Working with Documents

As we continue associating GeneXus objects with the tasks of the reservation validation diagram, we will perform the interactive tasks "Add customer information required for traveling" and "Evaluate Customer" that will have to be executed at the same time.



We will start by entering the information necessary for the trip.

This implies that we will need to handle files containing user data such as documents, worksheets, text files, images, compressed files, etc.

The workflow engine provides the necessary mechanism to store those associated with the diagram, as well as their control and access security.

The types of documents handled by GeneXus BPM Suite are as follows.





To use documents in process diagrams, first we have to define them at the knowledge base level. To do so, in GeneXus we open the **Preferences** window, select **Workflow** and double-click on **Documents**.

Suppose that in the task we have to enter the passenger's visa, which will be a jpeg image.

We press Enter, enter the document name and description, and in the properties we choose the **Image JPEG** type.

🐼 Start Page 🗙	🚯 Documents X	🔏 Validate Reservation *	x v	/	Properties	P	×
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Documents					WorkflowDocument: Vis	a	
Visa	Visa - JP	EG Image	Image JPEG	۰.	Name	Visa	
					Description	Visa - JPEG Image	•
					Type	Image IPEG	
					Template	(none)	
					Eachla full text search	(none)	
					Enable full text search	raise	
					Digital signature required	False	
					Module/Folder	Root Module	
					Qualified Name	Visa	
					Object Visibility	Public	
					✓ Event Handling	-	
					On action performed		
						1	
				4	Properties Toolbox		

Now we have to associate the document with the task. To do so, we open the ValidateReservation diagram, double-click on the task **Add customer information required for traveling** and set the property **Work with documents** to True.

In the **Documents** property we click on the button and a screen is opened for us to select the document we previously defined.

Task Documents				×
Documents ⊽ 2/ … *	Actions Read New Update Delete	Enabled	Required	
		ОК	Cancel	

In the Documents section of the window, we click on the button and select the document called "Visa".

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🛐 Visa	W	orkflowDocument	Root	Visa - JPEG Image		7
selected object(s).					1 matchin	ıg object(s). Cancel

We click on OK.

Now we can select different actions for this document and whether they are required or not. In our example, entering an image for the visa will be required, so for New we select the Enabled and Required boxes. We also select the Update action, in case we need to edit that information, but we don't set it as required.

Task Documents				×
Documents ⊽ ▶ Visa ★	Actions Read New	Enabled		
	Update Delete			
		ОК	Cancel	

These steps can be repeated for various documents that have to be entered in the task of checking the documents necessary for travel, such as immunization records, ID card, traveler's insurance, etc.

In addition to what we've seen, we need to configure several options in the GXflow client, so we open the main process **FlightTicketReservation** and run it.

We click on ServerSettings, Advanced, and finally on Document Management. In this window we set **Enable** to YES.

A window is opened with several options. We assign the folder C:\Temp in "**Upload Path**" and leave the rest of the settings with their default values. We click on Save.

GeneXus GXflow™			December 6, 2017 - 07:(03:42 PM Workflow
DESKTOP	~	DOCUMENT MANAGEMENT		
PROCESS MANAGER	~			
DOCUMENT MANAGER	~	Enable	Yes 🔻	*
EVENT VIEWER	~	Upload Path	C:\TEMP	*
STATISTICS	~	Enable Full Text Se	arch No •	*
DYNAMIC FORMS	~	Enable Digital Signa	ature No 🔻	*
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SERVER SETTINGS	^			
MAIN	~			
ADVANCED	^			
EVENT HANDLING				
DOCUMENT MANAGEMENT				

We return to the inbox. We run it until we see the tasks **"Evaluate Customer**" and **"Add customer information required for traveling**".

If we look at the last one, we can see that it has a paper clip icon which indicates that it has associated documents.



If the diagram task that has several documents associated with it doesn't have an associated GeneXus object, running it will open an application to work with documents.

This will be our case, because we haven't associated any objects with the task "**Add customer information required for traveling**". Upon running it, the following window is opened:

WORK WITH DOCUMENTS					
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() () () () Name	Author	Created 💌	Updated		
	FIRST / PRE	V/NEXT/LAST 🗘			
				4	

Depending on the actions defined for the document, various options will be displayed. Since in this case we're logged in with the administrator user, we can perform all the actions.

To create a new document, we click on New, give it a name, and choose the type of document. The "Copy from file" check box allows us to create a document by copying another document existing in the PC. We leave it unselected and click on OK.

NEW DO	CUMENT	×
Name	John Parker visa	
Туре	Visa 🔹	
Copy f	rom file	
	OK CAN	CEL
		- 4

Next, we select the file we have on disk and click on OK to load it.

UPLO	DAD DOCUMENT	×
File	Seleccionar archivo Visa2.jpg]
	OK CANCEL	
		k

We can see that the document we've just loaded is displayed in the Work with Documents window.

WORK WITH DOCUMENTS				×
🕂 New 🙇 Read 🕴 Check In	n 🕆 Check Out	More Actions -		
(1) (2) (2) (3) Name	Author	Created 🔻	Updated	
🕒 🔘 🗐 🔒 John Parker visa	Workflow Administrator	08/01/17 04:00 PM	08/01/17 04:00 PM	
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If we go to Desktop - MyDocuments, we can see all the documents that we have worked with.

MY DOCUMENTS	C Comments	Versions	🙇 Read		م
🗈 🔕 🕗 🔒 Nar	ne			Created V	Updated
	n Parker visa			08/01/17 04:00 PM	08/01/17 04:00 PM

If we select Read, a new browser window will open containing the image.

Note that the GXflow engine manages a document repository. Once the document is loaded, it is added to this repository.



For a user to be able to change a document, he/she will have to perform a **Check Out** task. Once it is made, the user obtains a local copy of the document he is working with, and when he finishes editing it, he must perform a **Check In** operation. In this way, the changes are saved in the repository and a new version of the document is generated.

Only the first user who makes a Check Out can make the Check In of this file. Other users can make Check Out to read the file, but they can't make Check In until the first user who took the file sends his changes to the server.



Only the administrator user can cancel a Check Out by opening the Document Manager and selecting More Actions. The documents uploaded to the server can be digitally signed.



This feature ensures the document's integrity –that is to say, that it hasn't been altered– and confirms that the signature was made by a user.

The certificate that authenticates the document makes it possible to assign a validity start and end date.

One more thing about documents is that it's possible to search their content. To do so, we open **Document Management** and set Full Text Search to Yes.

The search option is available in the Work with Documents window, which can be opened by selecting the task and choosing **More Actions – Documents**.

GX flow [®]						August 1, 2017 - 08:38:25 PM	Workflow
DESKTOP	^ î	INBOX 🕀 New 🇞 Execute 🐼 Send	More Actions -				٩
INBOX		🚺 💿 🌀 🕕 🕮 Subject	History Preview		Task	Created 💌	
OUTBOX		🕕 🙆 💮 💮 Flight Ticket Reservation	Delegate		Evaluate customer	08/01/17 03:59 PM	
MY PROCESSES	_	Flight Ticket Reservation	Comments		Add customer information required for traveling	08/01/17 03:59 PM	
MY DOCUMENTS			Documents				
MY PERFORMANCE	_		(c) faite	1			
PROCESS MANAGER	~						
DOCUMENT MANAGER	^						
DOCUMENTS							

Once we are in the work with documents window, we can see the search selector on the top right corner.



