How to...

Create a New Portal Desktop

ENTERPRISE PORTAL 6.0

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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](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):

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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.

1. Import the new portal theme:
   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 Import to import the new portal theme.

   After a successful import, the message Everything correct is displayed in green and the new theme SAP Website is listed under Export Themes.
2. Upload the layout par file:


Browse to file `com.sap.website.layouts.framework.par` and upload it to your portal.

3. Create a new layout template:

Go to Content Administration – Portal Content and select your custom folder.

Right-click the folder and choose New From Portal Archive – Layout.

Select portal archive `com.sap.website.layouts.framework`. That is the file you uploaded in step 2.

**IMPORTANT:** In the layout wizard, make sure that you select Save As Layout Template. Otherwise the layout will not be available in the Page Layout Editor.

For detailed instructions, see “How to Create a New Page Layout Template”.

(The layout in this example has the name: SAPWebsiteLayout.)

4. Upload the new masthead par file:

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.

5. Create a new masthead iView:

Navigate to the Content Administration area and select your custom folder. Right-click the folder and choose New from Portal Archive -> iView. 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.)
6. Create a new framework page:
   

   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.
d) Add your new masthead iView (here: SAPWebsiteMasthead) to the default framework page by right-clicking the iView and choosing Add iView to Page → Delta Link.

e) Go to the Page Layout Editor to define the page layout view. Drag and drop your SAPWebsiteMasthead so that it is the first iView in the Framework Column list.

Save your changes and go back to the Page Content Editor.

NOTE: Keep the Page Content Editor open for step 7.

7. Change the top-level navigation to one level:

a) In the Page Content List of the Default Framework Page, select Top-Level Navigation and choose Edit.
**b)** Select *Show All* as the Property Category in the Property Editor.

Change the value of *Number of Display Levels* to 1.

Save your changes and close the Property Editor.

**c)** In the Page Content List on the Default Framework Page, select *Desktop Innerpage* and choose *Edit*.

**d)** In the Page Content List of the Desktop Innerpage, select *Content Area* and choose *Edit*. 
e) In the Property Editor for the Content Area, select Show All in the Property Category listbox and change the Number of Display Levels in TLN to 1.

Save your changes and close the Property Editor.

NOTE: Keep the editor of the Desktop Innerpage open for the next step.

8. Change the layout of the desktop innerpage:
   a) In the editor for the Desktop Innerpage, select Page Layout.
   b) Choose Add/Remove. In the next window, select a layout (from step 3; here: SAPWebsiteLayout), click Add and close the window by choosing OK.
HOW TO CREATE A NEW PORTAL DESKTOP FOR SAP EP 6.0

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:
      
      Select the folder in which you want to create the new portal desktop. Right-click the folder and choose New → Portal Desktop.
   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 Add Framework Page to Portal Desktop.

2. Create a rule collection.

3. Adjust the main rule collection.

   c) Click Save.
      
      Select your new layout in the Show Layout listbox and set it as default by clicking Set as Default.
      
      Arrange the iViews as displayed in the image below and save your changes.
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 *Add Theme to Portal Desktop* by right-clicking the theme object.

![Portal Desktop Editor](image)

**New Portal Desktop**

- **Portal Desktop ID**: SAPWebsiteDesktop
- **Portal Desktop Name**: SAPWebsiteDesktop

Add framework pages and themes from the Portal Catalog. Themes offer personalization options at runtime.

Verify that both have a green check mark in the default column.

Save your changes and close the editor.

d) Set the added framework page and portal theme as default by selecting the checkbox and clicking *Set Default* (for the framework page as well as for theme website_sap).

![Set Default](image)

Verify that both have a green check mark in the default column.

Save your changes and close the editor.

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2. Create a new rule collection:


Select the folder in which you want to create the new rule collection. Right-click the folder and choose *New ➔ Rule Collection*.

![Portal Desktop Editor](image)

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 *Add Portal Desktop to Expression* and choose *Apply*.
3. Adjust the Main Rule Collection:

a) You are still in System Administration – Portal Display – Desktops & Display Rules.

(pcd:portal_content/administrator/super_admin/main_rules)

Right-click object main_rules and open it for editing.

b) Click Add IF Expression to add a new IF statement. It should appear as the first entry in the list.

Enter the user, group or role for which your portal desktop should be applied and choose Apply.

Save your changes and close the editor.

c) Select the THEN statement and select Rule Collection in the listbox. Right-click your newly created rule collection and choose Add Rule Collection to Expression. Choose Apply to save your changes. Choose Apply 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”.

Save your changes and close the editor.
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.

Create a new portal framework page based on the standard template:

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 Object is a Template to true. Save your changes and close the editor.

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 Default Framework Page. This page is only available as a template because of the previous step. Assign a new name and ID, and finish the wizard.

After the new page is created, repeat step a) to set the value of Object is a Template to false again.
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.

Create a new Masthead Component:

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 download link. Open the zip file and extract it to your local file system.

b) Open Eclipse and create a new portal application project based on the par file (File – Import – PAR file).

We recommend that you give your new project a name that is similar to this com.customer.portal.navigation.masthead. 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.

c) In the new project, navigate to dist – PORTAL-INF – jsp and open HeaderIView.jsp for editing.

Here you can make your changes, such as:
- 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”

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).
### 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.

Create a new innerpage layout template:

<table>
<thead>
<tr>
<th>a)</th>
<th>Go to System Administration – Support – Support Desk – Portal Runtime – Browse deployment. Navigate to ROOT/WEB-INF/deployment/pcd and select file <code>com.sap.portal.layouts.framework.par.bak</code>. Click the download link. Open the zip file and extract it to your local file system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b)</td>
<td>Open Eclipse and create a new portal application project based on the par file (File – Import – PAR file). We recommend that you give your new project a name that is similar to this <code>com.customer.portal.layouts.framework</code>, 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.</td>
</tr>
</tbody>
</table>
| c) | In the new project, navigate to dist – PORTAL-INF and open the portalapp.xml. Go to portal component `WAandNavPanel`. In the component profile section of this component, remove the following property to create a new layout template based on this par file:  

```xml
<property name="com.sap.portal.pcm.Category" value="platform">
  <property name="inheritance" value="final"/>
</property>
```

| 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) |
| 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). |
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