In this lab you will learn how to configure the Capture Applications process to automatically create one Loan application process for every Application form.

Lab 15-1

Configuring the Capture and Loan Application Processes

Add 4 New Variables

In this lab you will create 4 new variables. 3 of the variables will be used in a loop node which will be used to iterate through each document in the folder that is passed into the capture process. You will create a new instance of the loan application process for each document that is found in the Applications folder. The case reference variable will be created to store the case reference for each new Loan Application case.

1. Open the Process Designer Module and open the Capture Applications Process.
2. On the Modeling bar click the Variables link. Add the following 4 new variables:

<table>
<thead>
<tr>
<th>Initialization</th>
<th>Name</th>
<th>Id</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Application Document</td>
<td>APPLICATIONDOCUMENT</td>
<td>Document</td>
<td>Personal Loans</td>
</tr>
<tr>
<td></td>
<td>Document Found</td>
<td>DOCUMENTFOUND</td>
<td>Bool</td>
<td>False</td>
</tr>
<tr>
<td></td>
<td>Start Index Documents</td>
<td>STARTINDEXDOCUMENTS</td>
<td>Long</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Case Reference</td>
<td>CASEREFERENCE</td>
<td>String</td>
<td></td>
</tr>
</tbody>
</table>

3. **Note**: the **Application Document** variable is of **Type=Document**, and the default value is set to **Document Type** called **Personal Loans**.

Configure the Applications Folder Loop Node

The loop node can be used to process a group of folders/documents (list or array). In this example for each row (folder) in the array, we will pass the individual document into a new process that will handle an individual application (the Loan Application process). The loop node starts at the first row (with an index of 1). If a row is found, the updated index is incremented by 1 and the second row in the array can be processed the next time around the loop.

4. Add an **Ordinary** activity after the **Validation** step (delete the connector and move the End node to the right to create some space).
5. Select the new node and in the **Properties** area change the **Type** to **Loop**.
6. Rename the node to **Loop Applications** and position as shown below:

![Diagram of Loop Applications node](image)

7. Click **Extended Properties** icon and select the **Configuration** link.

8. Click the **Variables** consume icon in the Complex Variable field, and click **Process**.

9. Click the **Applications Folder** variable to expand it, click **System** and drag and drop **Documents** to the Complex Variable field.

10. Click the **Variable** consume icon in the **Start Index** field, and click **Process**.

11. Drag and drop **Start Index Documents** variable to the **Start Index** and **Updated Index** fields.
   
   **Note:** as the process is leaving the loop, the start index is incremented by 1, meaning the next time back into the loop, the next row of data is obtained.

12. Drag and Drop **Document Found** variable to the **Row Found** field.
   
   **Note:** this Boolean (true/false) variable will be analysed in a Decision node later in the process. This variable will be automatically populated if another row is found.

13. Enter 1 as the **Number of Columns** and click the **Set Columns** link.

14. Drag and drop **Application Document** variable to the **Mappings** column. The finished configuration should be as follows:

![Extended Properties](image)

**Note:** The first document (Column1) in the Applications Folder array will be stored in a document variable called **Application Document**. We can then pass this document to a new process, which will be responsible for processing the individual Loan Application.
15. Click **Close**.

**Test a Variable Value in a Decision Node**
In this part of the lab, you will test the value the Document Found variable in a decision node.

16. Add a **Decision** node after the **Loop Applications** node. Rename the node to **Application Found**.

17. Click the **Extended Properties** icon, select **Condition Text** link, and from the **Variable** list drag and drop **Document Found** variable to the **Condition Text**.

![Extended Properties](image)

**Notes**: (i) ![Document Found] and ![Document Found] = TRUE are equivalent.
(ii) You can use the following logical operators/keywords: <, >, =, <>, >=, <=, !, And, Or

18. Click **Validate** and **Close**.

19. Connect the **Decision** node to the **End** node.

20. Add an Ordinary activity to the **Application Found** decision node and set the name property of the activity to **Create Case Reference**.

21. Add an Ordinary activity to the **Create Case Reference** node and set the name property of the activity to **Loan Application Process**.

22. Select the **Application Found** decision node. In the **General** Properties (bottom left corner of the screen), select **Create Case Reference** as the **True Path**.

![Properties](image)
23. Select the **Loan Application Process** node. Hold the mouse down over the middle of the node (the cursor changes to a hand) and drag the cursor to the **Loop Applications** node (the connector should loop back to the Loan Applications Process node).

24. Click the **Rearrange** button on the **Actions** bar.

25. Your process should look like:

26. **Release** the process.

**Expression Node**

You can use an Expression node to set the value of one or more variables using free text, variables, operators, and functions.

27. Select the **Create Case Reference** node and change the **Type** to **Expression**.

28. Click the **Extended Properties** icon and click the **Configuration** link. We will use the Expression node to concatenate the first and last name of the Applicant and pass the result into the **Case Reference** variable.

29. Click **Add**.

30. Click the **Variable** icon in the **Target Variable** field. In the **Explorer** click **Process**.

31. Drag and drop **Case Reference** to the **Target Variable** field.

32. Click into the **Expression** consume area and click the **Variables** consume icon.

33. In the **Explorer** click **Process**.
34. Click the Application Document variable and click the Customer data grouping.

35. Configure the expression as shown:

![Expression Diagram]

**Note:** the Application Document variable contains all the fields in the Document Type Personal Loans.

36. Click Validate.

37. Click OK to close the Expression.

38. Click Close to close the Extended Properties.

**Create New Job Activity**

Create New Job (CNJ) is an automatic activity that starts a new instance of a process. The main process carries on independently of the new process that it instantiated.

39. In the Capture Applications process, select the Loan Application Process node and change the Type to Create New Job.

**Note:** this node is part of the loop so as each new document is found a new instance of the downstream Loan Application case is created.

40. Select the Loan Application Process node and click on the Extended Properties icon. Click on the Configuration link.

41. Set the Select the job type to Create New Case.

42. Click the Process consume icon in the Process field.

43. In the Explorer, filter by Personal Loan category and drag and drop Loan Application to the Process field.

44. Map the fields as follows:
45. Notice that there are three variables listed for the **Loan Application** process. These are initialization variables in the Loan Application process.

**Notes:**
(i) In the above example the **Case Reference** variable is holding the Customer Name, as populated from the **Expression** node. The Customer Name (we will use Last Name from the extracted fields) and the Loan Amount can be found in the Application Document variable.

(ii) You could create an additional variable called Customer Name. You could then use the previous expression node to populate this variable with the First Name, space character, and Last Name joined together to create the customer name for the downstream process.

46. **Close** the Extended Properties.

47. **Release** the process.
Lab 15-2

**Test the Capture and Loan Application Processes**

*Test the Capture Process and Loan Application Process*

1. Complete a **Job Clear down**.
2. Open a **new tab** in Internet Explorer and browse to the **xyzbank** logon form.
3. Enter **pblack** as the **User Name** and click **Logon**.
4. Select the **Scan Applications** menu and click **New**.
5. Browse to C:\KTAEssentials\LabFiles\Documents\Test Set and select 2 applications.

![Image of the interface showing a toolbar and application selection]

6. Click the **Create new job** icon on the toolbar.
7. Select **To Do > Work Queue**.
8. Select **All Activities** in the **Query** panel.
9. Take and complete the **Document Review** and **Validation** activities (you will need to refresh the work queue form).
10. On the **Jobs > Find** menu notice the 2 instances of the Loan Application process (you will need to refresh the jobs form).

![Image of the jobs find interface]

11. Logon as **ssmyth** (if you are not logged on already) and notice the 2 Loan Approval Activities.
<table>
<thead>
<tr>
<th>Activity Name</th>
<th>Process</th>
<th>Activity Priority</th>
<th>Due Date</th>
<th>Assigned To</th>
<th>Activity SLA</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Approval</td>
<td>Loan Application</td>
<td>1</td>
<td>15/02/2014 09:15:22 PM</td>
<td>Approving Officers</td>
<td>✔️</td>
<td>Select</td>
</tr>
<tr>
<td>Loan Approval</td>
<td>Loan Application</td>
<td>1</td>
<td>15/02/2014 09:15:58 PM</td>
<td>Approving Officers</td>
<td>✔️</td>
<td>Select</td>
</tr>
</tbody>
</table>