

Business Agility!

First Workshop for Product Evaluation

My First Process

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1. BizAgi

BizAgi® is a Business Process Management solution that supports the management in process-oriented organizations by allowing the visualization, control, and improvement of all the processes in real time. Its main application is the management, control, tracking and analysis of procedures such as processing of insurance claims, approvals of credit requests, and handling of complaints and reclamations. BizAgi® offers immediate results. The processes are modeled and implemented in an agile way, no matter its complexity, but they conserve sufficient flexibility, so that they can be easily modified, according to the changing requirements of the business.

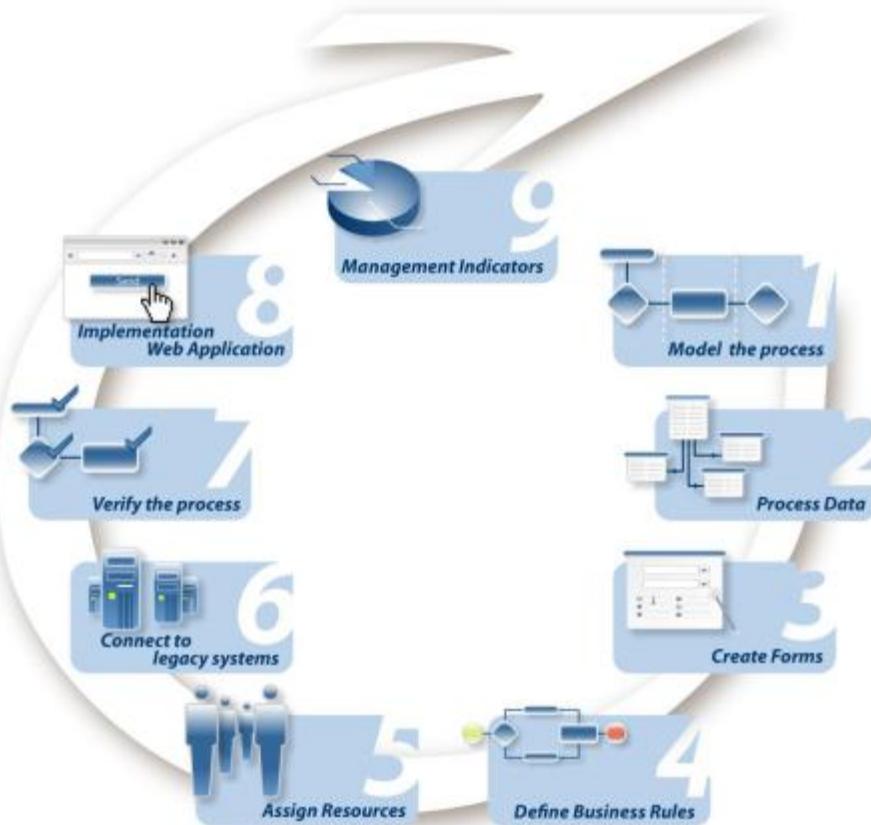
HOW DOES BIZAGI WORK?

BizAgi is a solution developed for the organizations oriented to the optimization, automation, and management of business processes. They are organizations with a vision of processes in each of its functional areas, regardless of the amount of areas or departments involved in the process.

Taking into account the agility and flexibility in the optimization, automation, and management that the organizations in the continuous execution of the processes currently require, BizAgi is based on the following fundamental steps for its operation:

2. WORKSHOP: VACATIONS REQUEST

A company has initiated a BPM strategy and has chosen BizAgi to support it. You have been selected to implement the process of Vacation Request, which is described as follows.



The information about the process and data to be controlled and visualized can be found in the following pages. Follow step by step the instructions of this manual and at the end you will have automated the process of Vacation Request.

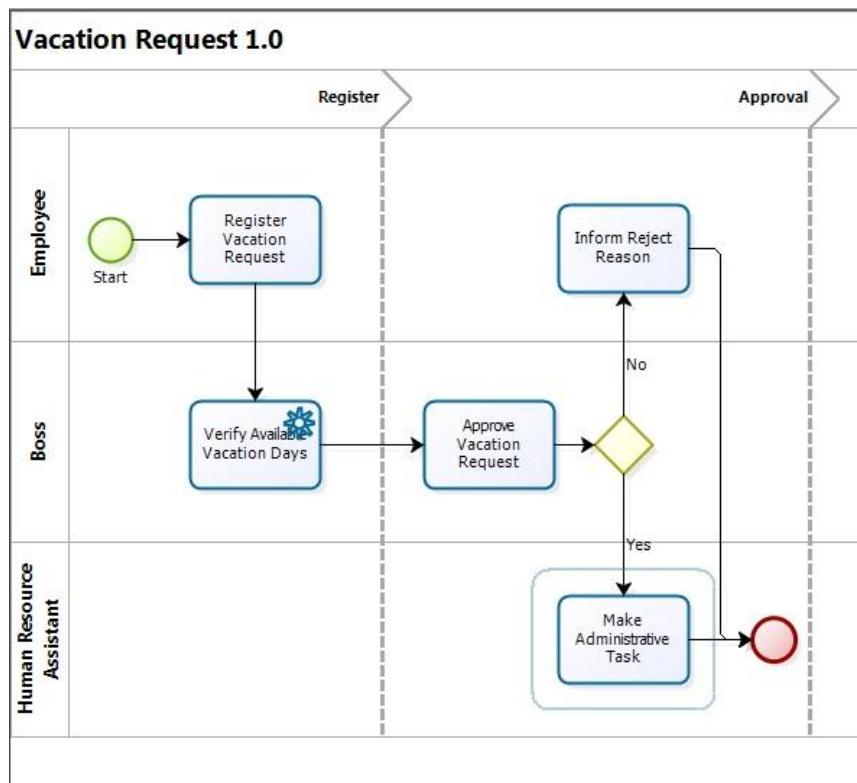
Description of the Process of Vacation Request

The process of Vacations Request starts when any employee of the organization submits a vacation request, once the requirement is registered, the request is received by the immediate supervisor of the employee requesting the vacation, the supervisor must approve or reject the request, if the request is rejected the application is returned to the applicant/employee who can review the rejection reasons. If the request is approved a notification is generated to the Human Resources Representative, who must complete the respective management procedures.

Scope

This process focuses in controlling the requests of Vacations of the organization, from the initial request up to its approval or rejection.

Modeling the process step by step



BizAgi has two main products:

- BizAgi Process Modeler: Used to diagram and document the processes
- BizAgi BPM Suite: Used to turn the diagrammed processes into real running applications

We'll use the Process Modeler to diagram the process and then we'll automate it using BizAgi Xpress. BizAgi Xpress is a version of the BPM Suite that you can download [here](#)

STEP 1: DEFINING AND MODELING THE PROCESS

The process modeling is one of the first steps for the implementation of BizAgi. This stage is vital because it is the phase where the real flow of the process is created or designed. The variables and elements required, according with the organization needs, will be added to this chain of activities or flow, which is the fundamental base of the project.

In this stage, BizAgi offers a modeler with a set of figures or templates to draw processes flowcharts; the figures available are part of the Business Process Modeling Notation (BPMN), which makes possible the standardization of the process layout.

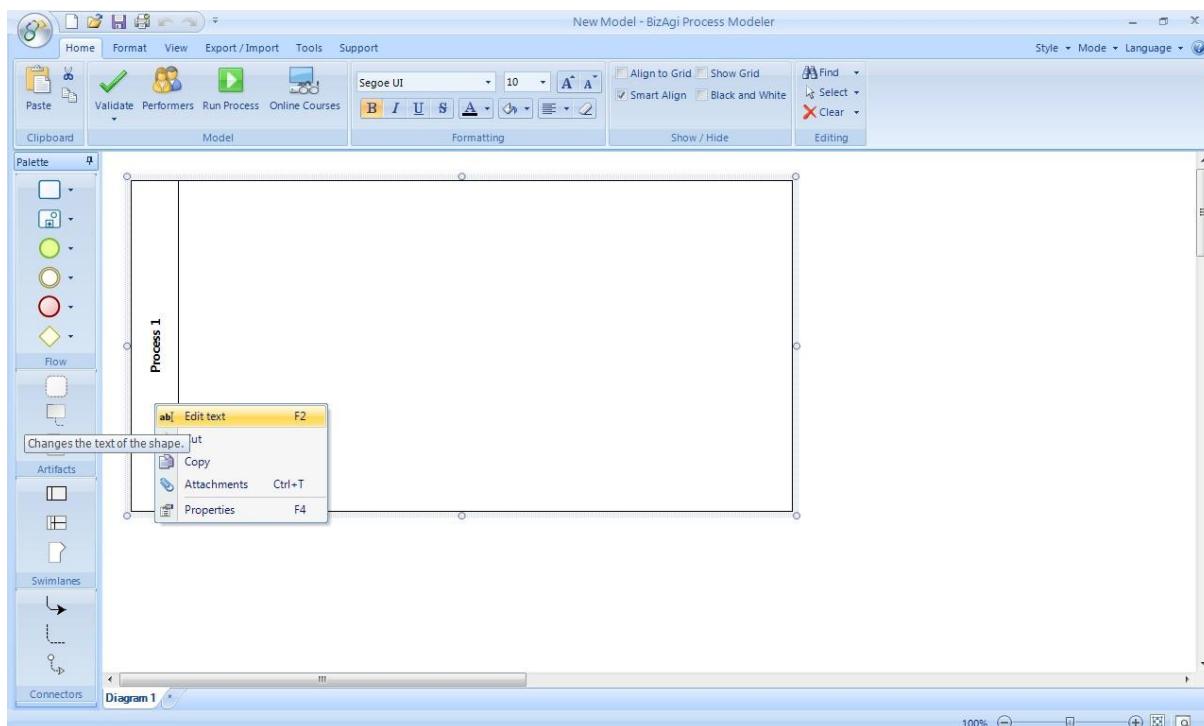
Additional information to create the process:

The company seeks to have the organization and consolidation of all processes related to the internal services in one site.

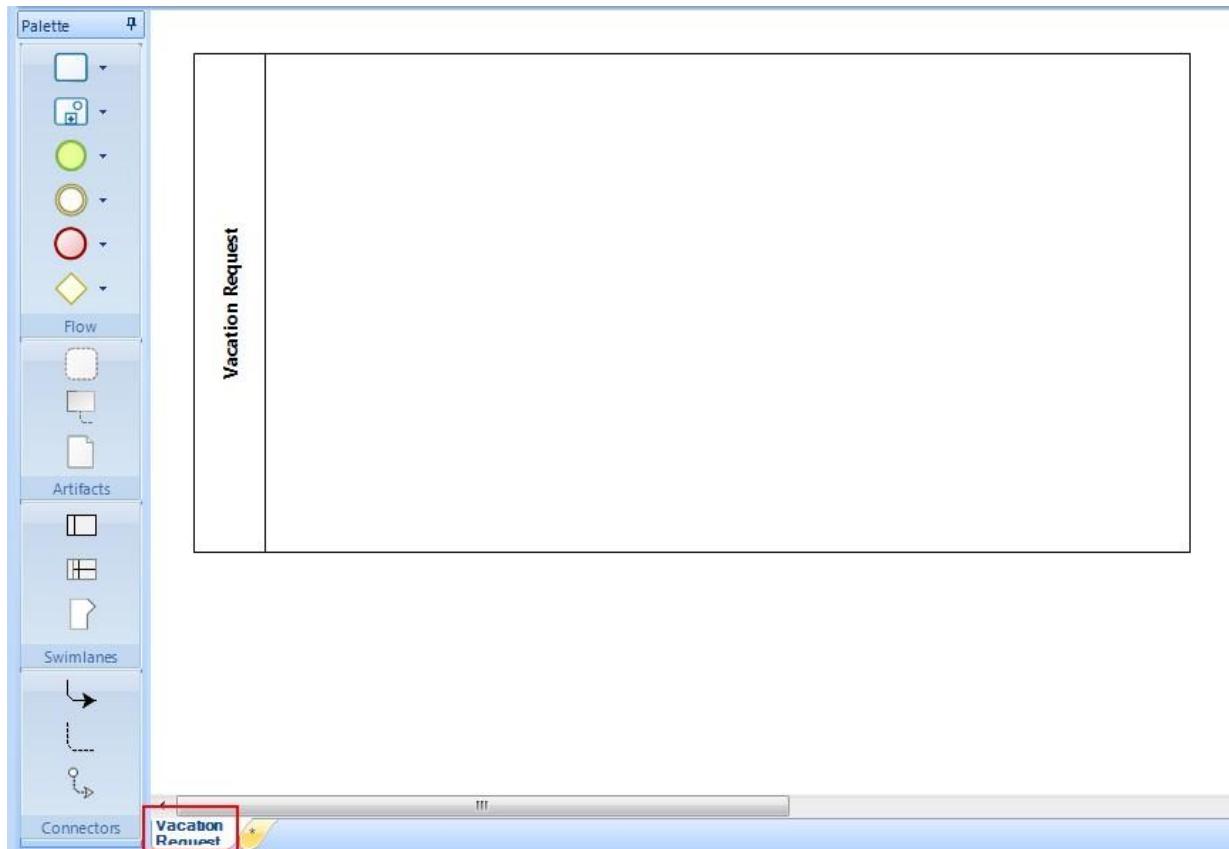
Double click on the BizAgi Process Modeler Shortcut. If you have not downloaded BizAgi Process Modeler, you can download it [here](#):



1. Name your process; right click on the Pool (Process) and select **Edit Text**, type **Vacation Request**



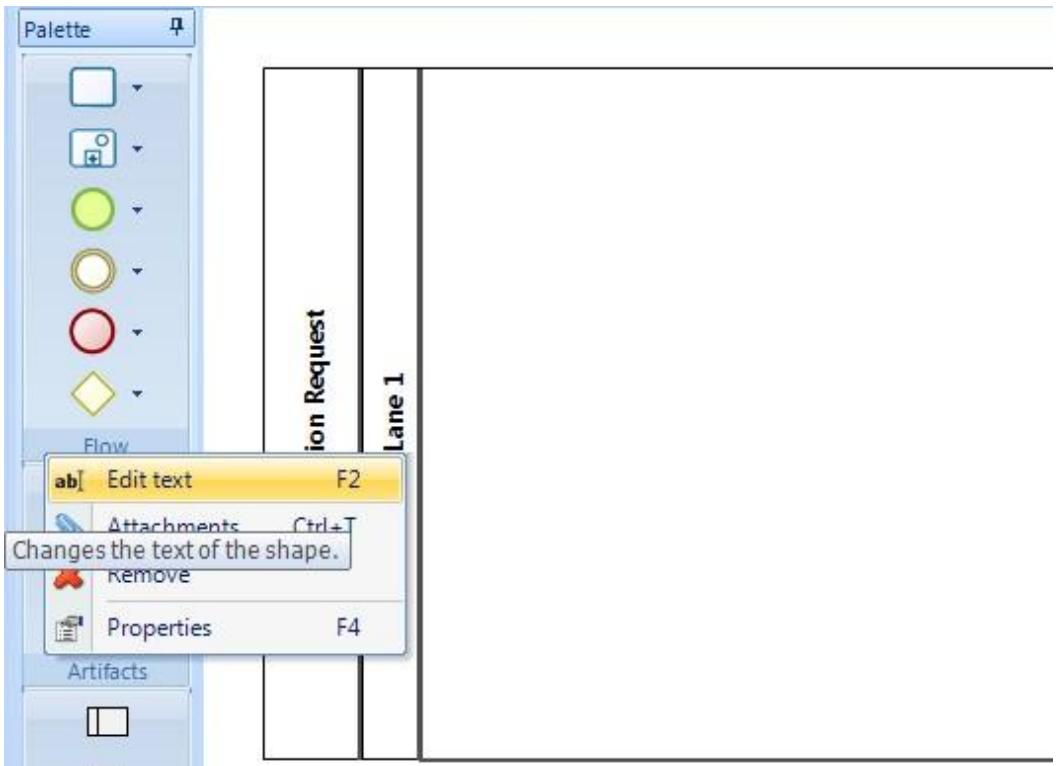
2. Change the name of the main diagram; double click on the Diagram name and type **Vacation Request**:



3. Include lanes for the process. Drag and drop the lane symbol from the Palette:



4. Rename the Lane; Right click on the lane and select **Edit Text**. Type **Employee**



5. Enter two more lanes, name them **Boss** and **Human Resources Assistant**:

Vacation Request	Boss	Employee
	Human Resources Assistant	

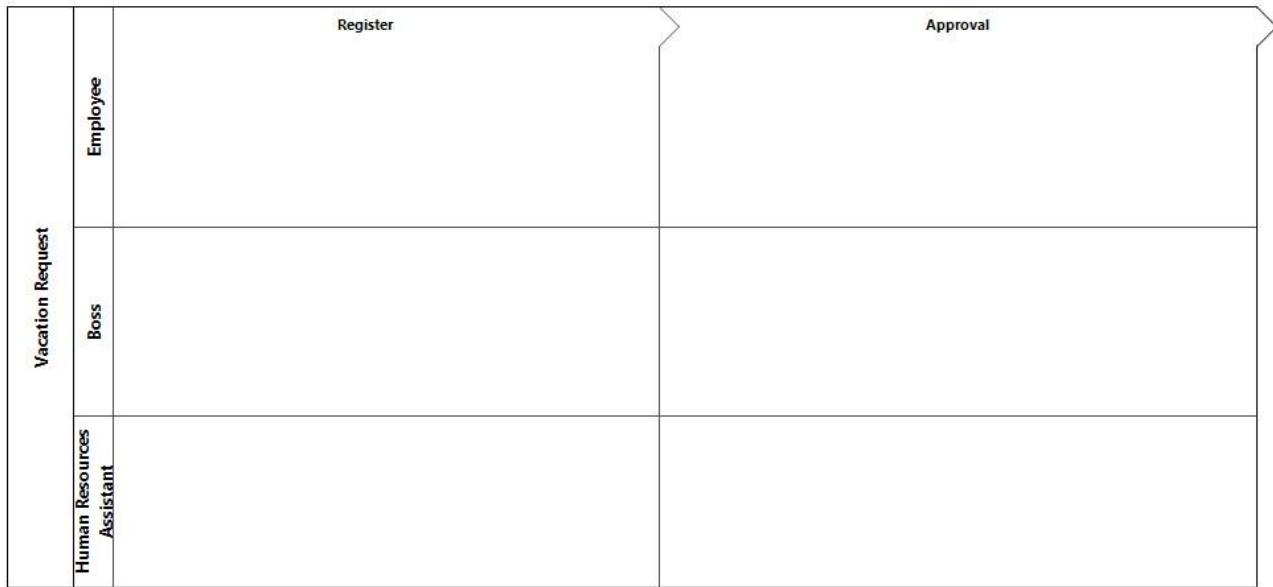
6. Drag and Drop the Milestone Symbol from the Palette to the Process to add phases:



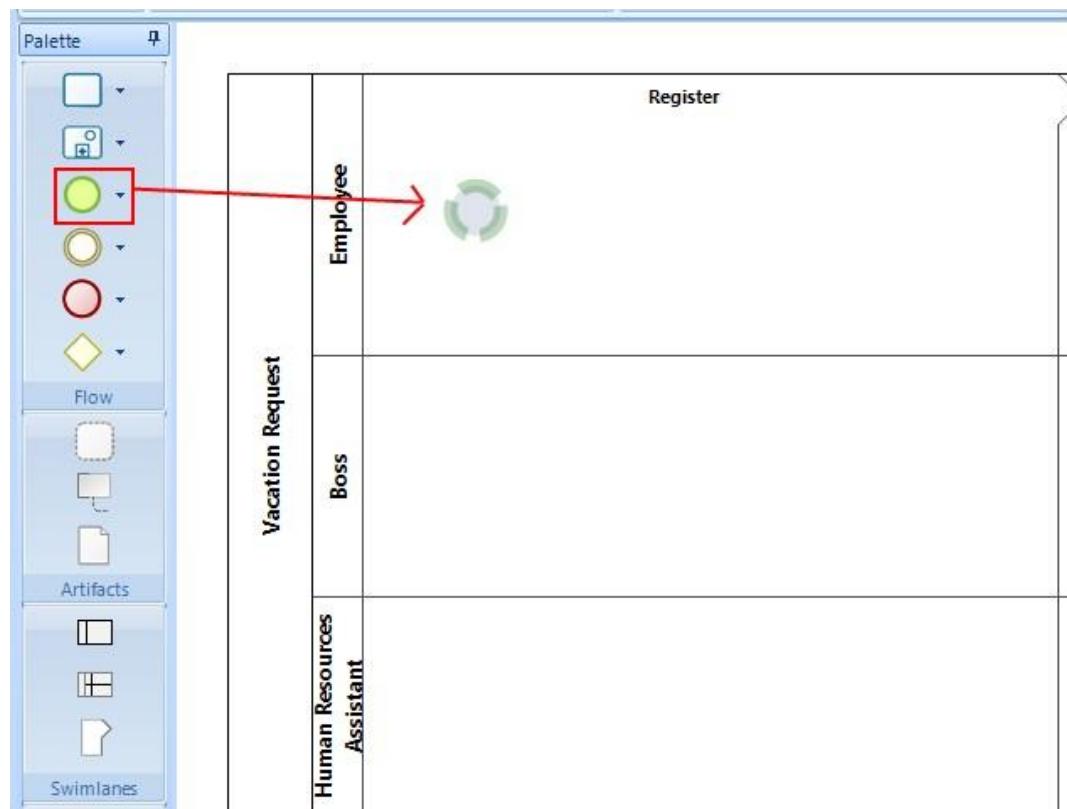
7. Rename your phase; double click on the Milestone Name and type **Register**



8. Add a second Milestone/Phase and rename it **Approval**

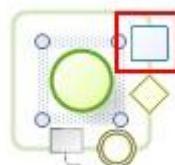


9. We'll start adding the shapes to our Process. Select the Start Event from the Palette and drop it to the position of the process diagram where it must be located:

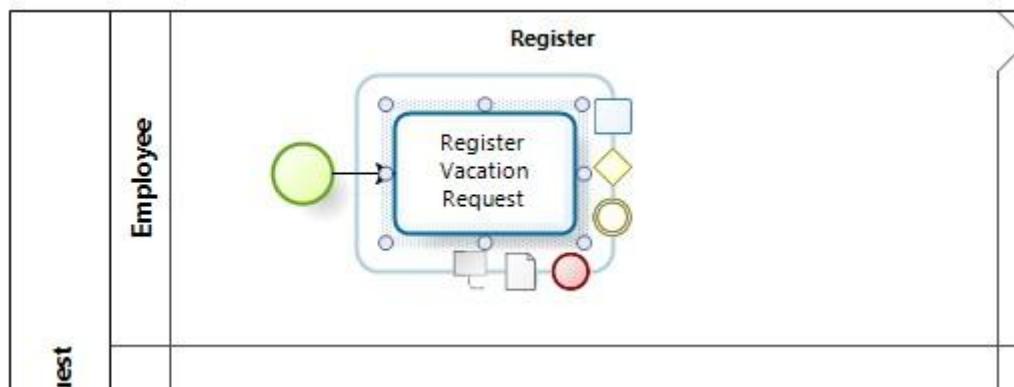


10. The figures have a Pie Menu that allows the selection of figures for interconnection into the diagram. A translucent edge of the same color of the figure is displayed when positioning the cursor on the figures of the diagram. The icons of the figures, with which a connection may be created, are displayed when clicking on the figure. These icons are drag and drop enabled, so that a new figure and sequence flow may be created.

Select the rectangle of the Pie Menu and place the selection inside the area of the diagram where the **Register** activity is going to be displayed.

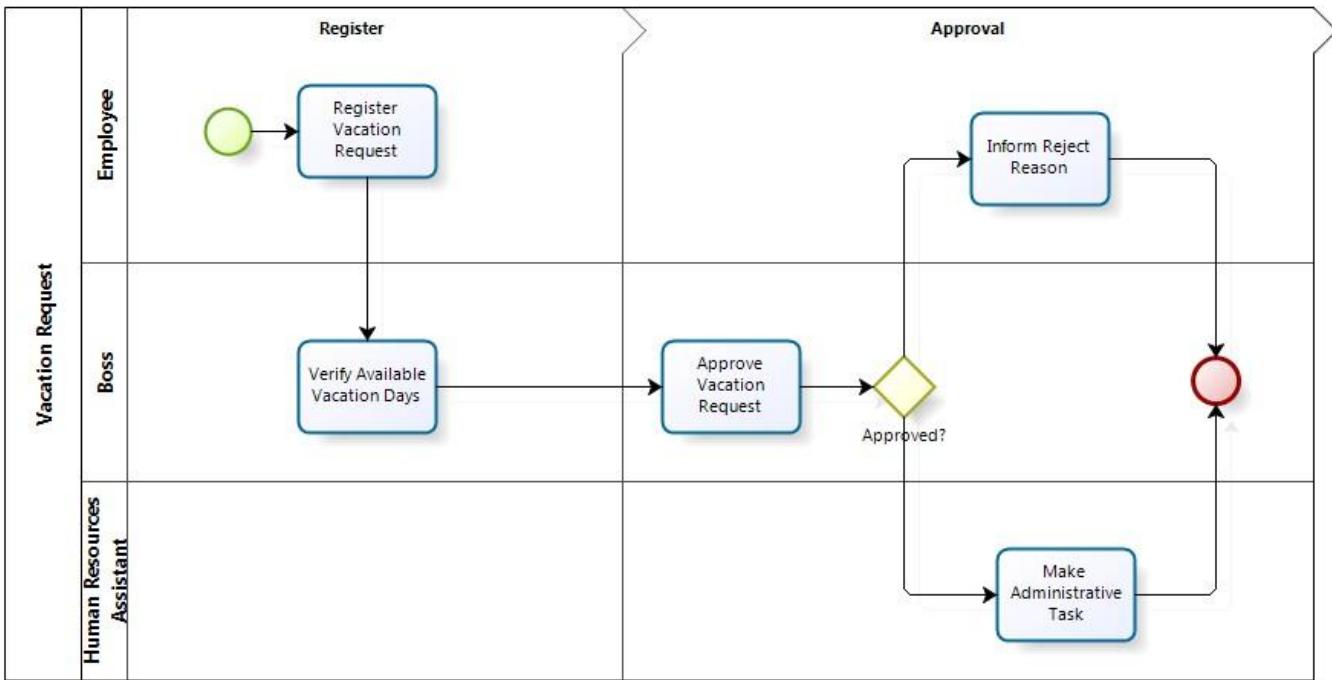


11. Rename the new task as Register Vacation Request. **You may rename the shapes and transitions (arrows connecting shapes) by double clicking on them.**

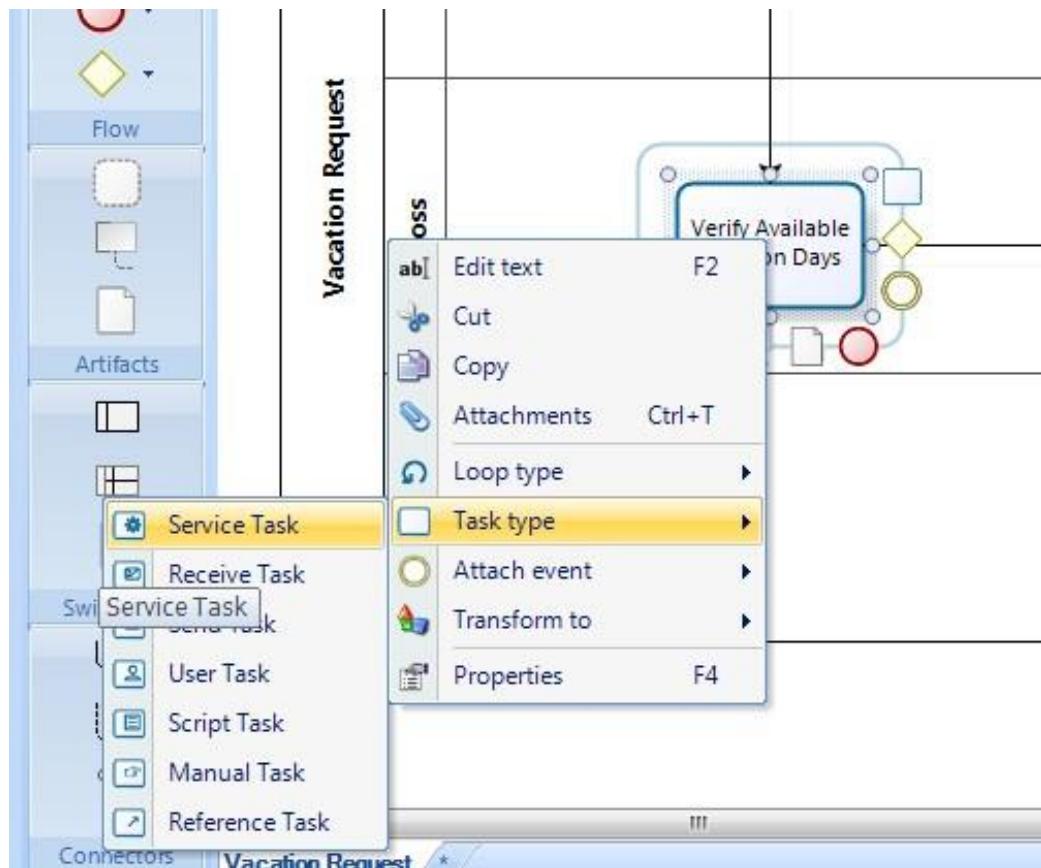


Warning... All the transitions must be properly connected and all the figures must be inside the area of the phases and functional areas and NOT on the limit of a phase or functional area.

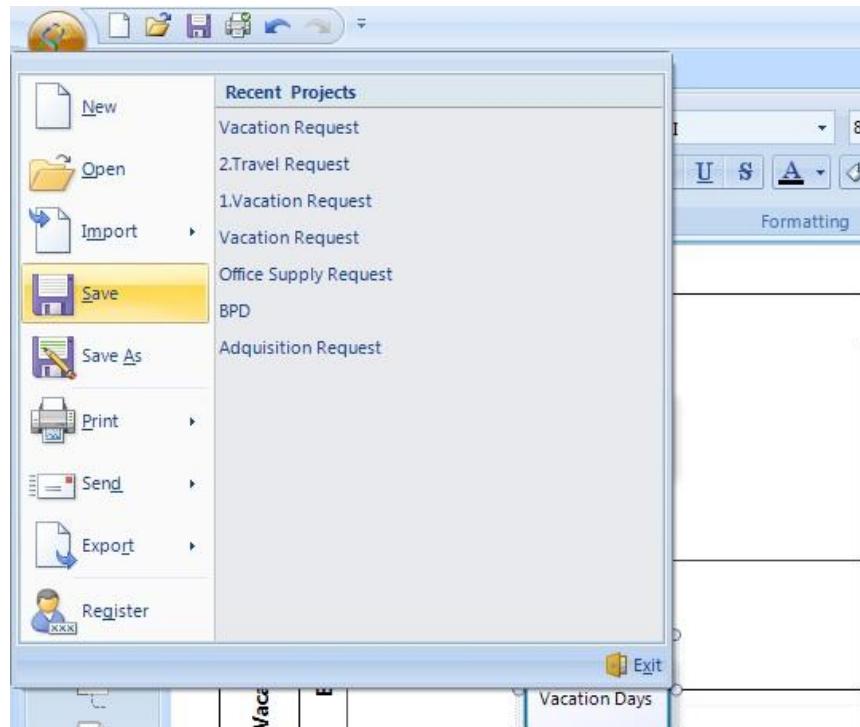
12. Keep adding your shapes until the diagram look like this figure:



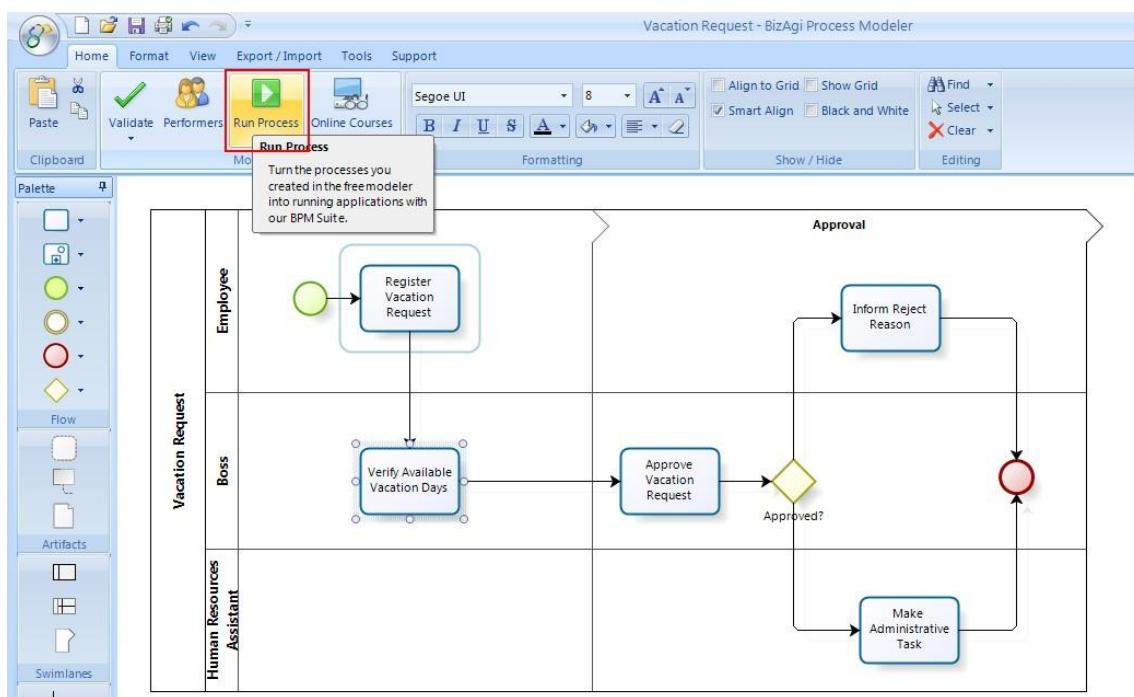
13. Right click on the Verify Available Vacation Days Activity and transform it to a Service Task



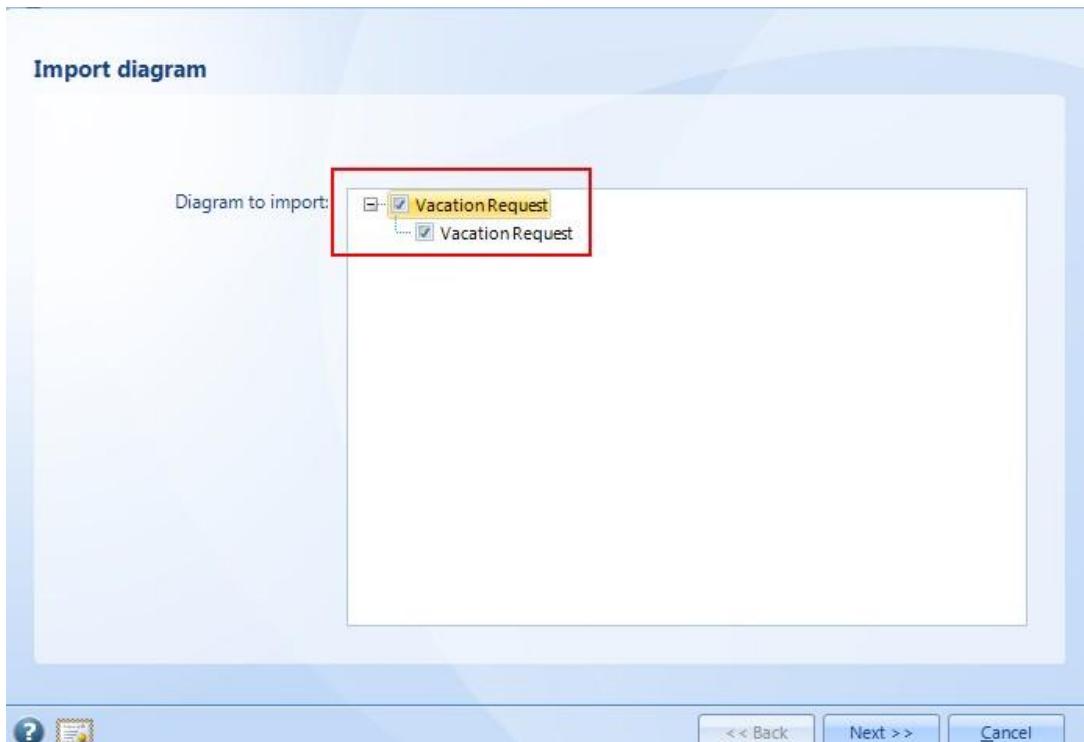
14. Save your BPM File. The file will be available for later documentation and changes.



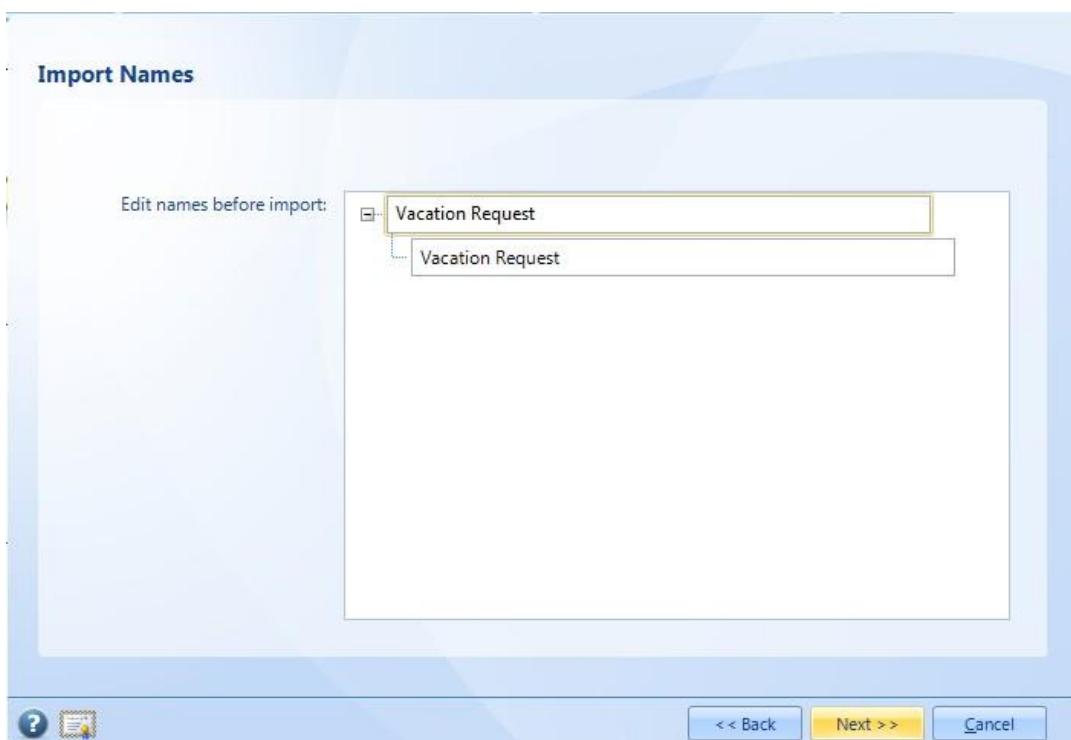
15. Run your Process. This procedure will take your diagrammed process to the automation environment.



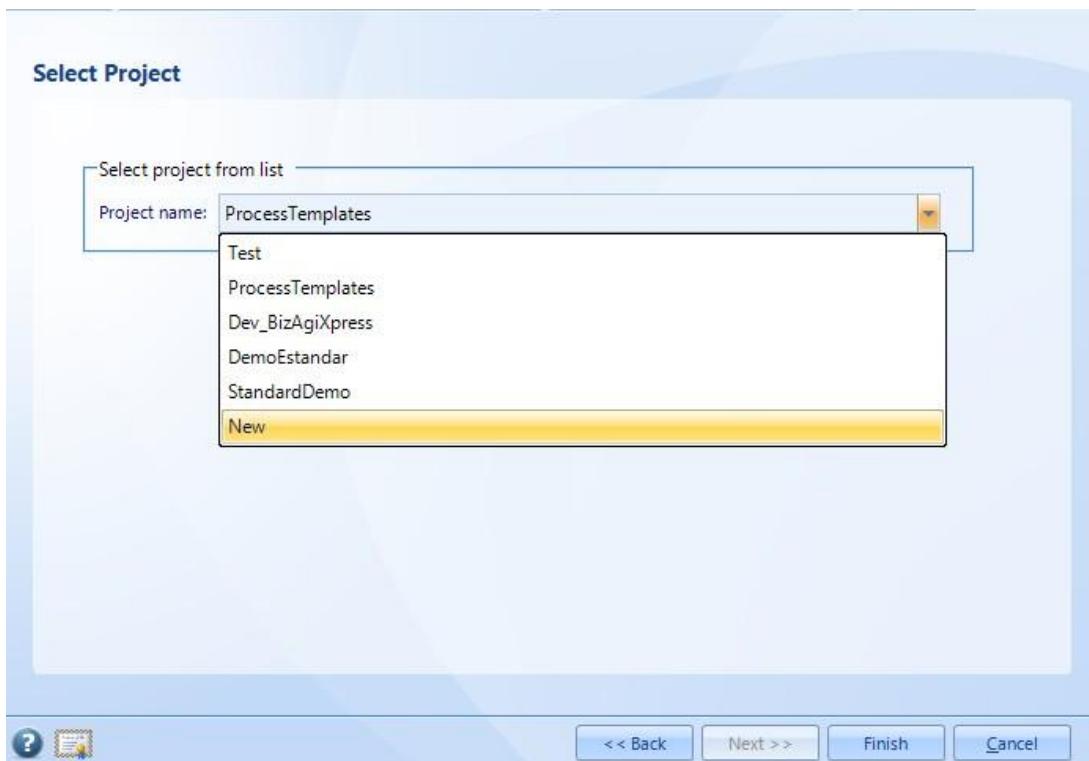
16. In the next window select the Diagram to be exported and click on Next:



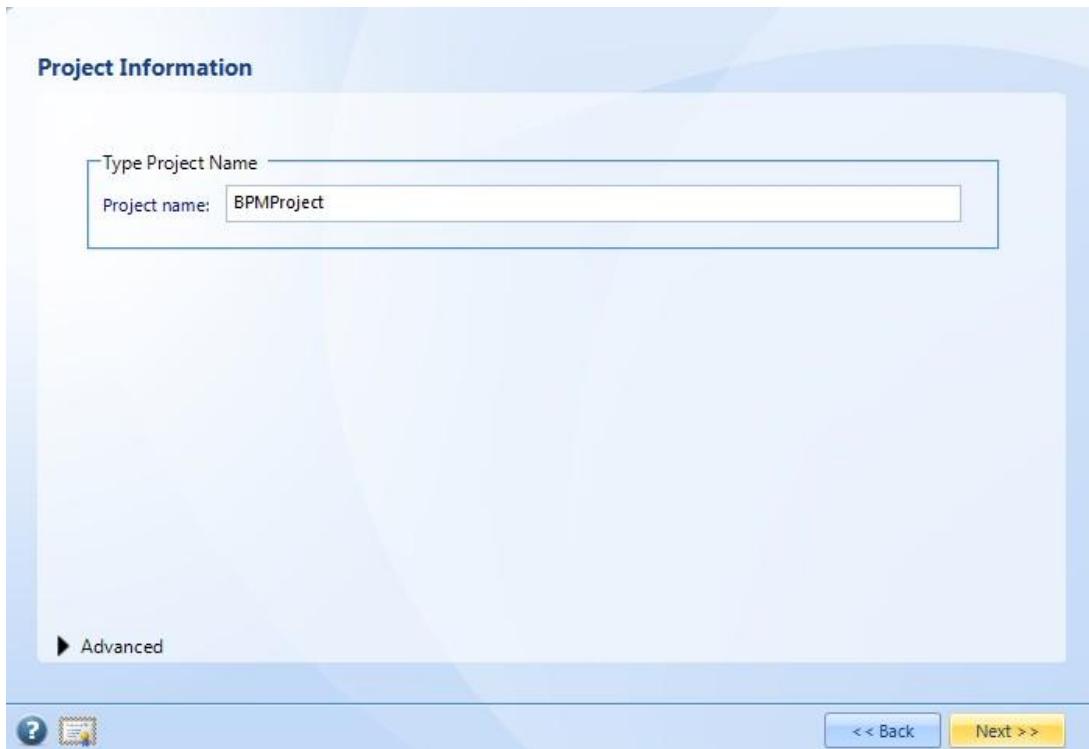
17. In the next window, you may rename your process, for this example just click on Next:



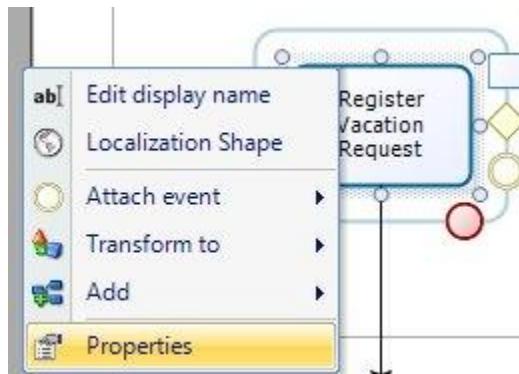
18. Create a new BizAgi Xpress Project; Select the New Option and click on Next:



19. Type a name for the Project: **BPMProject** and click on Next:



- 20.** After creating the project, you'll be located in the Bizagi Studio's Modeler. Some parameters must be integrated to the process' activities once the diagramming of the process has been completed, such as the duration, the help text, and the description among others. The properties for each activity must be updated to perform this configuration.



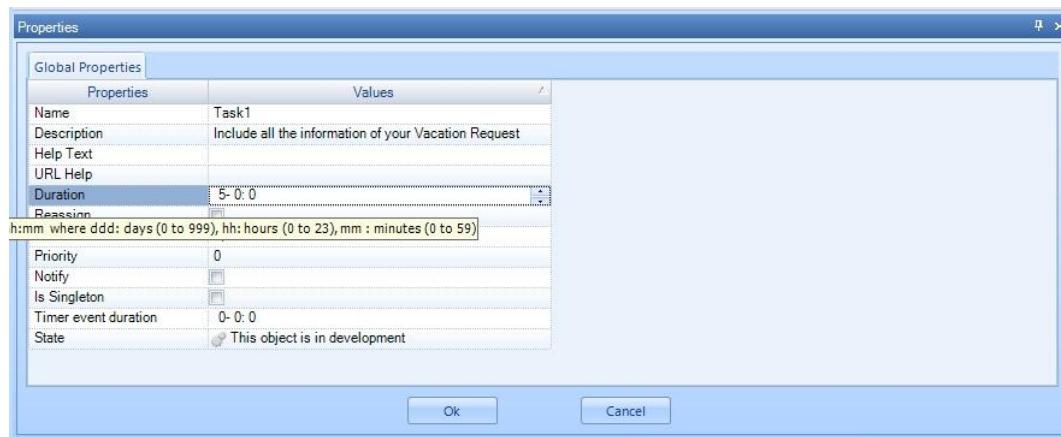
Right click on the figure; select **Properties**, to enter the properties of the activity.

- 21.** Click on the **Help Text** and enter the following help text for the activity.

Include all the information in your vacation request.

The help text will be displayed to the end user when the activity is executed in the web application.

- 22.** Click on the **Duration** (format: ddd – hh:mm where ddd:Days, hh:Hours and mm: minutes) field and enter the days as follows:

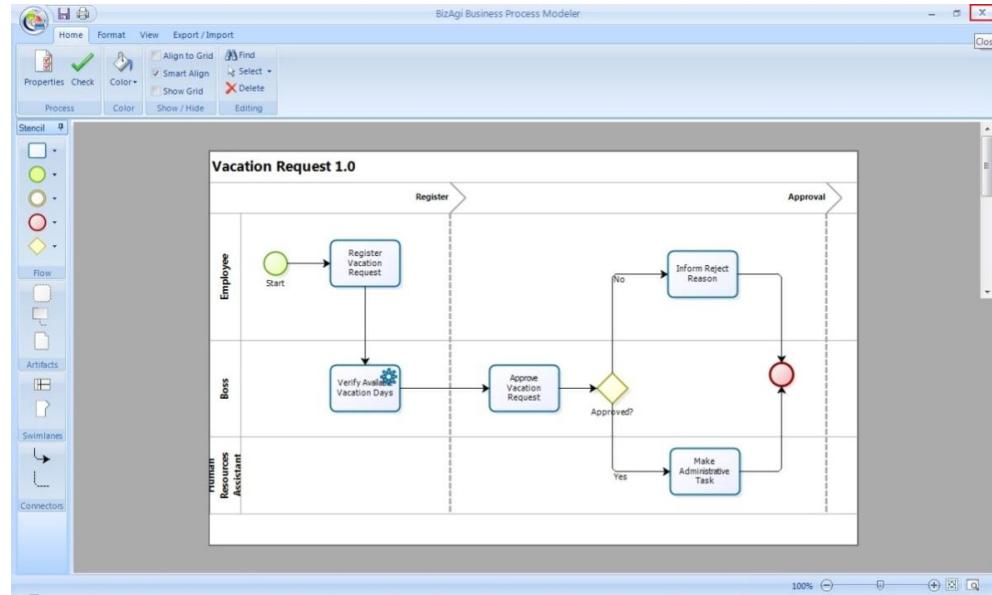


Click **Ok** once the properties have been entered; close the properties window for the activity.

- 23.** Once the properties of the activity Register Vacations Request have been entered, configure the following properties for each process activity; do not forget to save the changes for every activity and to close the properties window.

Activity	Help Text	Duration
Approve Vacation Request		2 days
Inform Reject Reason	Review the reasons for rejection request.	3 days
Make Administrative Task	Post the event into the payroll system.	3 days

Once you finish do not forget to close the modeler to go back to the Process Wizard.



STEP 2: PROCESS DATA

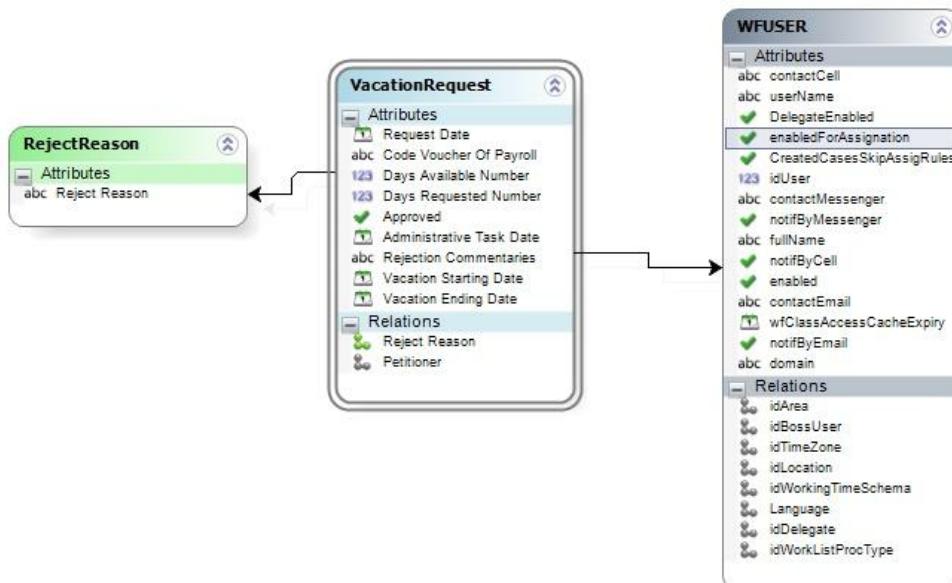
Once the Process Diagram has been created we'll proceed to the Data Model Creation. This Data Model will include all the information required by the process.

The process of Vacations Request requires the following information:

- Date Request
- Vacation Starting Date
- Return Date
- Days requested number
- Days available number
- Applicant
- Authorizer (Supervisor)
- Flag for Approval or Rejection
- Rejection Reason
- Code Voucher of Payroll
- Administrative Task Date

A structured data model will be used to represent the information; therefore, the entity relation model for the previous information would be:

All the information about the request, such as dates and number of requested and available days will be grouped in the entity **VacationRequest**. A standardized list about the rejection reasons will be found in the

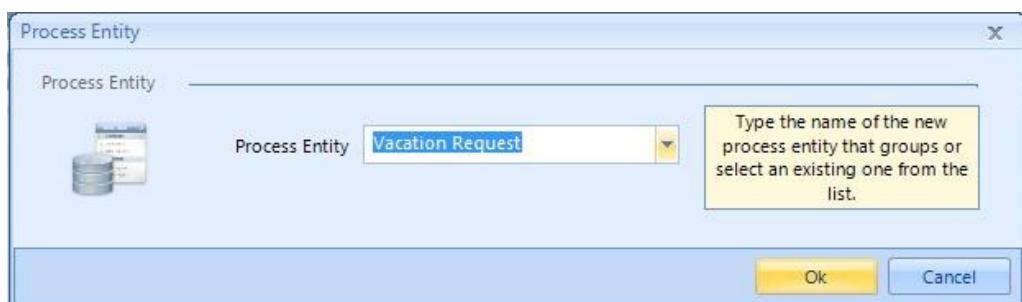


entity **RejectedReason**, which is manageable, and the entity User will contain the information about the applicant and respective supervisor.

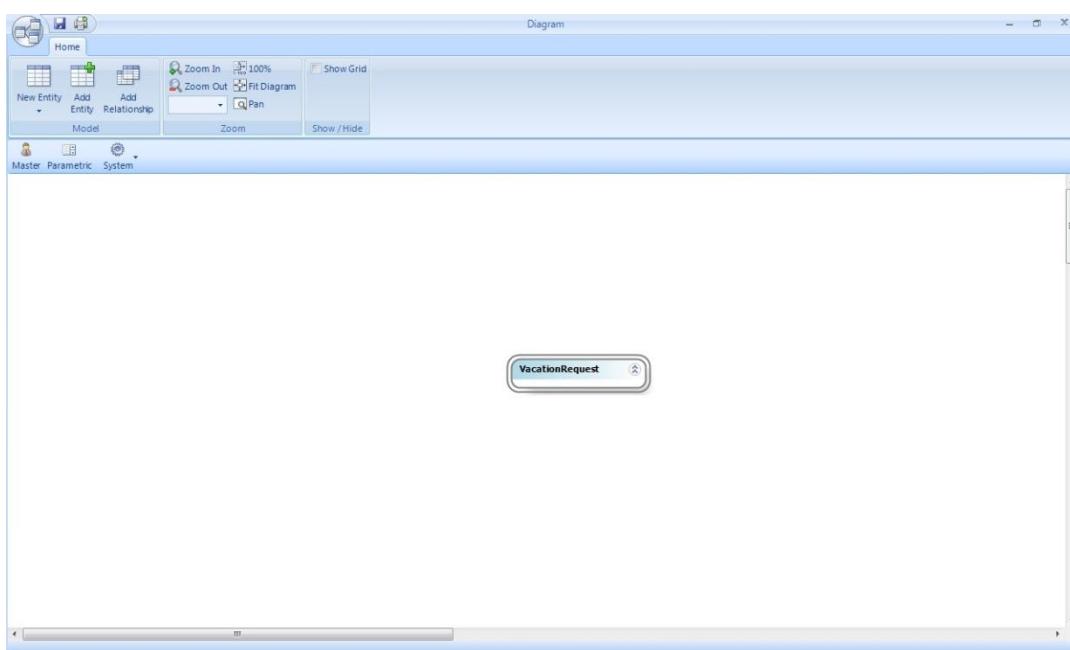
1. In the **second step** on the wizard in BizAgi Studio select **Model Data**:



2. A window will appear asking for the Process Entity, it will be named as our process **Vacation Request**. Click **Ok** to see the model.



3. A new window containing the Process entity will be displayed.



The entire entity relationship model, which can be a partial or total representation of the project, is displayed in the diagram. Furthermore, the creation of entities, attributes, and relationships can be completed from the diagram, which allows the visualization of the relationships between existent entities.

4. Right click on the **Vacation Request** entity and select **Edit Attribute List**.



5. The Attribute List Window for the Vacation Request Entity will be displayed; click on the **Add** button to create an attribute; for each new attribute complete the following information:

- **Display Name:** Enter the attribute name **Request Date** which is the form that will be displayed to the end user; this field does not allow special characters.
- **Type:** Enter data type. **Date – time**

Create the following attributes under the entity Vacation Request:

Display Name	Type	Length
Request Date	Date - Time	None
Vacation Starting Date	Date - Time	None
Vacation Ending Date	Date - Time	None
Number of Office Days Requested	Integer	None
Number of Available Days	Integer	None
Approved	Boolean	None
Rejection Comments	String	100
Payroll Code	String	20
Administrative Task Date	Date - Time	None

6. The Attribute list for Entity **Vacation Request** will look as illustrated in the following screen:

Attribute list for VacationRequest

Attributes List

Add Remove

Display Name	Name	Type
Request Date	RequestDate	Date - time
Vacation Starting Date	VacationStartingDate	Date - time
Vacation Ending Date	VacationEndingDate	Date - time
Number of Office Days Re	NumberOfOfficeDaysRe	123 Integer
Number of Available Days	NumberOfAvailableDays	123 Integer
Approved	Approved	Boolean (Yes - No)
Rejection Comments	RejectionComments	abc String
Payroll Code	PayrollCode	abc String
* Administrative Task Date	AdministrativeTaskDate	Date - time

Advanced

Next >> Finish Cancel

7. After you create the basic attributes, create those related to other entities:

Attribute list for VacationRequest

Attributes List

Add Remove

Display Name	Name	Type
Request Date	RequestDate	Date - time
Vacation Starting Date	VacationStartingDate	Date - time
Vacation Ending Date	VacationEndingDate	Date - time
Number of Office Days Re	NumberOfOfficeDaysRe	123 Integer
Number of Available Days	NumberOfAvailableDays	123 Integer
Approved	Approved	Boolean (Yes - No)
Rejection Comments	RejectionComments	abc String
Payroll Code	PayrollCode	abc String
* Administrative Task Date	AdministrativeTaskDate	Date - time
* Reject Reason	RejectReason	abc String

Description Default Value

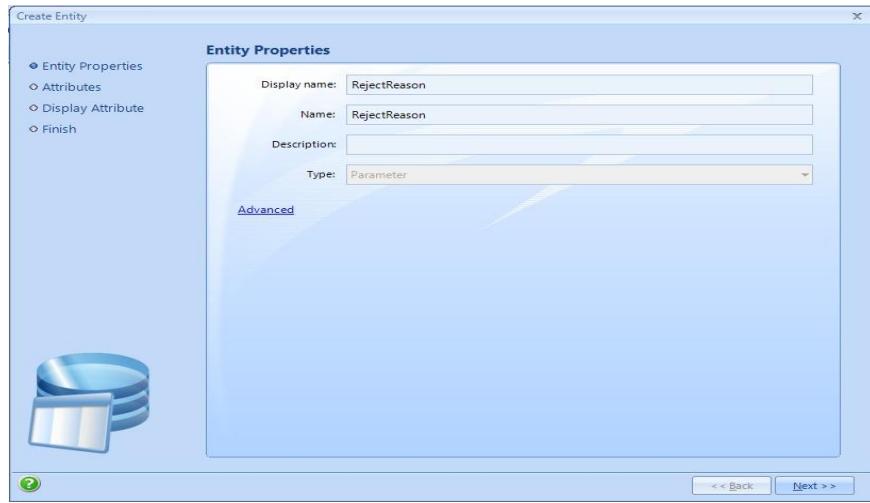
Help Text Length

Entity Application Master Parameter New Entity... System Collection

Hide

Next >> Finish Cancel

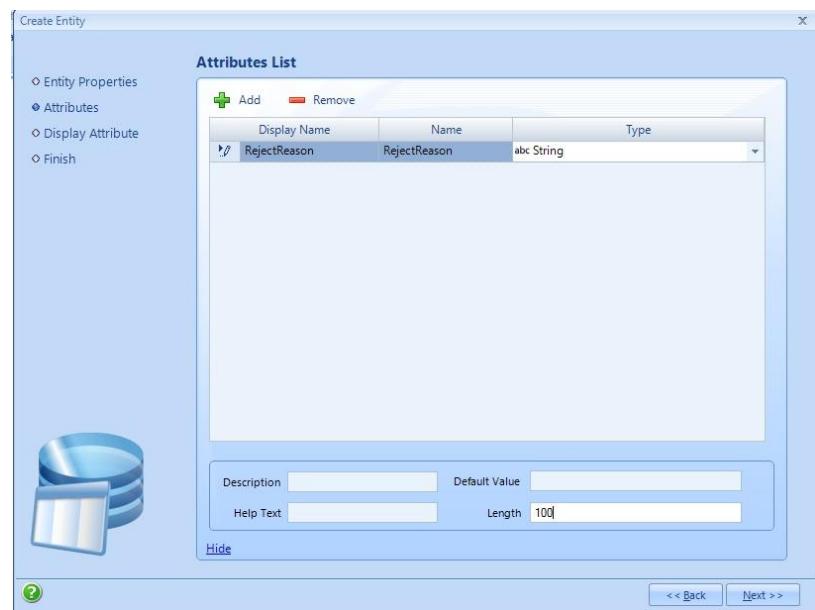
- **Display Name:** Reject Reason.
- **Type:** Entity – Parameter – New Entity



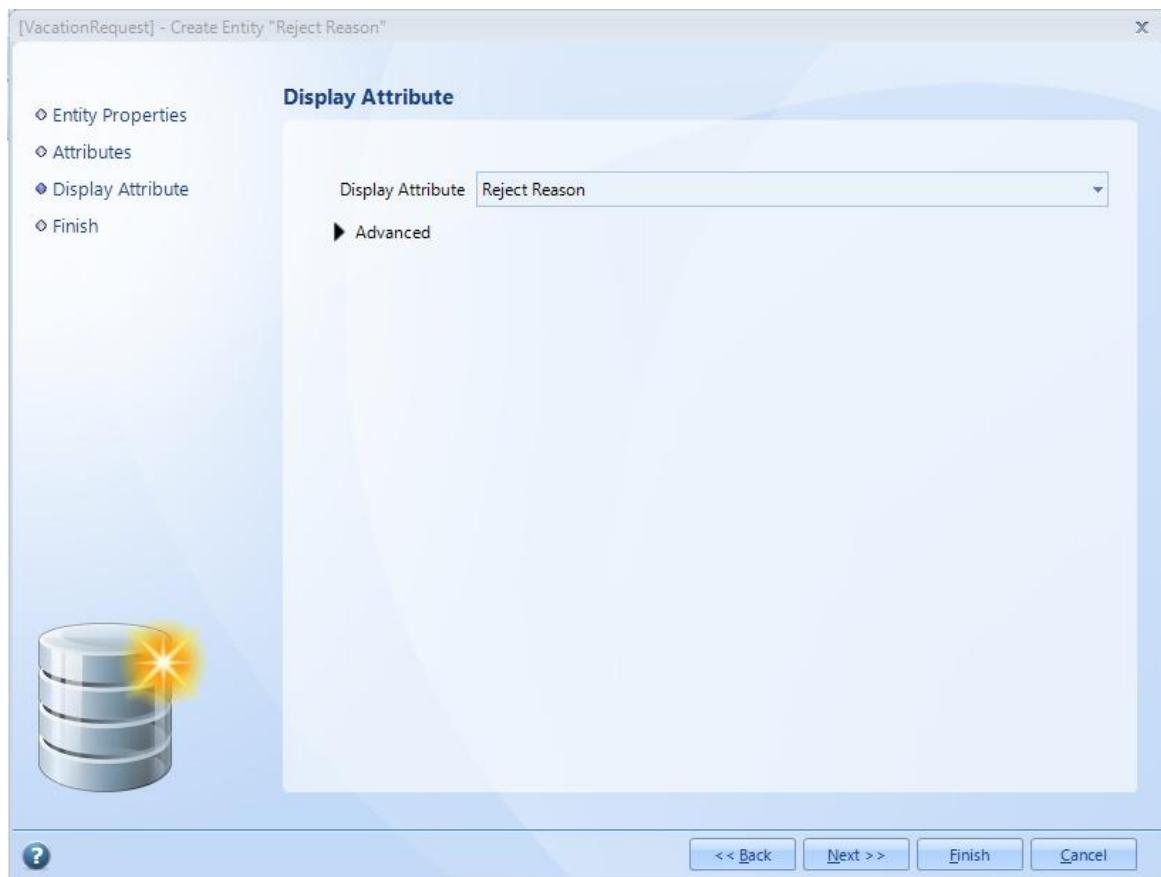
- **Display Name:** Enter the displayable name for the entity, **Reject Reason**.
- **Name:** Enter the name of the entity **RejectReason**; this field allows no special characters.

Click on next and create the attribute for the entity, notice that in the bottom you can select the Length for the String type Attribute:

Display Name	Type	Length
Reject Reason	String	100

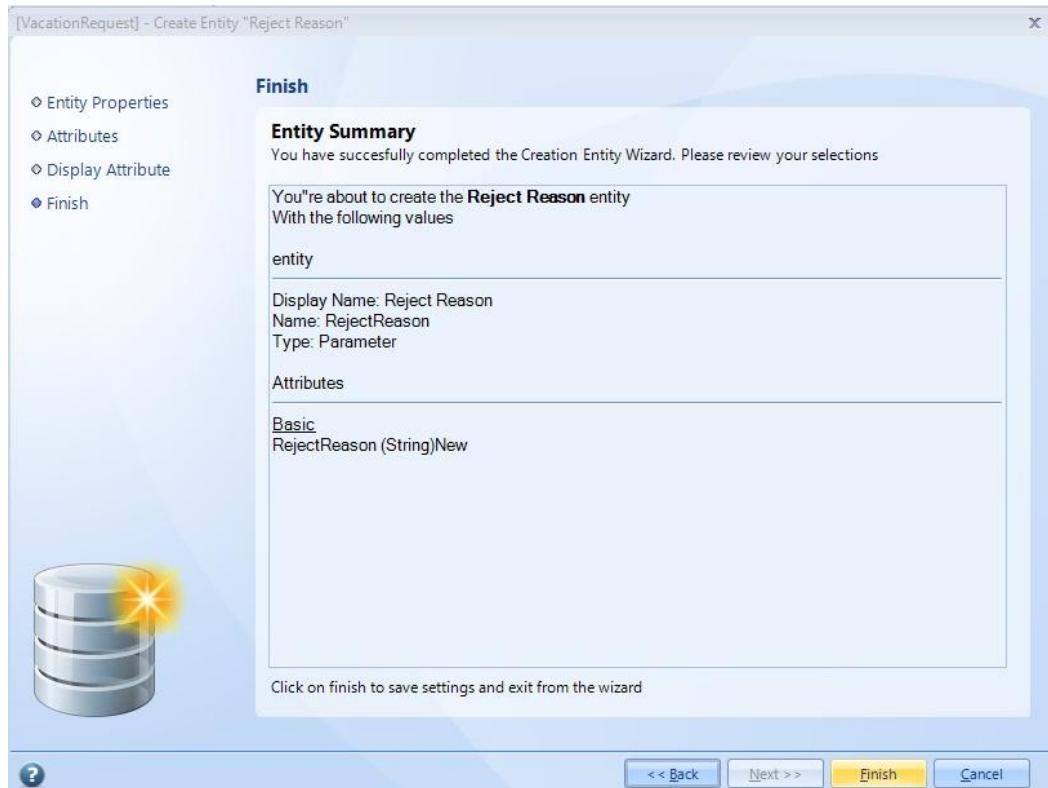


8. Since this is a Parameter entity, click Next and you'll be asked for a Display Attribute, select the one you just created:



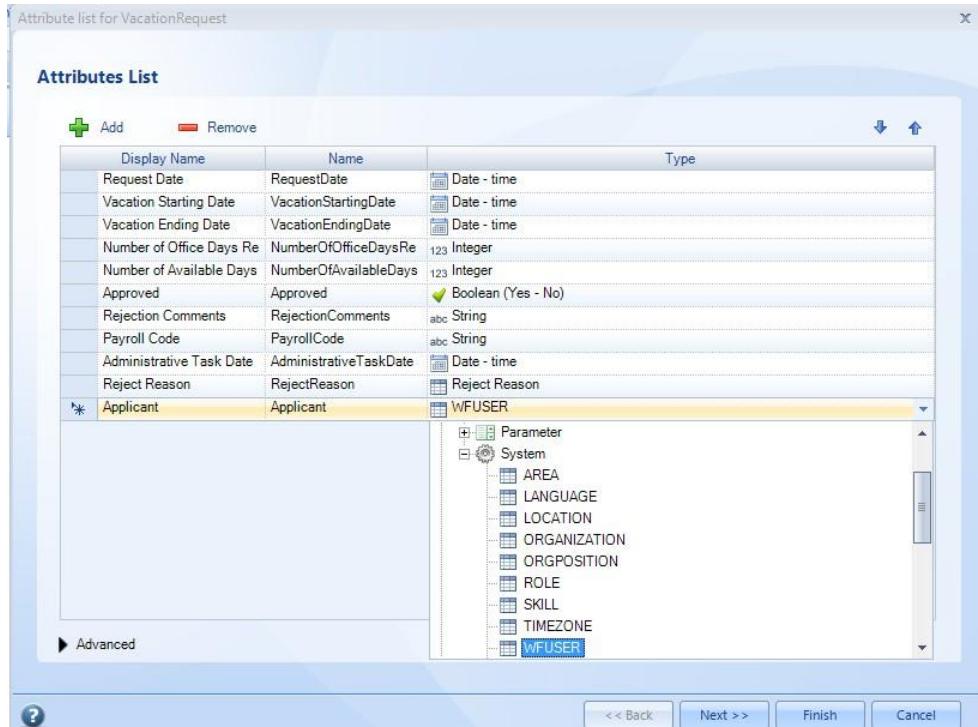
Click on next to continue

9. A new Summary window will appear:



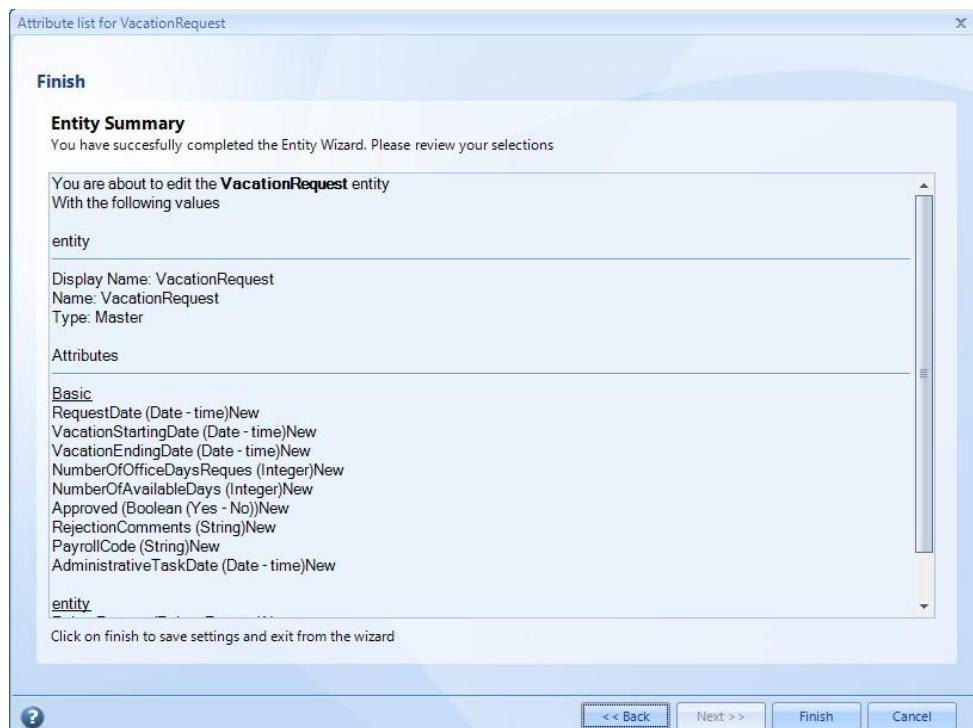
10. Click on Finish and you'll return to the Vacation Request Attribute List. The entity VacationRequest is also related to the entity User, keep in mind that BizAgi includes by default the entity **User (WFUSER)**, which is used to store all the information related to the users of the system. Hence, this entity may be used to display all the information related to the employee requesting the vacation. This entity can be found under the group of entities of the system.

An attribute must be added along with the information below listed to create the attribute related to the **WFUSER (User)** entity:

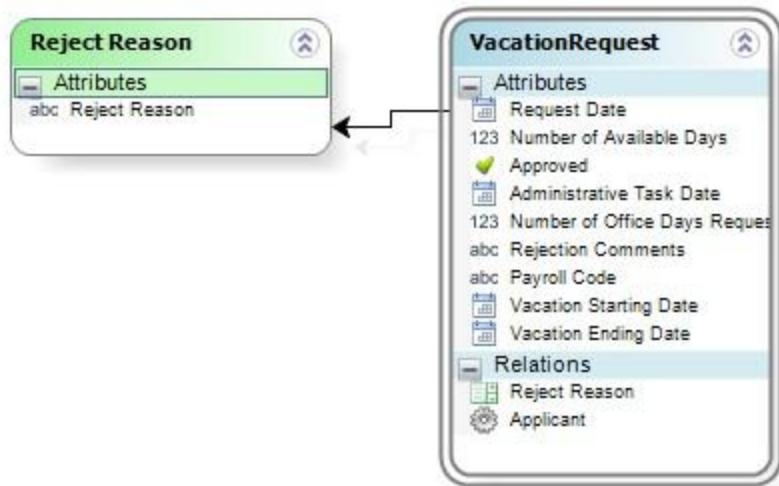


- **Display Name:** Enter the attribute's name in the form that will be displayed to the end user; this field does not allow special characters. **Applicant**
- **Type:** Enter data type. **Entity – System - WFUSER**

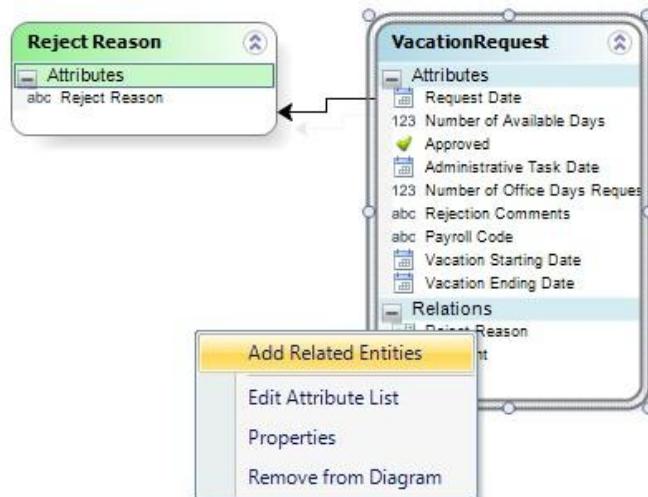
11. Click on next and a new summary window will appear for the Vacation Request Entity:



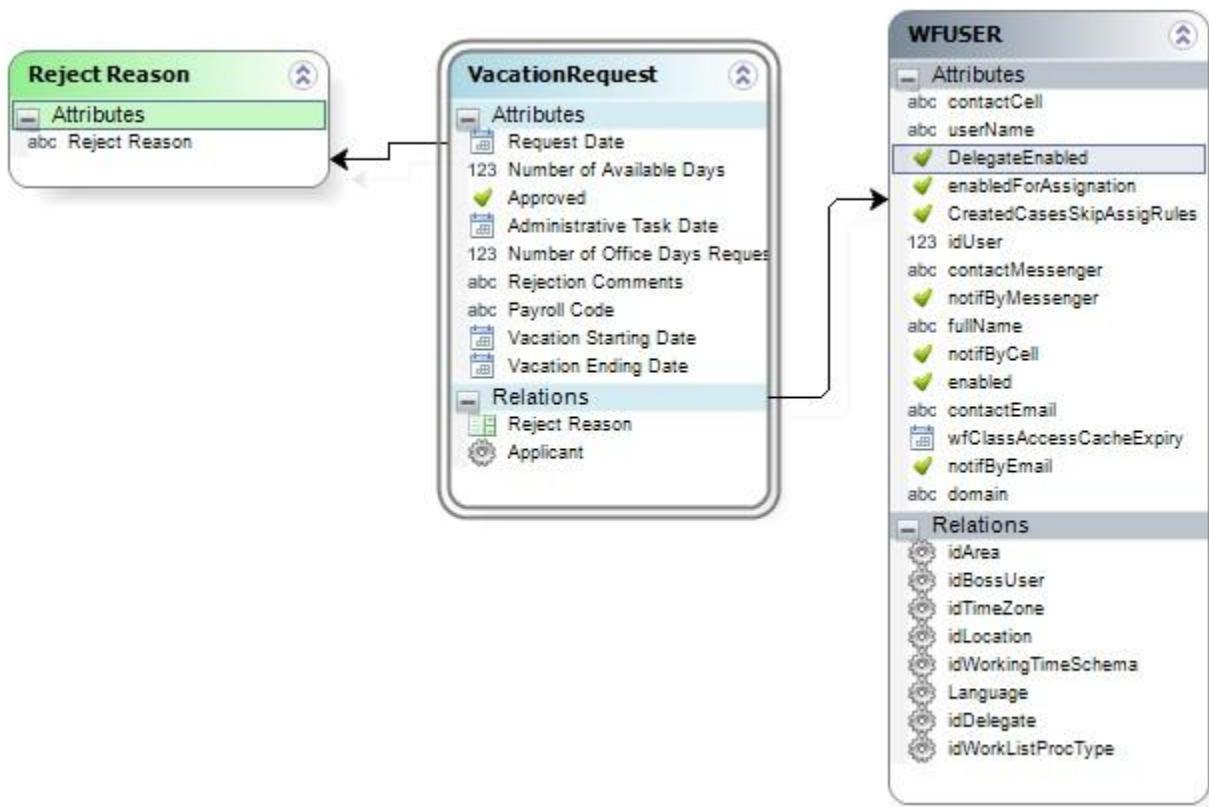
12. Click on Finish. The work completed so far will result in the following screen (You may need to re-organize the entities on the screen by dragging and moving them):



13. Select the option **Add Related Entities** by right clicking on the Vacation Request Entity:



The diagram will be displayed in the following way:



Save and close the diagram once the data model has been completed.

STEP 3: FORMS CREATION

Once the Process Diagram and the Data Model are ready we'll proceed to create the forms associated to each one of the activities of the process.

In BizAgI a web form is used to represent every process activity; this form is used to enter and display required information, so that users may interact and complete in a friendly way each one of the activities of the process. Let us create the form for the first activity of the process, Register Vacation Request, which must contain the following information:

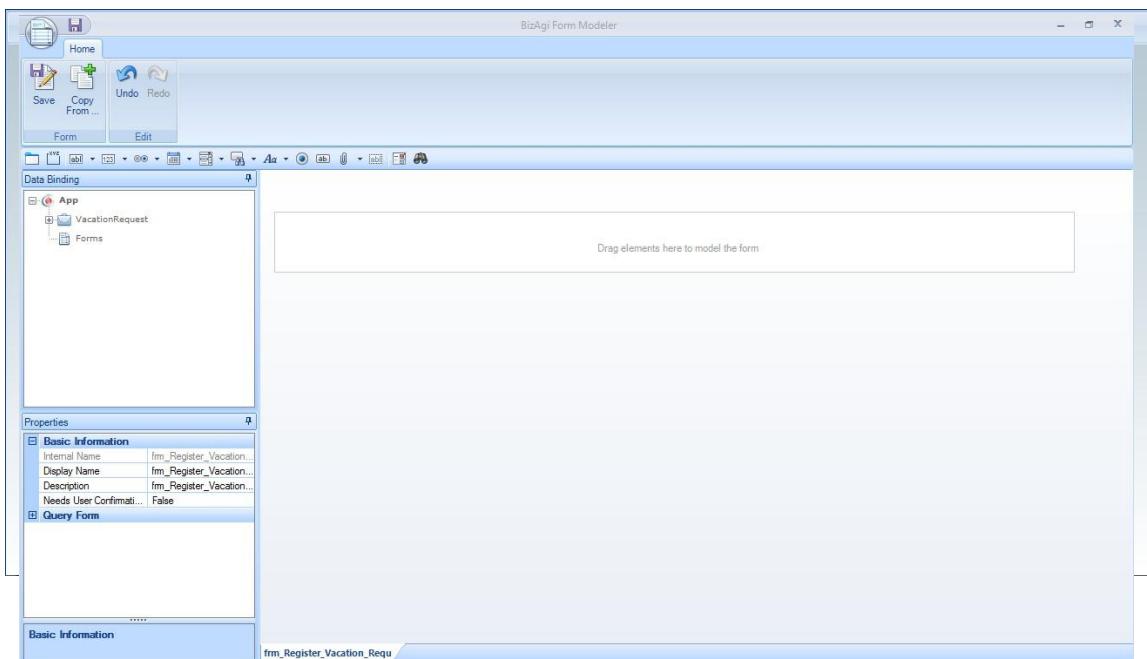
Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	<input type="text" value="23/11/2009"/>
Vacation Ending Date	<input type="text" value="23/11/2009"/>
Number of Office Days Requested	<input type="text" value="123"/>

Drag elements here to model the form

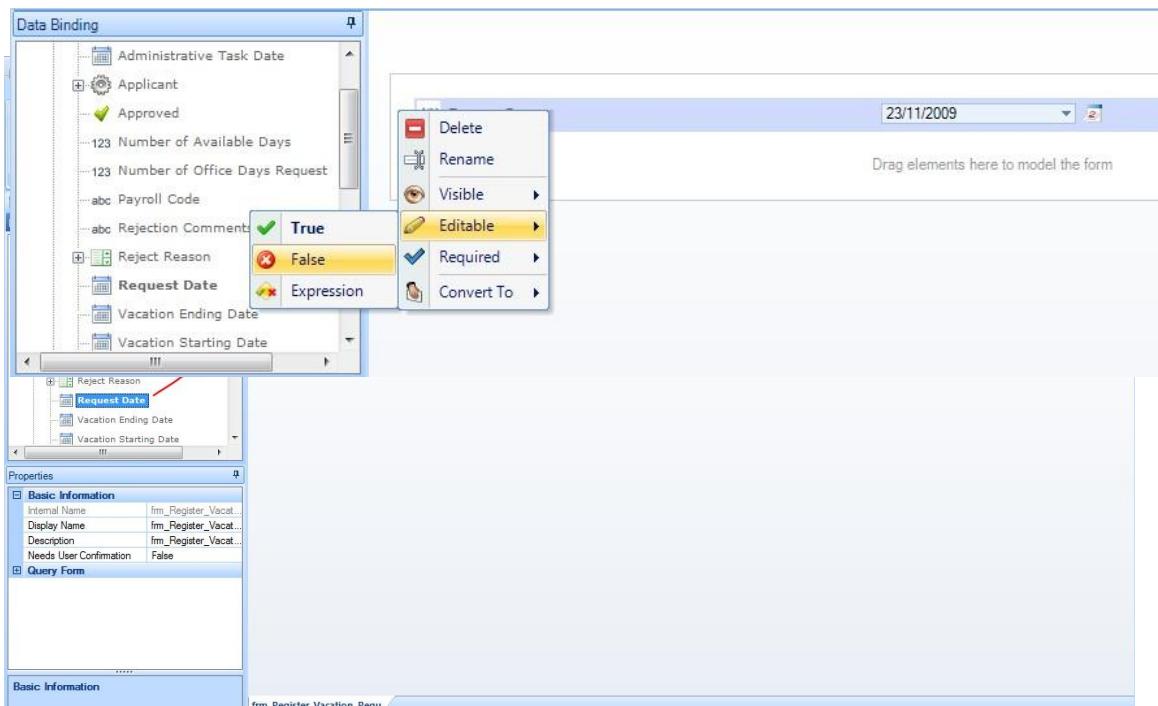
ACTIVITY: REGISTER VACATION REQUEST

The entity VacationRequest must be selected for the creation of the form due that this entity contains the information required for display.

1. To create the forms please select the **Third Step** on the wizard:
2. After selecting the step you'll see a diagram where only user tasks will be available for you to select, select the activity **Register Vacation Request** by clicking on it. The following screen will appear:

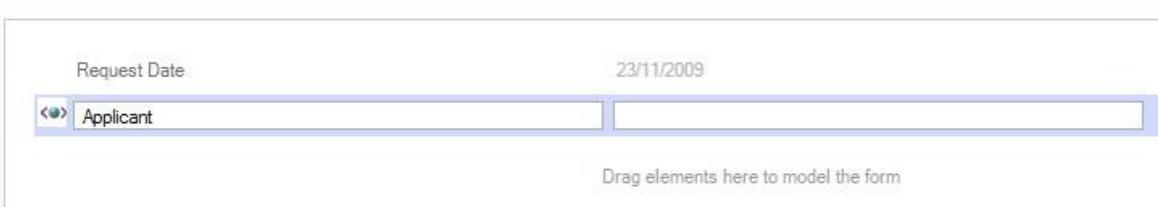
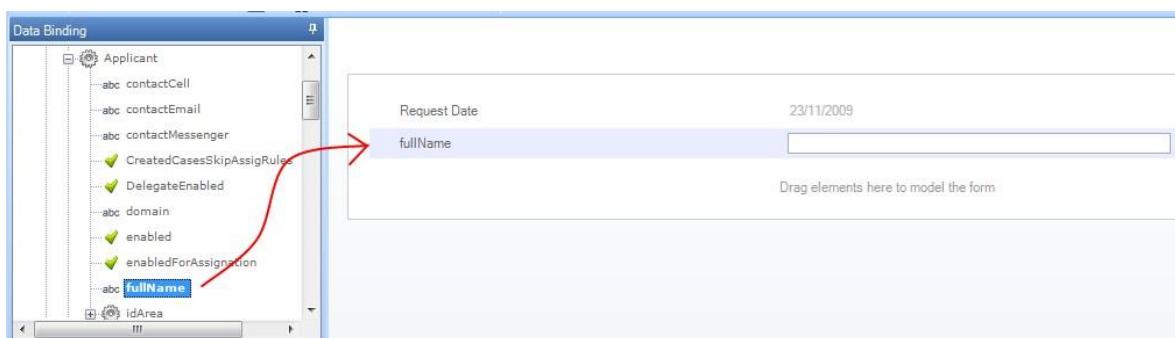


3. Navigate through the Data Binding to find the elements in the Data Model, then drag and drop the elements from the Data Binding:



- Request Date:** This field must be read only. Right click on the field and select **Editable** and then **False**

- Applicant:** To add the Applicant, navigate the Data Binding and once in the Applicant entity (WFUSER), select the fullName Attribute. Edit the Display Name for the attribute by double clicking on it. This field must be read only. Right click on the field and select **Editable** and then **False**



Add the following fields from the Data Binding. These fields will be required. Select these fields, right click on them and select Required and then True

- **Vacation Starting Date**
- **Vacation Ending Date**
- **Number Of Office Days Requested**

The screenshot shows the Bizagi Studio interface for configuring data binding. On the left, there's a tree view of fields under 'Applicant'. In the main area, there are four form elements: 'Request Date' (23/11/2009), 'Applicant' (abc), 'Vacation Starting Date' (23/11/2009), and 'Vacation Ending Date' (23/11/2009). Below these is a text input field for 'Number Of Office Days Requested' containing the value '123'. A context menu is open over the 'Number Of Office Days Requested' field, with the 'Required' option selected and highlighted in yellow. Other options in the menu include 'Delete', 'Visible', and 'Editable'. At the bottom of the interface, there's a message: 'Drag elements here to model the form'.

The screenshot shows the completed form with the following data:

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123

Below the form, there's a message: 'Drag elements here to model the form'

Click on the Save button once the form has been completed and close it.

ACTIVITY: VERIFY AVAILABLE VACATION DAYS

Since this is an automatic task it won't use any form to be displayed. In step 6 of the process wizard we'll see how the configuration is done for this activity.

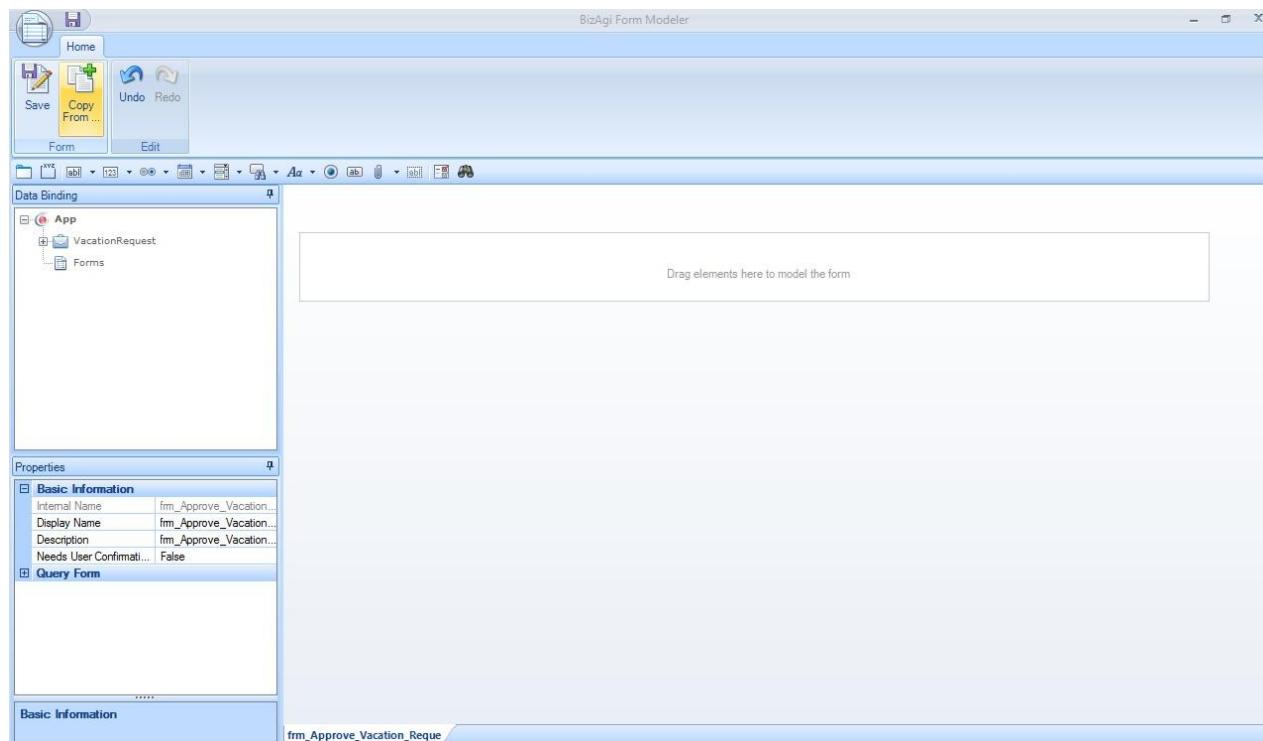
The creation of the form **Approve Vacation Request** is the second step. This form will display the information for the vacation request approval in read-only mode. The form design for the activity will be:

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123
Number of Available Days	123
Approved	<input checked="" type="radio"/> Yes <input type="radio"/> No
Reject Reason	<input type="text"/>
Rejection Comments	<input type="text"/>
Applicant's Boss	abc

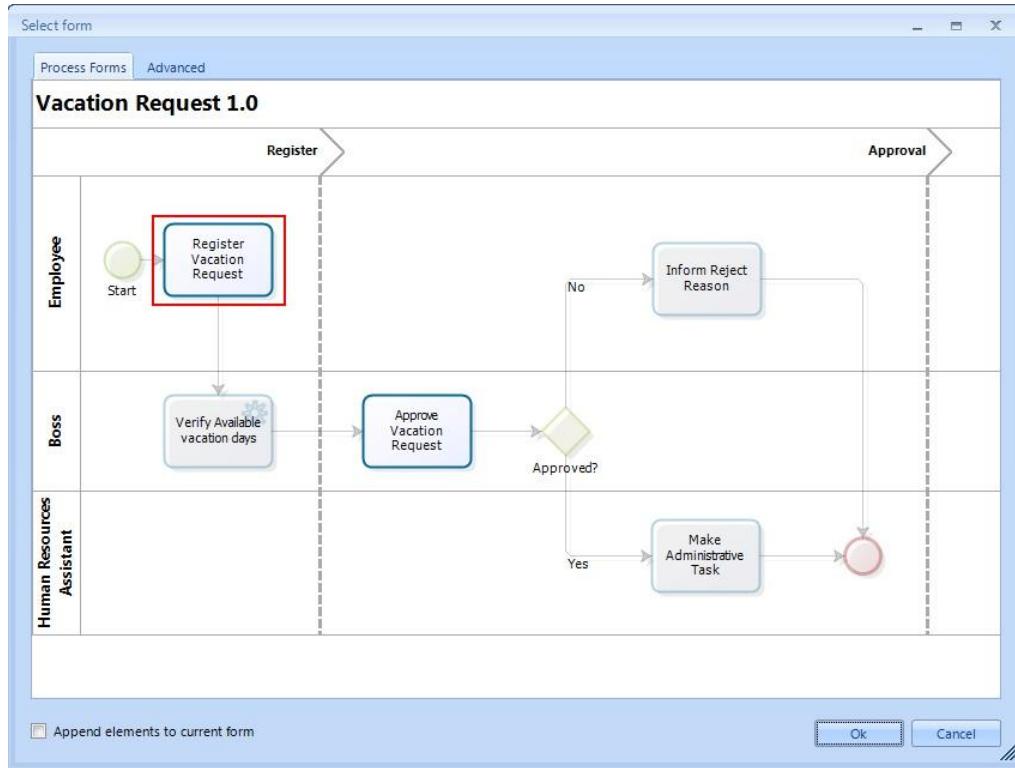
ACTIVITY: APPROVE VACATION REQUEST

- After entering into the flow chart area, select the activity **Approve Vacation Request**, by clicking on it.

The forms editor will be opened after clicking on the Activity; the form will be created in the same way as the last one. Since we will use the same fields we'll use the **Copy From** option to bring the information from the last form.



A new window displaying the process will open. Select the Register Vacation Request Activity by clicking on it.



Click on Ok.

2. The information is copied the same as in the original form. Right click on the fields Vacation Starting Date, Vacation Ending Date and Days Requested Number and make the Editable property False.

Request Date:	23/11/2009
Applicant:	abc
Vacation Starting Date:	23/11/2009
Vacation Ending Date:	23/11/2009
Number of Office Days Requested:	123

Drag elements here to model the:

- True
- False
- Expression
- Delete
- Visible
- Editable
- Required

3. Additionally the following fields will be entered:

- **Number of Available Days:** Right click on the field and select **Editable** and then **False**
- **Approved:** Drag and drop the attribute from the Data Binding. Right Click on this field and select the **Required** property and click on True since this field is mandatory.
- **Reject Reason**
- **Rejection Comments**
- **Applicant's Boss:** Locate the applicant Attribute from the Data Binding and expand this, drag and drop the Applicant -idBossUser – fullName attribute to the form.

The screenshot shows the Bizagi Studio interface. On the left, the 'Data Binding' palette is open, displaying a tree structure of attributes under 'idBossUser'. One of the attributes, 'fullName', is highlighted with a blue selection bar. A red arrow points from this selection bar to the 'Properties' palette on the right. The 'Properties' palette has a section titled 'Basic Information' where the 'Display Name' is set to 'fullName'. The main form designer area contains several fields: Request Date (23/11/2009), Applicant (abc), Vacation Starting Date (23/11/2009), Vacation Ending Date (23/11/2009), Number of Office Days Requested (123), Number of Available Days (123), Approved (radio buttons for Yes and No), Reject Reason (empty text box), Rejection Comments (empty text box), and a final field labeled 'Applicant's Boss' which also has 'fullName' assigned as its display name.

This field must be read only. Right click on the field and select **Editable** and then **False**. Change the display name to Applicant's Boss by double clicking on the field and typing:

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123
Number of Available Days	123
Approved	<input checked="" type="radio"/> Yes <input type="radio"/> No
Reject Reason	(empty text box)
Rejection Comments	(empty text box)
Applicant's Boss	abc

4. Click on the **Save** button once the form has been completed and close it.

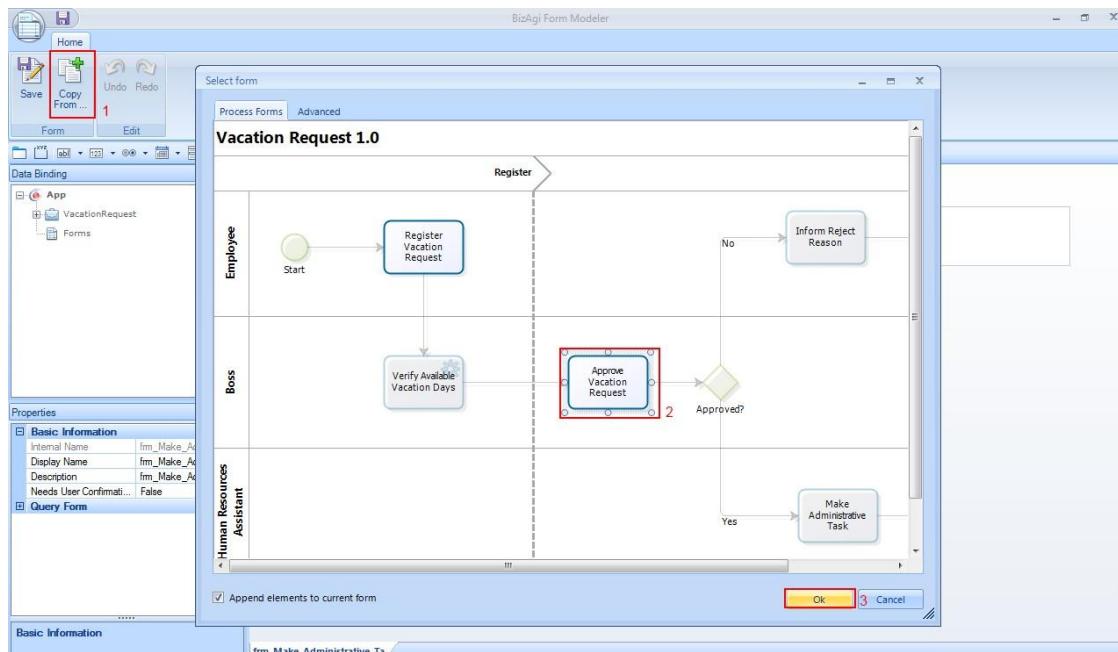
The creation of the form **Make Administrative Task** is the following step after designing the forms **Register Vacation Request** and **Approve Vacation Request**. The read-only information for the **Vacation Request** and **Applicant Boss** will be displayed for this activity along with the information to be entered by the Human Resources Representative.

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123
Number of Available Days	123
Approved	Yes - No
Reject Reason	value
Rejection Comments	abc
Applicant's Boss	abc
Update employee's folder and make administrative task in payroll's system	
Administrative Task Date	23/11/2009
Payroll Code	

Drag elements here to model the form

ACTIVITY: MAKE ADMINISTRATIVE TASK

24. After entering into the flow chart area by clicking on the BPMProject at the bottom of the screen, select the activity **Make Administrative Task** by clicking on it.
25. We'll add all the information we included on the Register Vacation Request and Approve Vacation Request activities, this information won't be editable. Copy the information from the Approve Vacation Request



26.

2. Select False for the Editable Property for the Fields Approved, Reject Reason and Rejection Comments.
3. In the form editor we'll add the activity information from the Vacation Request entity:

Display Name	Field	Required	Editable	Visible
Update employee's folder and make administrative task in payroll's system	none	No	No	Yes
	Administrative Task Date	Yes	Yes	Yes
	Code Voucher of Payroll	Yes	Yes	Yes

To Add a Label, select the button from the upper bar, drag and drop the label to its position and then double click on the field to edit the Display:

The screenshot shows the Bizagi Form Editor interface. The toolbar at the top includes icons for font style (Aa), font size, bold, italic, underline, align, and others. A red arrow points from the 'Aa' icon to the 'Request Date' field in the list below. The list contains the following fields:

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123
Number of Available Days	123
Approved	Yes - No
Reject Reason	value
Rejection Comments	abc
Applicant's Boss	abc

At the bottom of the list, there is a button labeled 'Render11'.

The screenshot shows the Bizagi Form Editor interface. The header bar at the top contains a label: 'Update employee's folder and make administrative task in payroll's system'. A red arrow points from the 'Request Date' field in the list below to this label. The list of fields is identical to the one in the previous screenshot. At the bottom of the editor, there is a message: 'Drag elements here to model the form'.

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123
Number of Available Days	123
Approved	Yes - No
Reject Reason	value
Rejection Comments	abc
Applicant's Boss	abc
Update employee's folder and make administrative task in payroll's system	
Administrative Task Date	<input type="text" value="23/11/2009"/> 
Payroll Code	<input type="text"/>

Drag elements here to model the form

Click on the **Save** button once the form has been completed and close it.

The creation of the form **Inform Reject Reason** is the next step. The read-only information for the **Vacation Request** and **Applicant Boss Approval** will be displayed for this activity.

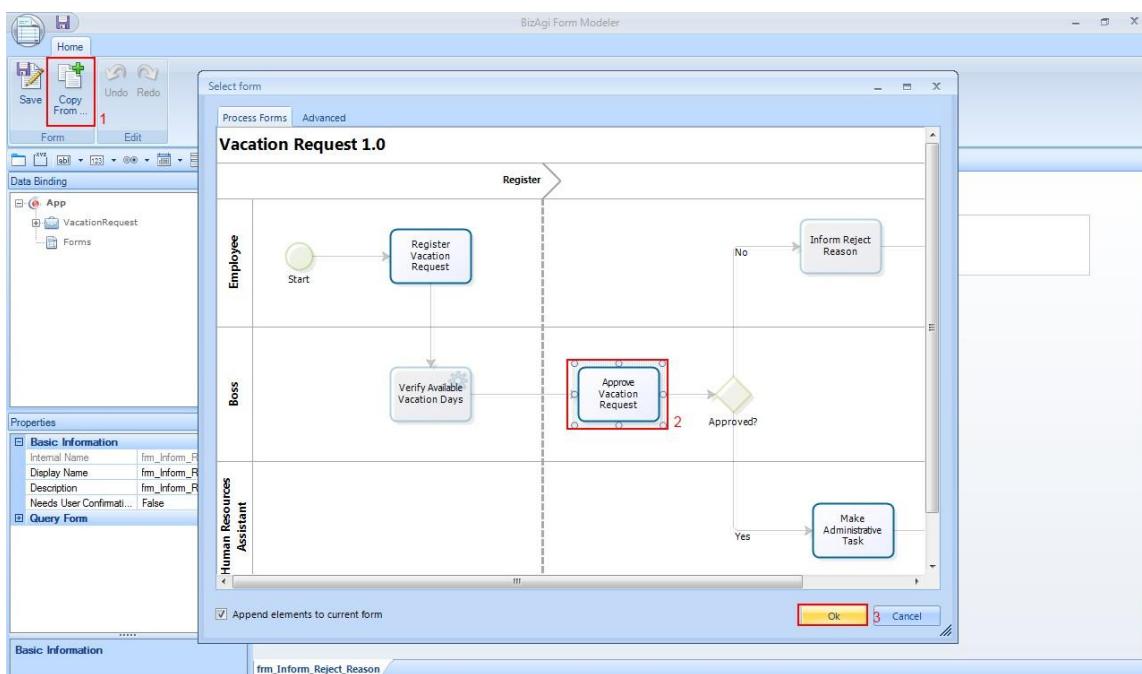
The activity will be displayed as follows:

ACTIVITY: INFORM REJECT REASON

Petitioner:	admon
Request Date:	Sunday, June 21, 2009
Vacation Starting Date:	Wednesday, June 17, 2009
Vacation Ending Date:	Wednesday, June 24, 2009
Days Requested Number:	5
Days Available Number:	28
Approved:	No
Rejection Commentaries:	Rejected
Reject Reason:	For working reasons it is not possible to take vacations on that date
Petitioner Boss:	Boss

27. After entering into the flow chart area, select the activity **Inform Reject Reason**, by clicking on it.

28. Copy the information from the Approve Vacation Request Activity:



29. Select **Editable – False** for the fields Approved, Reject Reason and Rejection Comments.

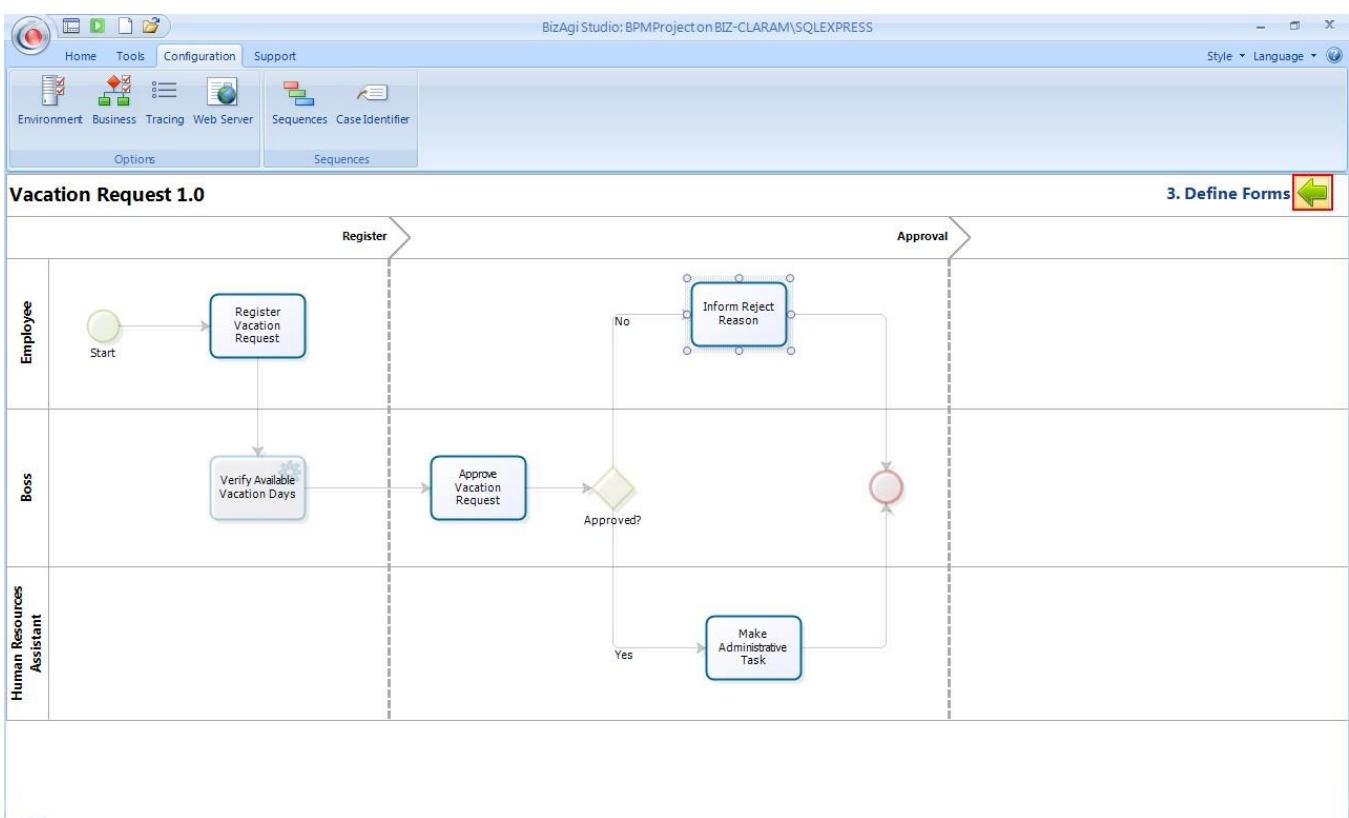
30.

Request Date	23/11/2009
Applicant	abc
Vacation Starting Date	23/11/2009
Vacation Ending Date	23/11/2009
Number of Office Days Requested	123
Number of Available Days	123
Approved	Yes - No
Reject Reason	value
Rejection Comments	abc
Applicant's Boss	abc

Drag elements here to model the form

31. Click on the **Save** button once the form has been completed and close it.

32. Close the Forms editor by clicking on the arrow as follows:



33.

34.

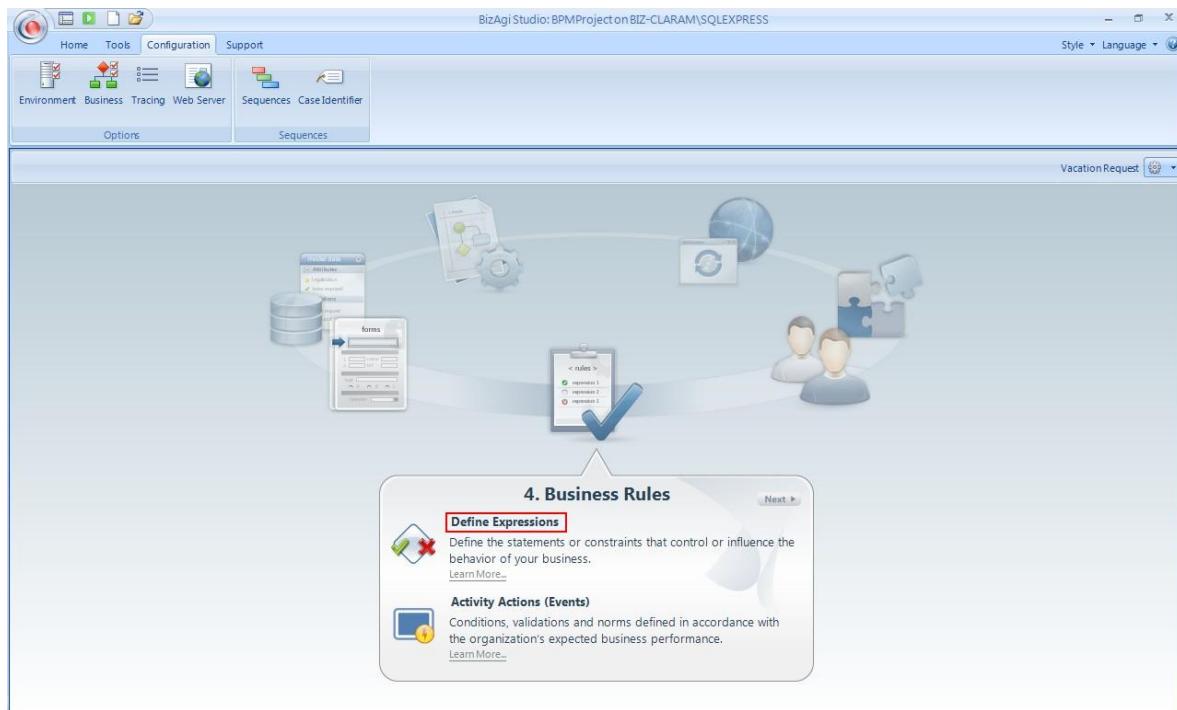
STEP 4: BUSINESS RULES

Once we have defined the forms we must create the business rules that control the process route. The first rules to be completed are the transition rules, these rules, are the ones that allow verifying that a specific condition is being fulfilled at some point during the process. These rules must always return true or false and they are associated to the decision figures.

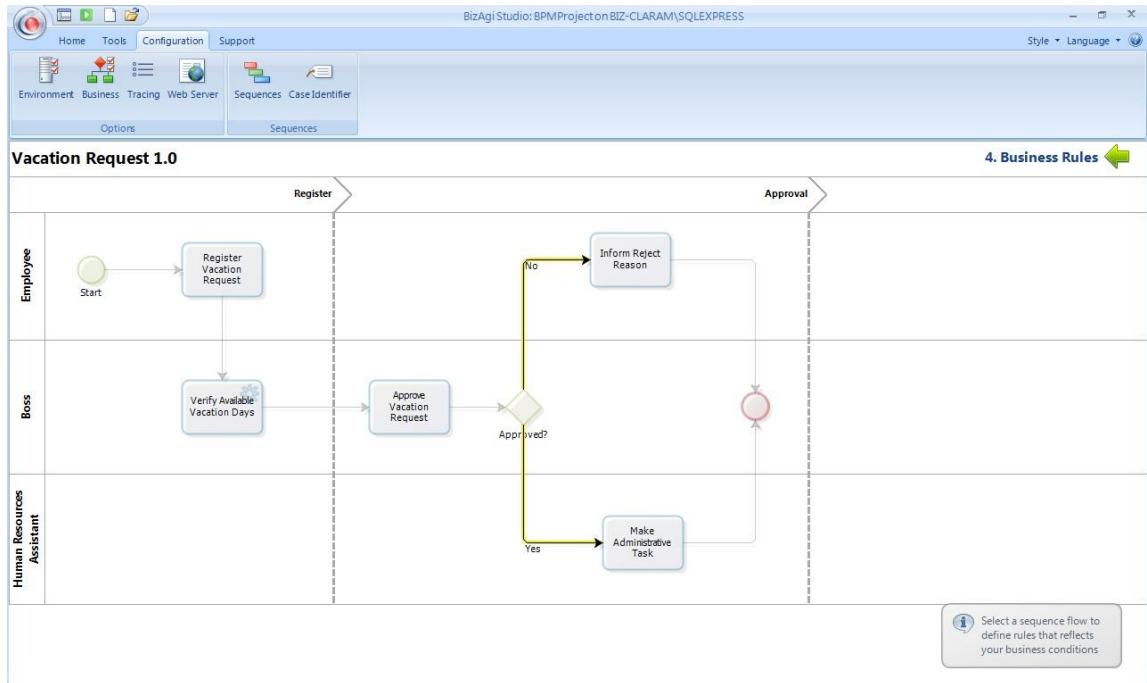
- We are going to create a rule for the Authorized Decision, this rule must return true if the field Authorized Request is true, and it must also be associated within the decision to the transition "Yes", which takes the flow to the activity Make Administrative Task.

Transition Conditions

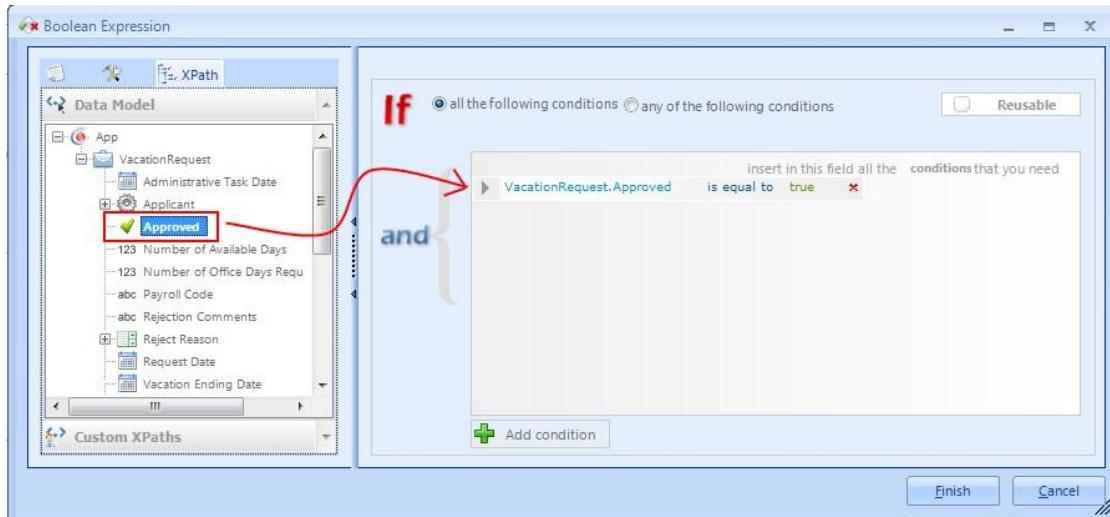
1. To create the Business Rules please select the **Fourth Step** from the wizard and Select **Define Expressions**:



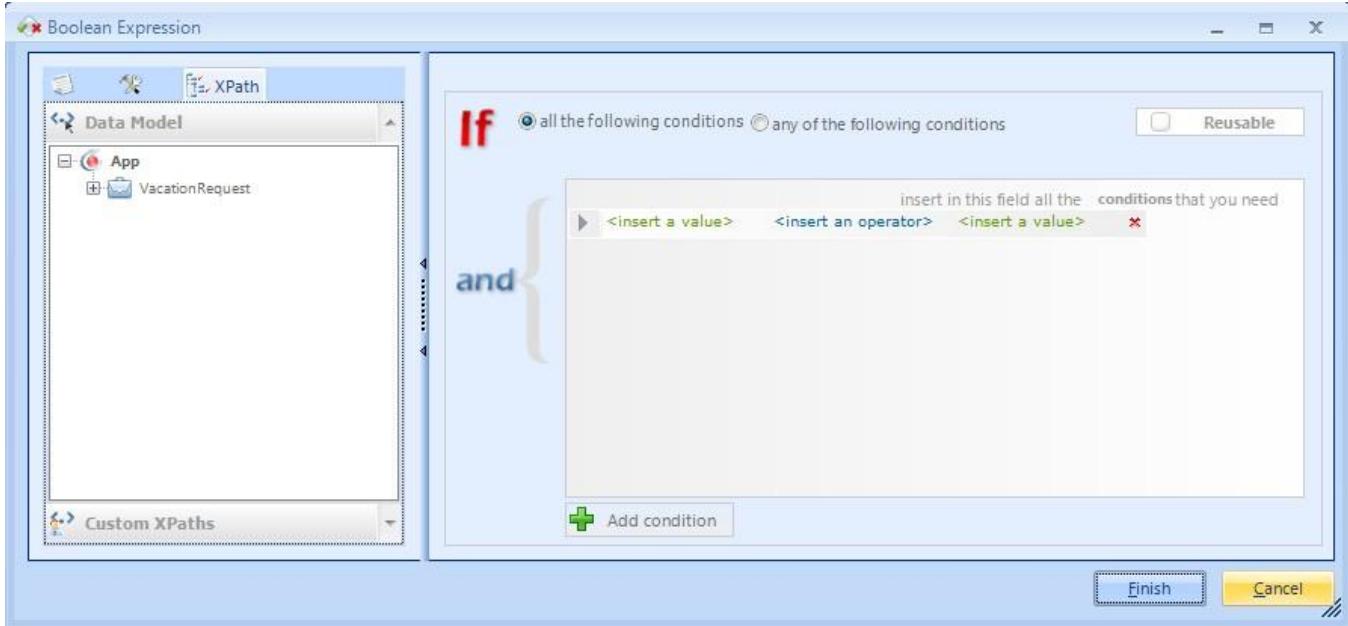
2. The Rule editor will be open indicating the transitions with no rule associated with a yellow shade:



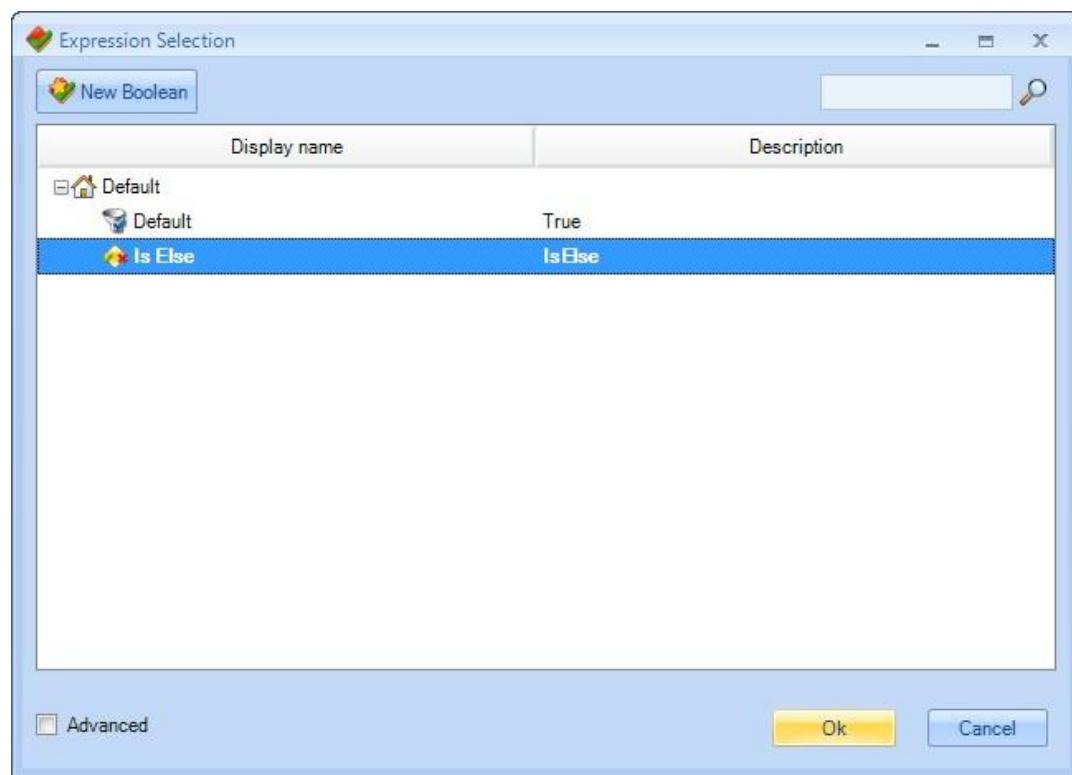
3. Select the transition named YES (the arrow) from the decision to the **Make Administrative Task** by clicking on the yellow flow line.
4. Drag and drop the attribute from the Data Binding components to the condition, select the function **is Equal to** and in the Insert Value check the **true** option:



5. Click **Finish**.
6. Select the transition from the gateway to the **Inform Reject Reason** Task by clicking on it, you will find the **Boolean Expression window**, click on **Cancel** to close the window.



7. Select the **IsElse** condition in the Expression Selection window and click on **Ok**.



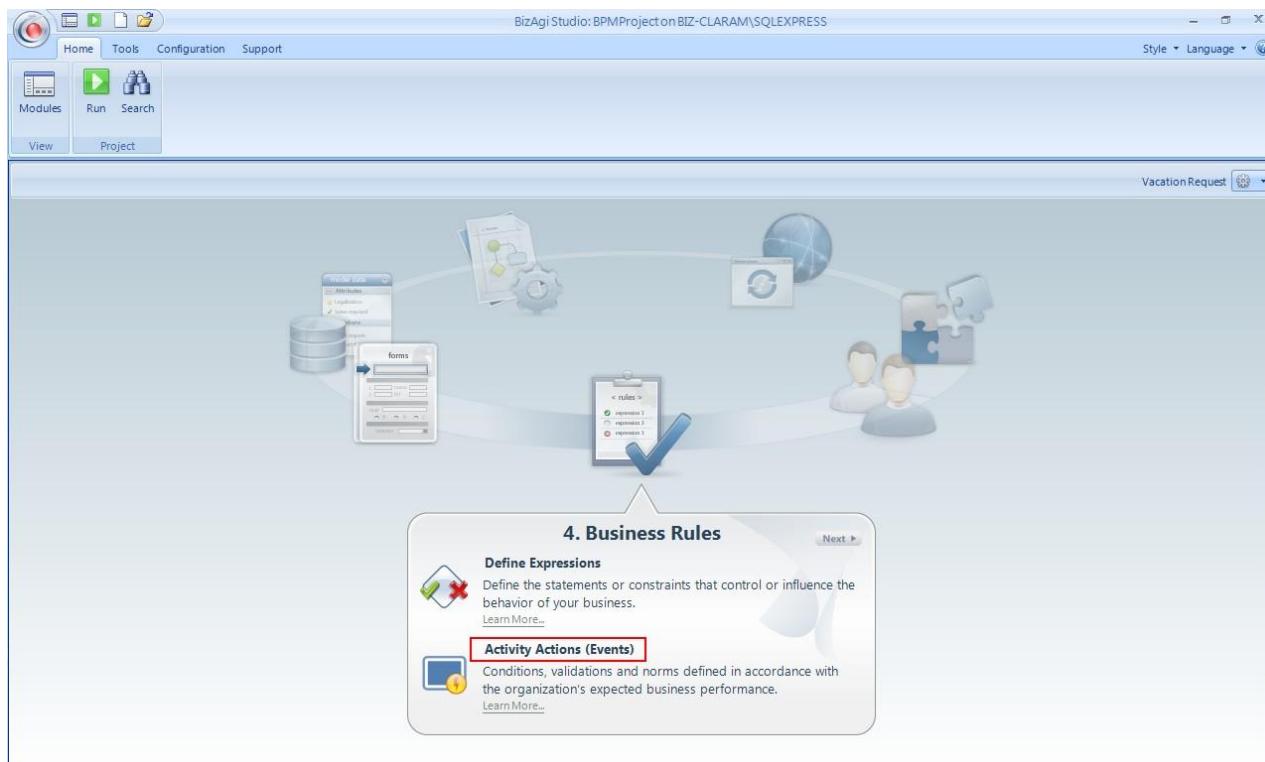
8. Close the Editor and go back to the Process Wizard by pressing the green arrow on the top right corner of the screen.

Activities Actions

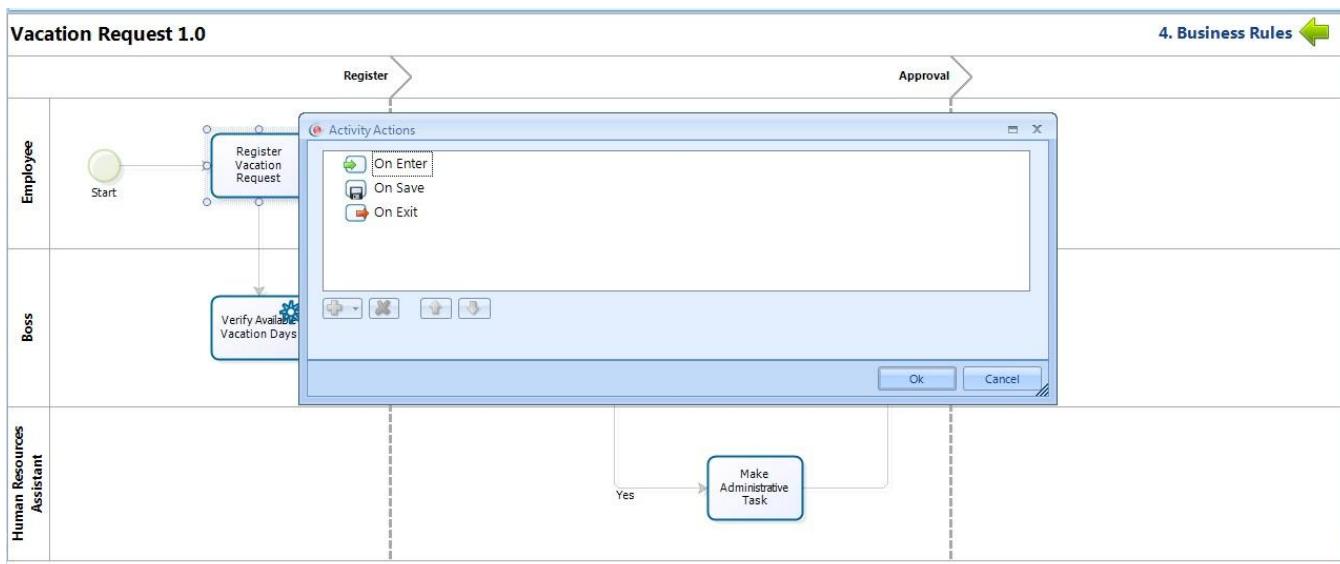
We must create certain rules to fill the fields Request Date and Applicant; this information must be stored automatically by the application when a case is started.

For the First Activity of the process we must create a rule to set the Date of the Request and to save the Case Creator as the applicant:

1. Go to the step 4 of the Wizard Process, select the **Activities Actions** Option



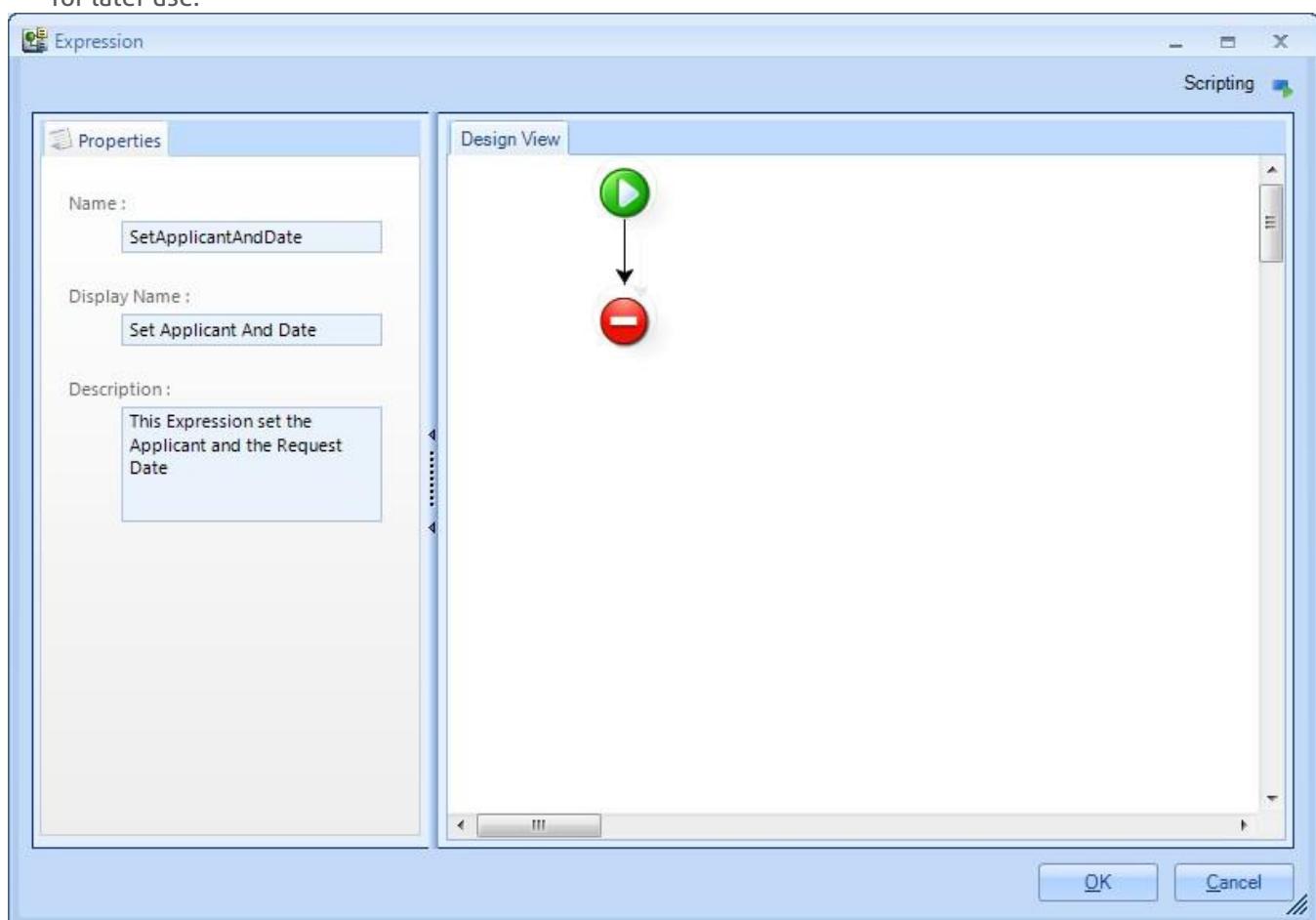
2. A new window will appear displaying the activities where you can add actions. Select the Register Vacation Request Activity by clicking on it



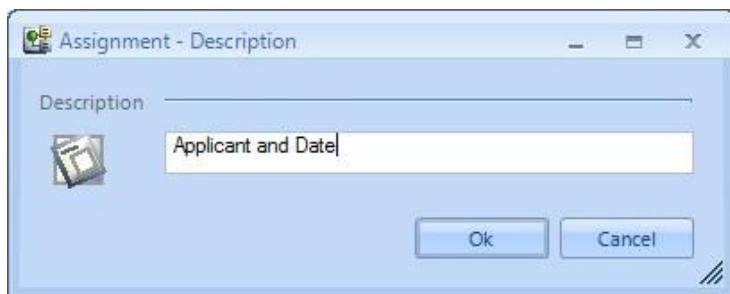
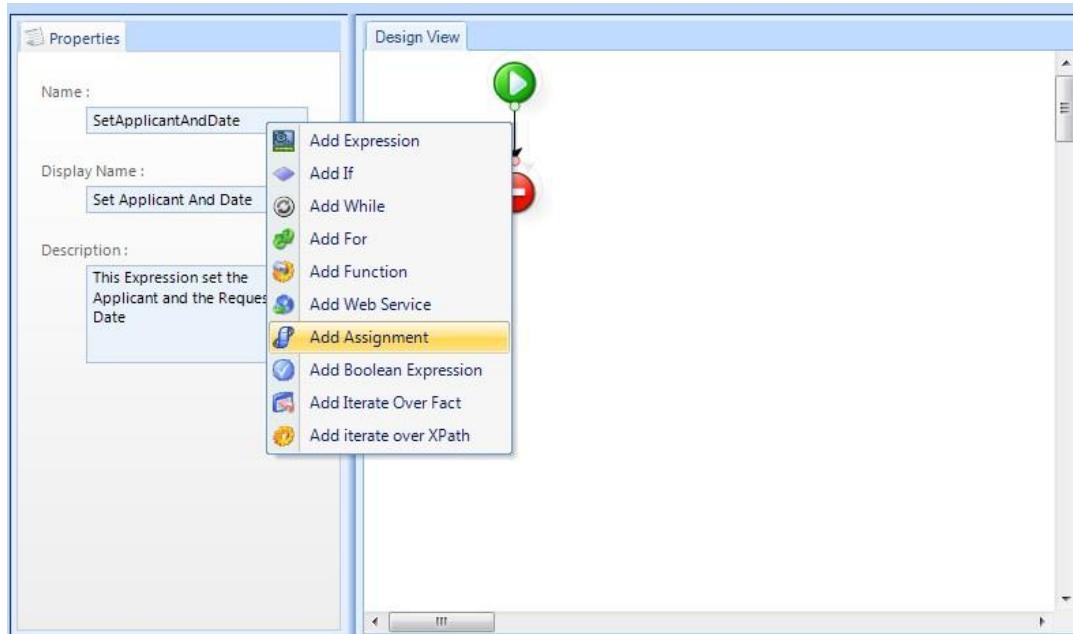
3. Select the **On Enter** Option, then click on Add an Action:



4. Fill the Name, Display Name and Description as follows, this information will let you identify the Expression for later use:

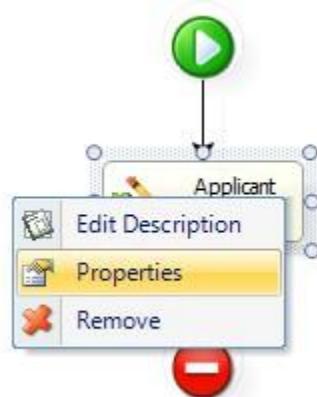


5. Right Click on the Arrow from Begin to End and select "Add Assignment"

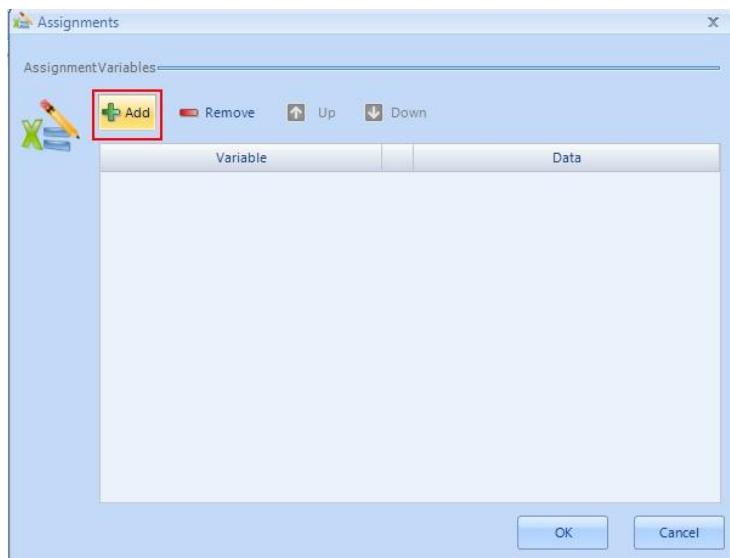


Click on Ok.

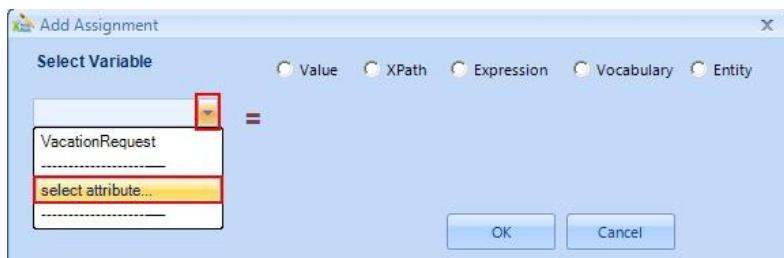
6. Right click on the Applicant Assignment and Select Properties



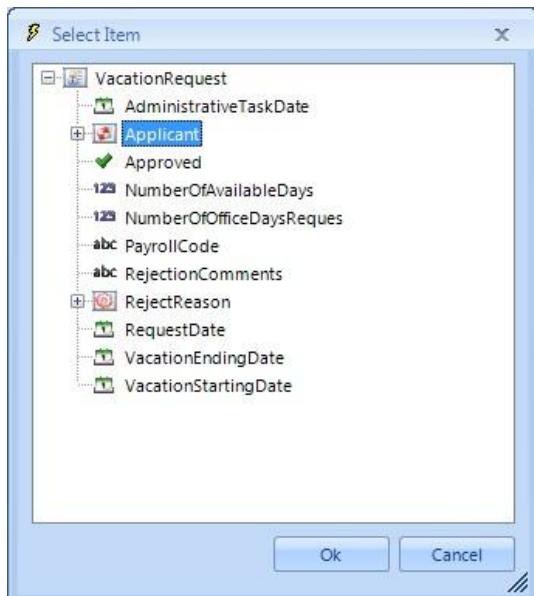
7. The Assignments Windows will open, Add a new Assignment Variable



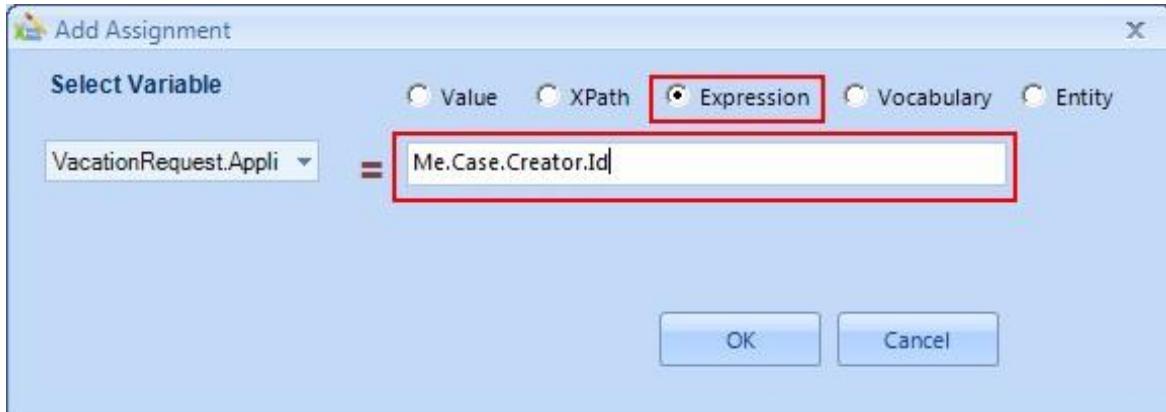
8. In the Add Assignment Window Click on the Drop Down List and Select the **Select Attribute** option



9. Select the Applicant Item from the Data Model and click on Ok

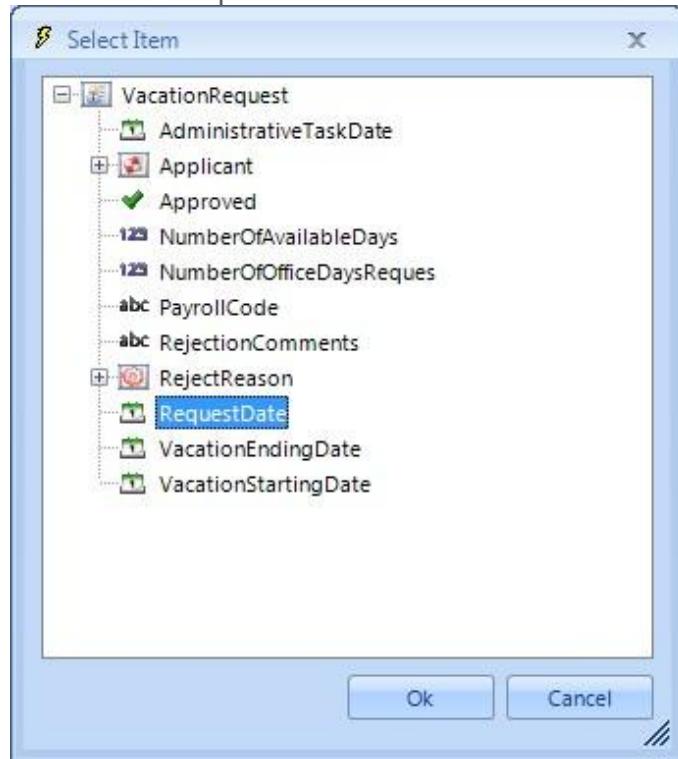


10. Select the Expression Radio Button and type in Me.Case.Creator.Id, this Expression is a default Expression in BizAgi that will allow us to take the Creator id.

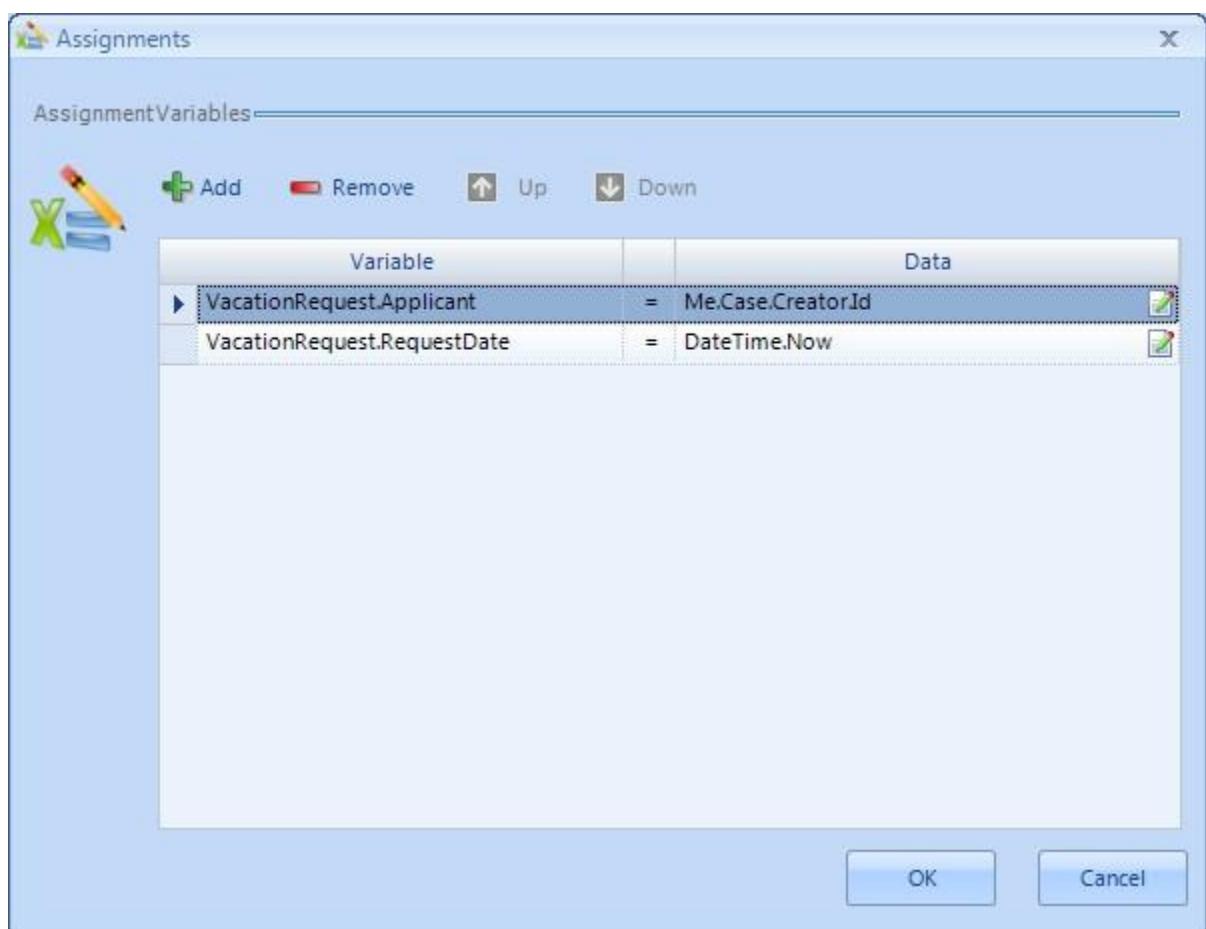
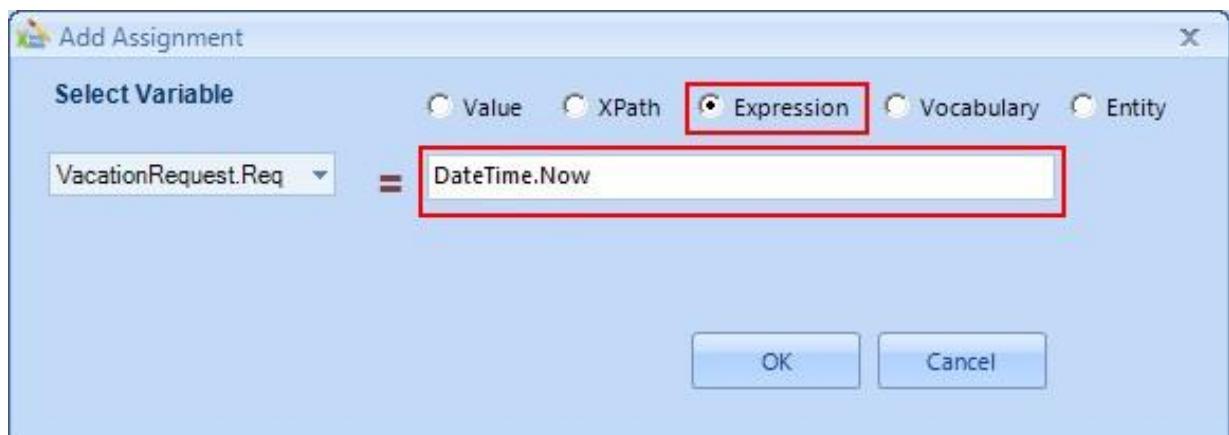


11. Click on Ok to Close the Add Assignment Window

12. In the same rule we'll add a new Assignment for the date, Add a new row (step 7 and 8), in the first combo select the RequestDate Attribute:



13. Select the Expression Radio Button for this assignment and the text DateTime.Now will appear automatically, indicating the function BizAgi uses to get the Real Date when the Case was created. Click Ok when done.



14. Click Ok to save the Assignments, Ok to save the rule, and Ok on the Properties menu to apply the changes to the Activity. Don't forget to close the modeler after adding this rule.

STEP 5: PERFORMERS

The resources assignment is a very important stage within BizAgi. The people or responsible resources for each one of the process activities are defined at this stage.

BizAgi identifies the relation that exists between the different employees based on the variables that characterize and differentiate them. Thanks to this functionality, BizAgi assigns activities or tasks intelligently to the different company members with the purpose of executing a process satisfactorily.

First of all, let us define what would be an appropriate assignment for each one of the process activities; later on, the configuration will be completed within BizAgi.

The access to the process of vacation request will not be limited because this is an internal process that must be available for all the employees of the organization.

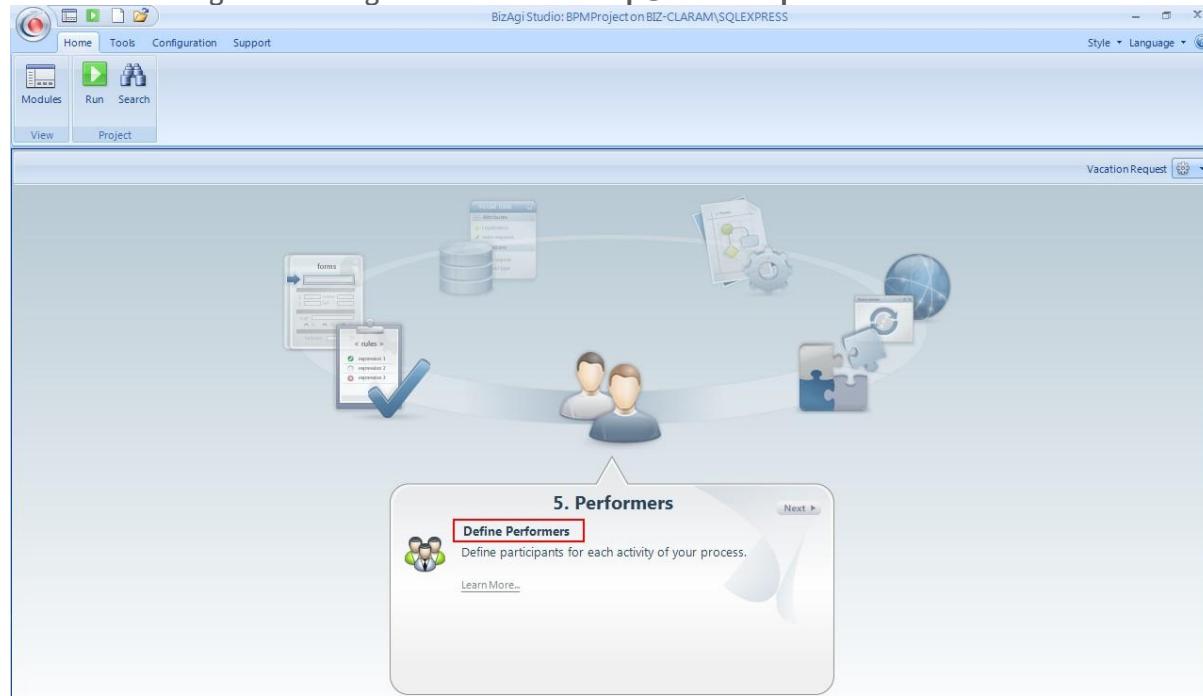
The first activity must always be available to the person who created the case.

The requester's boss or the creator of the vacation request will ALWAYS complete the activity **Approve Request**.

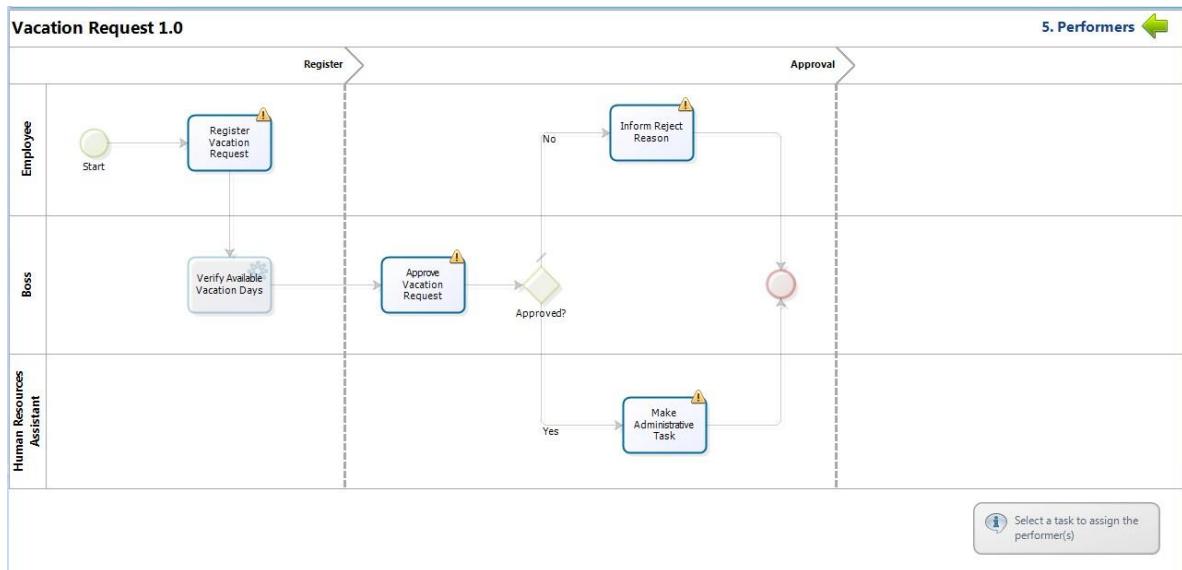
The user who submitted or created the request will ALWAYS complete the activity **Inform Reject Reason**.

The Human Resources Representative will ALWAYS be responsible for the **Make Administrative Task** activity.

The configuration in BizAgiStudio must be completed for the activities once the assignment rules have been defined. To configure the Assignment select the **step 5** from the process wizard:



We'll find the different activities and we can identify the ones whose performer has not been assigned:

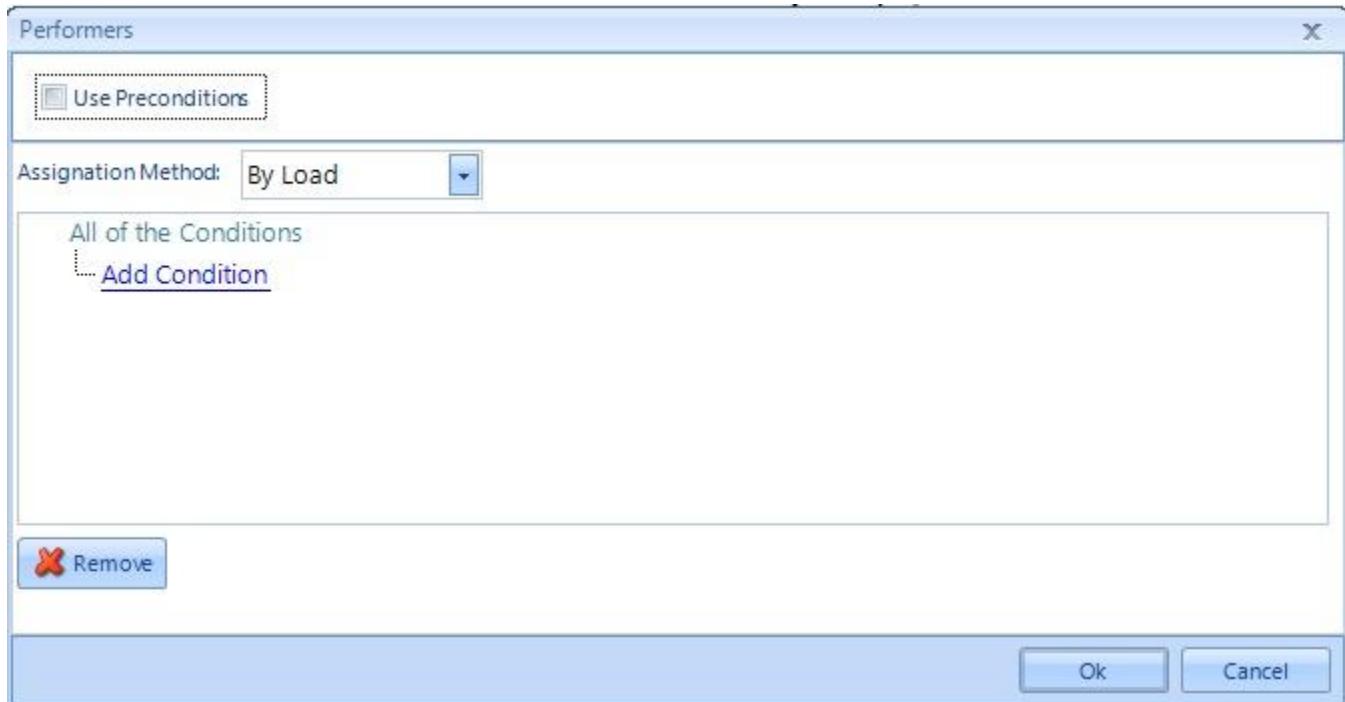


ACTIVITY: REGISTER VACATION REQUEST

This activity must be assigned to the creator of the case; this is a default functionality BizAgi provides, so we don't have to create an assignment for it.

ACTIVITY: APPROVE VACATION REQUEST

- Once in the diagram select the activity by clicking on it, you'll find the performers Assignment window

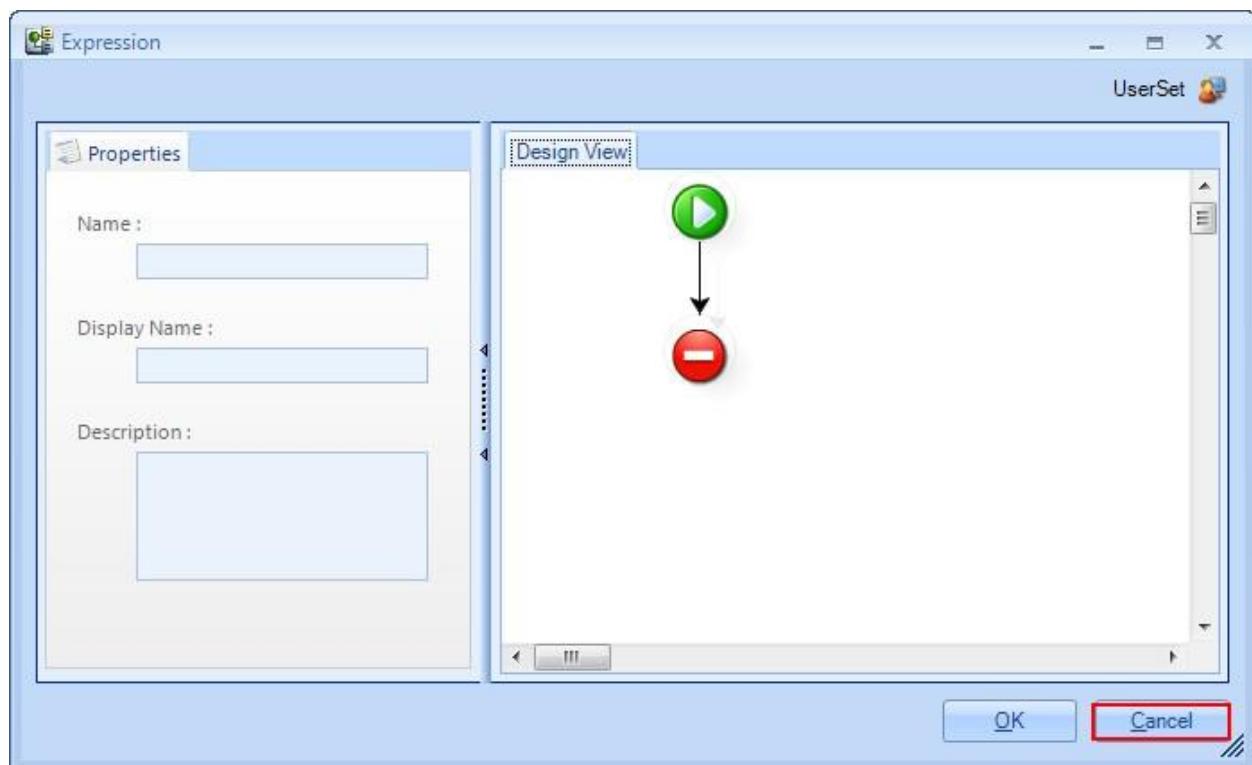


- Click on the **Add a condition** link

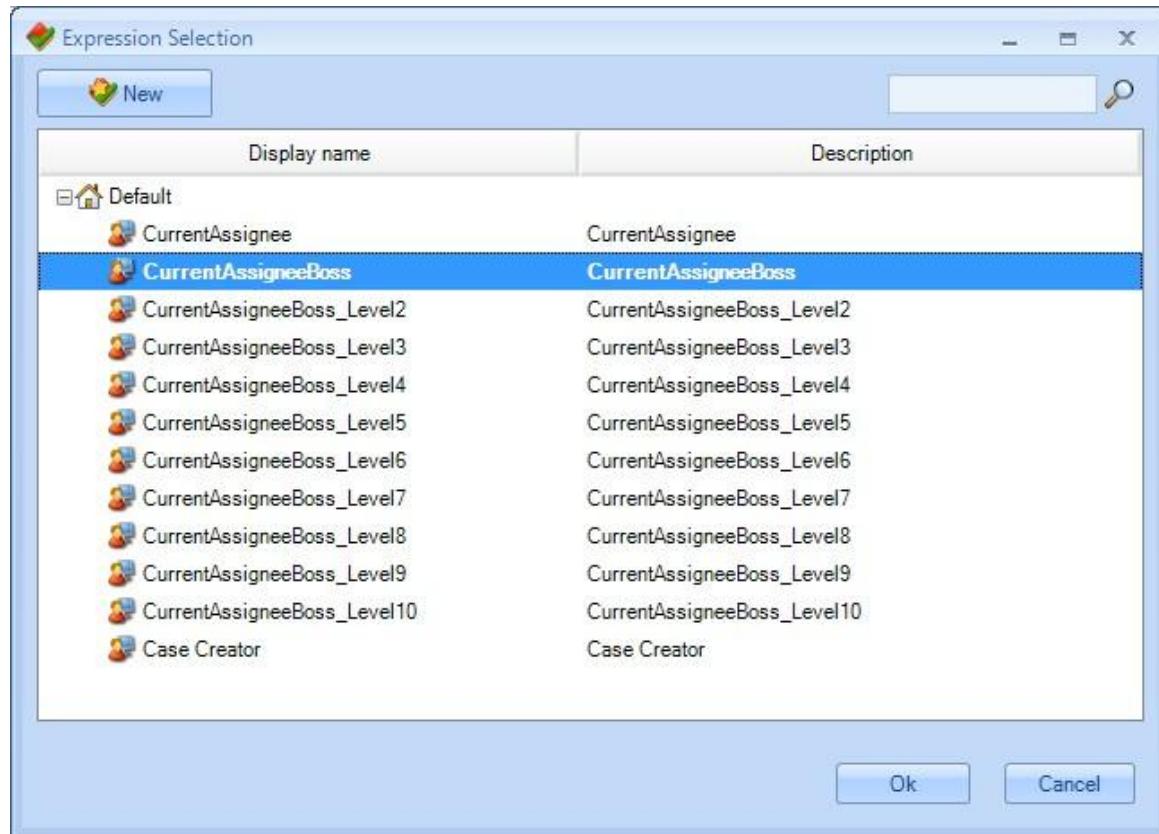
3. In the new window we'll define the parameter for the performer, in the first box select User Id



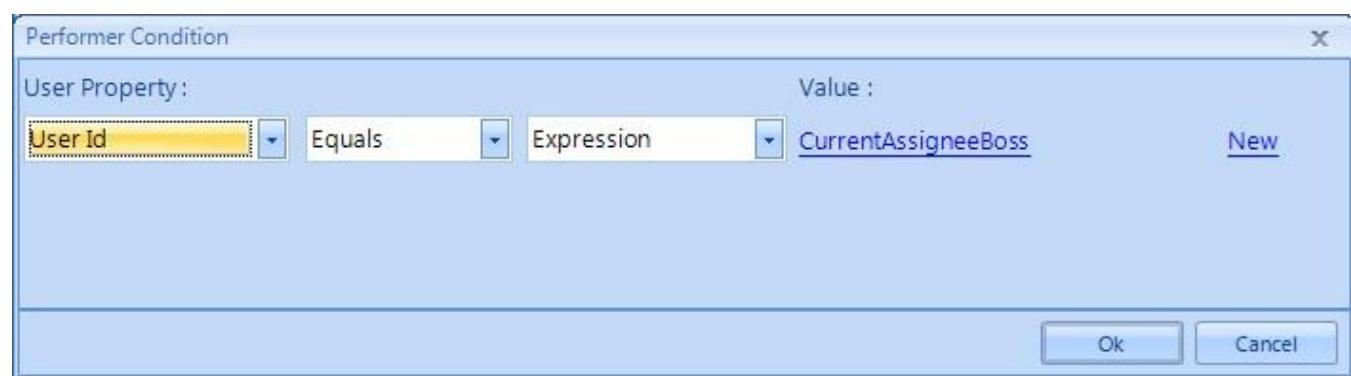
4. Click on Select Expression Link and click *Cancel* in the new window. Don't save any change to the Expression:



5. Select the CurrentAssigneeBoss and click Ok, this is a Bizagi Default Rule to bring the id of the current (applicant) assignee boss id that is configured in the user.



6. The Expression must look like this:



7. Click on Ok to save the Performer Condition and Ok again to save the performer.

ACTIVITY: MAKE ADMINISTRATIVE TASK

1. Repeat steps 1 and 2 from the Approve Vacation Request Activity
2. In the first Combo select position



3. Click on New Link to Create a new Position



4. Write the value for the new Position and Click on Save. Human Resources Assistant.

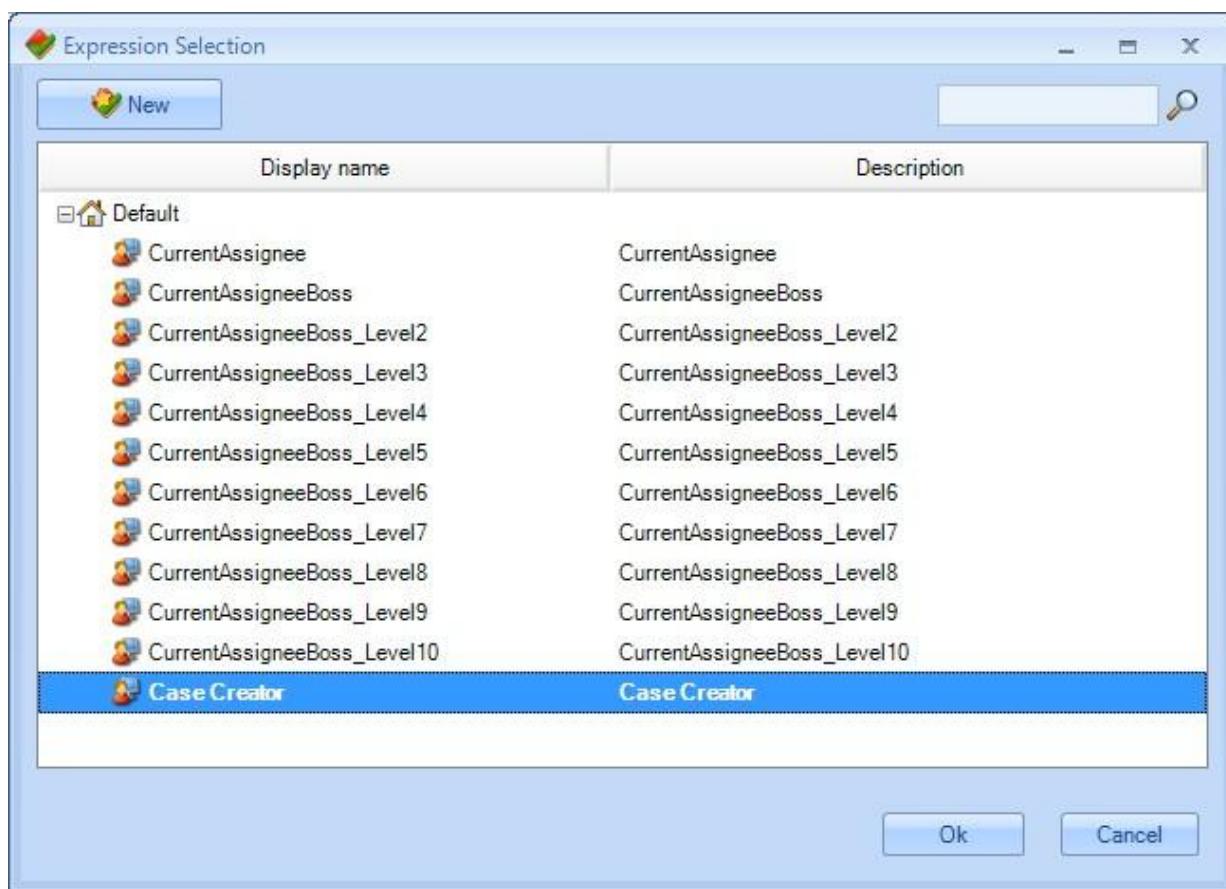


5. Click Ok on all the windows to Save the Assignment

ACTIVITY: INFORM REJECT REASON

We'll set the assignment for the Inform Reject Reason Activity and like we explained before it should ALWAYS be assigned to the person who created the case.

1. Repeat steps from 1 to 4 from the Approve Vacation Request Activity
2. Select the **Case Creator** of the Case and click Ok to save the condition



3. Save the rule by clicking Ok for the Performers Window.

Close the Diagram by clicking the green arrow located on the top right corner of the screen to go back to the Process Wizard.

STEP 6: INTEGRATE WITH OTHER SERVICES

BizAgi uses distinct mechanisms, which allow the connection with existent systems from the organization by using the necessary information for the business processes execution.

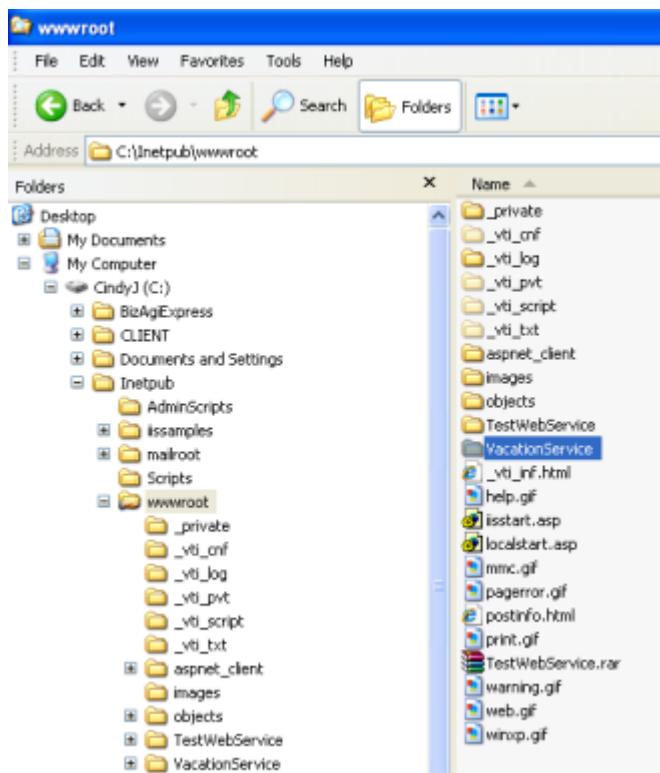
Web Services will be used to integrate the application with the payroll system, which contains the available vacation days for each employee; the **username** input parameter will be accepted by the web service to return the number of available vacation days.

There are two options to able to implement this step. One option is, if you have an Internet connection available, to use this URL: <http://www.bizagi.com/VacationService/Vacations.asmx>, and no further configuration is needed and you can jump directly to the section "Invoke the Web Service from BizAgi".

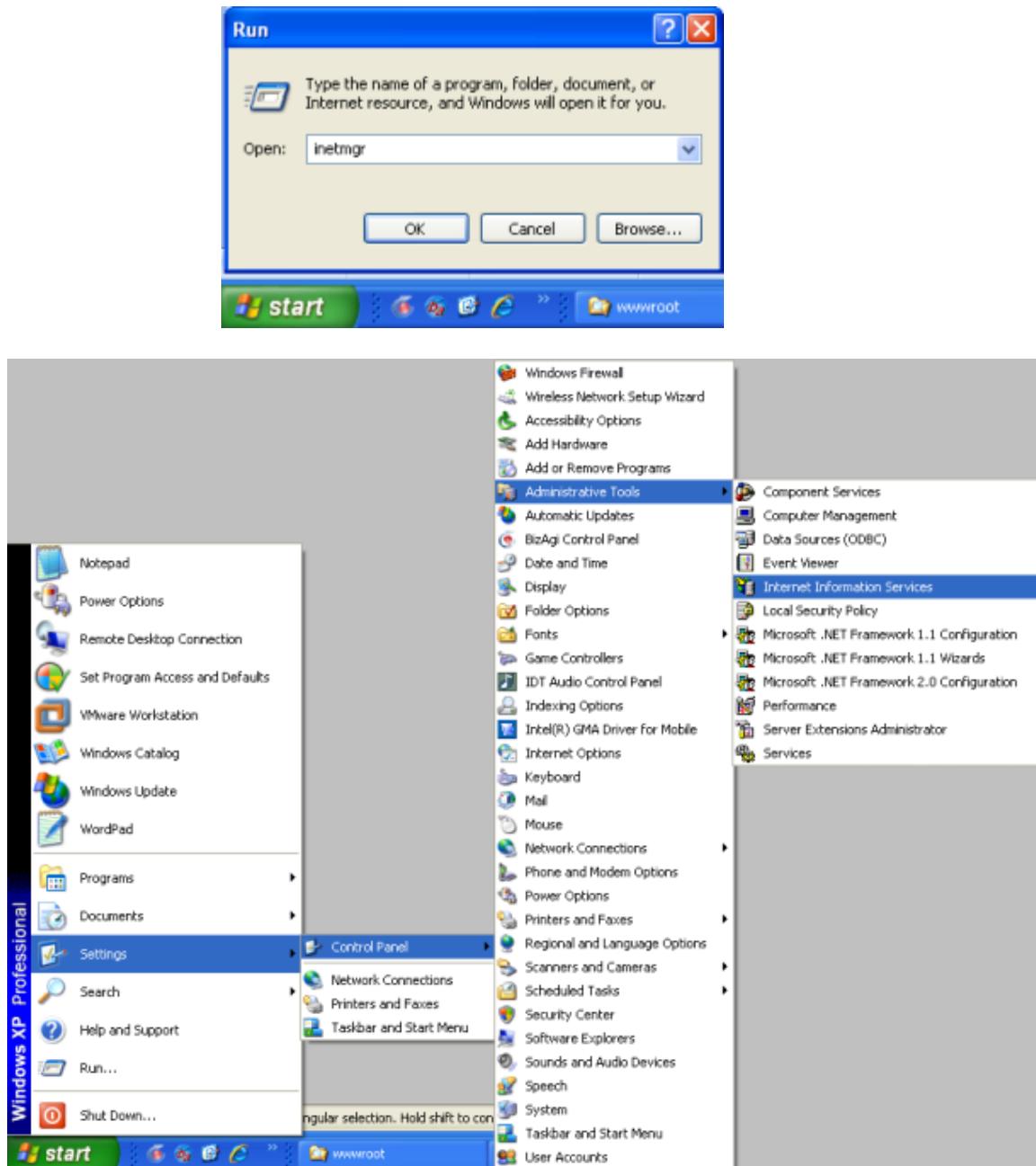
Otherwise, follow these steps to install the web services locally.

Install the Web Service

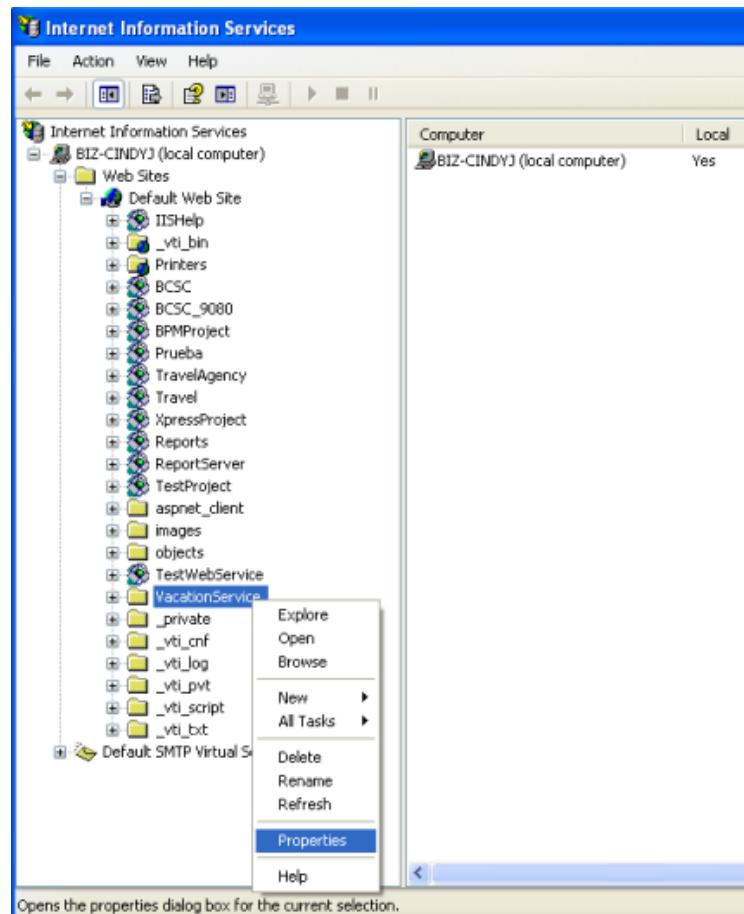
1. Download and unzip the file VacationService.zip.
<ftp://bizagiWSUser:bizagiWSUser@ftp.bizagi.com/VacationService>
2. Copy the unzipped folder into your default web site local path, usually C:\Inetpub\wwwroot



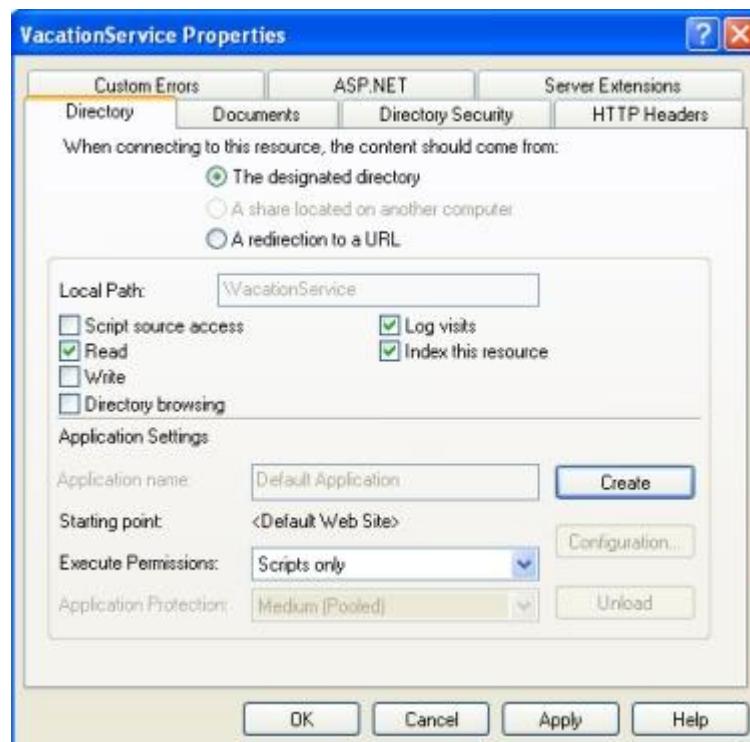
3. Open the IIS Manager either by running the command `inetmgr` or by selecting it from the Administrative Tools in the Control Panel.



4. In the manager open the Default Web Site and find the VacationService folder. Right click on it and select Properties.

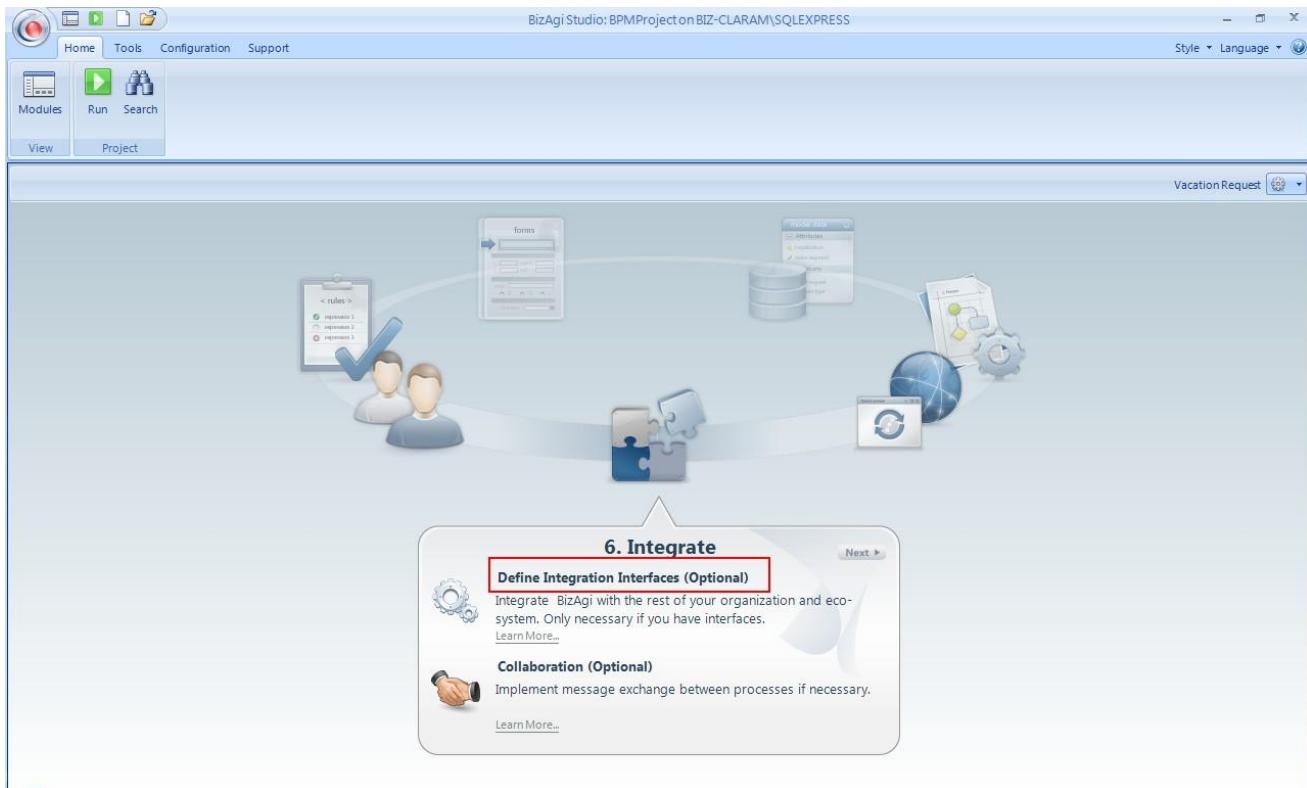


5. In the VacationService Properties window click the **Create** button and then **OK**.

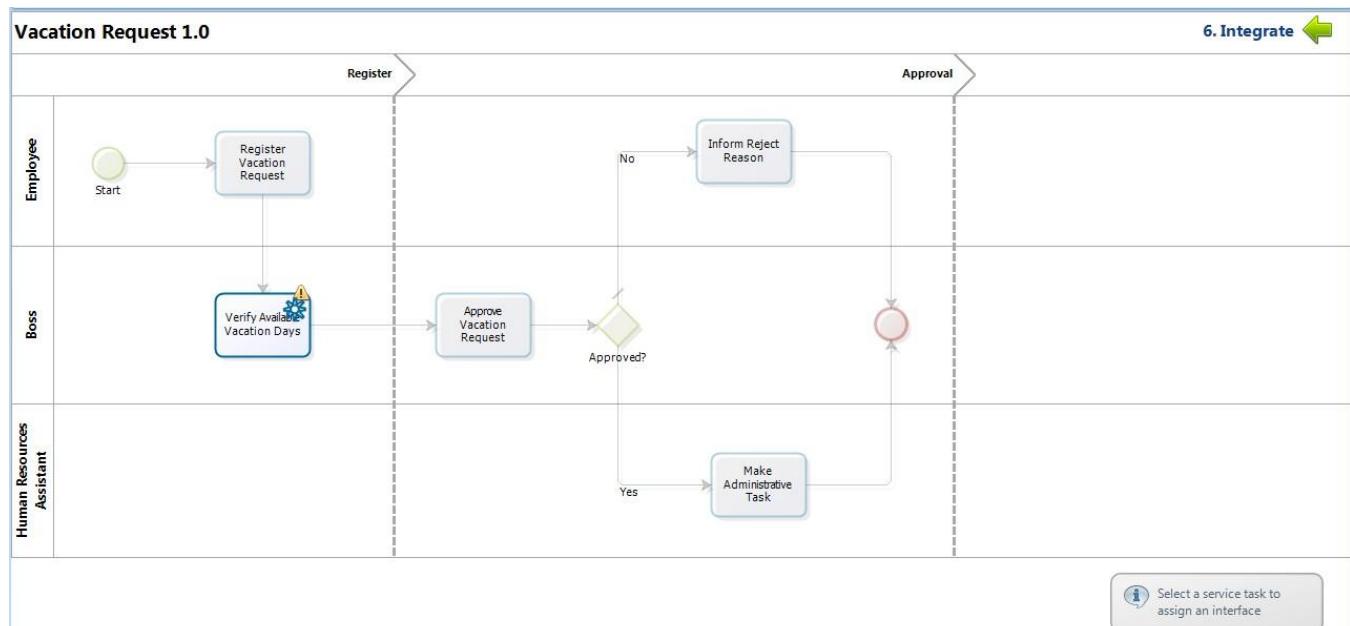


Invoke the Web Service from BizAgi

1. From the Project Wizard select the **Sixth Step**.

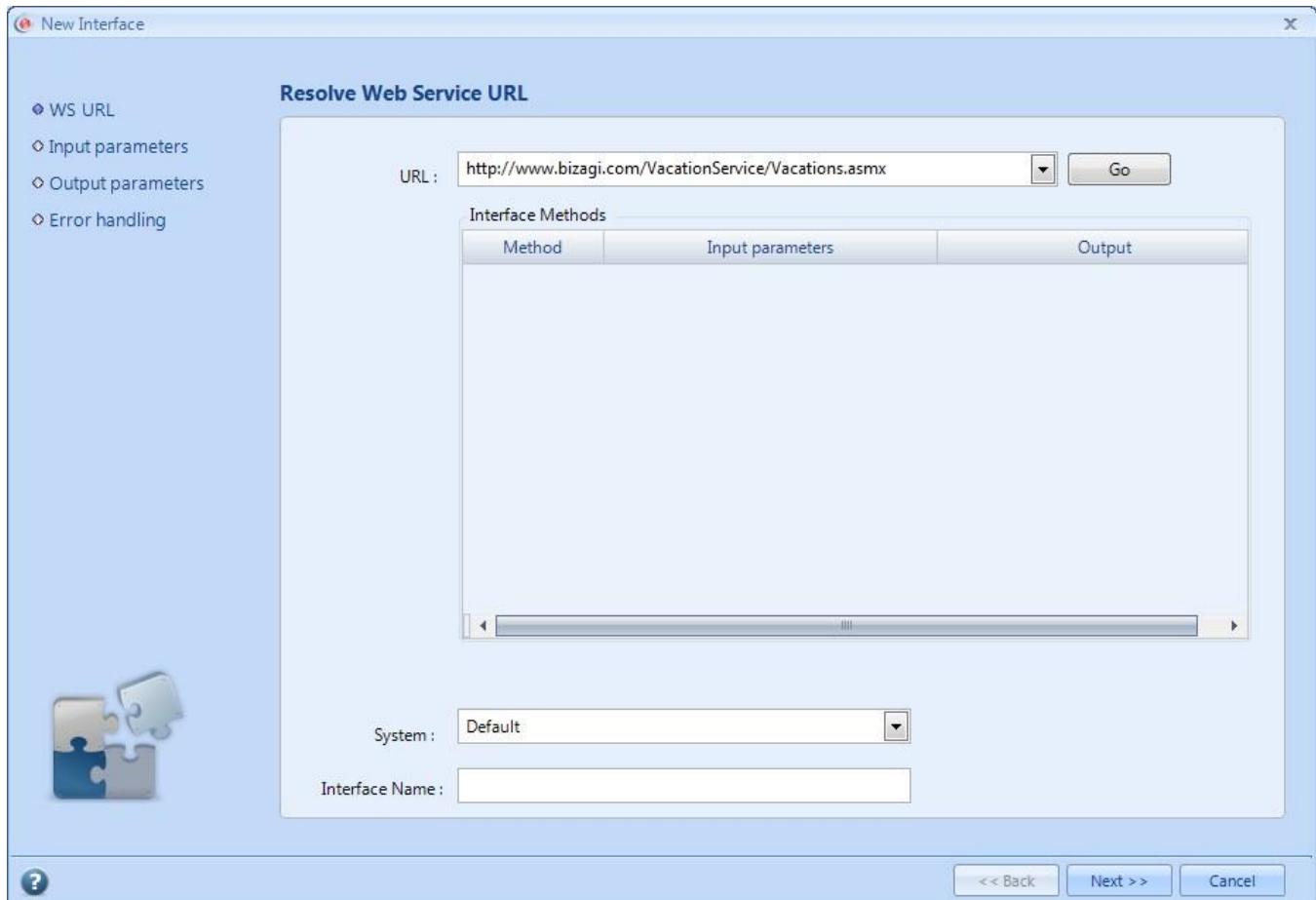


2. A view of the process would be presented. In this view only the service tasks would be active. Click on the task **Verify Available Vacation Days**.

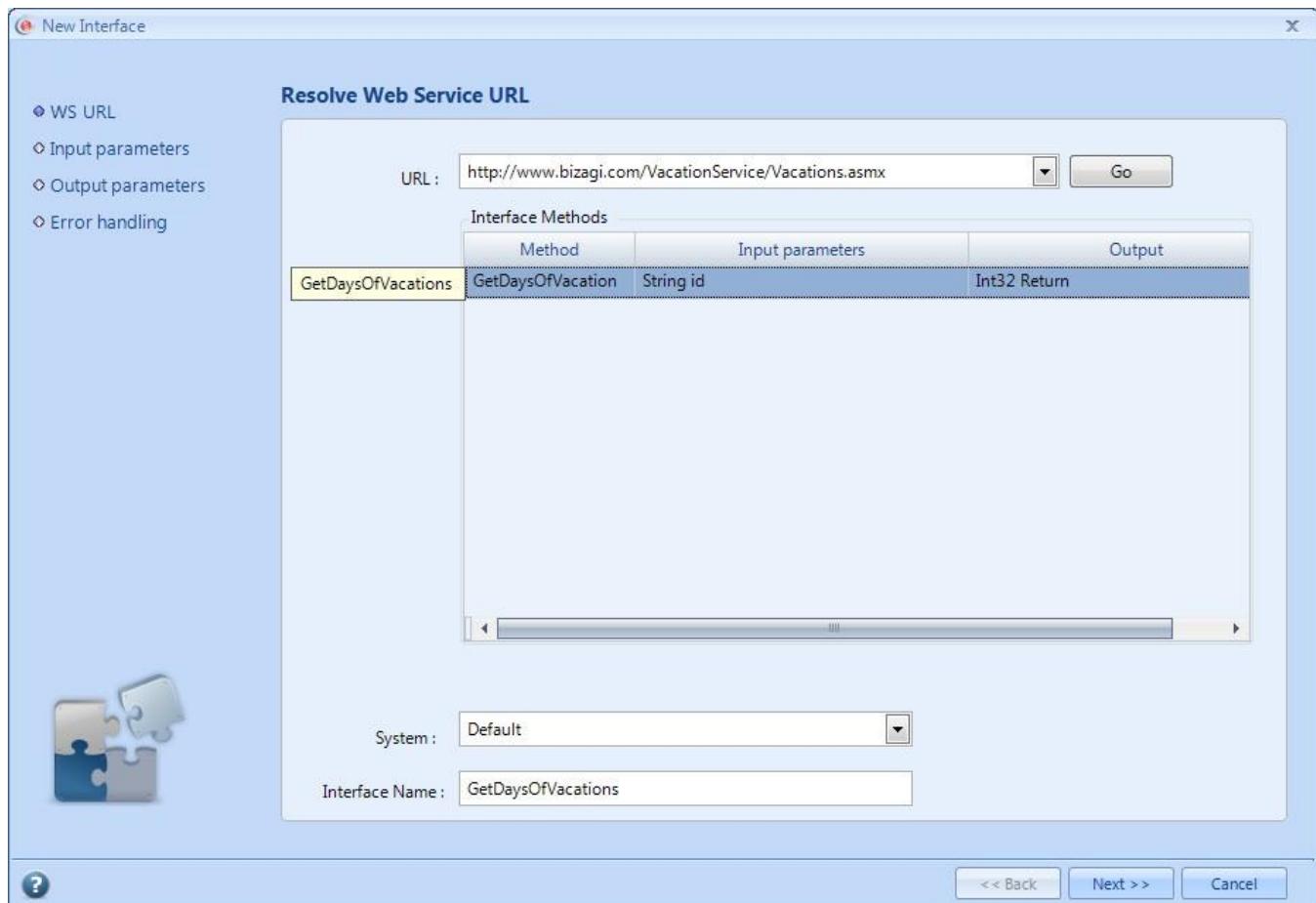


3. The Interface Wizard opens up. Type the URL.

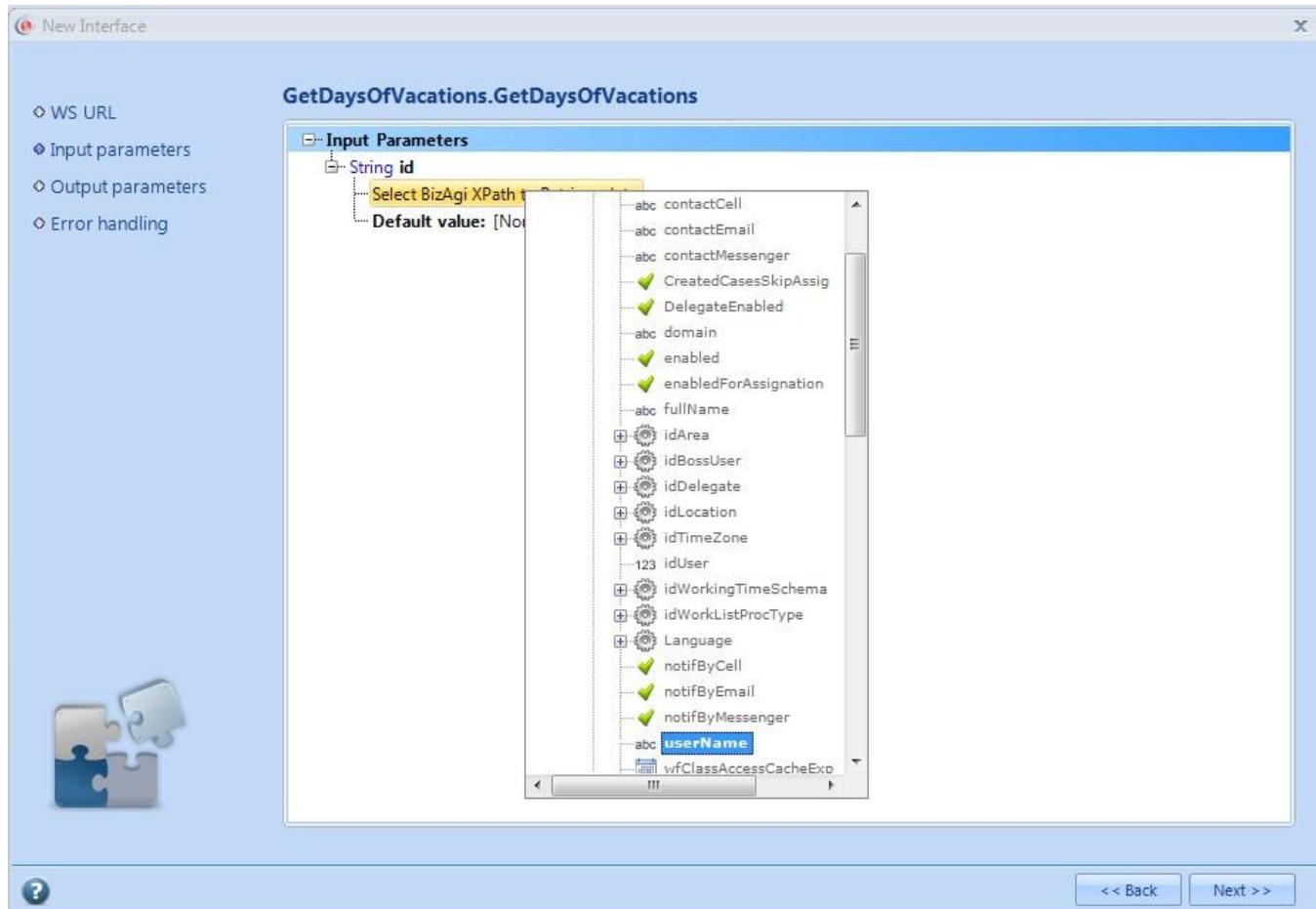
- If an Internet connection exists, type: <http://www.bizagi.com/VacationService/Vacations.asmx>
- If the web service is installed locally, type: <http://localhost/VacationService/Vacations.asmx>



4. Click the **Go** button (this operation could take some time to finish) to see the available methods. Select the method and click **Next**.



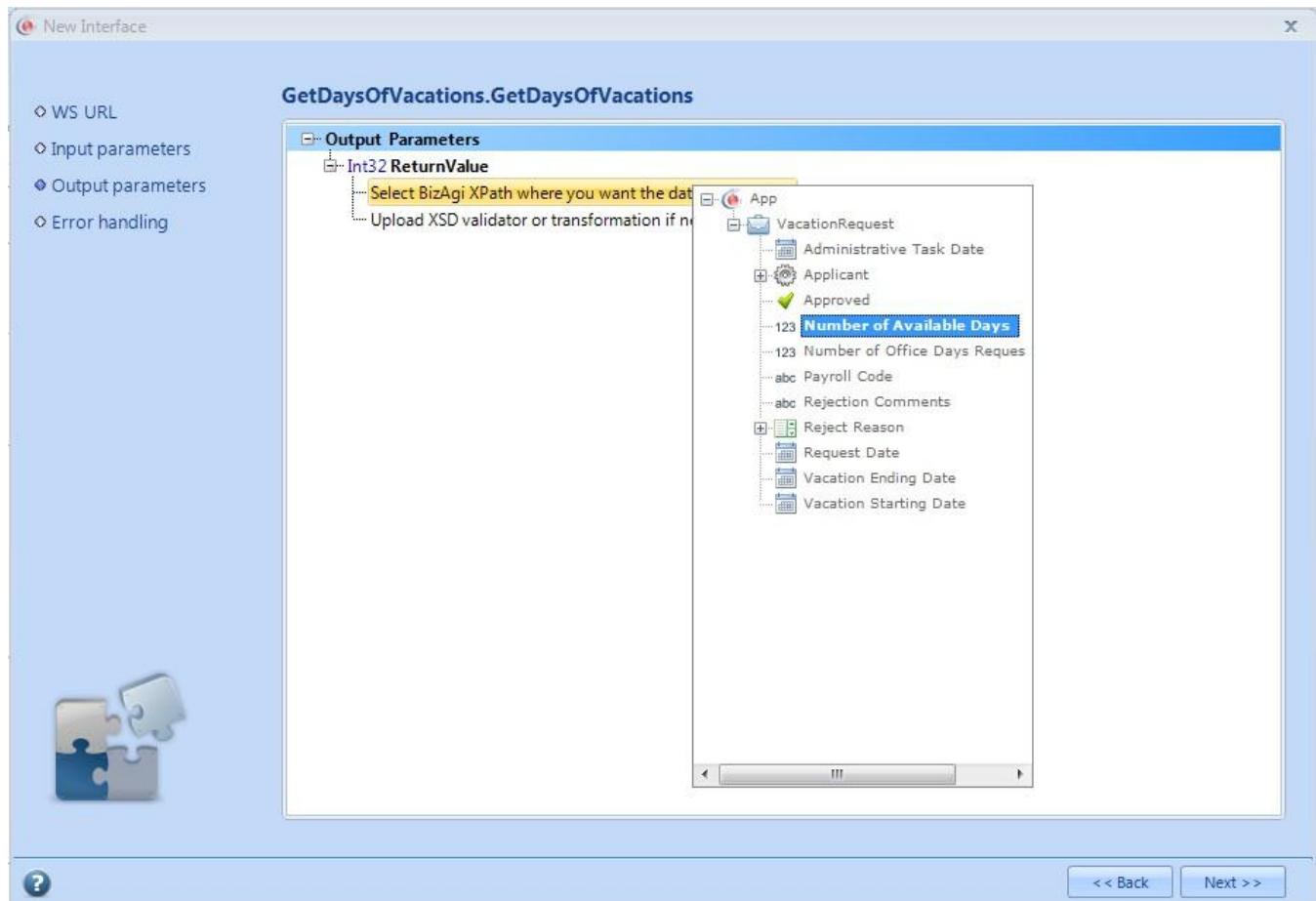
5. Since the Applicant's username is used to obtain the available Vacation Days, select the option **Select BizAgi XPath to Retrieve Data**. Then this option is clicked go though the entities tree until you see the Applicant's username. Once the desired attribute is reached, double click on it to select it.



The entities tree closes and the resulting XPath (`VacationRequest.Applicant.userName`) is shown. Click **Next >>** to continue.

The screenshot shows the 'Input Parameters' configuration screen. The selected XPath is `VacationRequest.Applicant.userName`, which is highlighted in yellow. The 'Default value' field contains '[None]'. The 'Remove' link next to the XPath is underlined.

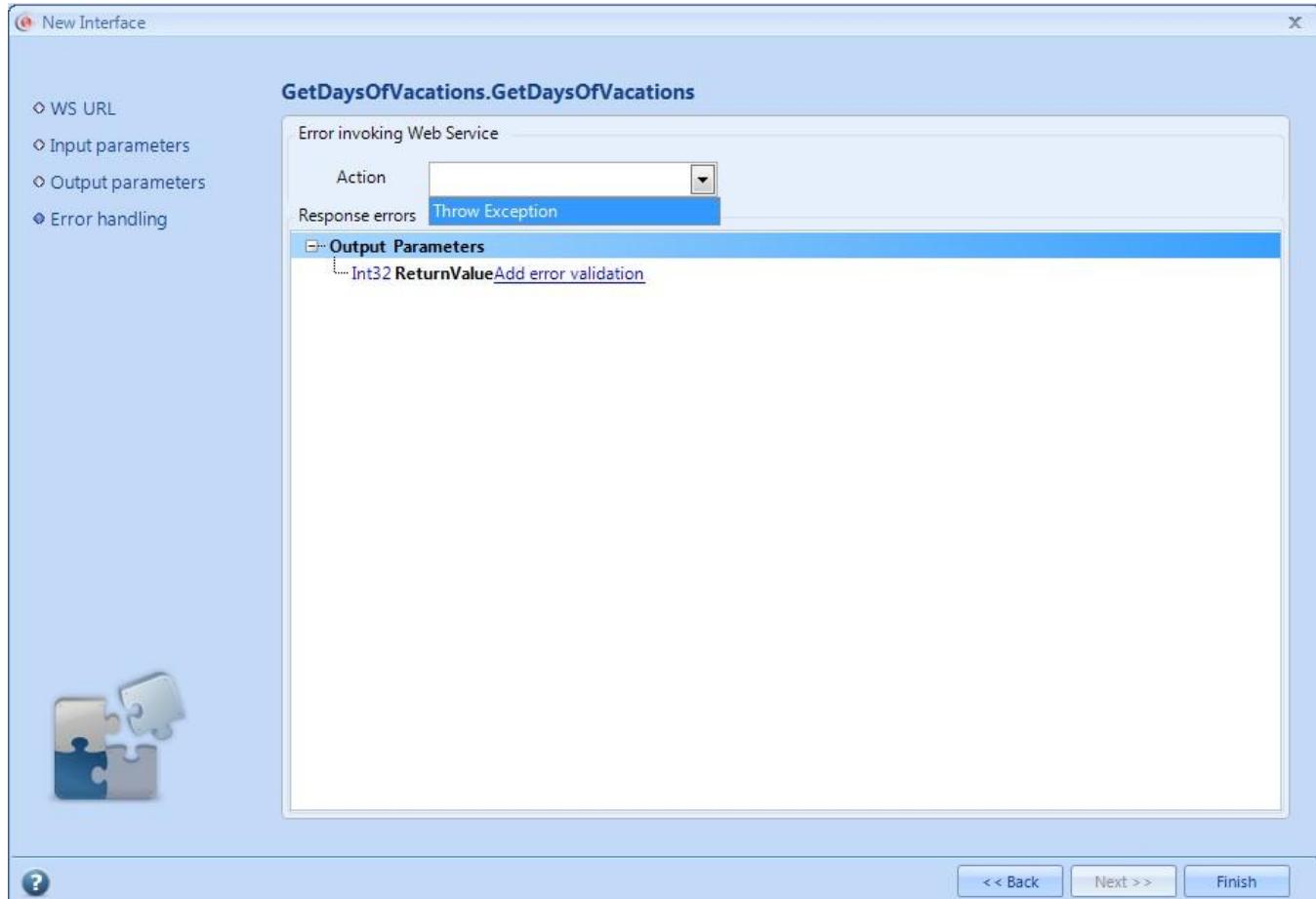
6. In the next window select the XPath where the web service response is going to be saved, by clicking on the **Select BizAgi XPath where you want the data to be saved** option. In this example it is VacationRequest.NumberOfAvailableDays.



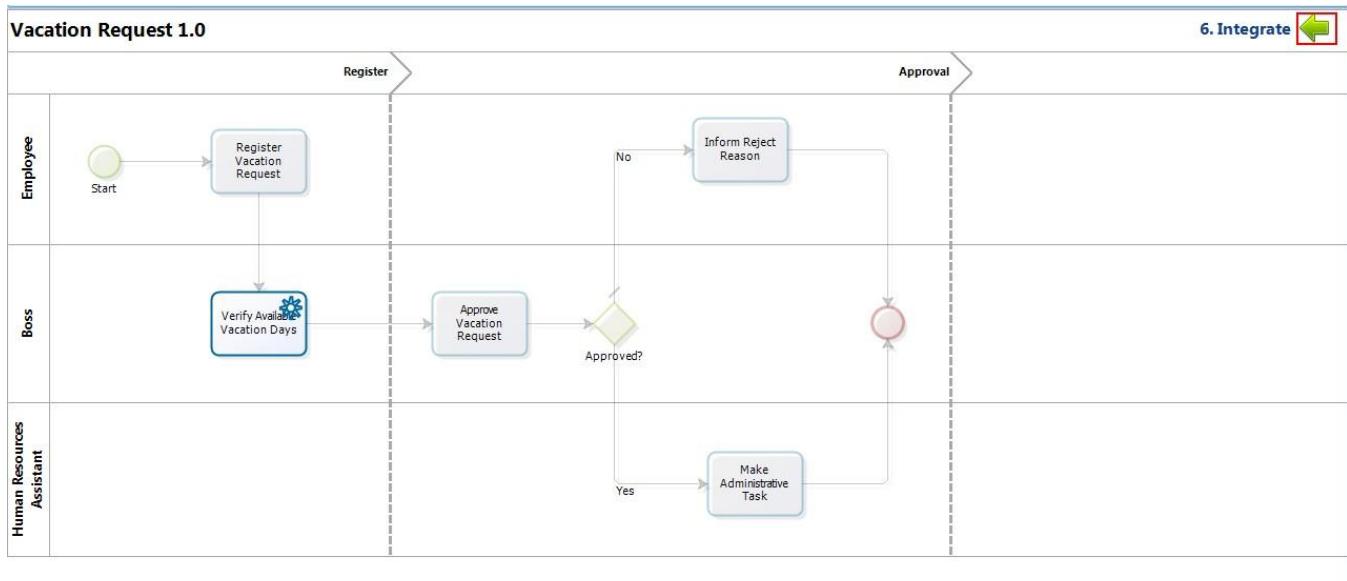
This screenshot shows the same 'Output Parameters' configuration window as above, but with a different selection. The 'ReturnValue' node now has a child node 'BizAgi XPath: VacationRequest.NumberOfAvailableDays' highlighted in yellow. The other options like 'Remove' and the note about XSD validation are visible below it.

Then Click Next

7. Finally we'll configure what to do if an error occurs, select the option Throw Exception from the Action List and Click Finish



8. The Interface wizard closes. Finally, click on the green arrow at the top right corner of the process view to return to the process wizard.

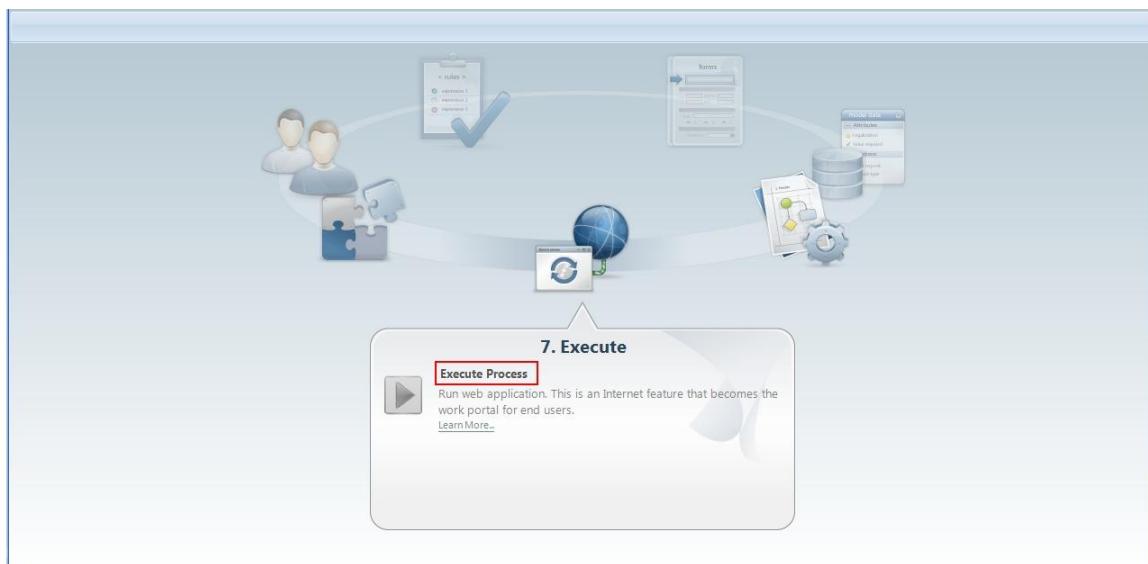


STEP 7: WEB APPLICATION

So far, the process flow chart has been completed along with the inclusion of some properties, the structuring of the process information, the forms design for each one of the process activities, and the definition of the business rules for the decision process. Based on the tasks previously completed, we are ready to configure the web application.

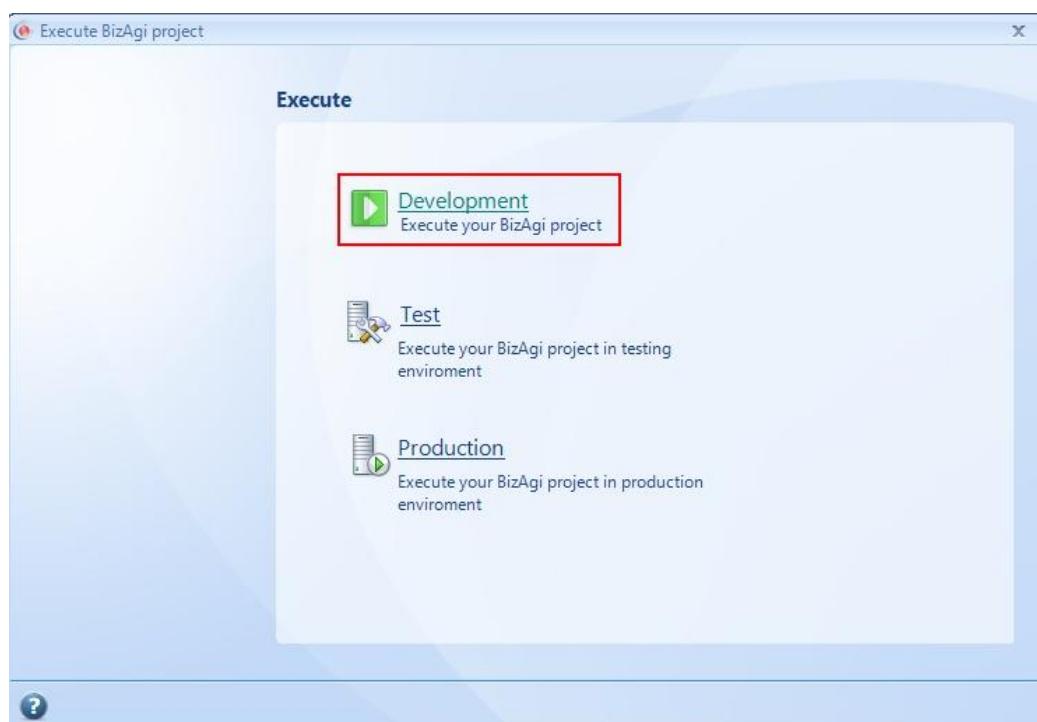
Click on the step 7 of the process wizard:

In the new Window select Development:



USERS

The web application has 3 users, so that the behavior of the assignments can be verified.



The following table presents the user list:

USER	PASSWORD	DOMAIN	IMMEDIATE BOSS	JOB TITLE
Boss	Boss	domain		
Applicant	Applicant	domain	Boss	
Assistant	Assistant	domain		Human Resources Assistant

BOSS

1. To create the users select the Admin Menu and go to the Users Section



2. Click on New User

This is a 'Search User' dialog box. It contains fields for 'Domain', 'User Name', and 'Full Name', each with an associated text input field. Below these fields are 'Search' and 'Clear' buttons. At the bottom of the dialog is a large red rectangular box highlighting the 'New User' button.

3. Fill out the information from the table

Basic Information

Name	Boss
User Name	Boss
Domain	Domain
Notify by Email	<input type="checkbox"/>
Contact Email	

User Authentication

Password	****
Expire Password	<input type="checkbox"/>
Lock Account	<input type="checkbox"/>
Send Mail with Password to User	<input type="checkbox"/>

BE CAREFULL to include a password you can remember or use the one in the previous table. Bizagi will assign the User Name as password by default.

- Click on Add to Save the Boss User

APPLICANT

- Repeat steps 1 to 3 from the Boss user Creation
- To get the Boss field for the Applicant User move to the Configuration User Tab and select Get User

Configuration User

Email	
Active	<input checked="" type="checkbox"/>
Skip assignment rules on cases created by this user	<input type="checkbox"/>
Area	-----
Boss	Boss Get User Clear User
Roles	Admon Viewer >>
Skills	User property Skills undefined
Notify by Email	<input type="checkbox"/>
Contact Email	
Delegated User	
Delegate Enabled	<input type="checkbox"/>
Enabled for Assigntion	<input type="checkbox"/>
Time Zone	-----
Language	-----

Search User

Domain	<input type="text"/>
User Name	<input type="text"/>
Full Name	<input type="text"/> Boss
<input type="button" value="Search"/> <input type="button" value="Clear"/>	
<input type="button" value=""/> <input type="button" value="ID"/> <input type="button" value="User"/> <input type="button" value="Domain"/> <input type="button" value="Name"/> <input type="button" value="Email"/>	
<u>Select</u> 2 Boss Domain Boss <input type="button" value="1"/>	

3. Click on the Select Link
4. Click on Add to Save the Applicant User.

ASSISTANT

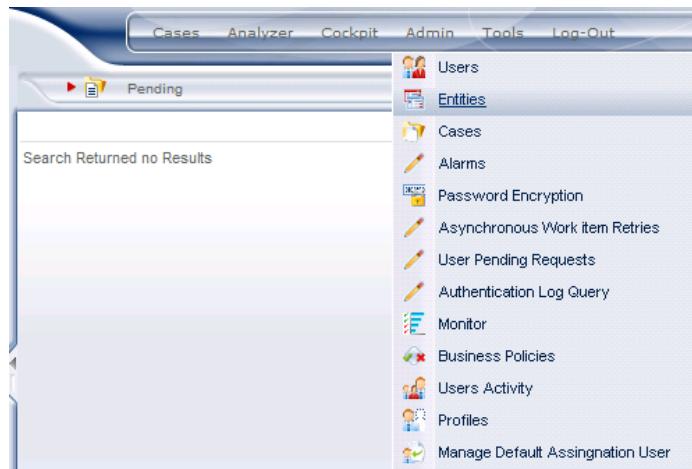
1. Repeat steps 1 to 3 from the Boss user creation.
2. To Add the Position for the **Assistant** User move to the Organizations Tab and select the position you want to Add as shown in the figure and save the User by clicking Update.

Basic Information	Organizations	Configuration User									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50px; padding: 5px;">Organizations</td> <td style="width: 50px; padding: 5px;">Vision Software S.A.</td> </tr> <tr> <td>Location</td> <td><input type="text"/></td> </tr> <tr> <td colspan="2" style="background-color: #cccccc; padding: 5px;"> Vision Software S.A. </td> </tr> <tr> <td style="padding: 5px;">Positions</td> <td style="padding: 5px;"> -- Human Resources Assistant <input type="button" value=">>"/> </td> <td style="padding: 5px;"> <input type="button" value="<<"/> Human Resources Assistant </td> </tr> </table>			Organizations	Vision Software S.A.	Location	<input type="text"/>	Vision Software S.A.		Positions	-- Human Resources Assistant <input type="button" value=">>"/>	<input type="button" value="<<"/> Human Resources Assistant
Organizations	Vision Software S.A.										
Location	<input type="text"/>										
Vision Software S.A.											
Positions	-- Human Resources Assistant <input type="button" value=">>"/>	<input type="button" value="<<"/> Human Resources Assistant									
<input type="button" value="Update"/> <input type="button" value="Cancel"/>											

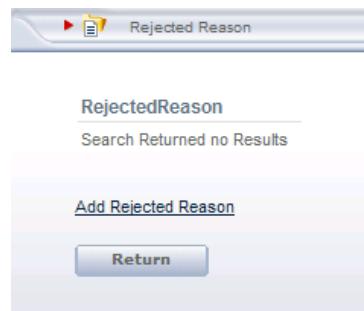
PARAMETERS

Before executing the process we must define the rejection reasons.

1. In the application administration section, click on Entities; immediately, a screen with the listing of entities for which parameters may be created will be displayed.



2. Select the RejectReason entity, click on Add Reject Reason



3. Enter some rejected reasons, which can be:

Rejected Reasons
For working reasons it is not possible to take vacations on that date
No replacement
Important Event on Date Requested
No Available days
Other Reason

Reject Reason		
	Reject Reason	Disabled
View	For working reasons it is not possible to take vacations on that date	
View	No replacement	
View	Important Event on Date Requested	
View	No Available days	
View	Other Reason	

- Press log out and then close the browser

TESTING THE WEB APPLICATION

Let us verify the process after the information for the parametric entities and users has been entered; Open once more the application, you'll be asked to enter one of the credentials for the users created. Enter the application using the Applicant User:



Visit http://wiki.bizagi.com/en/index.php?title=Web_Application#Login_to_the_Web_Application to see how to activate the Quick Login option.

1. Select **New case** from the **Cases** submenu; the screen will be displayed for the first process activity after clicking on **New case**.

Request Date: Tuesday, November 24, 2009

Applicant: Applicant

Vacation Starting Date:

Vacation Ending Date:

Number of Office Days Requested:

Save **Next >>**

Creation Number:	1
Solution Date:	11/24/2009
Created by:	Applicant
Current Assignee:	Applicant
Current Event Assignees:	

The application name, followed by the process name, and finally the activity name can be observed in the upper bar of the screen.

2. Complete the information for the activity; click on **Next** to continue with the process. The summary form will appear indicating the current Assignee for the Case:

Vacation Request - Activity Register Vacation Request has finalized successfully

You have no more Work items for this case

Go to [Pending](#)

Creation Number:	1
Solution Date:	11/24/2009
Created by:	Applicant
Current Assignee:	Boss
Current Event Assignees:	

3. Log out from the application and Log in again with the Boss User



4. The information for the activity **Approve Vacation Request** is displayed in the following screen; complete the information for the user and then you'll see the work portal and you can select the case:

The screenshot shows the BizAgi BPM Project interface in Internet Explorer. The main window displays a table of cases, with one row highlighted. The columns are C.Num, Path, Process, State, Creation Date, State Expires On, Solution Date, and View. The highlighted row shows C.Num 1, Path App/Processes/ Vacation Request, Process • Approve Vacation Request, State Pending, Creation Date Tuesday, November 24, 2009, State Expires On Thursday, November 26, 2009, Solution Date Tuesday, November 24, 2009, and a View icon. The left sidebar shows navigation links like BizAgi Cases, Future (1), Smart Folders, BizAgi Folders, BizAgi Queries, and Analysis Queries. The bottom status bar shows the user is 'Boss (Etc/UTC)' on 'Tuesday, November 24, 2009' at '5:51 PM'.

Request Date:	Tuesday, November 24, 2009
Applicant:	Applicant
Vacation Starting Date:	Tuesday, November 24, 2009
Vacation Ending Date:	Monday, November 30, 2009
Number of Office Days Requested:	5
Number of Available Days:	2
Approved:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Reject Reason:	<input type="text"/>
Rejection Comments:	<input type="text"/>
Applicant's Boss:	Boss

Click on **Next** to continue the process; keep in mind that if the request was approved, then the next screen to be displayed by the system is the activity **Make Administrative Task**, to see his activity log out and log in again with the Assistant User.



App - Vacation Request - Make Administrative Task

Request Date:	Tuesday, November 24, 2009
Applicant:	Applicant
Vacation Starting Date:	Tuesday, November 24, 2009
Vacation Ending Date:	Monday, November 30, 2009
Number of Office Days Requested:	5
Number of Available Days:	2
Approved:	Yes
Reject Reason:	
Rejection Comments:	
Applicant's Boss:	Boss

Update employee's folder and make administrative task in payroll's system

Administrative Task Date:	11/25/2009
Payroll Code:	PR4561

Save **Next >>**

Creation Number:	1
Solution Date:	11/24/2009
Created by:	Applicant
Current Assignee:	Assistant
Current Event Assignees:	

At any rate, if the request was not approved, then the **Inform Request Rejection** screen will be displayed; to see this activity log out and log in with the Applicant User

App - Vacation Request - Inform Reject Reason

Request Date:	Tuesday, November 24, 2009
Applicant:	Applicant
Vacation Starting Date:	Tuesday, November 24, 2009
Vacation Ending Date:	Monday, November 30, 2009
Number of Office Days Requested:	5
Number of Available Days:	11
Approved:	No
Reject Reason:	No replacement
Rejection Comments:	There is no replacement available
Applicant's Boss:	Boss

Save **Next >>**

Creation Number:	2
Solution Date:	11/24/2009
Created by:	Applicant
Current Assignee:	Applicant
Current Event Assignees:	

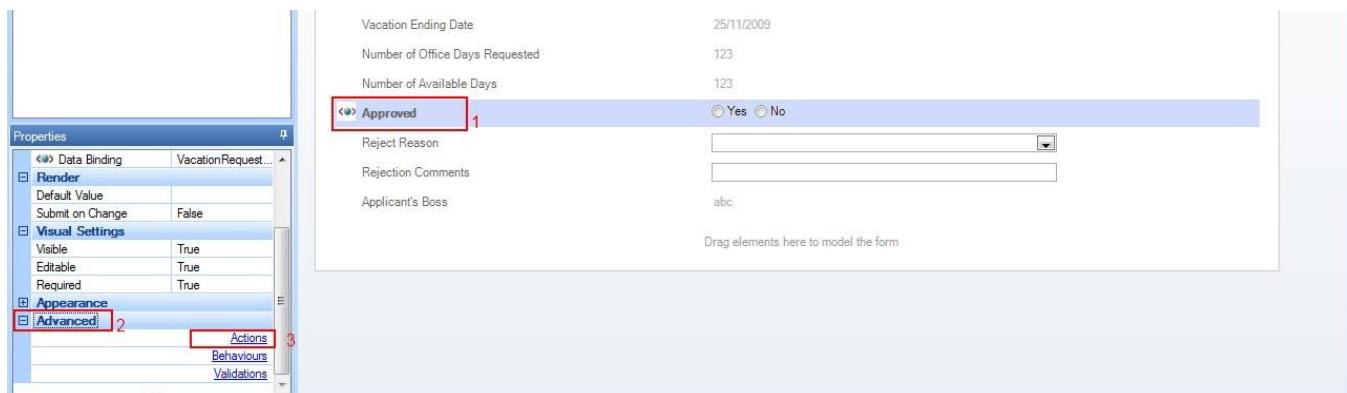
IMPROVING THE WEB APPLICATION

BizAgi allows the modification of the fields' appearance within the forms. BizAgi also offers a set of tools, which allows validating the information entered to ensure that the capture of the data is adequate for each activity and in fulfillment of the different conditions that have been settled down throughout the process.

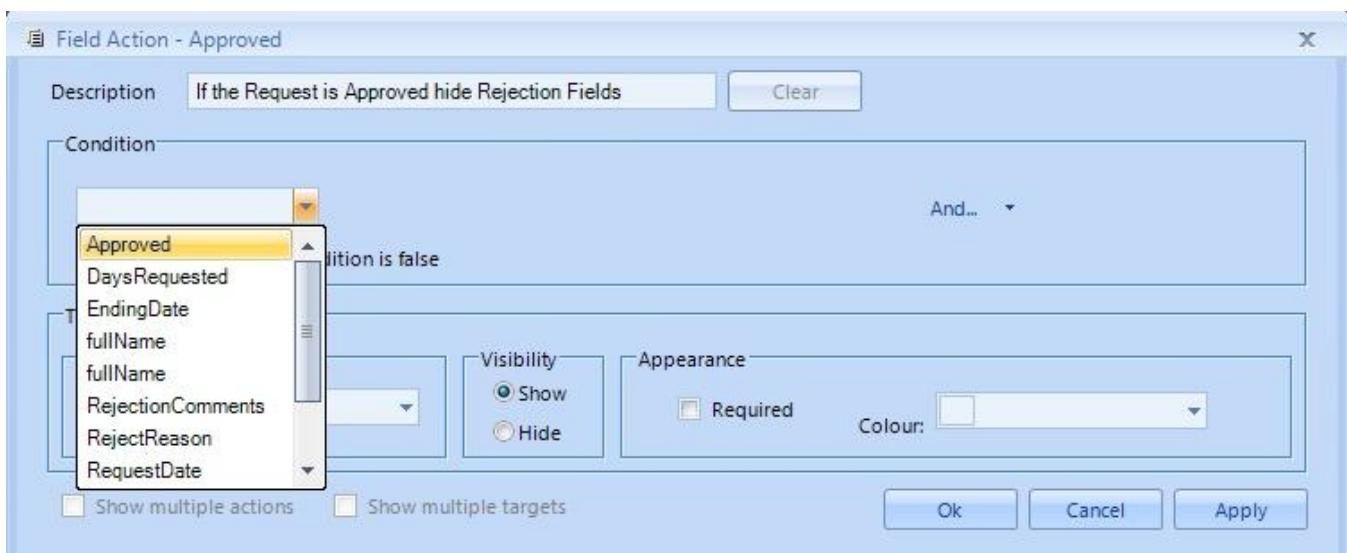
For this workshop only one exercise will be completed to improve the user interface.

The Rejected Reason in the Approve Vacation Request Activity should be displayed to the user only when the request is rejected; some actions will be implemented inside the forms editor to implement that functionality.

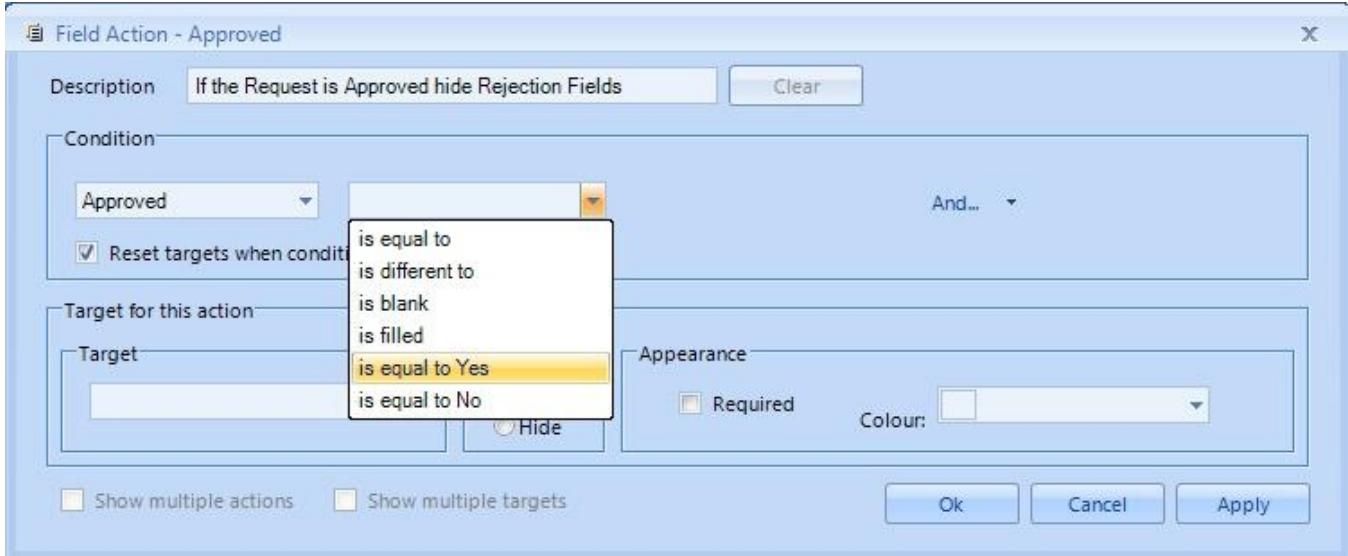
1. Go to the step 3 of the Process wizard and Open the form associated to the **Approve Vacation Request** activity.
2. Select The Approved Field. Identify and select the **Advance** submenu; click on the **Action Link**; the **Field Action** window will be displayed.



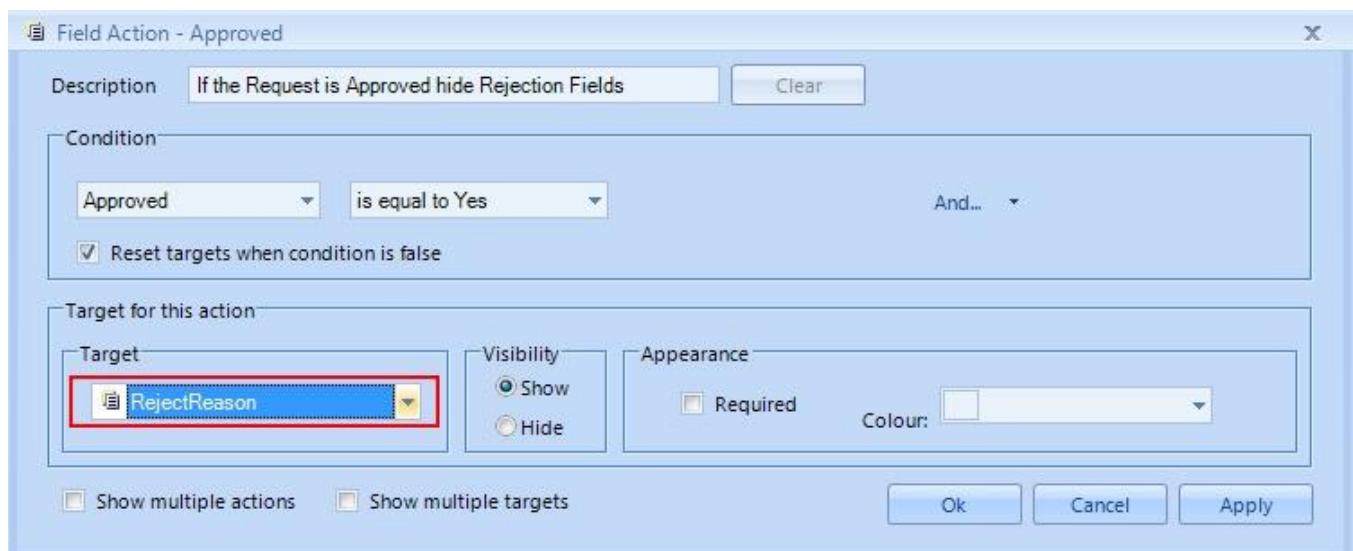
3. Enter the description **If the Request is Approved hide Rejection Fields**, for the action and select the condition to be evaluated. The object to be evaluated is selected in the first group; the system will display a list of the attributes that may be selected for evaluation; here, the **Approved** attribute is selected.



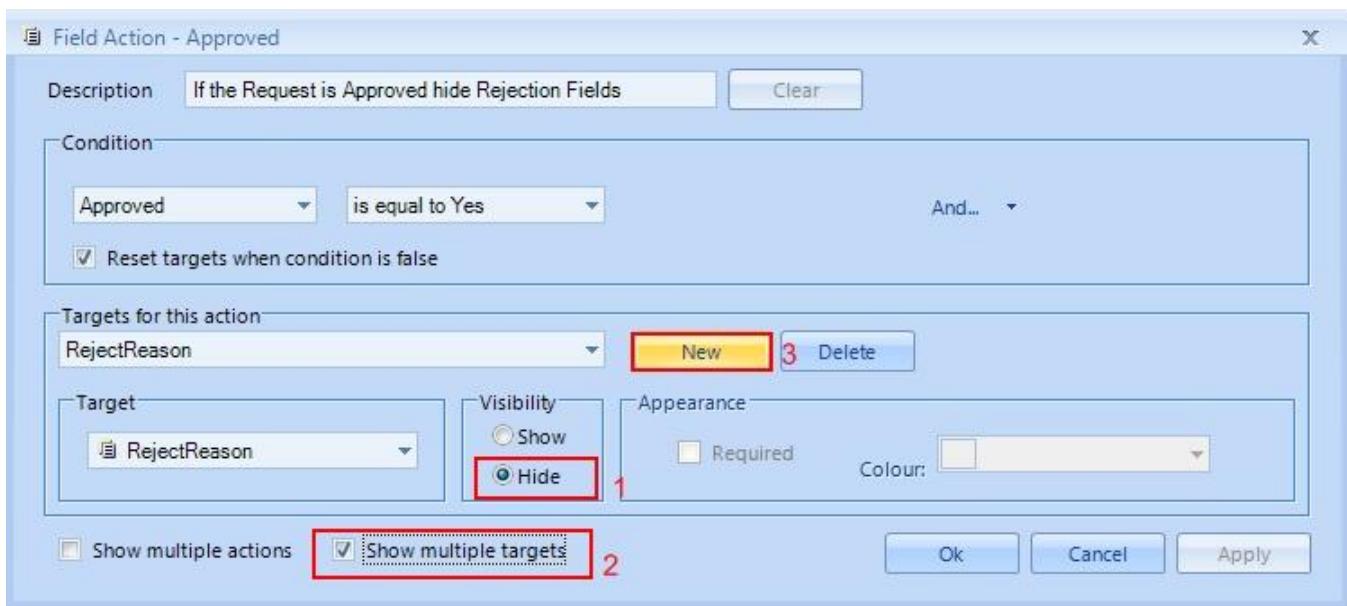
4. In the second Box select the **Is Equal to Yes** option.



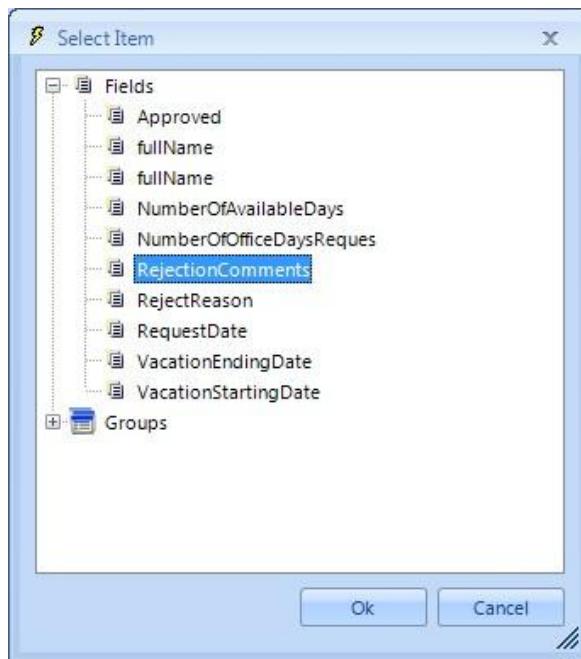
5. The operator to be used must be defined after the element for evaluation is entered; here, if the request is Approved the fields **RejectReason** and **RejectionComments** must be hidden. In the Target Box select **RejectReason**



6. Select **Hide** under visibility for the **RejectReason** attribute; click on **Show multiple targets**; click on the button **New** to create another target.



7. The **Select Item** window will be displayed; select **RejectionComments**.



8. Click on the "Ok" button to save the changes after selecting the intermediate event type and the rule; close the task's form and save the changes.

The new behavior for **RejectedReason** and **RejectionComments** can be observed by going to the Approve Vacation Request Task in the web application and selecting Yes or No for the Field Approved.

Request Date:	Wednesday, November 25, 2009
Applicant:	Applicant
Vacation Starting Date:	Tuesday, November 24, 2009
Vacation Ending Date:	Monday, November 30, 2009
Number of Office Days Requested:	5
Number of Available Days:	2
Approved:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Applicant's Boss:	Boss

Save **Next >>**

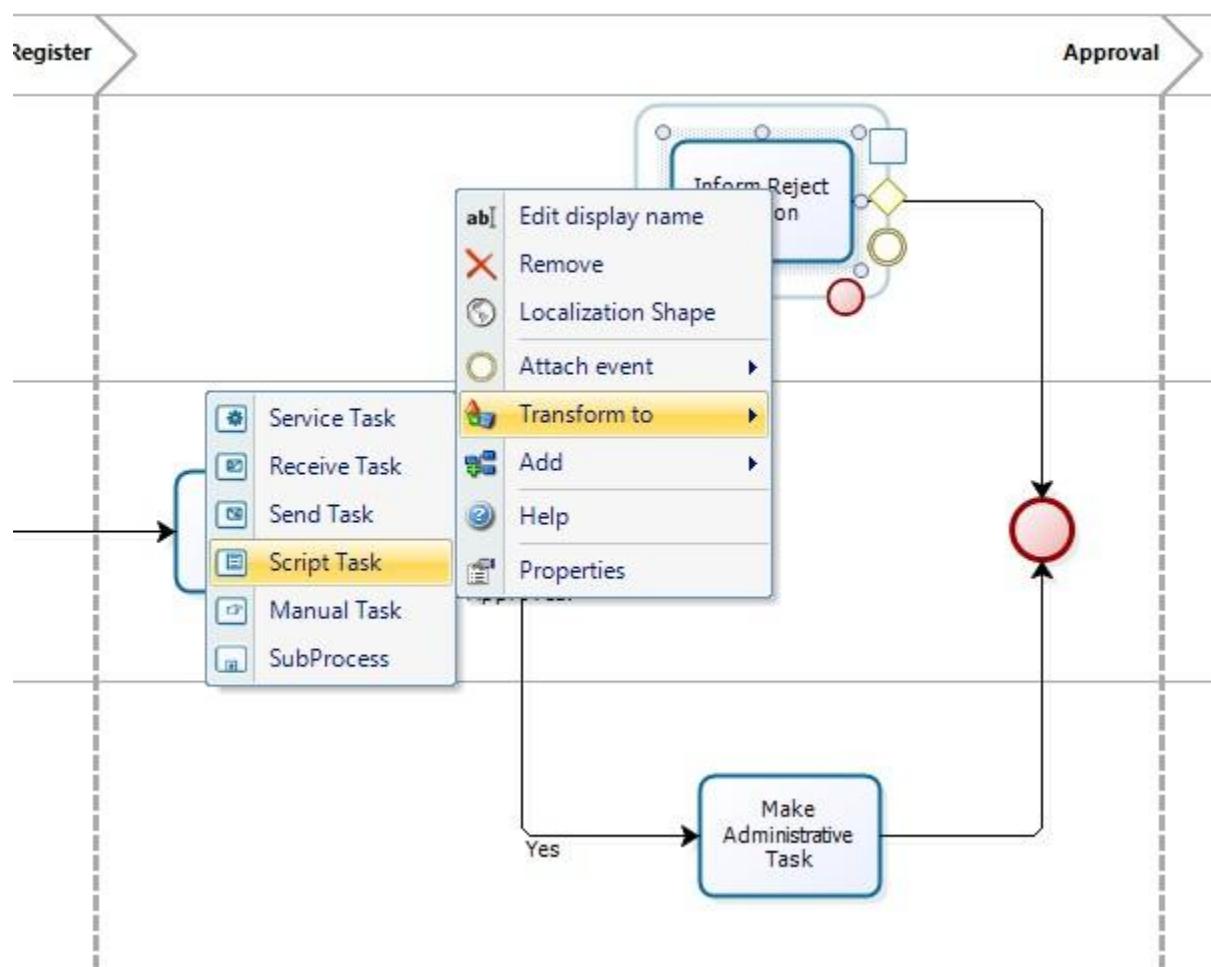
Request Date:	Wednesday, November 25, 2009
Applicant:	Applicant
Vacation Starting Date:	Tuesday, November 24, 2009
Vacation Ending Date:	Monday, November 30, 2009
Number of Office Days Requested:	5
Number of Available Days:	2
Approved:	<input type="radio"/> Yes <input checked="" type="radio"/> No
Reject Reason:	<input type="text"/>
Rejection Comments:	<input type="text"/>
Applicant's Boss:	Boss

Save **Next >>**

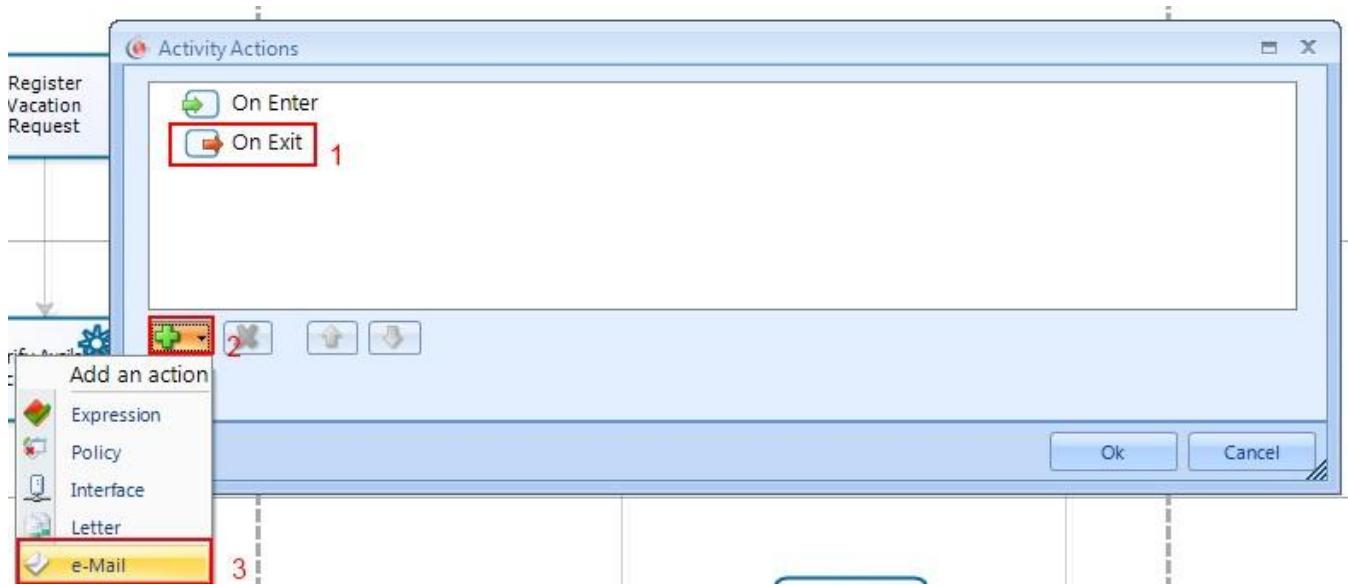
SENDING A NOTIFICATION (OPTIONAL)

The process could be changed to send an automatic notification for the Inform Reject Reason Activity, in order to do this the activity need to be converted into a service task. A SMTP Server would also be required, execute this step if you already have one.

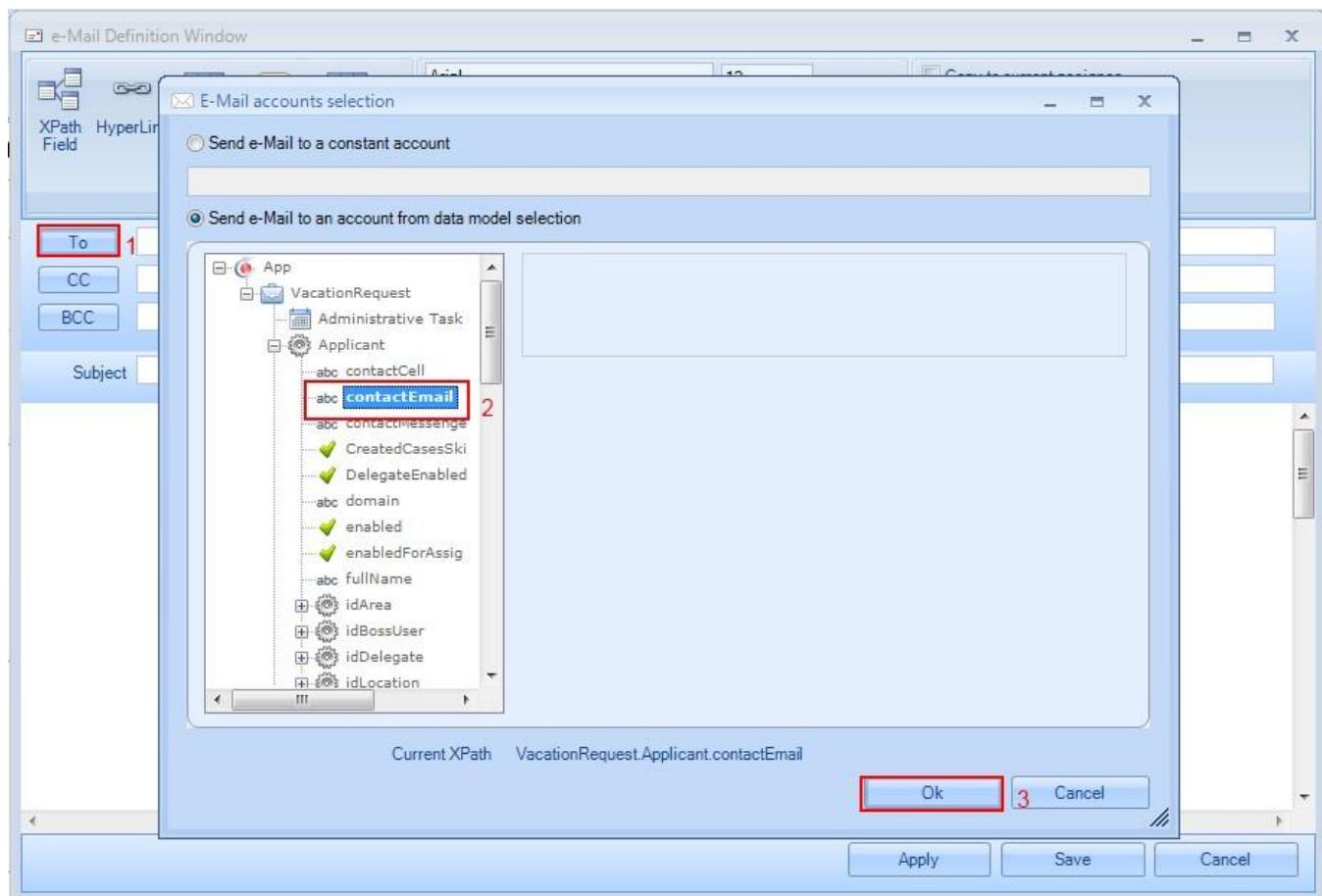
1. Go to the step 1 of the process wizard
2. Right click on the Inform Reject Reason Activity and select **Transform to- Script Task**:



3. Save the Process and Close the Modeler and go to the step 4 of the process wizard, select the option Activity Actions. The BizAgi Business Process Modeler will be opened.
4. Right click on the Inform Reject Reason Task and Add an **On Exit Email**



5. On the Message Window fill the **To** Information as follow VacationRequest-Applicant-ContactEmail



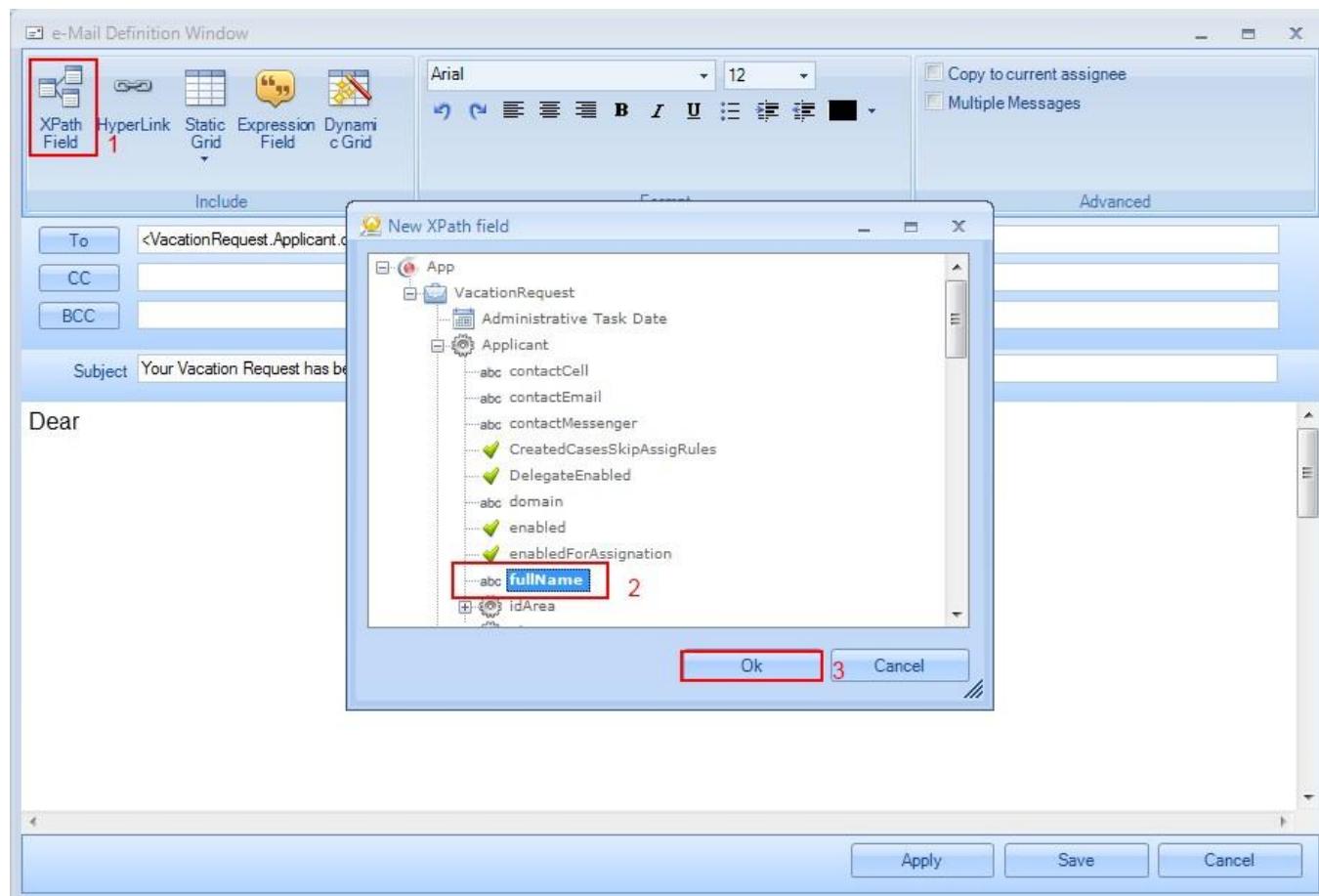
6. Include a subject as **Your Vacation Request has been Rejected**
7. A text like this one must be included in the message:

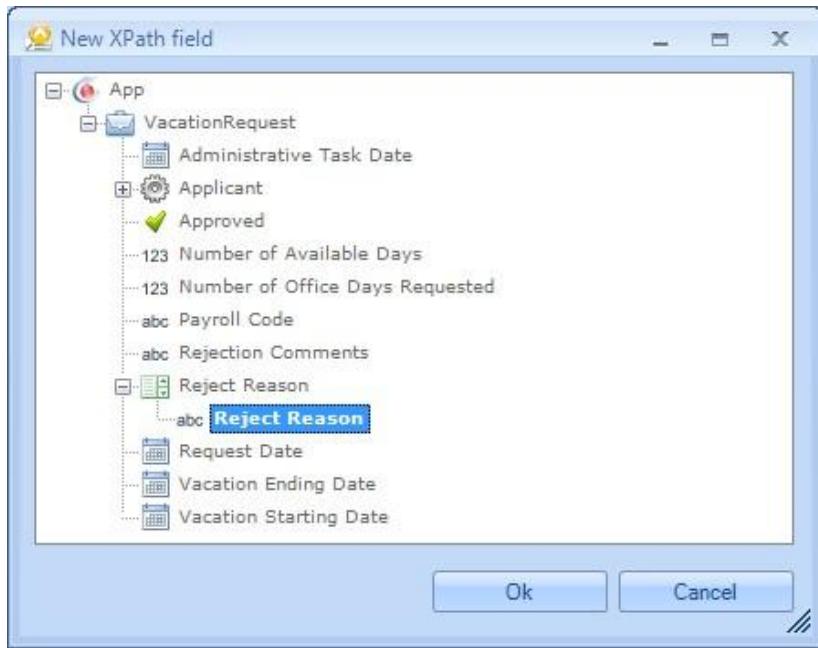
Dear (Applicant full name):

We are sorry to inform your Vacation Request has been rejected. The reason for this rejection as follow:

(Reject Reason)

To include the applicant full name and Reject Reason select the **XPath Field Option** and navigate in the Data Model to find the required attribute





The result will look like this:

To: <VacationRequest.Applicant.contactEmail>

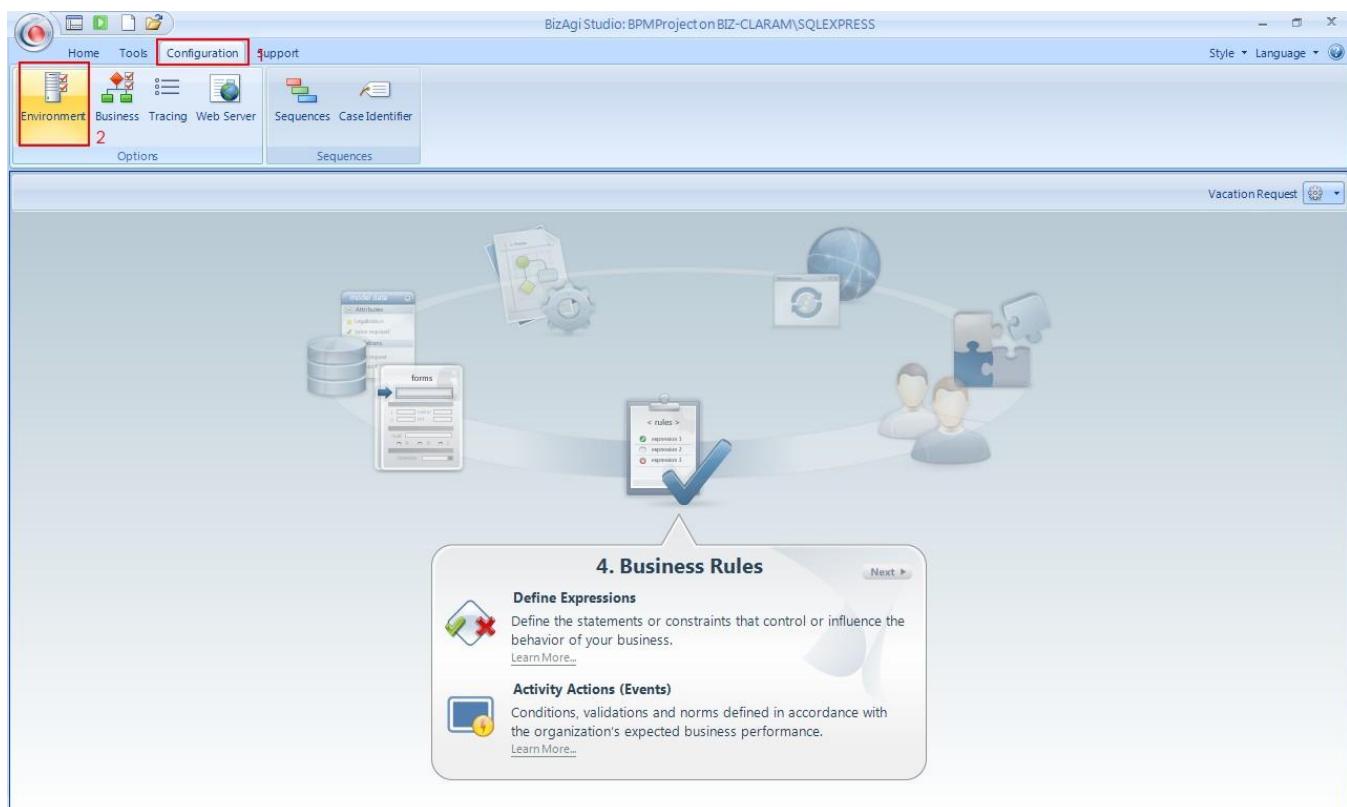
CC:

BCC:

Subject: Your Vacation Request has been Rejected

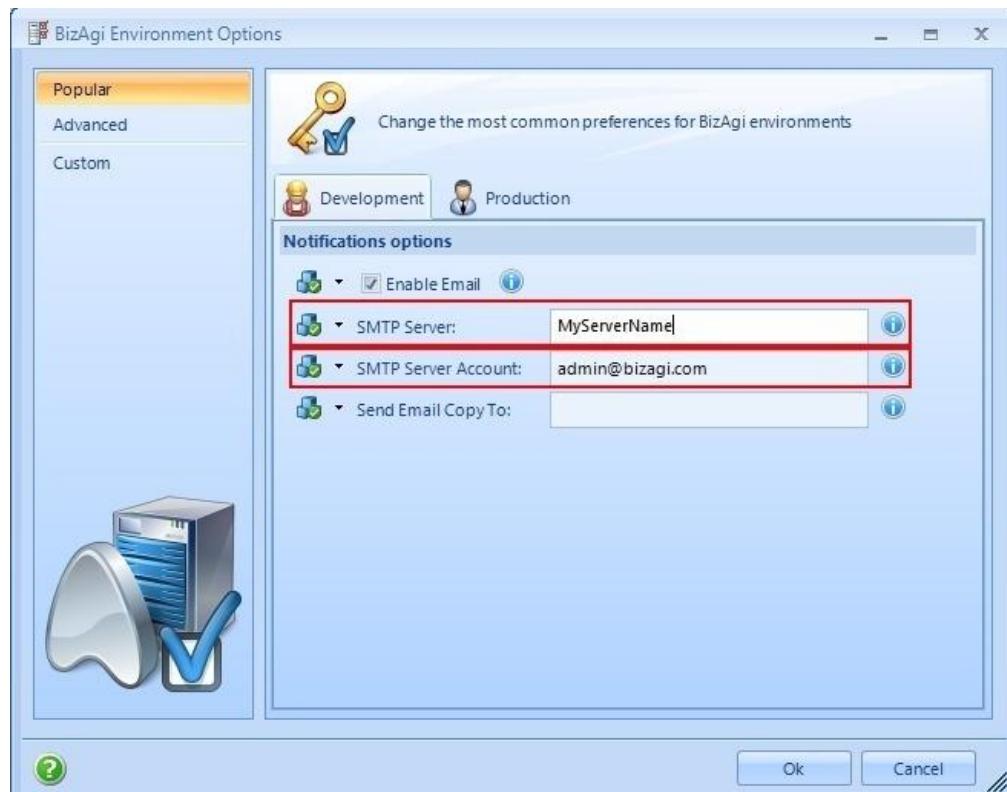
Dear <VacationRequest.Applicant.fullName>,
We are sorry to inform your Vacation Request has been rejected. The reason for this rejection is as follows:
<VacationRequest.RejectReason.RejectReason>

8. Click on **Save** to close the Message Definition Window and then **Ok** on the Activiti Actions Window.
9. Save the changes made to the process and close the Activity Actions after doing so.
10. Go to the **Configuration** tab and select **Environment**



11. The BizAgi Environment Options Window will appear, fill the Require information for the SMTP server as follow:

- a. SMTP Server: Your SMTP Server Name
- b. SMTP Server Account: A Valid E-mail Account on the domain. It will appear as return recipient of the emails sent.



You may review how to check your SMTP server name if you are using outlook at http://wiki.bizagi.com/en/index.php?title=Find_SMTP_Server_in_Outlook

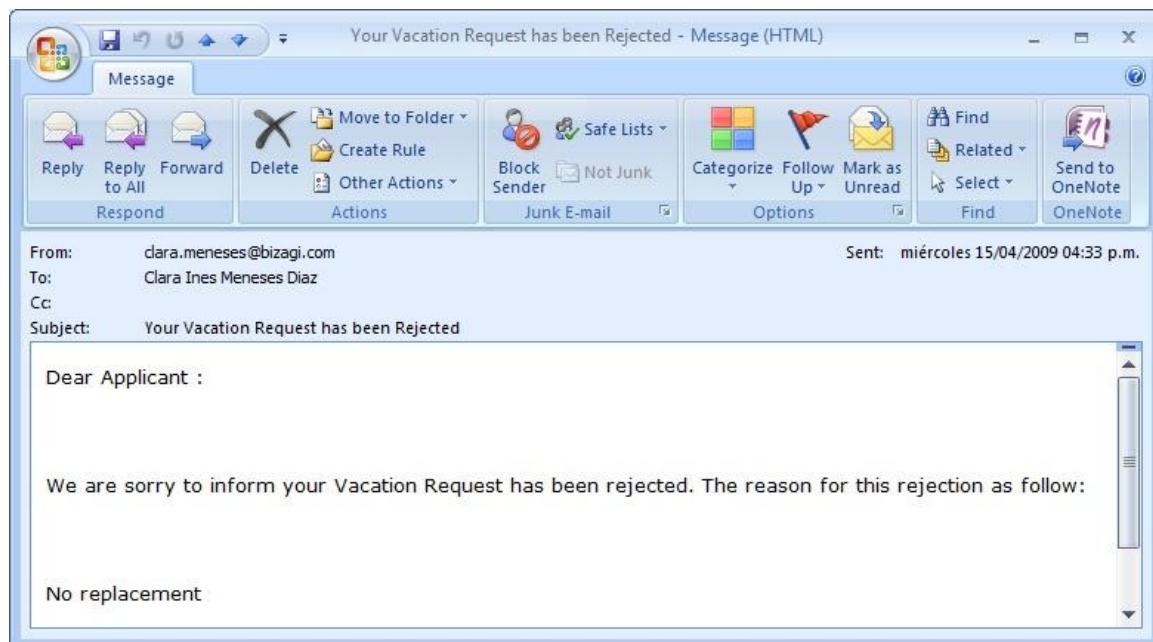
Make sure the information included is correct.

12. Configure the Contact Email for the Applicant. Go to the Web Application, Admin-Users:

Basic Information	Organizations	Configuration User
Name	Applicant	
User Name	Applicant	
Domain	domain	
Notify by Email	<input type="checkbox"/>	
Contact Email	applicant@bizagi.com	
<u>User Authentication</u>		
Password	<input type="password"/>	
Expire Password	<input type="checkbox"/>	
Lock Account	<input checked="" type="checkbox"/>	
Send Mail with Password to User	<input type="checkbox"/>	
<input type="button" value="Update"/> <input type="button" value="Cancel"/>		

Make sure the Email is a valid Email address and click on Update.

13. Run The Application, start a new case and reject the request, instead of looking to a form for the Inform Reject Reason Activity an e-mail will be sent and the case will be closed. The e-mail would have to look like this:



3. CONCLUSION

In this workshop, you learned to diagram the flow of processes, the design and creation of its data structure, the definition of business rules, configuration of assignation rules for each one of the manual activities, and to connect with other applications via web. The final result was an easy-to-use web application, which shows accurately the model created in BizAgi Studio; this result could be achieved because of the data driven concept of BizAgi.

Thank you for completing this workshop, for BizAgi it has been a pleasure to show you why we are the most agile solution to automate process.

We hope that your experience with BizAgi has been satisfactory; should you have any questions or comments, please feel free to contact us at:

<http://www.bizagi.com/eng/bizagi/contact/contact.aspx>

If you need to review the solution of the workshop, you may open BizAgi and the project will be available.

NEXT STEPS

1. There is an additional more advanced workshop, in which an office supply request process is automated. Interested? Please [click here](#)
2. To learn more about BizAgi and BPMN please take our online courses at [e-learning.bizagi](http://e-learning.bizagi.com).
3. At any moment you may press F1 to get help in BizAgi Studio
4. Visit our resource center at <http://wiki.bizagi.com/en>