

How-to Guide
SAP NetWeaver 2004s



How To... Transport Applications Modeled in Visual Composer from NetWeaver 2004s to NetWeaver 2004

Version 1.5 – August 2006

Applicable Releases:
SAP NetWeaver 2004s

© Copyright 2006 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, and Informix are trademarks or registered trademarks of IBM Corporation in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data

contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

These materials are provided "as is" without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.

SAP shall not be liable for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials.

SAP does not warrant the accuracy or completeness of the information, text, graphics, links or other items contained within these materials. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third party web pages nor provide any warranty whatsoever relating to third party web pages.

SAP NetWeaver "How-to" Guides are intended to simplify the product implementation. While specific product features and procedures typically are explained in a practical business context, it is not implied that those features and procedures are the only approach in solving a specific business problem using SAP NetWeaver. Should you wish to receive additional information, clarification or support, please refer to SAP Consulting.

Any software coding and/or code lines / strings ("Code") included in this documentation 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.

Introduction

This document describes how to transfer applications modeled with Visual Composer in SAP NetWeaver 2004s to SAP NetWeaver 2004.

Prerequisites

- SAP NetWeaver 2004 Portal has the same systems with the same system aliases as those in NetWeaver 2004s
- You have models from any of the following sources:
 - Models that were imported from a business package to NetWeaver 2004s using the Transport Package tool (these models have been added to the Portal Content Catalog).
 - Models that you created in NetWeaver 2004s
- If your models contain BI queries, you have the following components installed: BI_MMR and BI_UDI. For more information, see *SAP NetWeaver Visual Composer Installation & Configuration Guide*.

Importing Models from NetWeaver 2004s to NetWeaver 2004

The process of integrating applications modeled in Visual Composer 2004s into NetWeaver 2004 includes the following steps:

- Downloading and extracting the runtime patch
- Setting PAR files to be permanently saved on your local system. Otherwise, the files will be saved in a temporary directory, and will be automatically removed at predefined intervals.
- Deploying the model that you wish to transport to NetWeaver 2004
- Uploading the model's PAR files to NetWeaver 2004
- Creating the iView based on the PAR files



Before using the patch for transport, be sure to check that NetWeaver 2004 supports the functionality of the application to be transported. Functionality *not* supported by NetWeaver 2004 includes:

- Use of Web services
- Support for the standard SAP JDBC connector, although iViews created with the BI JDBC connector *will* operate.
- Single connection for all data services with same back end. With Visual Composer for NetWeaver 2004s, all ERP data services in the same back-end system share a single connection. This is in contrast to NetWeaver 2004, where each data service received its own dedicated connection. (Note that all non-ERP systems continue to function the same: receiving a dedicated connection for each data service.)
- Web Dynpro runtime

Step 1: Download and Extract the Patch Files

Before installing the patch, you download SAR files containing the patch and control files specific to your platform, and you extract them into one shared empty folder, from which you run the patch tool and apply it to your portal.



Make sure that the number of the latest SAP stack installed on your portal is SPS14 or higher.

To download the patch files:

1. Access the patch from the patch software download area on SAP Service Marketplace at:
<http://service.sap.com/swdc> → *Download* → *Support Packages and Patches* → *Entry by Application Group* → *SAP NetWeaver* → *SAP NETWEAVER* → *SAP NETWEAVER 04* → *Entry by Component* → *Visual Composer* → *VISUAL COMPOSER 6.0* → *#OS independent* → *#Database independent* → *NWVC60_0.SAR*
2. In order to run the installation, access the following SAR files on SAP Service Marketplace:
<http://service.sap.com/swdc> → *Download* → *Support Packages & Patches* → *Entry by Application Group* → *SAP NetWeaver* → *SAP NETWEAVER* → *SAP NETWEAVER 04* → *Entry by Component* → *Enterprise Portal* → *PORTAL PLATFORM 6.0_6.40*
 - a. Navigate to *#OS independent*, and download:
 - EP6TOOLS<x>_0.SAR (where x is the number of the SP stack installed on your portal)
 - b. Navigate to: *<Your OS specific folder - Windows, Solaris, HP-UX, AIX, etc.>*, and download the files specific to your platform (if you already installed a patch, the most recent files may be downloaded):
 - SAPINSTx_0.SAR
 - EP6CTRLx_0.SAR

(x is the number of the latest SP stack installed on your portal)
3. Unpack all the SAR files into the same local directory using:

Windows: SAPCAR.EXE -xvf <SAR_file_name>

UNIX: ./SAPCAR -xvf <SAR_file_name>



Make sure that you unpack the SAR files into an empty folder.



Find the SAPCAR executable on your Enterprise Portal installation DVD or in the SAPinst installation directory.

Preparing your Host for SAPinst Installation

Make sure that your `DISPLAY`, `JAVA_HOME`, and `PATH` environment variables are set correctly. Follow the instructions in the section *Preparing the Host for SAPinst Installation* in the *Installation Guide - SAP Enterprise Portal 6.0 on Web AS 6.40* to verify that your system is ready to run SAPinst.

The guide is located in SAP Service Marketplace at:

<http://service.sap.com> → *Installation & Upgrade Guides* → *SAP NetWeaver* → *Release 04* → *Installation* → *SAP EP*

Installing the Patch

Run the Patch tool, as you would run SAPinst, following the instructions in this section, according to your platform.

To install the patch:

1. Start SAPinst as follows:

UNIX

- a. Log on to your installation host as a user with *super user (root)* permission.
- b. Run the following command: `chmod -R 777 /<SAR file dir>/SAPINST-CD`
- c. Go to the directory: `cd <SAR file dir>/SAPINST-CD/SAPINST/UNIX/<OS>/`
- d. Run the command: `./sapinst`



SAPinst will create and keep the log files in the directory: `/tmp/sapinst_instdir`

Windows

- a. Log on to your host as a user who is a member of the local administration group.
- b. Run the file: `<drive>:\<SAR File Directory>\SAPINST-CD\SAPINST\NT\<OS>\sapinst.exe`



SAPinst will create and keep the log files in the directory:
`<OS drive>:\Program Files\sapinst_instdir`

2. In the screen *Specifying the SAP Web AS Java System and J2EE Administrator Account*, enter the details for the J2EE Engine on which the portal you are patching is installed.
 - a. From the *SAP Web AS Java System* drop-down list, choose the J2EE system you want to patch.
 - b. In the *Administrator* account details, enter the name and password of the user with Administrator privileges on the J2EE system on which your portal is running. These are the details for the *SAP J2EE Administrator Account*, defined during J2EE installation.
The default is:
 - User **Administrator** with a password of minimum five characters.
 - For Add In installations the default is **j2ee_admin**.
 - c. Click *Next*.

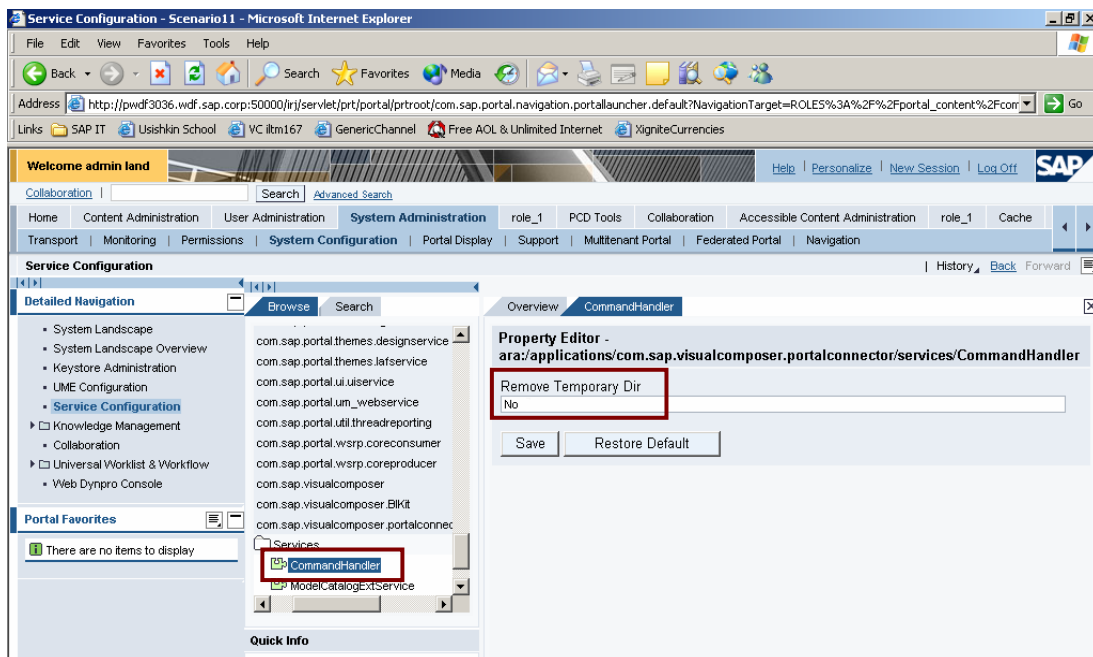
3. **Windows only:** In the screen *Specifying SAP System Administrator Account*, enter the details for the System Administrator of the SAP Web AS system.
 - a. In the SAP System Administrator details, enter the name and password of the OS user of the SAP Web AS system that hosts the portal. These are the details for the *SAP System Administrator Account*, defined during J2EE installation.
 - b. If this user is a Window domain user, enter the Windows domain name. Otherwise, enter the local machine host name.
 - c. Click *Next*.
4. In the *Start Installation* screen, review your input. Click *Start* to start the installation, or *Back* to change your entries.
5. SAPinst starts the installation and displays installation progress during the processing phase. If the installation was successful, the message `The installation finished successfully` is displayed.



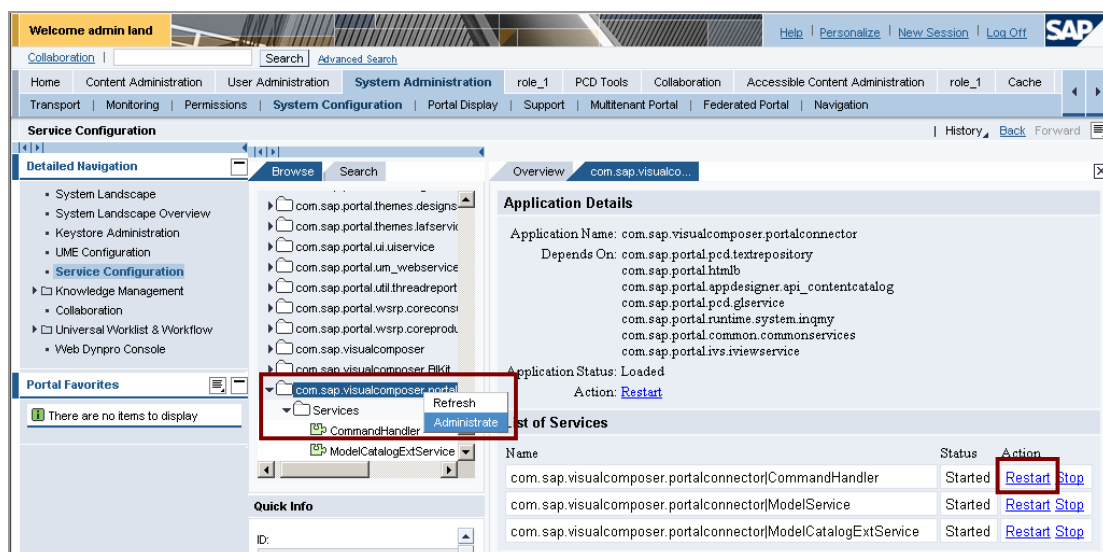
- If SAPinst fails during installation, see the section on *Troubleshooting the SAPinst Installation* in the guide *Installation Guide - Portal Platform* for SAP Enterprise Portal 6.0.
- After this message is displayed, the deployment process is still running. It may take up to 15 - 90 minutes before the deployment is completed and the portal is ready to be launched.

Step 2: Set the PAR Files to be Saved on your Local System

1. In NetWeaver 2004s, log on to the portal with the Super Administrator role.
2. Navigate to *System Administration* → *System Configuration* → *Service Configuration*. The Service Configuration Editor is displayed.
3. In the Portal Catalog, open the *Applications* folder and locate `com.sap.visualcomposer.portalconnector` → *Services*. Then double-click *CommandHandler*. The Property Editor is displayed.
4. In the *Remove Temporary Dir* field, change the value of the property to **No**.



5. Click *Save* and close the Property Editor.
6. Return to the Portal Catalog, right-click the `com.sap.visualcomposer.portalconnector` folder, and from the context menu choose *Administrate*.
7. In the *List of Services*, locate the *CommandHandler* service and click *Restart*.



Step 3: Deploy the Model

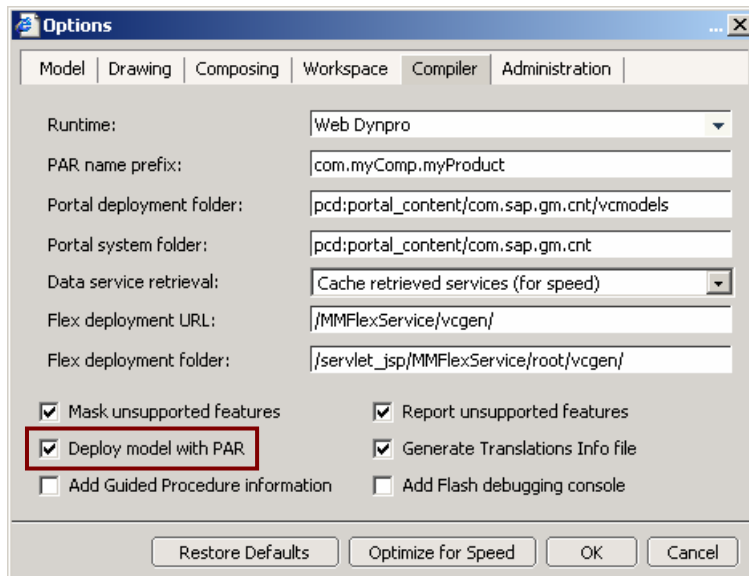
If the model originates from a business package:

1. In the Portal Catalog, locate the required model in the `models` folder, right-click it and choose *Open in Storyboard*.



At this stage you can make any necessary changes to the model.

2. In Storyboard, choose *Tools* → *Options* → *Compiler* tab, and select the *Deploy model with PAR* check box.



3. Deploy the model.

If you created the model in NetWeaver 2004s:

1. Open the model in Storyboard.
2. Choose *Tools* → *Options* → *Compiler* tab, and select the *Deploy model with PAR* check box.
3. Deploy the model.

Step 4: Upload the PAR Files to NetWeaver 2004

1. In NetWeaver 2004, log on to the portal with the Super Administrator role.
2. Navigate to *System Administration* → *Support* → *Top Level Areas* → *Portal Runtime*.
3. From the "Portal Anywhere" Admin Tools, choose *Administration Console*.
4. In the *Archive Uploader* area, click *Browse*, locate any of the PAR files, and click *Upload* to store the file in the PCD.

The screenshot shows the NetWeaver 2004 Administration Console. The main content area is titled "Archive Uploader" and contains the following sections:

- Cluster Administration:** A table with columns: Server ID, Server Name, Server Type, and Server IP.

Server ID	Server Name	Server Type	Server IP
3513300	Dispatcher 0 0_35133	Dispatcher	10.21.72.109
3513350	Server 0 0_35133	Server	10.21.72.109
- Archive Uploader:** A section with the instruction "Please specify a Portal Archive file (PAR) and press 'upload' to store it into the PCD." Below this is a text input field, a "Browse..." button, and an "Upload" button. The input field and buttons are highlighted with a red box.
- Archive Deployment Checker:** A section with the instruction "Please choose a Portal Archive from the list. Then press 'show' to display the version deployed on each PRT server." Below this is a dropdown menu with "AnimalSelector" selected and a "Show" button.
- Archive Remover:** A section with the instruction "By choosing a Portal Archive and pressing 'clean' you may force deletion of the application. Note that this tool also removes the application from the PCD! Use this with care!"



To locate the PAR files, go to the server file system in NetWeaver 2004s at the following location:

```
.../usr/sap/<SID>/JC<XX>/j2ee/cluster/server0/GUIMachine_Business_Packages/<Model Name>_<XXX>
```

This folder contains all PAR files of the model. Each PAR file contains the prefix `com.myComp.myProduct` (unless changed), iView ID and iView name.

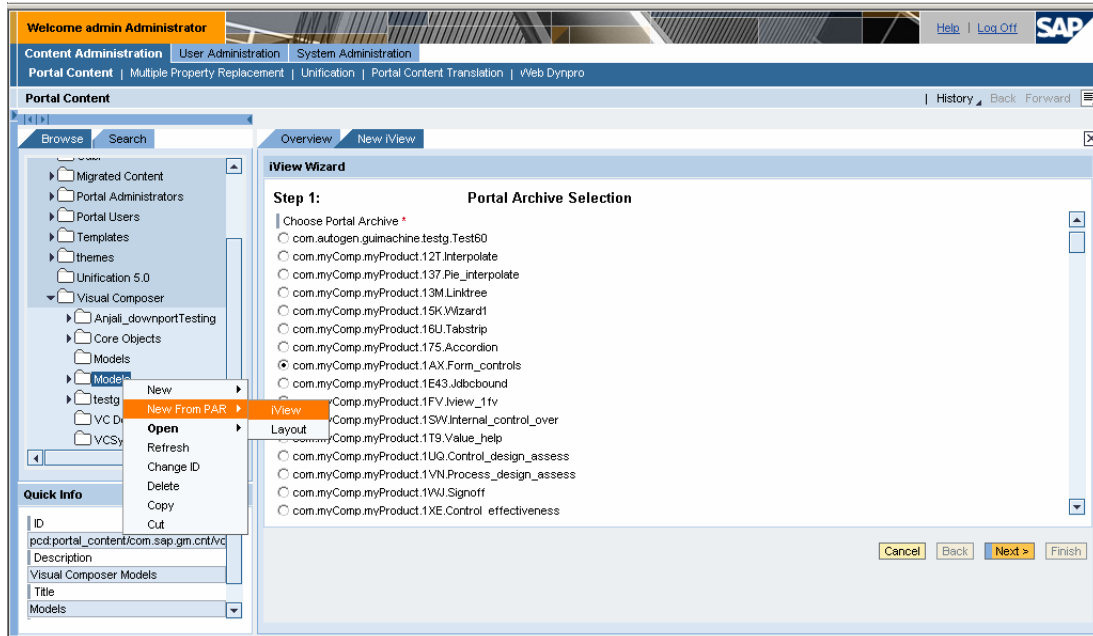
If the model contains several iViews (in cases of popup and nested iViews), you can find the PAR file of the main iView according to the iView name, which is the same as the name that was defined for it in Storyboard. (Note that the case-sensitivity of the name may change; however, the name itself will remain the same.)

5. Repeat for all PAR files of the model.
6. Check that the PAR files were uploaded successfully to NetWeaver 2004.

Once the PAR files are uploaded, a template is created in the portal from each file. From this template you can now create an iView for the main iView.

Step 5: Create the iView Based on the PAR File

1. In the portal, navigate to *Content Administration* → *Portal Content*.
2. Locate the folder in which you want to create the iView, right-click it and choose *New from PAR* → *iView*. A list of portal PAR files is displayed, including the PAR files that you have uploaded.



3. Choose the uploaded PAR for the **main** iView (there is no need to create iViews for popup and nested iViews), and click *Next*.
4. Define a name for the iView as follows:
If the name of the PAR is, for example, `com.myComp.myProduct.Q7Q.Banksc.par`, then for the iView ID, insert the value **Banksc** and for the prefix – **com.myComp.myProduct.Q7Q**.
5. Follow the steps of the iView Wizard to create the iView.

Once the iView is created, you can locate it in the selected folder of the Portal Catalog, preview and use it.

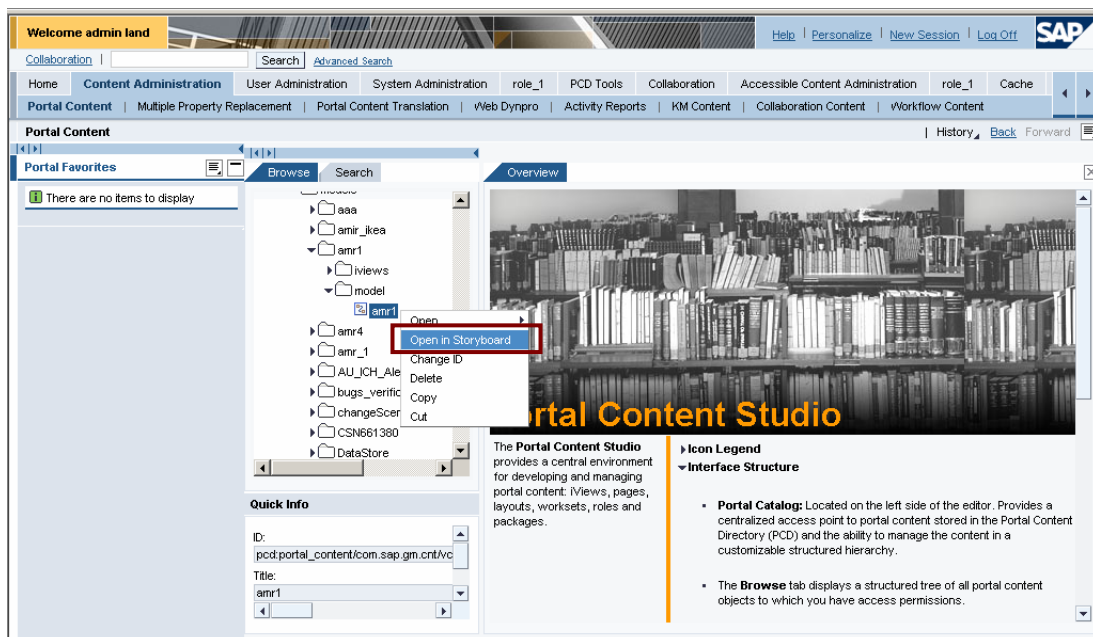


- To translate the iView using the Portal Content Translation tool, you need to perform the above process for all iViews (including popup and nested iViews), and add them to the Translation Worklist.
- In the Property Editor, make sure that the *Isolation Method* property for each iView is set to *URL*.

Modifying a Business Package Model and Uploading it to NetWeaver 2004

To modify a model after it has been transported to NetWeaver 2004, you need to make the changes in NetWeaver 2004s and then repeat the transport process.

1. Log in to the portal with the Content Administrator role.
2. Navigate to *Content Administration* → *Portal Content* → *Portal Content* → *Visual Composer* → *Models* → *<model name>* → *model*.
3. Right-click the model name, and choose *Open in Storyboard* from the context menu. Visual Composer opens and prompts you to create a new copy of the model.



4. Enter a new name for the model.
5. Make any necessary changes to the model, and then deploy it.
6. Locate the new folder containing the new PAR files, and rename the PAR files according to their previous names, before you changed the model.

For example, if the PAR file name is now `com.myComp.myProduct.B2E.Banksc.par`, change to the previous name: `com.myComp.myProduct.Q7Q.Banksc.par`.

7. Open the PAR file with WINRAR or WinZip, and in the `PORTAL-INF` folder locate and open the `portalapp.xml` file. Change the suffix of the component name. In the above example, change it from `...B2E` to `...Q7Q`.

```

<application>
  <application-config>
    <property name="SharingReference" value="com.sap.visualcomposer, com.sap.portal." />
  </application-config>

  <components>
    <component name="A&DPCK">
      <component-config>
        <property name="JSP" value="jsp/A&DPCK.jsp"/>
        <property name="ComponentType" value="jspnative" />
        <property name="ResourceBundleName" value="localization"/>
        <property name="SecurityZone" value="com.sap.portal/low_safety" />
      </component-config>
      <component-profile>
        <property name="System1" value="03.11" />
      </component-profile>
    </component>
  </components>
</application>

```

8. Upload the new PAR files of the modified iView to NetWeaver 2004. For information, see Step 4: Upload the PAR Files to NetWeaver 2004, page 7.



To change the source model (rather than create a copy of the model), open it directly in Visual Composer 2004s Storyboard and not through the portal (*Open in Storyboard*), and make your modifications. Then upload the file to NetWeaver 2004 (see Step 4: Upload the PAR Files to NetWeaver 2004, page 7). In this case, you do not need to change the names of the PAR file and the component.



After modifying the iView and uploading it to NetWeaver 2004, the translation of the popup and nested iViews will no longer be visible. To redisplay the translation:

- Log in to the portal with the Content Administrator role.
- Navigate to *Content Administration* → *Portal Content* → *Visual Composer* → *Models* → *<model name>* → *iviews*.
- Double-click the main iView. The Property Editor opens.
- In the *Property Category* drop-down list, select *Show All*.
- Locate the property named `embeddedPar.<name of PAR of nested or popup iView>` and change it from its new name to the previous name, before the iView took was modified.
- Repeat for all nested and popup iViews.
- Click *Save*. Now you will be able to see the translations of the popup and nested iViews.