

Designing a Process



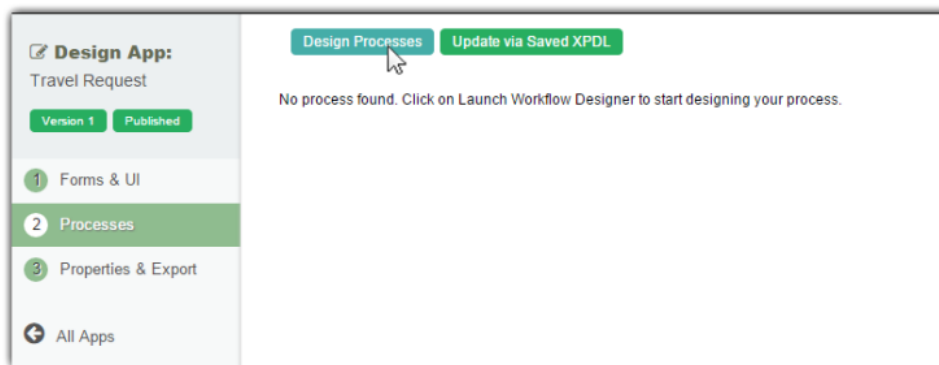
Previous step

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

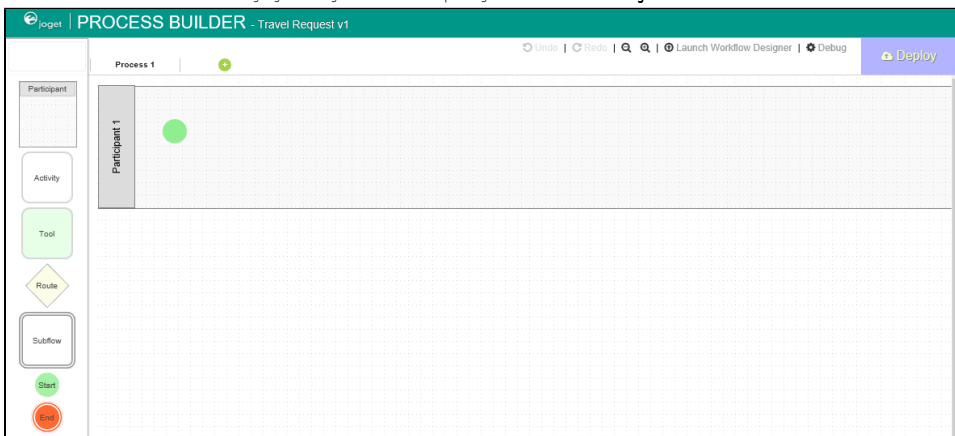
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- [Incorporating the Process into the Userview](#)

Introducing the new Process Builder

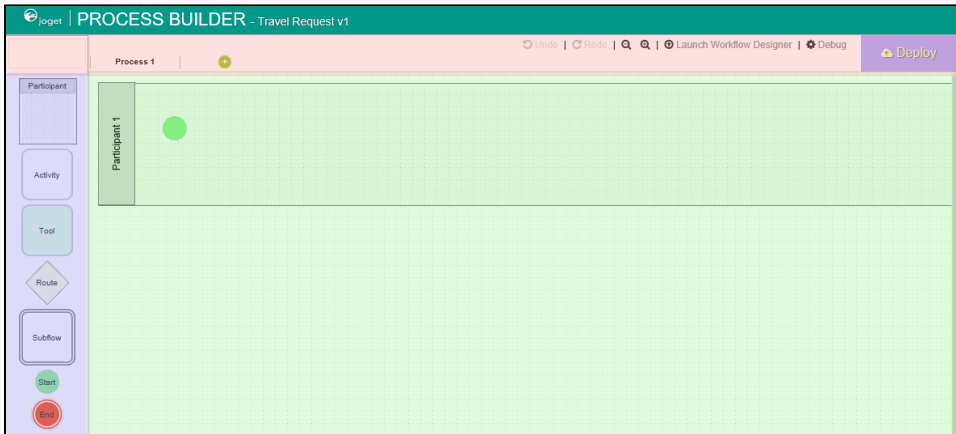
1. In the App design page, click on the **Processes** menu on the left, and then on the **Design Processes** button along the top.



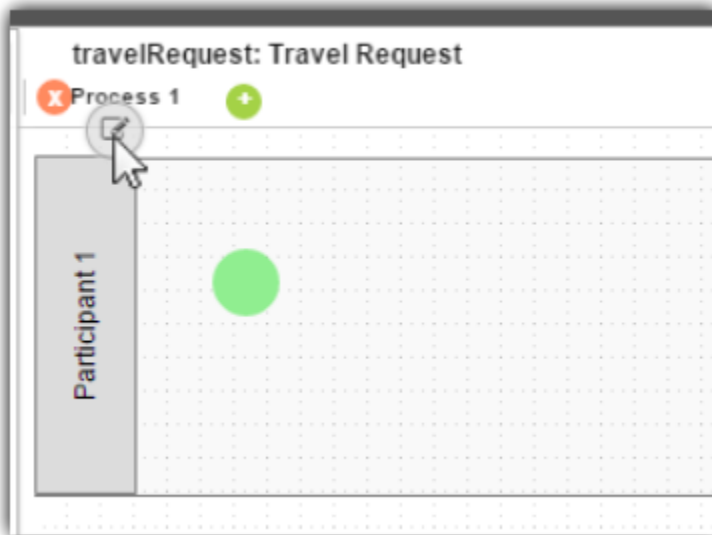
2. The **Process Builder** is one of the main highlights in Joget Workflow v5 replacing the older **Workflow Designer**.



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.



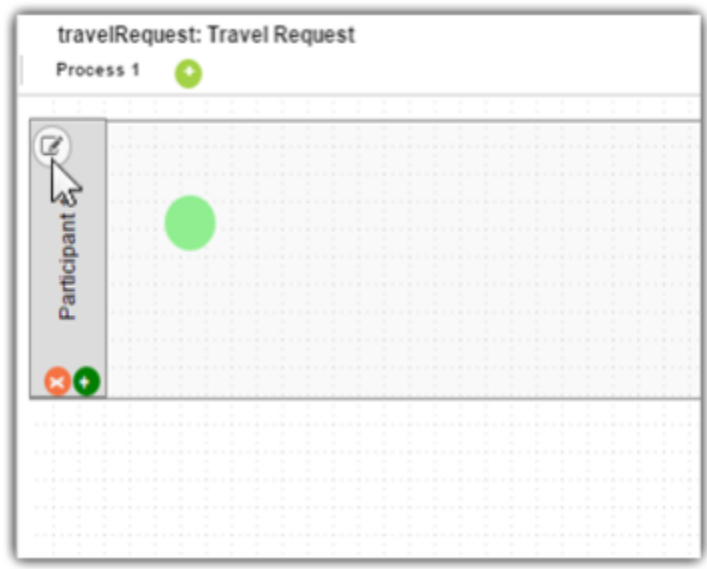
The screenshot shows the 'Process Properties' dialog box. The title bar says 'Process Properties'. The breadcrumb trail is 'Process Properties > Subflow Properties > SLA Options'. The form contains the following fields:

- ID *:
- Name *:
- Workflow Variables:

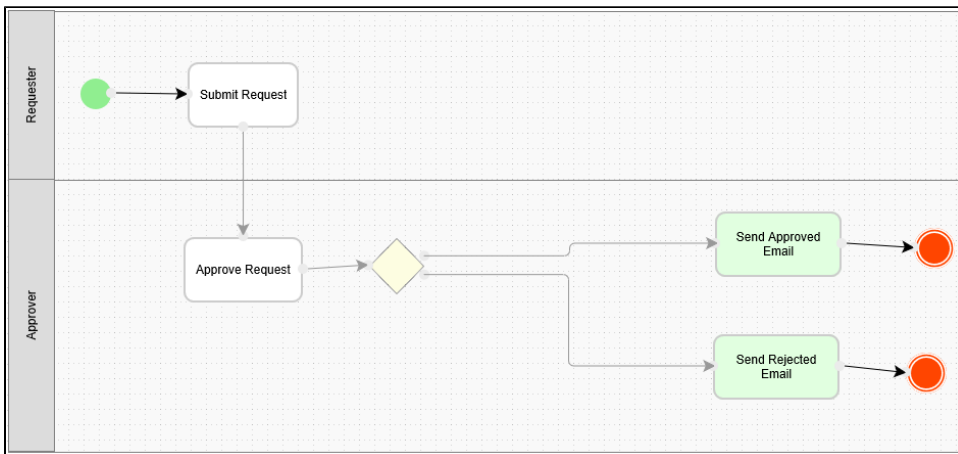
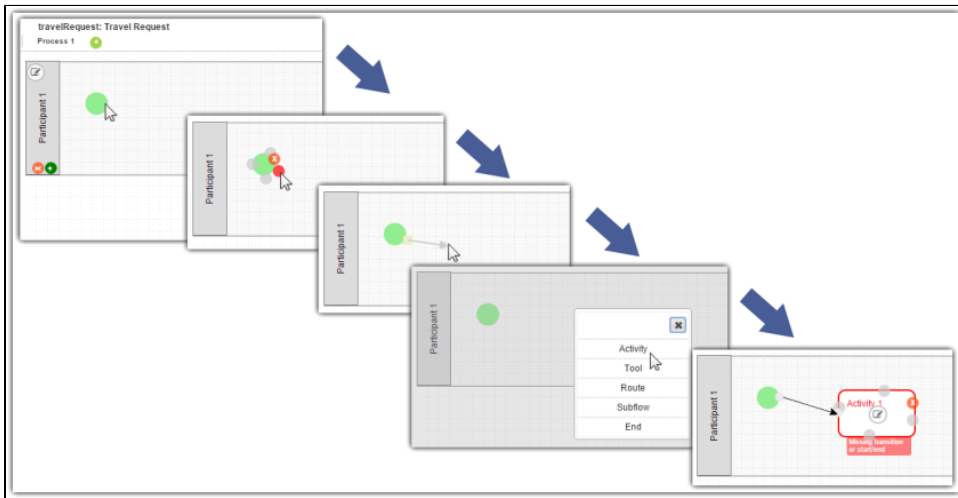
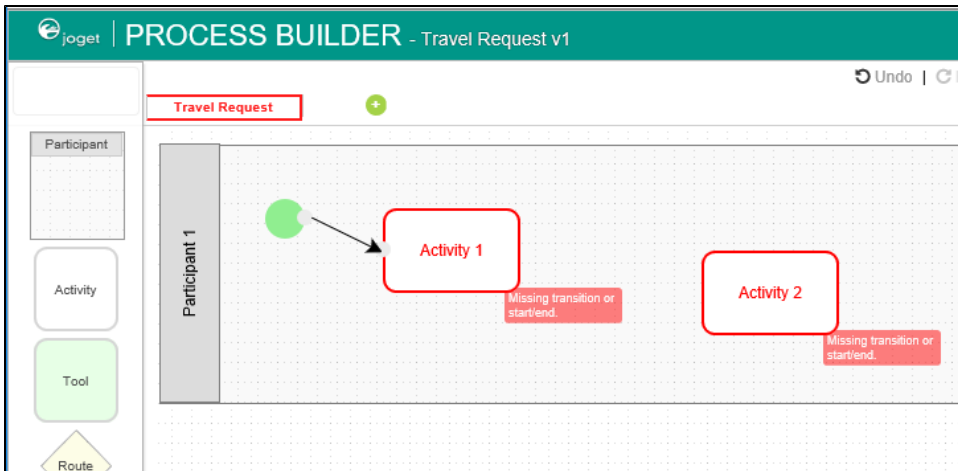
Variable ID
status

At the bottom, there are navigation buttons: '< Prev', 'Next >', 'OK', and '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](#).

Process Properties

Process Properties > Subflow Properties > SLA Options

ID *

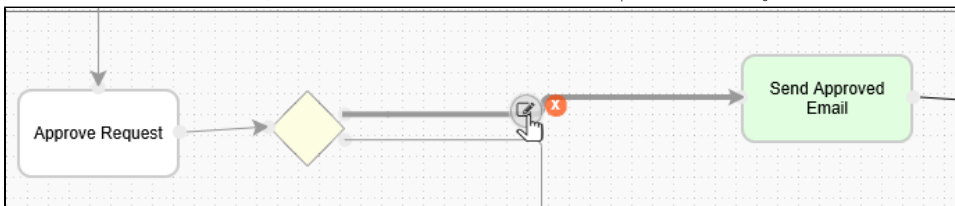
Name *

Workflow Variables

Variable ID
status

+ - ↕ ✖

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



9.

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".

Transition Properties [close]

Transition Properties

Name

Style ☐ Straight ☒ Orthogonal

Type

Use Condition Helper

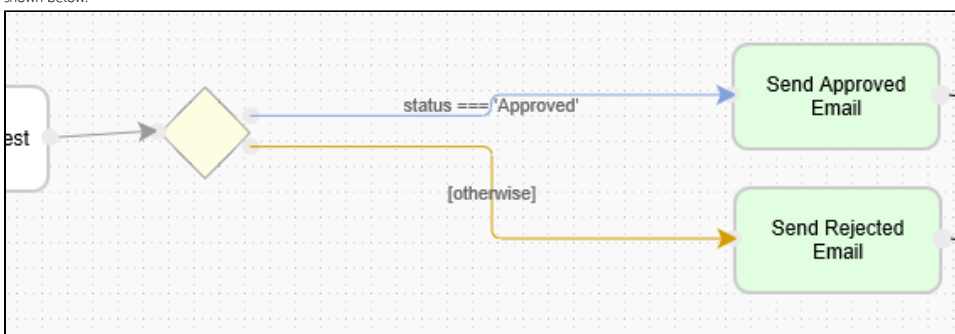
Conditions *

Join	Variable	Operation	Value
AND	status	Equal To	Approved

+ - ↕ ✖

OK Cancel

11. 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:



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

Mapping Participants to Users

- 1. 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 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 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 checked="" 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 travelApprovalForm *

Form Name Travel Approval Form *

Table Name travel_requests *

Description

Show Advanced Options

Save Cancel

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

joget FORM BUILDER Travel Request v1: Travel Approval Form

DESIGN FOR Property Editor

Basic

Hidden Field

Text Field

Password Field

Text Area

Select Box

Check Box

Radio

Date Picker

File Upload

Subform

Custom

Grid

Edit Subform

ID * field1

Label

Form * Travel Request Form x

UI

General

Readonly ☒

Display field as Label when readonly? ☐

Display without frame? ☐

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

Property Editor [close]

Edit Radio

Edit Radio > Advanced Options

ID *

Label

Options (Hardcoded)

Value	Label	Grouping
Approved	Approved	
Rejected	Rejected	

Or Choose Options Binder

< Prev Next > OK Cancel

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

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

Design Process Update via Saved XPDL Run Process

Process name: **Travel Request**

Workflow Diagram:

```

graph TD
    Start(( )) --> SubmitRequest[Submit Request]
    SubmitRequest --> ApproveReject{Approve/Reject}
    ApproveReject -- "Approved/Rejected" --> SendApprovedEmail[Send Approved Email]
    ApproveReject -- "Rejected" --> SendRejectedEmail[Send Rejected Email]
    SendApprovedEmail --> End1(( ))
    SendRejectedEmail --> End2(( ))
  
```

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.

Tool Name	ID	Action
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.

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 ti	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.

Design Process Update via Saved XPDL **Run Process**

Travel Request Process - Submit Request

Travel Request Details

Name:

Travel Date (From):

Travel Date (To):

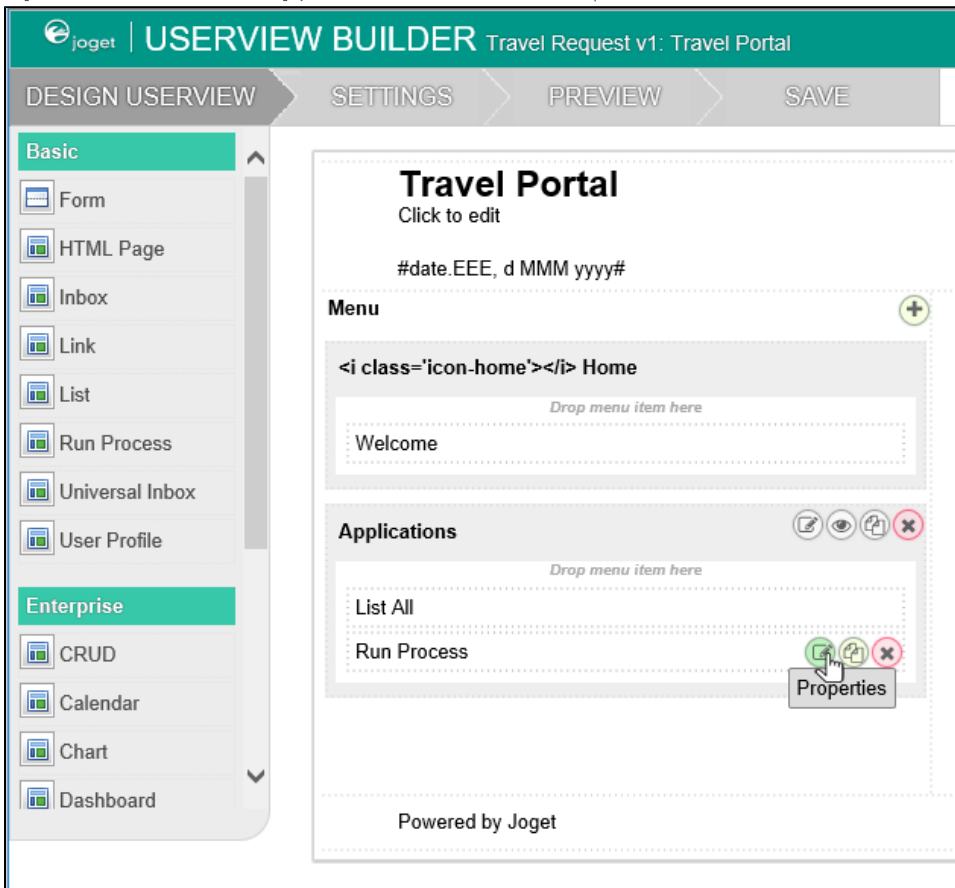
Remark:

[Save As Draft](#) [Complete](#)

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.

Edit Run Process

Edit Run Process ⓘ

Custom ID

Label *

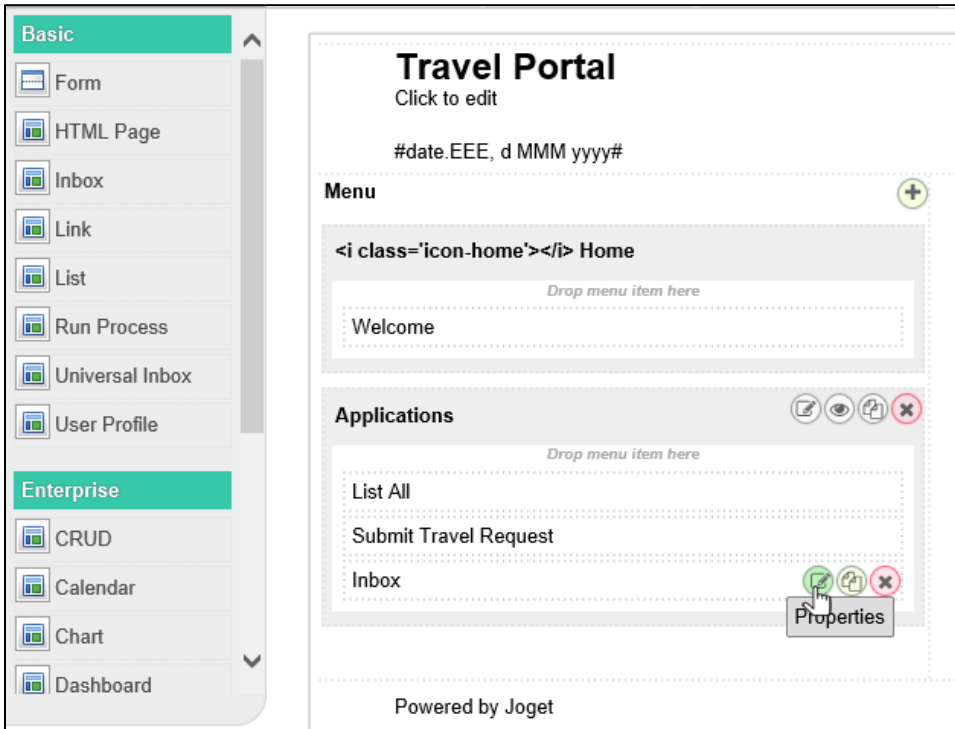
Process *

Run process without confirmation screen? ☒

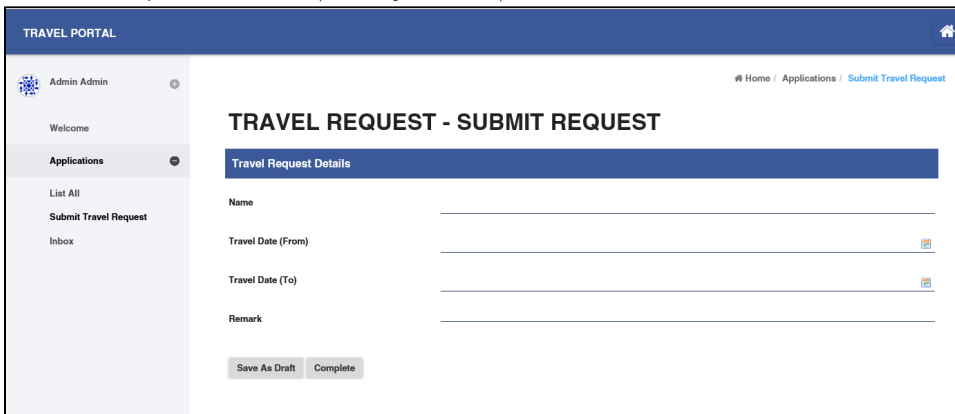
Show in popup dialog? ☐

Submit Button Label

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](#)