

## **Oracle® Fusion Middleware**

Oracle WebCenter Forms Recognition AP Project Migration  
Guide

Version 1007G

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Documentation for the WebCenter Forms Recognition AP  
Packaged Project, that describes the features and use of the  
Project Migration tool for upgrading earlier versions of the  
project.

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# 1 Introduction

The Oracle WebCenter Forms Recognition Project Migration tool provides a convenient method for upgrading an earlier version of the AP Packaged Project to the latest version. While the Project Migration tool does not automatically upgrade every element of an already-implemented project, it does drastically reduce the amount of effort required, by allowing implementers to easily migrate 'core' project changes from the later version of the project to existing project.

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**Note:** The Project Migration tool is provided solely for upgrading the AP Packaged Project, and should not be used with any other WebCenter Forms Recognition projects.

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## 1.1 Definitions

- **Template or Source Project:** The project that acts as a template to update all other projects. This is typically the latest version of the AP Packaged Project.
- **Target Project:** The project that will be overwritten with updates from the template project. This is typically the currently implemented version of the AP Packaged Project.

## 1.2 Items of Note

- All in-flight batches should be reprocessed after the AP Packaged Project has been migrated using the Project Migration tool.
- It is the responsibility of the implementer to test the migrated project to ensure that system performance is not impacted by the update.
- The Project Migration tool does not perform any updates to the project configuration (.ini) file. Required updates to the project configuration file must be performed manually. See [Section 5.3: Update the Project Configuration \(.ini\) File](#).
- The Project Migration tool does not perform any updates to the *Oracle AP* features. Required updates must be performed manually. See [Section 5.1: Post Migration Steps for the AP Packaged Project](#).
- The new *Invoice\_CN* and *Invoice\_CN2* subclasses for processing Chinese language invoices will not be migrated to the source project. It is strongly recommended that where multi-byte language documents are being processed, a separate project be used for each language. In this case, a new instance of version 1007G of the AP Packaged Project should be implemented, which will already include the subclasses mentioned above.
- The name of the project (.sdp) file and its associated configuration (.ini) file will not be changed.

## 2 Migration Items

This section describes the elements of the AP Packaged Project that will be updated or otherwise modified by the Project Migration tool.

**Note:** If a project element is not explicitly described below it should be assumed that it will remain unaltered after being migrated through the Project Migration tool.

### 2.1 Project Script

Description	Comments
<i>APPackaged</i> Class	This script page is fully encrypted and the tool will be performing a full replacement.
<i>Generic</i> Class	This script page is fully encrypted and the tool will be performing a full replacement.
<i>GlobalVariables</i> Class	<p>At the bottom of the delivered script there is a section where user customizations are permitted to be entered. This is clearly identified in the script by the following comments section:</p> <pre data-bbox="716 905 1325 1077"> '===== '===== GLOBAL VARIABLES CUSTOM EVENTS ===== '===== ' '===== '= CUSTOM EVENTS, VARIABLES AND FUNCTIONS SHOULD BE '= CREATED BELOW THIS POINT '===== </pre> <p>Any script above the comments indicating the user customizations area will be completely replaced with the script from the <i>GlobalVariables</i> class in the template project.</p> <p>Any script entered in the permitted section, i.e. below the comments shown above, will be retained by the Project Migration tool.</p>
<i>Invoices</i> Class	<p>At the bottom of the delivered script there is a section where user customizations are permitted to be entered. This is clearly identified in the script by the following comments section:</p> <pre data-bbox="716 1356 1325 1528"> '===== '===== INVOICES CLASS CUSTOM EVENTS ===== '===== ' '===== '= CUSTOM EVENTS AND FUNCTIONS SHOULD BE CREATED '= BELOW THIS POINT '===== </pre> <p>Any script above the comments indicating the user customizations area will be completely replaced with the script from the <i>Invoices</i> class in the template project.</p> <p>Any script entered in the permitted section, i.e. below the comments shown above, will be retained by the Project Migration tool.</p>
<i>UserExits</i> Class	The <i>UserExits</i> class script will be updated with new <i>UserExits</i> events from the template project. Existing events in this class will not be modified by the Project Migration tool.

## 2.2 Project Fields

Description	Comments
New Fields in the <i>Invoices</i> Class	New class fields that exist in the template project will be migrated to the target project if they do not already exist.  Any custom fields in target project will not be removed by the Project Migration tool.
Field Settings	All field settings that exist in the template project will be migrated to the target project, with the exception of any ASE fields, which will remain unaltered by the Project Migration tool.  Table fields should be replaced from the template project.

## 2.3 Project Settings

Description	Comments
Analysis Templates	All core analysis templates will be overwritten. Custom templates will remain unaltered.  All new templates will be migrated to the target project.
Evaluation Templates	All core evaluation templates will be overwritten. Custom templates will remain unaltered.  All new templates will be migrated to the target project.
Validation Templates	All core validation templates will be overwritten. Custom templates will remain unaltered.  All new templates will be migrated to the target project.
OCR Engine / Customization	No modification will occur.

## 2.4 Learnset Settings

Description	Comments
Classification Engines	Existing classification engine settings will not be modified in the target project.
Classification Learnset	No changes will be made to the classification learnset.
Extraction Learnset for the <i>Invoices</i> Class	The extraction learnset for the <i>Invoices</i> class will remain encrypted.  The extraction learnset from the template project will be copied to the target project.

---

## 3 Pre Migration Steps

Before migrating the changes from version 1007G of the AP Packaged Project to an earlier version of the project, it is essential that the existing project is upgraded and otherwise modified to work with the current version of WebCenter Forms Recognition in its current state.

This section describes the specific pre-migration steps that should be performed for the AP Packaged Project. For further information regarding project migration, refer to the following documentation:

- *WebCenter Forms Recognition Installation Guide* (see Section 5.7: Migrating Existing Project Files)
- *WebCenter Forms Recognition Designer User's Guide* (see Section 3: Project Migration)

### 3.1 Backup the Project

Before performing the AP Packaged Project migration, ensure you have a complete backup of the project in its current state. The backup should include:

- The project (.sdp) file.
- The project configuration (.ini) file.
- All learnset files and folders (e.g. the **Train** folder and all its contents).
- The *VendorASSA* pool and any other ASE pool data that is used in the project (e.g. the **Pool** folder and all its contents).
- If the existing implementation uses the file system for batch storage, backup the batch root directory and all its contents.
- If the existing implementation uses a database for batch storage, backup the database.

### 3.2 Upgrade the Existing Project in Designer

Follow these steps to upgrade the existing AP Packaged Project to work with the current version of WebCenter Forms Recognition:

1. Open the existing AP Packaged Project in the Designer application.

If the existing project uses a version of the FineReader OCR engine that is no longer supported by the current version of Forms Recognition you may see the following warning message when attempting to open the project:

```
Project file could not be loaded!

Error Description: Cannot load collection item with name "All", because: Zone
could not be loaded, because a required engine is not installed on this computer.
Name of this Engine: "FineReader8".

WebCenter Forms Recognition Designer can try to load the project file once again
ignoring all errors. This may result in complete or partial loss of project
information.

Do you want to retry loading the project file anyway?
```

In this case, click **Yes** to continue loading the project in Designer.

---

**Note:** The project is automatically upgraded when it is opened in Designer. There is no visual notification that this has happened.

---

2. If the project will be used with the Web Verifier client, it is mandatory that database authentication be enabled for the project:
  - a. From the **Options** menu, select **Users, Groups and Roles...** The *Project Authentication Properties* dialog is displayed.
  - b. On the *Project Authentication Properties* dialog, ensure that the **Allow Database Authentication** option is checked.
  - c. Click the **Export to Database...** button. A notification is displayed when the users, groups and roles are successfully exported to the database. Click **OK** to dismiss this message.
  - d. Click the **OK** button to save the users, groups and roles settings, and close the *Project Authentication Properties* dialog.
  - e. When prompted to save the project file, click **Yes** to save the project and dismiss the prompt.
3. Switch to Definition Mode by selecting the **Definition Mode** option from the **View** menu.
4. In the *Classes* tree, right-click the project node and select **Show Properties** from the popup menu. The properties pane is displayed on the right-hand side of the Designer window.
5. In the properties pane, click the **OCR Settings...** button. The *OCR Properties* dialog is displayed.
6. In the *OCR Properties* dialog, select the **Recognition** tab.
7. Select the required OCR engine from the *Available Engines* dropdown. **FineReader11** is the recommended engine for version 1007G of the AP Packaged Project.
8. Ensure that the **Use as Default Engine** option is checked.
9. Click **OK** to save the OCR settings and close the *OCR Properties* dialog.
10. Save the project.

### 3.3 Replace the Template Classification Engine

Projects that were created with a version of WebCenter Forms Recognition prior to 11g Release 1 (11.1.1), for example, version 1006D of the AP Packaged Project, used the Template Classification Engine as the default classification for Supervised Learning Workflow. That classification engine is no longer supported, and has been superseded by the Brainware Layout Classification Engine.

If the existing project contains any classes or subclasses that previously used the Template Classification Engine, those classes must be updated to use the Brainware Layout Classification engine, and the project must be re-learned, before performing the project migration.

1. Open the existing AP Packaged Project in the Designer application and switch to Definition Mode.



2. In the **Classes** tree, select the first class or vendor subclass that previously used the Template Classification Engine. Right-click the class and select **Show Properties** from the popup menu.
3. On the properties pane, select the **Classification** tab.
4. In the list of *Used Classification Engines for This DocClass*, check the box for **Brainware Layout Classification**.
5. Repeat steps 2 to 4 for every class or vendor subclass that previously used the Template Classification Engine.
6. Switch to Document Selection Mode and use the Learn Set input mode. To do this, click the dropdown arrow beside the *Switch to Document Input Selection* toolbar button, and select **Learn Set** from the dropdown menu.
7. Select the first class or vendor subclass in the *Learn Set* tree that previously used the Template Classification Engine. Right-click the class or vendor subclass and ensure that the **View Classification Learn Set** option is checked in the popup menu.
8. For every document listed in the bottom pane, check the box in the **Brainware Layout Classification** column.
9. Repeat steps 7 and 8 for every class or vendor subclass that previously used the Template Classification Engine.
10. Switch to Definition Mode.
11. Re-learn the upgraded project by selecting the **Learn Documents** option from the **Run** menu.
12. When learning is complete, save the project.

---

## 4 Performing the Project Migration

Follow the steps below to perform the project migration:

1. Launch the Project Migration tool (**Start > Programs > Oracle > WebCenter Forms Recognition > Tools > Project Migration**).
2. Click the **Load...** button for the *Source Project*, then browse to and select the migration template project (.sdp) file. This is typically located at *<Installation Folder>\Projects\AP 1007G\Global\AP Packaged Project\_1007G.sdp*
3. Click the **Load...** button for the *Target Project*, then browse to and select the project (.sdp) file to be upgraded.
4. Click the **Upgrade Project** button. The project migration is performed, and when it is complete a confirmation message is displayed.
5. Click **OK** to dismiss the confirmation message.
6. Click the **Exit** button to close the Project Migration tool.

---

## 5 Post Migration Steps

After performing the project upgrade using the Project Migration it is necessary to manually update the project script as described below.

### 5.1 Remove Reference to the OracleAP Class (1007CA Only)

Version 1007CA of the AP Packaged Project contains a script-only class called *OracleAP*, which is no longer used in version 1007G.

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**Note:** Version 1006D of the AP Packaged Project does not include the *OracleAP* class, so the steps in this section are not required when upgrading from that version. Continue to [Section 5.2: Update the UserExits Class](#).

---

Perform the following steps to remove the reference to this deprecated class from the project script:

1. Open the upgraded project in the Designer application.

---

**Note:** It is to be expected that when you open the upgraded project in the Designer application and switch to Definition Mode you will be notified of script errors. When prompted to debug the script code, click **Yes**.

---

2. Open the **UserExits** class script window.
3. Select **(General)** from the *Object* dropdown, then select **(declarations)** from the *Proc* dropdown at the top of the script window.
4. Locate the following script line. This will be on or around line 14 of the script:

```
'#include "OracleAP"
```

5. Modify the script line to replace **OracleAP** with **GlobalVariables**, as shown below:

```
'#include "GlobalVariables"
```

---

**Note:** It is necessary to retain the apostrophe character at the start of the script line. While this may appear to be a code comment, this is the correct syntax.

---

6. Close the script window.
7. Delete the **OracleAP** class from the project. To do this, select it in the *Classes* tree in the main Designer window, then right-click and select **Delete DocClass** from the popup menu.
8. Save the project.

### 5.2 Update the UserExits Class

Additional features of the AP Packaged Project are executed by being called from appropriate events in the *UserExits* class. Because the Project Migration tool does not alter that class during

the upgrade, it is necessary to manually modify the *UserExits* class script as described in this section.

The following table identifies which events in the *UserExits* class of the upgraded project should be modified, depending on which version of the project is being upgraded. Update the appropriate events in the *UserExits* class script as shown below:

UserExit	Upgrading from 1006D	Upgrading from 1007CA
<a href="#">UserExitCSVFile</a>	●	
<a href="#">UserExitDocumentValidate</a>	●	
<a href="#">UserExitFilterVendorSearch</a>	●	
<a href="#">UserExitPostClassify</a>	●	●
<a href="#">UserExitPostLinePairing</a>	●	●
<a href="#">UserExitVerifierException</a>	●	●
<a href="#">UserExitXMLOutput</a>	●	

### 5.2.1 UserExitCSVFile (1006D Only)

```
' ***** Oracle AP: Start *****
Call wfrWriteFilenameComponentToCSV(pWorkdoc, strRecordText, strKey)
' ***** Oracle AP: End *****
```

### 5.2.2 UserExitDocumentValidate (1006D Only)

```
' ***** Oracle AP: Start *****
Call wfrCheckForDuplicateInvoice(pWorkdoc)
Call wfrRemovePONumberFromNoPO(pWorkdoc)
' ***** Oracle AP: End *****
```

### 5.2.3 UserExitFilterVendorSearch (1006D Only)

```
' ***** Oracle AP: Start *****
blReject = wfrFilterVendorsByCompanyCode(pWorkdoc, Address)
' ***** Oracle AP: End *****
```

---

**Note:** The above should replace the existing script in this user exit.

---

### 5.2.4 UserExitPostClassify (1006D and 1007CA)

```
' ***** Oracle AP: Start *****
Call wfrDetectSeparatorPage(pWorkdoc)
' ***** Oracle AP: End *****
```

### 5.2.5 UserExitPostLinePairing (1006D and 1007CA)

```
' ***** Oracle AP: Start *****
```

```

Call wfrSetCreditAmountsNegative(pWorkdoc, odtInvoiceLines, LineData())
Call wfrExportCustomUOM(pWorkdoc, LineData())

' ***** Oracle AP: End *****

```

---

Note: Call wfrExportCustomUOM(pWorkdoc, LineData()) is new since 1007CA

---

### 5.2.6 UserExitVerifierException (1006D and 1007CA)

```

' ***** Oracle AP: Start *****

Dim blnSuccess As Boolean

blnSuccess = wfrSetAllFieldsToValid(pWorkdoc)

If blnSuccess = True Then

    BatchDocumentState = 700

End If

' ***** Oracle AP: End *****

```

### 5.2.7 UserExitXMLOutput (1006D Only)

```

Case cXMLInvHeader

' fnWriteXMLField(strParameterNameInIniFile,
pWorkdoc.fields("MyField").text)
' fnWriteXMLDateField(strParameterNameInIniFile,
pWorkdoc.fields("MyDate").text)

Dim dblFreight As Double

dblFreight =
fnConvertToDouble(pWorkdoc.Fields("AmountFreightPrepaidAndAdded").Text)
fnWriteXMLField("HCHHeaderLevelFreight",
Replace(Format(CStr(dblFreight), "#.00"), ",", "."))

' ***** Oracle AP: Start *****

Call wfrWriteFilenameComponentToXML(pWorkdoc)
Call wfrSetCreditAmountsNegative(pWorkdoc, odtInvoiceHeader, LineData)

' ***** Oracle AP: End *****

Case cXMLLineItems

```

## 5.3 Update the Project Configuration (.ini) File

The project configuration file for version 1007G of the AP Packaged Project contains updated and new entries to support the updated project. The Project Migration tool does not update the project configuration file, so it is necessary for all required modifications to the file to be performed manually.

Refer to the *AP Packaged Project Release Notes* document for full details of the new and updated configuration settings, and ensure that the configuration file for the upgraded project is amended accordingly.