

## Extending MDM 5.5 Business Package functionality with Web Dynpro using EPCF

### Applies to:

SAP Netweaver 2004s  
SAP MDM 5.5 SP4

### Summary:

You want to extend the SAP MDM 5.5 Business Package- iView functionality using EPFC and SAP Web Dynpro.

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### Author Bio:



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## Introduction

This article will show you how to extend the SAP MDM 5.5 Business Package- iView functionality by using SAP Web Dynpro. With SAP MDM 5.5 SP4 there is a very good possibility to use Enterprise Portal Client Framework to throw certain MDM-repository information to a Web Dynpro application which is positioned on the same Portal page.

The following graphic shows you the result of this article:

The screenshot shows two SAP iViews. The top iView, titled 'MDM - ResultSet', displays a table of business partners. The table has columns for 'MDM Partner ID', 'Partner Number', and 'Name 1'. Two rows are visible: one for 'Test Company 1' (ID 1, Partner Number 10001) and one for 'Test Company 2' (ID 2, Partner Number 10002). A 'Start' button is circled in the first row. Below the table is a 'MDM - Catch App' iView. It contains a text field labeled 'MDM\_EPFC\_CompView' with the value 'Test Company 1' displayed next to the label 'CaughtValue:'. A large white arrow points from the circled 'Start' button to the 'CaughtValue' field.

MDM Partner ID	Partner Number	Name 1
1	10001	Test Company 1
2	10002	Test Company 2

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MDM - Catch App  
MDM\_EPFC\_CompView  
CaughtValue: Test Company 1

After clicking on “Start”, the EPFC throws the value of “Name 1” to the Web Dynpro application below. The Web Dynpro application displays this caught value.

## Prerequisites

The following software has to be installed in order to follow the instructions in this article.

- MDM 5.5 Server, MDM Console and MDM Data Manager; Version 5.5 SP4
- NetWeaver Portal 7.0
- MDM 5.5 SP4 Business Package
- Installed MDM 5.5 SP4- Business Partner repository on the MDM Server
- SAP Developer Studio 7

Please consult the installation guides at <http://service.sap.com/instguides> for instructions on how to download and install the required packages. Additional logon is required.

The MDM Business Package consists of four files that have to be deployed using the Software Deployment Manager (SDM). Make sure that the Business Package has the same patch level as the MDM 5.5 Server.

You will also need a portal user (referred to as administrator throughout this guide) that has the following roles assigned:

- super\_admin

## Attachments

I have attached the Web Dynpro project to this article. You can import this project into your SAP Developer Studio workspace.

Filename: [MDM\\_EPFC\\_SDN.zip](#)

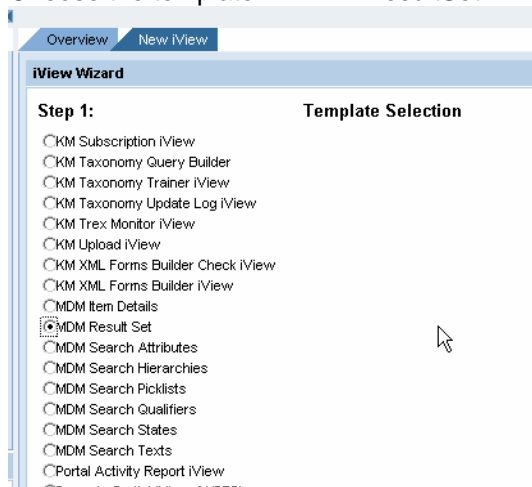
## Process flow

The table below lists individual descriptions for each of the steps involved in setting up the scenario to enlarge the SAP MDM 5.5 Portal iViews with Web Dynpro.

Step	Process Step Name	Description
1	Creating the Result Set iView	Use the Portal Content Administration to create a MDM Result Set iView including the Custom Event
2	Developing the Web Dynpro application	Use the SAP Developer Studio to develop a Web Dynpro which catches the EPCF event
3	Creating the Web Dynpro iView	Use the Portal Content Administration to create a Web Dynpro iView for your developed Web Dynpro application
4	Creating the Portal page	Use the Portal Content Administration to create a Portal page which includes both iViews
5	Test Scenario	Test the result of this Article

### Step 1: Creating the Portal Result Set iView

Login to your Portal as administrator user. Navigate to “Content Administration” → “Portal Content”. Below this folder create a new folder called “MDM-EPFC”. Within this folder create a new template-iView. Choose the template “MDM – ResultSet”.



Use the name “EPFC-ResultSet” (Step 2) during the setup.

**MDM iView Wizard**

**Step 2: General Properties**

Name: \*

iView ID: \*

iView ID Prefix (Example: com.companyname):

Master Language: \*

Description:

Cancel Back Next >

In Step 3 choose the System Alias to your installed MDM 5.5 SP4 – Business Partner repository. (See [http://help.sap.com/saphelp\\_mdmgds55/helpdata/EN/index.htm](http://help.sap.com/saphelp_mdmgds55/helpdata/EN/index.htm) for “Technical Description and Configuration Information”)

**MDM iView Wizard**

**Step 3: System Alias**

System Alias: \*

Step 4: Choose the main table

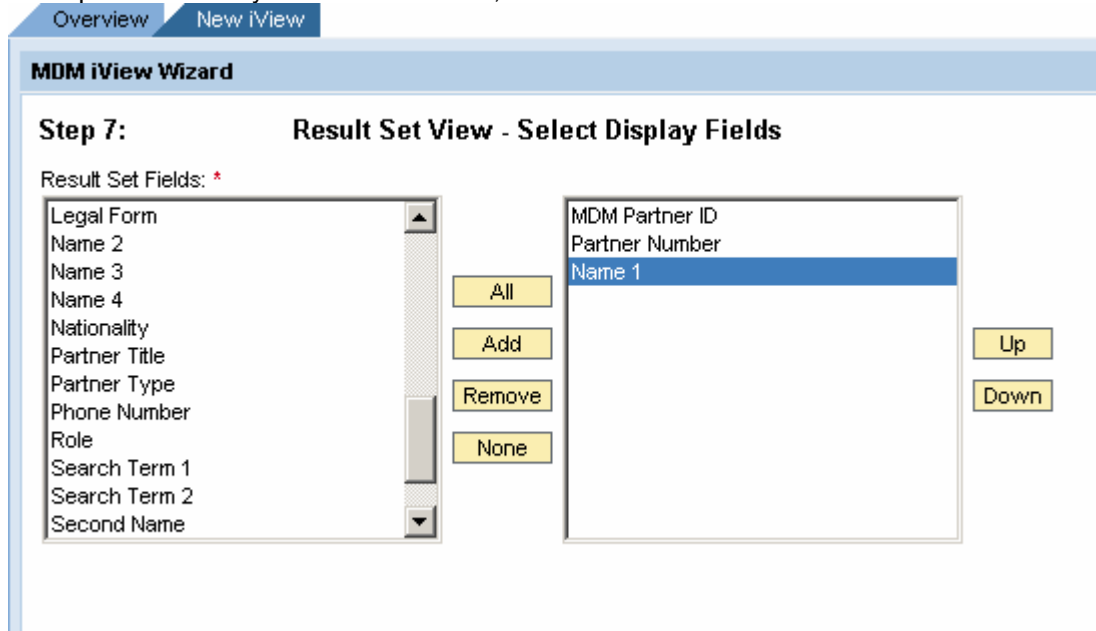
**MDM iView Wizard**

**Step 4: Search Table**

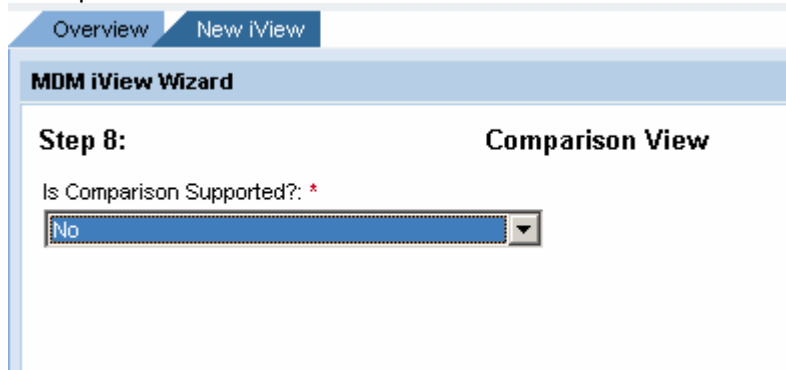
Search Table: \*

Leave Step 5 and 6 as it is proposed!

In Step 7 choose only “MDM-Partner-ID” , “Partner Number” and “Name 1”.



In Step 8 choose “no”

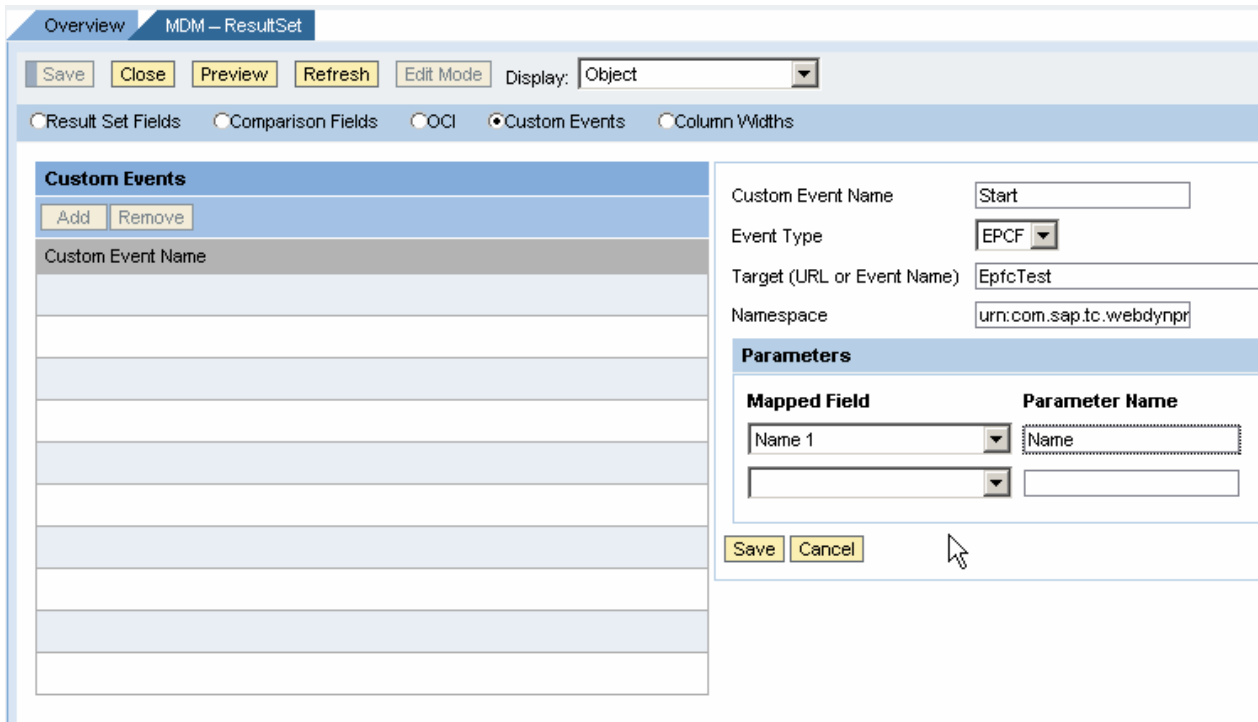


Leave Step 9 as proposed and Finish with Step 10.

Open the new created iView and click on “Custom events”.

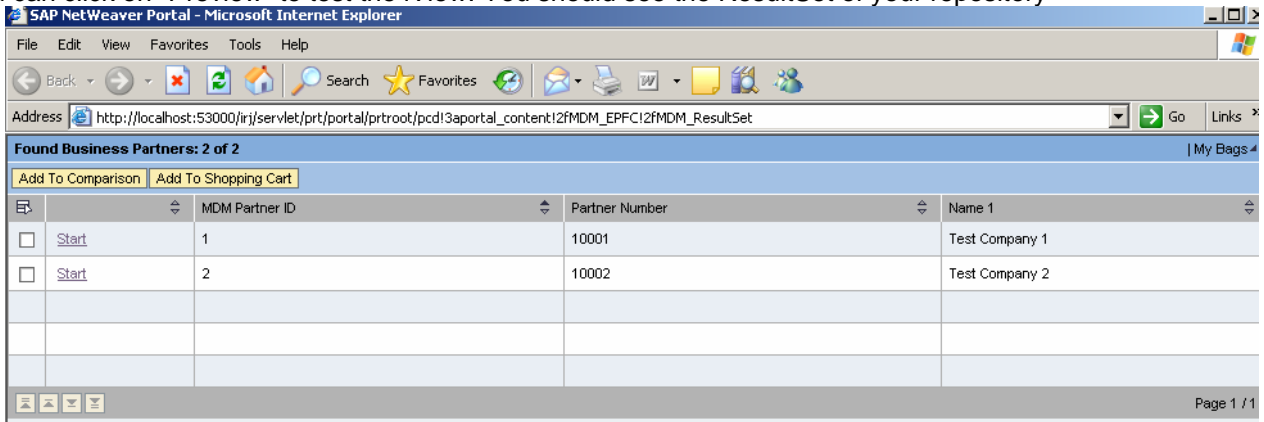
- Click on “Add” and enter “Start” as Custom Event Name,
- Choose “EPFC” as type
- Enter “EpcfTest” as Target
- Enter “urn:com.sap.tc.webdynpro.mdm.epfc.test” as Namespace
- Choose as Parameter “Name 1” and as Parameter Name enter “Name”

→ Save



Do not forget to SAVE the iView !!

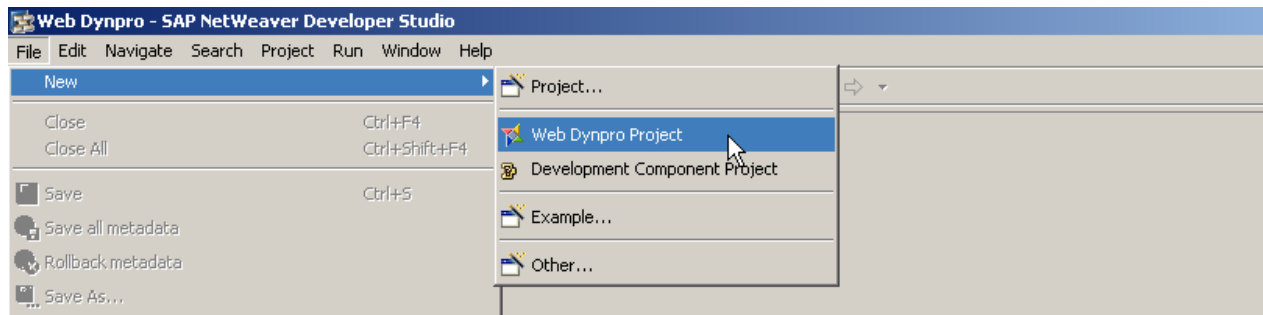
You can click on "Preview" to test the iView. You should see the ResultSet of your repository



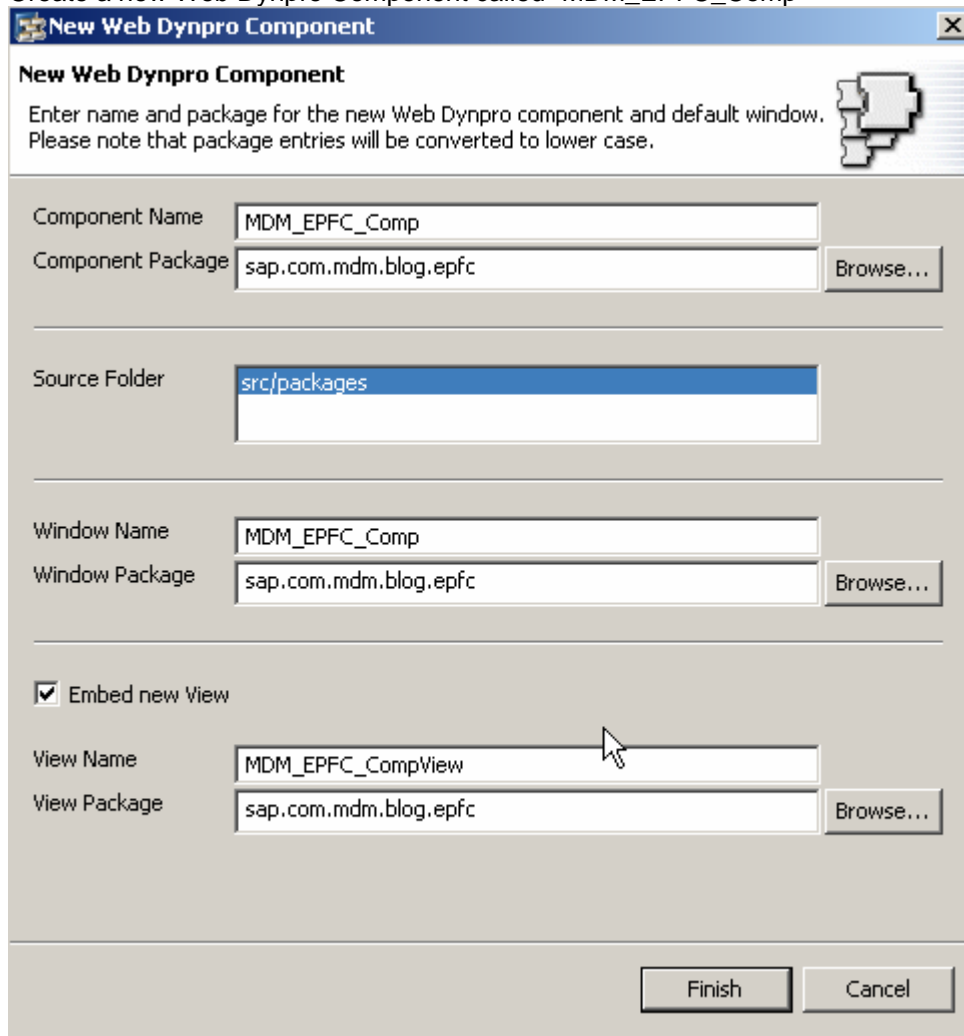
## Step 2: Developing the Web Dynpro application

### A. Create the Web Dynpro Project

Open the SAP Developer Studio 7 and create a new Web Dynpro project. Choose "MDM\_EPFC" as project name.



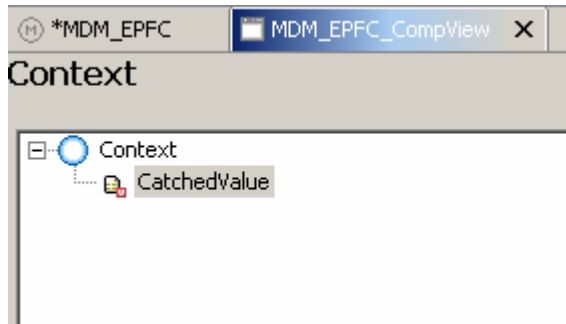
Create a new Web Dynpro Component called "MDM\_EPFC\_Comp"



### B. Create the WD-Context

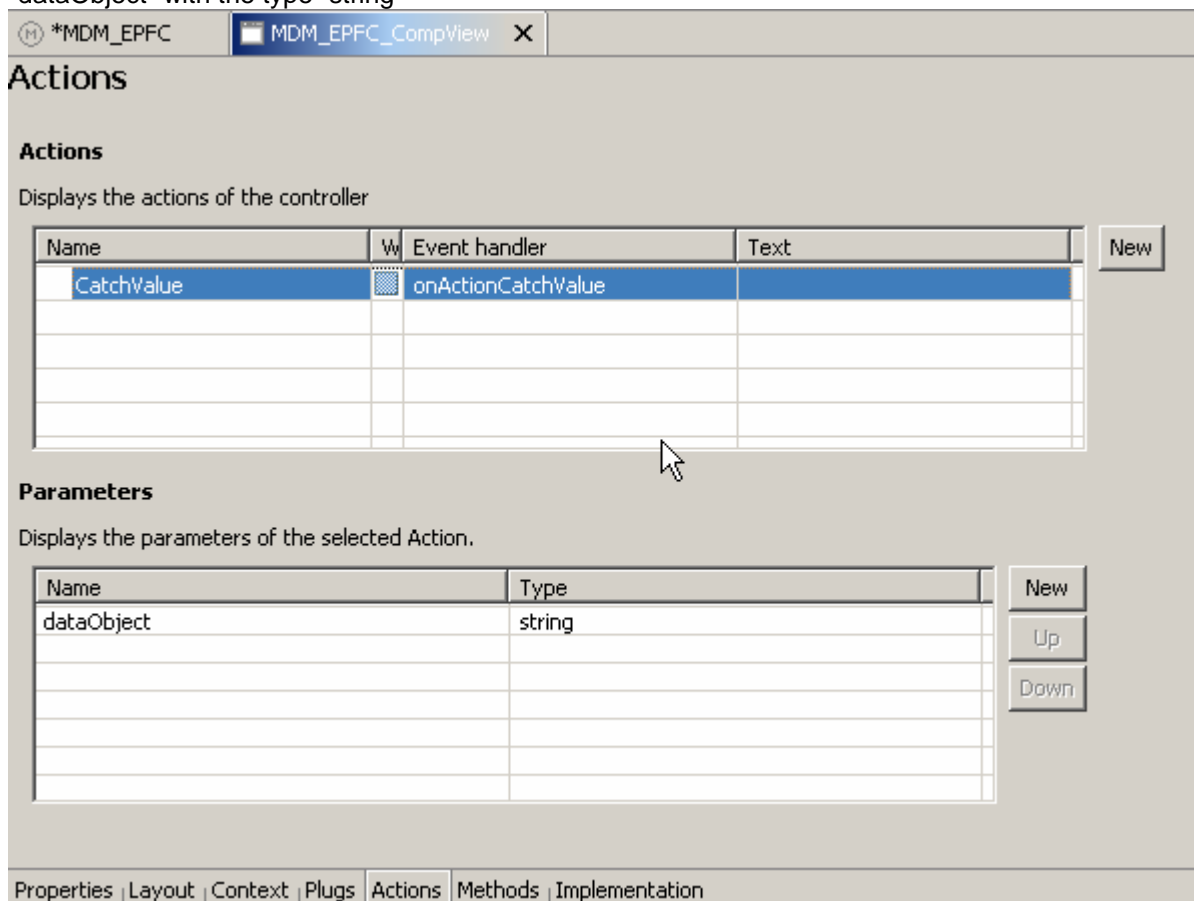
Open the View "MDM\_EPFC\_CompView" within the Web Dynpro perspective and add a new Context Value Attribute called "CaughtValue".





### C. Create the Action

Add a new action called "CatchValue" and click next to define a parameter. Add the parameter "dataObject" with the type "string"



### D. Implementation

Goto the "Implementation" tab and add the following two String variables at the end of the code:

```

/*
 * The following code section can be used for any Java code that is
 * not to be visible to other controllers/views or that contains constructs

```

```

* currently not supported directly by Web Dynpro (such as inner classes or
* member variables etc.). </p>
*
* Note: The content of this section is in no way managed/controlled
* by the Web Dynpro DesignTime or the Web Dynpro Runtime.
*/
/**
 * @begin others
 * private String namespace;
 * private String eventname;
 * @end
 */

```

Now you have to implement the subscribing to the Portal Event in the wdInit() – method:

```

/**
 * @begin javadoc:wdDoInit()
 * ** Hook method called to initialize controller. */
 * @end
 */
public void wdDoInit()
{
    /**
     * @begin wdDoInit()
     * namespace = "urn:com.sap.tc.webdynpro.mdm.epfc.test";
     * eventname = "EpfCTest";
     *
     * WDPortalEventing.subscribe
     * (namespace,eventname,wdThis.wdGetCatchValueAction());
     *
     * @end
     */
}

```

Consider that you have defined the namespace and the eventname in the ResultSet iView during Step 2.

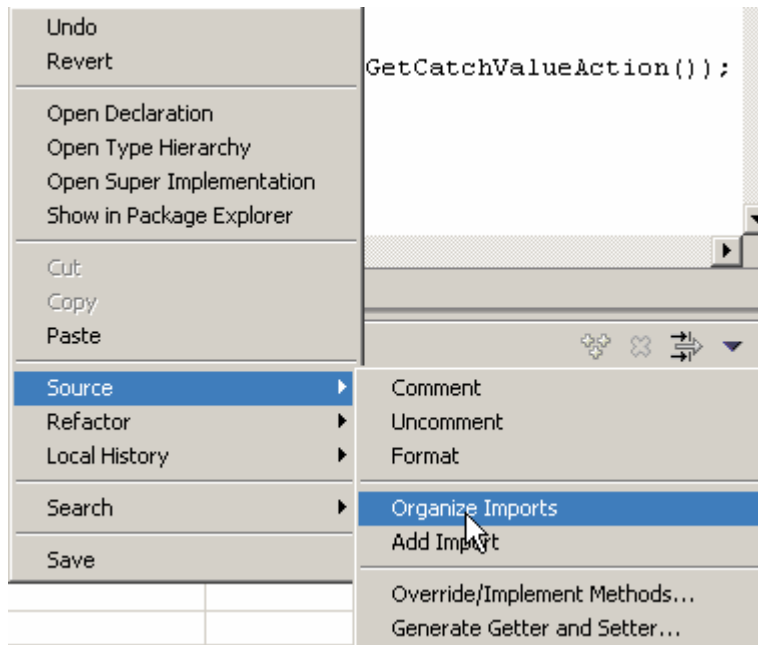
Add the following code to the created Action:

```

/**
 * @begin javadoc:onActionCatchValue(ServerEvent)
 * ** Declared validating event handler. */
 * @end
 */
public void
onActionCatchValue(com.sap.tc.webdynpro.progmodel.api.IWDCustomEvent wdEvent,
java.lang.String dataObject )
{
    /**
     * @begin onActionCatchValue(ServerEvent)
     * int marked=dataObject.indexOf("=");
     * String value=dataObject.substring(marked+1);
     * wdContext.currentContextElement().setCaughtValue(value);
     *
     * @end
     */
}

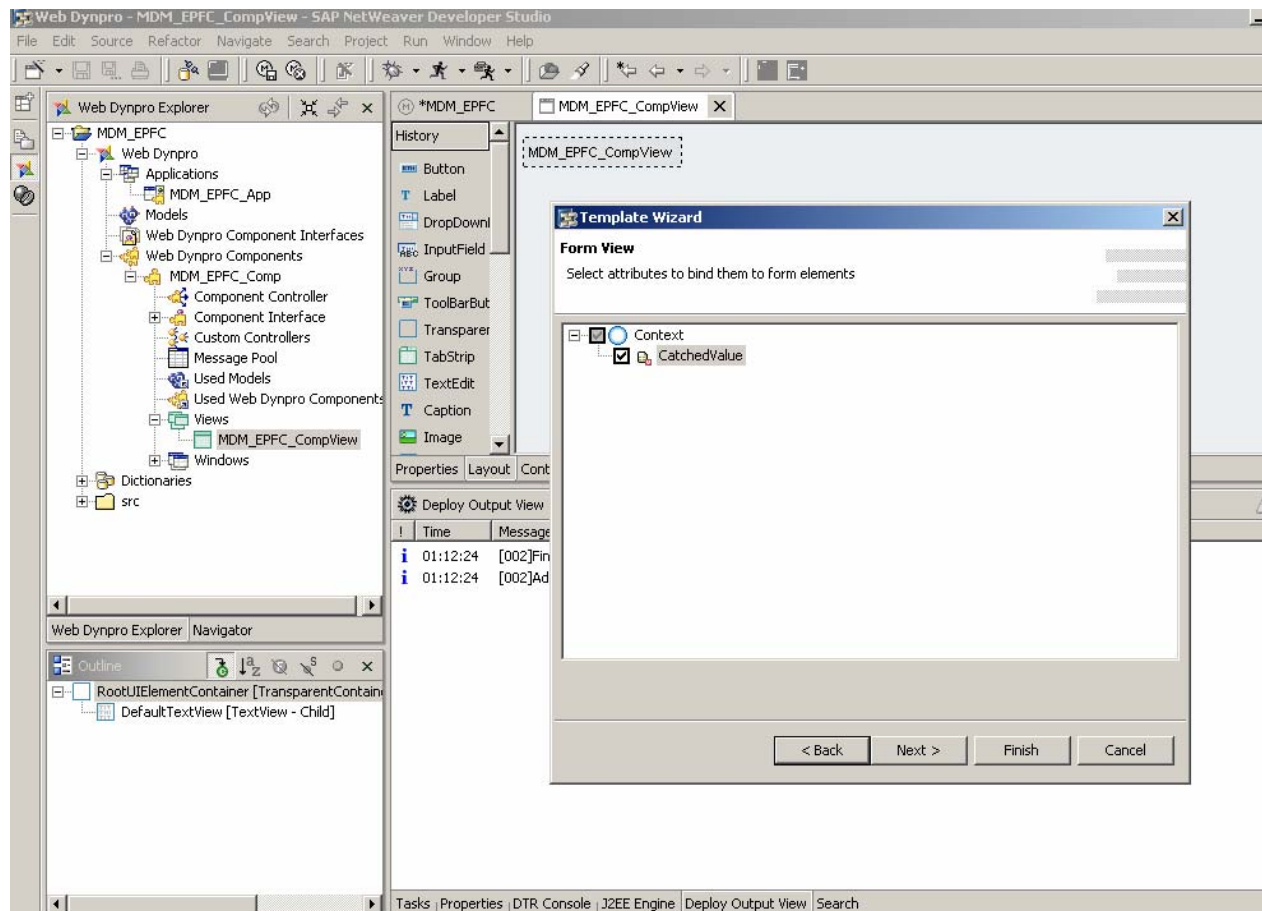
```

You must use “Organize Imports” functionality. This will add the Portal Eventing-API to your class at the top of the source code file

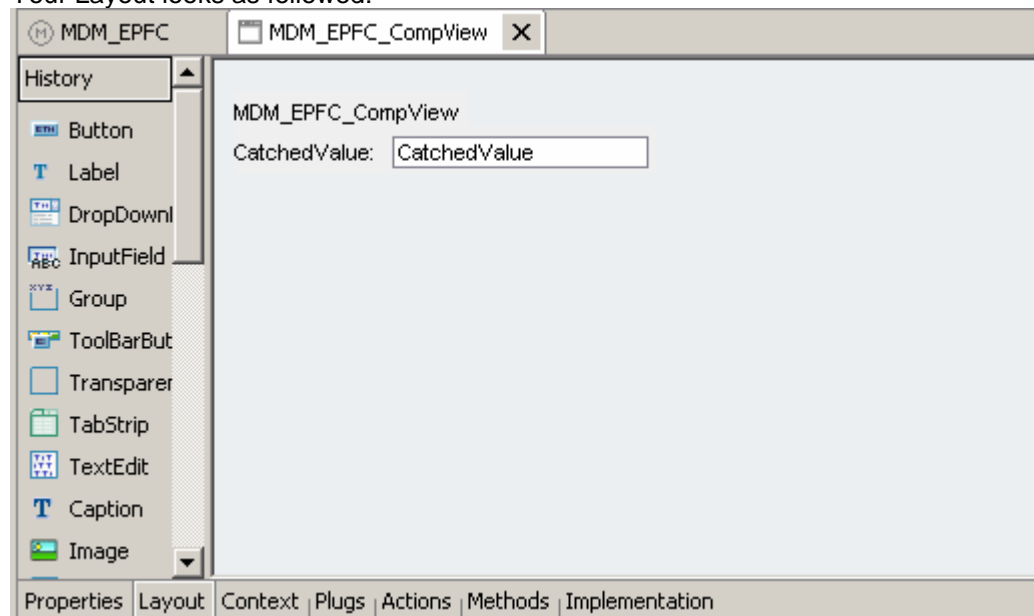


#### E. Define the WD-View

Click on the Layout tab and apply a simple form to the View. Choose the one and only context attribute for displaying.

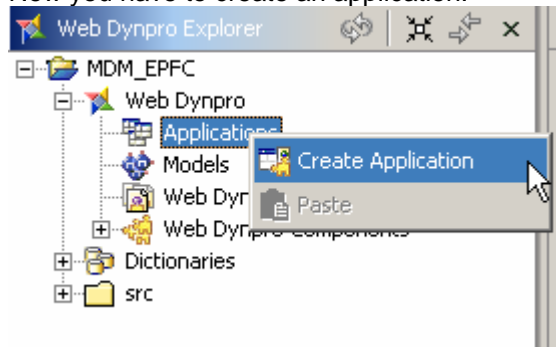


Your Layout looks as followed:

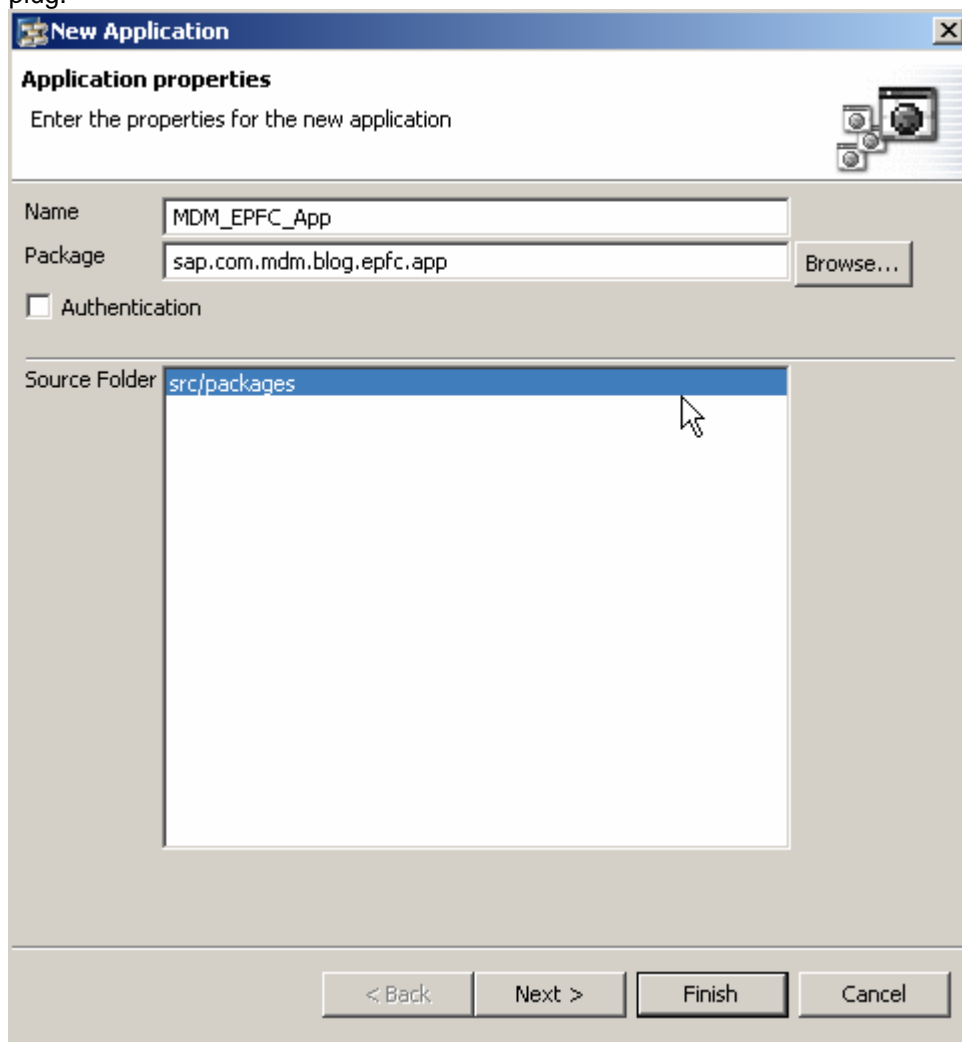


### F. Create Application

Now you have to create an application:

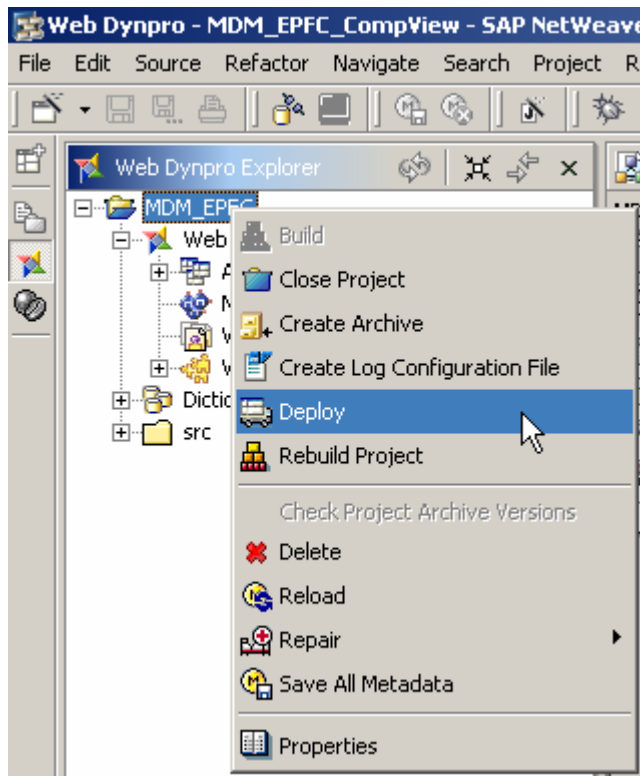


Enter the name "MDM\_EPFC\_App" and choose finish. The wizard will add the default plug as the start plug.



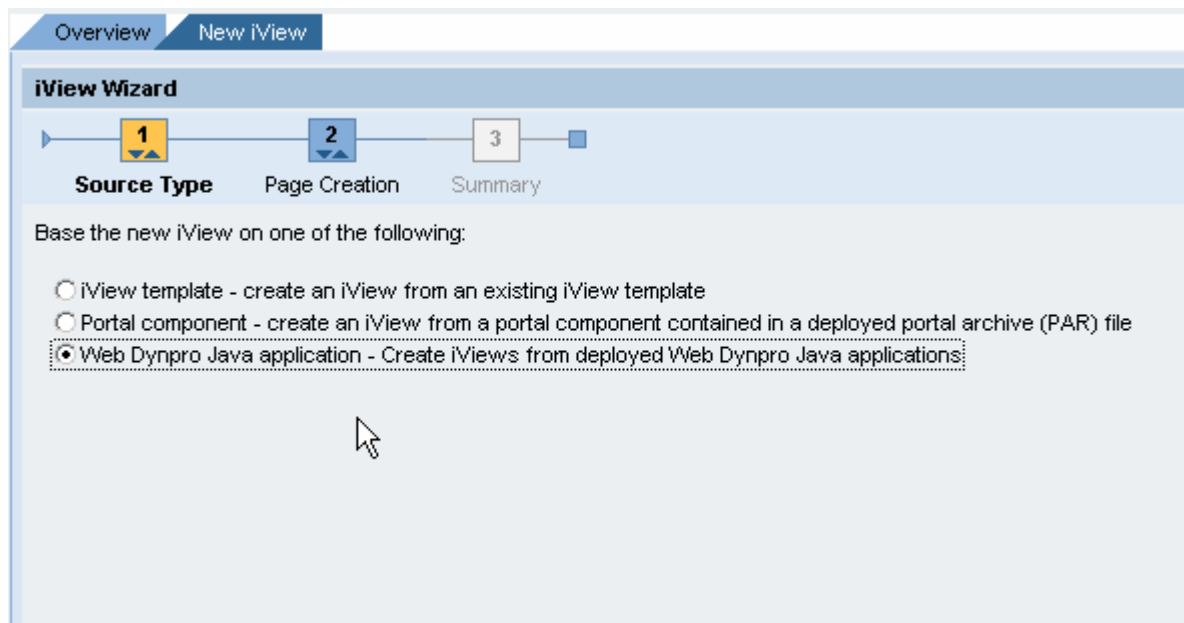
### G. Create Archive & Deploy

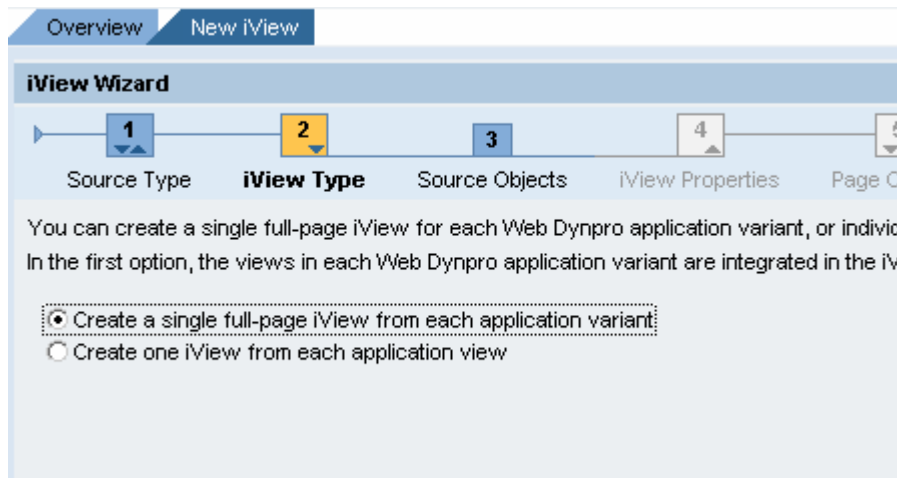
Finally you must create the archive and deploy the application to your Portal J2EE engine.



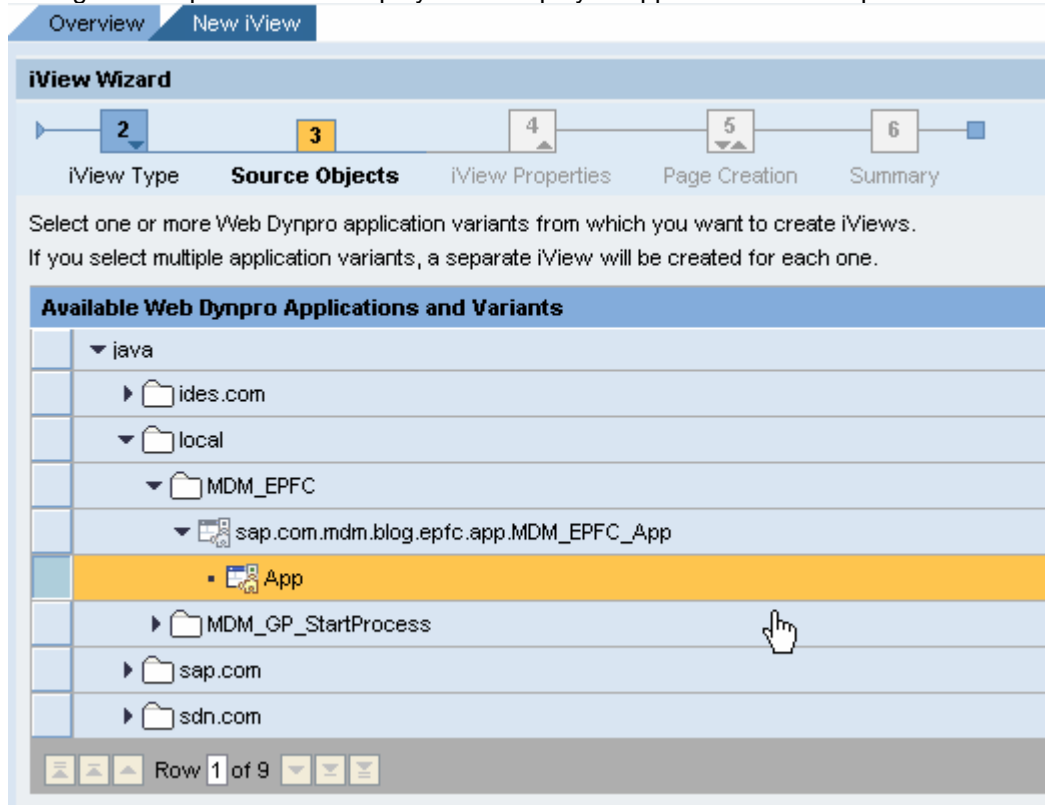
### Step 3: Creating the Portal Web Dynpro iView

Login to your Portal as administrator user again and create a new Web Dynpro iView below your folder "MDM-EPFC".

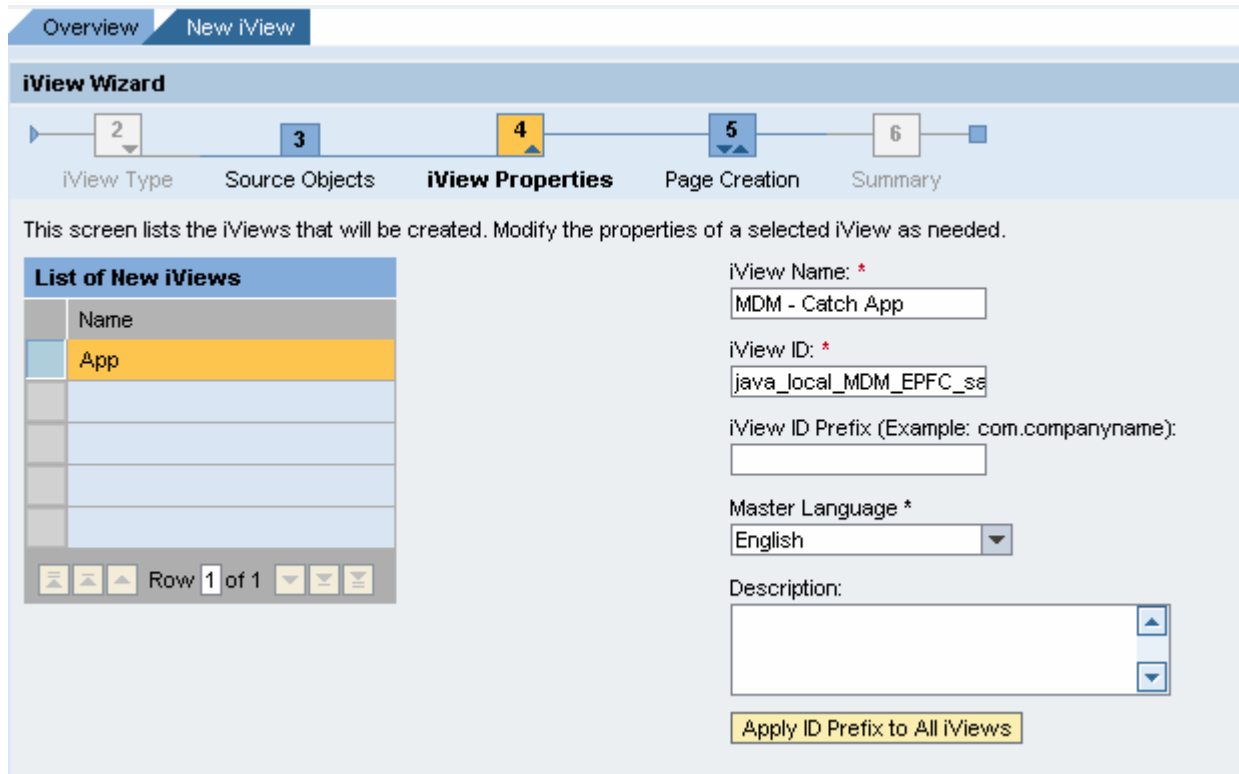




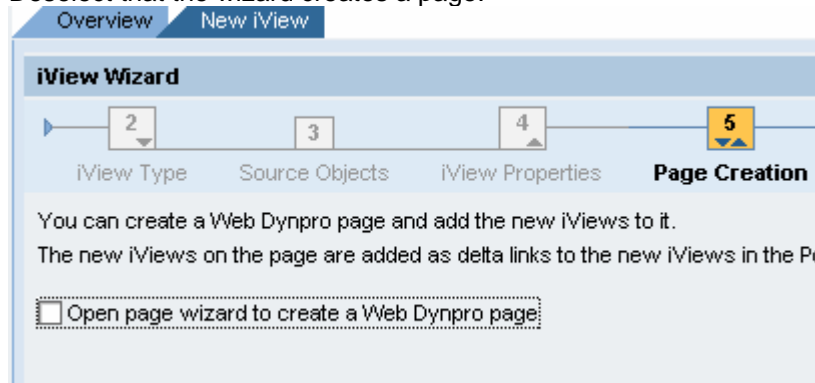
During the setup choose the deployed the deployed application from Step 2.



Enter a name for the iView:



Deselect that the wizard creates a page:

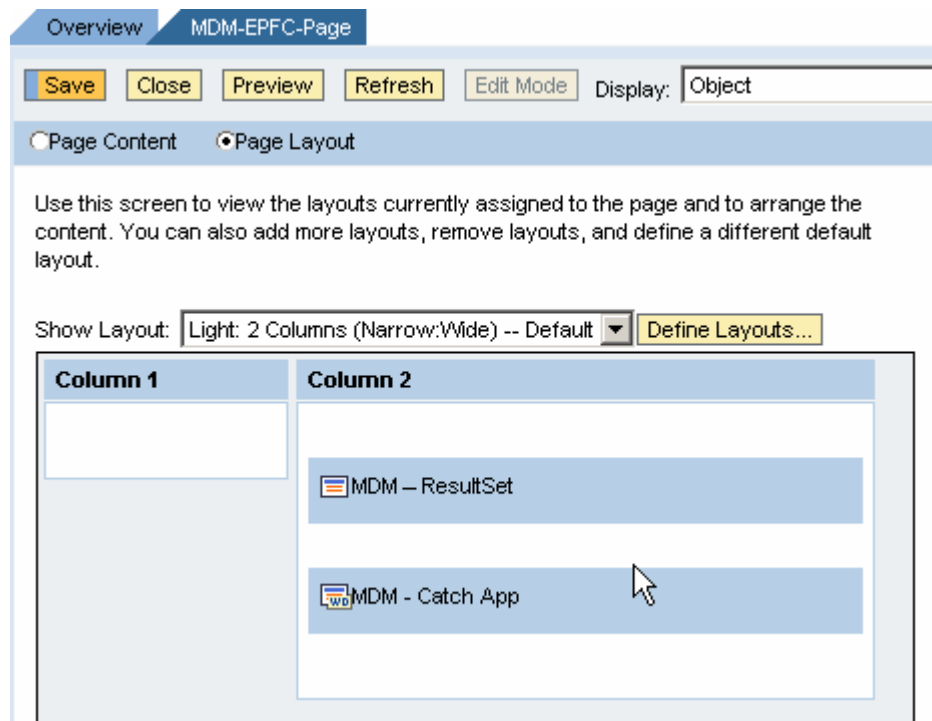


Finish the wizard.

#### Step 4: Creating the Portal Result Page

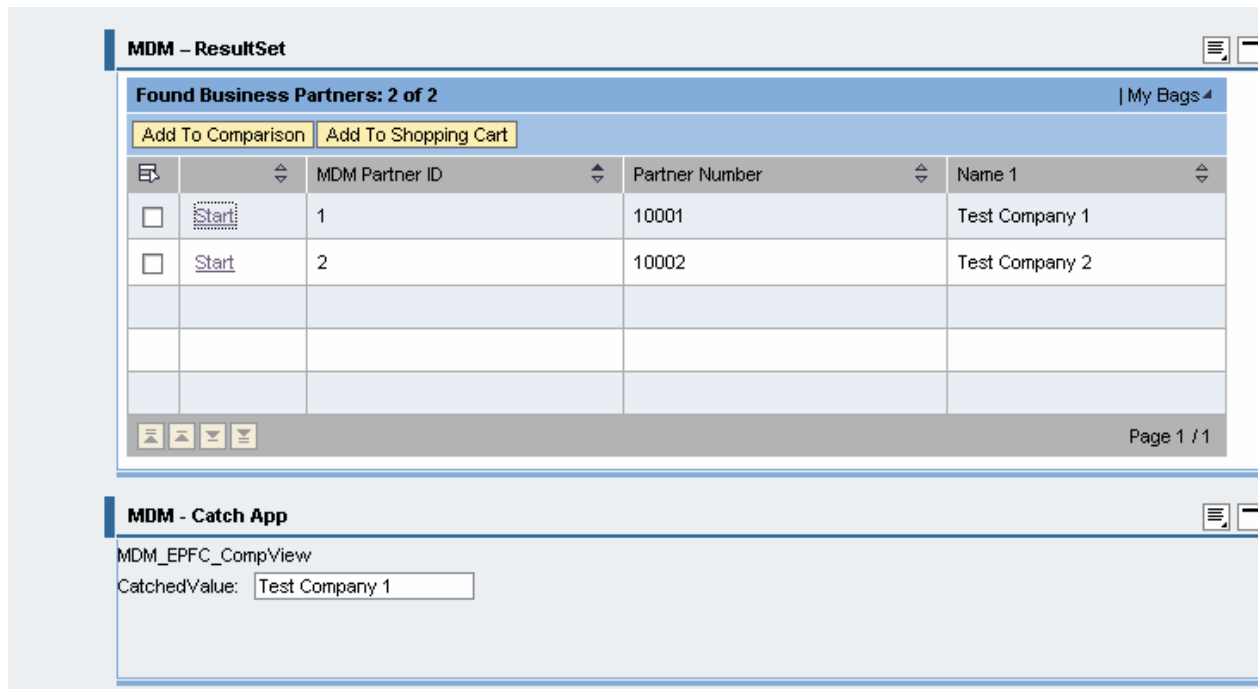
Create a page called “MDM-EPFC-Page” within the folder “MDM-EPFC”. Use the Page-Layout you want and add the two created iView to the page. The following screenshot gives an example to you:





### Step 5: Test Scenario

You can add this page to a workset or directly to a portal role. After opening the page you can test the functionality. After clicking on the event, you will see that the “Name 1” is transferred to the Web Dynpro application.



## Extending the application

### Use WDConfiguration

You can use the WDConfiguration to read the namespace and the eventname from a configuration file (Please read the useful article: <https://www.sdn.sap.com/irj/sdn/weblogs?blog=/pub/wlg/2456>). With that dynamic reading technique you are much more flexible during the setup of the iView.

### Throw more information

Additionally you can send much more information to the Web Dynpro application. Add more events to the result set iViews and catch the values in your application.

### Start a SAP Guided Procedure

I'm using this technology to start a SAP Guided Procedures application. The Portal- users searches the records using the SAP MDM iViews. After they found the desired record they are starting e.g. the GP-based Deletion Request process. This is a very useful way because otherwise you must implement the repository search functionality by yourself (if you want to use SAP GP as workflow system) Please read the very good article from Mr. Lars Rüter: Create Master Data Centrally Using Guided Procedures (<https://weblogs.sdn.sap.com/pub/wlg/3834>)

### More ideas

There are a lot of operational scenarios for this EPFC within SAP MDM 5.5 such as:

- Call a SAP ECC- BAPI to validate entries like country and postal code
- Call a web service to validate other repository fields
- Make calculation within Web Dynpro and write the values back to the MDM-repository

## Attachments

Web Dynpro Project as zip file: [MDM\\_EPFC\\_SDN.zip](#)

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