



Leading the **Integration** Revolution

Your business problems have changed.
Why hasn't your integration solution?

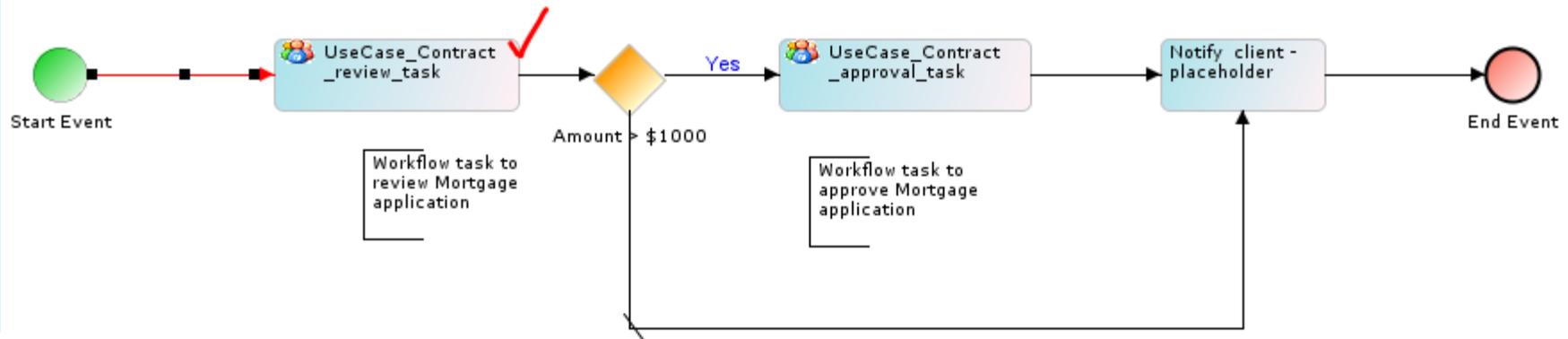


ADEPTIA



Use Case: Dynamic Web Form using REST API and JSON

Using Dynamic Forms in a Workflow



Dynamic form is being used in a Contract management workflow consisting of a Review and Approval steps for a mortgage application.

Review Task shows a application form to a Workflow user and when the user enters A Client ID the form automatically enters the mortgage details related to the property in rest of the fields. If the monthly mortgage amount is greater than \$1000 it requires further approval else the workflow sends a notification to client and completes the process.

Refer to the deployable solution for more details. Also refer to the video for this use case.

High level scenario

Web form is automatically filled when a field in the form is entered by a User.
Form automatically calls RESTful API and gets a response in JSON which is mapped to the fields.

Review Task form

The screenshot shows a web form titled "UseCase_Contract_reviewForm". At the top, there is a toolbar with buttons for "Preview", "Controls", "Rules", "Form Action", "Doc Action", "Finish", and "Cancel". Below the toolbar is a "print" icon. The form contains several input fields: "ClientID" (highlighted with a red box), "Address", "City", "State", "AttachmentType", "Built Year", "Usage Type", "MonthlyAmount", and "Valuation". A blue box labeled "Auto filled By REST API response" has arrows pointing to the "ClientID" field and the "Valuation" field.

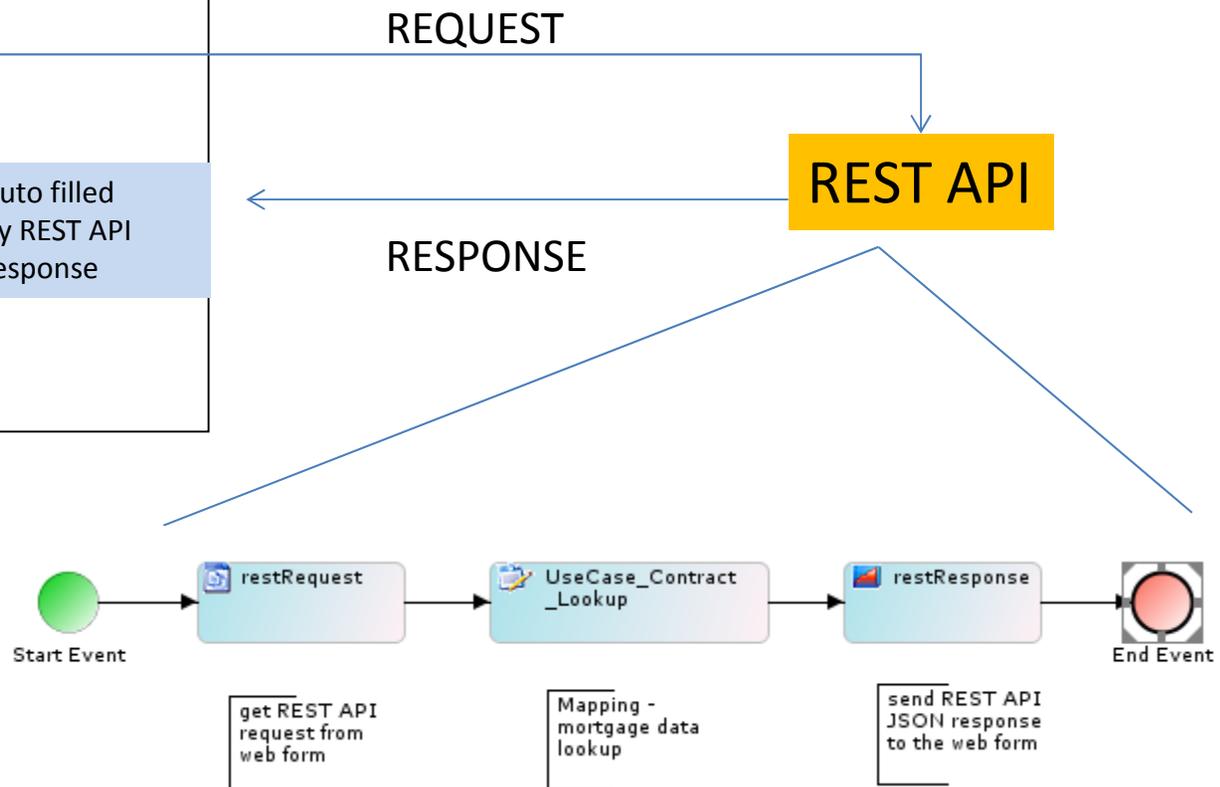
REQUEST

REST API

RESPONSE

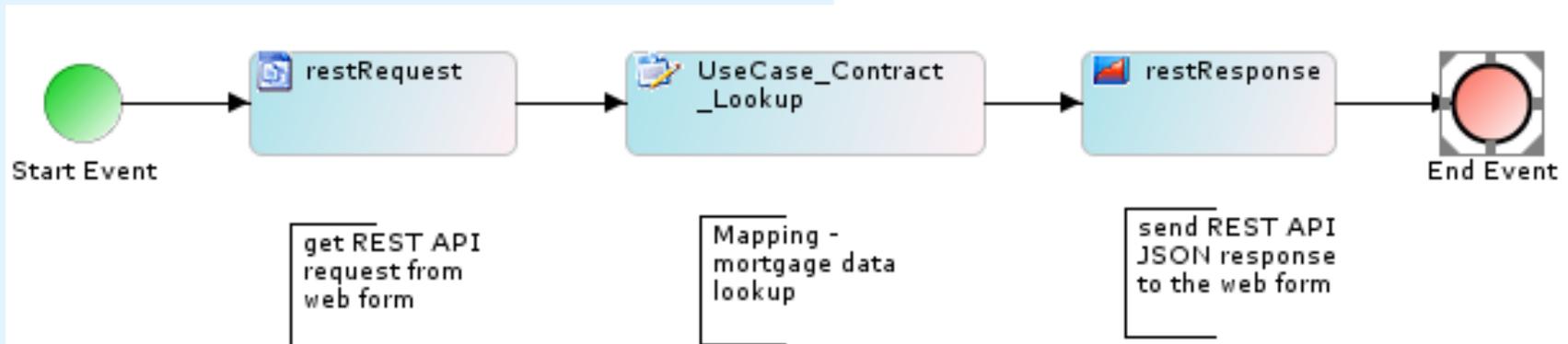
REST API design overview

Web form is automatically filled when a field in the form is entered by a User.
Form automatically calls RESTful API and gets a response in JSON which is mapped to the fields.



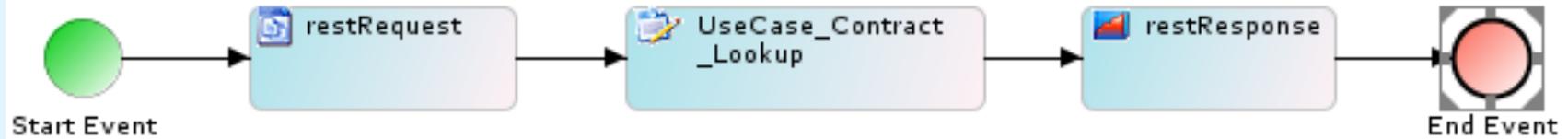
Orchestration is published as a REST API that returns a JSON object.

REST API design details



- Form request is received by the first activity
- Mapping does a lookup to get Mortgage data of a property from a database
- The lookup result is converted into a JSON object as a response to the Form

REST API design details



ContextSource with parameter name restRequest

get REST API request from web form

Mapping - mortgage data lookup

send REST API JSON response to the web form

In PutContextVar set the below JSON in variable restResponse

Mapping uses Context variable "id" coming from restRequest and uses DB Lookup query to get the related data for the target fields (context schema).

```

    {"Address":"$$Address$$",
    "City":"$$City$$",
    "State":"$$State$$",
    "AttachmentType":"$$AttachmentType$$",
    "BuiltYear":"$$BuiltYear$$",
    "UsageType":"$$UsageType$$",
    "MonthlyAmount":"$$MonthlyAmount$$",
    "Valuation":"$$Valuation$$"}
  
```

Publishing Orchestration as a RESTful API

Process flow described in previous step is published as a REST API

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Services > **Web Services** > **Provider** ✓

Synchronize Delete + Create New Quick Search

Name	Description	Owner	Style	WSDL	Project Name	Modified	Action
<input type="checkbox"/> contractlookup ✓	contract lookup	demouser	REST	View	UseCase_Dynami...	12/01/13...	⋮

Web Service Provider: contractlookup

Name* contractlookup

Description* contract lookup

Character Set Encoding* ISO-8859-1

Publish Type SOAP REST ✓

Resource End Path* /lookup ✓

Process Flow Name* UseCase_Contract_Lookup ✓

#	Name	Value	Style
1			Query
2			Query
3			Query
4			Query

No. of Rows 1 at Position 5 [Add Row](#) [Remove Row](#)

[Add Method](#)

#	Method Type	Action
1	GET ✓	Edit Delete

Method Description - Google Chrome

localhost:8080/adeptia/wsrestprovidermethod.jsp?mode=edit&endRes...

Method Type* Get

#	Name	Default Value	Style
1	id ✓		Query
2			Query
3			Query
4			Query

No. of Rows 1 at Position 5 [Add Row](#) [Remove Row](#)

Type	Media Type	Status Code	Variable Name
RESPONSE	application/text		restResponse
FAULT	application/text		restFault

[Save](#) [Cancel](#)

Design a Web Form

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Web Forms

Delete + Create New

Name	Description	Owner	Project Name	Modified	Action
<input checked="" type="checkbox"/> UseCase_Contract_review	Contract Review form	demouser	UseCase_Dynamic_W...	12/01/13 1...	⋮
<input checked="" type="checkbox"/> UseCase_Contract_approval	Contract approval form	demouser	UseCase_Dynamic_W...	12/01/13 1...	⋮

Info: -If you want to use this form as menu link then select a theme other than default theme(WorkflowTaskTheme). Go to "Style(Tab)-->Theme" to change

PALETTE

- Dropdown
- Radio
- Checkbox
- Section
- Repeat
- Tabs
- Panel
- Message
- Link
- Trigger
- Upload
- Text
- TextArea
- Date
- Email
- Money
- Phone
- Quantity
- Number
- Image
- Video
- Submit

CUSTOM

PROPERTIES

Settings | **Style** | Form Info | Help

Width: regular 600px

Height:

Controls: vertical

Theme: WorkflowTaskTheme

Font Name:

Font Size:

Font Color:

DATA SOURCES

UseCase_Contract_reviewForm

Preview Controls **Rules** Form Action Doc Action Finish

print

ClientID

Address

City

State

AttachmentType

BuiltYear

UsageType

MonthlyAmount

Valuation

Create New Rule View All Q

Rule 53 Enabled

Description: Rules can be used to dynamically modify form behaviour

Rule

```

if (ClientID.value.length > 4) {
    eval ('x=' + http.get
('http://localhost:8080/adeptia/publishProviderByRest/contractlookup/lo
okup?id=' + ClientID.value));
    Address.value = x.Address;
    City.value = x.City;
    State.value = x.State;
    AttachmentType.value = x.AttachmentType;
    BuiltYear.value = x.BuiltYear;
    UsageType.value = x.UsageType;
    MonthlyAmount.value = x.MonthlyAmount;
    Valuation.value = x.Valuation;
}
    
```

Web Form rule configuration to automatically call REST API

```
if (ClientID.value.length > 4) {  
  
eval ('x=' + http.get  
('http://localhost:8080/adeptia/publishProviderByRest/contractlookup/lookup?id=' +ClientID.value));  
  
Address.value = x.Address;  
City.value = x.City;  
State.value = x.State;  
AttachmentType.value = x.AttachmentType;  
BuiltYear.value = x.BuiltYear;  
UsageType.value = x.UsageType;  
MonthlyAmount.value = x.MonthlyAmount;  
Valuation.value = x.Valuation;  
}
```

```
if (ClientID.value.length > 4) {
```

```
eval ('x=' + http.get  
('http://localhost:8080/adeptia/publishProviderByRest/contractlookup/lookup?id=' +ClientID.value));
```

```
Address.value = x.Address;
```

```
City.value = x.City;
```

```
State.value = x.State;
```

```
AttachmentType.value = x.AttachmentType;
```

```
BuiltYear.value = x.BuiltYear;
```

```
UsageType.value = x.UsageType;
```

```
MonthlyAmount.value = x.MonthlyAmount;
```

```
Valuation.value = x.Valuation;
```

```
}
```

URL of the Process flow that is published as a REST API is used in the function shown above. Client ID is passed into the “id” variable of the REST URL and then the result of the Call is mapped to the form fields. This function in javascript enables automatic form entry based on the REST API response. You call multiple REST APIs in the form rules.

Use Case project

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Projects

Delete + Create New Quick Search

Name	Description	Owner	Group	Modified
UseCase_Dynamic_WebForms	creating dynamic web forms using REST API and JSON	demouser	DemoGroup	12/01/13 09:33

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Projects

List of activities included in project "UseCase_Dynamic_WebForms"

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Name	Description	Owner	Modified	Action
Data Mapping (1)				
UseCase_Contract_Lookup	Lookup Mapping	demouser	12/01/13 11:19	
Human Workflow (2)				
UseCase_Contract_approval_task	Contract review	demouser	12/01/13 11:25	
UseCase_Contract_review_task	Contract review	demouser	12/01/13 10:05	
Process Flow (2)				
UseCase_Contract_Lookup	this process is published as a REST API	demouser	12/01/13 16:11	
UseCase_Contract_review	contract review process	demouser	12/01/13 11:32	
Web Forms (2)				
UseCase_Contract_approval	Contract approval form	demouser	12/01/13 11:10	
UseCase_Contract_review	Contract Review form	demouser	12/01/13 11:44	
Web Service Provider (1)				
contractlookup	contract lookup	demouser	12/01/13 10:00	

Leading the
Integration
Revolution

Your business problems have changed.
Why hasn't your integration solution?

Thank You!



ADEPTIA