Leading the **Integration** Revolution

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

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Use Case : RESTful Web Service in JSON

Use Case highlights

In this use case we will go through following steps:

1. Publish an orchestration as a RESTful Web Service
2. Client requests an account profile by passing accountid parameter
3. Orchestration gets the Account profile by querying a backend database
4. Web Service responds back with Account profile in JSON format
5. View the status and the run-time logs in the Process Monitoring

Design methodology

Design ➤   Configure ➤   Deploy ➤

Design a high level process flow
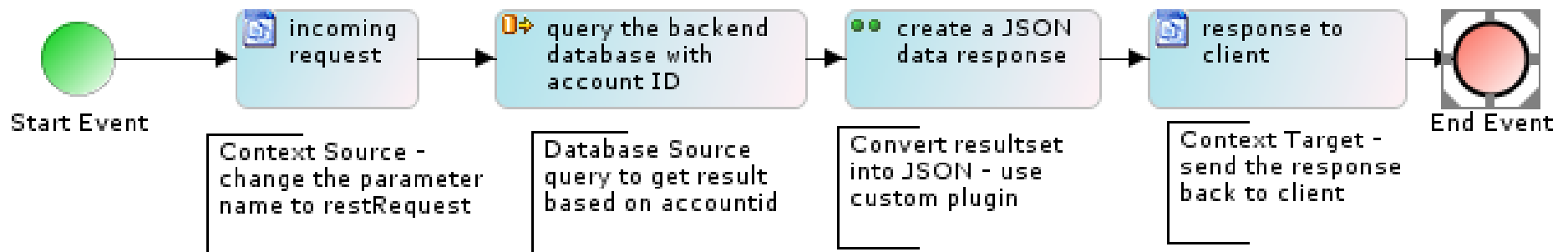
Configure all the activities in the process flow

Publish as RESTful API

Design: Process Flow

Please refer to the Use Case video describing how to build this process flow

Start Event	incoming request	query the backend database with account ID	create a JSON data response	response to client	End Event

Context Source – change the parameter name to restRequest

Database Source query to get result based on accountid

Convert resultset into JSON – use custom plugin

Context Target – send the response back to client

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Configure – Database Schema

Go to Develop > Services > Schema > Database

Services > Schema > Database ✓

	Name	Description	Owner	Project Name	Modified	Action
☐	UseCase_AccountMaster_Schema	Account Master db schema	demouser	UseCase_JSON_...	01/26/1...	☰

Database Schema: UseCase_AccountMaster_Schema

The parameterized query
Receives the parameter value
from the REST request

Name* `UseCase_AccountMaster_Schema`

Description* `Account Master db schema`

Select Database Info* `AccountMaster_Database` ⌄
Create New

Definition Mode* ○ Import XSD File ● Table Name

XSD File [ ] Browse...

Table Name `dbo.[assetallocation]` Browse Tables

SQL Query
```
SELECT * FROM dbo.[assetallocation] WHERE accountid =
$$accountid$$ ✓
```

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Configure – Database Source

Go to Develop > Services > Source > Database

Services > Source > Database

	Name	Description	Owner	Project Name	Modified ▾	Action
☐	UseCase_Account_Master_DB	source to get Account profile	demouser	UseCase_JSON_...	01/26/1...	☰

Delete   ✚ Create New   Quick Search 🔍

Select the Database Info
And the Schema.

Name*	UseCase_Account_Master_DB ✕
Description*	source to get Account profile
Database Info*	AccountMaster_Database ✓ ⌄
Schema Name*	UseCase_AccountMaster_Schema ✓ ⌄

Configure – Custom Plugin

Go to Develop > Services > Extensions > Custom Plugin

Services > Extensions > Custom Plugin ✓

	Name	Description	Owner	Project Name	Modified ▾	Action
☐	CP_XML_to_JSON	XML to JSON code	demouser	UseCase_JSON_...	01/26/1...	☰

Delete ✚ Create New   Quick Search

Name* CP_XML_to_JSON

Description* XML to JSON code

Character Set Encoding* ISO-8859-1
Refresh

Copy and paste the code attached for this Use Case in the forum.

Variables

#	Name	Type	Default Value
1		Plain Text	
2		Plain Text	
3		Plain Text	
4		Plain Text	

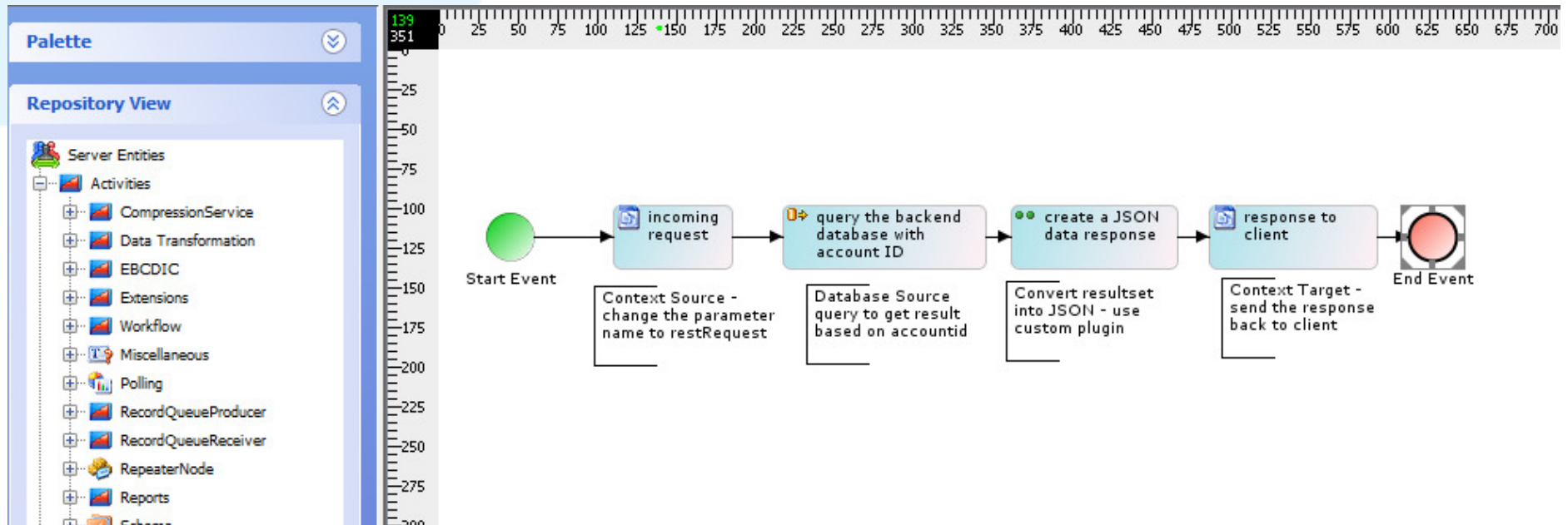Number of Rows 1 at Position 5 Add Row Remove Row

Hide Script

```
import org.json.XML;
import java.io.*;
import org.json.JSONObject;
import org.json.XML;
import com.adeptia.indigo.services.ServiceException;
```

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Configure – Process Flow

Attach the activities as shown in the video.
For the JSON custom plugin, right click and use Multiple Stream option to map the 'default' stream to Context Target.

Deploy – Publish as RESTful Web Service

Go to Develop > Services > Web Services > Provider

Services > Web Services > Provider ✓

Synchronize	🗑 Delete	➕ Create New				Quick Search	🔍		

☐	Name	Description	Owner	Style	WSDL	Project Name	Modified	Action
☐	allocation	allocation data for account id	demo...	REST ✓	View	UseCase_JS...	01/26...	☰

Name*	allocation
Description*	allocation data for account id
Character Set Encoding*	ISO-8859-1
	Refresh
Publish Type	○ SOAP ● REST
Resource End Path*	/account ✓
Process Flow Name*	UseCase_JSON_Web_Service ✓

Resource Parameter

#	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 Parameter

#	Method Type	Action
1	GET ✓	Edit Delete

Method Type* Get ▼

Method Parameter

#	Name	Default Value	Style	
1	accountid ✓	na	Query	▼
2			Query	▼
3			Query	▼
4			Query	▼

No. of Rows 1 at Position 5 Add Row Remove Row

Presentation

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

Method parameter name should be same as the one given in the Database Schema Query.

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Project: View and manage activities for this use case

Projects

List of activities included in project "UseCase_JSON_Web_Service" ✓

◀ Back   Move ⇄   Quick Search

	Name	Description	Owner	Modified
▣	**Custom Plugin (1)**			
☐	CP_XML_to_JSON	XML to JSON code	demouser	01/26/14 11:50
▣	**Database Info (1)**			
☐	AccountMaster_Database	sql server connection	demouser	01/26/14 11:45
▣	**Database Schema (1)**			
☐	UseCase_AccountMaster_Sch...	Account Master db schema	demouser	01/26/14 11:48
▣	**Database Source (1)**			
☐	UseCase_Account_Master_DB	source to get Account profile	demouser	01/26/14 11:48
▣	**Process Flow (1)**			
☐	UseCase_JSON_Web_Service	orchestration that will provid...	demouser	01/26/14 12:22
▣	**Web Service Provider (1)**			
☐	allocation	allocation data for account id	demouser	01/26/14 11:57

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Thank You!