

Web Dynpro for ABAP: Tutorial 1- Create a simple Web Dynpro Application



SAP NetWeaver 04s



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Icons in Body Text

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see *Help on Help → General Information Classes and Information Classes for Business Information Warehouse* on the first page of any version of *SAP Library*.

Typographic Conventions

Type Style	Description
<i>Example text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, graphic titles, and table titles.
EXAMPLE TEXT	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example text	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

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Web Dynpro for ABAP: Tutorial 1 - Create a simple Web Dynpro Application

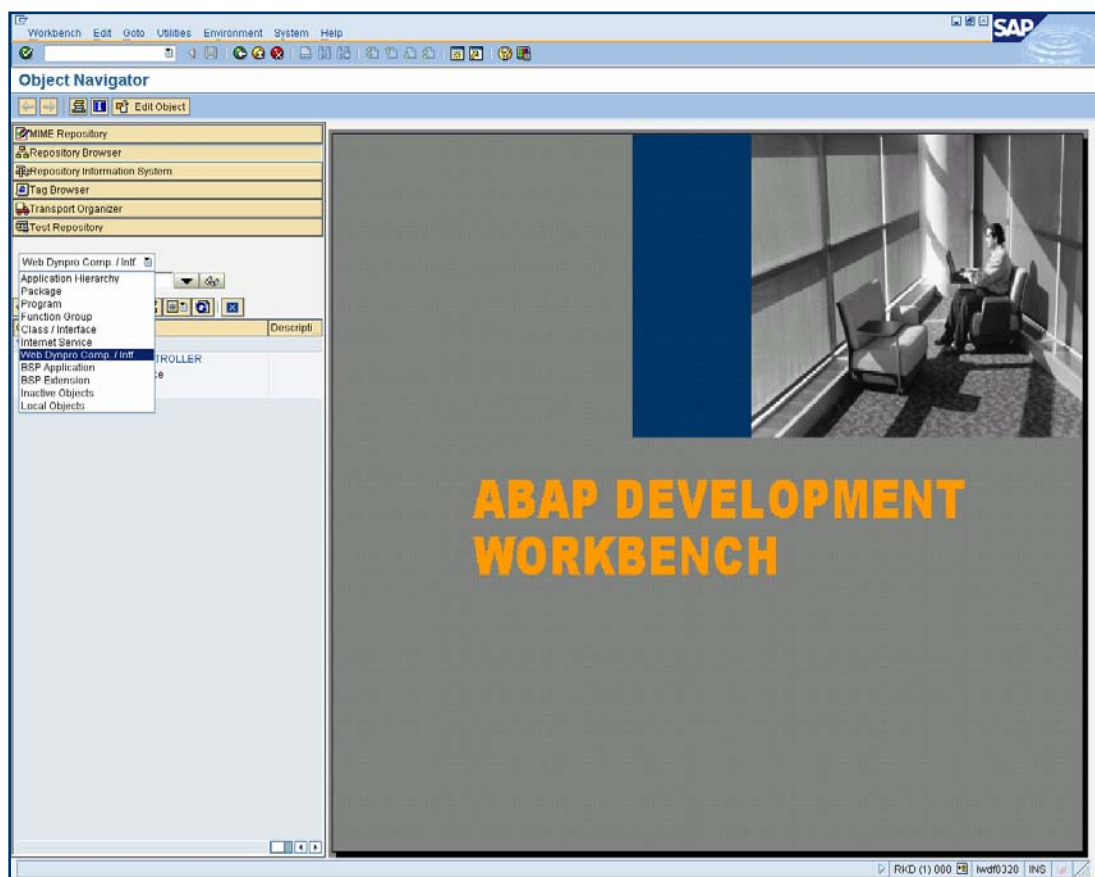
Development Objectives

In this step-by-step tutorial you will create a simple Web Dynpro component, which consists of one view. For the view, you will create a view context, which is linked to a table element on the view layout and which contains the data from table SFLIGHT. This table will be displayed in the browser at runtime. Furthermore, you will create a Web Dynpro application for this simple Web Dynpro component, which can be run in the browser.

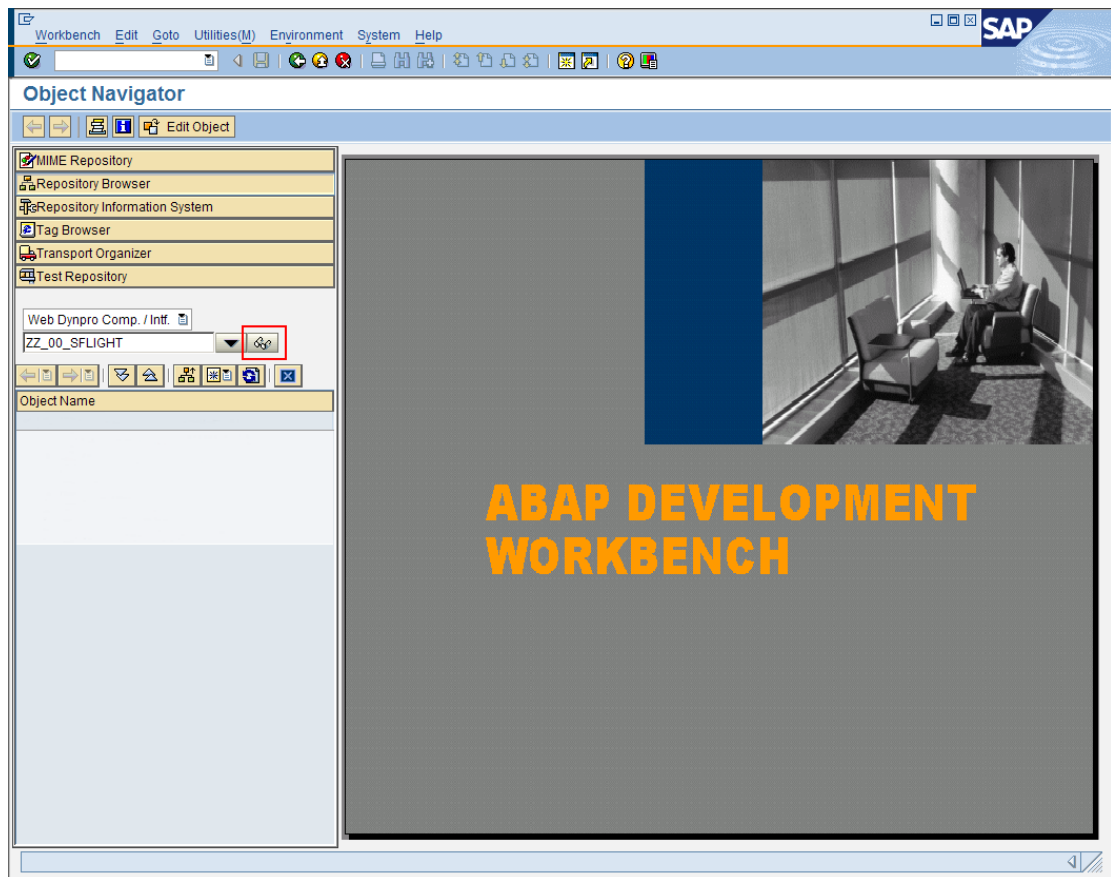
Procedure

Creating a Web Dynpro Component

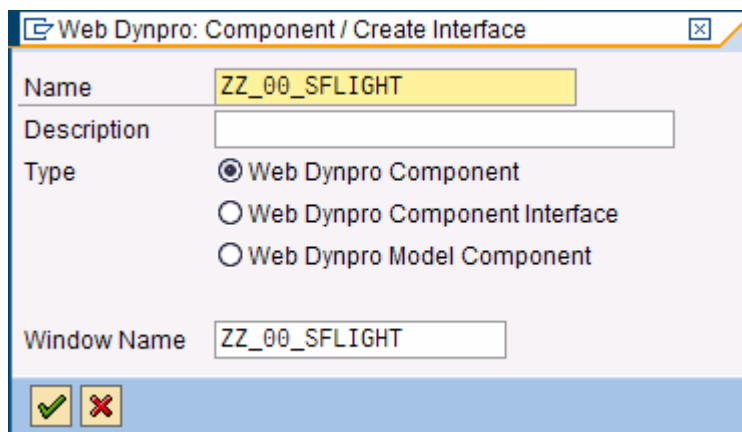
1. Start ABAP Workbench (SE80) and select *Web-Dynpro-Comp./Intf.* from the available object list.



2. To create a new Web Dynpro component, enter the name *ZZ_00_SFLIGHT* for the new component in the selection dialog of the object list, and select *Display*.



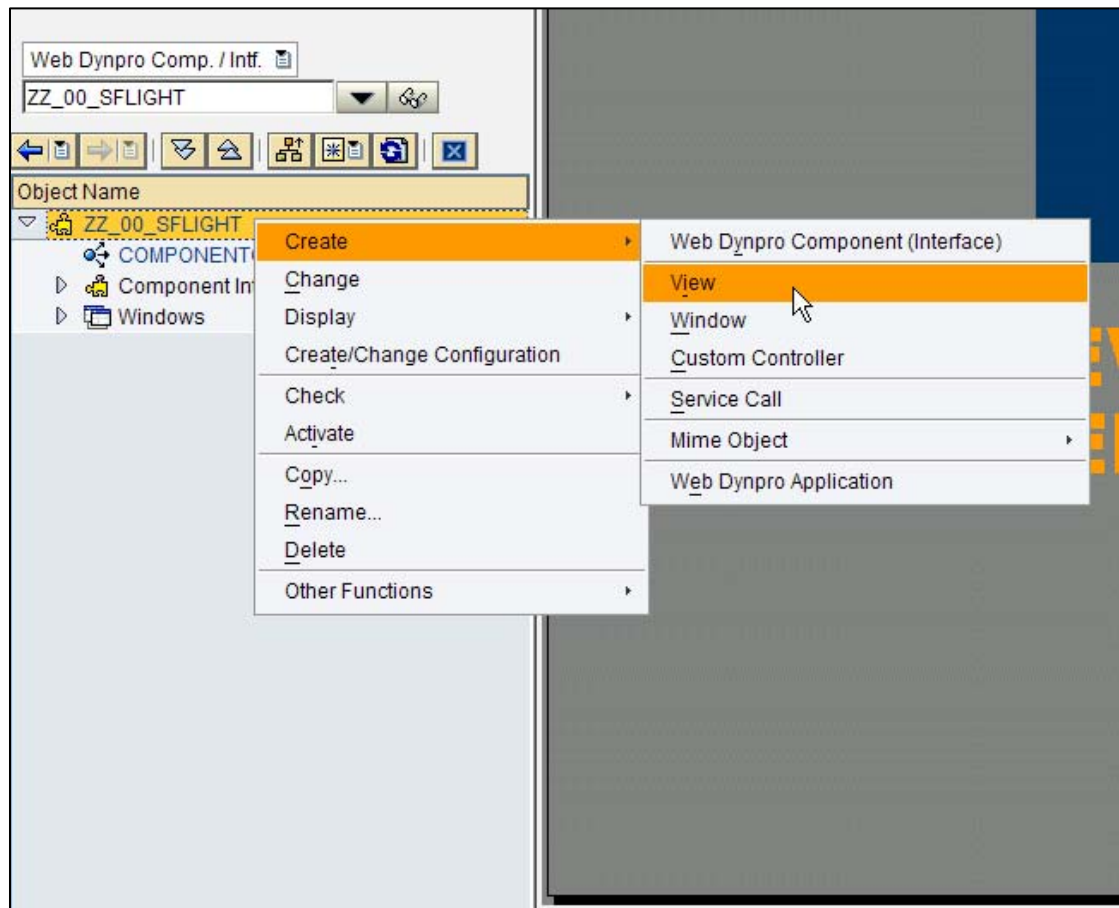
3. In the dialog box that appears, you can enter a description of the new object and select as type *Web Dynpro Component*. In this dialog you also have the chance to maintain the name of the default window.



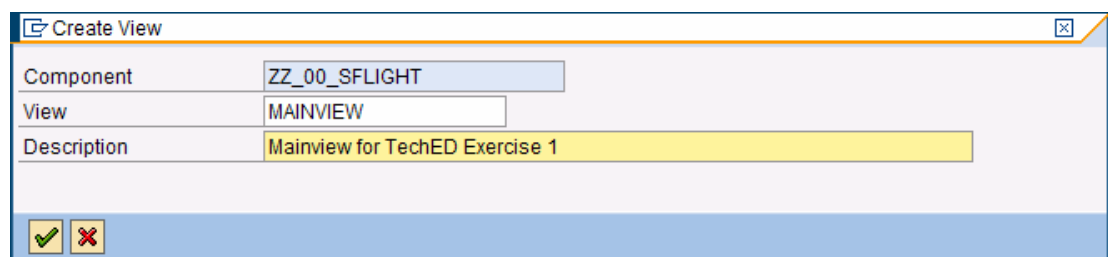
Assign the component ZZ_00_SFLIGHT to package \$TMP.

Creating a new View and Assigning the View to the Window

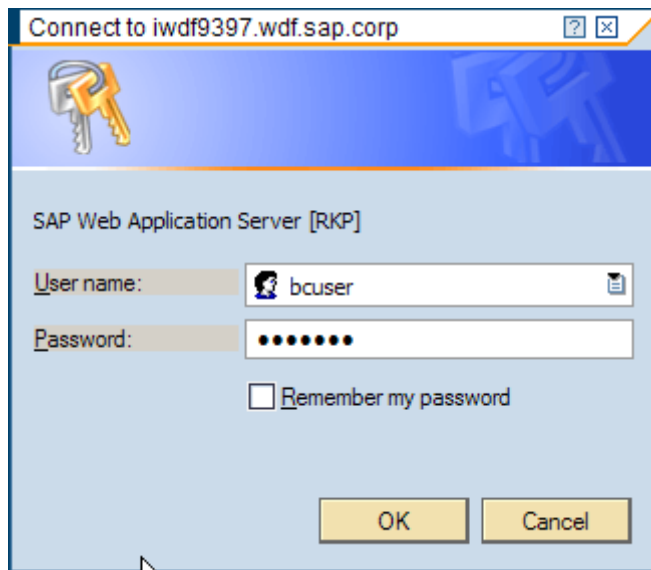
1. Click on the Web Dynpro component ZZ_00_SFLIGHT in the object tree and open the context menu to create a new view.



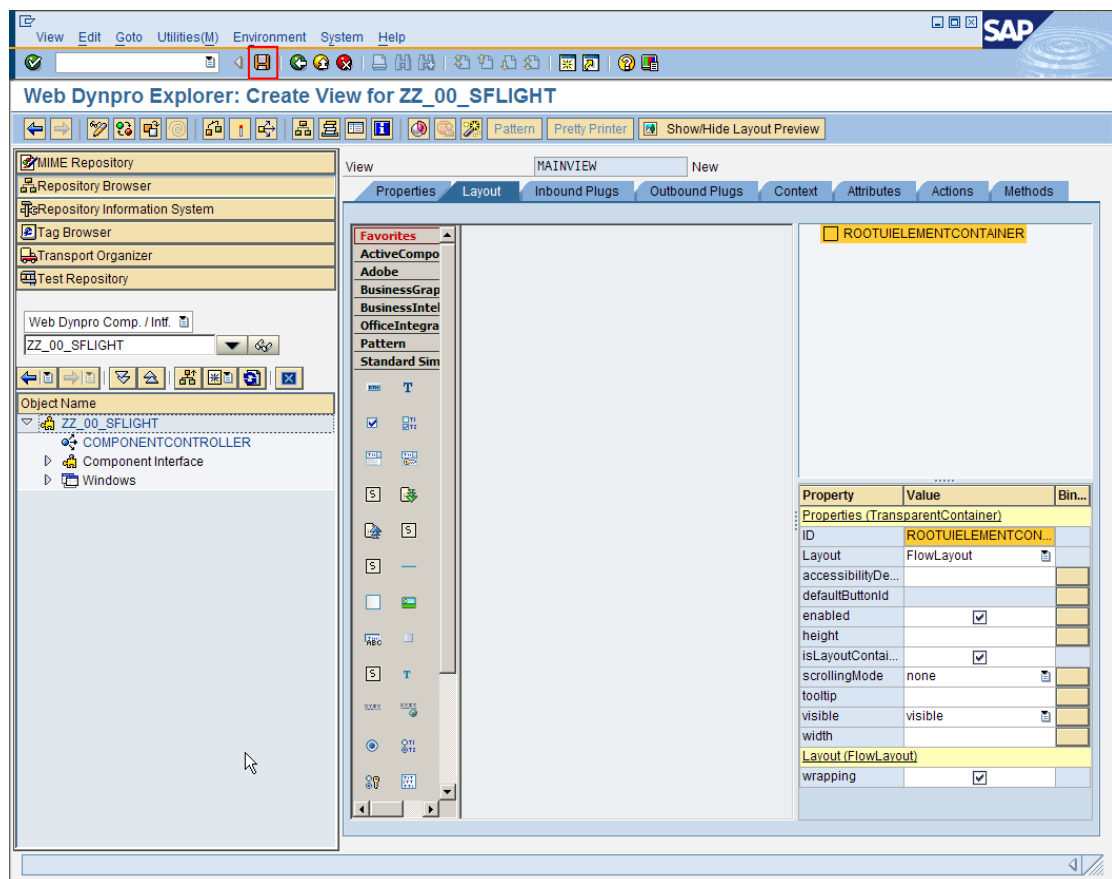
2. Create a view MAINVIEW.



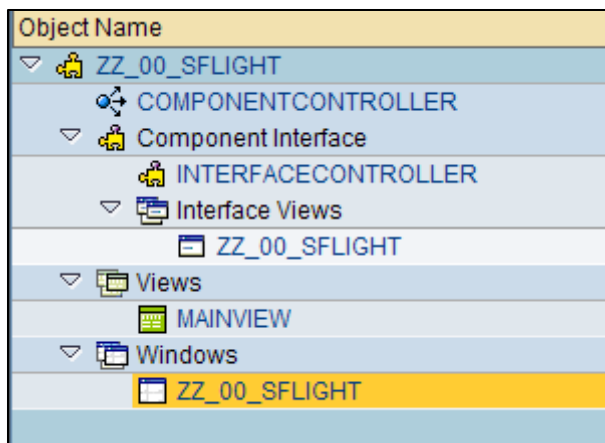
The *View Editor* will be started on the right side of the Workbench window. In order to open the *Layout* tab and the *View Designer*, a popup appears asking for user and password for the SAP Web Application Server. Use the same user/password which you used for login to the SAP system.



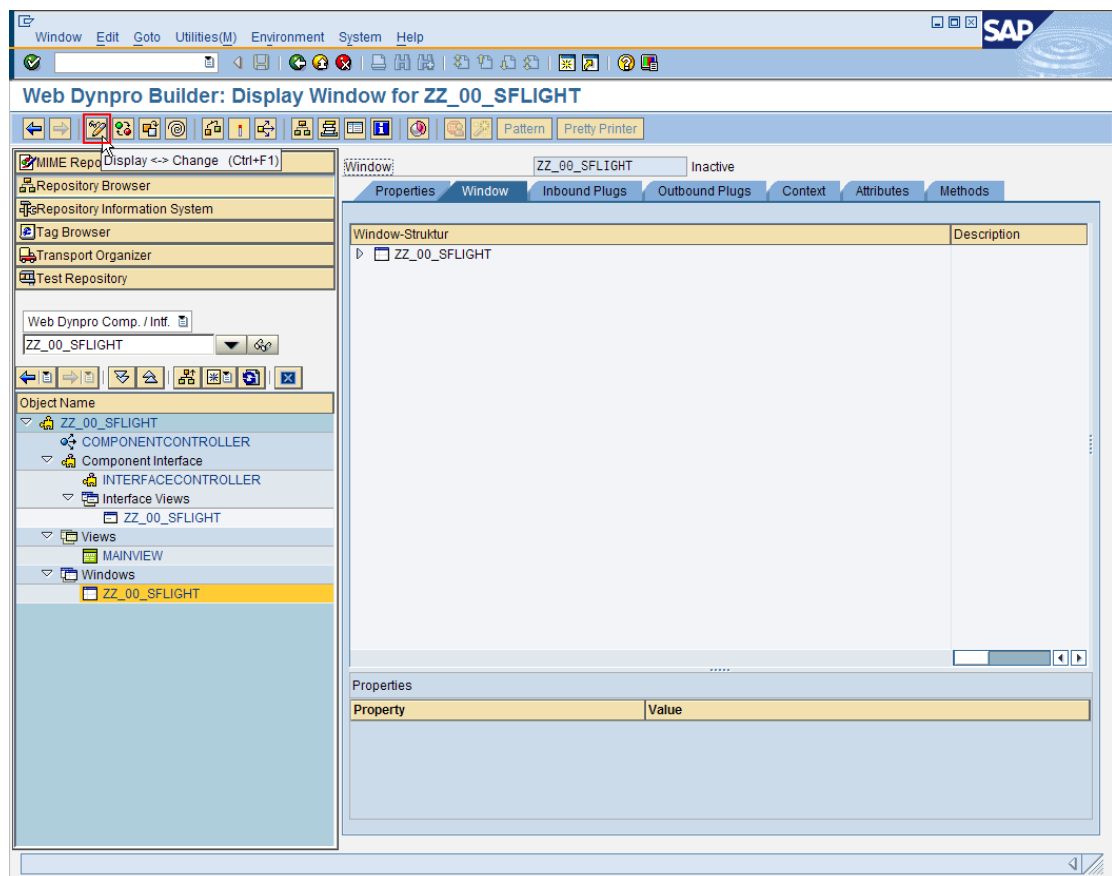
3. Save the view MAINVIEW.



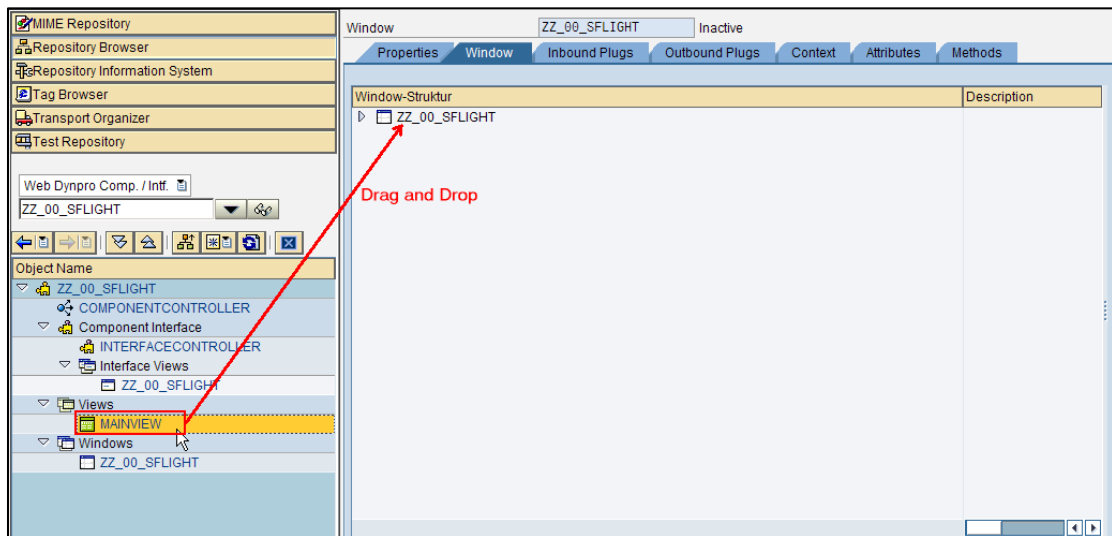
After saving the view MAINVIEW, it appears in the object tree of the Web Dynpro component under entry Views.



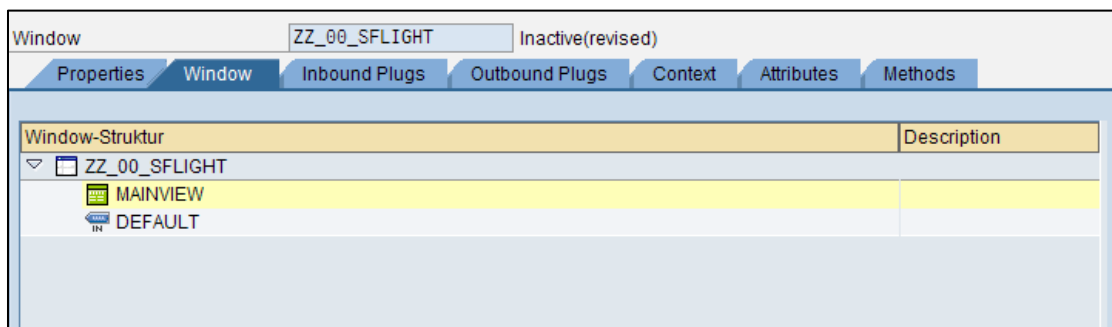
4. Now open window ZZ_00_SFLIGHT by clicking on Windows and double-clicking on ZZ_00_SFLIGHT. Switch to change mode.



5. Now open the view structure and move the view MAINVIEW inside the window structure on the right hand side by Drag and Drop.



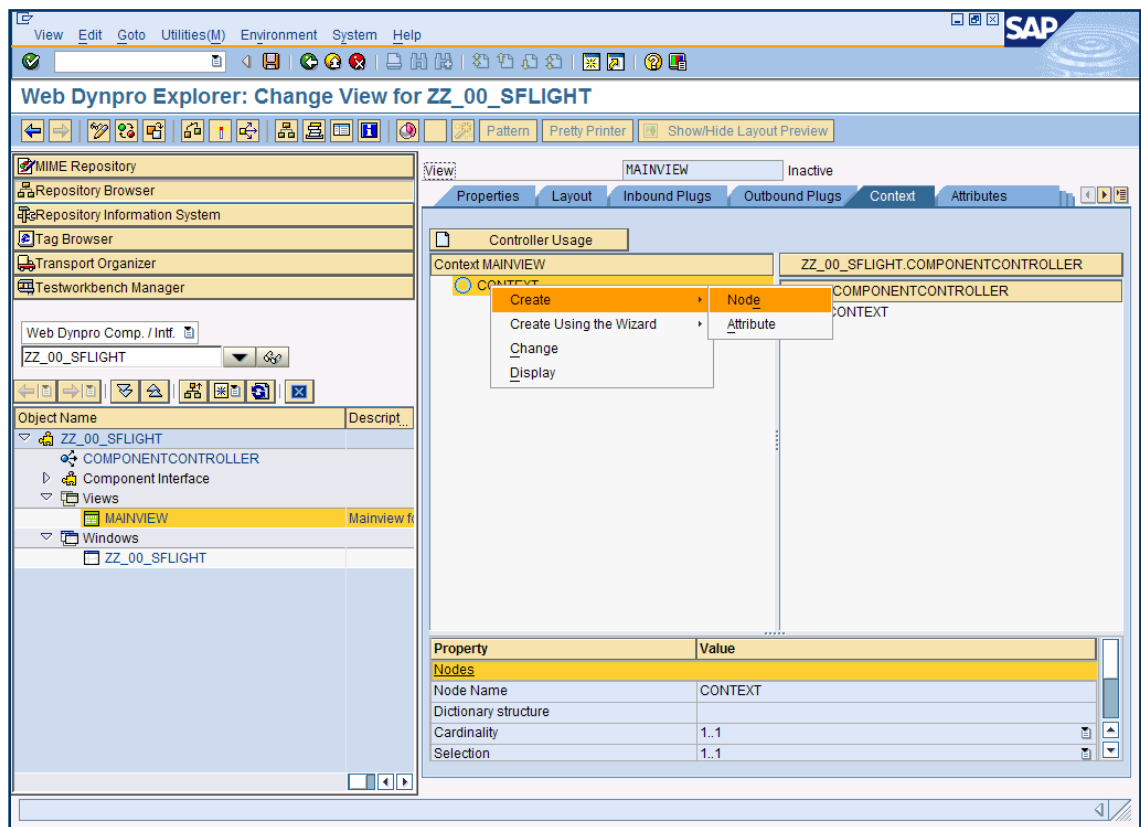
Open the window structure on the right hand side and you will see the embedded MAINVIEW.



6. Save your changes.

Creating a View Context for MAINVIEW

1. Open the View Editor for view MAINVIEW and switch to tab *Context*. Create a context node SFLIGHT_NODE in the View Controller by opening the corresponding context menu.



Maintain the properties according to the screen shot below. Select SFLIGHT as *Dictionary Structure* and "0...n" for the *Cardinality*.

Select button *Add Attribute from Structure* and select all components of structure SFLIGHT.

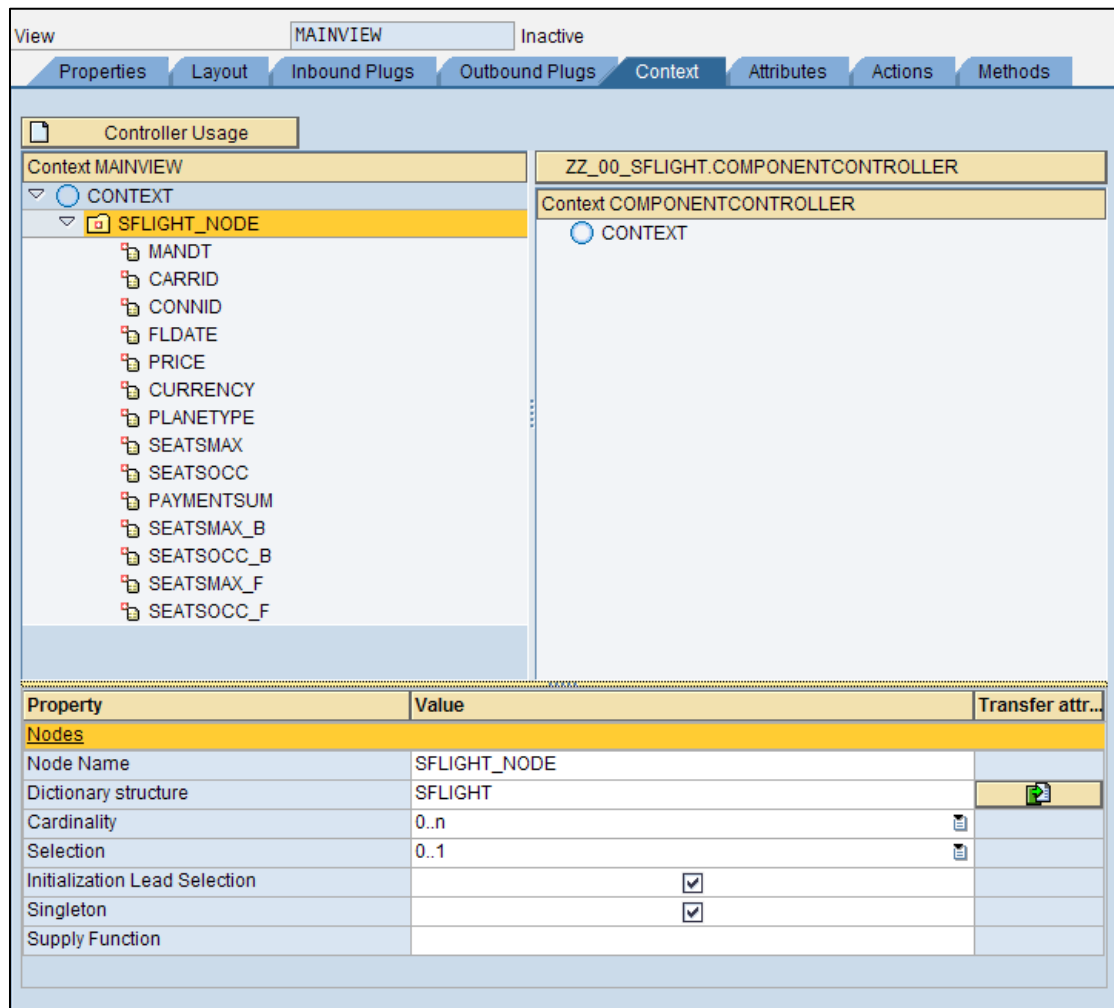
Node Name	SFLIGHT_NODE
Interface Node	No
Input Element (Ext.)	No
Dictionary structure	SFLIGHT
Cardinality	0..n
Selection	0..1
Init. Lead Selection	Yes
Singleton	Yes
Supply Function	

☒ Add Attribute from Structure

[illegible]

Press *OK*.

The result should look like this:

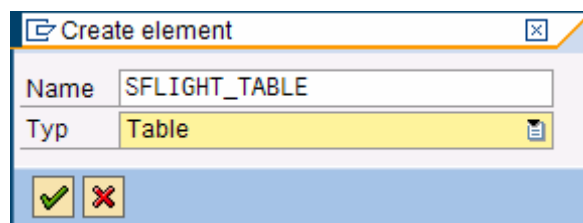
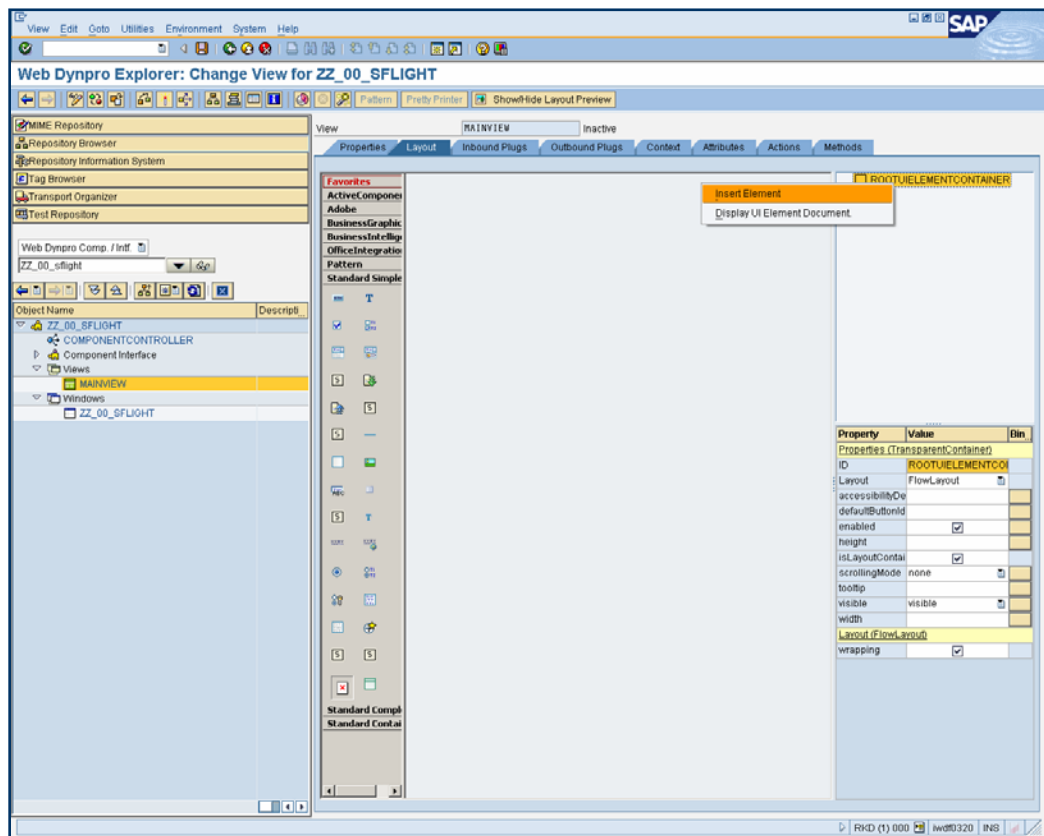


You have now created a context node SFLIGHT_NODE which refers to the data structure of table SFLIGHT and which can contain 0 to n entries at runtime. The context node has been created in the view context, since no data exchange with other views is planned. Therefore, the component controller context usage is not necessary.

2. Save your changes of view MAINVIEW.

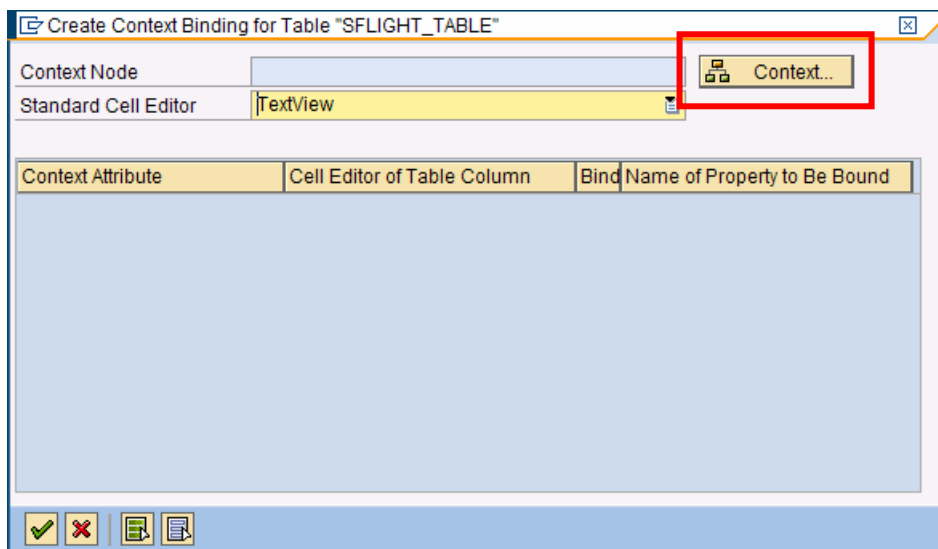
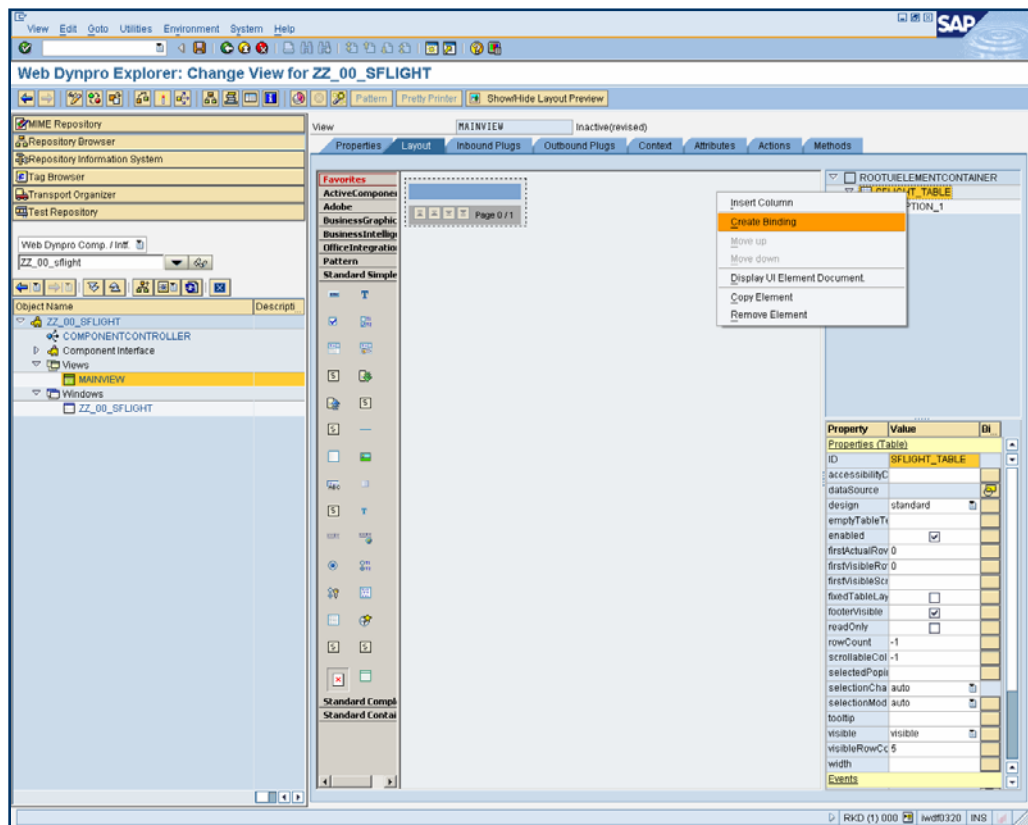
Creating a corresponding UI Element for the context node SFLIGHT_NODE

1. Switch to tab *Layout* of view MAINVIEW.
2. Insert a new UI element of type table under ROOTUIELEMENTCONTAINER and assign the properties in the given table.

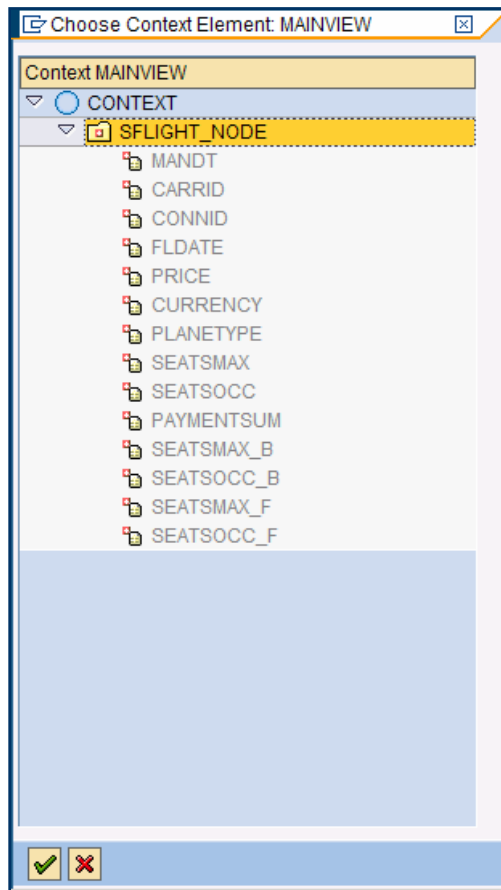


The name of the table is *SFLIGHT_TABLE*.

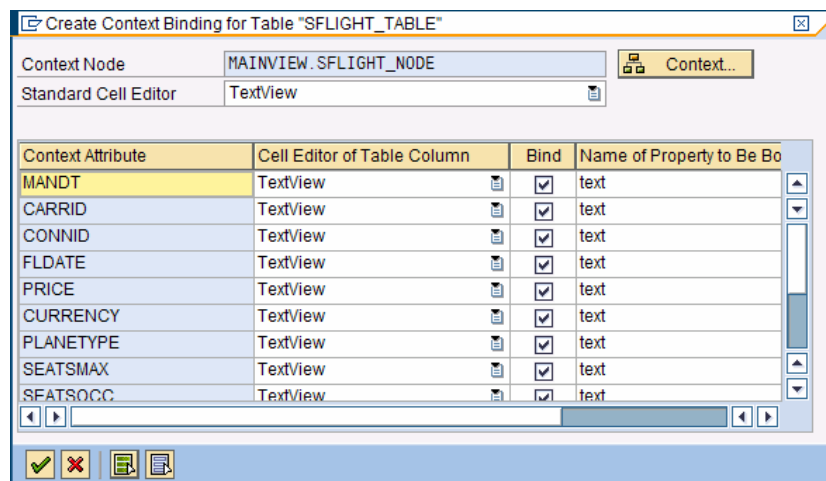
3. Create the binding of SFLIGHT_TABLE with context node SFLIGHT_NODE, select Text View as Standard Cell Editors and activate bindings for all cells.



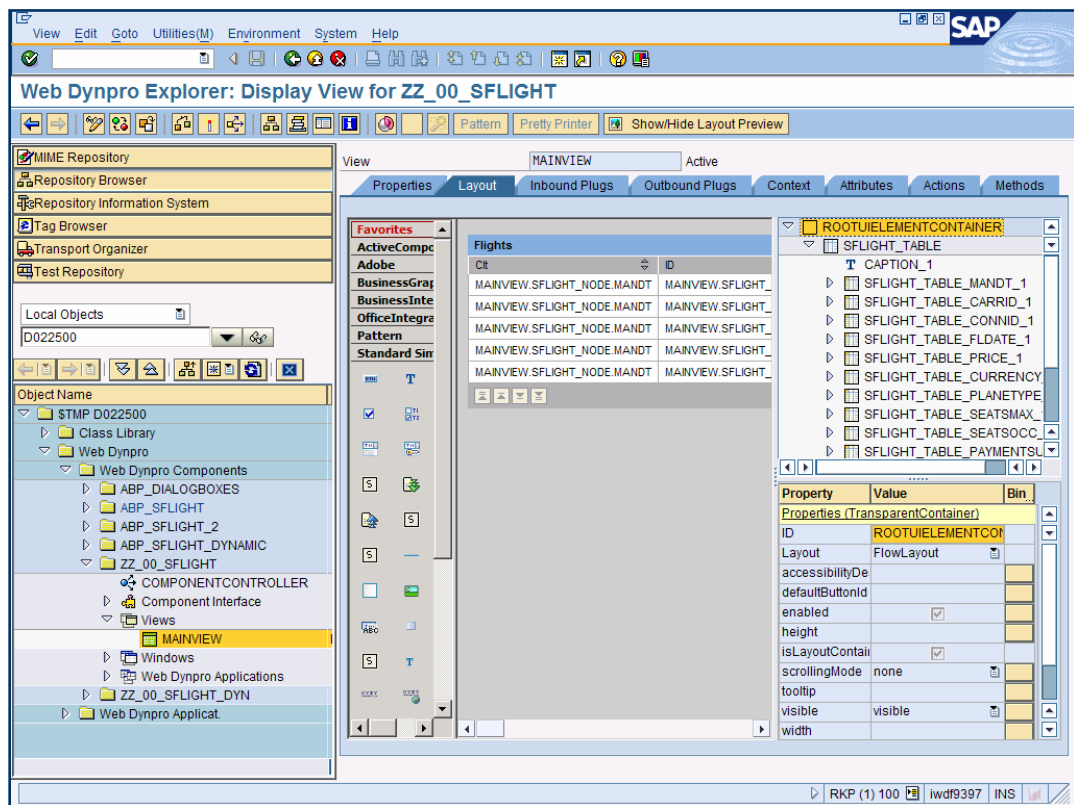
Select context node SFLIGHT_NODE and press *Continue*.



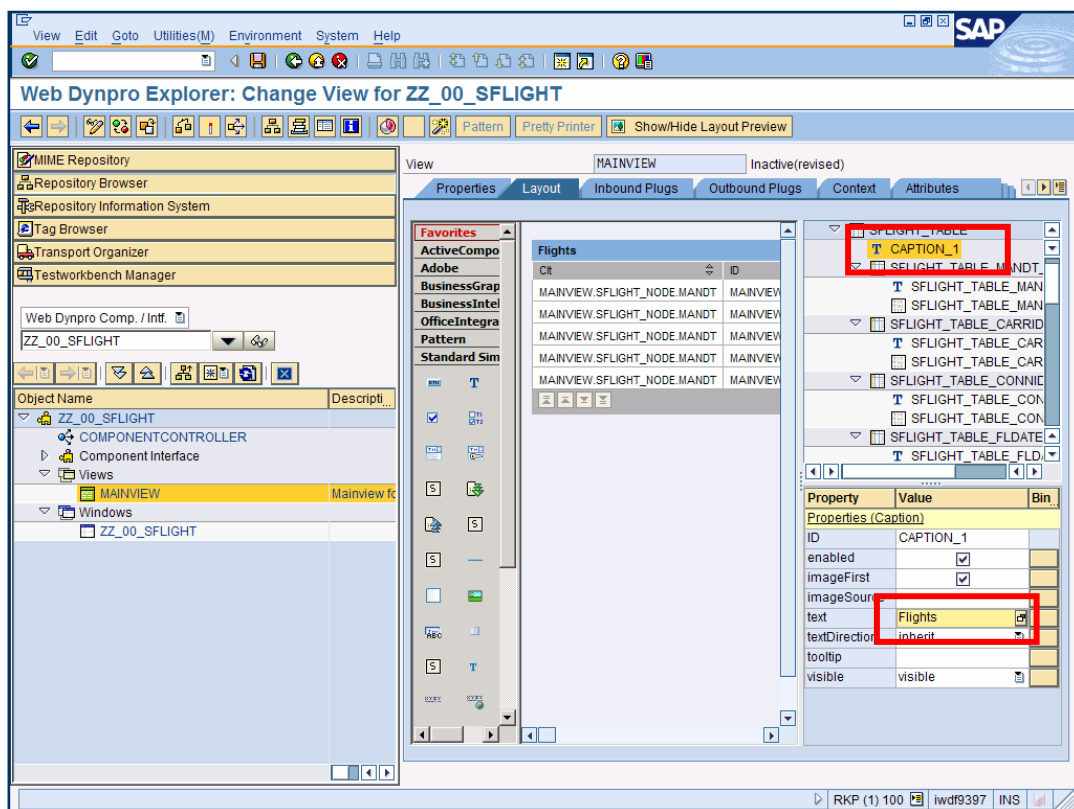
Make sure that the binding for all context attributes is enabled (all checkboxes are activated) and press *Confirm Entry (Enter)*.



The result should look like this:



4. Modify the property *text* of UI element *Caption_1* to value *Flights*.



On initialization of view MAINVIEW, the content of table SFLIGHT is loaded into an internal table and assigned to the data structure of context node SFLIGHT_NODE.

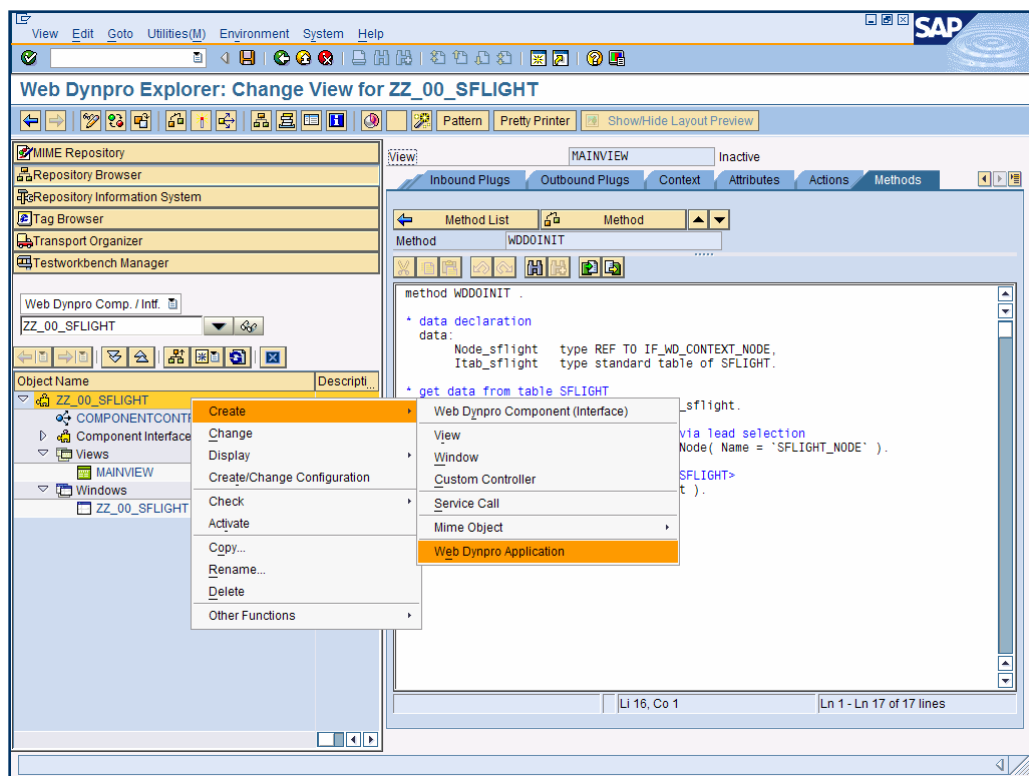


In productive Web Dynpro applications, you should not access database tables directly from Web Dynpro methods, but use supply functions or BAPI calls for data access. Direct select statements as used above will lead to a usability warning during code check.

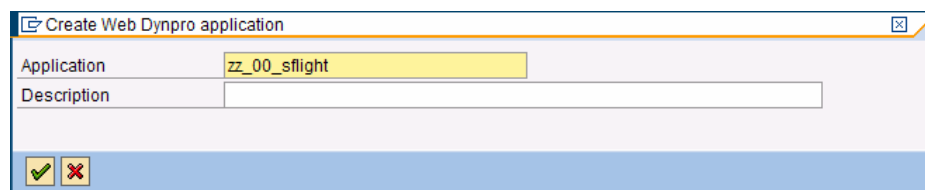
2. Save your changes.

Creating a Web Dynpro Application

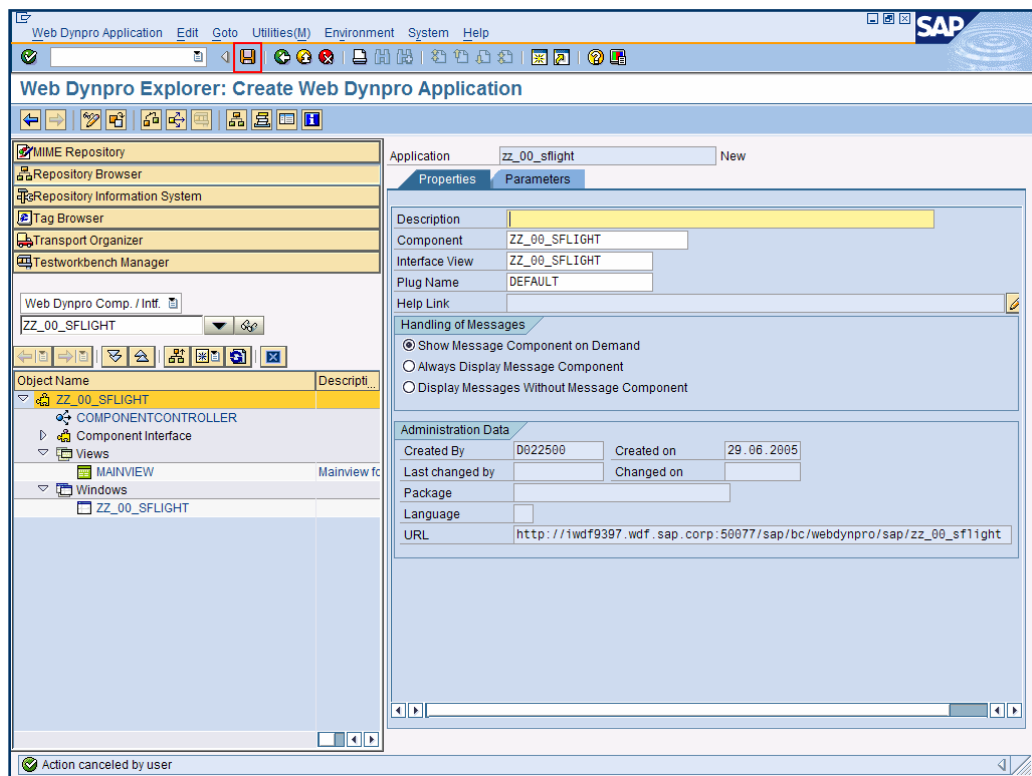
1. Click on the Web Dynpro component ZZ_00_SFLIGHT in the object tree and open the context menu to create a new application.



2. Enter a name (or accept the proposed name) and press *Continue (Enter)*.

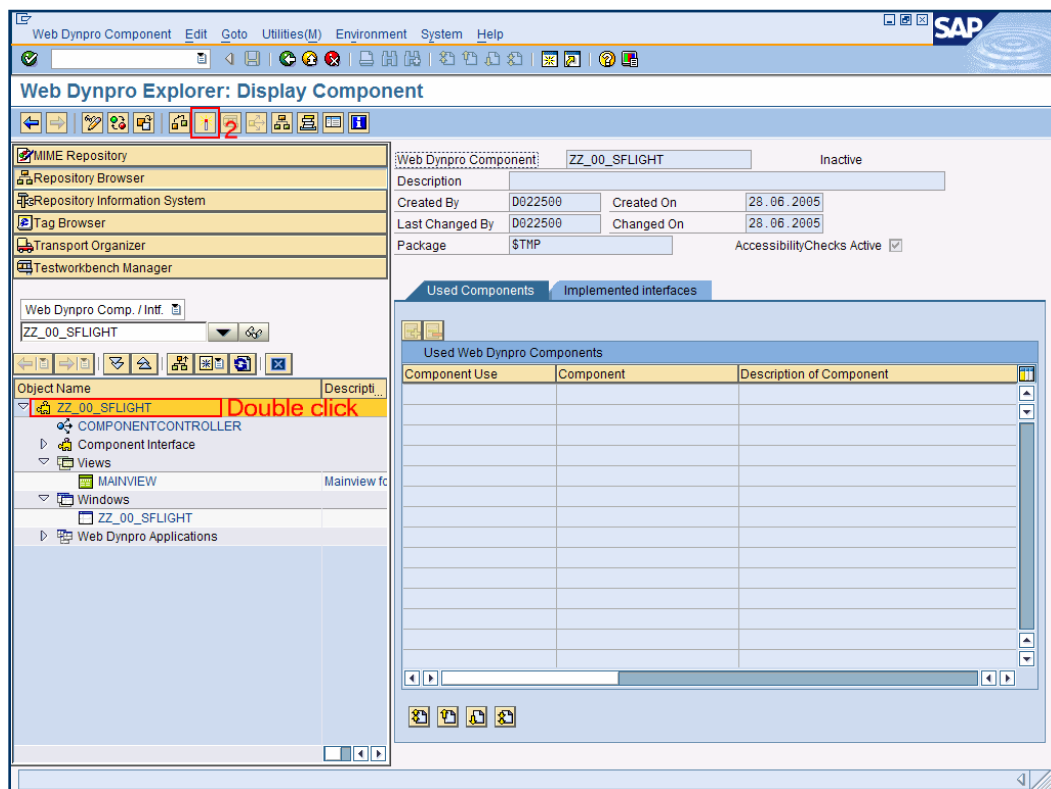


3. Save as local object.

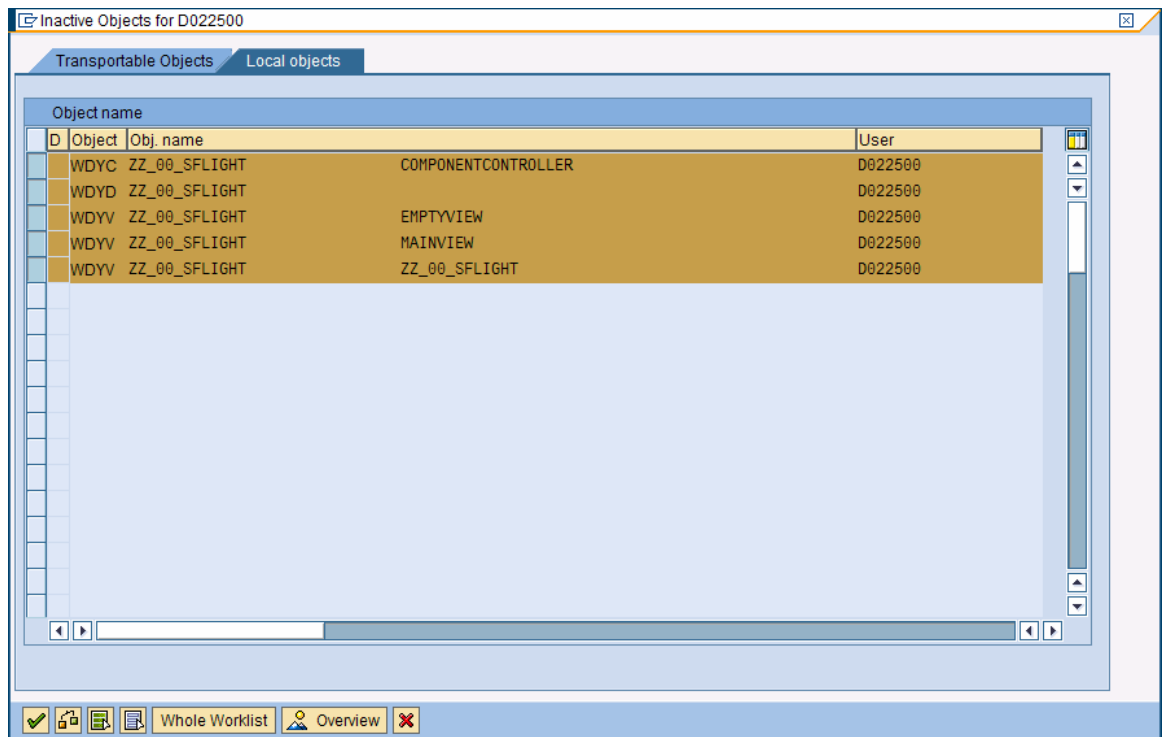


Activating and running your Application

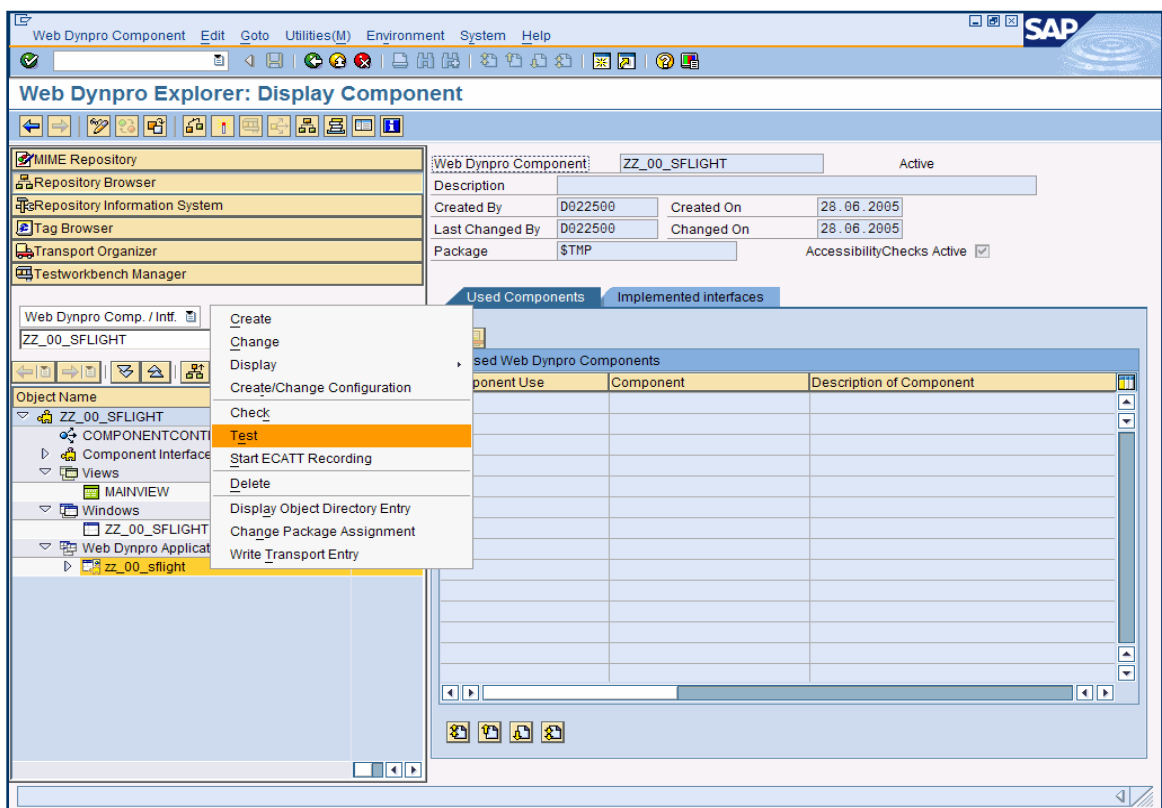
1. Activate all objects.



2. Select all relevant objects and press *Continue (Enter)*.



3. To start the application, right click on your Web Dynpro application entry and select context menu entry *Test*.



A browser will be started to run the Web Dynpro application. Log on using the same credentials as before.

The result page should look like this:

Client	Airline	Flight Number	Date	Airfare	Airline Currency	Plane Type	Max. capacity econ.	Occupied econ.	Total	Max. capacity bus.	Occupied bus.	Max. capacity
100	AA	0017	15.12.2004	422,94	USD	747-400	385	372	192.357,65	31	31	
100	AA	0017	12.01.2005	422,94	USD	747-400	385	370	190.699,69	31	30	
100	AA	0017	09.02.2005	422,94	USD	747-400	385	372	193.008,95	31	29	
100	AA	0017	09.03.2005	422,94	USD	747-400	385	363	188.517,24	31	29	
100	AA	0017	06.04.2005	422,94	USD	747-400	385	373	195.605,77	31	31	

Result

You have now created a Web Dynpro component which contains one view MAINVIEW. On view MAINVIEW a table element is displayed which is mapped to the view context node SFLIGHT_NODE. SFLIGHT_NODE represents the structure of database table SFLIGHT and is filled on initialization with data from SFLIGHT. Furthermore, you have created a Web Dynpro application (as handle for the Web Dynpro component) which can be started directly via URL. The result screen is a table which displays SFLIGHT data.

SAP Online Help

More information on Web Dynpro for ABAP can be found at the SAP Help Portal under the short link http://help.sap.com/saphelp_nw04s/helpdata/en/77/3545415ea6f523e10000000a155106/frame.htm or via path help.sap.com → Documentation → SAP NetWeaver → SAP NetWeaver 2004s → English → SAP NetWeaver Library → SAP NetWeaver by Key Capability → Application Platform by Key Capability → ABAP Technology → UI Technology → Web UI Technology → Web Dynpro for ABAP.