



CLEAN_Address Oracle® Forms Integration Guide (V1.0.1)

The sample forms modules referenced in this document can be found under the “fmb” folder, the most current versions can be sourced from the following location:

<http://ftp.runnertech.com/ftpcln/patches/clnaddrForOracleForms.zip> (895.7 KB)



In order to utilize the selectable suggestion list feature, the following parameters in the clnaddrd.ini must be set as follows (VerboseSuggestList = 1, and IncludeSuggestHeader = 1)

SUPPORT	
If you run into problems, or have questions regarding the installation or integration, please contact Runner Technologies Support using any of the methods below:	
Phone:	877-784-0003 9am-6pm EST or 561-395-9322
Fax:	561-395-9301
Email	support@RunnerTechnologies.com
Website	http://www.RunnerTechnologies.com - click on Support Link from home page

Clean_Address_Demo.fmb utilizes procedures found in the base clnaddr schema and does not require installation of additional software. The CLEAN_Address functionality is implemented via program units CHECK_EMAIL, CLEAR-RESULTS, PARSE_NAME, VERIFY_ADDRESS, VERIFY_TELEPHONE, and WHEN-VALIDATE-ITEM triggers on the ADDR data block items.

Clean_Address_App.fmb demonstrates implementation of the selectable suggestion list functionality, and requires installation of additional PL/SQL components. Instructions on how to install the additional PL/SQL components can be found in the **install_OracleForms.txt** document. The relevant form objects, form item descriptions are documented below, along with a sample integration guide to assist with your specific implementation.

FORM OBJECTS:

Object Type	Name	Description	Items	Trigger
Data Blocks	CLNADDR_TREE_CONTROL	Used to store request specific values required by trigger items.	CLNADDR_PUSH_BUTTON (Button) DPV_ERROR_CODE(Text Item) SUGGESTION_LIST_ITEM(Text Item) DISPLAY_CONSOLE (Text Item) TARGET_TRIGGER_BLOCK(Text Item) TARGET_ITEM_PREFIX(Text Item) TARGET_ITEM_QUALIFIER(Text Item)	
	CLNADDR_TREE_DATA		CLNADDR_TREE(Hierarchical Tree)	WHEN-TREE-NODE-ACTIVATED WHEN-MOUSE-DOUBLECLICK
Canvases	CLNADDR_STACKED_CANVAS	Stacked canvas to enable suggestion list be programmatically shown, hidden, or relocated relative to the main canvas.		
Program Units	CLNADDR_VERIFY_ADDRESS	<p>Main address verification routine triggered by address items on main address entry screen.</p> <ul style="list-style-type: none"> a. Makes call to PL/SQL verify_address procedure. b. Generate suggestion list items to populate DISPLAY_CONSOLE, DPV_ERROR_CODE, and SUGGESTION_LIST_ITEM in the CLNADDR_TREE_CONTROL data block; c. Generates record group used to populate the hierarchical tree; d. Makes the stacked canvas visible. 		

FORM ITEM DESCRIPTIONS:

Item Name	Description	Sample Data
CLNADDR_PUSH_BUTTON	Form button used to close the suggestion list	
DPV_ERROR_CODE	Hidden field used to store the DPV error code returned from call to CLEAN_Address_Banner.Verify	
SUGGESTION_LIST_ITEM	Hidden field used to store the colon, and semicolon delimited suggestion list string returned from call to CLEAN_Address_Banner.Verify	
DISPLAY_CONSOLE	Visible field used to display the user friendly error code and error string returned from call to CLEAN_Address_Banner.Verify	
TARGET_TRIGGER_BLOCK	Hidden field used to store name of the block that initially triggered the address verification request. This is used to enable indirect referencing of the form canvas items.	
TARGET_ITEM_PREFIX	Hidden field used to store the canvas item prefix. Used to support indirect referencing of form canvas items.	
TARGET_ITEM_QUALIFIER	Hidden field used to store the target canvas item name qualifier. Used to support indirect referencing of form canvas items where a canvas may have multiple address fields using a naming convention of <prefix><qualifier><item_name>	
CLNADDR_TREE	Hierarchical tree used to store display suggestion list items, and trigger logic used to populate address form upon user selection.	

STEP 1 – OPEN BASE FORM

Open the *CLEAN_ADDRESS_APP.fmb* “base” form in Oracle™ Form Builder
save and compile module.

STEP 2 – OPEN TARGET FORM

Open the target form – the Oracle form to be integrated – in Form Builder
Save and compile module.

STEP 3 – ADD CANVAS:

Copy canvas *CLNADDR_STACKED_CANVAS* from base form

Paste copied form into in *canvas* area of target form.

Change the “window” property in the property pallet to match the window of your target form’s window.

Save - do not compile – the target module.

STEP 4 – ADD DATA BLOCKS

Copy Data Blocks *CLNADDR_TREE_CONTROL*, and *CLNADDR_TREE_DATA* from base form

Paste copied data blocks into *Data Block's* section of target form.

Save - do not compile – target module.

STEP 5 – ADD PROGRAM UNIT

Copy *Program Unit* *CLNADDR_VERIFY_ADDRESS* from the base form

Paste copied program unit into the Program Units section of the target form

Save and compile the target module.

STEP 6 – ADD ITEM TRIGGERS

Expand the data block containing the address items.

For each address item add or update the *WHEN-VALIDATE-ITEM* trigger to include a call to the *CLNADDR_VERIFY_ADDRESS* procedure.

```
/* BEGIN: CLEAN_Address - Call CLEAN_Address Verify local Forms procedure */  
Clnaddr_Verify_Address;  
/* END: CLEAN_Address - Call CLEAN_Address Verify local Forms procedure */
```

STEP 7 – ADD WHEN-NEW-RECORD-INSTANCE DATA BLOCK TRIGER FOR EACH ADDRESS DATA BLOCK

```
/* BEGIN: CLEAN_Address – Hide suggestion list stacked canvas */  
SET_VIEW_PROPERTY('CLNADDR_STACKED_CANVAS', width, 0);  
SET_VIEW_PROPERTY('CLNADDR_STACKED_CANVAS', height, 0);  
/* END: CLEAN_Address - Hide suggestion list stacked canvas */
```

STEP 8 – ADD ADDITIONAL REQUIRED ITEM

CLNADDR_VERIFY_ADDRESS requires the following additional CHECKBOX form field/item *OVERRIDE_ADDRESS_VERIFICATION*

Add the additional checkbox field/item to the appropriate canvas.

Compile and test.

COMPILE and TEST