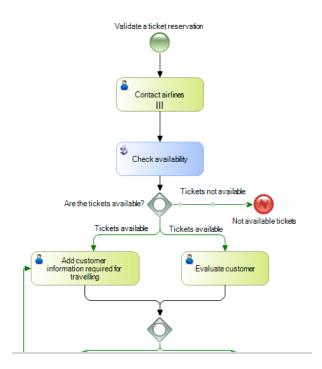
## **Working with Documents**

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.

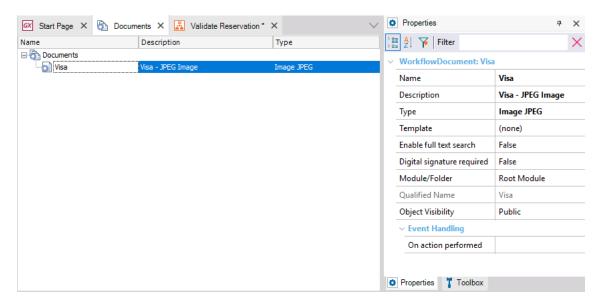
## Types of Documents: Microsoft Word, Excel, Power Point PDF Open Office: Text, Spreadsheet, Presentation StarOffice: StarWriter, StarCalc, StarImpress Images: JPG, BMP, GIF Text XML

ZIPOther

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**.

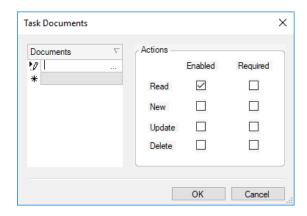
Suppose that in the task we have to enter the passenger's visa, which will be a jpeg image.

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

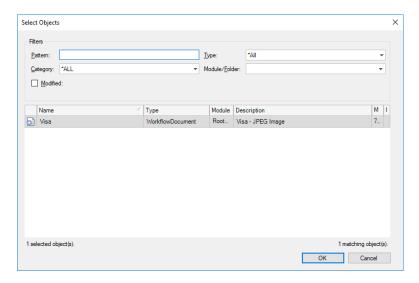


Now we have to associate the document with the task. To do so, we open the ValidateReservation diagram, double-click on the task **Add customer information required for traveling** and set the property **Work with documents** to True.

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

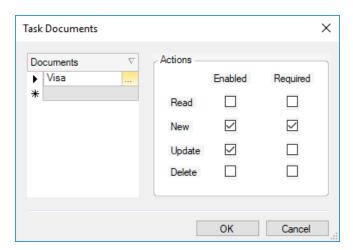


In the Documents section of the window, we click on the button and select the document called "Visa".



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.

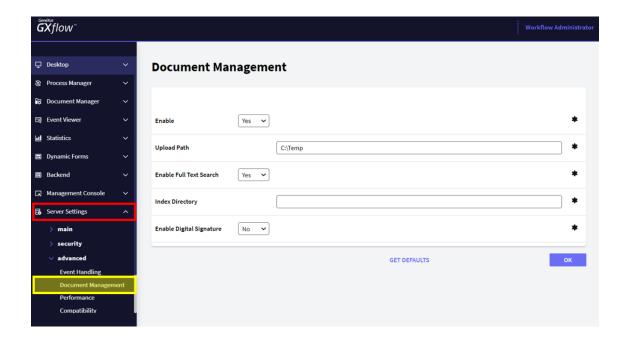


These steps can be repeated for various documents that have to be entered in the task of checking the documents necessary for travel, such as immunization records, ID card, traveler's insurance, etc.

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.

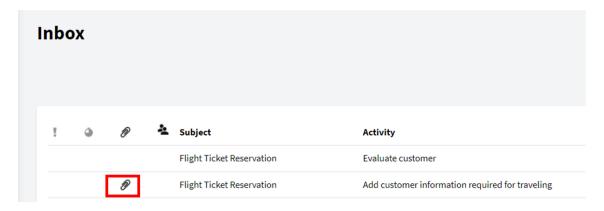
We click on ServerSettings, Advanced, and finally on Document Management. In this window we set **Enable** to YES.

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.



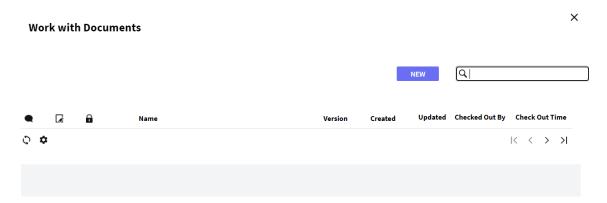
We return to the inbox. We run it until we see the tasks "Evaluate Customer" and "Add customer information required for traveling".

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.

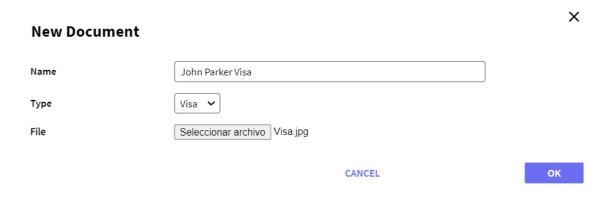
This will be our case, because we haven't associated any objects with the task "**Add customer information required for traveling**". Upon running it, the following window is opened:



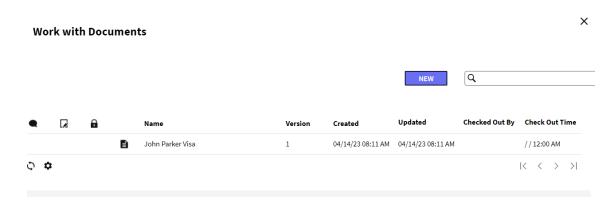
Depending on the actions defined for the document, various options will be displayed. Since in this case we're logged in with the administrator user, we can perform all the actions.

To create a new document, we click on New, give it a name, and choose the type of document.

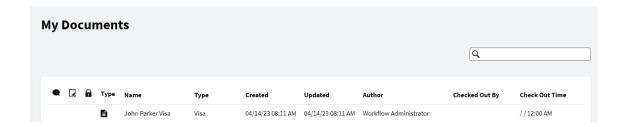
Next, we select the file we have on disk and click on OK to load it.



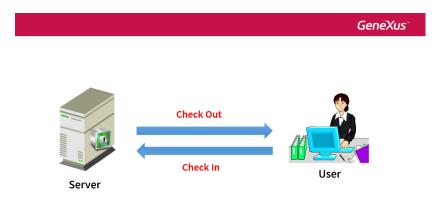
We can see that the document we've just loaded is displayed in the Work with Documents window.



If we go to Desktop - MyDocuments, we can see all the documents that we have worked with.

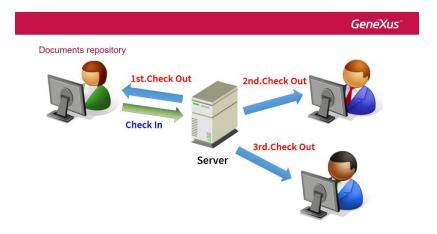


Note that the GXflow engine manages a document repository. Once the document is loaded, it is added to this repository.

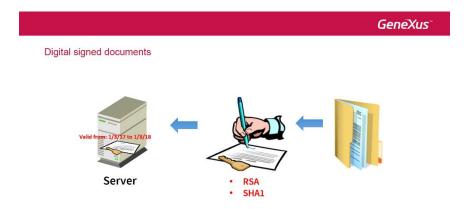


For a user to be able to change a document, he/she will have to perform a **Check Out** task. Once it is made, the user obtains a local copy of the document he is working with, and when he finishes editing it, he must perform a **Check In** operation. In this way, the changes are saved in the repository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

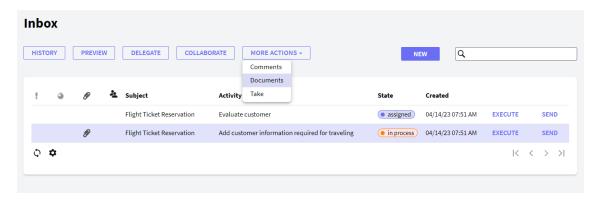


This feature ensures the document's integrity –that is to say, that it hasn't been altered– and confirms that the signature was made by a user.

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**.



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