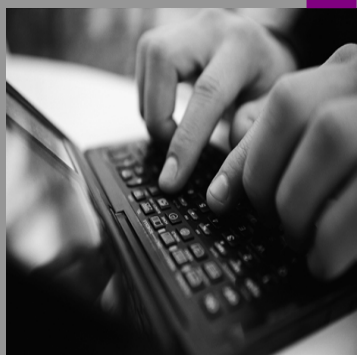

How-to Guide
SAP NetWeaver '04

How to Upload and Adapt ERP Roles and Their Content to SAP Enterprise Portal

Version 1.00 – November 2004

Applicable Releases:
SAP NetWeaver '04

THE BEST-RUN BUSINESSES RUN SAP

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1 Business Scenario

You use mySAP ERP together with SAPNetWeaver, and you would like to make the single and composite roles of your ERP system and their entire content accessible through SAP Enterprise Portal.

2 Introduction

This guide describes the possibilities for role upload and explains how you can adapt the uploaded roles from the ABAP-based backend system in the portal environment.
This document does not overlap with any of the standard documentation. Instead, it describes aspects that are not covered in detail by the standard documentation. References to the standard documentation can be found in the appendix.

3 Technical Preparations

3.1 Checking Technical Requirements

Check that the following requirements are fulfilled:

1. **Importing the SAP Enterprise Portal Plug-In 6.0**

   Up to ABAP Basis Release 6.20, you must import SAP Enterprise Portal Plug-In 6.0 into your SAP system in order for the functions necessary for uploading backend roles to be available in the ABAP-based SAP system.

   With ABAP Basis Release 6.40, the functions of Enterprise Portal Plug-In 6.0 are included in the PI_BASIS, which no longer needs to be imported separately. See also: Note **723189**.

2. **Authorizations in the backend system**
   In the ABAP-based backend system you need the authorization *S_RFC* for the function group *PWP2*.
   Make sure that the administration user in the portal that has to perform the role upload has also been assigned administrator privileges.

3. **Configuration of the system landscape in the portal**
   In your portal system landscape, you must create a system for each backend system from which you upload objects. You have to create a system alias. For the alias name you **must** use the ID of the logical system name of the SAP backend system (e.g. QWACLNT100).

4. **Corresponding Users**
   The role/user assignment upload only works if the users in the portal and in the backend system have corresponding users. This means for every user in the backend you need a corresponding user in the Portal. The best way to achieve this is by defining the ABAP based backend system as data source for the User Management Engine (UME). You do this during the installation process.

For more information on the requirements for the upload and also the system landscape configuration read the documentation on the SAP Help Portal (see 6.0 Appendix).

Note:

1. Portal Platform **and** Knowledge Management/Collaboration need to be installed. If this is not the case, the *Portal Favorites* iView will not be available.
2. During the installation process, a customer portal, not a development portal needs to be installed.

3.2 Checking the Portal Configuration

By default, all initial folder levels of uploaded roles appear as entry points in the top-level navigation area.
You can change the standard role upload procedure so that the role content from the ABAP-based backend system automatically appears in the detailed navigation area.
To do this you must make the following settings:

- Enter new property values for the role migration service
- Perform some configuration steps by creating content objects that ensure that the role content is contained in the detailed navigation

We support this configuration version of the role upload by providing a pre-configuration with which you can quickly set up the modified role upload procedure. Customer note **762998** contains the content objects you need for the scenario. You only need to import them into the portal. The role migration service already contains initial values that are adjusted in line with this pre-configuration. For a detailed description of this configuration, see the standard documentation on the SAP Help Portal (see 6.0 Appendix).

4 Considerations for Role Upload

For a detailed description of the role upload, see the standard documentation on the SAP Help Portal (see 6.0 Appendix).

4.1 Upload Packages

Before the upload, you should check how big the upload packages are in which the roles are to be uploaded to the portal.
The larger the upload package, the longer the duration of the upload process. In the case of very large packages, the upload process may be terminated.
We therefore recommend that you upload smaller packages. The size of the packages depends on the number of contained menu items rather than on the number of roles that you are uploading. The more contained menu items, the longer the upload will last and the more likely it is that the upload process will terminate. You should therefore define smaller packages for the upload process, rather than uploading all objects at once.

4.2 Upload Settings

You can decide whether you want to upload in the form of roles, MiniApps, or transactions. We recommend that you upload as portal roles, since this is the only way that you can use the procedure recommended by us for adjusting the roles from the ABAP-based system in the portal environment (see 5.1 Recommended Approach).

The following settings are available for uploading roles:

Settings	Default Setting	Description
Upload User Mapping	Not selected	Select this option if you also need the user assignment to be uploaded to the portal. You can also upload the user assignments in a second step. In this case, you just select *Upload User Mapping* and do not select *Overwrite Existing Content*. **Note**: If you upload single or composite roles for worksets, the user assignments are not uploaded.
Upload Included Services	Selected	When roles are uploaded, the services included in the roles (such as transactions) are also uploaded and created as separate objects in the Portal Content Directory (PCD). If you deselect this option, only the role menu is uploaded, and the included

		services are not created in the PCD.
Migrate First Folder Level as Entry Point	Selected	In an uploaded role, the folders on the first level of the menu hierarchy are already defined as entry points for the portal navigation by default. If you deselect this option, no entry points are defined. Note: be careful with this option, because it is not always useful to have the first folder level automatically as an entry point in the portal. The top-level navigation area could become too extensive. If you use the recommended approach (see 5.1), you must deselect this option.
Convert Roles to Worksets	Not Selected	Here you can decide whether or not you want to convert the roles from the ABAP-based system to worksets in the portal. By default, they are converted to portal roles. We recommend that you convert them to portal roles. Only then you can use the recommended approach for the adaptation of single and composite roles in the portal environment.

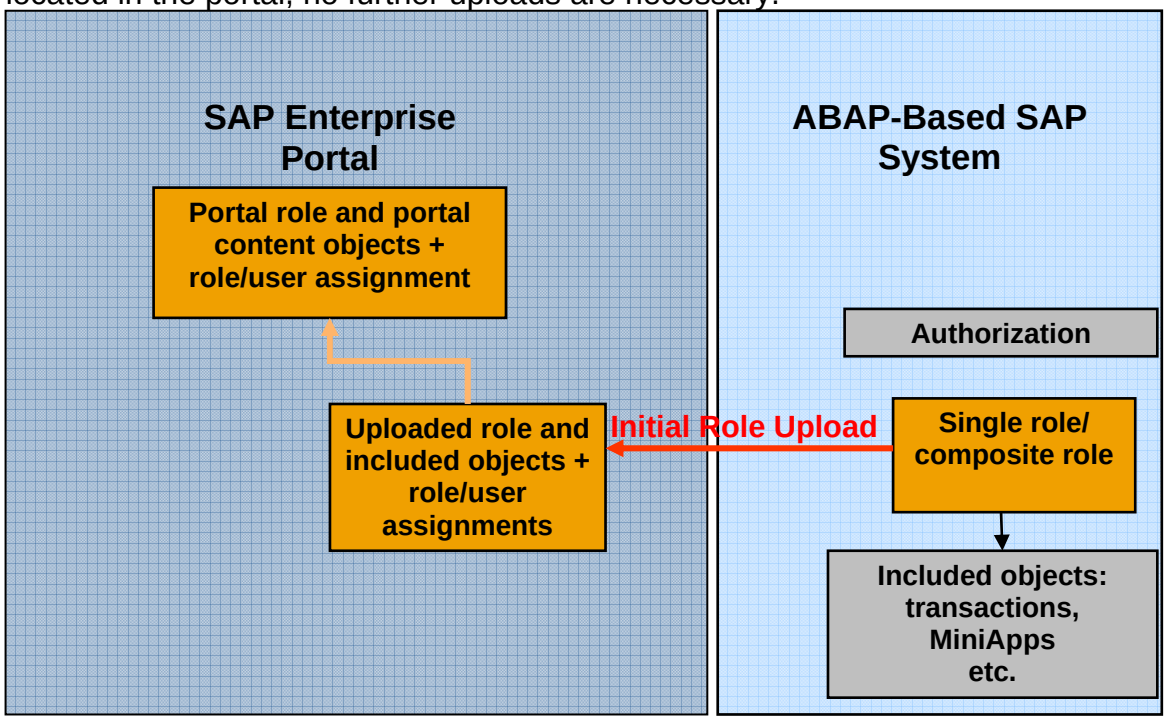
To summarize, the following settings are necessary if you want to use the procedure recommended by us for adapting the roles from ABAP-based systems in the Portal (see also Recommended Approach 5.1).

- Select "**Upload Included Services**"
- Do not select "**Migrate First Folder Level as Entry Point**"
- Do not select "**Convert Roles to Worksets**"
- For the upload of role/user assignments, you decide whether you prefer to upload them together with the roles or in a separate upload step.

You can also select other settings for the upload process. However, if you deviate from the procedure that we recommend, you have to accept that some additional effort will be necessary in adapting the content from the ABAP-based system to the portal environment. You can for example upload transactions and not roles. This procedure signifies a complete re-composition of the transactions to portal roles in the portal (see "Other ways of adapting content…" 5.5). The post processing of the uploaded content in the portal is then extremely complex.

4.3 After the Upload

After the upload we recommend that you use the portal as your main system for role creation and maintenance. The aim of the upload is to initially transfer all role content of the ABAP-based system, including the role menu information, to the portal. As soon as your single and composite roles and their entire content is located in the portal, no further uploads are necessary.



From then on you should no longer create your roles in the ABAP-based backend system and upload them to the portal. Instead, you should use the portal administration tools for all actions involved in creating and managing roles.

What remains to be done in the ABAP-based system?

The ABAP-based system will still be used for providing authorization profiles and creating new profiles.

SAP Enterprise Portal has no central authorization concept that can also be used to generate the authorization profiles required to execute iViews and transactions which are running in a ABAP-based system. The portal does not offer you the possibility of generating authorization profiles. After you have uploaded the ERP content to the portal, the relevant authorization profiles remain in the ERP system and can be accessed from the portal.

Note the following:

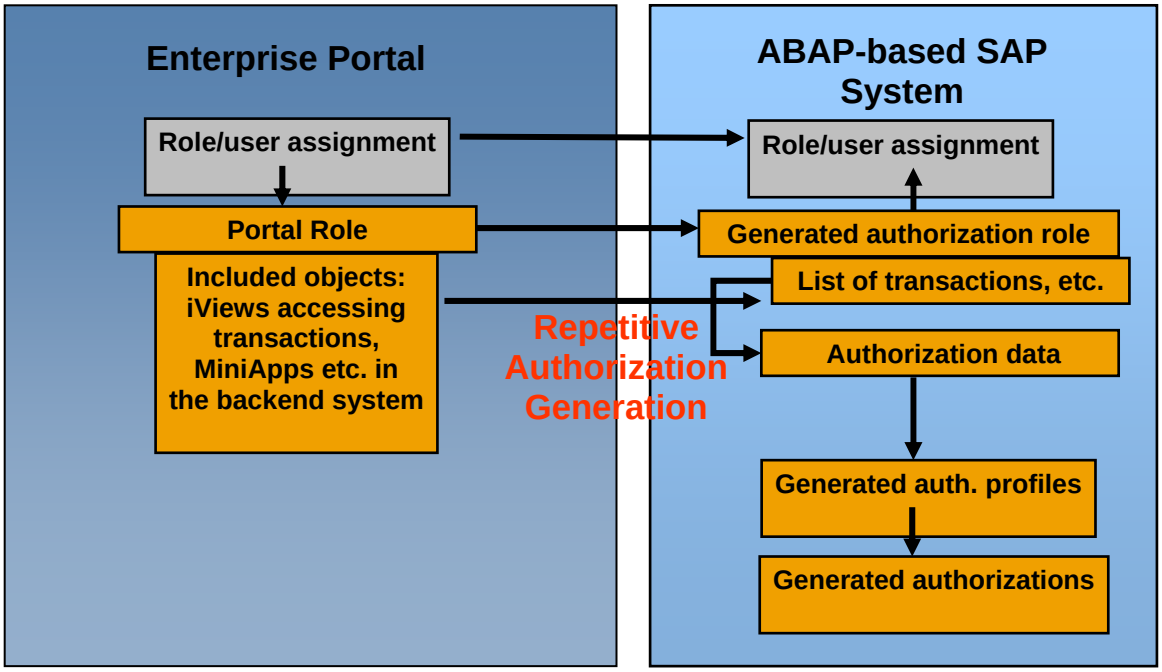
You should always assign a portal user the same content as the corresponding user in the ERP system. Otherwise, you may have a situation where a portal user is assigned to content for which he or she has no authorization in the ERP system.

This means the following: If you leave role content and user authorizations as uploaded, you need to take no further actions. However, as soon as you make changes in the portal, for example by changing user assignments or role

definitions, you must adjust the authorization profiles and user assignments in the ABAP-based system accordingly.

The portal provides a component that you can use to distribute role definitions and user assignments to the ABAP-based systems. This allows you to adjust or create authorization profiles in your ERP system. The ABAP-based system provides the dedicated transaction WP3R. This transaction can handle portal roles, and enables the generation of a corresponding role (authorization role) per portal role. Authorization roles are the basis for generating authorization profiles. User assignments are also distributed into transaction WP3R. This is the prerequisite that authorization roles can be assigned to the corresponding users in the ABAP-based system.

The role distribution procedure is a process that you have to repeat whenever you need to make adjustments in the ABAP-based system:



For detailed information on the role distribution process and procedure, see the SAP Help Portal (see 6.0 Appendix).

5 Adapting and Redesigning Uploaded Roles in the Portal Environment

Since single and composite roles were not originally designed for display in a portal, their contents will usually require some editing or redesigning.
Roles from an ABAP-based system represent the menu of this system, but portal roles represent the entire information requirements of a user in a certain role. Since portal roles have a greater global significance, it is necessary to adjust the contents of the uploaded roles. A portal role is not just a representation of a menu in an SAP system. A redesign is therefore necessary before uploaded roles can be used meaningfully in the portal.
For more information about the portal role concept and the differences between the role concepts in ABAP-based systems and Workplace systems, see the How-to Guide *Role Concepts in EP 5.0 and 6.0*. You can find it at **service.sap.com/ep60** -> **EP 6.0 (SP2 and earlier)** -> **How-to Guides** -> **Current How-to Guides**.

A list of possible post-processing steps for uploaded roles in the portal is given below:

- Single and composite roles have no pages. You should therefore consider whether or not to define pages with iViews, and with how many iViews, and then assign them to the roles.
- You should make adjustments to the role hierarchy and the navigation structure. The original uploaded roles represent the menu of an ABAP-based SAP system and therefore often have a very deep navigation structure. It makes sense to remove unnecessary navigation levels here.
- You should check the top-level navigation for the user after the upload. Single and composite roles often list more than 10 entries on the first level of their navigation structure. A 1:1 conversion in the portal would mean that the user would get an incomprehensible top-level navigation structure that is too large. You should also note that a user can be assigned to more than one role at a time.

There are different ways of adjusting single and composite roles to the portal environment according to the users' needs. Users often have the following requirements:

- Quick recognition of the menu structure in the portal
- Possibility of defining frequently used transactions as favorites
- Quick access to transaction, reports, and other services.

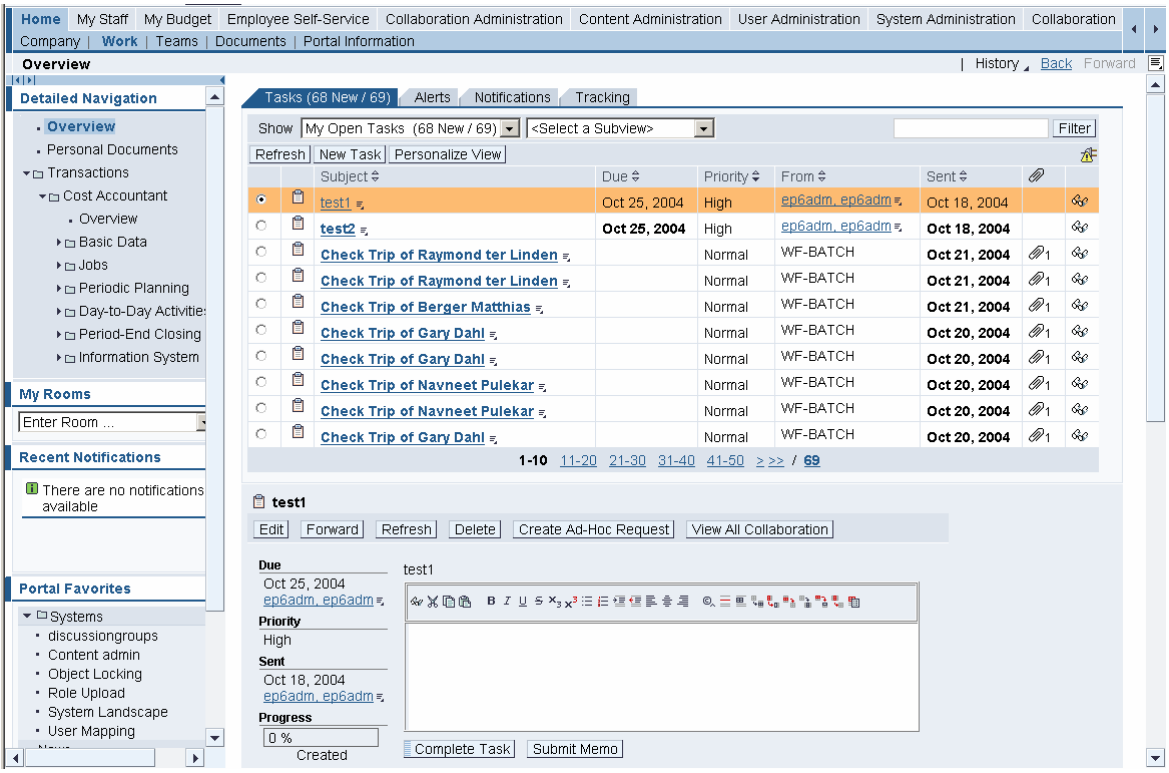
The procedure we recommend for role upload supports you to avoid some of these post-processing steps as it provides a pre-configured solution that you can use without any configuration and redesigning effort from your side.

5.1 Recommended Approach

You can change the role upload procedure so that the role content from the ABAP-based system automatically appears in the detailed navigation area rather than in the top-level navigation area. This prevents your top-level navigation area from containing too many entry points.

You can use a configuration delivered by SAP to set up the alternative procedure for the role upload. In this case, you do not need to make your own configuration in order for this scenario to work. Customer note **762998** contains the content objects that you need for the scenario. You only need to import them into the portal. You should also read the standard documentation on the Help Portal that describes how to use this configuration (see 6.0 Appendix).

When you follow the recommended approach the position of the uploaded content can be found in the portal in the top-level navigation area at **Home** -> **Work** -> **Transactions**. **Home** appears as entry point, followed by **Work** on the second level and **Transactions** in the detailed navigation area. The uploaded roles are listed under **Transactions**.
The following screenshot shows you the role “Cost Accountant” appearing in the detailed navigation area under the node “**Transactions**”.



Note:
The folders “Home” and “Work” are entries which appear automatically in the uploaded roles and they correspond to folders “Home” and “Work” in the Every User role (ID: eu_role). To prevent these folders from appearing twice (or even more – depending on the fact how many roles a user is assigned to) in the top-level navigation, they are merged with the corresponding folders of the Every User role. This also happens automatically. The folder “Transactions” also

contains a merge ID. Otherwise a user would get this entry several times in the top-level navigation depending on how many roles this user is assigned to. When you follow the recommended approach you do not have to define any merge Ids because everything works automatically.

5.2 Overview Page on Role Content

A further benefit of this recommended approach is that an overview page is automatically created for each uploaded role, based upon a Workset Map iView. The overview page appears directly beneath the role name.
A workset map is the equivalent of a site map, providing users with explicit information on the content that is available in a given uploaded role. It is based on an iView, and serves as a central point of entry and guided access to the contents of the role. It contains links to the role folders (first-level folders) and is enriched by graphical and textual information. Each overview iView contains the following:

- A short textual explanation of each item
- Identifying pictograms of each item
- Direct links to the target folder

Note: The description of the first-level folders of each role have to be filled by an administrator.

For detailed information on Workset Map iViews, see the standard documentation on the SAP Help Portal (see 6.0 Appendix).

5.3 Creating a Delta Link to Uploaded Roles

You should create a delta link for the uploaded role. By doing this you create a content object in your own namespace. This has the following advantages:

- Objects are easier to find and to be maintained
- You can change the role and in case you have to upload the role again you will keep your changes because your changes will not be overwritten.

When creating a delta link procede as follows:

1. Create a new role in your own namespace.
2. Add the uploaded role to the new created role as delta link.

You can find further information on delta links and how to create them in the standard documentation on the SAP Help Portal (see. Appendix 6.0).

5.4 Structuring of Roles in the Navigation Area

The roles are listed for users beneath the Transactions node. The roles are not automatically positioned according to system, region, or work process.

After the upload has finished, the administrator can view the uploaded roles in the portal catalog under the path *Portal Content -> Migrated Content -> SAPComponentSystem*. Here the objects uploaded from your ABAP-based

systems are stored, sorted by the portal object type to which they were converted and the logical system from which they were uploaded

In the enduser environment the uploaded roles are listed one below the other (sort sequence for the enduser can be defined, see above). A user can have the same role in different ABAP-based backend systems but there is no possibility for the end user to see from which system which role comes from. There is a possible workaround that enables end users to see information on which role comes from which system: The administrator can add the name of the system to the names of the uploaded roles. The role name is a property of the role and can be changed in the role editor.

If the user has to navigate through too many levels before reaching the required transaction, he or she may choose to define a frequently used transaction as a favorite.

5.4.1 Sort Sequence in the Detailed Navigation

You can define the sort sequence of the uploaded roles under the entry “Transactions”.
Procede as follows:

1. Choose in the Portal Catalog *Migrated Content* → *SAPComponentSystems* → *Roles* → *<Name of logical system>* -> *Content*. This folder contains workset objects with the same names as the uploaded role and they contain the uploaded content. One workset is automatically created per each uploaded role.
2. Edit the workset in the workset editor.
3. Click on the root entry of the workset and choose *Properties* and define the sort priority of the workset.

The lower the number of the sort priority is the higher the entry will be in the role sequence under the entry “Transactions”.

Note: If a user is assigned to several roles you always have to define sort priorities to create a defined order in the sequence of entries in the top-level navigation and in the detailed navigation.

You can find further information on defining favorites and sort priorities in the standard documentation on the SAP Help Portal (see. Appendix 6.0).

5.5 Other Ways of Adapting Content

Apart from the procedure recommended by us, there are other ways of adapting content from an ERP system to the portal environment.
Here is a list of some possibilities:

- You can upload transactions only rather than roles, and use them to form completely new roles in the portal.
- You upload single or composite roles as worksets and link them into portal roles. In other words, you integrate the role content from the ABAP-based system as worksets in already existing portal roles. You should consider to add worksets in the portal role structure at a particular position so that they

don’t appear in the top-level navigation but in the detailed navigation. You can for example define worksets according to special work processes or by region and place them into different portal roles.

Both procedures carry the disadvantage that you can no longer upload user assignments. As you are mixing content completely anew in the portal, the assignment of content to role and user is not the same in the portal as it is in the ABAP-based system anymore.

To make sure that authorization profiles and assignments are the same as in the ABAP-based system, you must use the role distribution function to create the authorization profiles and adjust the user assignments in the system.

By differing from the recommended and preconfigured approach you always have to consider that you have to do a lot of additional work.

6 Appendix

This document refers to standard documentation which is available on the SAP Help Portal under the address *help.sap.com/nw04* and the release SAP NetWeaver ’04 (SP Stack 9).

Documentation Area	**Path**
Role Upload	People Integration -> Portal -> Administration Guide -> System Administration -> Transport, Upload and Content Mirroring -> Upload of Roles from ABAP based systems.
Recommended Procedure for Role Upload	People Integration -> Portal -> Administration Guide -> System Administration -> Transport, Upload and Content Mirroring -> Upload of Roles from ABAP based systems -> Uploaded Roles in the Portal Environment
System Landscape	People Integration -> Portal -> Administration Guide -> System Administration -> System Configuration -> System Landscape
Role Distribution	People Integration -> Portal -> Administration Guide -> System Administration -> Permissions…-> Role and User Distribution to the SAP System.
Delta Links	People Integration -> Portal -> Administration Guide -> Content Administration -> Content Object Model -> Object Relationships -> Delta Links.
Roles and Worksets	People Integration -> Portal -> Administration Guide -> Content Administration -> Roles and Worksets
Favorites	Information Integration -> Knowledge Management -> User Guide -> Finding and Working with Information -> Portal Favorites.
Workset Map iView	People Integration -> Portal -> Administration Guide -> Content Administration -> Navigation -> Navigation with a Workset Map
Sort Priorities	People Integration -> Portal -> Administration Guide -> Content Administration -> Navigation -> Top-level navigation -> Defining the Sort Sequence of Navigation Nodes.
Merging	People Integration -> Portal -> Administration Guide -> Content Administration -> Navigation -> Top-level navigation -> Merging Navigation Nodes and Defining the Sequence.

www.sdn.sap.com/irj/sdn/howtoguides