHOD mo_srv->initialize_char_selection
11
12
13 ENDMETHOD.

```

The method SINGLE\_EXPLOSION reads the relationships between the parent object and the child data. All measurement data for the parent object provided by the importing parameter IS\_PARENT\_KEY is collected in the exporting parameter ET\_CHILD\_KEY. To achieve this for the measurement data, method cl\_redb\_vibdmeas=>get\_list\_by\_intreno is called and it returns a list of measurement data.

### Make the Required Customizing Settings for Displaying the New View

You can specify the names for the following entries in advance. In this example the following names were specified:

Object	Name
Generic Object Type	ZRE_MEAS
Relation	FL2MEAS
View	FL_ASG_MEAS
View Variant	FL_ASG_MEAS_VAR1

You create a new entry for real estate measurements in customizing for *Logistics-General* under *Product Lifecycle Management (PLM) -> PLM Web User Interface -> Settings for BO Framework and Navigation -> BO Framework ->*

[Define Generic Object Types](#). Changes in the customizing table are effective cross-client. Enter the key structure ZMEAS\_RE\_S\_ID with object type ZRE\_MEAS as [DDIC Structure Type of Object](#).

**Change View "Define Generic Object Types": Overview of Selected Set**

Obj. Type	Description of Object Ty...	Clas...	Clas...	Control ...	DDIC Structure Type of Object
ZRE_MEAS	Real Estate Measurements			Conve...	ZMEAS_RE_S_ID

Save your entries and include them in a transport request.

After you have defined the new object type, you have to add it, with a description (1) and an object type class, (2) to the IMG-activity [Make Settings for Object Navigator](#) (SM34, view cluster / PLMB/VC\_NAV).

**Change View "Object Types": Overview of Selected Set**

Object Type	Description of Object Type	Class
ZRE_MEAS	Real Estate Measurements	ZCL_EAMS_NAVO_MEAS_RE

Diagram Structure:

- Object Types
  - Columns of heterogeneous List
  - View Layout
  - Relations
  - Views
  - View Variants
    - Relations per View Variant
  - View Variant Ranking
  - Preferred Order of columns of a heterogeneous List
  - Parameters not Considered for Personalization

Arrows 1 and 2 point to the 'Description of Object Type' and 'Class' columns respectively.

In the menu entry [Relations](#), specify the new relationship, its class and the parent object type.

**Change View "Relations": Overview of Selected Set**

Relation	Relation Description	Class	Parent Object Type
FL2MEAS	RE: Measurements assigned to Func. Loc.	ZCL_EAMS_NAVR_FL2MEASUREMENTS	EAMS_FL

Diagram Structure:

- Object Types
  - Columns of heterogeneous List
  - View Layout
  - Relations
  - Views
  - View Variants
    - Relations per View Variant
  - View Variant Ranking
  - Preferred Order of columns of a heterogeneous List
  - Parameters not Considered for Personalization

Now specify the new view in the menu entry [Views](#). The text that you enter in the table field [Description of View](#) will appear as tab text in the Asset Viewer.



## Change View "Views": Overview of Selected Set

Dialog Structure

- Object Types
  - Columns of heterogeneous List
  - View Layout
- Relations
- Views**
- View Variants
  - Relations per View Variant
- View Variant Ranking
- Preferred Order of columns of a heterogeneous list
- Parameters not Considered for Personalization

Views

View	Description of View
FL_ASG_MEAS	Measurements

Create a view variant for the new view.

## Change View "View Variants": Overview

Dialog Structure

- Object Types
  - Columns of heterogeneous List
  - View Layout
- Relations
- Views
- View Variants**
  - Relations per View Variant
- View Variant Ranking
- Preferred Order of columns of a heterogeneous list
- Parameters not Considered for Personalization

View Variants

View Variant Name	Description of View Variant
FL_ASG_MEAS_VAR1	VV for RE Measurements of FL
SAP_ACC_ASG_ACC_ROLE	Context Roles (Standard)
SAP_ACC_ASG_ADMINS	Responsible Context Administrators (Standard)
SAP_ACC_ASG_DIR	Linked Documents (Standard)
SAP_ACC_ASG_ECN	Linked Change Numbers (Standard)
SAP_ACC_ASG_ECR	Linked Change Records (Standard)
SAP_ACC_ASG_LBL	Linked Labels (Standard)
SAP_ACC_ASG_MAT	Linked Materials (Standard)

Then create a relationship for this *View Variant*.

## Change View "Relations per View Variant": Overview

Dialog Structure

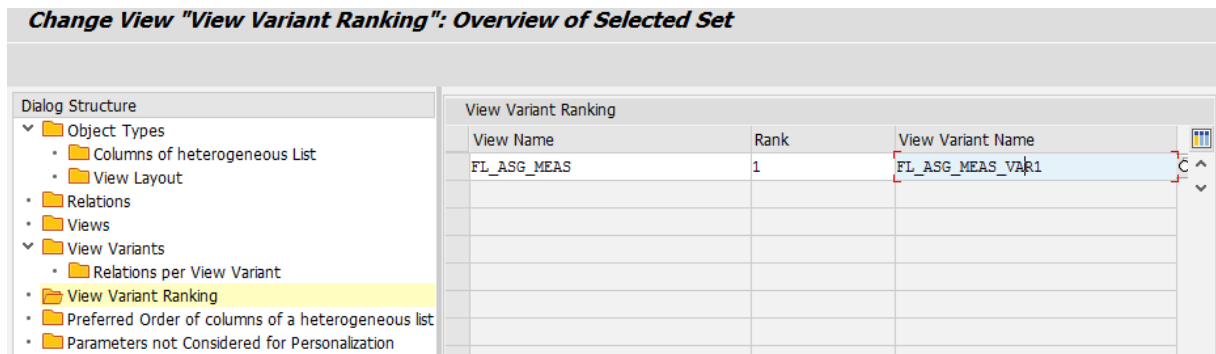
- Object Types
  - Columns of heterogeneous List
  - View Layout
- Relations
- Views
- View Variants
  - Relations per View Variant**
- View Variant Ranking
- Preferred Order of columns of a heterogeneous list
- Parameters not Considered for Personalization

Variant Name

FL\_ASG\_MEAS\_VAR1

Relation Name	Child Object Type	Display Mode
FL2MEAS	ZRE_MEAS	Display Always (Default)

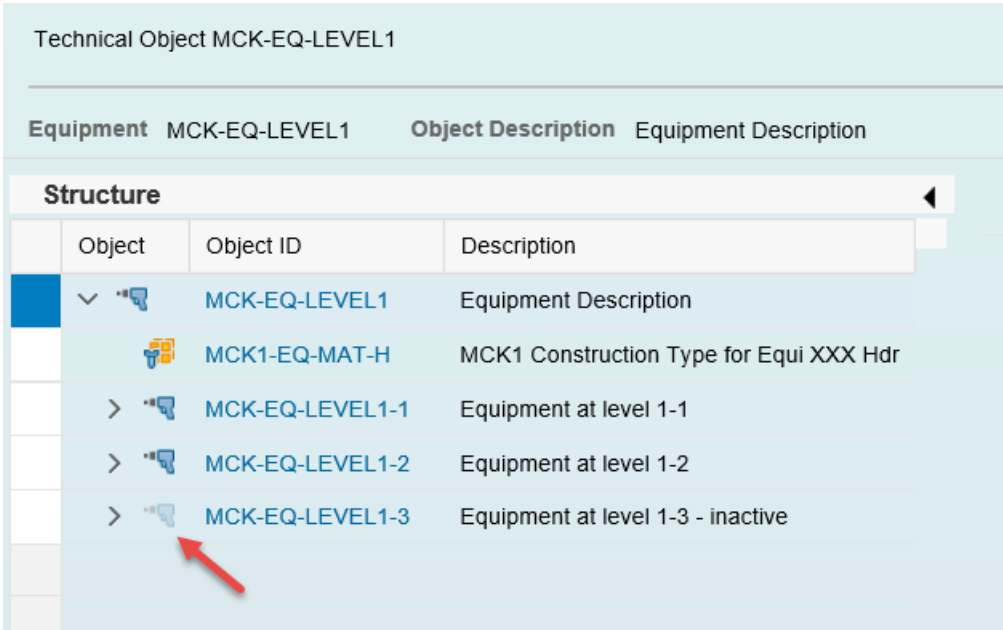
Finally, determine the *View Variant Ranking*.



If you wish, you have the option of making settings in the last two menu entries in the dialog structure. After you have completed these required customizing settings, the system displays the new tab page *Measurements* when you display a technical object in the Asset Viewer.

## 8.5 Example for Displaying Inactive Pieces of Equipment

In the structure view of the Asset Viewer, you can change the icon displayed in front of the list entry to mark specific technical objects as inactive. A greyed-out icon shows that the affected technical object is inactive, in this example the piece of equipment MCK-EQ-LEVEL1-3:



You can use the BAdI method `AFTER_RETRIEVE` of the BAdI `/PLMB/EX_SPI_APPL_ACCESS` (enhancement spot `/PLMB/ES_SPI`) to change the icon, using the filter criteria for the BAdI implementation `Application Building Block = EAMS_SV` and `Node Name = ROOT`. As a changing parameter the table `<lt_node_data>` contains all entries of the structure. In the example the column `ICON_DISABLED` has been set to 'X' for an inactive piece of equipment.

## 9 Working with Personal Object Worklists (POWL)

On the SAP Web user interface (UI), you have several options for processing maintenance documents and objects from a personal object worklist (POWL).

On the EAM Web UI the following worklists are available:

- o Maintenance Jobs POWL
- o Maintenance Confirmations POWL
- o Order and Notification POWL combined with Order Operation POWL
- o Maintenance Plan and Item POWL

If you start the maintenance worker role in NWBC, you can access the POWL for *Jobs* (1), the POWL for *Confirmations* (2) and in the *Information Center* (3) the POWLs for *Favorite Objects* and *Last Accessed* Objects. Your favorite objects and the objects you recently accessed can be any kind of maintenance objects.

The screenshot displays the SAP EAM Web UI interface. On the left, the 'Maintenance Worker' navigation menu is visible, with three red arrows pointing to specific items: arrow 1 points to 'Overview', arrow 2 points to 'Confirmation' (which is highlighted in blue), and arrow 3 points to 'Information Center'. The main content area shows the 'Confirmation' view, titled 'Confirmation List - Default (36)'. It includes a search bar at the top and a table of maintenance confirmations. The table has columns for Ref. Doc., Description, Tech. Object, Start Date, Start Time, WkCtr Descr., and Person Resp. The table contains six rows of data, all showing 'EAMT Test Order' and 'EAMT-EQ-MAINT' as the technical object.

Ref. Doc.	Description	Tech. Object	Start Date	Start Time	WkCtr Descr.	Person Resp.
4010091	EAMT Test Order	EAMT-EQ-MAINT	14.10.2014	00:00:00	EAMT Unit Test Workcenter- Do not change	
4010091	EAMT Test Order	EAMT-EQ-MAINT	14.10.2014	00:00:00	EAMT Unit Test Workcenter- Do not change	
4010091	EAMT Test Order	EAMT-EQ-MAINT	14.10.2014	00:00:00	EAMT Unit Test Workcenter- Do not change	
4010129	EAMT Test Order	EAMT-EQ-MAINT	24.10.2014	00:00:00	EAMT Unit Test Workcenter- Do not change	
4010129	EAMT Test Order	EAMT-EQ-MAINT	24.10.2014	00:00:00	EAMT Unit Test Workcenter- Do not change	
4010129	EAMT Test Order	EAMT-EQ-MAINT	24.10.2014	00:00:00	EAMT Unit Test Workcenter- Do not change	

When you access the system with the generic functions role and select *Work Overview* (1) in NWBC, you open the *Order and Notification Information Center*. Here you can select POWLs from several categories shown by default (2). In this example, the *Order and Notification List* in category *Maintenance Orders/Notifications* is selected.

Generic EAM Functions

Order and Notification Information Center

Work Overview

Master Data Overview

Search

Lists

New Worklist Change Worklist

Maintenance Orders/Notifications : Favorites - Default (5) Last accessed - Default (19) Order and Notification List # Default (50)  
Maintenance Notifications : Notification List - Default (50)  
Maintenance Orders : Order and Operation List - Default (250) Order List - Default (250)

Maintenance Orders/Notifications - Order and Notification List # Default (50)

View: Ord/Ntf View Set Order and Notification Status Set Order Status Set Notification Status Assign Order Print Object Add to Favorites Print Version Export Refresh

Ord/Ntf	Type	Description	Ass. Order/Ntf	Priority	Descr.	Tech. Object	Start Date	End Date	System Status	WkCtr Descr.
4018167	PM01	test					20.04.2015	20.04.2015	CRTD MANC NMAT PRC	Electrical
4018168	PM01	order					20.04.2015	20.04.2015	CRTD MANC NMAT PRC	Electrical
4018169	PM01	ste					20.04.2015	20.04.2015	CRTD MANC NMAT PRC	Electrical
4018170	PM01	test					20.04.2015	20.04.2015	CRTD MANC NMAT PRC	Electrical
4018171	PM01	stb-e					20.04.2015	20.04.2015	CRTD MANC NMAT PRC	Electrical
4018172	PM01	testing excon					20.04.2015	20.04.2015	CRTD MANC PRC	Electrical
4018378	PM01	MCK VE Viewer V/SP test against XCW				MCK1-EQ-H	20.04.2015	20.04.2015	CRTD MANC NMAT PRC	Electrical
4018382	PM01	EAMT Test Order		2-High		EAMT-EQ-MAINT	20.04.2015	10.05.2015	CRTD MANC PRC SETC	EAMT Unit Test Workcenter- Do not change
4018404	PM01	EAMT Test Order		2-High		EAMT-EQ-MAINT	20.04.2015	10.05.2015	LRRA REL MACM PRC SETC	EAMT Unit Test Workcenter- Do not change
4018405	PM01	EAMT Test Order		2-High		EAMT-EQ-MAINT	20.04.2015	10.05.2015	LRRA REL CNF MANC PRC SETC	EAMT Unit Test Workcenter- Do not change

Notifications

Create Notification

To work with other POWLs, start the *Master Data Overview* (1). Here you open the *Information Center*, where your favorites and last accessed object POWLs (3) are displayed. Additionally you can access the *Maintenance Plan and Maintenance Item List* (4).

Generic EAM Functions

Work Overview

Master Data Overview

Lists

Maintenance Plan and Maintenance Item List

Technical Objects

Create Technical Object

Change Technical Object

Display Technical Object

Maintenance Plans

Create Maintenance Plan

Change Maintenance Plan

Display Maintenance Plan

Maintenance Items

Information Center

My Objects

New Worklist

My Favorites (10) Last Accessed (10)

View: [Standard View] Remove Print Version Export Refresh

Object ID	Object Description	Object Type	Object Status
10003593	PG FIT NTF-ORD OPROL	Notification	NOPR ORAS OSTs
10028130	Pumpe defekt	Notification	OSNO
4007918	EAMT Test Order	Order	LRRA REL PCNF MANC
10028033	Muß-Beschreibung (BAdI)	Notification	NOPR ORAS
10027853	with description	Notification	OSNO
MCK-EQ-LEVEL1	MCK Equipment level 1	Technical Object	INST
E/89/2		Task List	
22	STB test Hierarchy	Maintenance Item	P
FLS852/H1-1	Stockwerk 1	Technical Object	CRTE
BU0001/3102	FL for Building, created manually	Technical Object	CRTE

For general information about POWLs, see [SAP Personal Object Worklist Library](#).

For more information about POWLs in EAM, see [Working with Personal Object Worklists \(POWL\)](#).

For more detailed information about the Order and Notification POWL, see [Order and Notification List](#)

## 9.1 Administration of EAM POWLs

As an administrator you can specify queries, control the visibility of selection criteria, define layouts, assign users and roles to queries and a lot more in the *POWL Cockpit*. To access the *Cockpit for POWL Administration (as of SAP NetWeaver 7.02)*, choose *Cross-Application Components -> General Application Functions -> Generic SAP Business Suite Functions -> Personal Object Worklist* in the IMG (transaction POWL\_COCKPIT).

All customizing settings that you adjust as an administrator are client-specific and apply to all users. The relevant transactions for adjusting the EAM POWLs to your needs are the following:

Transaction	Description
FPB_MAINTAIN_HIER	Define Personalization Hierarchy
POWL_CAT	Define Categories
POWL_QUERYU	Define Query Visibility at User Level
POWL_QUERYR	Query visibility at Role Level
POWL_QUERY	Define Default Queries
POWL_TYPE	Configure Worklist Type Repository
POWL_TYPEU	Define Worklist Type Visibility at User Level
POWL_TYPER	Define Worklist Type Visibility at Role Level

For more information about the required customizing settings in the POWL Cockpit, see [Settings for Personal Worklists \(Standard POWL\)](#).

The POWLs that are available for the EAM Web UI are of the type [Standard POWL](#). The technical names of the POWLs are listed in the following tables. The POWLs are grouped by the roles to which they are assigned ([Maintenance Worker](#) or [Maintenance Planner](#)). You can use the POWL application ID as a basis for several POWL type IDs.

#### [Maintenance Worker Role](#) [Information Center](#)

Description	Application ID	POWL Type ID
My Favorites - Infocenter	EAMS_IC_MYOBJ	EAMS_IC_MYOBJ_FAV
Last Accessed - Infocenter	EAMS_IC_MYOBJ	EAMS_IC_MYOBJ_LACC
Jobs	EAMS_JOBS	EAMS_JOBS
Confirmation	EAMS_CONF	EAMS_CONF

#### [Maintenance Planner Role](#) [Order and Notification Information Center](#)

Description	Application ID	POWL Type ID
Favorites - Orders/ Notifications	EAMS_ONL_IC	EAMS_ORDNTF_FAV
Last Accessed - Orders/ Notifications	EAMS_ONL_IC	EAMS_ORDNTF_LACC
Orders/ Notifications	EAMS_ONL_IC	EAM_ORDNTF
Notifications	EAMS_ONL_IC	EAMS_NTF
Orders/ Operations	EAMS_ONL_IC	EAMS_ORDOP
Orders	EAMS_ONL_IC	EAMS_ORD

### Work Overview/ Lists

Description	Application ID	POWL Type ID
Notifications	EAMS_ONL	EAMS_NTF
Orders	EAMS_ONL	EAMS_ORD
Orders/ Notifications	EAMS_ONL	EAM_ORDNTF
Orders/ Operations	EAMS_ONL	EAMS_ORDOP

### Master Data Overview/ Information Center

Description	Application ID	POWL Type ID
My Favorites	EAMS_MYOBJ	EAMS_MYOBJ_FAV
Last Accessed	EAMS_MYOBJ	EAMS_MYOBJ_LACC

### Master Data Overview/ Lists

Description	Application ID	POWL Type ID
Maintenance Plans/Items	EAMS_MPLAN_MPOS_APPLID	EAMS_MPLAN_MPOS_TYPE

A few reports are available for the administration of POWLs.

For a more detailed description, see the Web Dynpro ABAP Wiki for [POWL Reports](#).

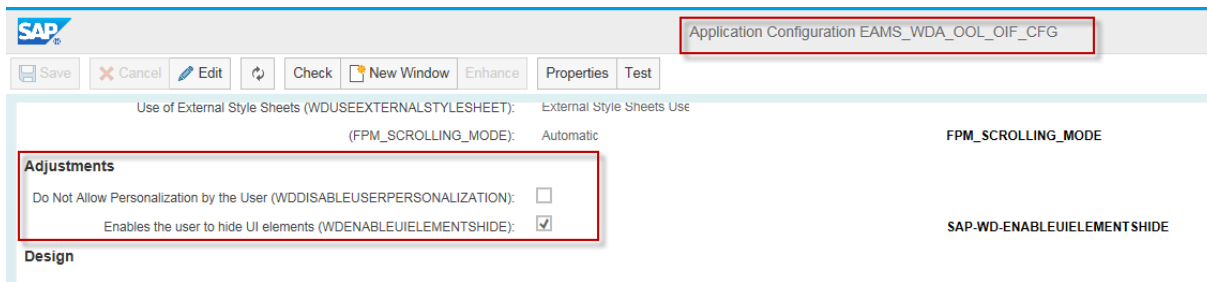
Report Name	Description
POWL_D01	Delete Queries from Database
POWL_D02	Show POWL Design Information
POWL_D03	Check Consistency of POWL Table Entries
POWL_D04	Delete Cached Selection Criteria for Admin Queries
POWL_D05	Delete POWL Check Results
POWL_D06	Activate Derived Queries
POWL_D07	Delete Shadowing Entries
POWL_D08	Delete Admin Layouts
POWL_D09	Delete Default Layout Mapping
POWL_WLOAD	Refresh of Active POWL Queries

For more information about administrating EAM POWLs, see the following documentation:

- [Configuration of Order and Notification List POWL](#)
- [Frequently Asked Questions: Order and Notification List](#)
- [Maintenance Plan and Maintenance Item List](#)

## 9.2 Personalization of EAM POWLs

In the EAM standard POWLs you can use various options for personalizing the POWL to suit your requirements. If you do not want the users to personalize their POWLs, you have to explicitly suppress the possibility for personalization. You can do so by changing the parameters in the [Adjustments](#) section of the application configuration and deselecting the appropriate checkbox:



To set these parameters globally, you can proceed as described in the Appendix (15.8).

There are several personalization options available in the EAM POWLs. These options are described in detail based on the example of the [Order/Notification POWL](#). The four tab pages show the POWLs currently available for [EAM Orders and Notifications](#) (1). The numbers in brackets indicate the number of records displayed in the individual lists.

You can use the following options to personalize the [Order/Notification POWL](#) or any other EAM POWL:

- [Change Query](#) (2)  
You can change the selection criteria and calculate the dates of the currently selected query or add [Quick Search Criteria](#).
- [Define New Query](#) (2)  
You can add your own query - based on the available POWL types and own selection values. If you have added an individual query the system displays it as an additional tab page.
- [Personalize](#) (3)  
You can open a popup with several options for personalizing the view and the layout of the worklists. The personalization options offered in the popup are described later in this document.
- [Open Settings Dialog](#) (4)  
You can influence the shown/hidden columns. The procedure for changing the settings for the query result table is described in more detail later in this document.
- [View Dropdown List](#) (5)  
If you have created and saved individual views for the data table, you can select these views from a dropdown list.
- [Refresh](#) (6)  
The line in the bottom right-hand corner displays the date when the data was last read. If you select the link text [Refresh](#), the system executes a manual refresh of the current query. However, by selecting the circle on the right-hand end of this line, you can refresh all queries on this page.

Order and Notification List

Order and Notification List # Default (250) | Order List - Default (152) | Notification List - Default (250) | Order and Operation List - Default (250)

View: \* [Standard View] | Set Order and Notification Status | Set Order Status | Set Notification Status | Assign Order | Print Object | Add to Favorites | Print Version

Export | Refresh

Changed	Order	Notification	Type	Description	Priority Descr.	Tech. Object	Start Date	End Date
	4014343		PM02	TEST Wartungsplan		00AB	19.05.2015	19.05.2015
	4014492		PM03	maint item text plan 22		MCK-SIDEPANEL	26.05.2015	26.05.2015
	4018655		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018677		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018678		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018683		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018684		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018685		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018686		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015
	4018690		PM01	EAMT Test Order	2-High	EAMT-EQ-MAINT	27.04.2015	17.05.2015

Last Refresh 06.05.2015 14:47:26 CET Refresh

**Note:** When a POWL runs in 'shadow mode' the links for *Define New Query* and *Personalize* are inactive to prevent any inconsistencies in the cache, see note [1692542 - POWL Links disabled when shadowing mode is active](#).

### Personalize (3) – Popup for Personalizing the View and the Layout

On the *Personalize View* tab page, you can change the order, the name and the display of queries and their categories. You can specify your own category (1), add your self-defined query, set your individual query as default and move it with *Move Up/Move Down* buttons (2) to the position where it should be displayed on the POWL page. The refresh mode can also be set individually. If you do not need all the active queries that are listed on the right-hand side, mark the corresponding entries and select *Remove* (3). The selected queries are moved to the *Available Queries* column.

Personalize Worklists Page

**Personalization**

Personalize View | Layout

**Available Queries**

Delete Query | Rename Query

Category/Query
▼ Maintenance Orders/Notifications
Order and Notification List # Default

Add > | Add All > | Remove < | Remove All <

**Active Queries**

Move Up | Move Down | Add Category | Remove Category | Rename

Category/Query	Set Default Query	Refresh Type
▼ MY Category		
MY Query	<input checked="" type="radio"/>	Manual ...
▼ Maintenance Orders		
Order List - Default	<input type="radio"/>	Manual Only
Order and Operation List - Default	<input type="radio"/>	Manual Only
▼ Maintenance Notifications		
Notification List - Default	<input type="radio"/>	Manual Only

Apply | Cancel



On the [Layout](#) tab page, you can define how the tab matrix for choosing the queries should be displayed. In this example, we change from [Tab Strip](#) to [Link Matrix](#) and [Apply](#) the settings.

The screenshot shows the 'Personalize Worklists Page' with the 'Layout' tab selected. Under the 'Personalization' section, the 'Link Matrix' radio button is selected, and the 'Apply' button is highlighted. The 'Tab Strip' radio button is unselected, and the 'Enhance Query Text with Category Info' checkbox is also unselected.

The personalized POWL page now opens with the settings for [Link Matrix](#) and displays the [MY Query](#) in category [MY Category](#) as default. The removed category [Maintenance Orders/Notifications](#) with its query [Order and Notification List # Default](#) is no longer displayed.

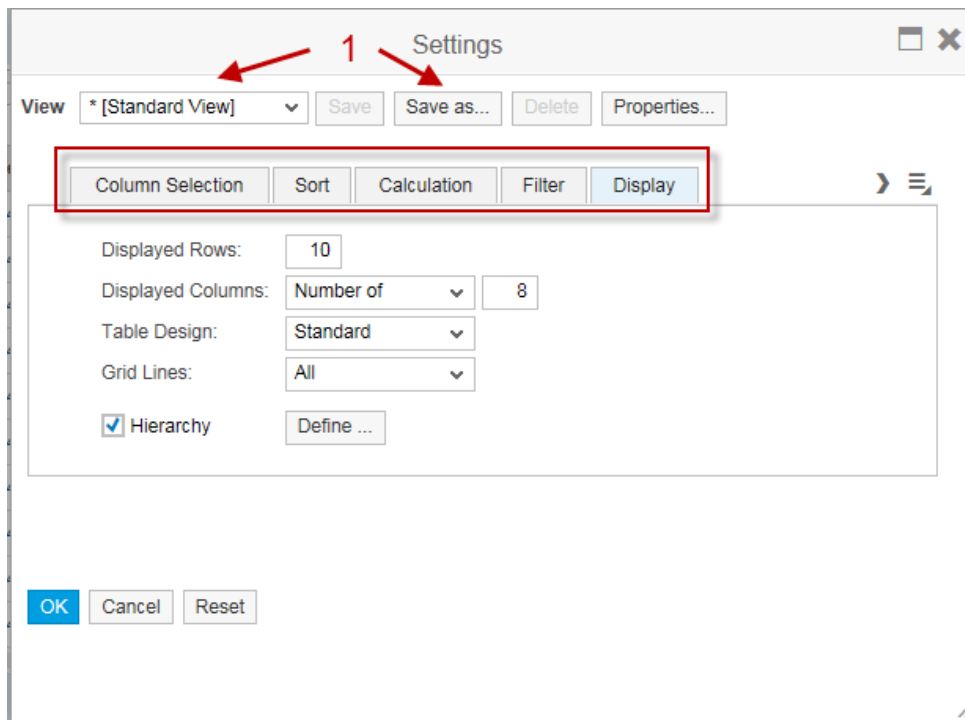
The screenshot shows the 'Active Queries' section with a table of queries. The table has columns: Changed, Leading Document, Order, Notification, Type, Description, Priority Descr., Tech. Object, and Start Date. The table is filtered by 'MY Category - MY Query'.

Changed	Leading Document	Order	Notification	Type	Description	Priority Descr.	Tech. Object	Start Date
	Order	4000322		ZMK1			MCK1-EQ-MAT-H	22.11.2012
	Order	4004361	10002121	PM01			MCK-SIDEPANEL	09.04.2013
	Order	4004380	10002130	PM01	Side panel order	3-Medium	MCK-SIDEPANEL	09.04.2013
	Order	4004381	10002131	PM02	order for SP	3-Medium	MCK-SIDEPANEL	09.04.2014
	Order	4005001	10002911	PM01	STephane test		MCK-SIDEPANEL	24.06.2013
	Order	4005705	10003445	PM01	notif for testing order create with mat		MCK1-FL-MAT	28.11.2013

#### Open Settings Dialog button (4) – Changing settings for query result table

You can select the columns that should be shown or hidden and their sequence, as far as the sorting and the calculation including a line counting. In addition, you can set a filter on any column or change the display of the data table layout.

If you have changed anything in this popup and not yet saved your changes as a view variant, the system indicates this by a star in front of the value in the [View](#) (1) field. The changes only remain for the duration of this session. If you want to keep your settings for the next time, save them in a new view by selecting [Save as](#) (1).

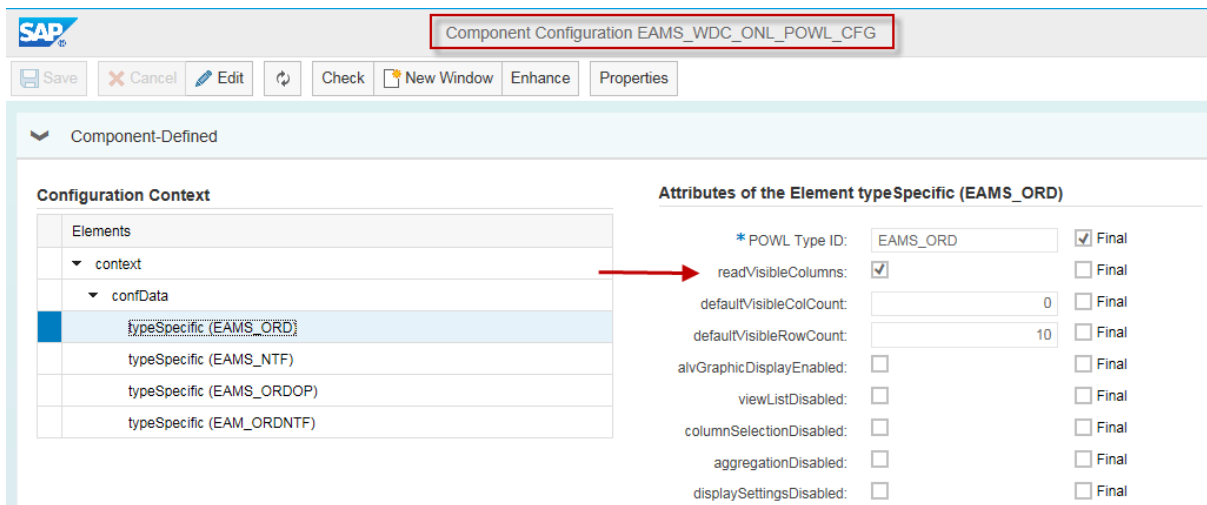


All personalization settings that are made for the POWLs are only visible for the respective user.  
See also [Personalization](#) and [View with Settings](#).

## 9.3 Configuration and Performance of POWLs

SAP delivers standard configurations for POWLs. If you want to change them or create your own POWL with the respective configuration, you can find detailed information about the [POWL configuration parameters](#) on the SCN Wiki page.

Performance optimizations for the *Notification and Order List* are delivered with SAP Note [2107154 - EAMS Web UI: Performance improvements in order lists, operations lists, and notification lists \(POWL\)](#). In the configuration EAMS\_WDC\_ONL\_POWL\_CFG, the checkbox for parameter *readVisibleColumns* is selected by default for each of the POWL type IDs.



**Hint:** If you want to speed up the POWL display, hide less important columns with descriptions, such as material texts or plant texts.

You can find general documentation on configuring the order and notification list (POWL) in EAM generic functions under [Configuration of Order and Notification List \(POWL\)](#).

You can also find further information about POWLs in the SAP Community Network in the section dealing with [Web Dynpro ABAP / POWL](#).

### Quick Search criteria in EAM POWLs

You can define which criteria are to be displayed as quick search criteria in the left upper corner of the POWLs and enable a fast and easy filtering of the result list. You define fields as quick search criteria in the [Selection Criteria Settings](#) (transaction POWL\_QUERY) of the POWL query.

If you want to provide the quick search criteria in the [Master Data Information Center](#) or [Order and Notification Information Center](#), you have to deselect the field in the attribute 'enableNewUI' for the respective component configurations EAMS\_WDC\_MD\_IC\_POWL\_CFG and EAMS\_WDC\_ONL\_IC\_POWL\_CFG. For more information, see the SAP note [2533626](#) and the corresponding attachment.

## 9.4 BAdIs in POWLs

### 9.4.1 Job List and Confirmation List

If you want to enhance the [Jobs](#) POWL list or the [Confirmations](#) POWL, you may have to do this in several places due to the architecture of the application.

Depending on the kind of enhancement, the following enhancement options may be useful:

- User interface/frontend layer: BAdI: Job List Enhancements (BADI\_EAMS\_JOBLIST)
- Backend/service provider interface layer: BAdI Adjustment of Data for Service Provider Access Methods (/PLMB/EX\_SPI\_APPL\_ACCESS)

The Business Add-In `BADI_EAMS_JOBLIST` (enhancement spot `ES_EAMS_JOBLIST`) offers several methods for implementing enhancements in the frontend layer of the job list and confirmation list, for example adding actions (pushbuttons), adding additional columns, specifying additional selection criteria and defining urgency rules.

The available BAdI methods are described in the BAdI and interface documentation of BAdI `BADI_EAMS_JOBLIST` and interface `IF_EX_BADI_EAMS_JOBLIST`.

For general technical information about the implementation of POWL feeder classes, see the section [Feeder Implementation](#) of the online documentation for [Personal Worklists](#).

This documentation describes the methods used in the POWL feeder class and will help you to identify the required BAdI methods.

The *BAdI Job List Enhancements* (`BADI_EAMS_JOBLIST`) can be accessed via IMG: [Integration with Other SAP Components -> Business Packages/Functional Packages -> Maintenance Roles -> Maintenance Worker -> Business Add Ins](#).

## 9.4.2 Notification and Order List

### Adding (Customer) Fields and (Customer) Actions

You can add (customer) fields and actions to the standard POWL configuration with Business Add-In (BAdI) *Changes to Order and Notification List* (`BADI_EAMS3_POWL`) in enhancement spot `ES_EAMS3_UI`. You can implement this BAdI via the IMG for [Plant Maintenance and Customer Service](#) under [System Enhancements and Data Transfer -> Business Add-Ins](#). The interface of BAdI `BADI_EAMS3_POWL` is similar to the interface used in the feeder class (`CL_EAMS_UI_FD_ONL_POWL`) of the *Order and Notification POWL* (`IF_POWL_FEEDER`).

### Adding Fields

If you want to add customer-specific fields to a specific application, you can use BAdI `BADI_EAMS3_POWL` to enhance the UI accordingly. To fill the individual customer-specific fields with the respective data, you also have to implement BAdI `/PLMB/EX_SPI_APPL_ACCESS`. With BAdI method `AFTER_QUERY` you publish the customer-specific fields in the POWL structure `EAMS_S_SP_ORDNTF_ONL`. Proceed as follows:

- Enhance DDIC structure `EAMS_S_SP_ORDNTF_ONL` by adding a customer-specific append structure with customer-specific fields.
- Create an enhancement implementation for the enhancement spot `/PLMB/ES_SPI`.
- Create a BAdI implementation for the BAdI definition `/PLMB/EX_SPI_APPL_ACCESS`.
- Create a filter in the BAdI implementation for the fields `IV_NODE_NAME` (e.g. `EAMS_ONL`) and `IV_ABBID` (Application Building Block) (e.g. `EAM_ORDNTF`) in order to restrict the logic encoded in the BAdI implementation to the corresponding application.
- Implement the method `AFTER_QUERY` in order to publish the customer-specific fields after the standard query has been executed.
- Create an enhancement implementation for the enhancement spot `ES_EAMS3_UI`.
- Create a BAdI implementation for the BAdI definition `BADI_EAMS3_POWL`.
- Create a filter in the BAdI implementation for the `powl_type` (e.g. `EAMS_ORD`) in order to restrict the logic encoded in the BAdI implementation to the corresponding list ([Order List](#), [Notification List](#), or [Order and Notification List](#)).
- Implement the method `GET_FIELD_CATALOG` to specify the properties of customer-specific fields on the UI.

## Adding Actions

If you want to add customer-specific pushbuttons or change existing ones in the Web Dynpro POWL application for the [Order and Notification List](#), you can use the BAdI methods `GET_ACTIONS` and `HANDLE_ACTION` of `BADI_EAMS3_POWL`. Proceed as follows:

- Create an enhancement implementation for the enhancement spot `ES_EAMS3_UI`.
- Create a BAdI implementation for the BAdI definition `BADI_EAMS3_POWL`.
- Create a filter in the BAdI implementation for the `powl_type` (e.g. `EAMS_ORD`) in order to restrict the logic encoded in the BAdI implementation to the corresponding list ([Order List](#), [Notification List](#), or [Order and Notification List](#)).
- Implement the method `GET_ACTIONS` to add customer-specific actions.
- Implement the method `HANDLE_ACTION` to define your own customer-specific user command handling.

## Restricting Actions to a User Group

If you are working in the SAP Net Weaver Business Client (NWBC) and want to restrict specific actions to a certain user group, you can fill the import parameter `I_ROLE_NAME` in BAdI method `GET_ACTIONS` of `BADI_EAMS3_POWL`. If you do not work in NWBC, this import parameter does not contain a value.

**Class Builder: Display Interface IF\_BADI\_EAMS3\_POWL**

Interface: `IF_BADI_EAMS3_POWL` Implemented / Active

Properties Interfaces Attributes **Methods** Events Types Aliases



Method parameters: `GET_ACTIONS`

Methods Exceptions

Parameter	Type	P...	O...	Typing ...	Associated Type	Default value	Description
<code>I_USERNAME</code>	Importi...	<input type="checkbox"/>	<input type="checkbox"/>	Type	XUSER		User name
<code>I_APPLID</code>	Importi...	<input type="checkbox"/>	<input type="checkbox"/>	Type	POWL_APPLID_TY		Application ID
<code>I_SELCRIT_PARA</code>	Importi...	<input type="checkbox"/>	<input type="checkbox"/>	Type	RSPARAMS_IT		rsparams Table
<code>I_LANGU</code>	Importi...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Type	LANGU	SY-LANGU	Language Key
<code>I_ROLE_NAME</code>	Importi...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Type	STRING		role name  (only in nwbc)
<code>C_ACTIONS_CHANGED</code>	Changi...	<input type="checkbox"/>	<input type="checkbox"/>	Type	POWL_XFLAG_TY		X-Flag
<code>C_ACTION_DEFS</code>	Changi...	<input type="checkbox"/>	<input type="checkbox"/>	Type	POWL_ACTDESCR_I...		action meta description

## 9.4.3 Maintenance Plan and Item List

You can use the Business Add-ins (BAdIs) [BAdI: Mass Change of Maintenance Plan Header Data](#) (`MPLAN_HEADER_MASS_CHANGE`) and [BAdI: Mass Change of Maintenance Items](#) (`MPLAN_ITEM_MASS_CHANGE`) to make customer-specific enhancements to the mass data change function for maintenance plans and items.

-  **BAdI: Mass Change of Maintenance Plan Header Data**
-  **BAdI: Mass Change of Maintenance Items**

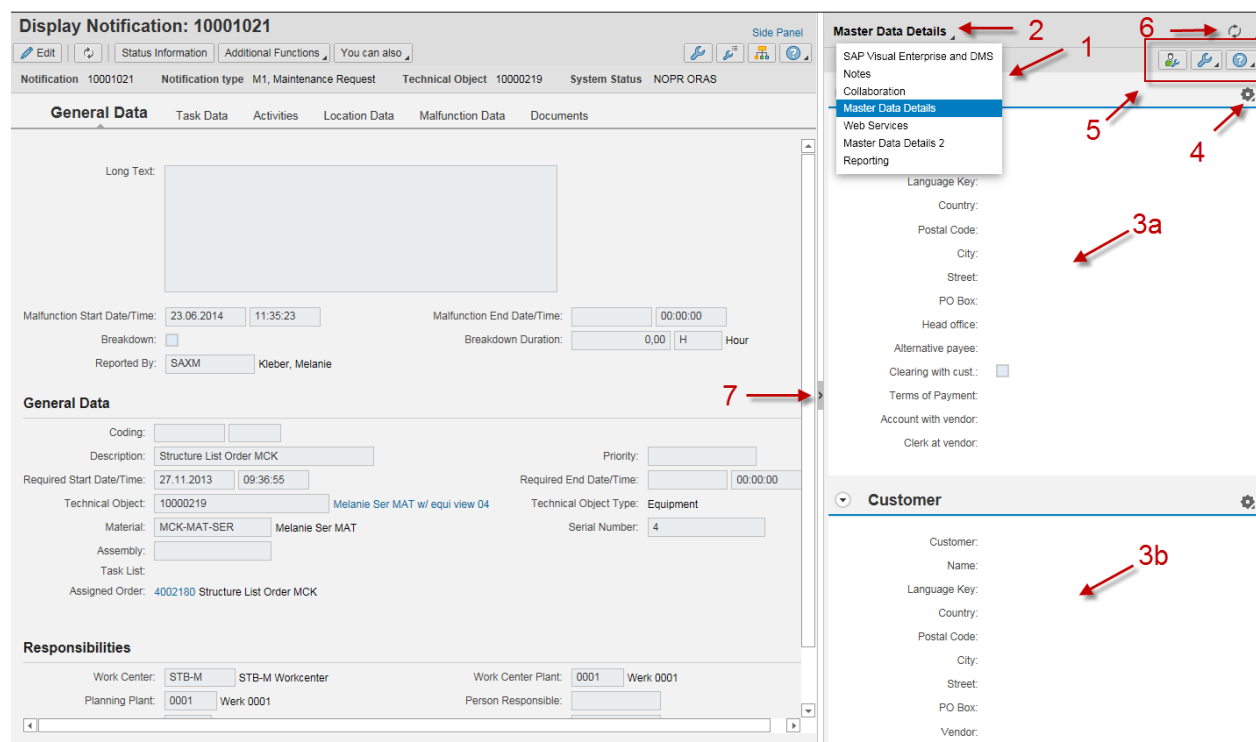
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You can implement these BAdIs via the IMG for *Plant Maintenance and Customer Service* under *System Enhancements and Data Transfer -> Business Add-Ins*.

## 10 Using Side Panels with the EAM Web UI

You can use side panels when processing technical objects, maintenance notifications, service notifications, maintenance orders, service orders, and task lists. Side panels are available in the SAP NetWeaver Business Client for SAP GUI applications and in Web Dynpro applications. You can enhance the side panels to meet your requirements, thereby specifying which information you want to have displayed in the side panel.

The picture below shows a Web Dynpro notification in NWBC for Desktop. You can open a dropdown list of available side panels (1). This allows you to select another panel. In this example, the panel *Master Data Details* (2) is shown. This panel contains two Collaborative Human Interface Parts (CHIPs) (3a and 3b). In the CHIP menu (4), you can display the properties and create or change CHIP Customizing settings. The left-hand button (5) in the side panel menu allows you to personalize the panel. With the button in the middle, you can choose between customizing the panel (for all users in the client) or configuring the panel (for all users in the entire system). The right-hand button is the help button. With the refresh button (6), you can update the CHIP data. Use the arrow (7) to close the panel.



You can use transaction BSSP\_CONTENT (*Side Panel Content Browser*) to find information about side panels for users, transactions, roles, and so on in your system.

For more information about side panels, see [Side Panel for Business Suite](#) in the SAP Library. From here, you can also navigate to the documentation for delivered side panel roles.

For additional information, see [Integrating Context-Sensitive Side Panels](#) in the SAP Library.

## 10.1 Setting up Side Panels for EAM Web UI Applications

The following roles are delivered with EAM side panels:

- SAP\_BSSP\_LO\_SIDE\_PANEL
- SAP\_BSSP\_LO\_SIDE\_PANEL\_EXT (contains SAP 3D Visual Enterprise Panel)
- SAP\_PM\_BCV\_SIDE\_PANEL (contains Business Context Viewer Side Panel).

To show side panels in the EAM Web Dynpro applications, you have to copy the role SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2 (in transaction PFCG) to your own role and add the three side panel roles mentioned above.

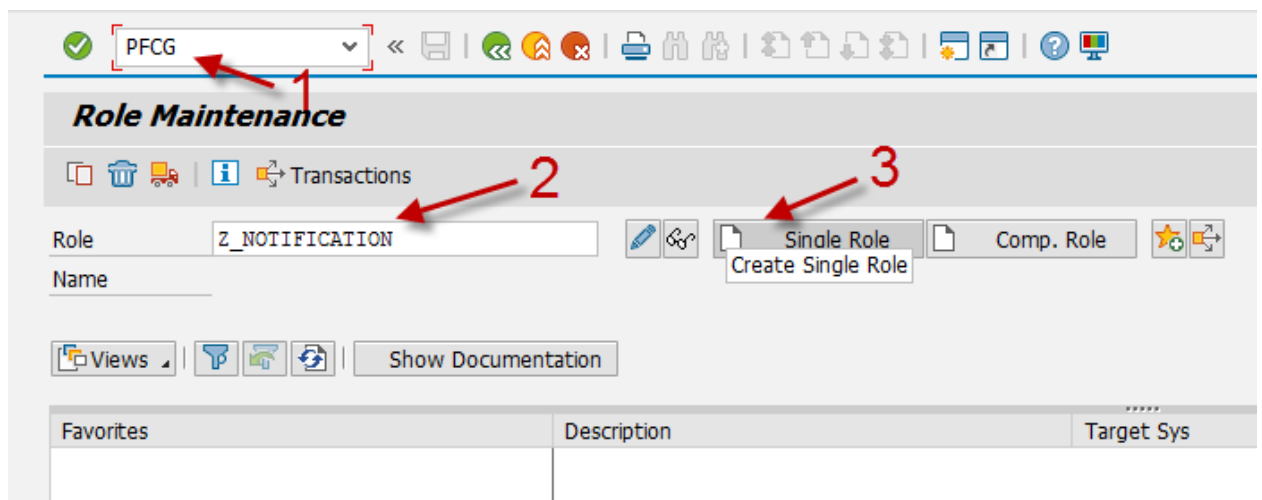
To show side panels in the EAM SAPGUI transactions, you have to add the roles SAP\_BSSP\_LO\_SIDE\_PANEL, SAP\_BSSP\_LO\_SIDE\_PANEL\_EXT and SAP\_PM\_BCV\_SIDE\_PANEL to the role you use for working with SAPGUI.

For up-to-date information about side panels and CHiPs for EAM, see SAP Note [1816377 - EAM Side Panels, Roles and Tagging information](#).

### 10.1.1 Adding Side Panel Functionality to Your Own PFCG Role (for Notification)

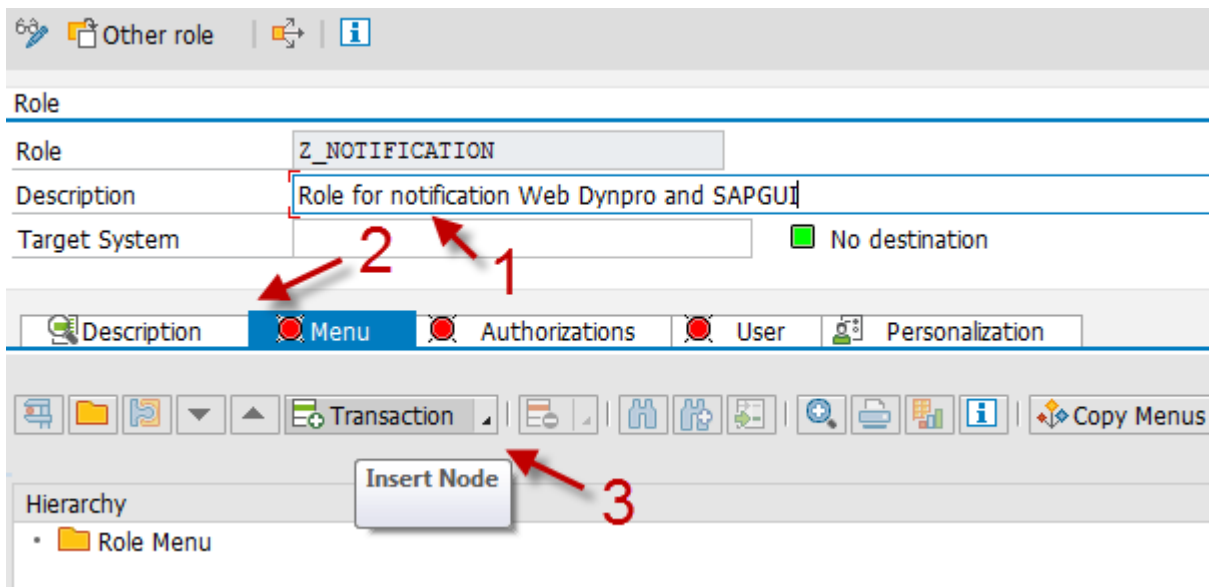
You can add existing side panels to your Web UI applications as well as to the corresponding SAPGUI transactions. In this example you want to add a side panel to the notification in Web UI and SAPGUI (transaction IW23).

First, open transaction PFCG (1), enter a new role, such as Z\_Notification (2), and choose [Create Single Role](#) (3).

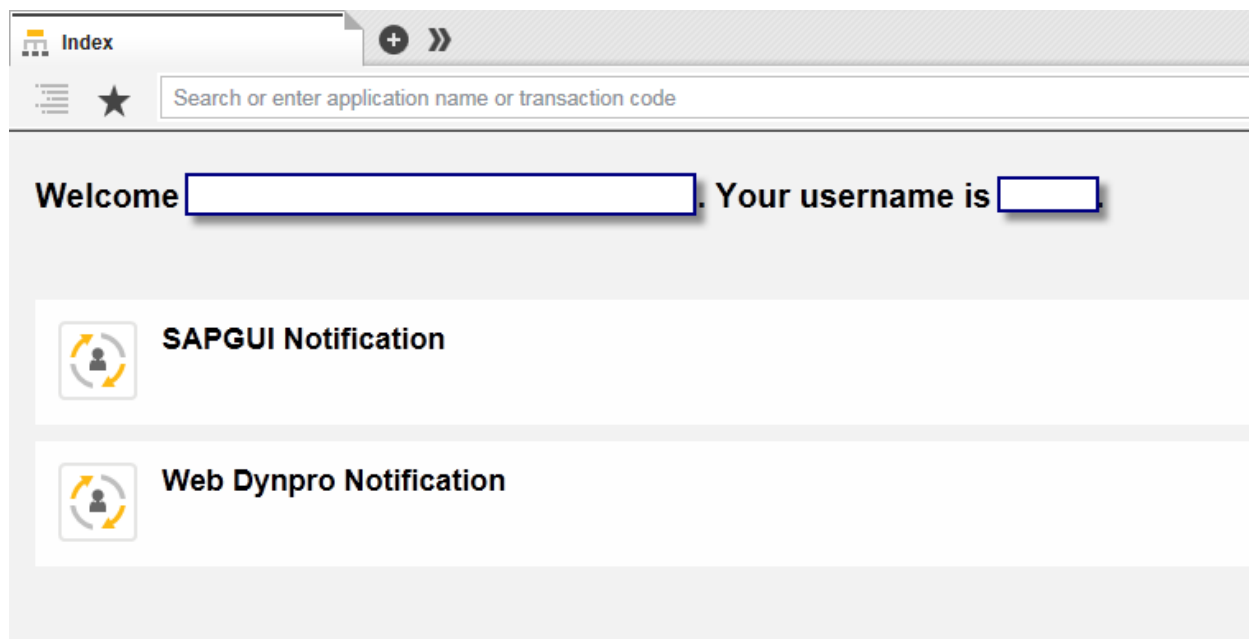


You enter a role description (1), then choose the [Menu](#) tab (2):

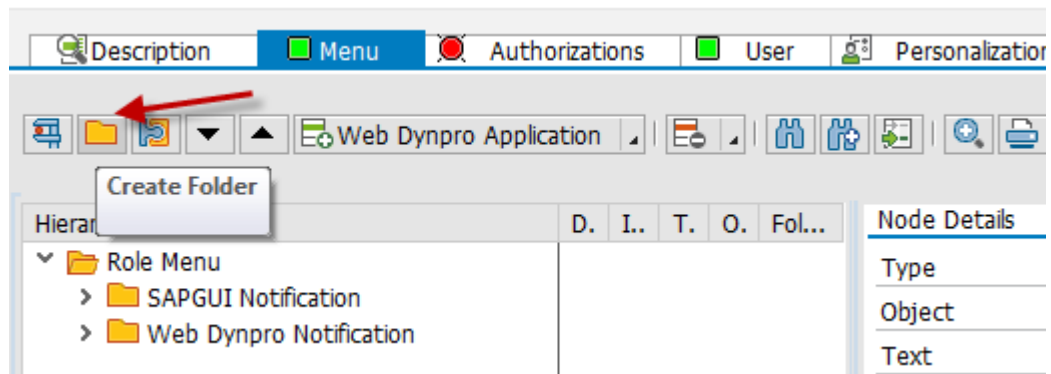




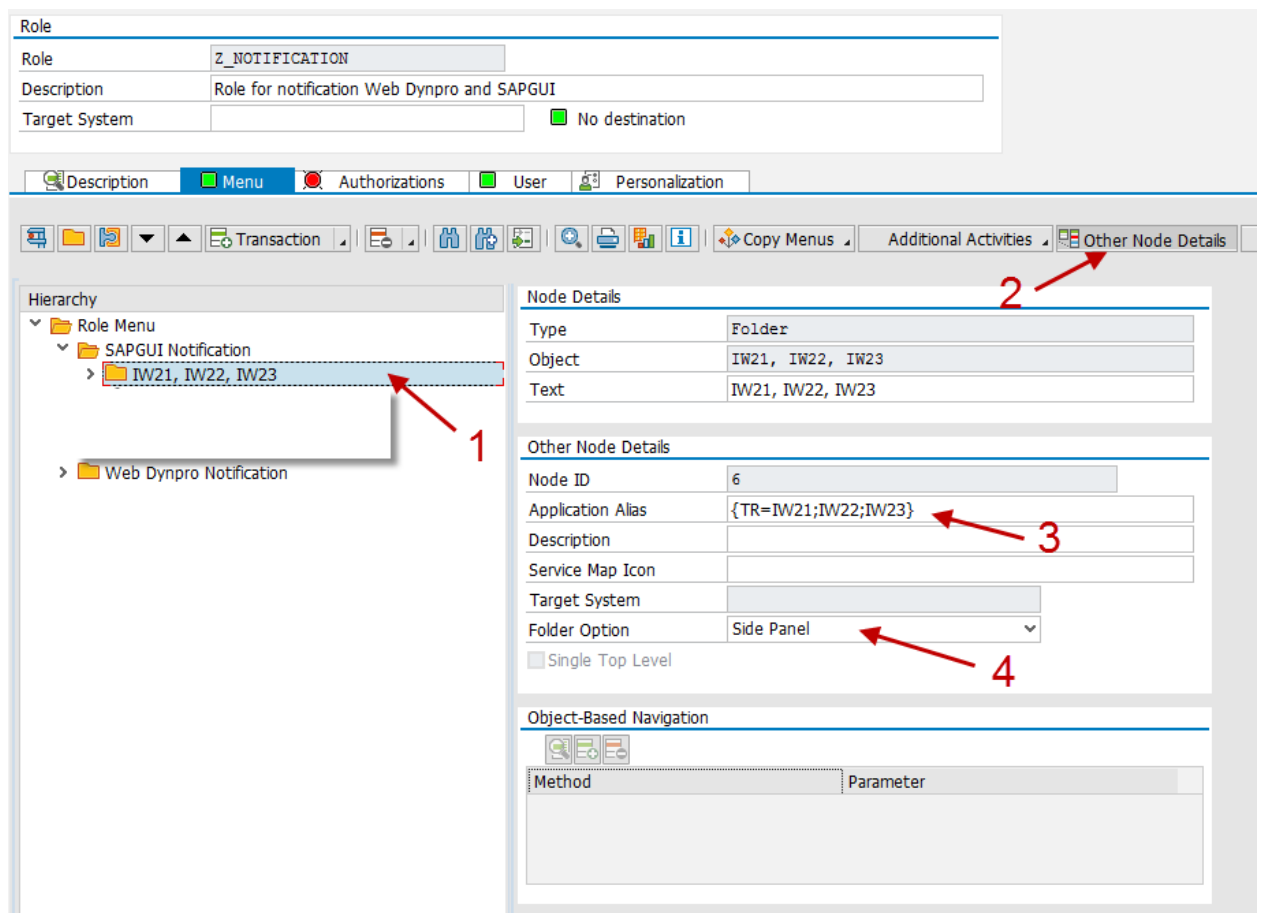
Before you can add existing side panels to the new customer-specific PFCG role, create a folder structure in the *Role Menu*. The folders are necessary to group the applications on the entry screen when you start NWBC for Desktop (see 15.2):



First you create two folders, one for SAPGUI Notification and one for Web Dynpro Notification:



Then you create a subfolder for the *SAP GUI Notification* folder with side panel information for SAPGUI transactions IW21, IW22, IW23, which is also the name of the folder. To maintain the details, choose *Other Node Details* (2) and specify where you want the side panels to be shown (3). In addition, the folder option must be set to *Side Panel* (4). The side panels you define later for the notification will be stored in this folder.



Similarly, you create a subfolder for the *Web Dynpro Notification* folder with side panel information for the application configuration EAMS\_WDA\_ORDNTF\_OIF\_CFG on the Web UI:

Node Details	
Type	Folder
Object	SP Web Dynpro Notification
Text	SP Web Dynpro Notification

Other Node Details	
Node ID	7
Application Alias	{WDA=EAMS_WDA_ORDNTF_*}
Description	
Service Map Icon	
Target System	
Folder Option	Side Panel
<input type="checkbox"/> Single Top Level	

Object-Based Navigation	
Method	Parameter

Once you have created the folder structure, select the folder *SAPGUI Notification* and add the transactions that are to appear in the NWBC role. To do so, you assign SAPGUI transactions to the role (1) by using the button *Add Transaction*. The transactions you enter in the popup are inserted in the folder structure under *SAPGUI Notification*.

The screenshot shows the SAP GUI interface. The 'Hierarchy' pane on the left displays the folder structure: 'Role Menu' > 'SAPGUI Notification'. The 'Transaction' button in the toolbar is highlighted with a red arrow. The 'Add Transaction' dialog box is open, showing a list of transactions. The transaction 'IW23' is selected, and its text 'play PM Notification' is visible. A red box highlights the 'IW23' row. The 'Node Details' pane on the right shows the details of the selected node.

Then you determine which Web UI application is added to the *Web Dynpro Notification* folder and will appear in the NWBC role. To do so, mark the corresponding folder, choose *Add Web Dynpro Application* (1), and assign the Web UI Notification application with technical name `EAMS_WDA_ORDNTF_OIF` (2). The system automatically uses the

description from the dictionary. You can use the input help to enter the name for the application configuration. In this example, we are using the same configuration (3) as in role SAP\_COCKPIT\_EAMS\_GENERIC\_FUNC2. You also have to maintain a few additional parameters (4).

Hierarchy: Q7Q(1)/002 Web Dynpro Application

Application Type: Standard | Personalization | Application Configuration

Web Dynpro Applicat.: EAMS\_WDA\_ORDNTF\_OIF

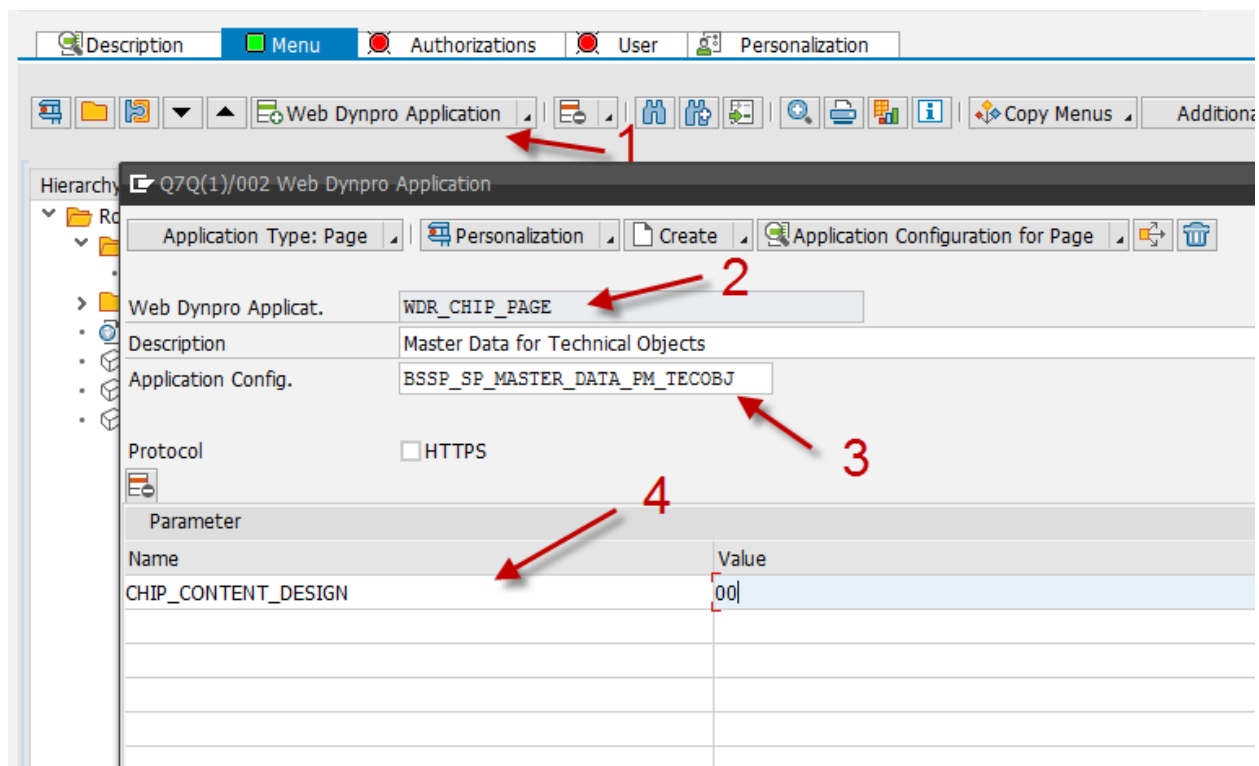
Description: Maintenance Order/Notification

Application Config.: EAMS\_WDA\_ORDNTF\_OIF\_CFG

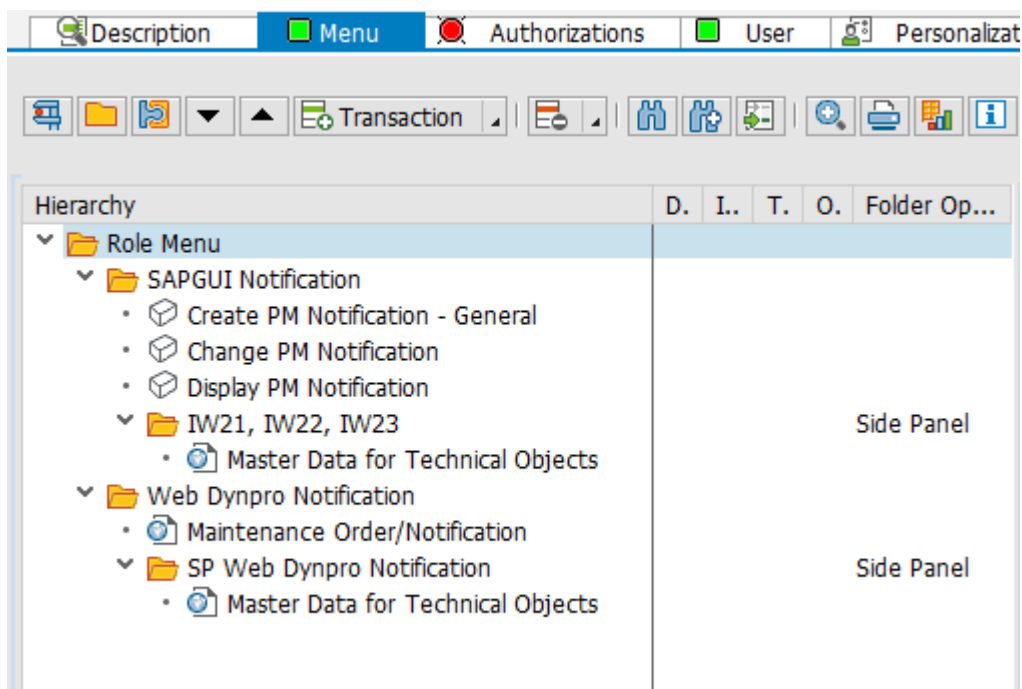
Protocol: ☐ HTTPS

Parameter	
Name	Value
FRW_MODE	D
EAMS_ROLE	EAMS_ROLE_GF
FRW_OTYPE	EAMS_NTF

After having determined where you want the side panels to be available, you finally add one or more side panels to the folders with *Folder Option* Side Panel. In this example, you want to assign the existing side panel *Master Data for Technical Objects*. The side panel is a Web Dynpro application and contains a CHIP for *Equipment Details* and *Functional Location Details*. You therefore add this Web Dynpro application (1) to the side panel subfolders *IW21, IW22, IW23* (SAP GUI) and *SP Web Dynpro Notification* (Web UI) as a WDR\_CHIP\_PAGE (2). The application configuration is BSSP\_SP\_MASTER\_DATA\_PM\_TECOBJ (3). The parameter CHIP\_CONTENT\_DESIGN (4) with value 00 ensures that the background of the SAPGUI and the side panel have the same design.



Now the side panel *Master Data for Technical Objects* is shown in the SAP GUI transactions of the notification as well as in the Web Dynpro application. Your new customer-specific role `Z_NOTIFICATION` looks like this:



## 10.1.2 Displaying the Side Panel for a Notification

After having created your customer-specific role `Z_NOTIFICATION` (see chapter 10.1.1) and having added the side panel *Master Data for Technical Objects* to that role, you can now display this side panel in the notification. Start the NWBC for Desktop (see chapter 15.2) and choose the role `Z_NOTIFICATION`. In the notification, the arrow on the right-hand side of the screen (1) indicates that a side panel is available. Since the side panel *Master Data for Technical Objects* provides information about the technical object assigned to the notification, you must enter a technical object to see any data in the side panel CHIPS.

The screenshot displays the SAP NWBC Desktop interface for a notification. The title bar reads "Display Notification: 10004105". Below the title bar, there are tabs for "Notification", "Notification type", "Technical Object", and "System Status". The "Notification" tab is active, showing "10004105". The "Notification type" is "M1, Maintenance Request". The "Technical Object" is "STB-1000-DF01". The "System Status" is "OSNO".

Below the tabs, there is a "General Data" section with sub-tabs: "Organizational Data", "Malfunction Data", "Task Data", "Activities", and "Documents". The "General Data" sub-tab is active, showing a "Long Text" field and a "General Data" section with various input fields.

Red arrows and numbers highlight specific elements:

- Arrow 1 points to the right-hand side of the screen, indicating the side panel area.
- Arrow 2 points to the "Technical Object" field, which contains the value "STB-1000-DF01".

The "General Data" section includes the following fields:

- Coding: [ ] [ ]
- Description: [ ]
- Required Start Date/Time: 16.06.2014 10:53:40
- Technical Object: STB-1000-DF01 (with a link to "Electric pump 001")
- Material: [ ]
- Priority: [ ]
- Required End Date/Time: [ ] 00:00:00
- Technical Object Type: Equipment
- Serial Number: [ ]

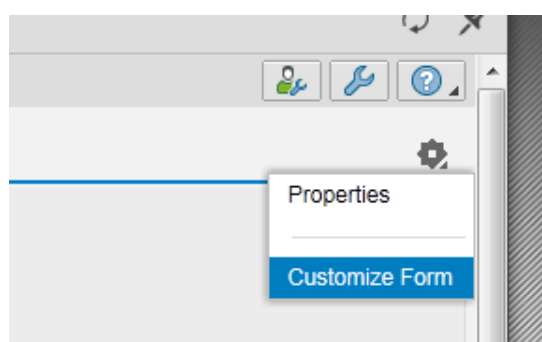
The first CHIP now displays detailed information from the master record of the piece of equipment. If a superior functional location exists, its details are displayed in the second CHIP.

The screenshot displays two SAP EAM web UI screens. The left screen, titled 'Display Notification: 10004105', shows a notification for a maintenance request (M1) related to a technical object (STB-1000-DF01). It includes a 'General Data' section with fields for coding, description, dates, and technical object details. The right screen, titled 'Master Data for Technical Objects', shows the 'Equipment' master data for the same technical object, including functional location (SB-B01-1), description (Pump set 1), and various organizational data like maintenance plant and planning plant.

## 10.1.3 Customizing and Link Navigation in EAM CHiPs

You can determine which context-sensitive information you want to be displayed in the side panel of the application by customizing the list of fields that are displayed in the CHiPs. In this example, you want to enhance the field list that is displayed in the side panel for the notification and add the construction type to the *Equipment* CHIP. Since you want to have all the information about the construction type to be accessible in the side panel, you provide a link to the construction type master data.

You can add fields to a CHIP by changing the customizing settings. To do so, choose *Customize Form* in the menu of the CHIP.



For the *Equipment* CHIP you open the component customizing of BSSP\_PM\_EQUIPMENT. The repository on the left-hand side provides a list of all fields that are available for the *Equipment* CHIP. You can move fields from the repository to the preview via drag and drop to add new fields to the side panel. If you move fields from the preview back to the repository, these fields are no longer visible in the side panel. In our example you move the field *Construction Type* (CONSTTYPE) from the repository to the preview. You want the new field to be shown in the screen area *General* underneath the *Technical Object Type*, so you move the field via drag and drop to that position in the preview.

COMP_CODE	Company Code	3	<b>General</b>	
CONFIGMAT	Configurable Material	4		Equipment Category: <Text View>
CONFIGMAT_EX...	External Config. Material No.	5		Technical Object Type: <Text View>
CONFIGMAT_GUID	GUID (External Config. Material)	6		Construction Type: <Link to Action>
CONFIGMAT_VE...	Ext. Config. Material Version	7		Manufacturer: <Text View>
CONFIG_CONTR...	Configuration Control Indicator	8		Start-Up Date: <Text View>
CONSTMONTH	Construction Month			
CONSTTYPE	Construction Type			
CONSTTYPE_EX...	Construction Type (Mat. No.)			

Since you want to provide a link to the construction type data, you have to change the field attributes. To do so, select the new field (1), open the attributes (2), and change the display type from *Text View* to *Link to Action* (3a). Your changes are adapted immediately in the preview (3b). You then have to enter `EAM_NAVIGATION` (4) in the *Action Assignment* section.

**Component Customizing BSSP\_PM\_EQUIPMENT**

Save Cancel Edit Save Draft Load Draft Undo Redo Check

4	Equipment Category:	<Text View>
5	Technical Object Type:	<Text View>
6	Construction Type:	<Link to Action>
7	Manufacturer:	<Text View>

**Attributes of Element: CONSTTYPE**

**Element**

Field Name:	CONSTTYPE	Display Type:	Link To Action
Text:		Tooltip:	Construction Type
Label Text:	Construction Type	Label Visibility:	Is Visible
Tag Name:		Context Menu ID:	

**Position**

Start Row of Label:	6	Start Col. of Label:	A
End Row of Label:	6	End Col. of Label:	C
Start Row of Element:	6	Start Column of Element:	D
End Row of Element:	6	End Col. of Element:	H

**Display-Type-Dependent Properties**

Quickview ID:		Image Field:	
Hide Text:	<input type="checkbox"/>	Hotkey:	none
Image Source:		Link Design:	Standard
Link Type:	Reporting	Wrapping:	<input type="checkbox"/>

**Action Assignment**

\* FPM Event ID for onAct..

EAM_NAVIGATION (EAM Navigation)
---------------------------------

If you now open the side panel for the notification and display the CHIP *Equipment*, the new field is displayed. If a construction type (1) is assigned to the respective piece of equipment, the system provides the link to the Web



Dynpro application (only if software component PLMWUI is activated) or the SAPGUI transaction (2). Depending on whether or not the software component PLMWUI is activated, either the Web Dynpro application opens or the *Material Master* (transaction MM03) of the construction type is displayed.

**Master Data for Technical Objects**

Equipment: RBU-HI991  
Description: Roland

**General**

Equipment Category: M  
Technical Object Type:  
Construction Type: **RBU** 1  
Manufacturer: Construction Type  
Start-Up Date:

**Location Data**

Maintenance Plant: 0001  
PP Work Center: MAN-002

**Organization Data**

Planning Plant: 0001  
Planner Group: 010  
Work Center: STB-E  
Cost Center: STB-E

2

The possibility to provide links via Launchpad Navigation in side panels is delivered by SAP EAM in the following CHIPs:

*Equipment* (BSSP\_PM\_EQUIPMENT); link to master data

*Functional Location* (BSSP\_PM\_FUNCTIONAL\_LOCATION); link to master data

*Purchase Requisition Items* (BSSP\_PM\_PURREQITEM\_LIST); link to original document

*Purchase Order Items* (BSSP\_PM\_PURORDERITEM\_LIST); link to original document

## 10.1.4 Using the SAP 3D Visual Enterprise Panel in WEB UI

The *SAP 3D Visual Enterprise* (BSSP\_SP\_VISUAL\_ENTERPRISE) side panel enables you to visualize technical objects, spare parts, and instructions in the SAP 3D Visual Enterprise Viewer. 2D and 3D model views as well as animated scenes make critical maintenance processes such as finding the spare parts you need and carrying out instructions quicker and easier. You can also display the assigned RH files as thumbnails.

For more information about this side panel, see [PM Side Panels: SAP 3D Visual Enterprise](#).

The *SAP 3D Visual Enterprise* side panel provides the following CHiPs:

- *SAP 3D Visual Enterprise Viewer* (DMS\_CHiP\_VIEWER)
- *Thumbnail* (DMS\_CHiP\_THUMBNAiL)

Furthermore, a logic for finding document info records is implemented on the *Viewer* CHiP. In the side panel, however, the system only displays document info records that are assigned at header level and whose assignment has already been saved.

You can determine which pictures are shown in which CHiP in customizing for *Cross-Application Components* under **Document Management** **Visual Enterprise Generator** **Define Search Sequence for Viewable File** (or transaction SM30 for view DMS\_VEG\_V\_VSS).

If you want the system to show different pictures on the side panel, you can place the *Viewer* CHiP twice on the side panel. Then you define different files to be displayed by determining different **search sequences** and setting different **usage parameters** in customizing of the CHiP itself (see 10.1.3 for information about CHiP customizing). Then the side panel displays, for example, the document info record directly assigned to the order header on one CHiP and the document info record assigned to the equipment of the order header on the other CHiP.

The screenshot displays the SAP 3D Visual Enterprise interface. On the left, the 'Display Maintenance order: 4009363' window shows various data fields under 'General Data' and 'Responsibilities'. The 'General Data' section includes fields for Description, Required Start (24.06.2014), Required End (24.06.2014), Technical Object (10000287), Process Pump Capacity (1500 m3/h), Material, Assembly, Assigned Notification (10005577 Pump Leaking), Task List, Priority, and System Condition. The 'Responsibilities' section includes Work Center (STB-M), STB Mechanik, Planning Plant (0001), Work 0001, Planner Group (STB), Work Center Plant (0001), and Person Responsible. On the right, the 'SAP 3D Visual Enterprise' side panel is visible, showing a 3D model of a pump and a performance curve graph. The graph plots 'TOTAL HEAD' (m) against 'CAPACITY' (m3/h) for two different RPM values: 1450 RPM (50 Hz) and 1750 RPM (60 Hz). The graph shows several curves for different pump models, including 3x4-13, 3x4-10, 3x4-12, 3x4-11, 3x4-14, 3x4-15, 3x4-16, 3x4-17, 3x4-18, 3x4-19, 3x4-20, 3x4-21, 3x4-22, 3x4-23, 3x4-24, 3x4-25, 3x4-26, 3x4-27, 3x4-28, 3x4-29, 3x4-30, 3x4-31, 3x4-32, 3x4-33, 3x4-34, 3x4-35, 3x4-36, 3x4-37, 3x4-38, 3x4-39, 3x4-40, 3x4-41, 3x4-42, 3x4-43, 3x4-44, 3x4-45, 3x4-46, 3x4-47, 3x4-48, 3x4-49, 3x4-50, 3x4-51, 3x4-52, 3x4-53, 3x4-54, 3x4-55, 3x4-56, 3x4-57, 3x4-58, 3x4-59, 3x4-60, 3x4-61, 3x4-62, 3x4-63, 3x4-64, 3x4-65, 3x4-66, 3x4-67, 3x4-68, 3x4-69, 3x4-70, 3x4-71, 3x4-72, 3x4-73, 3x4-74, 3x4-75, 3x4-76, 3x4-77, 3x4-78, 3x4-79, 3x4-80, 3x4-81, 3x4-82, 3x4-83, 3x4-84, 3x4-85, 3x4-86, 3x4-87, 3x4-88, 3x4-89, 3x4-90, 3x4-91, 3x4-92, 3x4-93, 3x4-94, 3x4-95, 3x4-96, 3x4-97, 3x4-98, 3x4-99, 3x4-100.

You can use the Business Add-In BAdI: *File Determination Logic for SAP 3D Visual Enterprise Viewer* (BADI\_EAMVE\_FILE\_SEARCH) to influence the standard file determination logic.

## 10.1.5 List of PM Side Panels

The table below shows a list of all PM side panels used in PM transactions and WDAs. For detailed information about CHIPs and technical names, see SAP Note [1816377](#).

Web Dynpro Application	Application Configuration	Description
WDR_CHIP_PAGE	BSSP_SP_NOTES_ONLY	Notes
WDR_CHIP_PAGE	BSSP_SP_STREAMWORK	Collaboration
WDR_CHIP_PAGE	BSSP_SP_PM_COST_REPORTING	Reports
WDR_CHIP_PAGE	BSSP_SP_MASTER_DATA_PM	Master Data Details
WDR_CHIP_PAGE	BSSP_SP_WEBSER_PM_KUN_LIEF	Web Services
WDR_CHIP_PAGE	BSSP_SP_MASTER_DATA_PM_TECOBJ	Master Data Details
WDR_CHIP_PAGE	BSSP_SP_PM_ORDER_REPORTING	Reports
WDR_CHIP_PAGE	BSSP_SP_VISUAL_ENTERPRISE	SAP 3D Visual Enterprise
/BCV/WDA_UIF_SIDE_PANEL	--	Business Context Viewer

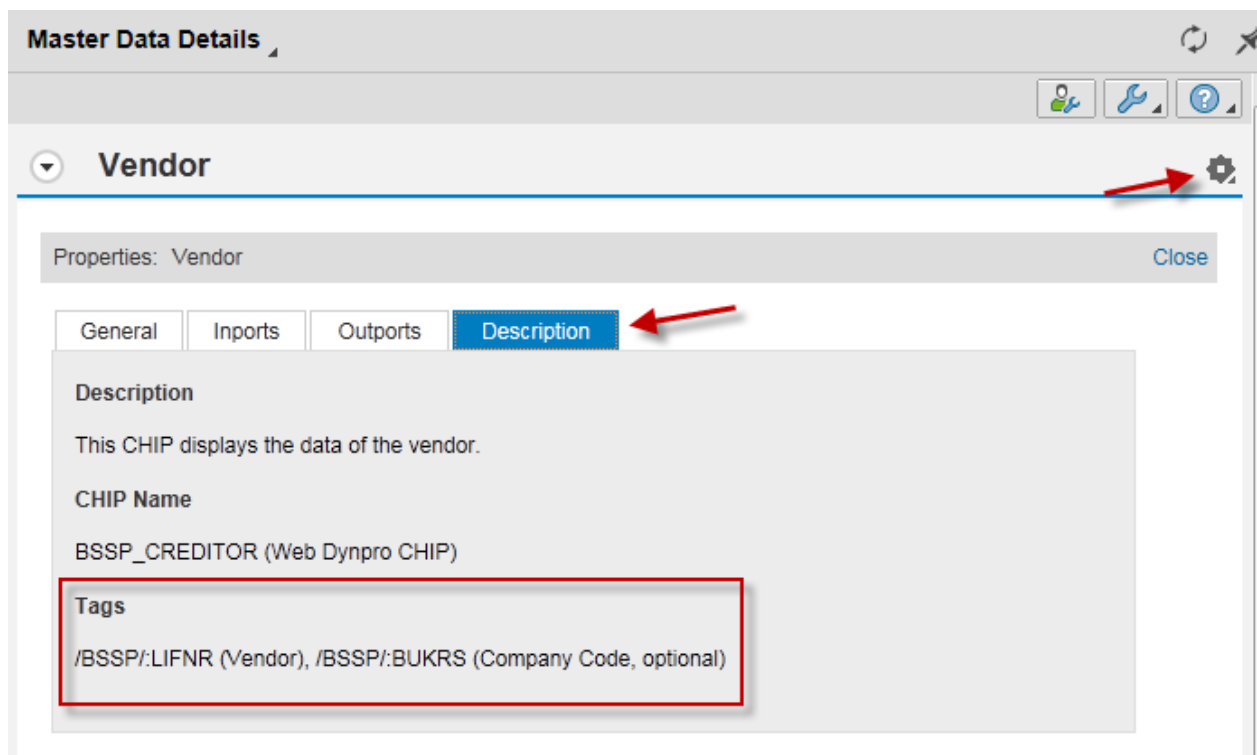
For information about Side Panels refer to SCN Blog [Side panel for SAP Business Suite - Overview](#). For creating own content in Side Panels see SCN Blog [Side panel for SAP Business Suite \(2\) - Adapting SAP's Side Panel content and creating new content](#).

## 10.2 Tags and Tagging

### 10.2.1 Tags Used by CHIP

Tagging (automatic wiring) is provided for you to set up a connection between an application whose data is needed (a Web Dynpro application or an application in the NWBC content area) and the CHIP in the side panel. The tags in the Web Dynpro application must be unique, meaning a specific tag can only be used once within a Web Dynpro application.

To find out which tags the CHIP uses, you open the properties of the CHIP (see 10.1.3) and choose the [Description](#) tab. For example, the CHIP [Vendor](#) needs values for tag [Vendor Name](#) (/BSSP/:LIFNR) and (optionally) for tag [Company Code](#) (/BSSP/:BUKRS).



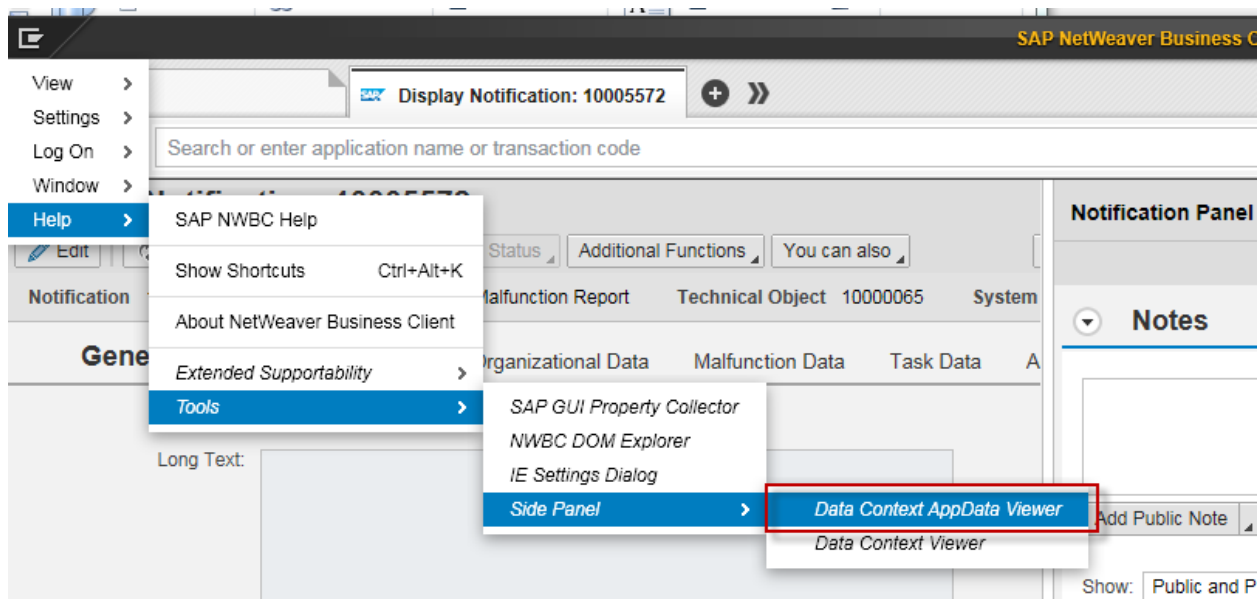
## 10.2.2 Availability of Tags in the System

SAP delivers standard tags for SAP GUI transactions. These SAP tags are stored in table NWBC\_VS\_GUI\_TAG. If you add your customer-specific tags, you have to store them in table NWBC\_VC\_GUI\_TAG. The tagging for EAM Web Dynpro applications is already provided by SAP. The namespace for the tags is /BSSP/ :.

EAM roles and tagging are available in Software Component EA-APPL 617 as of SAP enhancement package 6 for SAP ERP 6.0 SP07 and are therefore included in enhancement package 7. For more details, see SAP Note [1816377](#).

## 10.2.3 Checking Current Tag Values

To check which value is currently transferred from the application to the CHIP tag, hold down the CTRL button while you click on the symbol in the upper left-hand corner and then follow this path:



Then you can change to panel *Data Context AppData Viewer* to see the tag names (1) and their values (2), which are mostly unconverted. Tags that do not have a value yet are indicated as *undefined*.

Data Context AppData Viewer		
CANVAS_appData	/BCV/PLNTY[0]	undefined
	/BCV/POINT[0]	undefined
	/BCV/SYSLIAS[0]	undefined
	/BCV/WAPOS[0]	undefined
	/BCV/WARPL[0]	undefined
	/BSSP/ANLN1[0]	000000010000
	/BSSP/ANLN2[0]	0000
	/BSSP/ARBPL[0]	MK-1
	/BSSP/AUFNR[0]	000004009360
	/BSSP/BORTYPE[0]	BUS2038
	/BSSP/BUKRS[0]	0001
	/BSSP/DMS_OBJECT_TYPE[0]	PMQMEL
	/BSSP/EQUNR[0]	000000000010000065
	/BSSP/GSBER[0]	0001

**Hint:** In SAPGUI transactions tags are read when they appear on the screen. We therefore recommend that you display all the tabs of an application to get all tags for the current transaction.

Tags starting with prefix '/BCV/:' are used for the *Business Context Viewer* which is discussed in chapter 10.4.

## 10.2.4 Creating Your Own Tags or Overriding SAP Tags

You can add customer-specific tags and replace the tags delivered by SAP.

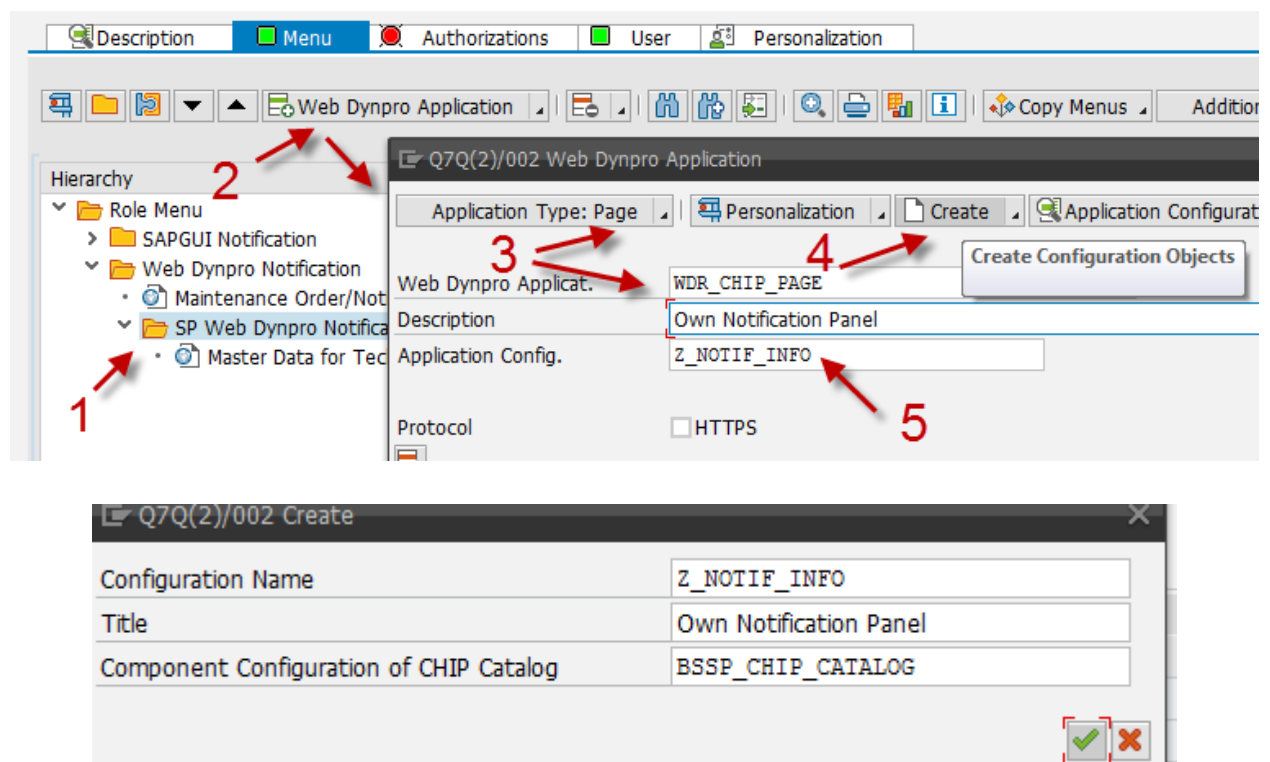
For detailed information about adding and changing tags, see [Enhancing the Side Panel](#) in the SAP Library. There you also find information about the Business Add-In (BAI) `BSSP_TAGGING_SERVICE` ([Tagging Service for Side Panel](#)) and sections about the tagging for SAP GUI via table `NWBC_VS_GUI_TAG` and tagging via API.

## 10.3 Setting Up Customer-Specific Side Panels and CHIPs

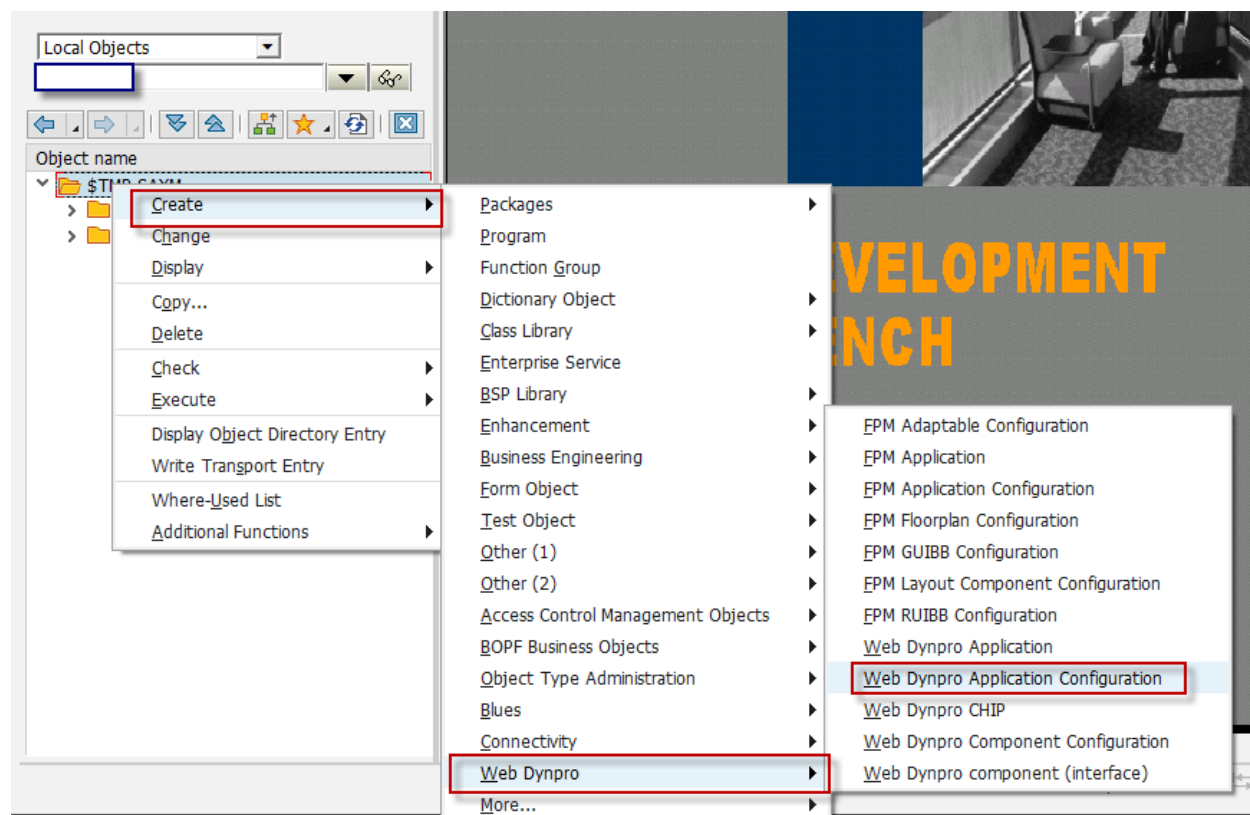
### 10.3.1 Setting Up Your Customer-Specific Side Panel

As described above, you can personalize SAP standard side panels by changing the sequence of CHIPs, adding new CHIPs, and removing existing ones. In addition, you can set up your own customer-specific side panel and choose the CHIPs you want to place on the panel.

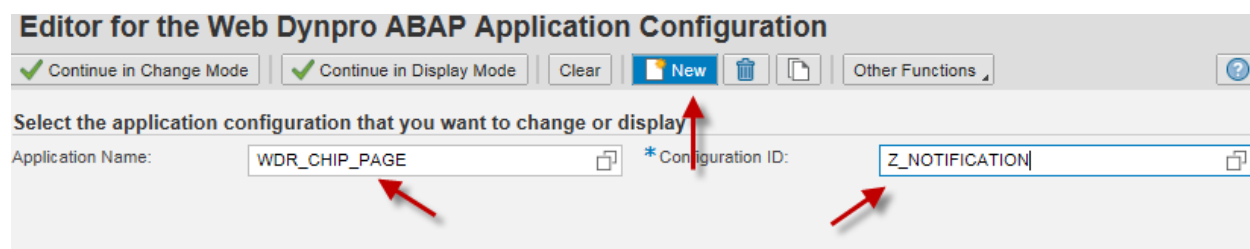
In this example, you want to add a completely new side panel to the role `Z_NOTIFICATION` and choose which CHIPs from the CHIP catalog delivered by SAP you want to be placed there. To do so, access the role in change mode, choose the [Menu](#) tab and select the respective folder for the Web Dynpro Notification (1). Then you add a Web Dynpro application (2) and choose [Application Type: Page](#) (3). To create a new page, click on the button [Create](#) (4) and enter the configuration name, the title, and the CHIP catalog from which the CHIPs on this side panel are chosen.



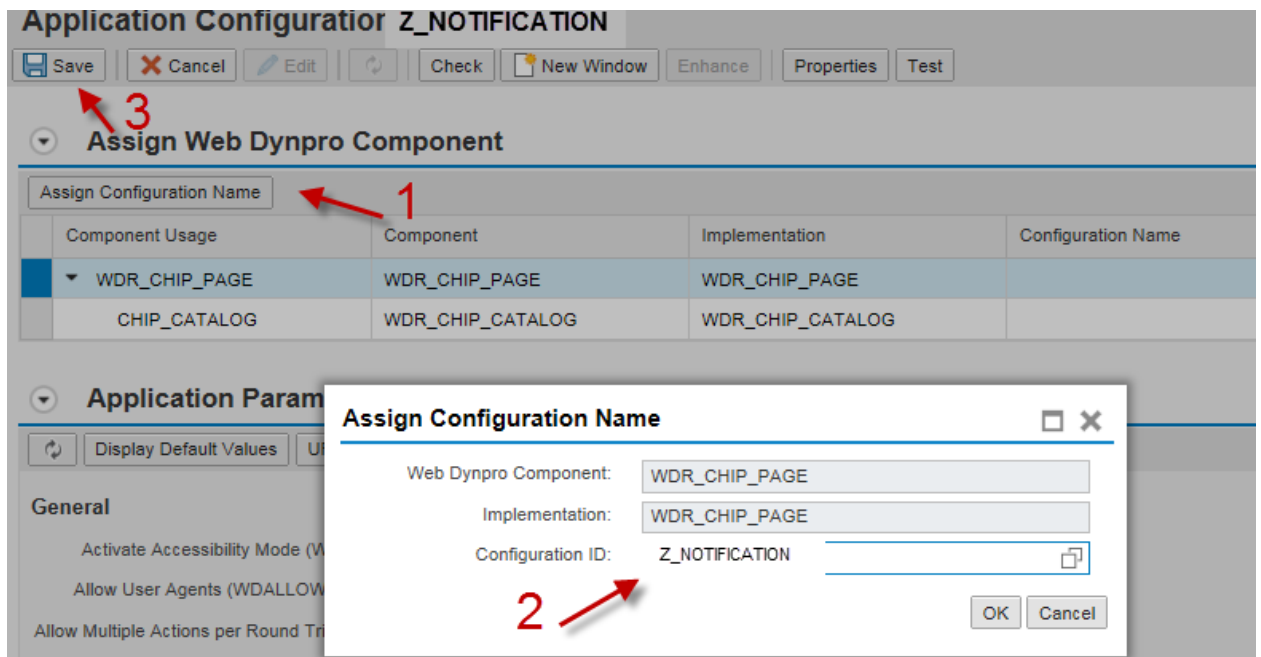
If this is not allowed in your client, change to a cross-customizing client and create the new side panel page in transaction SE80.



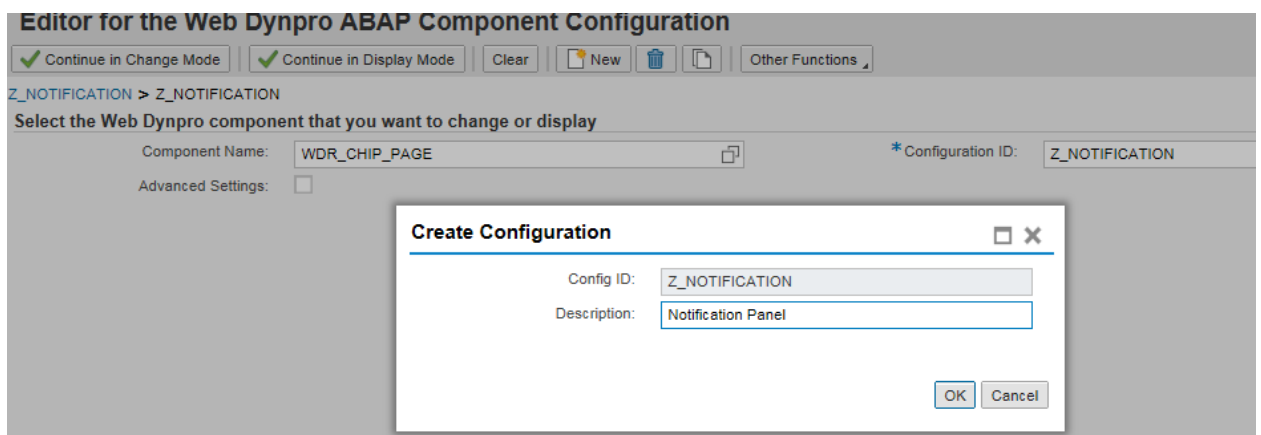
Enter the application name WDR\_CHIP\_PAGE and enter the new configuration ID Z\_NOTIFICATION. To create a new side panel, click on the button [New](#) and enter a description. You have to provide a package in the next step.



In the [Application Configurator](#) you have to assign a configuration name (1). Since you have already entered the configuration ID in the previous step, the system displays this configuration ID in the input help (2). After having entered WDR\_CHIP\_PAGE as the [Application Name](#), click on it and provide a description and the package. Then save your changes (3).



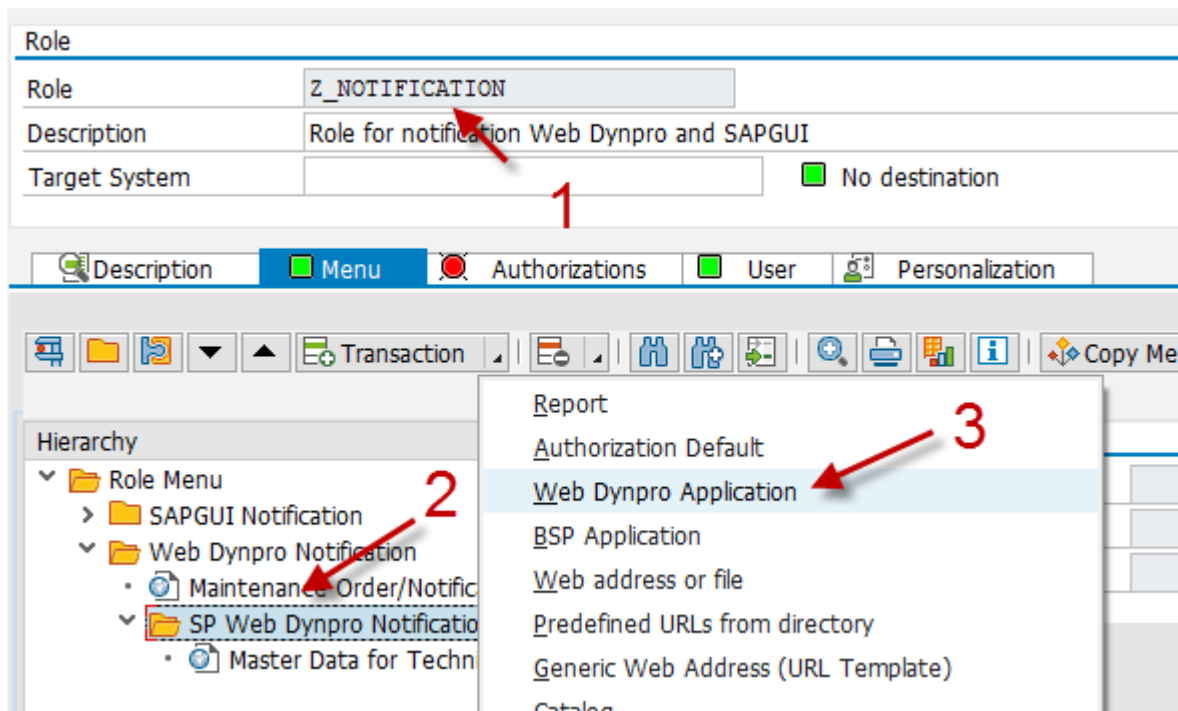
Now that you have defined the application, you can determine the configuration of the component that you assigned to this application. To do so, click on the component, enter a description and a package, and save your entries.



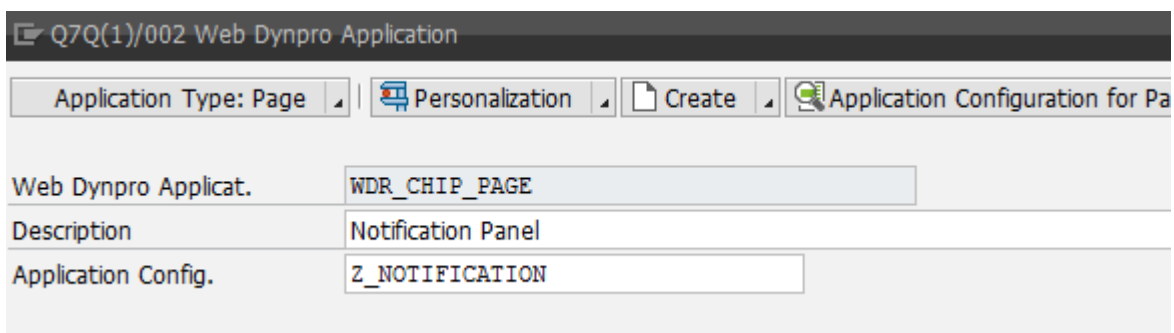
## 10.3.2 Adding the Panel to a Role

After having set up the side panel, you have to add the panel to the respective authorization role. To do so, access the role (1) in change mode (transaction `PECG`), choose the [Menu](#) tab, and select the respective folder for the Web Dynpro Notification (2). Make sure that you add the panel to the role in the same client in which the role was created. Then choose [Web Dynpro Application](#) in the dropdown menu of the [Transaction](#) button (3).





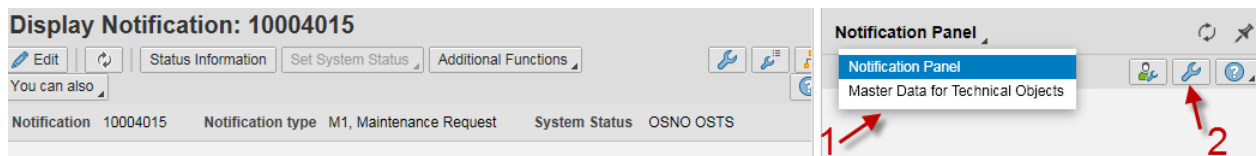
Fill in the required fields. The string entered in the *Description* field appears as the side panel name. Save your changes to the role.



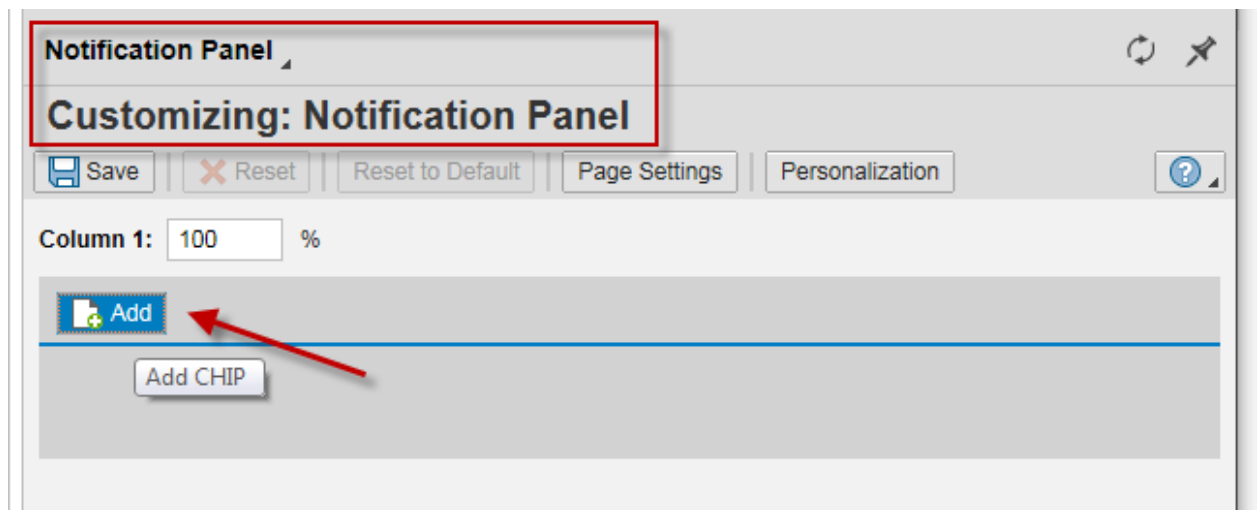
The panel is now visible in the correct folder.

### 10.3.3 Placing CHiPs on Your Customer-Specific Side Panel

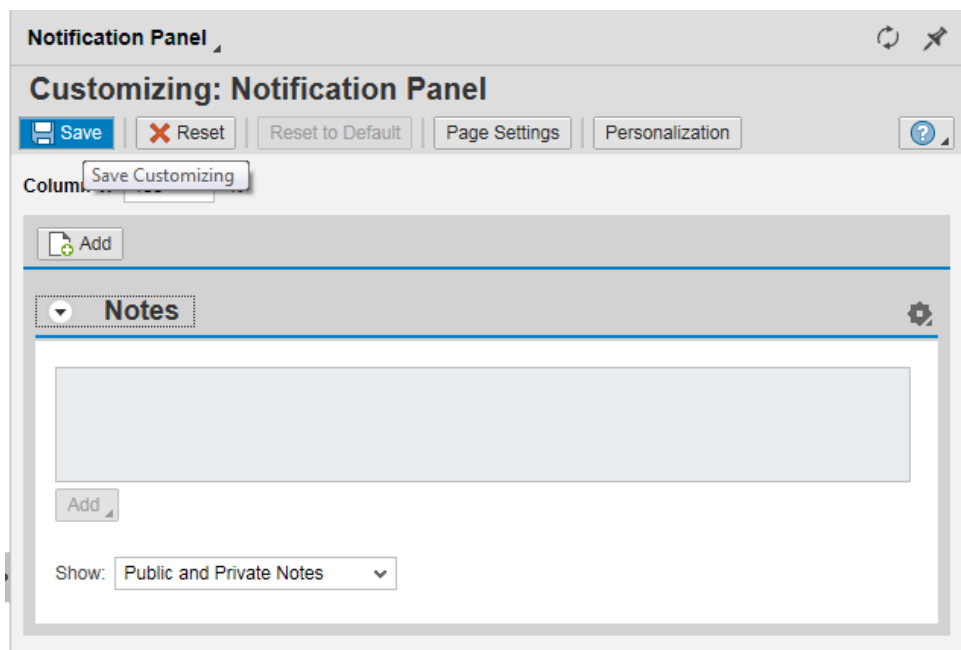
After having set up the empty side panel page and assigned the side panel to a PFCG role, you choose which CHiPs are placed on the panel. To do so, log on to NWBC for Desktop with the role `Z_NOTIFICATION` and choose *Display Notification* to display the empty side panel page (1). Click on the respective button to open this side panel in customizing mode (2). Your settings are then valid for all users in this client.



In customizing mode, you can select CHIPs by choosing the [Add CHIP](#) button. You can decide which CHIPs you want to be displayed on the new side panel.

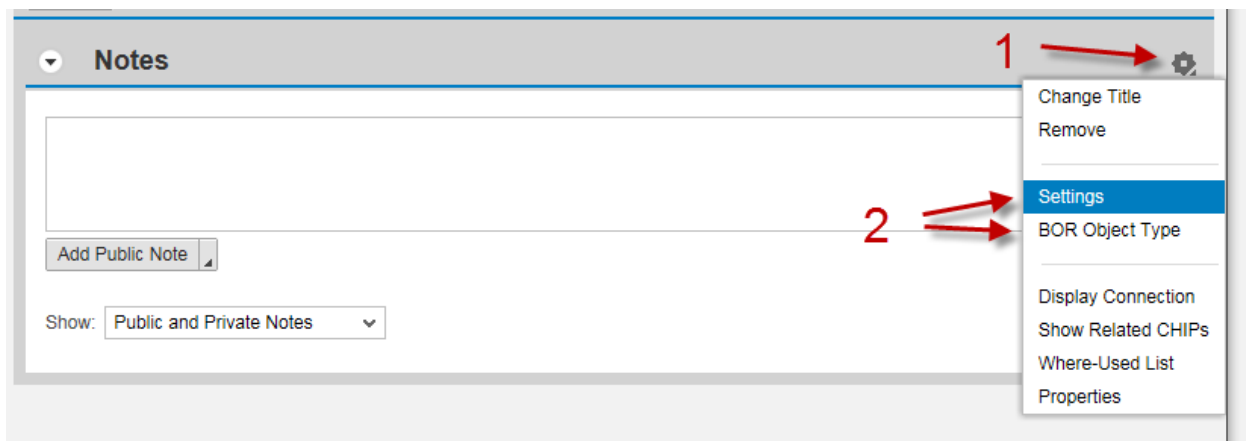


In this example, the [Notes](#) CHIP was selected and added to the side panel. If you want these settings to also be valid for other systems or clients, save your customizing settings in a transport request. You exit the customizing mode by choosing the [Personalization](#) button.

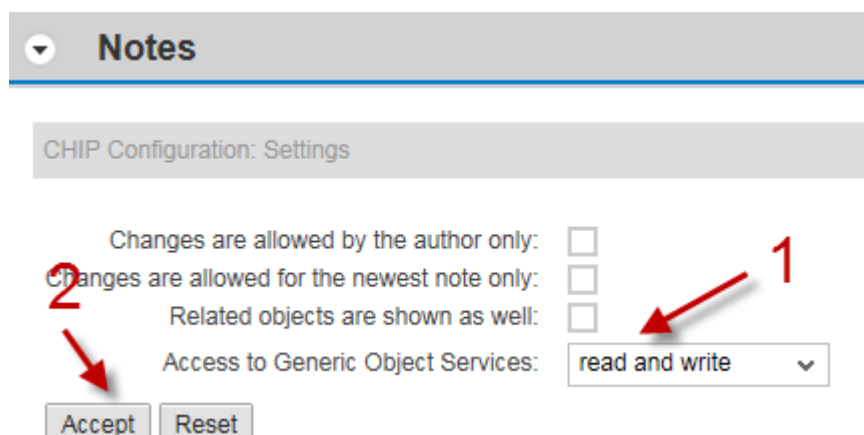


## 10.3.4 Entering the Customizing Settings of the CHIP

In many of the CHIPS you can make changes to what is displayed in customizing mode. To do so, access the respective CHIP in customizing mode and open the menu by clicking on the button in the upper right corner (1). In this example, you can change the title of the *Notes* CHIP, you can remove the CHIP from the side panel, or show related CHIPS. By clicking on *BOR Object Type* and *Settings* (2) you can influence the CHIP configuration settings.



In this example, you access the settings because you want the notes from the *Generic Object Services* (GOS) to also be displayed within this CHIP. Allow read and write access for GOS (1) in the settings and accept the changes (2). After you have finalized your personal settings, save your customizing settings of the side panel.



## 10.4 Business Context Viewer (BCV)

Business Context Viewer (BCV) is a framework that allows all SAP Business Suite applications to integrate different types of additional information into the context of their applications. This information can then be analyzed according to the user's business needs.

The analytic data that BCV displays is available in the side panel of the application, so you can see context-specific data to the application you are currently working in without changing the system or opening an additional window. The data can be originated from BW (Business Warehouse) or ERP and can be fetched via queries (BW), BAPIs or Embedded Search.

EAM-specific business content is delivered in the following BC sets:

- EAMS\_BCV\_CONTENT
- EAMS\_BCV\_TL\_CONF\_MITEM

These BC sets provide several search connectors and queries, so that EAM-specific information can be displayed in the BCV side panel. You can only use the BI connectors if a BW system is connected and the data is periodically uploaded.

For more information about BCV content in EAM, see [Activating and Adapting Sample BCV content in EAM](#).

Users who want to use the BCV side panel have to be assigned to the technical role [Side Panel: BCV Plant Maintenance](#) (SAP\_PM\_BCV\_SIDE\_PANEL), which is only available in the software component PLMWUI. To add the side panel to your own role, use /BCV/WDA\_UIF\_SIDE\_PANEL as the Web Dynpro Application instead of WDR\_CHIP\_PAGE without entering an application configuration. If you want to display the side panel with NWBC for desktop, see 15.2. For more information about the BCV side panel in EAM, see [PM Side Panel: Business Context Viewer](#) in the SAP Library.

For more information about the Business Context Viewer, see [Business Context Viewer \(BCV\)](#) in the SAP Library.

For more information about the availability of EAM-specific BCV side panel content, see SAP Note [1816377](#).

### 10.4.1 Customizing of BCV Content

Before you can use the BCV side panel in your application, you need to define search connectors in customizing. Search connectors establish the connection between the data provision technology and the Business Context Viewer (BCV) by providing search access to a specific data provider at a specific destination (logical system) or list of destinations. The definition of the search connector includes the description of the selection attributes and the structure of the result data. The search connector delivers result data in a predefined form for the specified selection attributes. You define search connectors in customizing for [Cross-Application Components](#) under [Processes and Tools for Enterprise Applications](#) → [Business Context Viewer](#) → [Search Integration](#) → [Define Search Connectors](#).

The different types of search connectors are listed in the [Dialog Structure](#) on the left-hand side (1). If you select the [BI Search Connectors](#), the list of all search connectors available for Business Warehouse is displayed on the right-hand side. The technical name of the EAM search connectors starts with 1EAMS\* (2). For setting up a connection to the BI system, you have to specify the logical system (3) for the EAM search connectors. Furthermore, you have to determine the info provider (e.g. a cube or another data store object) where the data is to be extracted from (4). You finally have to specify the query name for retrieving the data from the info provider (5). You can specify several queries for the same search connector.

**Change View "BI Search Connectors": Overview**

BC Set: Change Field Values

Dialog Structure

- BI Search Connectors
  - Additional Systems
  - Input Fields
  - Output Fields
- BAPI Search Connectors
  - Additional Systems
  - Input Fields
  - Output Fields
- ES Search Connectors
  - Input Fields
  - Output Fields
- SES Search Connectors
  - Additional Systems
  - Input Fields
  - Output Fields
- WF Search Connectors
  - Input Fields
  - Output Fields
- InfoSet Search Connectors
  - Input Fields
  - Output Fields
- WS Search Connectors
  - Input Fields
  - Output Fields

Search Connector ID	Search Description	Logical Sys...	InfoProvider	BI Query Name	
1EAMS_BI_C01_COST_01	Maintenance Order: Planned/Actual Costs	QQ6CLNT003	0PM_C01	0PM_C01_Q0001	SZ
1EAMS_BI_C09DAMAG_01	Notifications Damage Analysis	QQ6CLNT003	0QM_C09	0QM_C09_Q0007	SZ
1EAMS_BI_DS02MTTR_01	Meantime to Repair (MTTR)/Meantime betwe	QQ6CLNT003	0PM_DS02	0PM_DS02_Q0002	SZ
1MATCOST01	Material Cost Analysis Search via BI	DLBCLNT800	0PC_C01	0PC_C01_Q0001	HZ
1STOCK01	Stock Overview Search via BI	DLBCLNT800	0IC_C03	0IC_C03_Q0012	HZ
ST_BI_SC1	BI-SC: Scenario Testing	Q81CLNT003	0IC_C03	0IC_C03_Q0012	GT
ZSH_SO_EQ	Sales Orders (via Easy Query)		20ZSH_BCV_SO	ZSH_BCV_SO_1	HZ
ZSH_SO_MDX	Sales Orders (via MDX)		20ZSH_BCV_SO	ZSH_BCV_SO_1	HZ
ZSTB_COST_WFLA_ITEM	Cost per Maintenance Item	QQ6CLNT003	0PM_C01	Z_STB_TEST_ACTUAL_P...	DC

For EAM several BAPI search connectors were developed. You find them in the next section and they also start with 1EAMS\*.



Dialog Structure

- BI Search Connectors
  - Additional Systems
  - Input Fields
  - Output Fields
- BAPI Search Connectors
  - Additional Systems
  - Input Fields
  - Output Fields

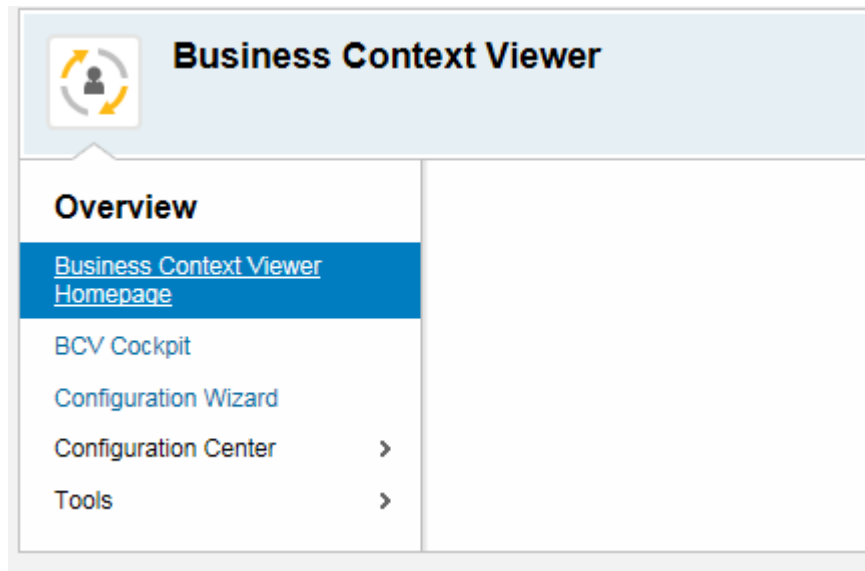
Search Connector ID	Search Description	Class Name
1EAMS_BP_CONF_PM_ORD	Confirmation PM order	CL_EAMS_SIN_BP_CONF_BY_ORD
1EAMS_BP_MAIN_ITEMS	Search maintenance items by techn.obj.	CL_EAMS_SIN_BP_MITEM_BY_TO
1EAMS_BP_NTF_01	Notification for technical object hierarchy	CL_EAMS_SIN_BP_NTF_BY_TOH
1EAMS_BP_ORD_FOR_TOH	PM Orders for Technical Object Hierarchy	CL_EAMS_SIN_BP_ORD_BY_TOH
1EAMS_BP_TL_FOR_TO	Task List for Technical Object	CL_EAMS_SIN_BP_TL_BY_TO

Using the NetWeaver Business Client role SAP\_BCV\_ADMIN2 you can enter the Cockpit for the BCV administration and get an overview of the connectors, their queries and the dependent query views.

Start NWBC with role SAP\_BCV\_ADMIN2.

Other  SAP\_BCV\_ADMIN2  To

Open the Business Context Viewer Homepage.



You enter the [Search](#) screen with active queries (1), where you can select any of the dashboards, views, queries and connectors, and so on, that are available in the system. In this example, we selected the [BCV Queries](#) (2) and chose the link for showing [All](#) (3) existing queries. The queries listed start with 1EAMS\* and are EAM queries for different purposes (see the descriptions).

Query ID	Description	Owner	Created On
1EAMS_BP_CONF_PM_ORD_BY_AUFNR	Confirmation PM Order by order number (BAPI search)		09.08.2013
1EAMS_BP_MAIN_ITEMS_BY_TO	Maintenance Items for Technical Object (BAPI search)		09.08.2013
1EAMS_BP_NTF_BY_TOH_01	Maint. Notif. of Techn. Obj. Hierarchy with status and date		15.10.2013
1EAMS_BP_ORD_FOR_TOH	PM Orders for Technical Objects Hierarchy (BAPI)		09.10.2013
1EAMS_BP_TL_FOR_EQ	Task List for Equipment (BAPI search)		09.08.2013
1EAMS_BP_TL_FOR_FL	Task List for Functional Location (BAPI search)		09.08.2013
1EAMS_DAMAGE_01	Notifications Damage Analysis		01.11.2009
1EAMS_DAMAGE_BY_ORG_01	Notifications Damage Analysis by Organization		01.11.2009
1EAMS_MTTTR_MTBR_01	Meantime between Repair/Meantime to Repair		01.11.2009
1EAMS_MTTTR_MTBR_BY_ORG_01	Meantime between Repair/Meantime to Repair by Organization		01.11.2009

If you select a query by clicking the Query ID link (here [1EAMS\\_BP\\_TL\\_FOR\\_EQ](#)), you enter the details. Here you can also see which context key the query is assigned to. The context key of this example is `EAMS_EQUI`, which means that this query appears in the application for equipment.

Display Query: 1EAMS\_BP\_TL\_FOR\_EQ

Save

Create Query View

Edit

Read Only

Save As

Check Consistency

Test

Where Used

Delete

You can also

Created By

Created On 09.08.2013

Changed By

Changed On 09.08.2013

\* Query ID: 1EAMS\_BP\_TL\_FOR\_EQ

Description: Task List for Equipment (BAPL search)

Owner:

Seq. No. of Row Limit: 0000

Row Limit: 0

Search Connector ID: 1EAMS\_BP\_TL\_FOR\_TO

Search Connector ID 2 (Join):

Combine Search Connectors...

Context Keys

Add Context Key

Remove Context Key

Context Key	Context Name	Context Description
EAMS_EQUI	EAM Simplicity Equipment	Classification Key for EAM Simplicity, Object: Equipment

Input Fields

Output Fields

Details

Selection Criteria

Selection Criteria Overview

Fld. Seq. No.	Field ID	Description	Field Origin	Search ID	Rel. Inp. Field	Required	Meaning
2	AENAM	Name of person who changed object	Search Connector Field	1EAMS_BP_TL_FOR_TO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3	AENNR	Change Number	Search Connector Field	1EAMS_BP_TL_FOR_TO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4	ANDAT	Date record created on	Search Connector Field	1EAMS_BP_TL_FOR_TO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	ANLZU	Syst.Condition	Search Connector Field	1EAMS_BP_TL_FOR_TO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

## 10.4.2 Displaying the BCV Side Panel

In this example, you display a notification with a technical object (1), for which the BCV side panel is assigned via the PFCG role. The BCV side panel is divided into several sections. In the [Overview](#) (2) you can see a dashboard with two CHIPs that both show the damage frequency of the technical object. The damage frequency is displayed in a table and in a pie chart. You define the content shown in the [Overview](#) section in the BCV Configuration Cockpit (access via role SAP\_BCV\_ADMIN2).

In the section for [Query Views](#) (4) you can see the list of query views that are assigned to the context key EAMS\_NTF, which is the context key for notifications. The context keys themselves are specified in the maintenance view /BCV/V\_CLF. The BCV content displayed in the section [Query Views](#) opens in a separate NWBC tab.

Display Notification: 10002131

Edit

Status Information

Set System Status

Additional Functions

Side Panel

You can also

Notification

10002131

Priority

3-Medium

Notification type

M1, Maintenance Request

System Status

NOPR ORAS

Technical Object

MCK-SIDEPANEL

General Data

Organizational Data

Malfunction Data

Task Data

Activities

Documents

Long Text:

General Data

Coding:

Description:

Required Start Date/Time:

09.04.2013

15:05:18

Required End Date/Time:

Technical Object:

MCK-SIDEPANEL

Equipment for Side Panel

Technical Object Type:

Material:

Assembly:

Task List:

Assigned Order:

4004381 order for SP

Responsibilities

Work Center:

OPT\_EAM

Work Center for Optimization EAM

Work Center Plant:

0001

B

Planning Plant:

0001

Budapest

Person Responsible:

Planner Group:

010

IH-Planner 010

Reported by:

Business Context Viewer

Overview

Select Content:

Damage Analysis for Technical Object

Refresh

Notification Damage Analysis for TecObj.

Problem	Problem Frequency
Damage 1	8
Damage 2	11
Damage A	5
Damage B	4
Long text for cause	11
Operation long text	7
Long text for consequences	1

Problem

Damage 1

Damage 2

Damage A

Damage B

Long text for cause

Operation long text

Long text for consequences

Query Views

Dashboards

Favorites

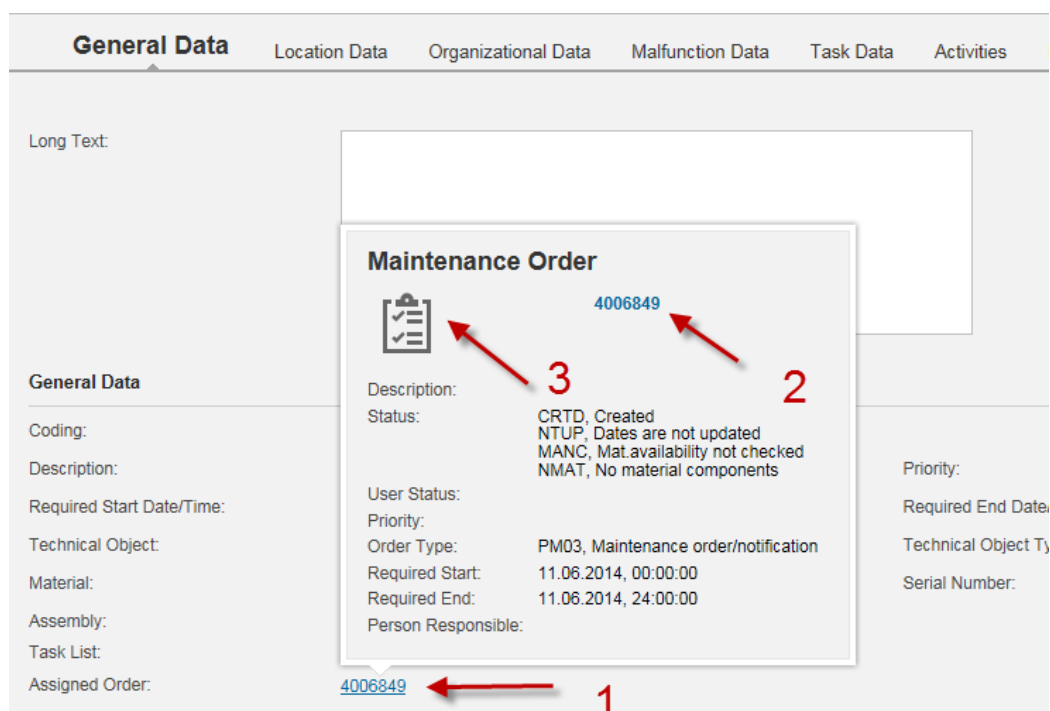


# 11 Using and Adapting Quickviews in EAM

On the SAP Web UI for Plant Maintenance, you can display relevant information about the maintenance documents, technical objects, materials, and long texts that are assigned to orders, notifications, task lists, and maintenance plans without having to navigate away from the screen you are working in. Quickviews appear as separate windows when you hover over an object and provide a preview of the object with the most important information. They also provide links for directly navigating to other objects and data.

You can determine whether quickviews are displayed or suppressed in single applications (see 15.6) or in all applications of a specific client (see 15.8). Quickviews are only displayed if you do not use an accessibility mode.

The example shows a quickview that is displayed on the *General Data* tab of the notification. By hovering over the assigned order number (1) the quickview provides you with the most important information about the order. A link allows you to navigate directly to the document (2) and an icon indicates the type of object for which the information is provided (3).

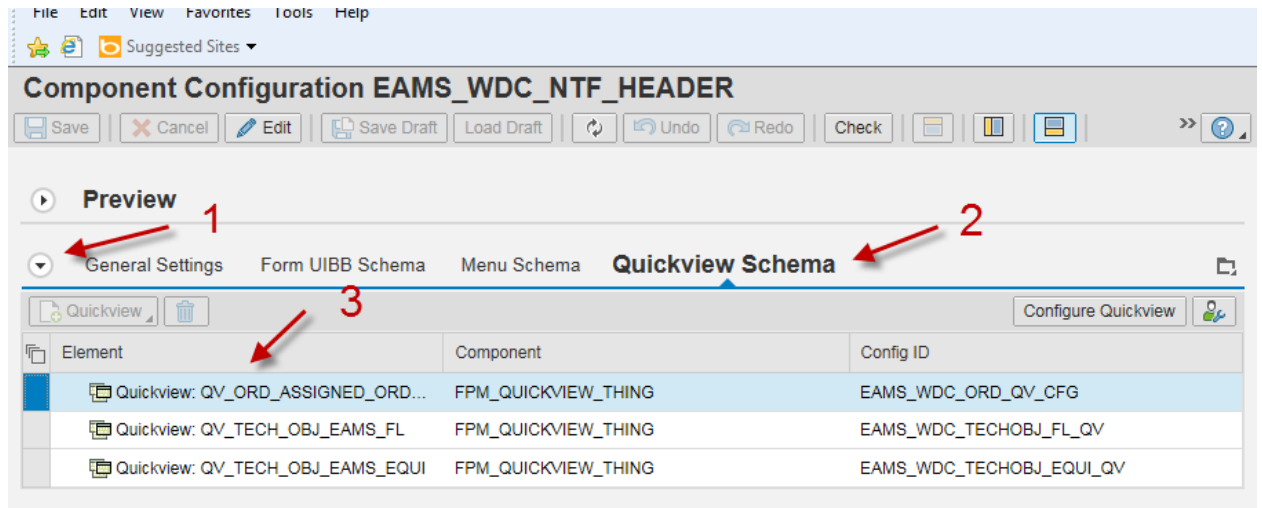


For more information about configuring quickviews see [Quickviews](#) in the SAP Library.

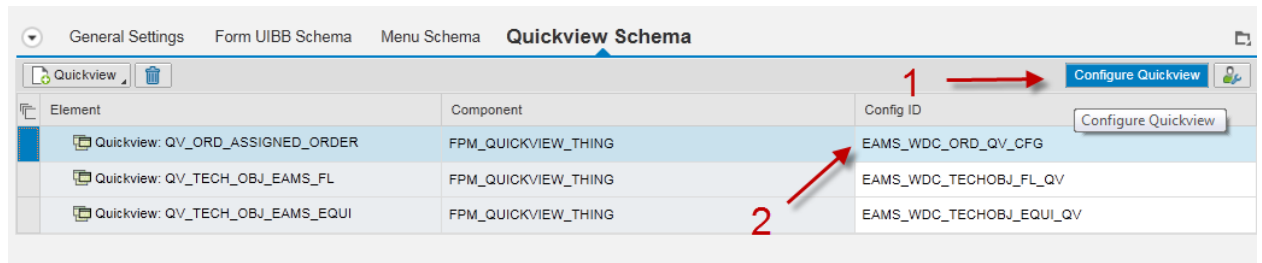
## 11.1 Changing an Existing Quickview

You can configure each individual quickview to display certain information for the users. To do so, you access the application, select a specific tab, and then choose the pushbutton *Show Configurable Areas*. The system highlights all configurable UIBBs in blue. Put the cursor in one of the highlighted areas and press the button in the

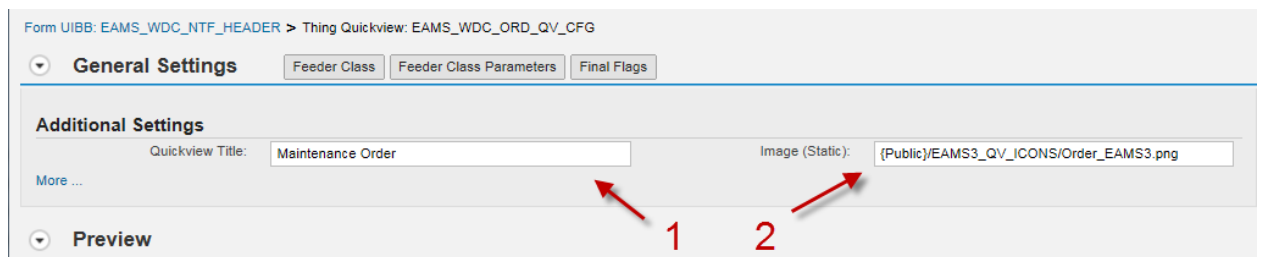
upper right corner (for a detailed description on how to access the configuration of UIBBs, see chapter 3). In this example you want to configure the quickview for the assigned order in the notification. To do so, access the configuration of the header data on the [General Data](#) tab. Open the screen area beneath the [Preview](#) (1) and select the [Quickview Schema](#) (2) to display all quickviews that are already defined for that UIBB. In this example, the quickview with information for the assigned order is displayed in the first row of the table (3).



To configure a quickview, select the respective table row on the [Quickview Schema](#) tab. Choose the [Configure Quickview](#) button (1) and open the quickview configuration for EAMS\_WDC\_ORD\_QV\_CFG (2).



In the [General Settings](#) you can change the title of the quickview (1). The icon that appears in the quickview is a mime-repository object in folder [Public](#) (2).



You can also change the icons that are displayed in the quickview in transaction SE80. In the [MIME Repository](#) choose [SAP](#) → [BC](#) → [WebDynpro](#) → [SAP](#) → [PUBLIC](#) → [EAMS3\\_QV\\_ICONS](#). If you want to use your own icons instead of the predefined ones, you have to create a new folder and store your changes in a transport request. To access your own icons enter { PUBLIC } / CREATED\_FOLDER / Icon.png for a static image.

To configure which information you want to be displayed in the quickview, you open the *Thing Quickview Schema* beneath the *Preview* screen area. In the table you find all the fields that are currently displayed in the respective quickview. To add fields from the field catalog, choose the *Attribute* pushbutton (1). If a specific element is no longer needed in the quickview, you can select the respective line in the table and delete it with the trash bin (2). With *Up* and *Down* (3) you can determine the order in which the information will be shown in the quickview.

Thing Quickview Schema				
<div> <span>Attribute</span> <span>Launchpad Entry</span> <span>Trash</span> <span>Up</span> <span>Down</span> </div>				
Element	Display Type		Instance	Text
Attribute: SHORT_TEXT	Text View			Description
Attribute: STATUS_QV	Text View	1	2	Status
Attribute: USER_STATUS_QV	Text View		3	User Status
Attribute: PRIORITY_QV	Text View			Priority
Attribute: ORD_TYPE_QV	Text View			Order Type
Attribute: REQUIRED_START_QV	Text View			Required Start
Attribute: REQUIRED_END_QV	Text View			Required End
Attribute: NAME_LIST	Text View			Person Responsible

With the *Display Type* you determine whether the system displays the field name and the corresponding value (*Text View*) or if the quickview provides a link for directly navigating to other objects and data (*Link to Action*). If you want to change the display type to *Link to Action*, you have to implement this in method `PROCESS_EVENT` of the feeder class. The system behavior when someone clicks on the link is handled in method `PROCESS_NAVIGATION` of class `/PLMU/IF_FRW_ACTION_UTIL`. Importing parameters of method `PROCESS_NAVIGATION` have to be maintained in customizing table `/PLMU/V_FRW_NAV`. You must then assign the object types and navigation targets to launchpad targets in the launchpad transaction `LPD_CUST`. For more information about navigation in Web Dynpro Service Provider Interface, see the SPI Wiki documentation for [Navigation](#).

## 11.2 Creating a Customer-Specific Quickview

Besides changing quickviews that have already been predefined for specific fields, you can also create a new quickview for a field where no quickview exists yet. To do so, you access the *Quickview Schema* in the configuration of the UIBB, choose the *Add Quickview* pushbutton (1), and provide the necessary data. New objects must be created in the customer namespace.

Quickview Schema		
<div> <span>Quickview</span> <span>Trash</span> <span>Configure Quickview</span> </div>		
Element	Component	Config ID
Quickview: QV_ORD_ASSIGNED_ORDER	FPM_QUICKVIEW_THING	EAMS_WDC_ORD_QV_CFG
Quickview: QV_TECH_OBJ_EAMS_FL	FPM_QUICKVIEW_THING	EAMS_WDC_TECHOBJ_FL_QV
Quickview: QV_TECH_OBJ_EAMS_EQUI	FPM_QUICKVIEW_THING	EAMS_WDC_TECHOBJ_EQUI_QV

---

For a new quickview you need a Component Configuration with a corresponding feeder class. The feeder class uses interfaces `IF_FPM_GUIBB`, `IF_FPM_GUIBB_QV_THING` and `IF_FPM_MULTI_INSTANTIABLE`.  
For more detailed information about creating quickviews, see FPM Developer's Guide 7.4 SP2 or a newer version.

## 12 Information on Several EAM Functions

### 12.1 Activation of Additional Functions in EAM

Some additional EAM functions are not part of a business function but have to be activated separately in Customizing. You can activate the respective functions in Customizing for *Plant Maintenance and Customer Service* under *System Enhancements and Data Transfer -> Activate Functions for Enterprise Asset Management* or directly in view V\_EAM\_ACT\_FUNC (transaction SM30).

Switch	Description
PM087_WD	<b>Document Assignment in Web Dynpro</b> This function enables you to display, create, and assign relevant documents when processing maintenance orders on the SAP Web user interface for Plant Maintenance.
DOC_TL_WD	<b>Document Assignment to Task List in Web Dynpro</b> This function enables you to display and assign relevant documents at header and operation level when processing task lists on SAP Web user interface for Plant Maintenance.
DOC_TL_GUI	<b>Document Assignment to Task List in SAP GUI Transactions</b> This function enables you to display and assign relevant documents at header and operation level when processing task lists in SAP GUI transactions for Plant Maintenance.
DOC_BOV	<b>Document Assignment in Basic Order View</b> This function enables you to display and assign relevant documents when processing maintenance orders in the basic order view.
PM110_WD	<b>Operation Account Assignment in Web Dynpro</b> This function enables you to enter and change estimated costs per value category at operation level on the SAP Web user interface for Plant Maintenance.
VE_INT_GUI	<b>SAP 3D Visual Enterprise Integration in SAP GUI</b> This function enables you to use the SAP 3D Visual Enterprise Viewer to visualize technical objects in SAP GUI transactions for Plant Maintenance.
PM117_ADD	<b>Displaying Characteristics in Additional PM Lists</b> This function enables you to use the enhancements for list editing that are provided with business function Enterprise Asset Management Part 6 (LOG_EAM_CI_6) in additional single-level PM lists.
OPER_USR	<b>User Fields for Operations in Web Dynpro</b> This function enables you to display and edit additional fields in orders and task lists on operation level. If you activate this function and choose the Operation Data tab

Switch	Description
	page in an order or task list, the system displays the Additional Fields tab page in the details of the operation.
COMP_ENH	<b>Copying Materials and Changing Requirements Date in WD</b> This function supports you when maintaining materials that you have assigned to an order operation.

**Note:** For some of the features described above, you have to activate a specific business function additionally. For more information about further prerequisites, see the Customizing documentation for this IMG activity.

## 12.2 Attaching Documents in EAM Web UI

The EAM applications use the PLM WUI Documents in combination with the SAP Document Management System (DMS) for attaching documents to maintenance orders or technical objects, for example. Before you can use the PLM WUI Documents, you need to configure it in Customizing.

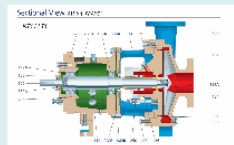
The following notes may help to understand and configure the PLM WUI Documents correctly:

- [1819440 - Understanding PLM WUI Documents and SAP DMS \(FAQs\)](#) - describing the PLM WUI document behavior
- [1946629 - PLMWUI: Configuration Guide for Document Management on PLM Web UI](#) - describing the configuration of DMS and Web UI in detail. The guide, attached to this note (PLM\_WUI\_DMS\_ConfigGuide\_EN\_EHP\*.pdf) covers the following areas:
  - Basic Document Management Configuration (SAP ERP Backend System)
  - Enhanced Document Management Configuration (PLM Web UI)
  - SAP 3D Visual Enterprise Generator

You find more information in the SAP Community Network about recent notes in the [Web UI DMS Wiki](#).

## 12.3 Showing a Thumbnail in Technical Objects

You can display a very small picture of the original GIF file of the technical objects as a thumbnail in the screen area next to the long text field when displaying and changing technical objects on the SAP Web UI for Plant Maintenance. Therefore, EAM uses a functionality from SAP Product Lifecycle Management (PLM-WUI).

Technical Object	STB2-TAG 3 Document(s)	Technical Object Type	Equipment	Description	Goulds Process Pump Capacity 1590 m3/h	Category	M - Machinery	Valid From	01.07.2016
<b>General Data</b> Location Data   Organization Data   Structure   Documents   Classes   Characteristic Values   Permits   Risk and Safety Information									
Long Text: <div>           Huber Moser Electromotor SERANO         </div>									
General Data <div>           Description: Goulds Process Pump Capacity 1590 m3/h         </div>									

The following prerequisites must be met:

- You have activated the business function *PLM Web UI* (/PLMU/WEB\_UI)
- You have attached a file with thumbnail information in the Document Management System (transaction CV02N).
- You have defined the search sequence for the file in Customizing in *Define Search Sequence for Viewable File* under *Logistics - General → Product Lifecycle Management (PLM) → PLM Web User Interface → Objects in PLM Web UI → Document in PLM Web UI* or directly in view /PLMI/DIR\_VSS (transaction SM30).
- You have defined the search sequence for the file in Customizing for *Plant Maintenance and Customer Service → Master Data in Plant Maintenance and Customer Service → Basic Settings → Define Search Sequence for Viewable File* or directly in view DMS\_EAM\_VEG\_V\_VSS.

You can also visualize technical objects as thumbnails using the SAP 3D Visual Enterprise Viewer. For more information, see the documentation on the SAP Help Portal about the EAM integration with SAP 3D Visual Enterprise.

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## 13 BAdIs and User Exits in EAM Web UI

### 13.1 Web Dynpro-Specific BAdIs

The Business Add-Ins (BAdIs) listed in the next chapters are available in all Web UI applications of EAM. They belong to the PLM framework on which these applications are built. Most of them react to a filter for the application name, e.g. EAMS\_NTF for the notification application.

#### 13.1.1 Enhancement Spot /PLMU/ES\_FRW\_CONSUMER\_APPCC

You can use BAdI /PLMU/EX\_FRW\_CONSUMER\_APPCC (*OIF Application Controller*) to influence the application logic and the appearance of the Web UI. The BAdI reacts to filter values:

WD_APPLICATION_NAME	Character-like	Web Dynpro Application Name
WDAPPLICATIONCONFIGURATIONID	Character-like	Web Dynpro Application Configuration ID

Furthermore, the enhancement spot contains the BAdIs /PLMU/EX\_FRW\_APPCC\_GAF and /PLMU/EX\_FRW\_APPCC\_OVP for additional types of Floorplan definitions.

#### 13.1.2 Enhancement Spot /PLMB/ES\_SPI

In enhancement spot /PLMB/ES\_SPI you find several BAdIs for enhancing and influencing the data of any Web Dynpro application. Two of the BAdIs can only be implemented by SAP, which is indicated in the usability-section. Some of the BAdIs can be found via the IMG.



Plant Maintenance and Customer Service	
Master Data in Plant Maintenance and Customer Service	
Maintenance Plans, Work Centers, Task Lists and PRTs	
Maintenance and Service Processing	
Information Systems for Plant Maintenance and Customer Service	
Maintenance Roles	
Maintenance Roles: Technician, Supervisor and Planner	
Maintenance Worker	
Set Up Launchpads	LPD_CUST
Configure Display of Jobs in the Launchpad	EAMS_V_UISETTING
Specify Long Text for Job	EAMS_LTXT_USAGE
Specify When Status "Job in Process" Is Set	V_TEAMS
Configure Print Control for Job Card	V_T390J
Configure Embedded Search	EAMS_SEARCH
Configure Search Help Assignment	V_EAMSC_UI_SHLP
Define Preconditions for Easy Attachment Upload	/PLMJ/V_DIR_ATT
Asset Viewer	
Settings for BO Framework and Navigation	
BO Framework	
Define Application Building Blocks	/PLMB/V_SPI_ABB
Define RFC Destinations	/PLMB/RFC_DEST
Assign Logical System to RFC Destination	/PLMB/V_RFC_LSYS
Define Generic Object Types	/PLMB/V_GOS_OTYP
Define Preview for Object Type	/PLMU/FRW_PREVW
Business Add-Ins for Service Provider Infrastructure	
BAdI: Enrichment of Node Definition	/PLMB/SPI_METADATA
BAdI: Steps After the Save and Clean-Up Process	/PLMB/SPI_TRANSACTN
BAdI: Adjustment of Data for Service Provider Access Methods	/PLMB/SPI_ACCESS_MET

For a detailed explanation of SPI Framework Enhancements, see the Service Provider Infrastructure WIKI for [Enhancements](#).

Example: You want to issue a message that a technical object has got a warranty

When you create a maintenance notification a message pops up in SAPGui transaction IW21 regarding the warranty check. It is not implemented by SAP in EAM Web Dynpro applications.

The warranty check in Notification and Order can be achieved with an implementation of BAdI `/PLMB/EX_SPI_APPL_ACCESS` in enhancement spot `/PLMB/ES_SPI`.

The BAdI definition `/PLMB/EX_SPI_APPL_ACCESS` has several methods which can change data or do checks on data at different points in time of the execution of a Web UI application.

It reacts on filter values for *Application Building Block* and *Node Name* (would be for maintenance notification: `EAMS_NTF` and `EAMS_HEADER`).

The function module for bringing up the popup in SAPGui is `WARRANTY_CHECK_POPUP`. Parts of the coding should be copied to method `AFTER_RETRIEVE` of the BAdI Implementation in `/PLMB/ES_SPI` and an information message can be send to the UI that a warranty exists for the technical object.

## 13.2 BAdIs Influencing the Web UI Logic

This chapter provides an overview about all BAdIs that are available for the specific applications, such as creating and changing technical objects, maintenance orders, notifications, task lists, and maintenance plans. Originally these BAdIs were created to enhance or change the business logic of SAP GUI transactions. If the respective implementations exist, you can also use these BAdIs for influencing the Web UI logic. Additionally, BAdIs are listed that were created for influencing the Web UI logic only. The following list contains the most important BAdIs, but please note that the list may not be complete.

## 13.2.1 BAdIs for Technical Objects

The BAdIs listed here are available in the **EAM Technical Object** Web UI application and can be implemented by customers.

BAdI-Definition	BAdI-Description
/PLMI/EX_DIR_THMB	BAdI: Change Thumbnail Search
/PLMU/EX_FRW_SIDE_PANEL	Side Panel BAdI Definition
APB_LAUNCHPAD_SELPAR	Modification of Selection Parameters in Launchpad
BADI_APB_LPD_MODIFY_LPD_LIST	Modify the Launchpad records
BADI_ESH_IF_F4_MODIFY_STEP	Allows modifications in the search help exit at runtime
BSV_STATUS_PROFILE	BAdI for Status Profile Evaluation
CACL_MAIN01	BAdI for Required Field Check
DMS_ES_GET_FILE	Get File For 3D And 2D Viewing
BADI_EAM_STRUCTURE_LIST	Extend Structure Lists
EAML_CHECK_LFE_DATA	BAdI for Checking Linear Data
EAML_LFE_SCREEN_MODIFICATION	BAdI for Customers to Modify Layout of Linear Fields
EAML_POINT_BY_MARKER	BAdI for Customer to Adjust Linear Point Determination (F4)
EAMS3_STRUCTURE_LIST_DATE	BAdI: Modification of Date for Structure List Explosion (Web UI)
BADI_EAMVE_FILE_SEARCH	BAdI: File Determination Logic for SAP 3D Visual Enterprise Viewer
BADI_IUID	Customer BAdI for Item Unique Identifier
BADI_IUID_MAN_ADJ_CON	BAdI for Modifying Adjusted Content in Manually-Created IUID Messages

## 13.2.2 BAdIs for Notifications

The BAdIs listed here are available in the **EAM Maintenance Notification** Web UI application and can be implemented by customers.

BAdI-Definition	BAdI-Description
/PLMU/EX_FRW_SIDE_PANEL	Side Panel BAdI Definition
APB_LAUNCHPAD_SELPAR	Modification of Selection Parameters in Launchpad
BADI_APB_LPD_MODIFY_LPD_LIST	Modify the Launchpad records
BSV_STATUS_PROFILE	BAdI for Status Profile Evaluation
FMEF_FACTORY	Own Factory for Earmarked Fund Objects

BAdI-Definition	BAdI-Description
BADI_ESH_IF_F4_MODIFY_STEP	Allows modifications in the search help exit at runtime
DFPS_NOTIFICATION3	Check Consistent Data for Technical Status During Posting
BADI_EAM_AUTHORITY_CHECK_ORDER	Additional Authorization Check for Orders
EAM_WKCTR_SYNC	Synchronization of Work Center in Order and Notification
EAML_CHECK_LFE_DATA	BAdI for Checking Linear Data
EAML_LFE_SCREEN_MODIFICATION	BAdI for Customers to Modify Layout of Linear Fields
EAML_POINT_BY_MARKER	BAdI for Customer to Adjust Linear Point Determination (F4)
EAMS3_STRUCTURE_LIST_DATE	BAdI: Modification of Date for Structure List Explosion
BADI_IUID	Customer BAdI for Item Unique Identifier
NOTIF_EVENT_POST	Notification Update: Retrieval of Notification Data
CACL_CLASSIFICATION_UPDATE	Classification Update
/SPE/PICK_PARTS	BAdI for Pick Parts in EWM Material Staging
BADI_EAM_ITOB_BAPI_CUST_FIELDS	BAdI: Modification of Data in BAPIs for Technical Objects
IWON_NOTIFICATION	BAdI: Modification of Data in Notification BAPIs

### 13.2.3 BAdIs for Maintenance Orders

The BAdIs listed here are available in the **EAM Maintenance Order** Web UI application and can be implemented by customers.

BAdI-Definition	BAdI-Description
/PLMU/EX_FRW_SIDE_PANEL	Side Panel BAdI Definition
APB_LAUNCHPAD_SELPAR	Modification of Selection Parameters in Launchpad
BADI_APB_LPD_MODIFY_LPD_LIST	Modify the Launchpad records
BSV_STATUS_PROFILE	BAdI for Status Profile Evaluation
DMS_ES_GET_FILE	Get File For 3D And 2D Viewing
BADI_EAM_AUTHORITY_CHECK_ORDER	Additional Authorization Check for Orders
MEASPOINT_CHECK	BAdI: Perform Measuring Point Checks in PRT Environment
EAM_WKCTR_SYNC	Synchronization of Work Center in Order and Notification
EAML_CHECK_LFE_DATA	BAdI for Checking Linear Data
EAML_LFE_SCREEN_MODIFICATION	BAdI for Customers to Modify Layout of Linear Fields

BAdI-Definition	BAdI-Description
EAML_POINT_BY_MARKER	BAdI for Customer to Adjust Linear Point Determination (F4)
BADI_EAMVE_FILE_SEARCH	BAdI: File Determination Logic for SAP 3D Visual Enterprise Viewer
BADI_ESH_IF_F4_MODIFY_STEP	Allows modifications in the search help exit at runtime
EAMCC_DOCUMENT_BADI_WD	BAdI: Documents in Order/Task List (SAP Web UI)
EAMS3_STRUCTURE_LIST_DATE	BAdI: Modification of Date for Structure List Explosion (Web UI)
BADI_IUID	Customer BAdI for Item Unique Identifier
PS_FUNCTION_SWITCH	BADI to switch on PS functions
BADI_PS_HLP_DRAFTS_EXIST	Check for Draft Existence
EAM_INSP_ROUNDS_CHECKS	BAdI: Make Checks When Changing Technical Objects
BADI_WCM_WCMOBJ	WCM: WCM Objects
BADI_WCM_ORDER	WCM: WCM-Relevant Order

## 13.2.4 BAdIs for Task Lists

The BAdIs listed here are available in the **EAM Task List** Web UI application and can be implemented by customers.

BAdI-Definition	BAdI-Description
APB_LAUNCHPAD_SELPAR	Modification of Selection Parameters in Launchpad
BADI_APB_LPD_MODIFY_LPD_LIST	Modify the Launchpad records
BADI_ESH_IF_F4_MODIFY_STEP	Allows modifications in the search help exit at runtime
BSV_STATUS_PROFILE	BAdI for Status Profile Evaluation
DMS_ES_GET_FILE	Get File For 3D And 2D Viewing
BADI_EAM_STRUCTURE_LIST	Extend Structure Lists
EAMCC_DOCUMENT_BADI_WD	BAdI: Documents in Order/Task List (SAP Web UI)
EAMS3_STRUCTURE_LIST_DATE	BAdI: Modification of Date for Structure List Explosion (Web UI)
BADI_EAMVE_FILE_SEARCH	BAdI: File Determination Logic for SAP 3D Visual Enterprise Viewer
EAM_INSP_ROUNDS_CHECKS	BAdI: Make Checks When Changing Technical Objects
BADI_WCM_WCMOBJ	WCM: WCM Objects

## 13.2.5 BAdIs for Maintenance Plans

The BAdIs listed here are available in the **EAM Maintenance Plan** Web UI application and can be implemented by customers.

BAdI-Definition	BAdI-Description
APB_LAUNCHPAD_SELPAR	Modification of Selection Parameters in Launchpad
BADI_APB_LPD_MODIFY_LPD_LIST	Modify the Launchpad records
BADI_ESH_IF_F4_MODIFY_STEP	Allows modifications in the search help exit at runtime
BADI_EAM_STRUCTURE_LIST	Extend Structure Lists
EAML_CHECK_LFE_DATA	BAdI for Checking Linear Data
EAML_LFE_SCREEN_MODIFICATION	BAdI for Customers to Modify Layout of Linear Fields
EAML_POINT_BY_MARKER	BAdI for Customer to Adjust Linear Point Determination (F4)
BADI_EAMS_VB_GEODB	BAdI: Enhancements for EAMS VB GeoDB
EAMS3_STRUCTURE_LIST_DATE	BAdI: Modification of Date for Structure List Explosion (Web UI)
MPLAN_BADI_HEADER_SAVE	Customer Enhancement When Saving Maintenance Plan

## 13.3 User Exits in Web UI

All User Exits that are listed here affect the data in the SAP GUI transactions as well as in Web Dynpro applications. A User Exit that was implemented in a specific SAP GUI transaction influences the corresponding Web Dynpro application as well. Nevertheless, we recommend further testing before you use the User Exits in a Web Dynpro application.

### 13.3.1 User Exits in Technical Objects

Exit Name	Enhancement	Description
IEQM0001	EXIT_SAPLIEL2_002	Add. checks for equip. installation at functional locations
IEQM0002	EXIT_SAPLIEL2_001	Additional checks for definition of equipment hierarchies
MGA00003	EXIT_SAPLOMCV_001	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_002	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_901	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_902	Material Master (Industry and Retail): Number Display

Exit Name	Enhancement	Description
ICSV0008	EXIT_SAPLIPAR_004	Validation of additional partner types
ILOM0002	EXIT_SAPLILOS_001	User exit when checking structure of location numbers
MCI10001	EXIT_SAPLMCI1_001	MCI1: PMIS/QMIS updating

## 13.3.2 User Exits in Notifications

Exit Name	Enhancement	Description
ICSV0003	EXIT_SAPLIPAR_002	Partner selection
ICSV0008	EXIT_SAPLIPAR_004	Validation of additional partner types
IWOC0002	EXIT_SAPLIQS0_001	PM/SM notification: Check whether status change is allowed
IWOC0003	EXIT_SAPLIW01_004	PM/SM authorization check of ref. object and planner group
IWOC0003	EXIT_SAPLIW01_005	PM/SM authorization check of ref. object and planner group
MGA00003	EXIT_SAPLOMCV_001	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_002	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_901	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_902	Material Master (Industry and Retail): Number Display
QQMA0013	EXIT_SAPMIW00_019	QM: Default Values when Creating a Task
QQMA0019	EXIT_SAPLIQS0_006	QM/PM/SM: Default Partner when Creating a Notification
QQMA0025	EXIT_SAPLIQS0_017	PM/SM: Default values when adding a notification
QQMA0026	EXIT_SAPLIBER_001	PM/SM: Auth. check when accessing notification transaction

## 13.3.3 User Exits in Orders

Exit Name	Enhancement	Description
BBPK0001	EXIT_SAPLBBPK_001	Exit for determining the external procurement profile
IWO10002	EXIT_SAPLCOIH_002	PM maintenance order: Customer check for order release
IWO10005	EXIT_SAPLCOIH_005	Maintenance order: Cust.-specif. determination of profit ctr
IWO10007	EXIT_SAPLCOIH_007	Maint.order: Customer enhancement - permits in the order
IWO10009	EXIT_SAPLCOIH_009	PM Order: Customer Check for 'Save' Event
IWO10010	EXIT_SAPLCOIH_010	Maint. order: Cust. enhancement for determining WBS element

Exit Name	Enhancement	Description
IWO10022	EXIT_SAPLCOIH_014	Determine calendar from user exit
IWO10025	EXIT_SAPLCOIH_025	PM/SM order: Finding responsible cost center
IWOC0003	EXIT_SAPLIWO1_004	PM/SM authorization check of ref. object and planner group
IWOC0003	EXIT_SAPLIWO1_005	PM/SM authorization check of ref. object and planner group
MGA00003	EXIT_SAPLOMCV_001	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_002	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_901	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_902	Material Master (Industry and Retail): Number Display
QQMA0026	EXIT_SAPLIBER_001	PM/SM: Auth. check when accessing notification transaction
STATTEXT	EXIT_SAPLBSVA_001	Modification exit for formatting status text lines

### 13.3.4 User Exits in Task Lists

Exit Name	Enhancement	Description
CPAU0001	EXIT_SAPLCPAU_001	Enhancement for Authorization Check in Task Lists
MGA00003	EXIT_SAPLOMCV_001	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_002	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_901	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_902	Material Master (Industry and Retail): Number Display
PCSD0007	EXIT_SAPLCSDI_007	Check changes in STKO
PCSD0005	EXIT_SAPLCSDI_006	BOMs: component check for material items

### 13.3.5 User Exits in Maintenance Plans

Exit Name	Enhancement	Description
MGA00003	EXIT_SAPLOMCV_001	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_002	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_901	Material Master (Industry and Retail): Number Display
MGA00003	EXIT_SAPLOMCV_902	Material Master (Industry and Retail): Number Display

Exit Name	Enhancement	Description
IWOC0003	EXIT_SAPLIWO1_004	PM/SM authorization check of ref. object and planner group

## 13.3.6 Replaced User Exits

The following user exits are among others not called in the Web Dynpro applications anymore. You find in the following table a BAdI name where you can implement additional logic instead.

No more used Exit	BAdI - use instead	BAdI Description
QQMA0014	NOTIF_EVENT_SAVE	Change When Saving Notification
IEQM0003	EQUI_UPDATE *	Equipment Master Data

\* Note: The BAdI EQUI\_UPDATE is called in update task - this means for example the change of the equipment user status data is not yet saved to the database and you don't have access to the just changed user status in some application internal table. A solution is to put the logic into an RFC-enabled function module which is called in this BAdI implementation the following way: `CALL 'Z_PROXY_FM' STARTING NEW TASK.`

When this function module is called once all changes by the registered function modules in update task are committed by the `COMMIT` of the update process. In this case you start sending data (like messages) only after the updates have been finished successfully and you are able to read the user status data from the database. In case of a `ROLLBACK` no messages are sent.



---

## 14 Breakpoints

Transaction `SAAB` is used to maintain and activate checkpoint groups for checkpoints that can be activated (assertions, breakpoints, and logpoints).

For Enterprise Asset Management the following groups exist:

EAM_TZS_GEN	EAM: Time Zone Support generic Checkpoint
EAM_TZS_PAI	EAM: Time Zone Support PAI Checkpoint
EAM_TZS_PBO	EAM: Time Zone Support PBO Checkpoint
EAM_WKCTR_SYNC	EAM_WKCTR_SYNC
EAML	Linear Asset Management
EAMS_UI_BCV	Checkpoint Group for BCV Tagging and BAdI
EAMWS_SCL	EAM Worker Safety List of Relevant Risks

When dealing with Business Context Viewer the following groups may be of interest.

/BCV/CFG	BCV Configuration Assertions
/BCV/FND	BCV Foundation Assertions
/BCV/QRM	BCV Query Management Assertions

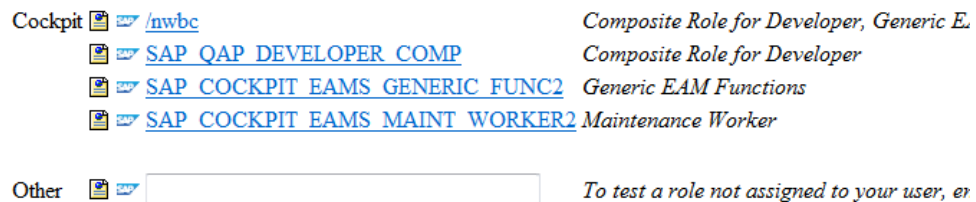
Depending on the framework on which EAM Web UI is based, you can use the input help to find all checkpoint groups starting with `/PLMB/` and `/PLMU/`.

## 15 APPENDIX (Tips & Tricks)

### 15.1 Starting the NWBC with PFCG Roles

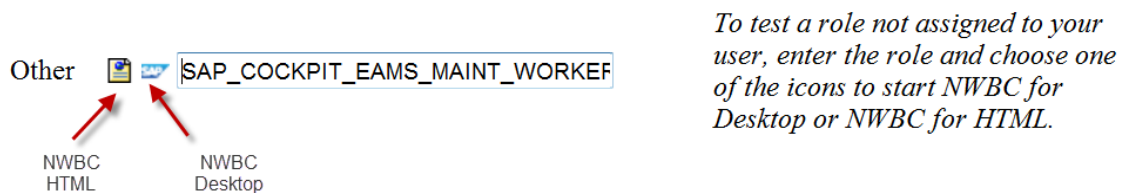
- o Log on to your system and enter NWBC in the transaction field.
- o A browser window opens and shows all roles that are assigned to the user.
- o Choose a role from the list or enter a role manually in the entry field *Other*.

#### Launch NetWeaver Business Client



Starting SAP NetWeaver Business Client for HTML or Desktop with PFCG role

### 15.2 NWBC for HTML or Desktop



With the icon in front of the role, you can choose either the NWBC for HTML or NWBC for Desktop

### 15.3 Checking the Status of Business Functions

- o Log on to your system and enter SFW\_BROWSER in the transaction field.
- o Filter or search for the business function

## Switch Framework Browser



Object	Client	System	Check...	Description
LOG_EAM_SIMPLICITY_2				Simplified EAM Functions 2
LOG_EAM_SIMPLICITY_3				Simplified EAM Functions 3
LOG_EAM_SIMPLICITY_4				Simplified EAM Functions 4
LOG_EAM_SIMPLICITY_5				Simplified EAM Functions 5
LOG_EAM_SIMPLICITY_6				Simplified EAM Functions 6
LOG_EAM_SIMPLICITY_7				Simplified EAM Functions 7

Alternatively you can proceed as follows:

- o Log on to your system and enter SEFW5 in the transaction field.
- o Select folder *ENTERPRISE BUSINESS FUNCTIONS* and look for the required BF. The light bulb indicates whether the respective business function is activated or not.

LOG_EAM_SIMPLICITY	Simplified Management of EAM Functions	Business func. will remain activated			
LOG_EAM_SIMPLICITY_2	Simplified Management of EAM Functions 2	Business func. will remain activated			
LOG_EAM_SIMPLICITY_3	Simplified Management of EAM Functions ...	Business function (reversible) will ...			

Here the business function LOG\_EAM\_SIMPLICITY\_3 is active, as well as the prerequisite BFs.

## 15.4 Entering the Component Configuration of a UIBB

If you want to find out the configuration name of a specific UIBB, log on to the corresponding Web Dynpro application in NWBC. Put the mouse cursor on the UIBB and open the context menu by clicking the right mouse button. In the context menu choose *Technical Help*.

**General Data**

Coding:

Description:

Required Start Date/Time: 10.06.2014 14:55:41

Technical Object:

Material:

Assembly:

Task List:

Assigned Order:

Priority:

Date/Time:

Object Type:

Material Number:

Display Quick Help

More Field Help...

**Technical Help...**

Delete input history for user SAXM

Create Support Message (CSS Internal Message)

On the popup window you find the name of the Component Configuration. Links enable you to directly navigate to the respective configurations.

## Technical Help

**Web Dynpro Application**   System Data   Browser   Views and View Elements   View Element Adapter   Components

---

**Application**  
Application: EAMS\_WDA\_ORDNTF\_OIF  
Application Configuration: [EAMS\\_WDA\\_ORDNTF\\_OIF\\_CFG](#)  
Application Component: PM

**Current View**  
Component: FPM\_FORM\_UIBB  
Component Configuration: [EAMS\\_WDC\\_NTF\\_HEADER](#)  
Window: FORM\_WINDOW  
View: V\_FORM  
Application Component: BC-WD-CMP-FPM

**Start Component**  
Component: FPM\_OIF\_COMPONENT  
Component Configuration: [EAMS\\_WDC\\_ORDNTF\\_OIF\\_CFG\\_2](#) ← This is the main configuration  
Personalization: [EAMS\\_WDC\\_ORDNTF\\_OIF\\_CFG\\_2](#)  
Application Component: BC-WD-CMP-FPM

← This is the current UIBB

If you know the name of the configuration already, you can use transaction **SE80** to access the configuration. Select the *Repository Information System* (1), then *Component Configurations* (2) and enter the name of the configuration you want to look at or change (3).

**Repository Info System: Find Component Configuration**

Connectivity Browser  
MIME Repository  
Repository Browser  
Repository Information System ← 1  
Tag Browser  
Transport Organizer  
Test Repository

Standard Selections

Component Configuration	<a href="#">EAMS_WDC_NTF_HEAD...</a>
Web Dynpro Component	
Short Description	
Package	
Component ID	

3

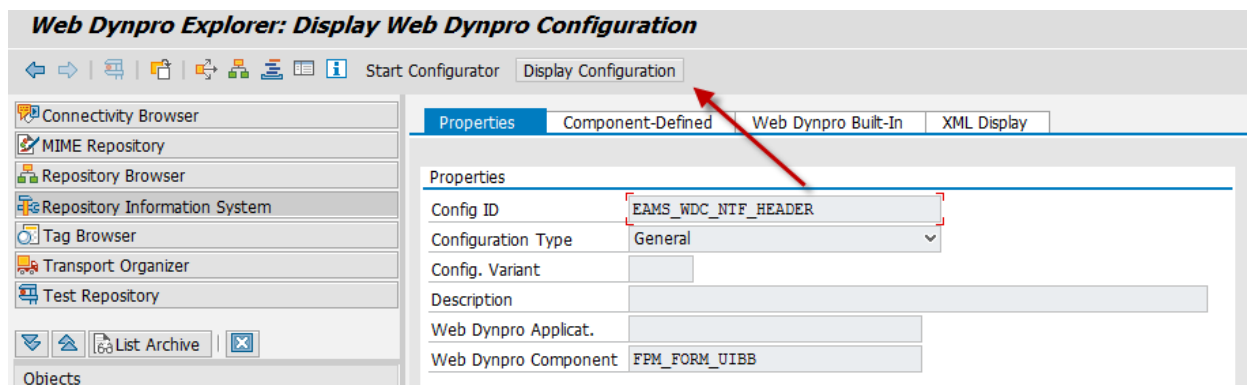
Settings

Max. Number of Hits	200
---------------------	-----

Objects

- Repository Information System
  - Development Coordination
  - Business Engineering
  - ABAP Dictionary
  - Program Library
  - Class Library
  - Web Dynpro
    - Web Dynpro Components
    - Web Dynpro Applicat.
    - Web Dynpro CHiPs
    - Component Configurations ← 2
    - Application Configurations
  - BSP Library
  - Enterprise Services
  - Enhancements
  - Test Objects
  - Other Objects

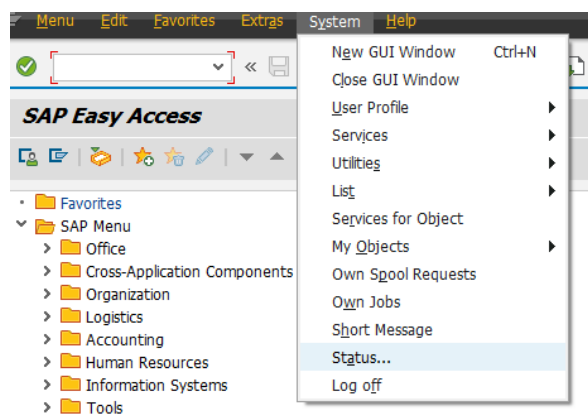
To display or change the configuration, choose execute and double-click on the search result. Then choose the *Display Configuration* button.



The system opens the configuration initially in display mode. If you want to make changes to the configuration, you have to switch to change mode first.

## 15.5 Finding out the Release and SP Level of a Software Component

If you want to find out the release and support package level of a software component, log on to the system and choose the menu entries *System* -> *Status*.



In the group box *SAP data*, column *SAP System data*, select the details for the *Component information*:

SAP data			
Repository data		SAP System data	
Transaction	ESH_TEST_SEA...	Component version	SAP NetWeaver 7 ...
Program	ESH_TEST_SEA...		
Program (screen)	ESH_TEST_SEA...	Installation Number	0020270862
Screen number	1000	License expiration	31.12.9999
Program (GUI)	RSSYSTDB	Unicode System	Yes
GUI status	\$_00		

In this example, the software component `SAP_APPL` is on release SAP enhancement package 7 for SAP ERP 6.0 SP 04.

Component	Release	SP-Level	Support Package	Type	Short description of the component
MDG_APPL	607	0008	SAPK-60708INMDGAPPL		MDG Applications 607
SAP_APPL	617	0004	SAPKH61704		Logistics and Accounting
SAP_FIN	617	0004	SAPK-61704INSAPFIN		SAP_FIN

## 15.6 Displaying or Suppressing Quickviews in an Application

You can determine whether quickviews are displayed or suppressed in individual applications. To open the respective Web Dynpro application, select the *Repository Information System* (1) in transaction `SE80`. Then select *Application Configurations* (2) and enter the name of the configuration you want to look at or change (3). In this example, you open the configuration for the Notification `EAMS_WDA_ORDNTF_OIF_CFG`.

The screenshot shows the 'Repository Info System: Find Application Configuration' dialog. The left sidebar contains a tree view with the following structure:

- Repository Information System (1)
  - Development Coordination
  - Business Engineering
  - ABAP Dictionary
  - Program Library
  - Class Library
  - Web Dynpro
    - Web Dynpro Components
    - Web Dynpro Applicat.
    - Web Dynpro CHIPS
    - Component Configurations
    - Application Configurations (2)

The main pane on the right is titled 'Standard Selections' and contains the following fields:

- Application Configuration: `EAMS_WDA_ORDNTF_OI` (3)
- Web Dynpro Application
- Short Description
- Package
- Application Component

Below the 'Standard Selections' section is the 'Settings' section, which includes a field for 'Max. Number of Hits' set to 200.

Open the configurator in display mode and check the application parameters. If you want the system to display quickviews in the application, make sure that the application parameter `WDALLOWQUICKVIEWS` is set. You can deselect the checkbox if you want to suppress quickviews in a specific application.

**Application Configuration EAMS\_WDA\_ORDNTF\_OIF\_CFG**

Save Cancel Edit Check New Window Enhance Properties Test

Assign Web Dynpro Component

Assign Configuration Name

Component Usage	Component	Implementation	Configuration Name
▼ EAMS_WDA_ORDNTF_OIF	FPM_OIF_COMPONENT	FPM_OIF_COMPONENT	EAMS_WDC_ORDNTF_OIF_CFG_2
IDR_USAGE	FPM_IDR_COMPONENT	FPM_IDR_COMPONENT	

Application Parameter


Display Default Values URL Parameter

**General**

Activate Accessibility Mode (WDACCESSIBILITY): ☐

Allow User Agents (WDALLOWEDUSERAGENTS): Tolerated

Allow Multiple Actions per Round Trip (WDALLOWMULTIPLEA. ☒

Quickviews for MouseOver (WDALLOWQUICKVIEWS): ☒ 

**Hint:** You can also make settings for quickviews that are valid for a whole client, independently from the application. For more information, see 15.8.

## 15.7 Allowing Data for Side Panels to be Sent and Received

If you want to use side panels in Web Dynpro applications for Plant Maintenance and display context-sensitive information, you have to allow data to be exchanged between the side panel and the application. To do so, enter the application configuration of a Web Dynpro application as described in chapter 3. Check if you have selected the checkboxes of the application parameters `WDSIDEPANELREMOTECONSUMER` and `WDSIDEPANELREMOTEPRODUCER`. If these checkboxes are not selected, the side panel CHiPs will not receive any data from the application and will remain empty.

Application Configuration EAMS\_WDA\_ORDNTF\_OIF\_CFG

Save

Cancel

Edit

Check

New Window

Enhance

Properties

Test

Label Alignment (WDSTYLE\_LABELALIGNMENT):

Labels Right-Aligned

Toolbar Design (WDSTYLE\_TOOLBARDESIGN):

Flat Toolbar Design

Stylesheet URI (WDTHEMEROOT):

SAP\_CORBU

UI Guideline (WDUIGUIDELINE):

Guideline 2.0

Show Animation (WDUSEANIMATION):

☒

Side-Panel

Configuration ID of Side Panel (WDSIDEPANELCONFIGURATI..)

/BCV/SIDEPANEL

Opened at Program Startup (WDSIDEPANELOPEN):

☐

Enable Receipt of Tagging Data in Remote Side Panel (WDSID..)

☒

Enable Sending of Tagging Data to Remote Side Panel (WDSID...)

☒

Size can be changed by user (WDSIDEPANELRESIZABLE):

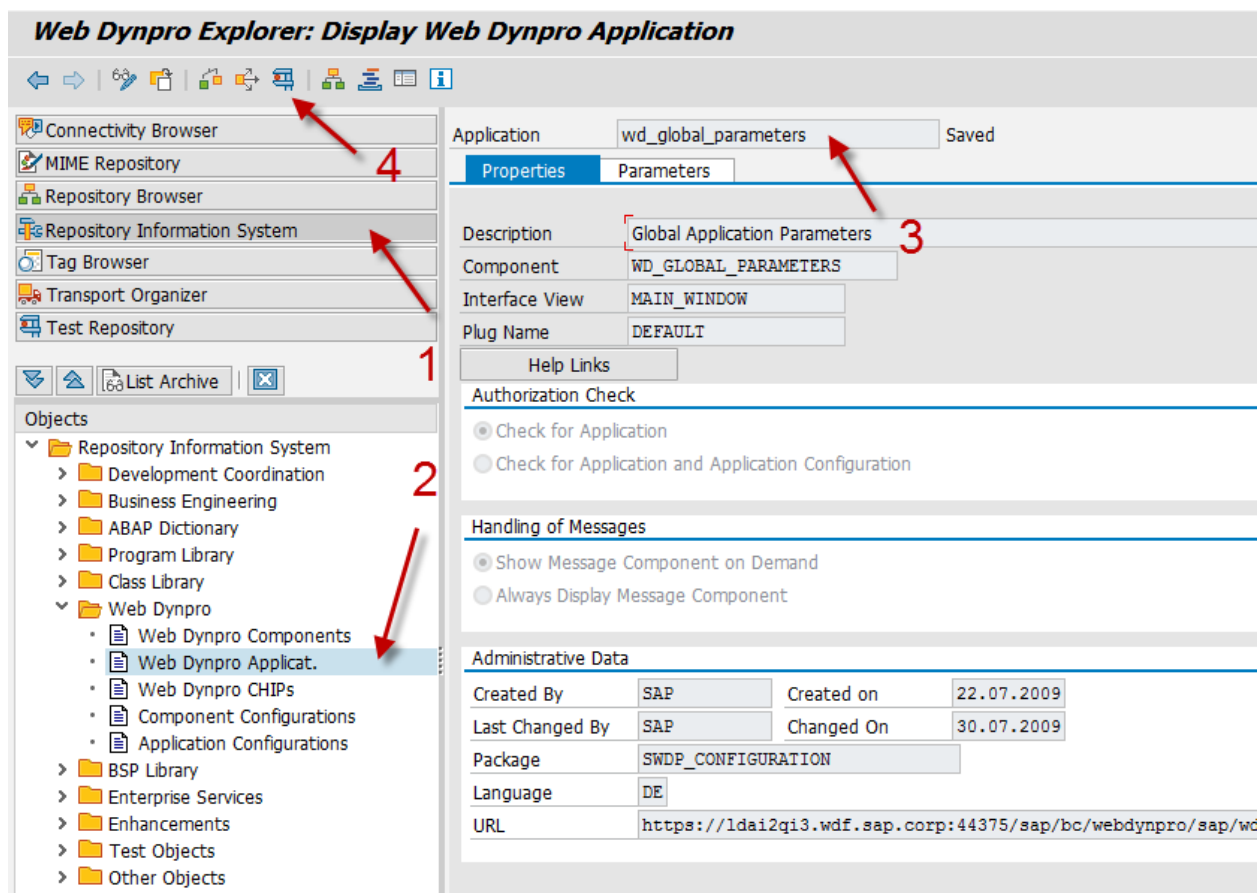
☒

**Hint:** You can also make settings for side panels that are valid for the whole client, independently from the application. For more information, see 15.8.

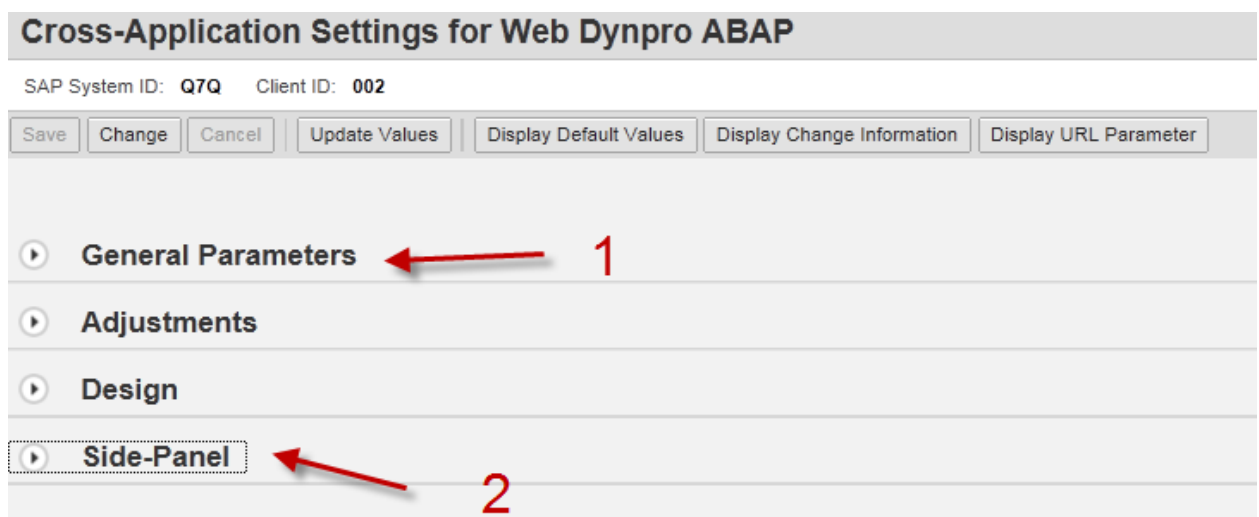
## 15.8 Global Web Dynpro Parameter Settings for the Whole Client

If you want to make Web Dynpro settings that are valid for the whole client, select the [Repository Information System](#) (1) in transaction SE80. Then select [Web Dynpro Applications](#) (2) and enter WD\_GLOBAL\_PARAMETERS (3) as the application name. Start the application by choosing the button [Test/Execute](#) F8 (4).





In the *Cross-Application Settings for Web Dynpro ABAP* you see all parameter settings for the client, grouped in four sections:

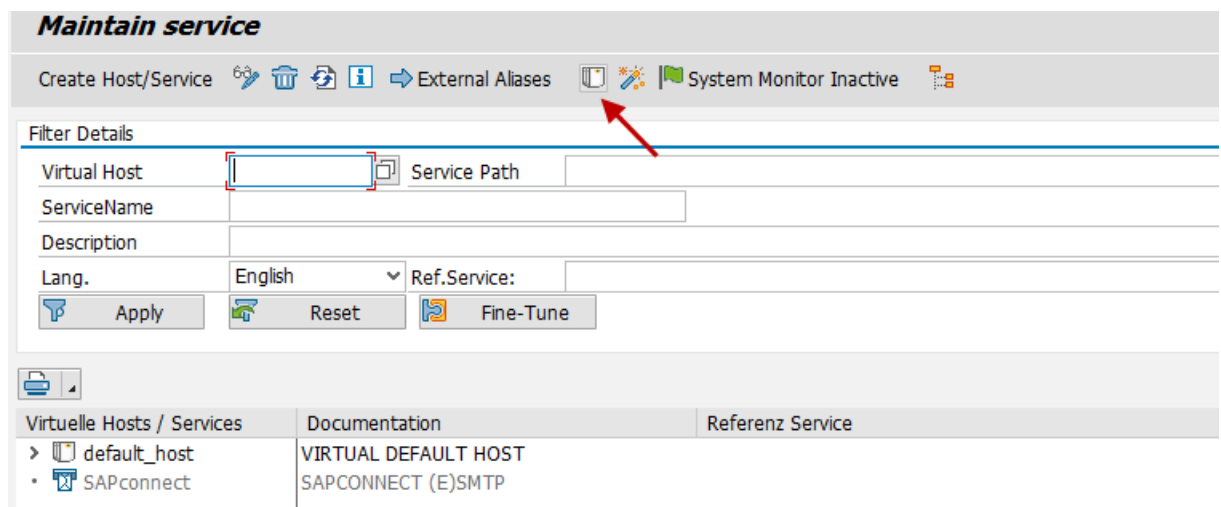


- o To display or suppress quickviews for the whole client, change the parameter `WDALLOWQUICKVIEWS` in the *General Parameters*. For more information about quickview settings for individual applications, see chapter 15.6.

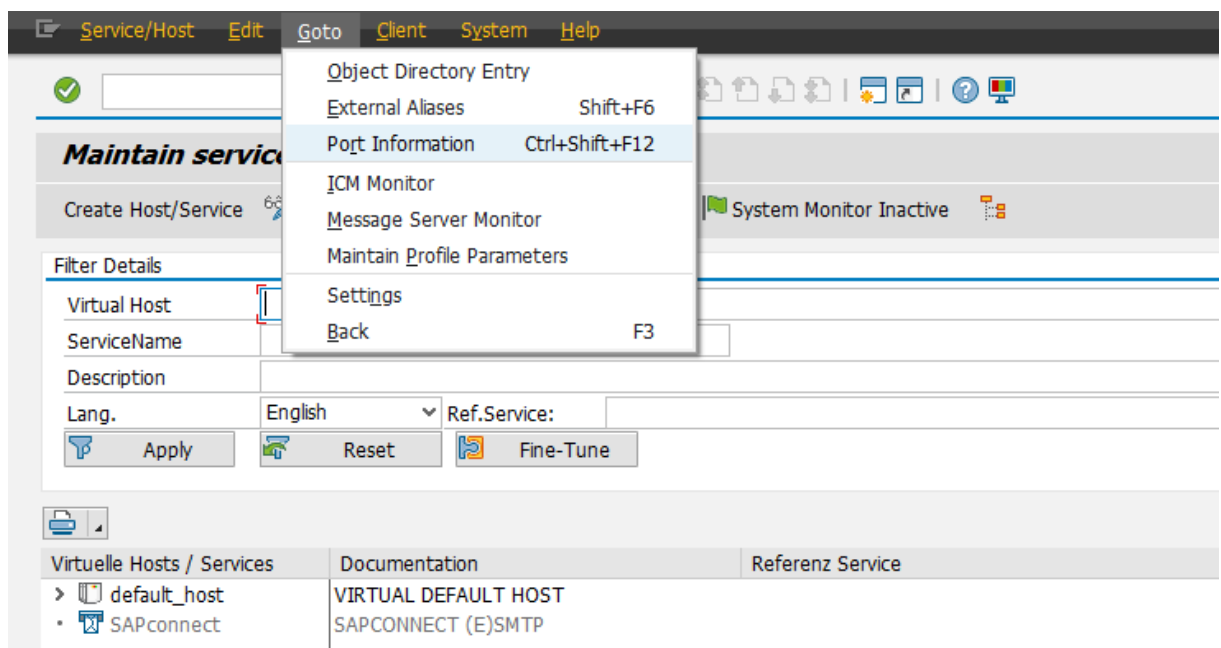
- o To enable side panels to receive and send data, select the checkboxes of the parameters `WDSIDEPANELREMOTECONSUMER` and `WDSIDEPANELREMOTEPRODUCER` in section [Side-Panel \(2\)](#). For more information about side panel settings for individual applications, see chapter 15.7.

## 15.9 Determining HTTP/HTTPS Port Numbers

If you want to enable cross-system navigation and therefore have to find out the HTTP/HTTPS port numbers, choose [Tools -> Administration -> Network](#) and execute [HTTP Service Hierarchy Maintenance](#) (transaction `SICF`) in the SAP menu. After you have executed the report, choose the [Information on Port and Host](#) button.



To display the required HTTP/HTTPS port numbers, choose [Goto -> Port Information](#) in the toolbar.



## 15.10 Report for Metadata for Web UI

To use the report, create an executable Z-report in the ABAP Editor (transaction code `SE38`) and copy the attached coding. Create the following five text symbols for the report.

001	Node Name	9	19
002	MP Name	7	17
003	Structure Name	14	24
004	Structure Description	21	42
005	Field Name	10	20

Save and activate the report before executing.

Coding:

```
REPORT zz_get_mp_data.
TYPES: BEGIN OF lty_output.
TYPES:
  abbid      TYPE /plmb/spi_abbid,
  mp_name    TYPE /plmb/spi_mp_name,
  sp_name    TYPE /plmb/spi_sp_name,
  struc_descr TYPE char40,
  field_name TYPE dd031-fieldname,
END OF lty_output.

DATA: ls_output TYPE lty_output,
      lt_output TYPE STANDARD TABLE OF lty_output.

DATA: lo_metadata_base TYPE REF TO /plmb/if_spi_metadata_base,
      lt_metadata_node TYPE /plmb/t_spi_metadata_node,
      ls_metadata_node TYPE /plmb/s_spi_metadata_node,
      ls_metadata_abbid TYPE /plmb/s_spi_metadata_abbid,
      ls_abbid          TYPE /plmb/s_spi_abb,
      ls_dd031          TYPE dd031,
      lt_dd031          TYPE STANDARD TABLE OF dd031.

DATA: ls_layout TYPE slis_layout_alv,
      lt_fcat   TYPE slis_t_fieldcat_alv,
      ls_fcat   TYPE slis_fieldcat_alv.

FIELD-SYMBOLS: <fs_output> TYPE lty_output,
               <fs_fcat>   TYPE lvc_s_fcat,
               <fs_dd031> TYPE dd031.

PARAMETERS: p_abbid TYPE /plmb/spi_abbid OBLIGATORY,
            p_field TYPE dd031-fieldname.

SELECT SINGLE abbid FROM /plmb/spi_abb INTO ls_abbid-abbid WHERE abbid = p_abbid.
IF sy-subrc NE 0.
  MESSAGE e001(cg) WITH p_abbid.
EXIT.
```

```

ENDIF.

CALL METHOD /plmb/cl_spi_abb=>get_abb(
  EXPORTING
    iv_abbid = p_abbid
  IMPORTING
    es_abb   = ls_abbid ).

CREATE OBJECT lo_metadata_base
  TYPE (ls_abbid-mp_name).

lo_metadata_base->get_node_definition(
  EXPORTING
    iv_abbid          = p_abbid
  IMPORTING
    et_metadata_node  = lt_metadata_node
    es_metadata_abbid = ls_metadata_abbid ).

LOOP AT lt_metadata_node INTO ls_metadata_node.
  ls_output-abbid   = ls_abbid-abbid.
  ls_output-mp_name = ls_metadata_node-name.
  ls_output-sp_name = ls_metadata_node-data_struct.
  APPEND ls_output TO lt_output.
ENDLOOP.

*read structure descriptions
IF lt_output IS NOT INITIAL.
  LOOP AT lt_output ASSIGNING <fs_output>.
    SELECT SINGLE ddtxt FROM dd02t INTO <fs_output>-struc_descr
      WHERE tabname = <fs_output>-sp_name.
    ENDLOOP.
  ENDIF.

  * search for field in structures (DD03L)
  IF p_field IS NOT INITIAL AND lt_output IS NOT INITIAL.
    ls_dd03l-fieldname = p_field.
    LOOP AT lt_output ASSIGNING <fs_output>.
      SELECT SINGLE * FROM dd03l INTO ls_dd03l
        WHERE tabname = <fs_output>-sp_name
          AND fieldname = ls_dd03l-fieldname.
      IF sy-subrc = 0.
        <fs_output>-field_name = ls_dd03l-fieldname.
      ENDIF.
    ENDLOOP.
  ENDIF.

  * create fieldcatalog
  CLEAR ls_fcat.
  ls_fcat-fieldname = 'ABBID'.

```

```

ls_fcat-inttype = 'C'.
ls_fcat-seltext_l = text-001.
ls_fcat-seltext_m = text-001.
ls_fcat-seltext_s = text-001.
APPEND ls_fcat TO lt_fcat.

CLEAR ls_fcat.
ls_fcat-fieldname = 'MP_Name'.
ls_fcat-inttype = 'C'.
ls_fcat-seltext_l = text-002.
ls_fcat-seltext_m = text-002.
ls_fcat-seltext_s = text-002.
APPEND ls_fcat TO lt_fcat.

CLEAR ls_fcat.
ls_fcat-fieldname = 'SP_Name'.
ls_fcat-inttype = 'C'.
ls_fcat-seltext_l = text-003.
ls_fcat-seltext_m = text-003.
ls_fcat-seltext_s = text-003.
APPEND ls_fcat TO lt_fcat.

CLEAR ls_fcat.
ls_fcat-fieldname = 'Struc_descr'.
ls_fcat-inttype = 'C'.
ls_fcat-seltext_l = text-004.
ls_fcat-seltext_m = text-004.
ls_fcat-seltext_s = text-004.
APPEND ls_fcat TO lt_fcat.

CLEAR ls_fcat.
ls_fcat-fieldname = 'field_name'.
ls_fcat-inttype = 'C'.
ls_fcat-seltext_l = text-005.
ls_fcat-seltext_m = text-005.
ls_fcat-seltext_s = text-005.
APPEND ls_fcat TO lt_fcat.

*define layout
CLEAR ls_layout.
ls_layout-coltab_fieldname = 'TABCOL'.
ls_layout-expand_fieldname = 'X'.
ls_layout-colwidth_optimize = 'X'.

* display output table
CALL FUNCTION 'REUSE_ALV_GRID_DISPLAY'
  EXPORTING
    i_grid_title  = 'Web UI Structures per Node'
    is_layout     = ls_layout
    it_fieldcat   = lt_fcat

```

---

```
TABLES
    t_outtab      = lt_output
EXCEPTIONS
    program_error = 1
    OTHERS        = 2.
IF sy-subrc <> 0.
    MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno
            WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.
ENDIF.
```





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**Material Number:**