

# Designing a Process

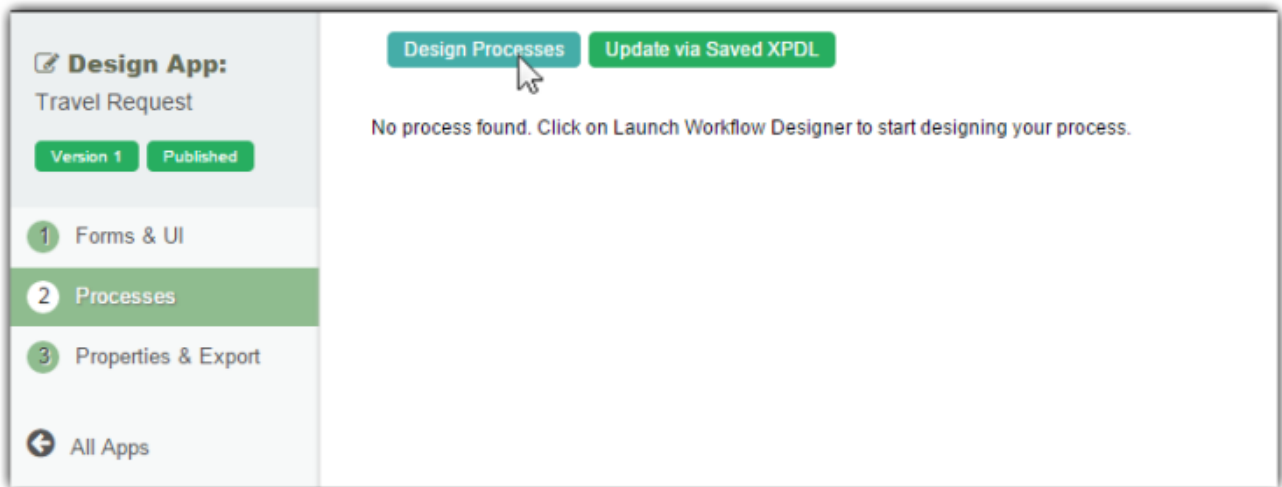
## Previous step

Make sure that you have first completed the previous tutorial - [Designing a Userview](#)

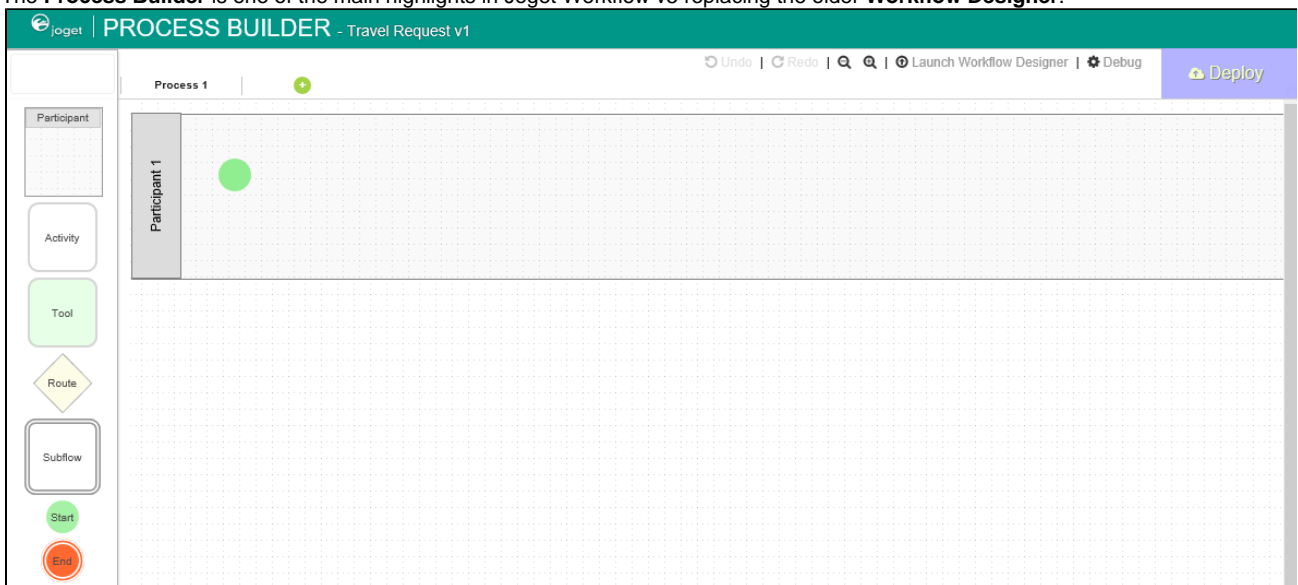
- [Introducing the new Process Builder](#)
- [Mapping Participants to Users](#)
- [Mapping Activities to Forms](#)
- [Mapping Tools to Plugins](#)
- [Test Driving the Process](#)
- [Incorporating the Process into the Userview](#)

## Introducing the new Process Builder

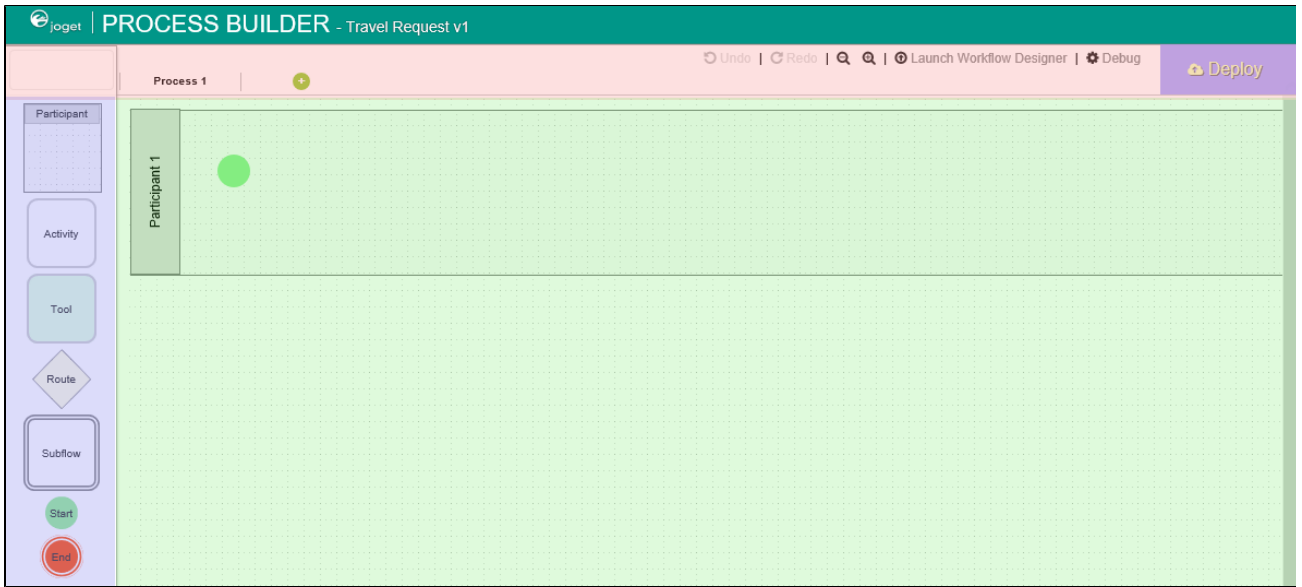
1. In the App design page, click on the **Processes** menu on the left, and then on the **Design Processes** button along the top.



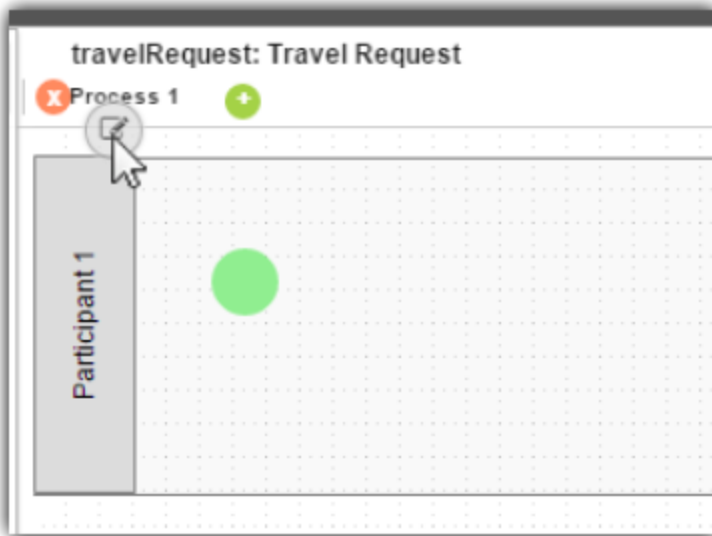
2. The **Process Builder** is one of the main highlights in Joget Workflow v5 replacing the older **Workflow Designer**.



3. There are 3 main areas in the Process Builder. On the top (red), the **Navigator** panel contains a list of processes together with the action buttons on the right. On the left (blue), this is where the element palette is placed by default. One can move it around to suit one's style. The main panel in the middle is the **Graph** area (green) that contains the actual process diagram.



4. Click on the edit icon under the process name in the Navigator. This brings up the properties dialog where you can edit the process details.



**Process Properties**

Process Properties > Subflow Properties > SLA Options

ID \*

Name \*

Workflow Variables

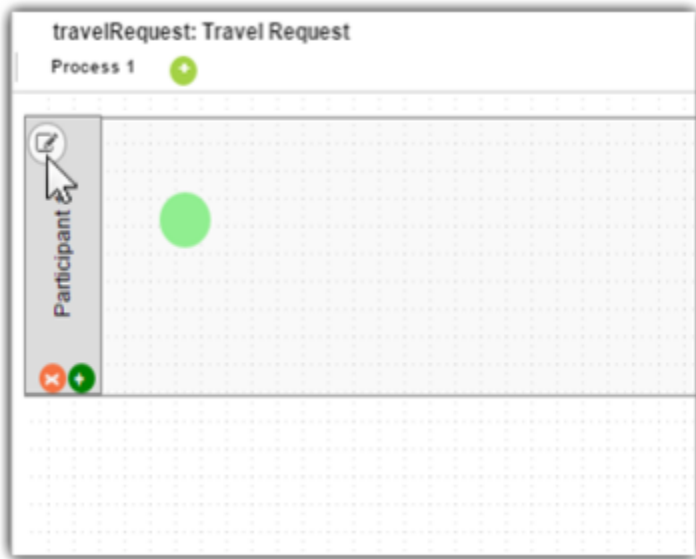
Variable ID	
status	↑ ↓ ×

+ (add button)

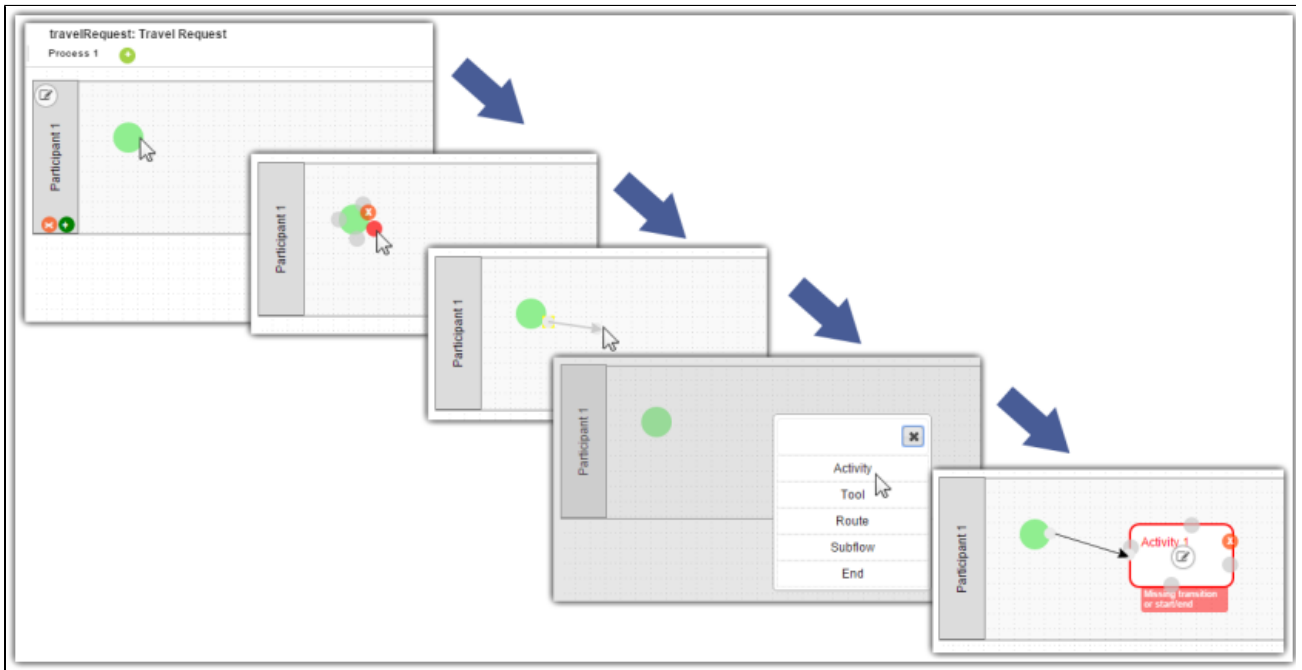
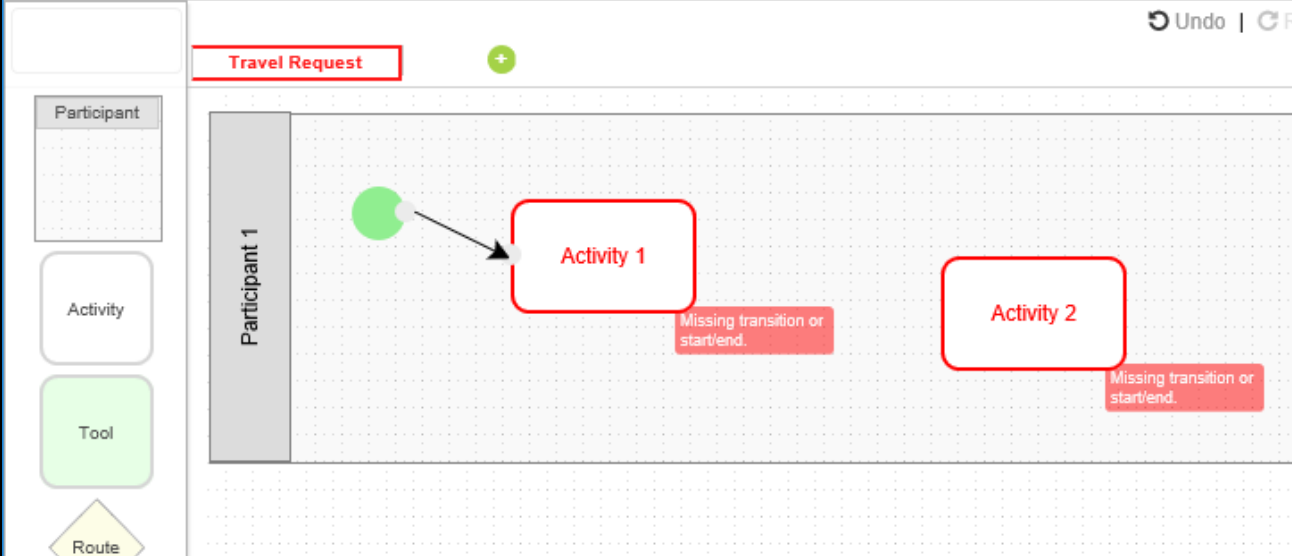
< Prev Next >

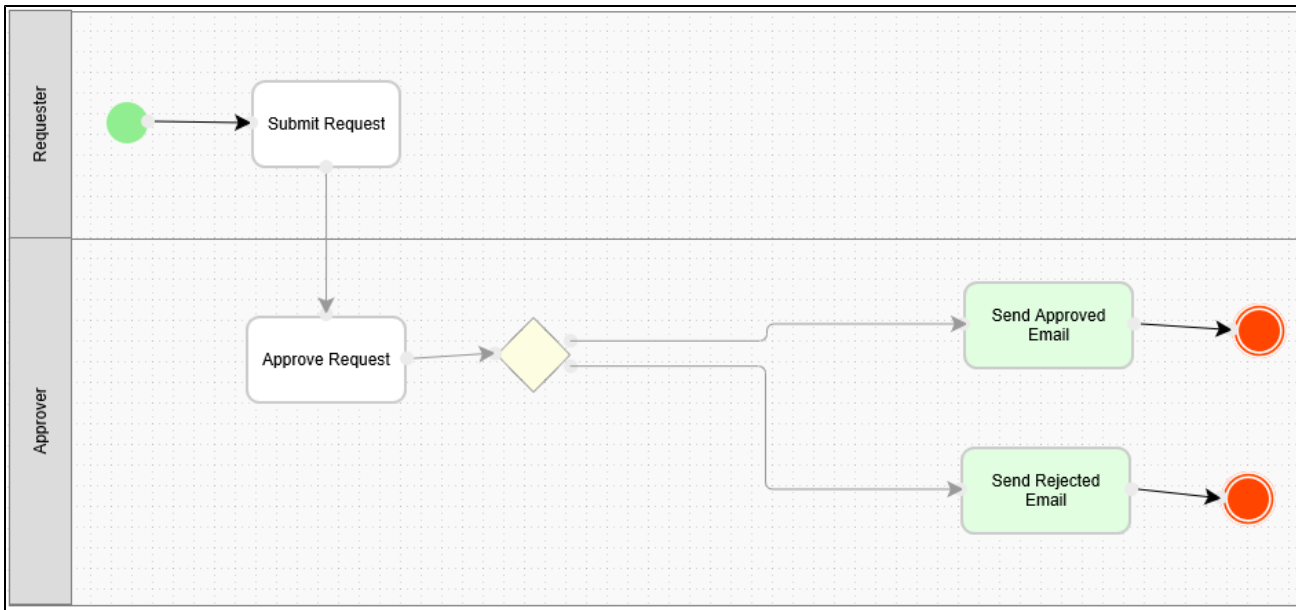
OK Cancel

5. Add **Participants** into the process by clicking on the green add button under current Participant. Participants represent users or roles that perform a certain task. Click on the edit button while hovering over the participant name to set its properties.



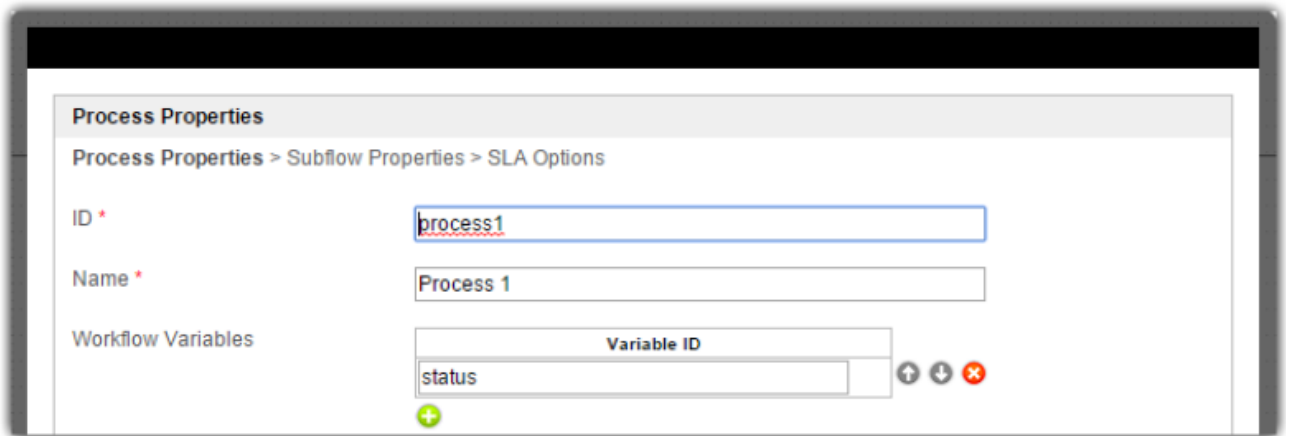
6. Add **activities**, **tools** and **routes** into the process diagram. Activities represent forms which require human interaction. Tools represent system or automated tasks, and routes are decision points. Use **transitions** to link them all together in a flow. You may either expand your design by connecting from existing nodes or by dragging the required nodes from the element palette into the process diagram.



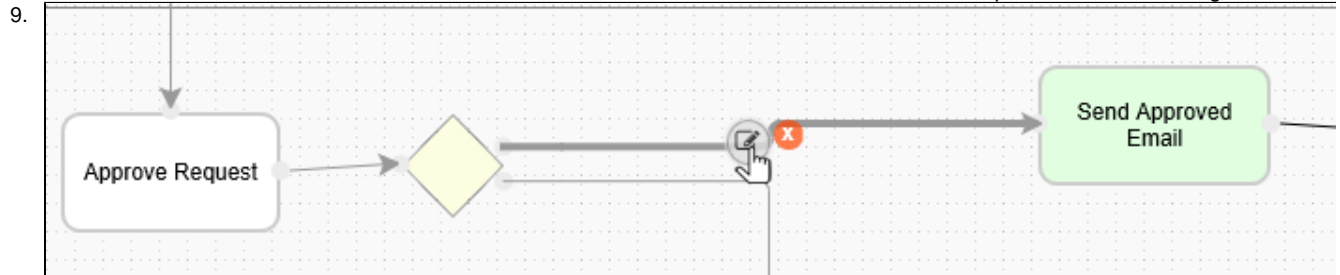


7. To handle routing (for example approval conditions), use **Routes** in combination with **workflow variables**. To create a workflow variable, double click on the process name in the Navigator to bring up the process dialog. Click on the first small icon under the Workflow variable heading, and key in the ID of the variable e.g. **status**.

**Routes**  
Learn more about [Process Routes](#).



8. Once a workflow variable has been defined, **hover over** on a transition and **click** on the edit icon to open the transition dialog.



10. In the transition dialog, select type **Condition**, select the variable **status** in **Variable** and key in **Approved** into the **Value** field\*. \* This means that this transition will occur if the value of status is "Approved".

[close]
Transition Properties

**Transition Properties**

Name

Style   
 Straight   
 Orthogonal

Type Condition

Use Condition Helper Yes

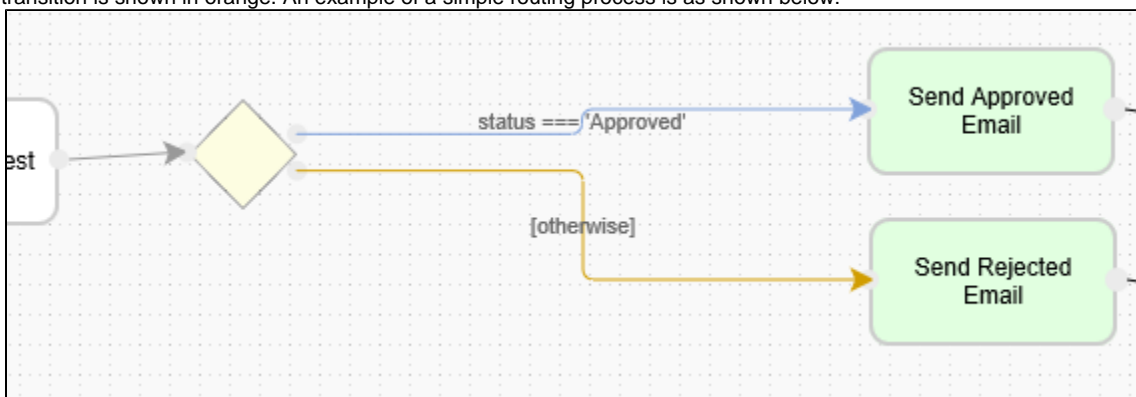
Conditions \*

Join	Variable	Operation	Value
AND	status	Equal To	Approved

+

OK
Cancel

- Set the transition type to **Otherwise** to indicate that it is the default path to take when other conditions are not met. The Otherwise transition is shown in orange. An example of a simple routing process is as shown below:



- Ensure that the process has a proper **Start** and **End**. Click on **Deploy** to deploy the process to the server.

## Mapping Participants to Users

- Once a process has been successfully deployed, return to the previous tab/window. The new process diagram will be generated after you click on **OK**. Joget Workflow will interpret the process diagram and load the process details.

Design Process Update via Saved XPDL Run Process

Design App: Travel Request

Version 1 Not Published

1 Forms & UI

2 Processes

3 Properties & Export

All Apps

Process name: Travel Request

Show Additional Info

Map Participants to Users Map Activities to Forms Map Tools to Plugins Variable List

This is the list of participants defined in the Workflow design.

Requester  
ID : requester [Add/Edit Mapping](#)

Approver  
ID : approver [Add/Edit Mapping](#)

Process Start White List  
ID : processStartWhiteList [Add/Edit Mapping](#)

Type	Role
Value	Admin

[Remove Mapping](#)

2. Participants defined in the process are listed in the **Map Participants to Users** tab, and you can map each participant to specific people. Click on **Add/Edit Mapping** to map to specific groups, users, organization chart, etc. If no mapping is done for a participant, any tasks are automatically defaulted to the current user instead.

Map Participants to Users - Approver (approver)

Map to User or Group Map to Org Chart Map to Workflow Variable Map to Plugin

Map to Group Map to User

Filter By Organization

Search

<input type="checkbox"/>	Username	First Name	Last Name	Email
<input type="checkbox"/>	admin	Admin	Admin	
<input type="checkbox"/>	cat	Cat	Grant	
<input type="checkbox"/>	clark	Clark	Kent	
<input type="checkbox"/>	david	David	Cain	
<input type="checkbox"/>	etta	Etta	Candy	
<input type="checkbox"/>	jack	Jack	Drake	
<input type="checkbox"/>	julia	Julia	Kapatelis	
<input type="checkbox"/>	roy	Roy	Harper	
<input type="checkbox"/>	sasha	Sasha	Bordeaux	
<input type="checkbox"/>	tana	Tana	Moon	

10 Page 1 of 2 Displaying 1 to 10 of 12 items

[Submit](#)

## Mapping Activities to Forms

1. In the **Map Activities to Forms** tab, all process activities are listed.
2. For each activity, click on **Add/Edit Form** to select from a list of current forms in the app.

Map Activities to Forms - Submit Request (submitRequest)

Map to a Form External Form

Search

Form Name	Table Name	Date Created	Date Modified
Travel Request Form	travel_requests	2015-04-07 18:44:44.0	2015-04-07 20:45:30.0

10 Page 1 of 1 Displaying 1 to 1 of 1 items

Create New Form

3. As an example to handle an approval process, click on **Create New Form** to create a new **Travel Approval Form**. In this new form, add a **Subform** that displays the original submitted form, and **radio** buttons to capture the approval status.

Create New Form

Form Details

Form ID  \*

Form Name  \*

Table Name  \*

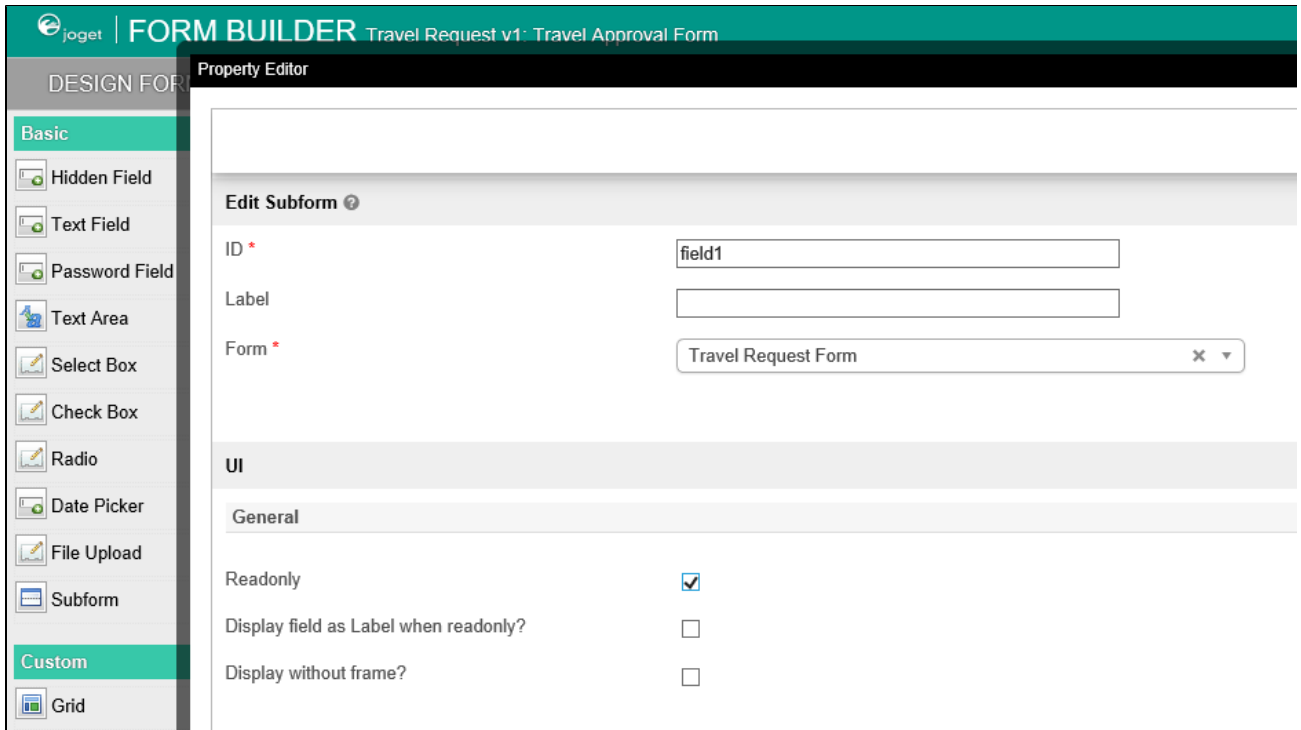
Description

[Show Advanced Options](#)

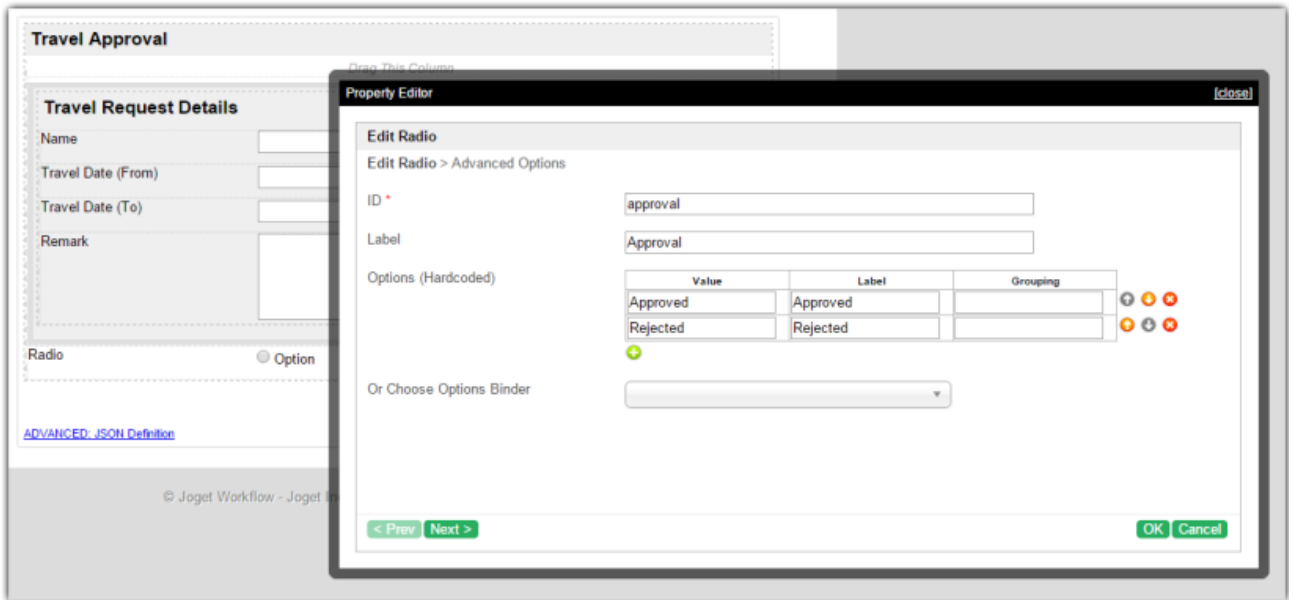
Save Cancel

4. Configure this Subform to select the original request form.





5. Configure the **status** radio button to have Approved and Rejected options.



6. For routing purposes, an important setting in the radio button is the mapping to a **workflow variable** under **Advanced Options**. In this case, setting the mapping to **status** means that the value will be stored in the **status** workflow variable.

Property Editor [Close]

**Advanced Options**

Edit Radio > Advanced Options

**Dependency**

Field ID to control available options based on Grouping

**UI**

Read-only

Display field as Label when read-only?

**Workflow**

Workflow Variable

< Prev Next > OK Cancel

7. After all the configuration, the new approval form should look similar to the following screenshot:

joget | **FORM BUILDER** Travel Request v1: Travel Approval Form

DESIGN FORM | PROPERTIES | PREVIEW | SAVE | Undo | Redo | Advanced Tools

**Basic**

- Hidden Field
- Text Field
- Password Field
- Text Area
- Select Box
- Check Box
- Radio
- Date Picker
- File Upload
- Subform

**Custom**

- Grid

**Travel Approval**

Drag This Column

**Travel Request Details**

Name

Travel Date (From)

Travel Date (To)

Remark

Approval  Approved  Rejected

## Mapping Tools to Plugins

1. In the **Map Tools to Plugins** tab, you can map tools defined in the process to plugins.

**Design App:**  
Travel Request

Version 1  
Not Published

1 Forms & UI

2 Processes

3 Properties & Export

All Apps

Design Process
Update via Saved XPDL
Run Process

Process name: **Travel Request**

**Show Additional Info**

Map Participants to Users
Map Activities to Forms
Map Tools to Plugins
Variable List

This is the list of tools defined in the Workflow design.

Send Approved Email  
ID : sendApproved

Add/Edit Plugin

Send Rejected Email  
ID : sendRejected

Add/Edit Plugin

2. For each tool, click on **Add/Edit Plugin** to select and configure a plugin.

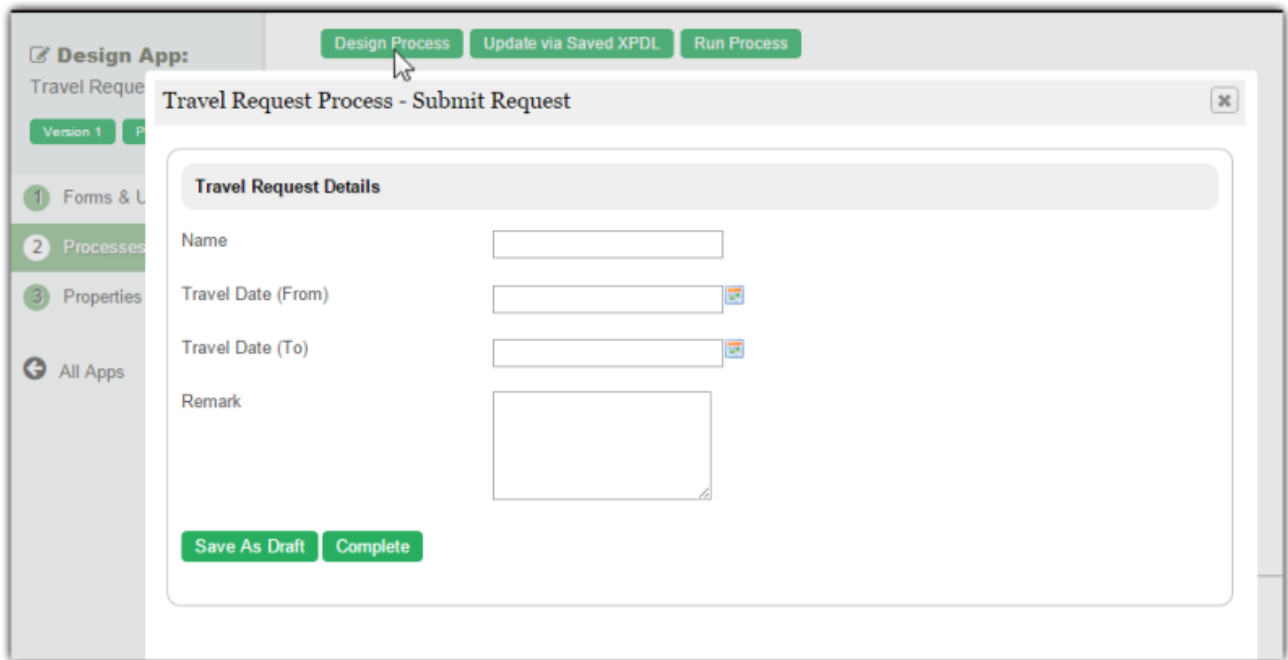
**Map Tools to Plugins - Send Approved Email (sendApprovedEmail)**

Plugin Name	Plugin Description	Plugin Version
Bean Shell Tool	Executes standard Java s	3.0.0
Counter Increment Tool		3.0.0
Csv Import Tool		3.0.0
Database Update Tool	Executes SQL INSERT an	3.0.0
Email Tool	Sends email message to t	3.0.0
Export Form Email Tool	Export form to pdf and sen	3.0.0
Form Data Update Tool	Used to update form data i	3.0.0
Id Generator Tool		3.0.0
Json Tool	Reads a JSON feed URL,	3.0.0
Preset Form Data Tool	Create or fill form data in a	3.0.1

10
Page 1 of 2
Displaying 1 to 10 of 11 items

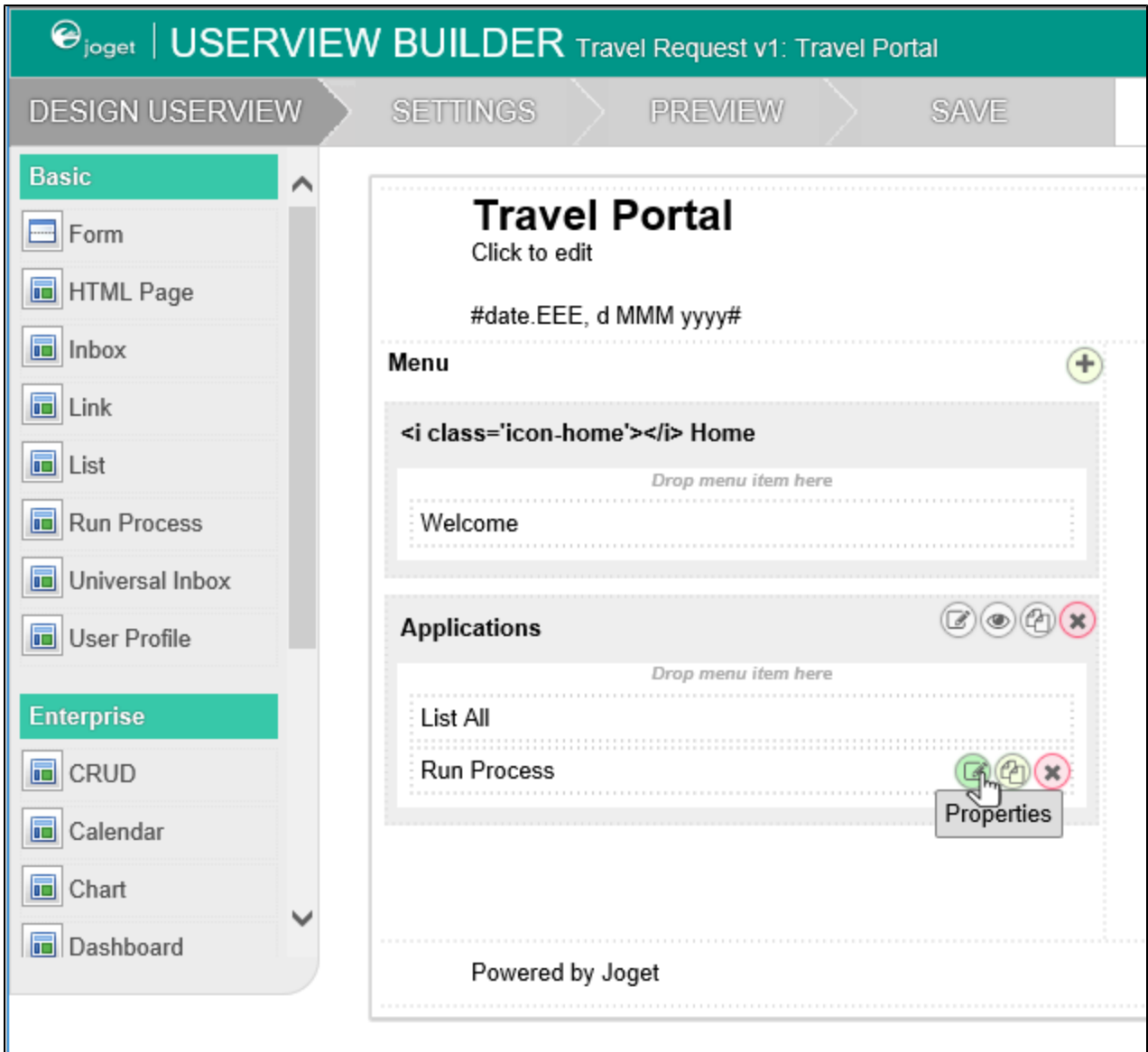
## Test Driving the Process

1. To perform a test run on a process, click on the **Run Process** button along the top of the App design process page.

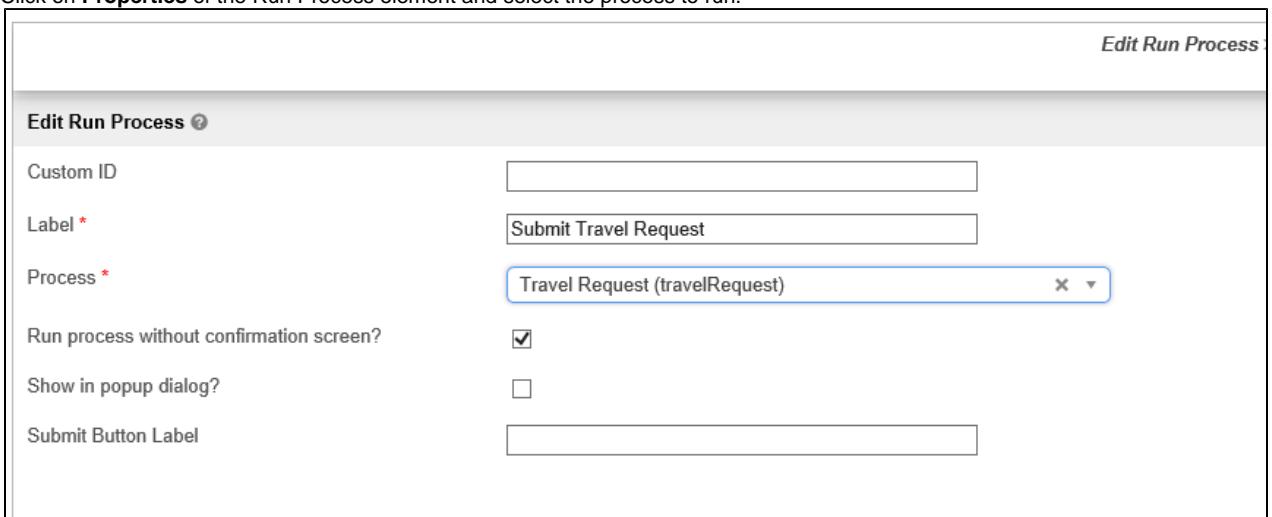


## Incorporating the Process into the Userview

1. In the App design page, click on the name of an existing userview to launch the Userview Builder.
2. Drag a **Run Process** element into a menu category. This menu element allows the user to start a process from the userview.

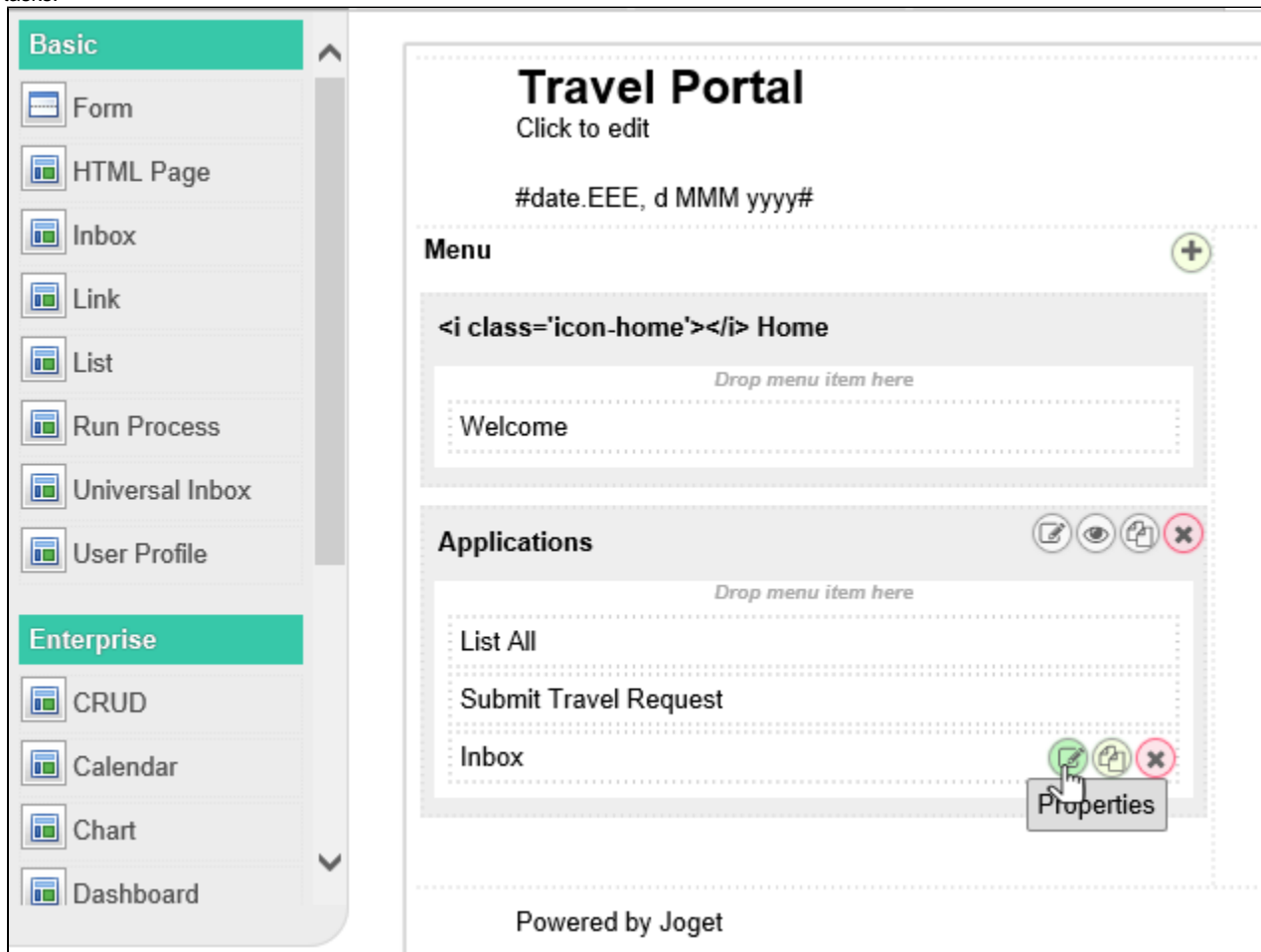


3. Click on **Properties** of the Run Process element and select the process to run.

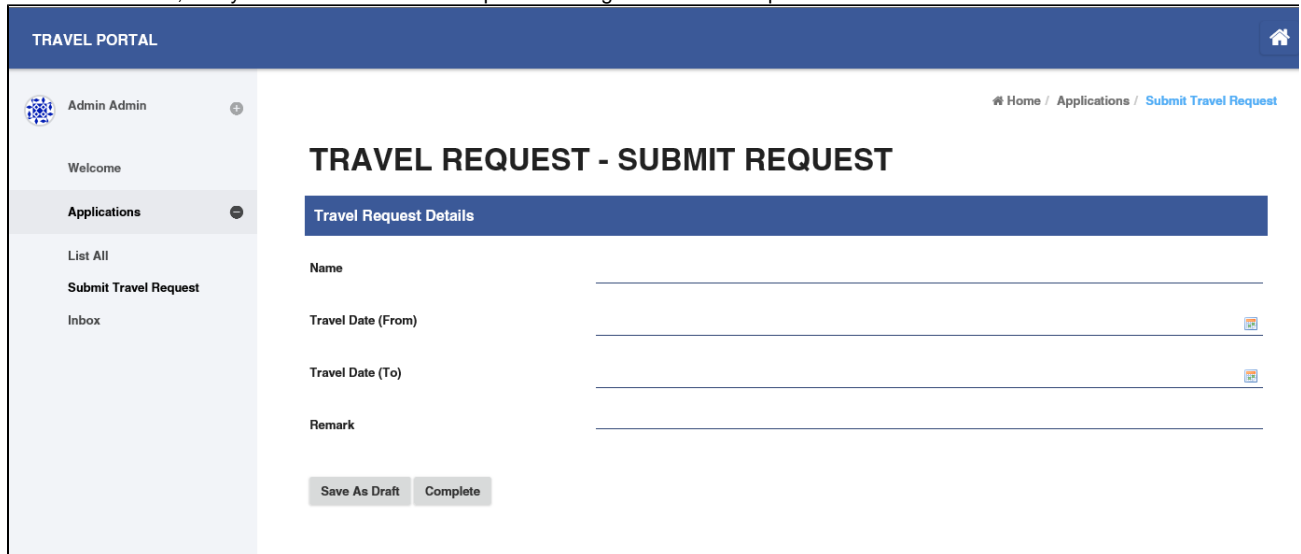


4. Drag an **Inbox** element into a menu category. This menu element provides the user with an inbox to manage their assigned workflow

tasks.



5. Save the userview, and you will be able to run and perform assigned tasks in the published userview.



## Related Tutorials

- Subflows (Subprocesses)

- Start a Process from External Page
- Sending Reminder Repetitively
- Process thumbnails not showing
- Process Deadlines, Exceptions and SLAs
- Multiple Approval
- Multiple Approval v2 (Thread safe)
- Duplicate Process
- Advanced Participant Mapping
  
- Process Routes