



## Forms

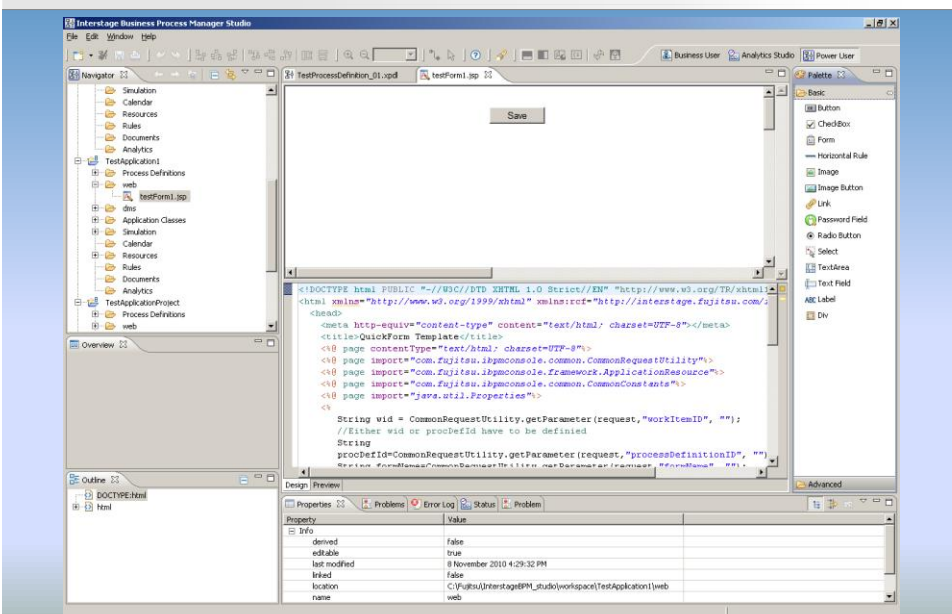
- Forms can be assigned to
  - Start node
  - Activity node
  - Voting node
- One Form can be reused at many Nodes
- Any node may have one or more forms
  - If multiple forms are added, they are displayed as tabs
- Default Form
  - Default form is displayed if no form is assigned

# Form Editor



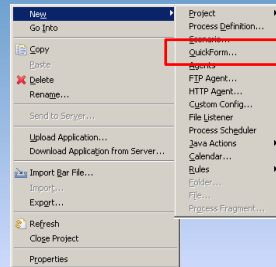
- Drag-n-drop to create rich interactive forms easily
- Maintain forms as part of BPM project, package and deploy
- Pre built widget to access and manipulate UDAs
  - Basic and Advance widgets
  - Layouts
  - widget properties, style
  - Define events and JavaScript functions
- Creates JSP forms
  - JSPs can be generated and extended to add more functionality
- Edit Source in source code view
- Preview forms in studio

# Interstage BPM Forms Designer

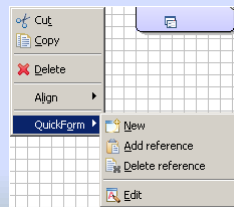


## Selecting Form Design Menu

- Create form
  - New -> Quick Form

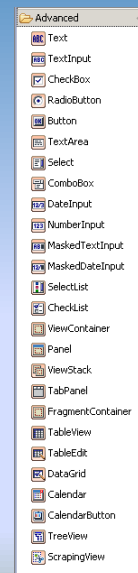


- Create and attach form to Node
  - Right Click on **Node** → QuickForm → New



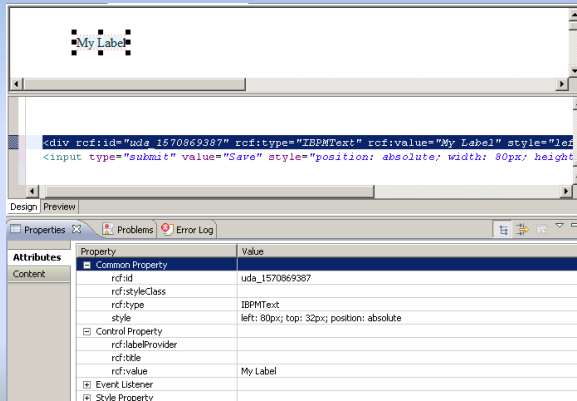
## Control Palette

- There are two sets of widget
- Basic
  - Basic HTML widget
- Advanced
  - HTML widget with associated actions to access UDAs
  - In-built validation support



## Add Widgets

- Drag and drop controls on the panel
- Configure widget Properties
  - Property Attributes
  - Edit Source



## Common Widget

- Text
- Text Input
- Date Input
- Checkbox
- Select
- Table

## Widget : Text

- Used to display read-only text or labels
- Text can be static or a UDA value

```
<div rcf:id="uda_2019988988" rcf:type="IBPMText" rcf:xpath="" rcf:value="Text"
      style="left: 112px; top: 125px; position: absolute">
</div>
```

Tag	value
rcf:id	UDA name with prefix "uda" e.g. "uda_CustomerName"
rcf:type	control type identifier
rcf:xpath	XPath expression, if UDA is XML type
rcf:value	default value of label text. If UDA is assigned, UDA value will replace default value

## Widget : TextInput



```
<div style="position: absolute; width: 188px; height: 78px; left: 237px; top: 82px">
  <div rcf:id="uda_1563017640" rcf:type="IBPMTextInput" rcf:xpath="" rcf:width="155px"
        rcf:height="20px" style="left: 12px; top: 12px; position: absolute"
        rcf:mandatory="true" ></div>
  <div rcf:id="error_1563017640" rcf:type="IBPMText" rcf:value="Mandatory*"
        rcf:color="#FF0000" rcf:width="155px" rcf:height="20px" style="left: 14px; top:
        46px; position: absolute"></div >
</div>
```

Tag	value
rcf:id	UDA name with prefix "uda" e.g. "uda_CustomerName" and with prefix "error" for validation control e.g. "error_CustomerName"
rcf:mandatory	True/false

## Widget : CheckBox & RadioButton

### ■ Radio Button and Check box group

- It's not allowed to create multiple widgets with same id, that puts a constraint on creating Widget Group
  - **Constraint:** form cannot have two widget with same **UDA**, rcf IDs are unique.
  - **Solution:** use basic HTML control with UDA values

Language:  English  Japanese

### ■ Creating group in BPM Form

```
<span rcf:type="IBPMText" rcf:value="Language:" ></span>
<input type="radio" NAME="uda_Variable1" value="English"
  <%= (ibpmUDAProp.getProperty("uda_Variable1").equals("English"))? "checked":"" %>>
  <span rcf:type="IBPMText" rcf:value="English" ></span>
<input type="radio" NAME="uda_Variable1" value="Japanese"
  <%= (ibpmUDAProp.getProperty("uda_Variable1").equals("Japanese"))? "checked":"" %>>
<span rcf:type="IBPMText" rcf:value="Japanese" ></span>
```

## Widget : Select

Country   

Tag	value
rcf:id	UDA name with prefix "uda" e.g. "uda_Country" and with prefix "error" for validation control e.g. "error_Country"
rcf:options	semicolon separated list of values e.g. "USA;UK;AUS"
rcf:prop_options	Name of UDA with list of values

## Widget : Date Input

- Date widget can be combed with Calendar widget for easy input
  - Display and update Date UDA
  - Date Popup Button displays Calendar



```
<div rcf:id="uda_ReqDate" rcf:type="IBPMDateInput" rcf:value="Requestor Date:"  
      rcf:target="IBMPopupCalendar_0885822"></div>  
<div rcf:id="IBMPopupCalendar_0885822" rcf:type="IBMPopupCalendar"  
      rcf:targetDateInputId="uda_ReqDate"></div>  
<div rcf:id="CalendarButton_0885822762" rcf:type="CalendarButton"  
      rcf:target="IBMPopupCalendar_0885822" ></div>
```

## Widget : Table View and Edit

- Used for displaying XML (UDA) in tabular format.
  - Table View is read only
  - Table edit allows editing values
    - Editing cell values results in updating XML element values
    - Adding/deleting rows in table results in updating XML (UDA) structure.

Table View

ID	Name	Charge
----	------	--------

Table Edit

ID	Name	Charge
----	------	--------

Add  
Remove

```
<div style="position: absolute; width: 495px; height: 354px; left: 52px; top: 641px">
  <div rcf:id="uda_XXXX" rcf:type="IBPMTTableEdit" rcf:xpath="" rcf:width="400px" rcf:height="300px" >
    <div rcf:id="IBPMViewColumn_0878587072" rcf:type="IBPMViewColumn" rcf:name="col1"></div>
    <div rcf:type="IBPMViewColumn" rcf:name="col2"></div>
  </div>
  <div rcf:type="IBPMButtonForTable" rcf:label="Add" rcf:targetTableId="uda_XXXX" ></div>
  <div rcf:type="IBPMButtonForTable" rcf:label="Remove" rcf:targetTableId="uda_XXXX" ></div>
  <div rcf:id="error_0878587072" rcf:type="IBPMText" rcf:value="" rcf:color="#FF0000" ></div>
</div>
```

Tag	value
rcf:id	uda name with prefix "uda" e.g. "uda_dataXML" and with prefix "error" for validation control e.g. "error_dataXML"
rcf:name	Name of IBPMViewColumn control should match the XML element name
rcf:targetTableId	Target for button action, UDA name or the id of table control.

- View Container
- Panel
  - Container with title and body
- View Stack
  - Used to switch display in the same section of screen
- Tab Panel
- Fragment Container
  - Specify container information in a separate file



# Sample Form

## ■ Example Loan Application Quick Form

Applicant

File Date

Status

Country

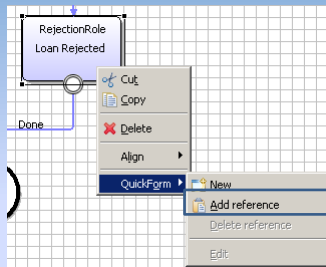
Loan Amount

Collateral

# Assign Form reference to Node

## ■ Assign LoanApprove QuickForm to all Nodes

### ■ Add reference



Add QuickForm

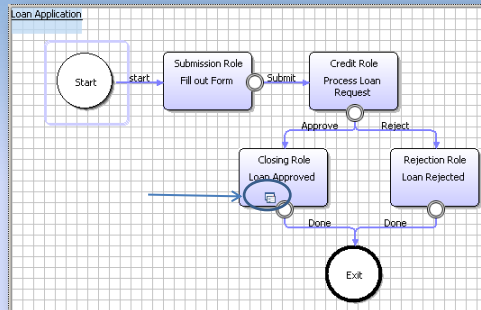
Select QuickForm

- TestApp
  - web
    - LoanApplication.jsp

## Add Form Reference to Node(s)

- Form Icon

- Form Icon will appear on nodes with Forms assigned



## Widget Properties

- Common Property

- id, style, type

- Control Property

- enabled, read-only, password, max length

- Event Listener

- Mouse or key event listeners e.g. onBlur, onFocus, onChange, onKeyPress

- Style Property

- Look and feel, color, padding, border etc.

- Validation Property

- Mandatory: true/false

## Event Listener

- HTML/JavaScript event listener and action framework is a powerful functionality to provide interactive rich UI experience to users.
- Capture events based on user actions and perform actions to manipulate the UI as required.
- example:
  - On selecting Country from one Select/Combo-box, change list of states in another select box.
  - Event used: onChange/onValueChanged
  - call JavaScript function "updateStates()" to update the values in 2<sup>nd</sup> select box.

## Event Listener

The screenshot shows the Properties window for a widget. The 'Event Listener' section is expanded, showing a list of events and their corresponding actions. The 'rcf:onChange' event is highlighted with a red box, and its value is 'updateStates()'. Other events include rcf:onClick, rcf:onClickClick, rcf:onFocus, rcf: onHide, rcf: onKeyUp, rcf: onKeyUpDown, rcf: onKeyUpMove, rcf: onKeyUpOut, rcf: onKeyUpOver, rcf: onKeyUpUp, rcf: onPropertyChange, rcf: onShow, and rcf: onValueChanged.

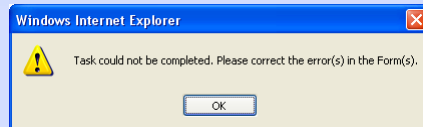
Property	Value
Common Property	
Control Property	
Event Listener	
rcf:onClick	
rcf:onChange	updateStates()
rcf:onClickClick	
rcf:onFocus	
rcf: onHide	
rcf: onKeyUp	
rcf: onKeyUpDown	
rcf: onKeyUpMove	
rcf: onKeyUpOut	
rcf: onKeyUpOver	
rcf: onKeyUpUp	
rcf: onPropertyChange	
rcf: onShow	
rcf: onValueChanged	updateStates()
Style Property	

```
<div rcf:id="uda_1872941250" rcf:type="IBPMTextInput" rcf:xpath="" rcf:width="155px" rcf:height="20px" style="left: 12px; top: 12px; position: absolute" rcf:onChange="updateStates()" ></div>
```

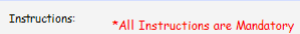
## Form Validation

- Form is validated for errors when
  - Form is saved
  - User makes choice to complete the task
- All controls with “error” tag are evaluated and if validation fails, JavaScript message is displayed:

- JavaScript error message:

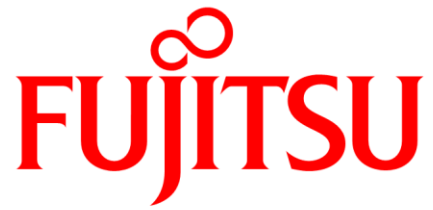


- Form Error Message:



## Form Submission and Choices

- Choice buttons are generated using outgoing arrows from the node
- Choices are displayed in *Choice* panel below form panel
- “Save” button is generated by default on the form.
- On Save, any change on the form is saved and UDAs are updated.
- On Submit (make choice), UDAs are updated and task is completed.



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