

How to...

Create a New Portal Desktop

ENTERPRISE PORTAL 6.0

PUBLIC

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1 Disclaimer

Any software coding and/or code lines / strings ("Code") included in the ZIP-file of this guide are only examples and are not intended to be used in a productive system environment. The Code is only intended better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, except if such damages were caused by SAP intentionally or grossly negligent.

2 Introduction

This document is a supplement to the How-to Guide "How to Create New Portal Display Rules". It is based on an example scenario for creating a new portal desktop with the look and feel of the SAP Website.

3 Scenario

A company has a specific corporate identity and wants to reflect this look and feel in its implemented portal solution. The company also has several subsidiaries, and each subsidiary has its own corporate design. The overall company requirement is that the layout, branding and navigation differ according to the corporate identity of the specific subsidiary and depending on a specific user, group or role.

SAP Enterprise Portal 6.0 provides a concept that allows you to implement this scenario by creating a customer-specific portal desktop. A portal desktop consists of framework pages and portal themes. The framework page defines the layout and structure of the content in a portal desktop. It is a portal page comprising the set of user interface elements required to operate and navigate within the portal. A portal theme provides the look and feel of the portal desktop. It defines the visual appearance of the control elements as well as the font size, colors and contrast of the user interface elements in a portal desktop.

4 Result

This guide shows you how to create a new portal desktop that is designed to meet customer requirements. It explains how to assign a new portal theme and portal framework page to the portal desktop and describes the steps needed to adjust the standard rule collection.

Before you build a new portal desktop, you need to create a new portal framework page consisting of several components. The procedure used to create the portal framework objects needed to build a new portal framework page is explained step-by-step. In the first step, we assume that the objects (such as the masthead component and layout component) are already developed and available. For ease of use, the objects needed are shipped as par files together with this How To guide.

The second step covers the creation of new framework page objects, such as a new layout for the innerpage and a new masthead component.

5 The Step-By-Step Solution

5.1 Introduction

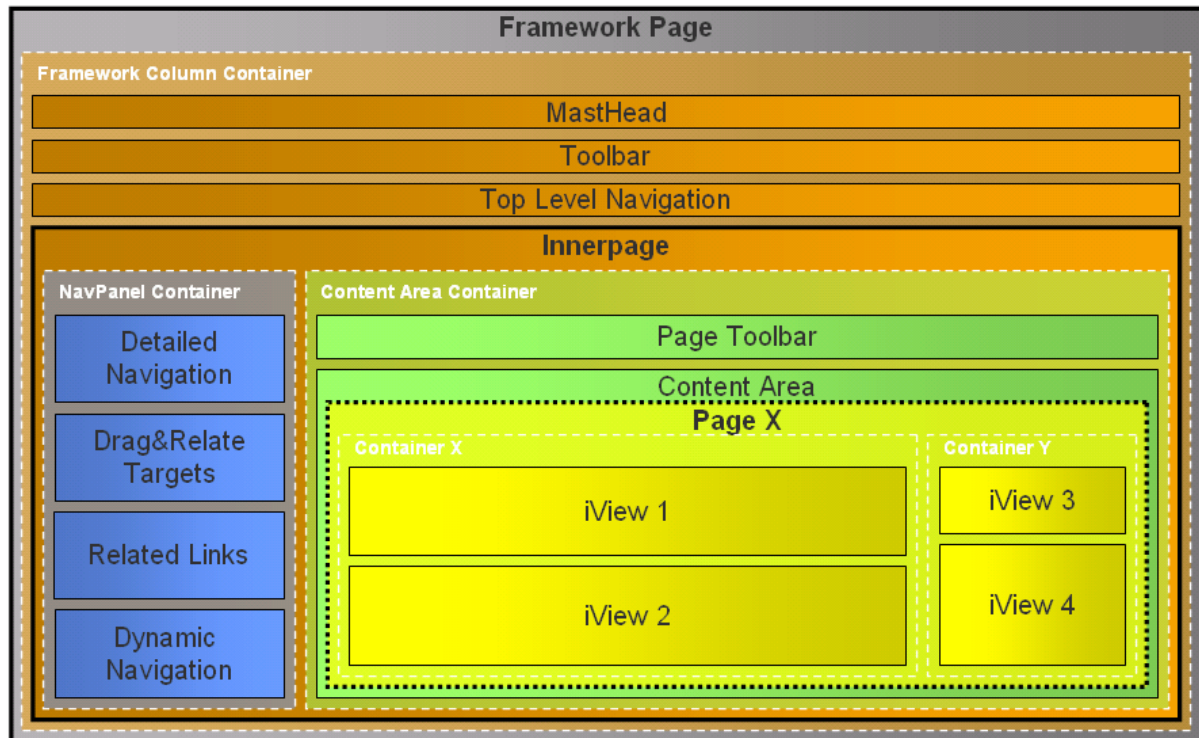
SAP Enterprise Portal 6.0 provides the following concepts for portal branding:

- 1) **Themes:** define the appearance of the control elements, the font size, the colors, and the contrast of the user interface elements of a portal desktop.
- 2) **Layouts:** define the structure of the page content using containers arranged across the page
- 3) **Framework Pages:** comprise the layout and structure of a portal desktop
- 4) **Portal Desktops:** represent a collection of framework pages and portal themes
- 5) **Rule Collections:** used to assign portal desktops to end users (groups or roles) through portal display rules → rule collections.

Neither the framework page nor the portal theme is directly assigned to a user. Combinations of framework pages and portal themes result in portal desktops. Portal desktops are assigned to users with rule collections.

Portal desktops and rule collections are roughly equivalent to organizational units. The actual branding as well as the look and feel comprise portal themes and the framework page. This guide does not discuss the creation of portal themes. See the standard documentation (<http://help.sap.com>) under "Portal Themes" in the *Administration Guide*.

The screenshot below shows the structure of the standard framework page:

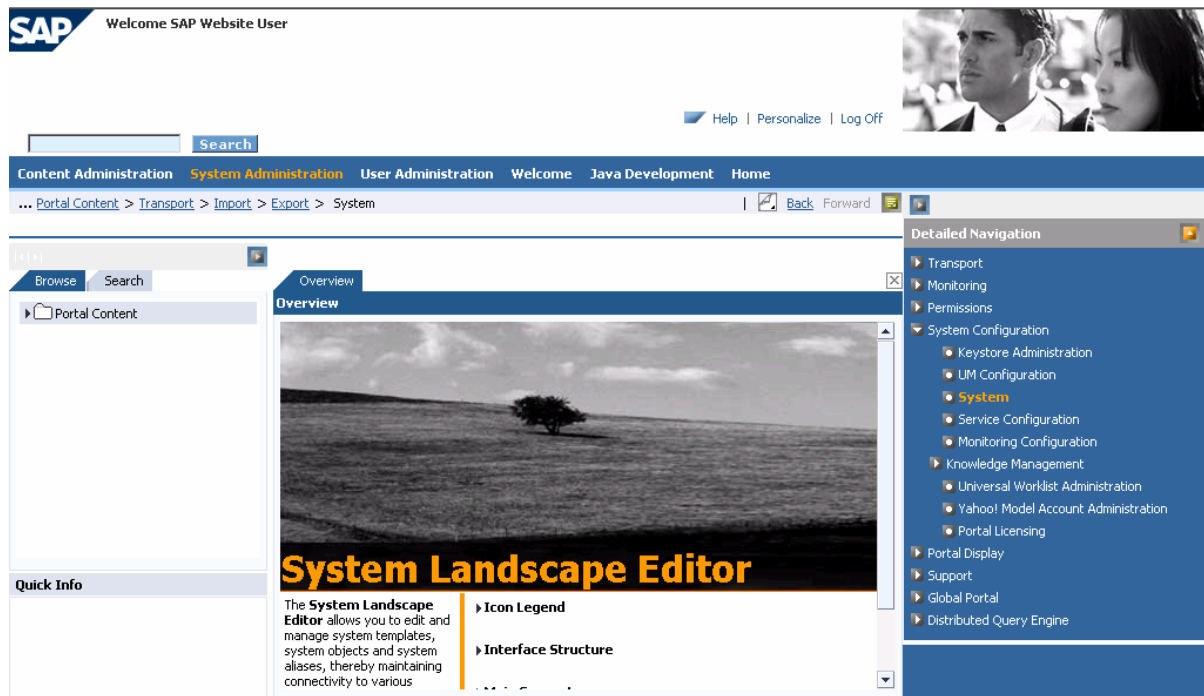


The standard default framework page has a layout with one column and consists of several iViews and pages:

- 1) iView: Masthead
- 2) iView: Tool Area
- 3) iView: Top-Level Navigation
- 4) Page: Desktop Innerpage (com.sap.portal.innerpage)
 - a. iView: Detailed Navigation
 - b. iView: Dynamic Navigation
 - c. iView: Drag&Relate Targets
 - d. iView: Related Links
 - e. iView: Page Toolbar
 - f. iView: Content Area

5.2 Creating a New Portal Desktop

The following step-by-step solution explains how to create a new portal desktop based on the example shipped with this How-to Guide. The layout of this example portal desktop is shown below. The look and feel is similar to that of the SAP Website with a one-level top-level navigation. The detailed navigation is on the right side.



The following objects are shipped with this example. The explanation below shows how to combine these objects to create a new portal desktop:

1. new portal theme
2. new masthead iView
3. new layout for the innerpage (with two columns → wide:narrow)

The following description explains which part of this portal desktop represents which portal component.

Masthead (custom component: com.sap.website.navigation.masthead):



Toolbar (standard):



Top-Level Navigation (standard – configured to be one-level):



Innerpage (with custom layout: com.sap.website.layouts.framework):



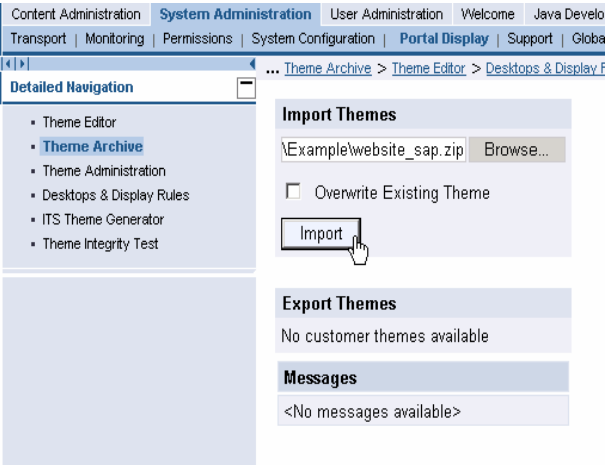
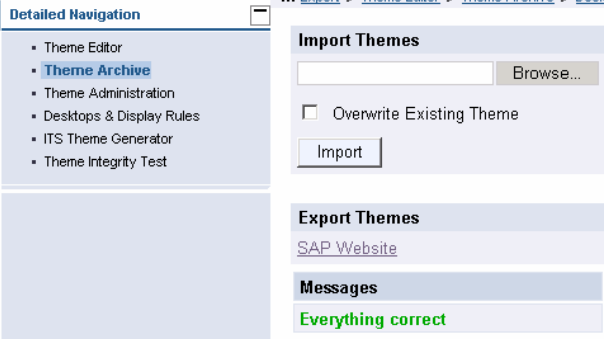
Content Area Container

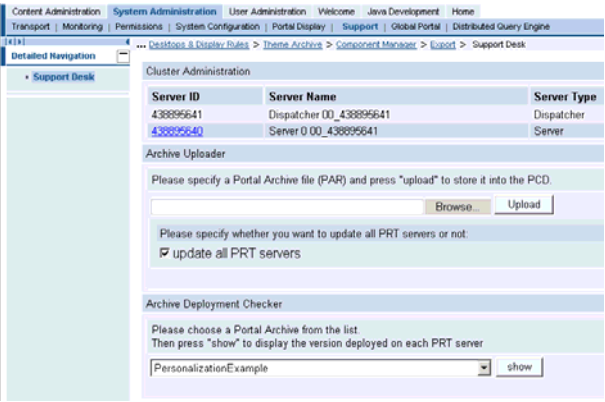
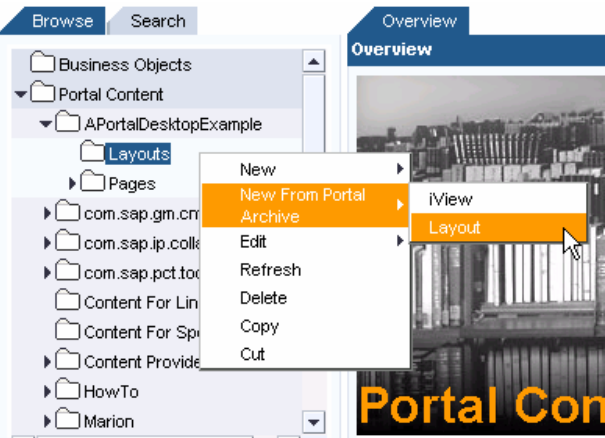
NavPanel Container

Follow the steps below to create the objects needed for the new portal desktop in your portal.

1. Import the new portal theme.
2. Upload the layout par file that contains the layout for the innerpage.
3. Create a new layout template.
4. Upload the masthead par file.
5. Create a new masthead iView based on the uploaded par file.
6. Create a new framework page that defines the layout of navigational and content-based components in your portal desktop.
7. Change the top-level navigation to one level.
8. Change the layout of the desktop innerpage.

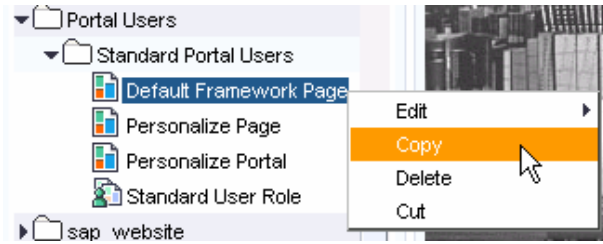
Unzip the example file provided with this How-to Guide to a directory of your choice on your local file system. Start the portal in the Web browser. Go to *Content Administration* and create a new folder in which you can store the objects that you will create in the next steps.

<p>1. Import the new portal theme:</p> <p>Go to System Administration – Portal Display – Theme Archive. Browse to the folder containing the extracted files of the example zip file and select file website_sap.zip. Click <i>Import</i> to import the new portal theme.</p> <p>After a successful import, the message <i>Everything correct</i> is displayed in green and the new theme SAP Website is listed under Export Themes.</p>	 
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<p>2. Upload the layout par file:</p> <p>Go to System Administration – Support – Support Desk – Portal Runtime – Administration Console.</p> <p>Browse to file com.sap.website.layouts.framework.par and upload it to your portal.</p>	 <p>The screenshot shows the 'Archive Uploader' section of the SAP Support Desk Administration Console. It includes a table for 'Cluster Administration' with columns for Server ID, Server Name, and Server Type. Below the table, there is a 'Browse' button to select a Portal Archive file (PAR) and an 'Upload' button. There is also a checkbox for 'update all PRT servers' which is checked.</p>
<p>3. Create a new layout template:</p> <p>Go to Content Administration – Portal Content and select your custom folder.</p> <p>Right-click the folder and choose <i>New From Portal Archive – Layout</i>.</p> <p>Select portal archive com.sap.website.layouts.framework. That is the file you uploaded in step 2.</p> <p>IMPORTANT: In the layout wizard, make sure that you select <i>Save As Layout Template</i>. Otherwise the layout will not be available in the Page Layout Editor.</p> <p>For detailed instructions, see “How to Create a New Page Layout Template”.</p> <p>(The layout in this example has the name: SAPWebsiteLayout.)</p>	 <p>The screenshot shows the 'Portal Content' area in SAP Content Administration. A folder named 'APortalDesktopExample' is selected, and a context menu is open. The 'New From Portal Archive' option is highlighted, and a sub-menu is visible with 'Layout' selected.</p>
<p>4. Upload the new masthead par file:</p> <p>Repeat step 2 for the par file containing the new masthead component. Browse to file com.sap.website.navigation.masthead.par and upload it to your portal.</p>	
<p>5. Create a new masthead iView:</p> <p>Navigate to the Content Administration area and select your custom folder. Right-click the folder and choose <i>New from Portal Archive -> iView</i>. Select portal archive com.sap.website.navigation.masthead. In the Portal Component Selection, choose the default component and finish the wizard to create a new iView based on that par file. (The iView in this example is named: SAPWebsiteMasthead.)</p>	

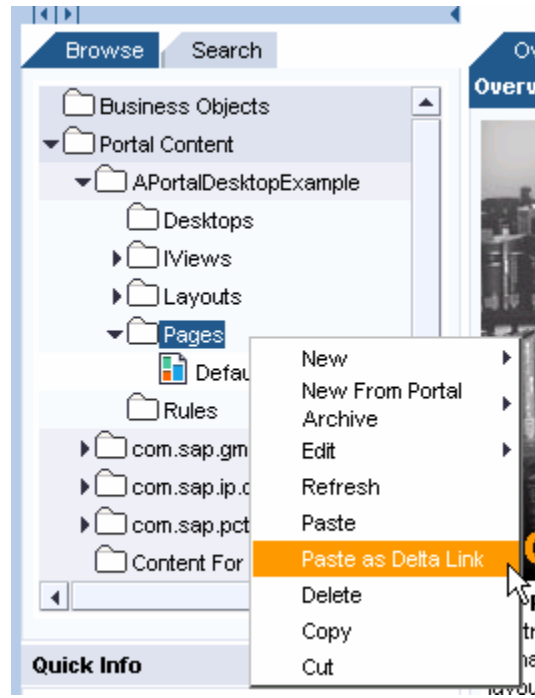
6. Create a new framework page:

- a) Copy the standard *Default Framework Page* located under *Portal Content – Portal Users – Standard Portal Users* (pcd:portal_content/every_user/general/frameworkpage).



- b) Paste the copied framework page into your custom folder as a delta link.

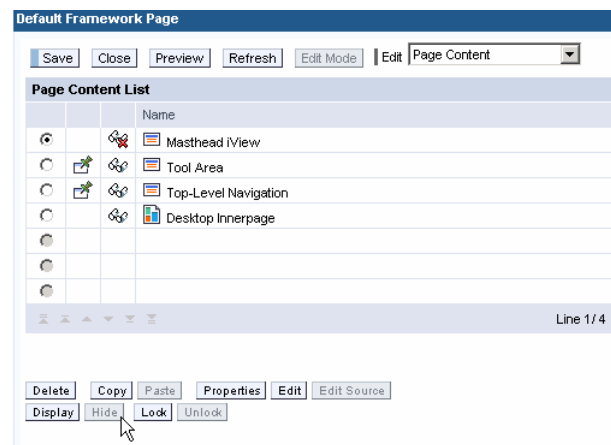
NOTE: Read Chapter 4.3.1 for other ways to create a default framework page.

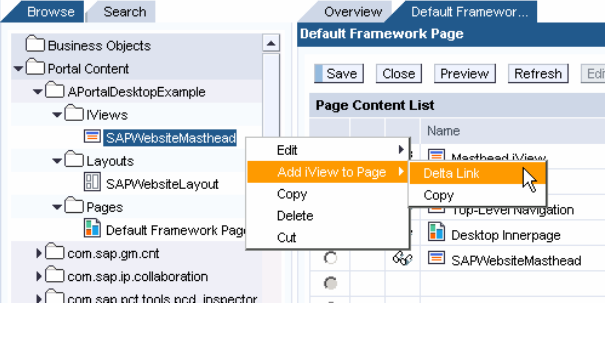
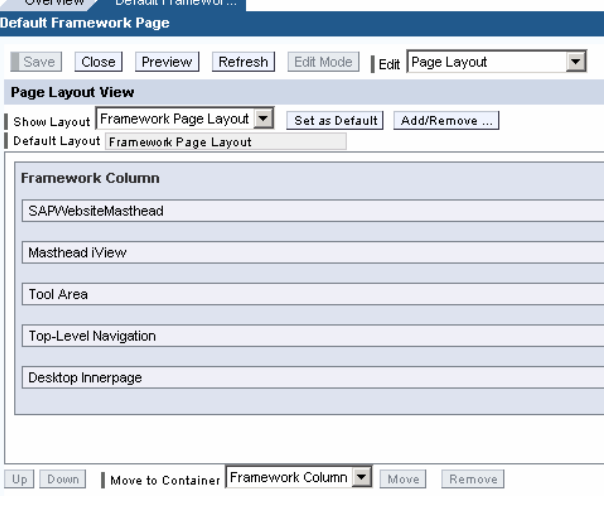
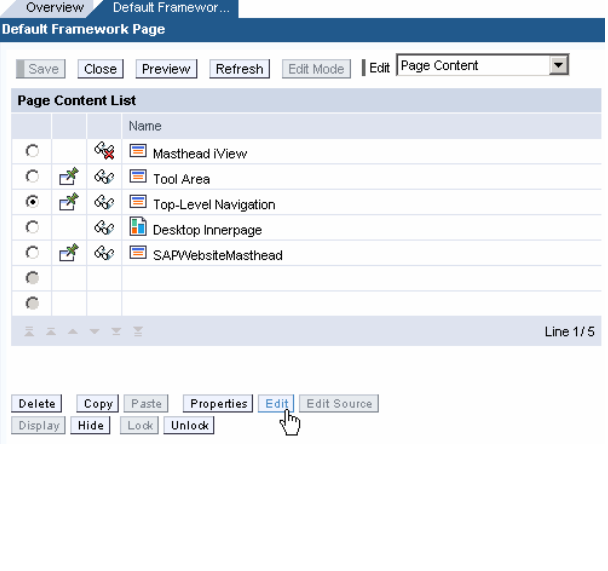


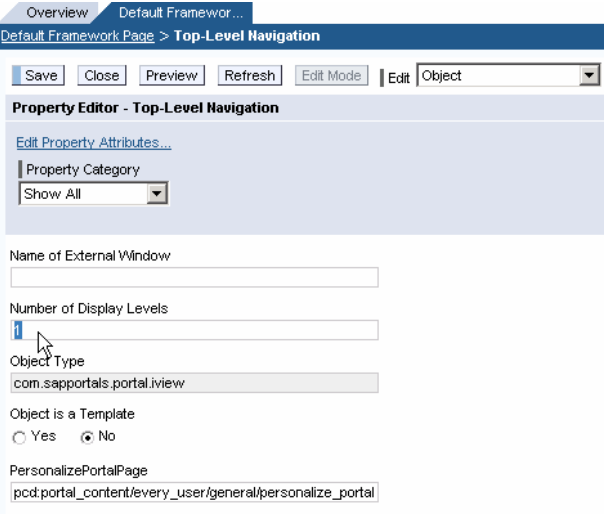
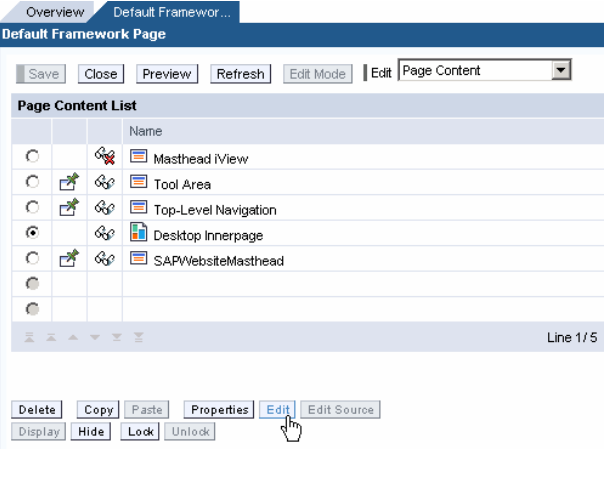
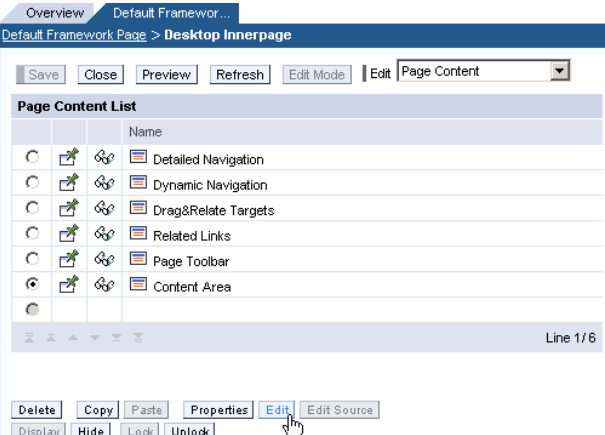
- c) Open the framework page by right-clicking: *Edit -> Object*.

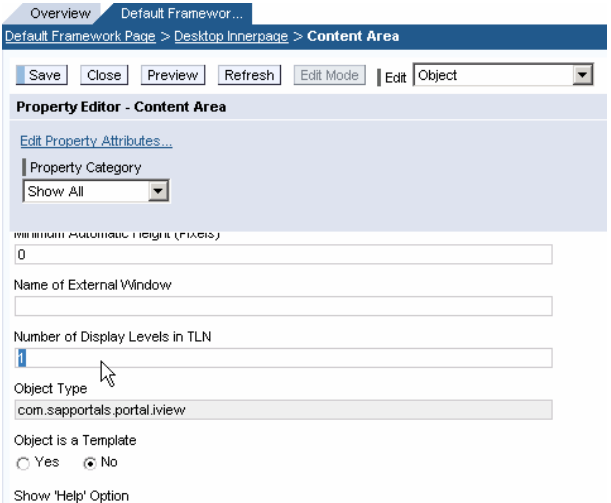
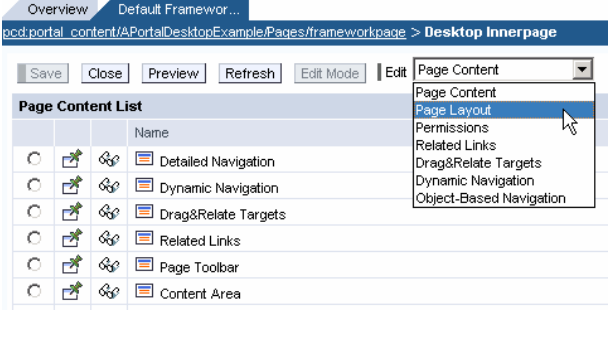
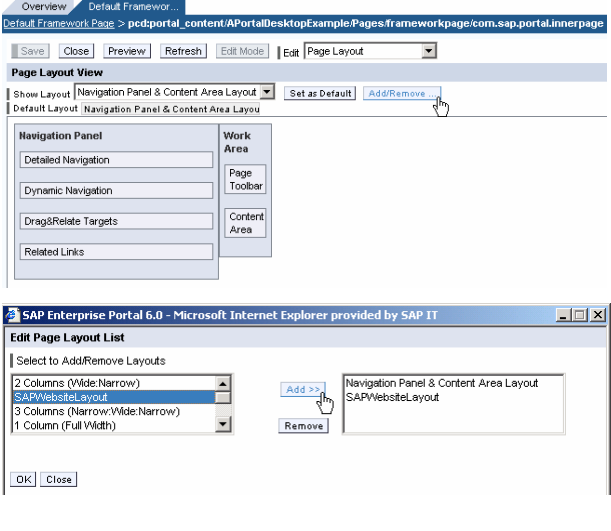
Select entry *Masthead iView*. Choose *Hide* to hide the standard masthead iView.

You can delete the standard masthead iView if you are sure that you no longer need it.



<p>d) Add your new masthead iView (here: SAPWebsiteMasthead) to the default framework page by right-clicking the iView and choosing <i>Add iView to Page</i> → <i>Delta Link</i>.</p>	 <p>The screenshot shows the SAP Web IDE interface. On the left, a tree view shows the project structure with 'SAPWebsiteMasthead' selected under 'iViews'. A context menu is open over this iView, with 'Add iView to Page' highlighted. A sub-menu is visible, showing 'Delta Link' as the selected option. Other options in the sub-menu include 'Copy', 'Top-Level Navigation', 'Desktop Innerpage', and 'SAPWebsiteMasthead'. The main editor area shows the 'Default Framework Page' with a 'Page Content List' table.</p>
<p>e) Go to the Page Layout Editor to define the page layout view. Drag and drop your <i>SAPWebsiteMasthead</i> so that it is the first iView in the Framework Column list.</p> <p>Save your changes and go back to the Page Content Editor.</p> <p>NOTE: Keep the Page Content Editor open for step 7.</p>	 <p>The screenshot shows the 'Page Layout Editor' in SAP Web IDE. The 'Page Layout View' is active, showing a 'Framework Column' list. 'SAPWebsiteMasthead' is listed as the first item in this column. Below it are 'Masthead iView', 'Tool Area', 'Top-Level Navigation', and 'Desktop Innerpage'. The interface includes buttons for 'Up', 'Down', 'Move to Container', 'Move', and 'Remove'.</p>
<p>7. Change the top-level navigation to one level:</p> <p>a) In the <i>Page Content List</i> of the Default Framework Page, select <i>Top-Level Navigation</i> and choose <i>Edit</i>.</p>	 <p>The screenshot shows the 'Page Content Editor' in SAP Web IDE. The 'Page Content List' is active, showing a table with columns for 'Name' and 'Edit'. The 'Top-Level Navigation' row is selected. The 'Edit' button for this row is highlighted with a mouse cursor. Other rows in the list include 'Masthead iView', 'Tool Area', 'Desktop Innerpage', and 'SAPWebsiteMasthead'. The interface also shows 'Delete', 'Copy', 'Paste', 'Properties', and 'Edit Source' buttons.</p>

<p>b) Select <i>Show All</i> as the Property Category in the Property Editor.</p> <p>Change the value of <i>Number of Display Levels</i> to 1.</p> <p>Save your changes and close the Property Editor.</p>	
<p>c) In the Page Content List on the Default Framework Page, select <i>Desktop Innerpage</i> and choose <i>Edit</i>.</p>	
<p>d) In the Page Content List of the Desktop Innerpage, select <i>Content Area</i> and choose <i>Edit</i>.</p>	

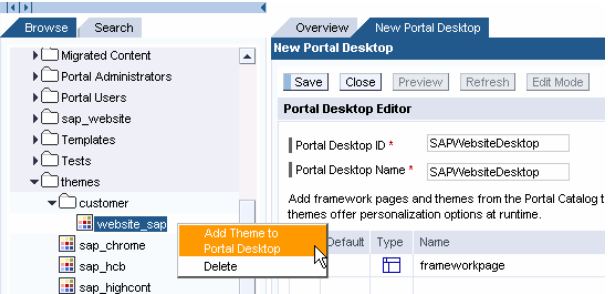
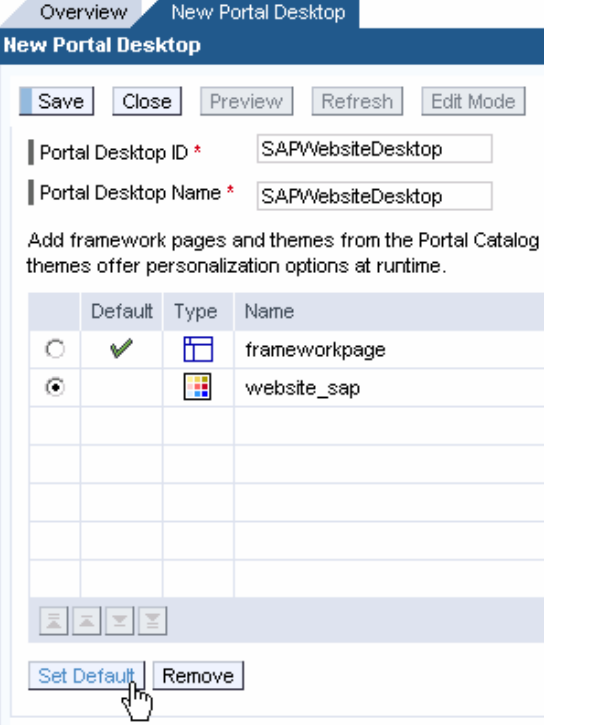
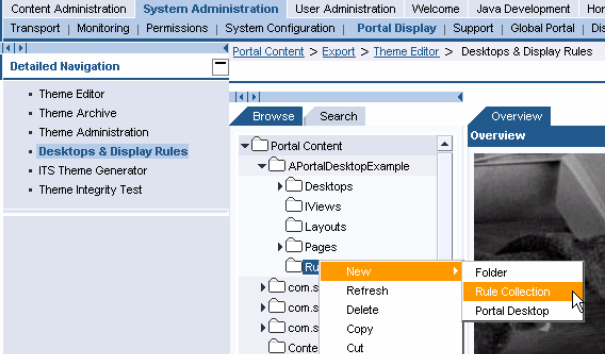

<p>e) In the Property Editor for the Content Area, select <i>Show All</i> in the <i>Property Category</i> listbox and change the <i>Number of Display Levels in TLN</i> to 1.</p> <p>Save your changes and close the Property Editor.</p> <p>NOTE: Keep the editor of the <i>Desktop Innerpage</i> open for the next step.</p>	
<p>8. Change the layout of the desktop innerpage:</p> <p>a) In the editor for the Desktop Innerpage, select <i>Page Layout</i>.</p>	
<p>b) Choose <i>Add/Remove</i>. In the next window, select a layout (from step 3; here: <i>SAPWebsiteLayout</i>), click <i>Add</i> and close the window by choosing <i>OK</i>.</p>	

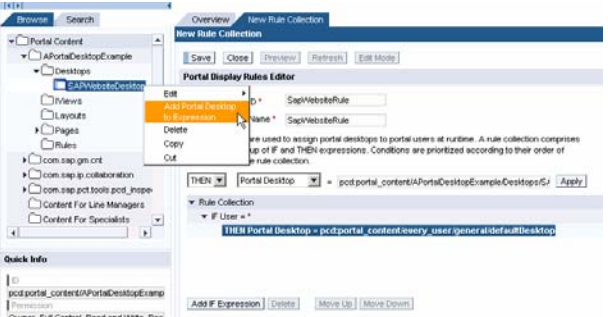
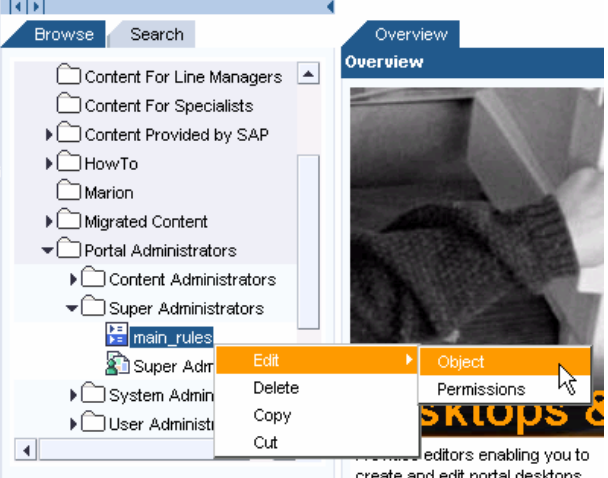
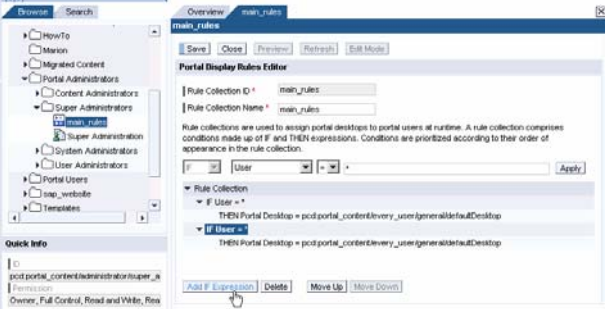
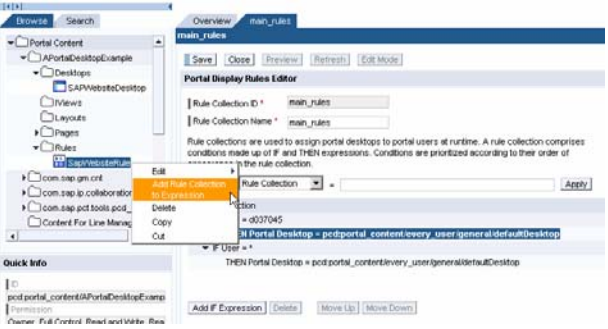
<p>c) Click Save.</p> <p>Select your new layout in the <i>Show Layout</i> listbox and set it as default by clicking <i>Set as Default</i>.</p> <p>Arrange the iViews as displayed in the image below and save your changes.</p>	
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We assume you created the new theme, framework page and layout as described above. The following steps explain the basic process for creating a new portal desktop if the needed objects are already available. You must perform these steps for each portal desktop, independent of what (theme, layout, innerpage, etc.) was changed.

1. Create a new portal desktop.
2. Create a rule collection.
3. Adjust the main rule collection.

<p>1. Create a new portal desktop:</p> <p>a) Go to System Administration – Portal Display – Desktops & Display Rules.</p> <p>Select the folder in which you want to create the new portal desktop. Right-click the folder and choose <i>New → Portal Desktop</i>.</p>	
<p>b) Enter a name and ID for your new portal desktop. Right-click the Default Framework Page that you created before (see step 6) and choose <i>Add Framework Page to Portal Desktop</i>.</p>	

<p>c) Add the newly imported portal theme website_sap (see step 1 above) to the portal desktop. Select it under Portal Content – themes – customer – website_sap and choose <i>Add Theme to Portal Desktop</i> by right-clicking the theme object.</p>	
<p>d) Set the added framework page and portal theme as default by selecting the checkbox and clicking <i>Set Default</i> (for the framework page as well as for theme website_sap).</p> <p>Verify that both have a green check mark in the default column.</p> <p>Save your changes and close the editor.</p>	
<p>2. Create a new rule collection:</p> <p>a) Go to System Administration – Portal Display – Desktops & Display Rules.</p> <p>Select the folder in which you want to create the new rule collection. Right-click the folder and choose <i>New → Rule Collection</i>.</p>	
<p>b) Enter a name and ID for your new rule collection. Select the THEN statement and right-click the newly created portal desktop in the Portal Catalog. Choose <i>Add Portal Desktop to Expression</i> and choose <i>Apply</i>.</p>	

<p>Save your changes and close the editor.</p>	
<p>3. Adjust the Main Rule Collection:</p> <p>a) You are still in System Administration – Portal Display – Desktops & Display Rules.</p> <p>Go to Portal Content – Portal Administrators – Super Administrators – main_rules. (pcd:portal_content/administrator/super_admin/main_rules)</p> <p>Right-click object main_rules and open it for editing.</p>	
<p>b) Click <i>Add IF Expression</i> to add a new <i>IF</i> statement. It should appear as the first entry in the list.</p> <p>Enter the user, group or role for which your portal desktop should be applied and choose <i>Apply</i>.</p> <p>Save your changes and close the editor.</p>	
<p>c) Select the THEN statement and select <i>Rule Collection</i> in the listbox. Right-click your newly created rule collection and choose <i>Add Rule Collection to Expression</i>. Choose <i>Apply</i> to save your changes. Close the editor and log on with the user for which this portal desktop was defined. You should now see the portal desktop based on theme “SAP Website”.</p>	

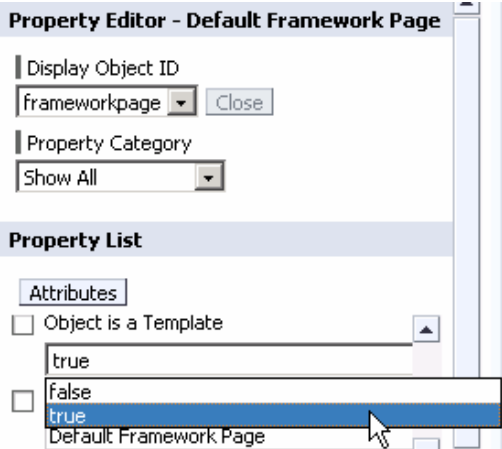
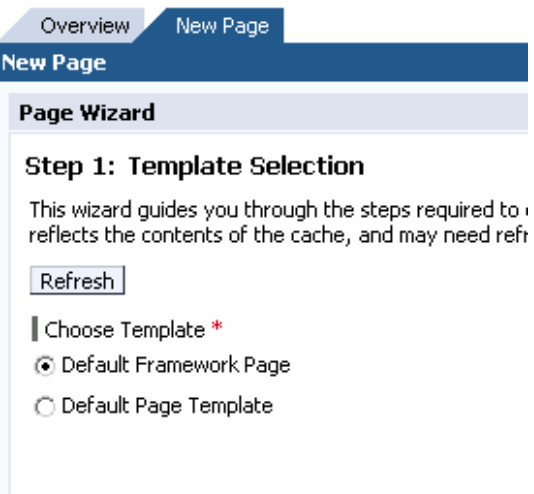
5.3 Creating New Portal Objects

This chapter describes how to create the portal objects needed for the new portal desktop. The above steps use the objects that are shipped with this How To guide. The following section gives some tips and tricks about how to create these objects, such as a new portal layout or a new masthead iView.

5.3.1 Framework Page

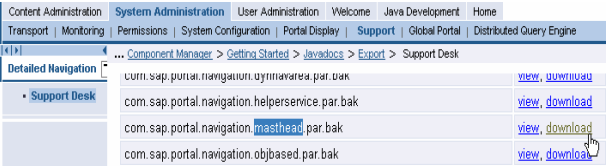
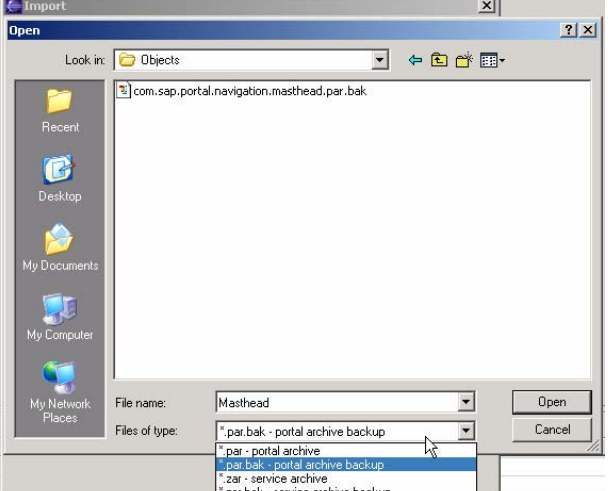
There are three ways to create a new default framework page.

1. Copy – Paste as Delta Link: This is the method described above. The technical name remains the same as for the original object (here: frameworkpage). Changes made during updates are inherited to this newly created object.
2. Copy – Paste: The technical name remains the same as for the original object (here: frameworkpage). Changes made during updates are not inherited to this object.
3. Template: The following steps describe how to create a new framework page based on the page template of the standard default framework page. Here you can define a new technical name with a prefix. It might be necessary to follow the naming conventions of a customer. This method is also useful when you want to assign a new layout template to your framework page.

<p>Create a new portal framework page based on the standard template:</p> <p>a) Open the standard default framework page for editing. (Portal Content – Portal Users – Standard Portal Users – Default Framework Page). In the Property Editor, change the value of <i>Object is a Template</i> to true. Save your changes and close the editor.</p>	 <p>Property Editor - Default Framework Page</p> <p>Display Object ID frameworkpage <input type="button" value="Close"/></p> <p>Property Category Show All</p> <p>Property List</p> <p>Attributes</p> <p><input checked="" type="checkbox"/> Object is a Template true</p> <p><input type="checkbox"/> false true Default Framework Page</p>
<p>b) Go to the custom folder in the Portal Catalog and create a new page (right-click Folder – New – Page). In step 1 (Template Selection), select <i>Default Framework Page</i>. This page is only available as a template because of the previous step. Assign a new name and ID, and finish the wizard.</p> <p>After the new page is created, repeat step a) to set the value of <i>Object is a Template</i> to false again.</p>	 <p>Overview New Page</p> <p>New Page</p> <p>Page Wizard</p> <p>Step 1: Template Selection</p> <p>This wizard guides you through the steps required to reflect the contents of the cache, and may need refresh</p> <p><input type="button" value="Refresh"/></p> <p>Choose Template *</p> <p><input checked="" type="radio"/> Default Framework Page</p> <p><input type="radio"/> Default Page Template</p>

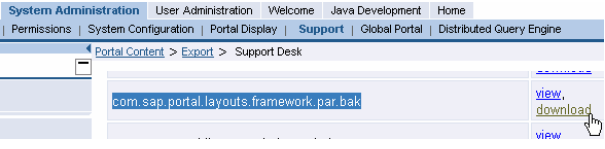
5.3.2 Masthead Component

The following steps describe how to create a new masthead iView that fulfills the requirements of our customer scenario (e.g. logo on the left side, image on the right side, etc.). We will use the standard par file and make some modifications to the jsp files. Keep in mind that this modification is based on the standard. As the new component lies in a non-SAP namespace, it is protected against overwriting during an update/upgrade. However, this component will not benefit from an update/upgrade. Also keep in mind that the Java sources (packages and class names) remain the same, this means they remain in a SAP namespace.

<p>Create a new Masthead Component:</p> <p>a) Go to System Administration – Support – Support Desk – Portal Runtime – Browse deployment. Navigate to ROOT/WEB-INF/deployment/pcd and select file com.sap.portal.navigation.masthead.par.bak. Click the <i>download</i> link. Open the zip file and extract it to your local file system.</p>	
<p>b) Open Eclipse and create a new portal application project based on the par file (File – Import – PAR file).</p> <p>We recommend that you give your new project a name that is similar to this <i>com.customer.portal.navigation.masthead</i>. This means that you should replace “sap” with your company name and leave the rest as it is, so that it is easier to identify the original par file on which it is based.</p>	
<p>c) In the new project, navigate to dist – PORTAL-INF – jsp and open HeaderView.jsp for editing.</p> <p>Here you can make your changes, such as:</p> <ul style="list-style-type: none"> - Move the logo from the right to the left side - Remove the design bar - Move the image from the middle to the right side - Add further links, such as “Contact” or “Feedback” 	
<p>d) Save your changes, create a par file, and deploy it to your portal. You can then create a new iView based on this par file (as described above).</p>	

5.3.3 Innerpage Layout Template

This section describes how to create or modify the layout of the innerpage, which is a special layout with some additional features. The easiest way to create a new layout is to use the standard innerpage layout and create a new one based on that.

<p>Create a new innerpage layout template:</p> <p>a) Go to System Administration – Support – Support Desk – Portal Runtime – Browse deployment. Navigate to ROOT/WEB-INF/deployment/pcd and select file <i>com.sap.portal.layouts.framework.k.par.bak</i>. Click the <i>download</i> link. Open the zip file and extract it to your local file system.</p>	 <p>The screenshot shows the SAP System Administration web interface. The breadcrumb navigation is: System Administration > User Administration > Welcome > Java Development > Home > Permissions > System Configuration > Portal Display > Support > Global Portal > Distributed Query Engine > Portal Content > Export > Support Desk. A file named 'com.sap.portal.layouts.framework.k.par.bak' is highlighted in a table. To the right of the file name are three links: 'view', 'download', and 'view'. A mouse cursor is pointing at the 'download' link.</p>
<p>b) Open Eclipse and create a new portal application project based on the par file (File – Import – PAR file).</p> <p>We recommend that you give your new project a name that is similar to this <i>com.customer.portal.layouts.framework</i>, that is you should replace “sap” with your company name and leave the rest as it is, so that it is easier to identify the original par file on which it is based.</p>	
<p>c) In the new project, navigate to dist – PORTAL-INF and open the portalapp.xml. Go to portal component <i>WAandNavPanel</i>. In the component profile section of this component, remove the following property to create a new layout template based on this par file:</p> <pre><property name="com.sap.portal.pcm.Category" value="platform"> <property name="inheritance" value="final"/> </property></pre>	
<p>d) Navigate to dist – PORTAL-INF – jsp and open the WAandNavPanel.jsp to make your changes (e.g. change the containers to wide:narrow instead of narrow:wide). See the “How To” guide “How to Create a New Layout”, which describes the tag library. (XXX)</p>	
<p>e) Save your changes, create a par file, and deploy it to the portal. You can now create a new layout template based on this par file (as described above).</p>	

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