

# How to Integrate Google Maps into a Web Dynpro ABAP Application Using the Page Builder



## Applies to:

Web Dynpro ABAP in enhancement package 2 for SAP NetWeaver 7.0. For more information, visit the [Web Dynpro ABAP homepage](#).

## Summary

This tutorial aims to explain how to use the Web Dynpro ABAP Page Builder, a new runtime authoring tool, to easily build Web Dynpro pages using CHIPs (Collaborative Human Interface Parts). In this example, we will show you how to display a route with Google Maps where the start and end of the route are transferred from Web Dynpro.

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## Author Bio



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## Introduction

In the Web Dynpro ABAP Page Builder, you normally use Web Dynpro ABAP based CHiPs to define the content of your page, but you can also create URL-based CHiPs. These CHiPs are called IFrame CHiPs and can display a web page and allow you to define parameters as inports.

In this example, we show you how to create an IFrame CHiP that points to Google Maps and is able to transfer parameters that define a starting point and a destination for a travel route.

## Prerequisite

You are familiar with the basics of the Web Dynpro ABAP Page Builder, as described in the documentation:

[Web Dynpro ABAP Page Builder](#)

This means: If you need a step-by-step description and you cannot find it in this document, check this link!

## Start the Page Builder

### Create the Application Configuration

1. In the ABAP Workbench (transaction SE80), display the `WDR_CHIP_PAGE` Web Dynpro component. In the context menu of the `WDR_CHIP_PAGE` application choose *Create/Change Configuration*.
2. Specify a unique configuration ID, such as `MY_CHIP_APP_CONF`.
3. Choose the *Create* pushbutton.
4. Enter a description text and specify a package to which the configuration is to be assigned.
5. Choose the *OK* pushbutton.
6. On the *Structure* tab, select an appropriate component configuration, or create a new one.
7. Save your entries.

Your configuration now appears under application `wdr_chip_page`, under node *Application Configurations*. You may need to refresh the tree display in the ABAP Workbench to see this.

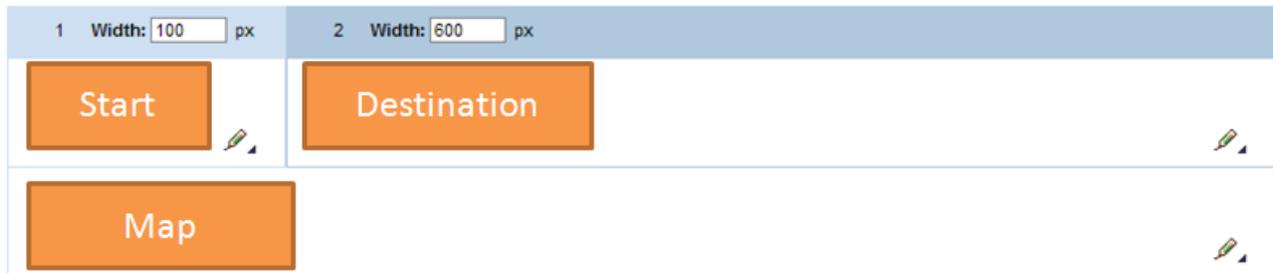
### Start the Page Builder

1. In the context menu of your application configuration `MY_CHIP_APP_CONF`, choose *Test*. The Page Builder starts with the URL parameter of your application, for example `sap-wd-configId=MY_CHIP_APP_CONF`.
2. To create and edit your page, switch to the configuration mode by adding the parameter `&sap-config-mode=config` to end of the URL in the address bar. This takes you to the runtime authoring environment of the Page Builder.

## Prepare the Layout

In this example, we use two generic CHIPS that are able to send parameters: one for the starting point and the other for the destination of the respective route.

The layout shall have three containers, *Start* and *Destination* for the CHIPS where the user can enter the locations, and *Map* where the Google Map will be displayed:



To achieve this:

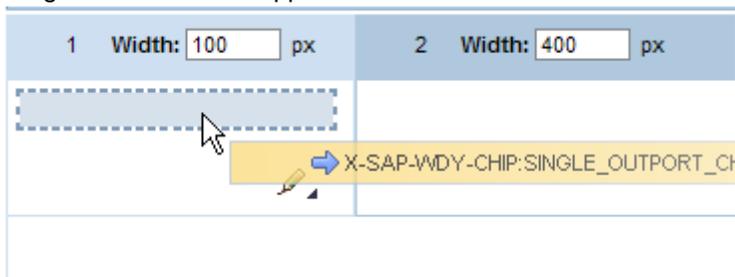
1. Choose (Edit Container Properties) and then choose *Insert Column* from the dropdown list.
2. Choose (Edit Container Properties) once more and then choose *Insert Row* from the dropdown list.
3. In the left container of the second row, choose (Edit Container Properties) and choose *Connect with Container on right*
4. Adapt the containers' widths to your needs.
5. Save your configuration.

## Embed the CHIPS for Defining Start Point and Destination

For the sake of simplicity, we will just use a generic test CHIP called CHIP with Outport. This CHIP uses a generic output parameter so you don't have to develop a separate CHIP for this. We will use this CHIP twice, firstly to define the starting point of the journey and secondly to define our destination.

To embed the CHIPS:

1. Open the CHIP catalog by clicking the *CHIP catalog* link in the header area. open the folder *Web Dynpro CHIPS* and select **CHIP with Outport** (field name: X-SAP-WDY-CHIP:SINGLE\_OUTPORT\_CHIP)
2. Drag this CHIP to the upper left container until the blue-dashed drop area becomes visible. Then drop it.



3. Repeat the last two steps for the upper right container.
4. To be able to distinguish between these two CHIPS when you connect them to the Google Maps CHIP, give them unique titles. To do so, open the CHIP Tray's *Option Menu* and choose *Change Title*, enter **Start** for the first CHIP and **Destination** for the second one.
5. Save your configuration

## Create an IFrame-CHIP Pointing to Google Maps

1. In the CHIP catalog, in the context menu of the *IFrame-CHIPs* node, choose *Create....*  
The editor for the Web Dynpro ABAP component configuration starts for the CHIP\_IFRAME\_CONFIG component.
2. Enter a configuration ID, such as **MY\_GOOGLE\_MAPS** and choose *Create*.
3. Enter a description, select the relevant package and confirm by choosing the *OK* pushbutton.
4. On the *Component-Defined* tab, select *header* and define the attributes as follows:

| Attribute Name    | Value                                  |
|-------------------|----------------------------------------|
| address           | http://www.google.de/maps?output=embed |
| CHIP: Icon        | ~Icon/GeographicalInfoSystem           |
| CHIP: Title       | Google Map                             |
| CHIP: Description | Display a map with Google Maps         |
| height            | 500                                    |

5. Save the component configuration for your CHIP.

## Define the Inport-Parameters

To display a route in Google Maps, two inport parameters are needed:

- SADDR for the starting point
- DADDR for the destination

### It's important to stick to these names exactly!

1. To define these parameters, in the editor for the Web Dynpro ABAP component configuration, select *context* in the *Configuration Context* screen area, then choose *Add -> inports*.
2. Enter a name for the inport, for example **Route** and enter a *description* and a *descriptive name* accordingly.
3. For this inport you need two *paramInfos*: one for the start address and one for the destination. To create these, in the context menu of the *inport* row, choose *Create -> paramInfo*.
4. Enter **SADDR** as the field name.
5. Repeat the previous step, to create another inport called **DADDR**.
6. Save your configuration.

| Configuration Context |                   |
|-----------------------|-------------------|
| Elements              |                   |
| ▼                     | context           |
| ▼                     | inports (Route)   |
| ▶                     | paramInfo (SADDR) |
| ▶                     | paramInfo (DADDR) |
| ▪                     | header            |

| Attributes of the Element paramInfo (DADDR) |                                                             |
|---------------------------------------------|-------------------------------------------------------------|
| Field Name: *                               | <input type="text" value="DADDR"/>                          |
| displayName:                                | <input type="text" value="Destination address"/>            |
| description:                                | <input type="text" value="Destination address"/>            |
| Parameter Usage:                            | <input type="text" value="Field used as normal parameter"/> |

Your CHIP is now displayed in the CHIP catalog:  Google Map - if not, in the context menu of the *IFrame-CHIPs* folder, choose *Refresh*.

## Embed the Google CHIP into your Page

You can now embed this new CHIP into your page.

1. To do so, drag and drop the CHIP from the CHIP catalog to the container in the second row of your page.
2. In the CHIP tray's *Option menu*, choose *Display Connection*.
3. The inport called *Route* (which you created for this CHIP) is displayed with its two inport parameters. For the starting point (SADDR), enter *Start* (if this is not already suggested) as the source. Then enter *Parameter Value of CHIP Definition* as the output parameter. Usually this parameter would show a more meaningful name, this name results of the fact that we have taken a generic CHIP.
4. For the destination enter ***Destination*** as the source and enter the generic output parameter *Parameter Value of CHIP Definition*. Confirm your entries by choosing the *Apply* pushbutton. The details of your connection are now displayed:

|               |                   |
|---------------|-------------------|
| Inport: route | Remove Connection |
|---------------|-------------------|

|                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------|
|  Inport Connected -> [SADDR: PARAM, DADDR: PARAM] |
|--------------------------------------------------------------------------------------------------------------------------------------|

5. Close this extension and save your configuration.

## Test your Application

Now you can test whether your application works.

1. Remove the configuration parameter (sap-config-mode) from the URL to start the application.
2. Enter a city or a postal code in the input fields for *Start* and *Destination* and confirm by pressing the *Fire Outport* pushbuttons for both CHIPs:

Here we go!

## **Related Content**

[Web Dynpro ABAP Page Builder Documentation on SAP Help Portal](#)

[New in Web Dynpro ABAP with SAP NetWeaver 7.0 EhP2](#)

For more information, visit the [Web Dynpro ABAP homepage](#).

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