

How to Pre-fill Tax Form Fields using Wedynpro Tax Forms, Events for WD Application for Form Processing, Processing Activities and BRFplus



Applies to:

Tax and Revenue Management

Summary

During the manual creation of a Tax Return, Tax Registration or any other Form Tax process created using Webdynpro technology, the Tax officer might require to pre-fill certain tax form fields automatically. This cookbook describes all the necessary steps to pre-fill form fields by using a combination of BRFplus rules and Processing Activities in TRM.

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Author Bio



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Introduction

In Tax and Revenue Management, the form data needed for any of the form-based processes (Tax return, Tax refunds and Registration) can be uploaded automatically using the Migration Workbench (transaction EMIGALL) and can also be entered manually by the tax officer on the Tax Officer Work center. Since Enhancement Package 5, besides Interactive Adobe Forms, SAP Webdynpro forms can be used for this purpose. What this cookbook describes is all the necessary steps to have Webdynpro form fields pre-filled during the manual form creation.

There are three main components that are used in order to accomplish this:

1. Events for WD Application for Form Processing

We use an event to define the additional functionality for the Webdynpro form and assign a processing activity to it. This activity is defined in Customizing (e.g. customizing activity Define Activity that Calls the BRF for Form Processing)

2. Processing Activities

You can specify the actions that the system should perform for each individual activity. For example, you can define that invoicing is started automatically after billing for one activity and posting simulated documents for another.

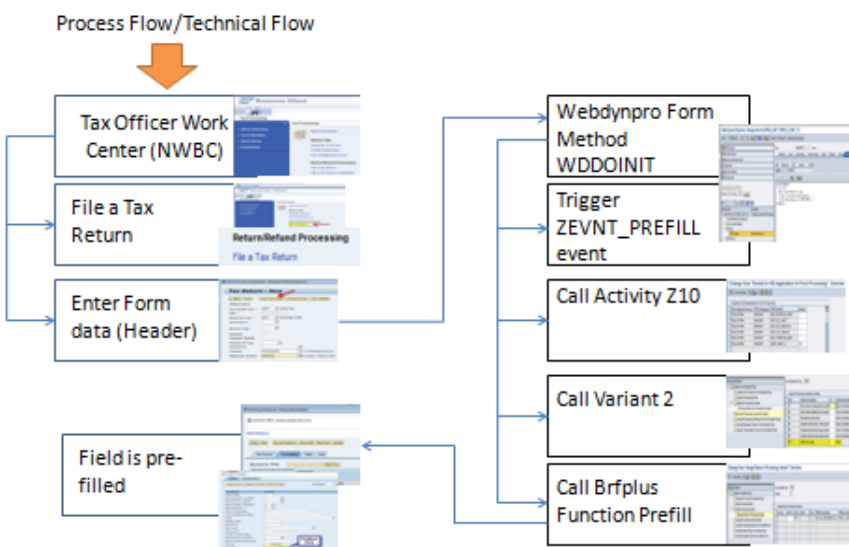
An activity processes a form bundle via our rules engine (Business Rule Framework or BRFplus). If you are using BRFplus, you define for each BRFplus function for which activity it is called.

3. BRFplus

We use the rule engine BRFplus to pre-fill the form data fields during the tax form creation.

Flow Diagram

On this diagram you can see the main elements I mentioned above combine with some customizing that has to be in place in order to derive the right BRFplus Application/Function. Every step on this diagram is explained in detail on this cookbook.



Form/Scenario

First of all select your Form scenario you want to use or create a new one if you wish. Check that that you have a unique ID entered on the Form field (e.g. ZSUT_UNIQUE_ID_11223223). This is a pre-requisite to use a Web Dynpro Form:

Change View "Version": Details

The screenshot shows the 'Change View Version: Details' dialog. On the left, a tree view shows the hierarchy: Dialog Structure > Basic Data > Version (selected) > Form Views > Form View Fields > TRM Fields Attributes > Related ISR Scenarios. The main area contains the following configuration:

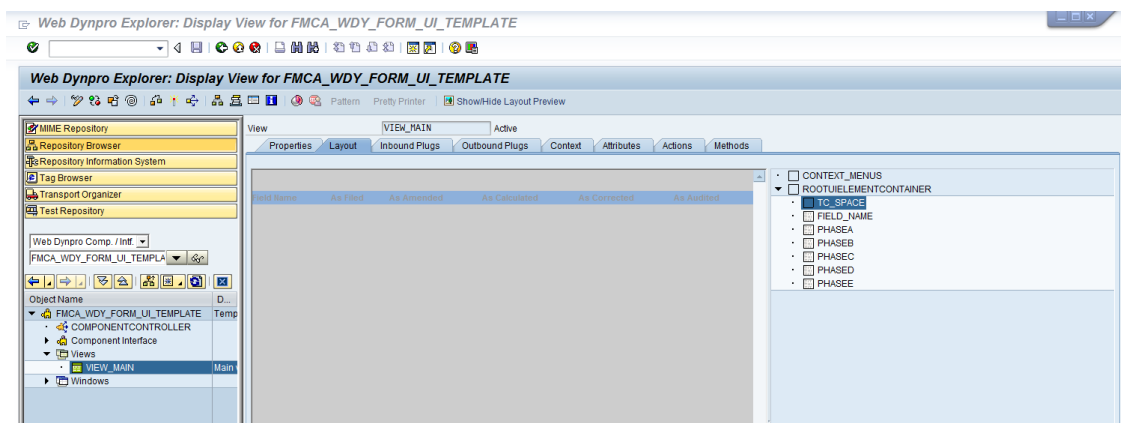
- You are in scenario: ZSFP
- The version is called: 0
- This scenario version is active
- Valid From: 01/01/2001 To: 12/31/9999
- The scenario contains the following general details:
 - Description: Sales & Use Tax - FPF
 - Enter a long text here: [icon]
 - Application: T Tax and Revenue Management (TRM)
- The scenario contains the following details for request entry:
 - Entry Type in Web: Entry Using Adobe PDF
 - Form: ZSUT_UNIQUE_ID_11223223
 - Interface: [empty]
- The scenario contains the following specifications for processing the request:
 - Additional Data for Scenario: [button]

Note: Since we are going to use Web Dynpro Forms, there is no need to generate the Adobe Form.

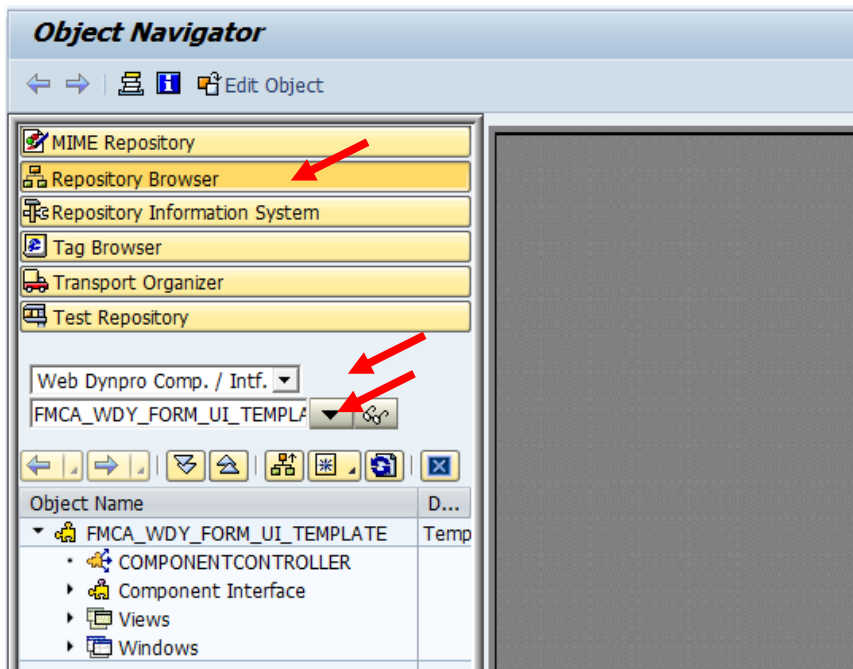
Create Webdynpro form (Optional)

If you have not created a Web Dynpro form yet, you can create it using the Web Dynpro template provided by SAP and assign it to your form/scenario (e.g. ZSFP). Here the steps to create the Web Dynpro form.

Note: The Web Dynpro template shown in the next screen shot includes the header structure (columns e.g. "As Filed", As Amended, As Calculated.....) for the new Web Dynpro screen:

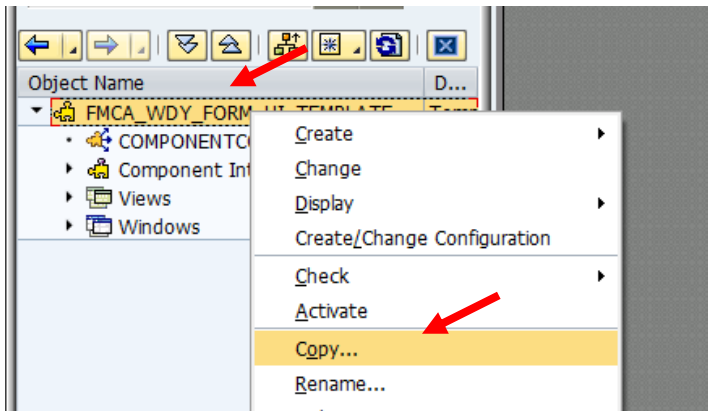


The first step is to make a copy from the template (e.g. "FMCA_WDY_FORM_UI_TEMPLATE".) to create your own Web Dynpro screen (e.g. Z_FMCA_WDY_FORM_UI_VA98). To do this run transaction SE80 and in the Repository Browser select Web Dynpro Comp. / Intf and enter the name for the Web Dynpro Component to be copied "FMCA_WDY_FORM_UI_TEMPLATE":

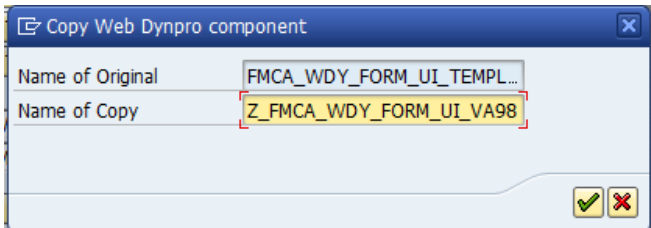


Click on  to display the component. The object is listed below.

Execute a right mouse click on the object name (FMCA_WDY_FORM_UI_TEMPLATE) in the list and select 'Copy'



Enter the name of your Web Dynpro Application (e.g. 'Z_FMCA_WDY_FORM_UI_VA98' as the Name of Copy:



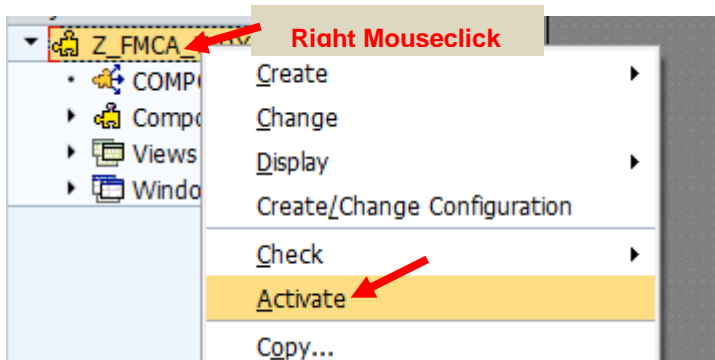
Click on 

Create the Web Dynpro Component as Local Object.

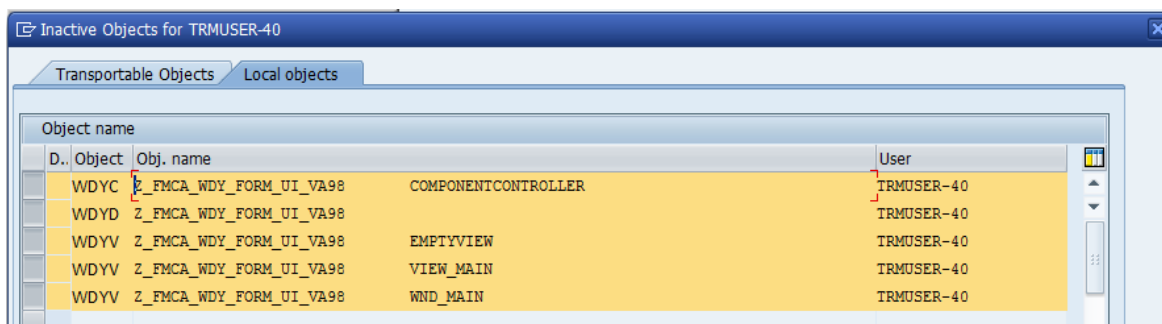
In the Object List, the name of the new Web Dynpro Component is shown.

Activate your Web Dynpro Component.

Execute a right mouse click on the object name (e.g. Z_FMCA_WDY_FORM_UI_VA98) in the list and select 'Activate'.

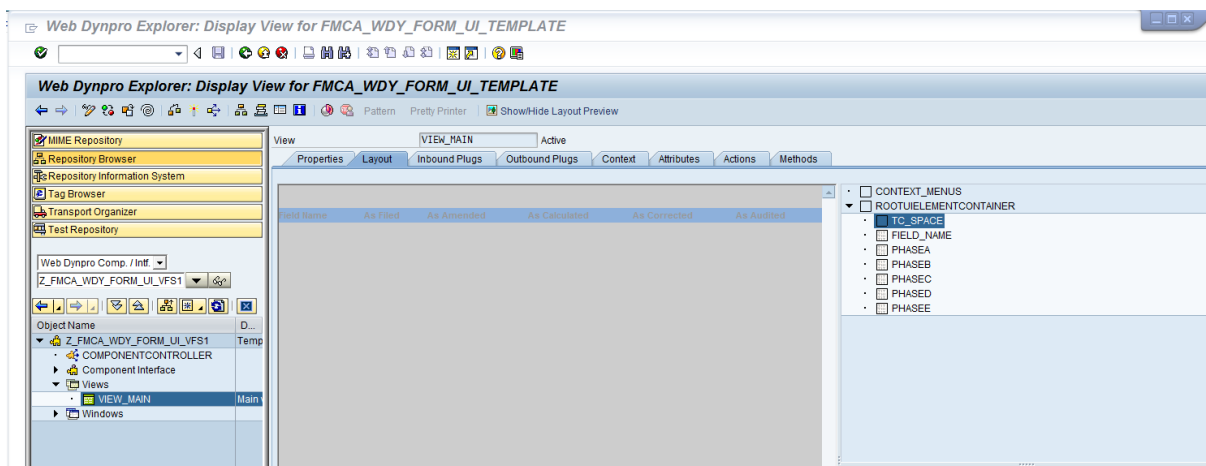


A list with the inactive objects is displayed:



Check whether all lines are marked and click on

After these steps your Web Dynpro component should look like as the template:



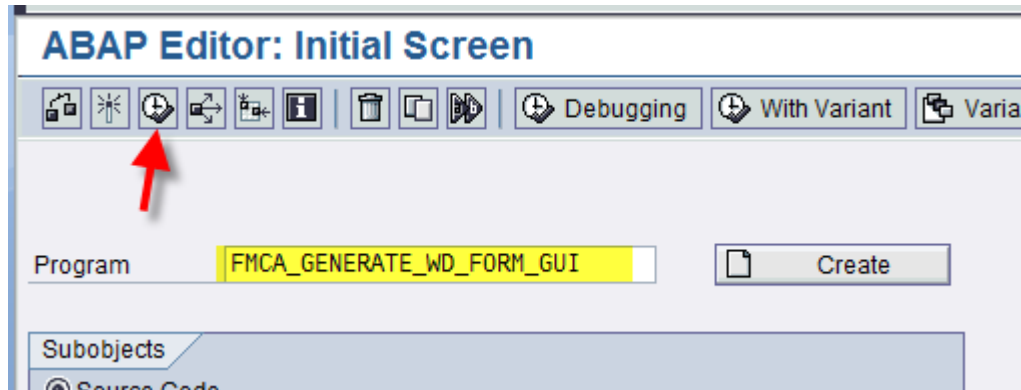
Note: What you can see above is that the form fields are missing. To include the fields which you have defined in your ISR scenario before please process the following steps.

Create Web Dynpro Context (Optional)

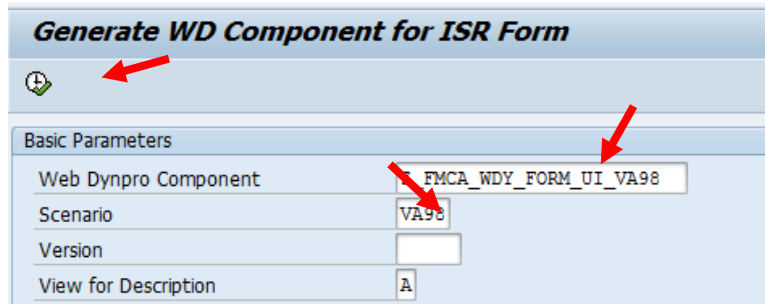
To copy your form field's from your scenario go into the Implementation Guide with transaction SPRO: Financial Accounting (New) → Contract Accounts Receivable and Payable → Business Transactions → Public Sector Tax Assessment → Form Processing → Forms → Generate Web Dynpro interface for interactive forms for form processing


or

Execute transaction SE38 and run program FMCA_GENERATE_WD_FORM_GUI via transaction SE38:





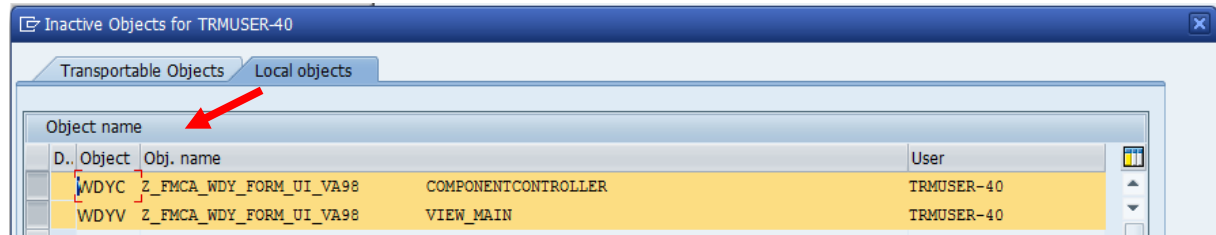
Enter the name of the created Web Dynpro Component and the name of your scenario



Execute the report by clicking on .

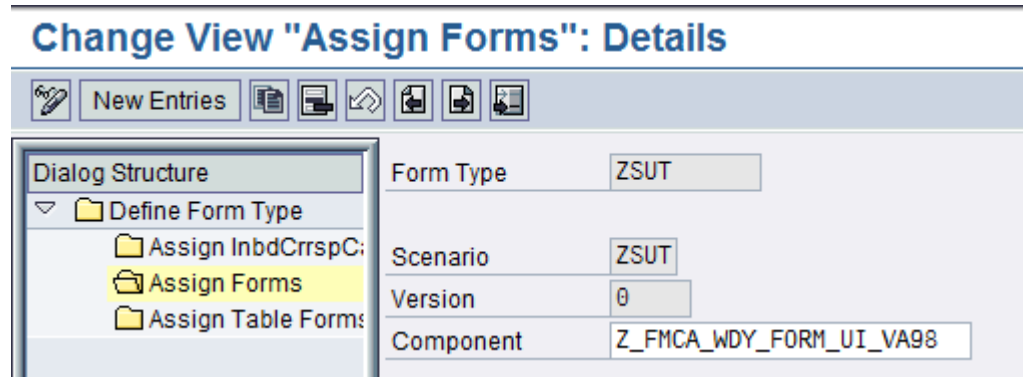
As result a list with the generated objects is displayed.

Finally activate your Web Dynpro component. To do this, click on the icon  "Activate" in the menu bar, mark all lines in the screen shown and click on .



Form Type configuration

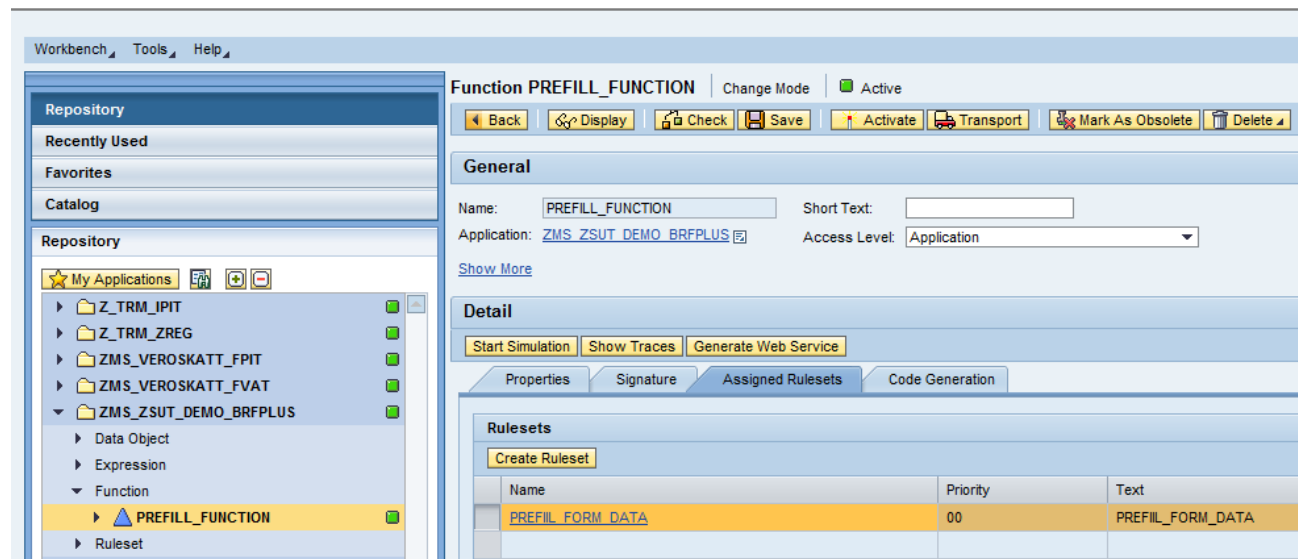
Now assign your Web Dynpro component to the Form Type. To do these go into the Implementation Guide with transaction SPRO: Financial Accounting (New) → Contract Accounts Receivable and Payable → Business Transactions → Public Sector Tax Assessment → Form Processing → Forms → Define Forms and under the Component field enter your Web Dynpro component (e.g. Z_FMCA_WDY_FORM_UI_VA98):



BRFplus Application

Prerequisite: If you do not have a BRFplus application already created to process your Form Bundle Type you will need to create one using t-code BRFPLUS_MANAGER.

Now, under your BRFplus Application, create a new Function using t-code BRFPLUS_MANAGER (e.g. PREFILL_FUNCTION). Then open the BRFplus workbench (t-code BRFplus o BRF+) and under the new Function create a new RuleSet (e.g. PREFILL_FORM_DATA):



And finally under your new RuleSet add up a new rule to change the value or values of the ISR fields within your scenario, for example below on the screen shot field A_111_GROSS_SALES will be prefilled with value 999.00 and currency USD (Note: any amount field in BRF+ have to have the Currency field defaulted to any existing currency (e.g. USD):

Ruleset PREFIIL_FORM_DATA | Display Mode | Active

Back | Edit | Check | Save | Activate | Transport

General

Name: PREFIIL_FORM_DATA | Short Text: |
 Application: ZMS ZSUT DEMO BRFPPLUS | Access Level: Application

Show More

Detail

Hide Ruleset Header

(Enabled Ruleset) Ruleset contains 1 rule(s) and 0 variable(s)
 Ruleset will be triggered if PREFILL_FUNCTION is processed

Rules

(1) Rule: No description is available - Unlimited Validity

Perform the following operations

(1) Change value of ISR_DATA-A 111 GROSS SALES to 999 USD

Before you close the BRFplus Workbench ensure everything is saved and activated.

Define a New Processing Activity

Now define a new Processing Activity (e.g. Z10 Prefill form Data). To do these go into the Implementation Guide with transaction SPRO: Financial Accounting (New) → Contract Accounts Receivable and Payable → Business Transactions → Public Sector Tax Assessment → Form Processing → Basic Settings → Define Activity that Calss the BRF for Form processing:

Change View "Define Processing Activity": Overview

New Entries

Dialog Structure

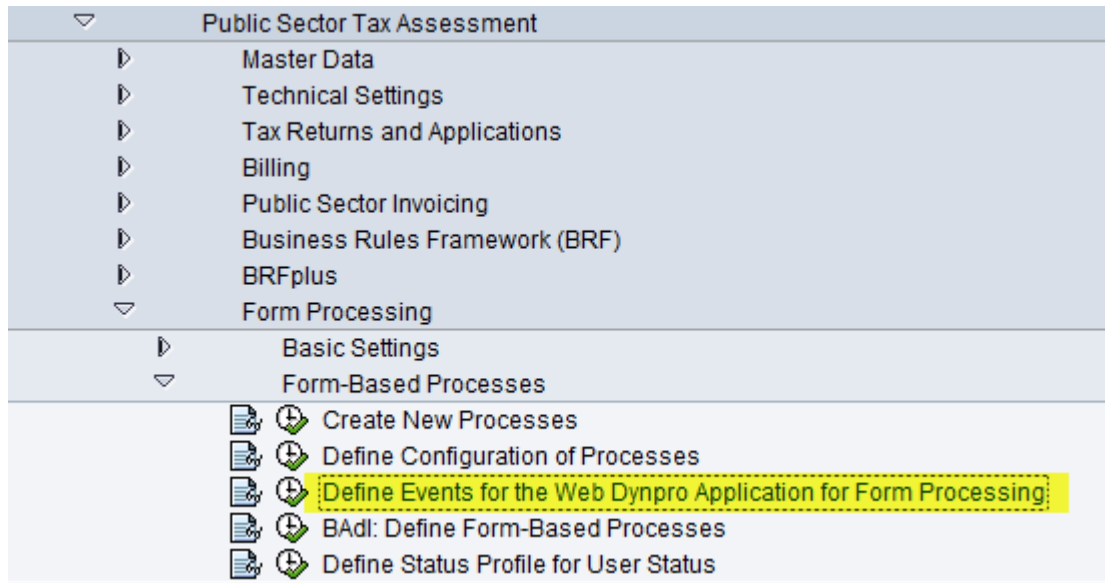
- Define Processing Activity
 - Assign Status to Processing Activity

Activity	Description	Sim. Docs	Documents
01	Check when creating form bundle	<input type="checkbox"/>	<input type="checkbox"/>
02	Check when editing form bundle	<input type="checkbox"/>	<input type="checkbox"/>
03	Simulate Assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
04	Create Assessment - Print out separately	<input type="checkbox"/>	<input checked="" type="checkbox"/>
05	Create and print-out assessment (PDF)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
06	Create and print-out assessment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
07	Registration: Create master data	<input type="checkbox"/>	<input type="checkbox"/>
11	Batch Processing	<input type="checkbox"/>	<input type="checkbox"/>
20	Propose form data	<input type="checkbox"/>	<input type="checkbox"/>
Z10	Prefill form data	<input type="checkbox"/>	<input type="checkbox"/>

Define New Event to Call your Processing Activity

Now define a new event (e.g. ZEVNT_PREFILL) to Form-Based Process TAX_RETURN/VARIANT 1.

To do these go into the Implementation Guide with transaction SPRO: Financial Accounting (New) → Contract Accounts Receivable and Payable → Business Transactions → Public Sector Tax Assessment → Form Processing → Form-Based Processes → Define Events for the Web Dynpro Application for Form Processing:



Note: This new entry on this customizing table will allow us to use the new FPM Event ID ZEVENT_PREFILL to access our Processing Activity Z10 that will derive the right BRFplus Application/ Function where our rule to prefill the form fields previously created.

Change View "Events for WD Application for Form Processing"

New Entries

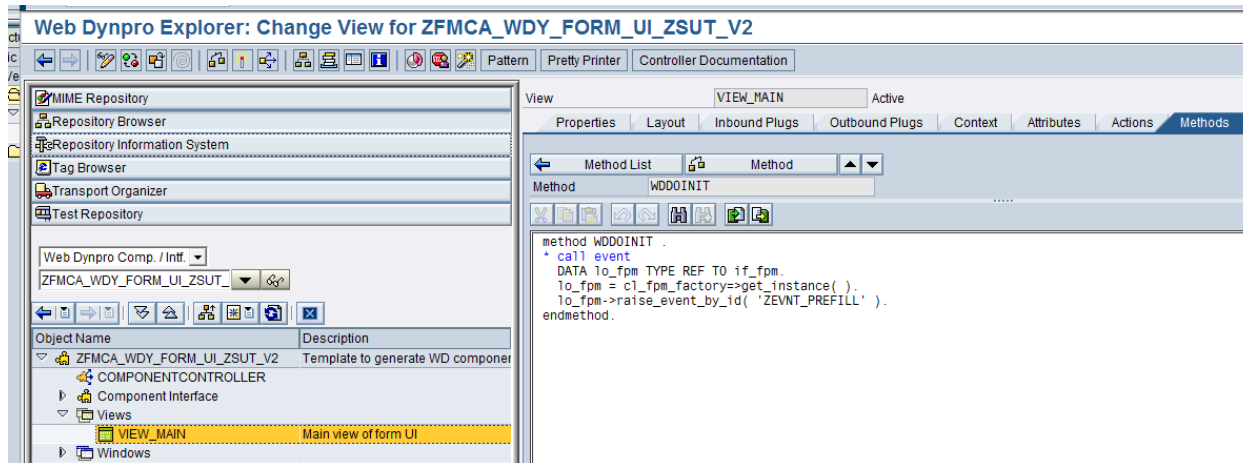
Form-Base...	FPM Configuratio...	FPM Event ID	Activity
TAX_RETURN	VARIANT1	EVNT_RETRIEVE_FORM	
TAX_RETURN	VARIANT1	EVNT_SET_AUDIT	
TAX_RETURN	VARIANT1	EVNT_SET_OBSOLETE	
TAX_RETURN	VARIANT1	EVNT_SIM_INVOICE	
TAX_RETURN	VARIANT1	EVNT_TRANSFER_FORM	
TAX_RETURN	VARIANT1	ZEVNT_PREFILL	Z10

Call your Prefill Event and Activate Web Dynpro Component

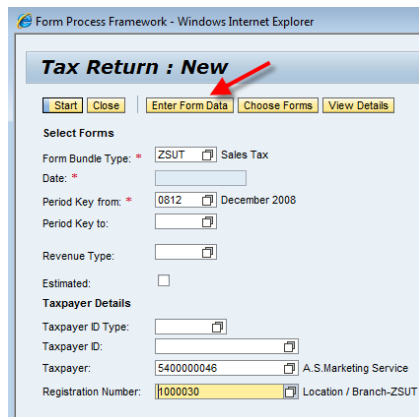
Now we need to add up the ABAP code that will trigger the prefill event create in the previous step (e.g. ZEVNT_PREFILL).

To do this, run transaction SE80 and under your Web Dynpro Component open Method WDDOINIT under VIEW_MAIN and enter the ABAP the following ABAP Code:

```
* call event
DATA lo_fpm TYPE REF TO if_fpm.
lo_fpm = cl_fpm_factory=>get_instance( ).
lo_fpm->raise_event_by_id( 'ZEVNT_PREFILL' ).
```



Note: This method WDDOINIT is always called just right before the Web Dynpro is displayed. This happens during the manual creation of the Tax Return when the “Enter Form Data” pushbutton is used:



Now activate your Web Dynpro component by clicking on the icon  ,Activate' in the menu bar.

Maintain your Form Bundle Type Configuration

Prerequisite: If you do not have a Form Bundle Type created and customized for your Form Type and scenario you will need to create one.

Now under “Define Processing Rule” add up a new Rule ID to point out your PREFILL Function in your BRFplus Application as shown on the following screen shot::

Change View "Define Processing Rule": Details

Add a new Variant under Define Processing Variant (e.g. Prefill):

Change View "Define Processing Variant": Overview

Var.	Name
1	Check Tax Return
2	Prefill

Now assign your Rule ID created above to the new processing variant:

Change View "Assign Rules to Processing Variant": Overview

Exe. Seq.	Rule ID	Scena.	Version	B Use	BRFplus Application	BRFplus Function
1	2	ZSFP	0	ZN	ZMS_ZSUT_DEMO_BRFPLUS_V3	PREFILL_FUNCTION

Finally under “Assign Processing Variant to Activity” create a new entry with the Processing Activity you created some steps above and assign the new variant (e.g. 2) to it:

The screenshot shows the 'Assign Processing Variant to Activity' dialog in SAP. The 'Form Bundle Type' is set to 'ZSUT'. The table below lists activities and their assigned variants.

Acty	Activity Description	Var.	Variant Description
01	Check when creating form bundle	1	Check Tax Return
02	Check when editing form bundle	1	Check Tax Return
03	Simulate Assessment	1	Check Tax Return
04	Create Assessment - Print out se	1	Check Tax Return
05	Create and print-out assessmen	1	Check Tax Return
06	Create and print-out assessmen	1	Check Tax Return
Z10	Prefill form data	2	Prefill

Complete Scenario Step by Step (screen shots)

Run t-code NWBC to access the Taxpayer Cockpit

The screenshot shows the SAP Easy Access interface. The search field contains 'nwbc'. Below the search field, there are several icons and a 'Favorites' list. The 'Favorites' list includes:

- FKKORD1 - Posting -> Request -> Edit Request
- FPF1 - Contract Accounts Receivable and Payable -> Posting ->

Select Tax and Revenue Management Role for NWBC “SAP_FMCA_CA_ALL_EHP5_TRM_NWBC”:

Note: You should have this role assigned to your R/3 user.

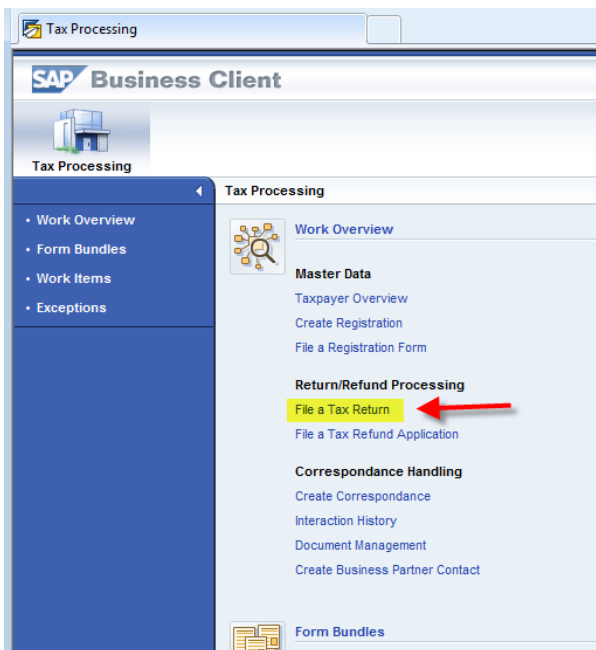
Launch NetWeaver Business Client

The screenshot shows the NetWeaver Business Client launch screen. The 'Cockpit' section is expanded to show the following roles:

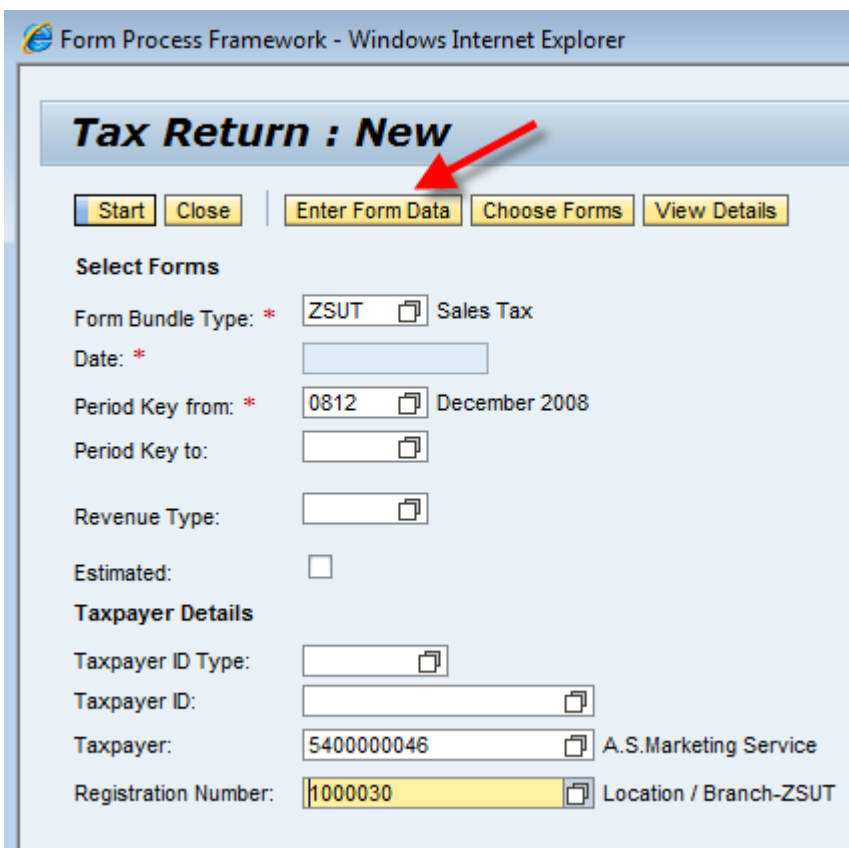
- [SAP QAP LOCAL DEVELOPMENT](#) Local development
- [SAP FMCA ALL](#) Public Sector Vertragskontokorrent
- [SAP FMCA ALL EHP3](#) Public Sector Vertragskontokorrent
- [SAP FMCA ALL EHP4](#) Public Sector Vertragskontokorrent
- [Z WQL TRM](#) Tax and Revenue Management Role for Netweaver Business Client
- [Z WQL TRM ROLE](#) TRM role - EhP5e AT
- [SAP FMCA CA ALL EHP5](#) Public Sector Contract Accounts Receivable and Payable
- [SAP FMCA CUST](#) Public Sector Contract Accounts Receivable and Payable: Customizing
- [SAP FMCA PWB](#) Public Sector Contract Accounts Receivable and Payable: Print Workbench
- [SAP QAP S TABU NAM](#) GAUDENZI
- [SAP FMCA CA ALL EHP5 TRM NWBC](#) Tax and Revenue Management Role for Netweaver Business Client

A red arrow points to the 'SAP FMCA CA ALL EHP5 TRM NWBC' role.

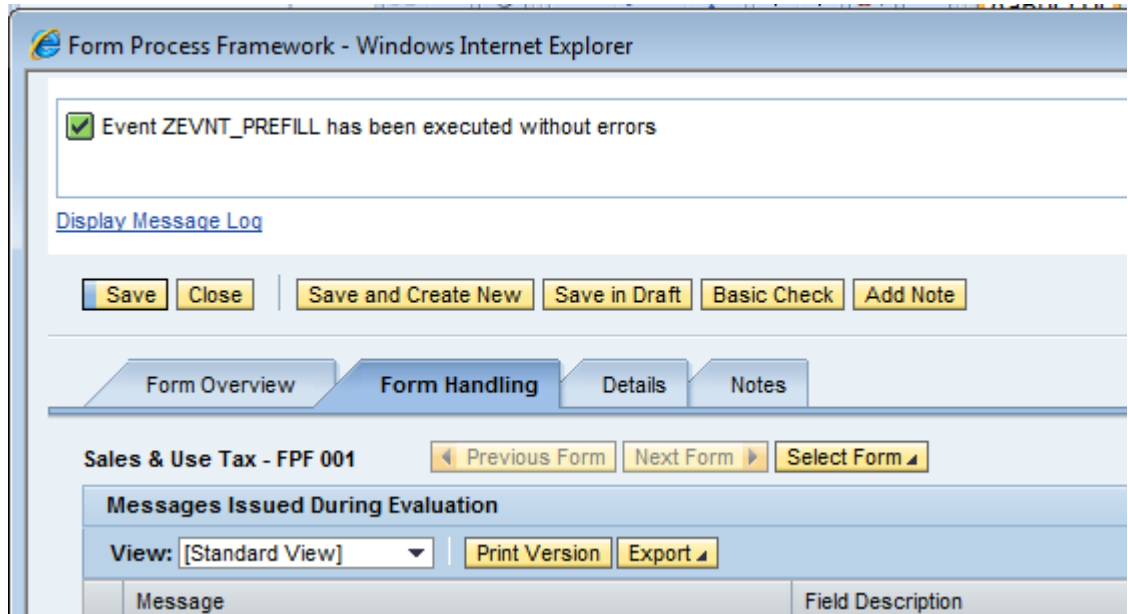
Click on File a Tax Return:



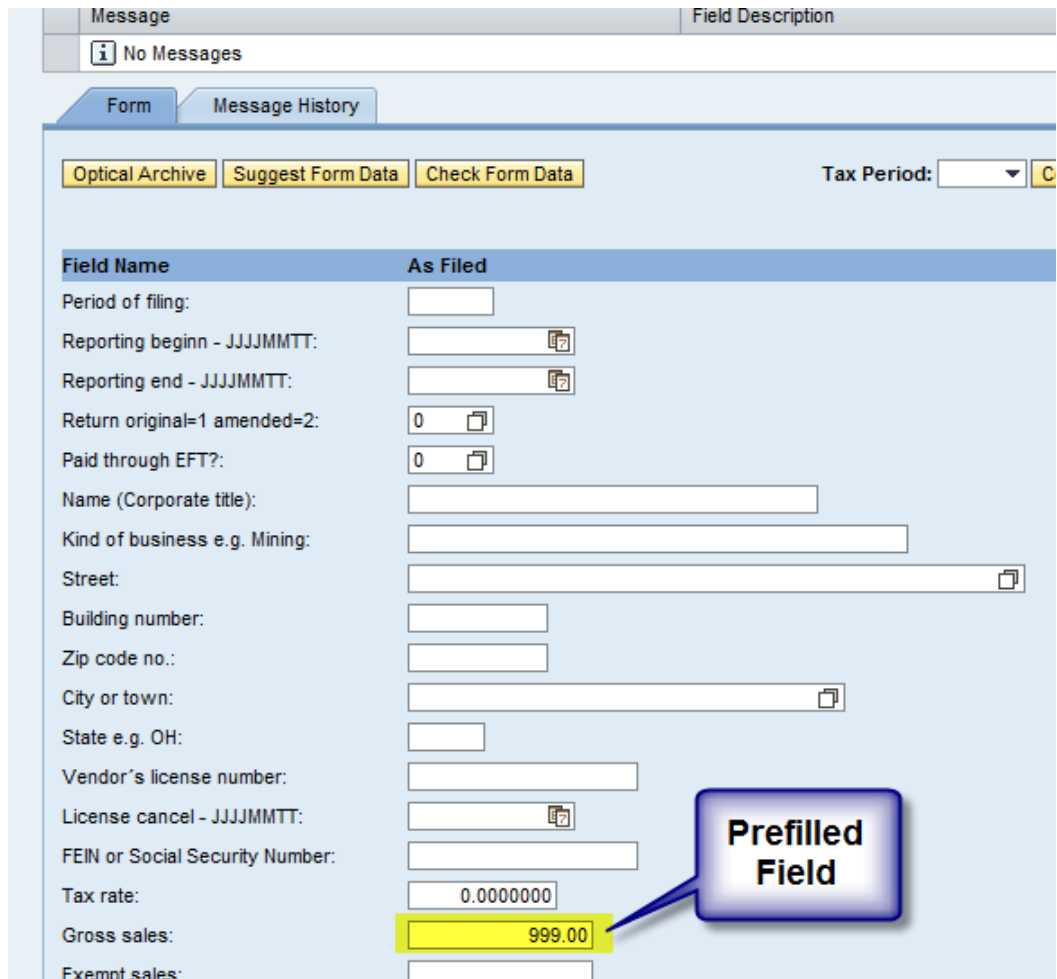
Enter your Form Bundle, Period Key From, Taxpayer and Registration Number and click Enter Form Data:



A new window will be opened and you should see a message saying that your Prefill event was triggered:



Verify that your field or fields were prefilled by the event:



Related Content

[Web Dynpro Applications](#)

[Creating Form Bundles via Web Dynpro Application](#)

[Business Rule Framework plus \(BRFplus\)](#)

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