



Leading the **Integration** Revolution

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



ADEPTIA

Using Adeptia

Use Case : Executing Database Stored Procedures

Use Case highlights

In this use case we will go through following steps:

1. Configure a Database Stored Procedure activity
2. Execute the activity as part of an orchestration
3. Publish the orchestration as a RESTful Web Service
4. Call the orchestration through a RESTful Web Service
5. Convert the Stored Procedure response into a JSON object
6. Pass the JSON object as a Web Service response

Design methodology

Design

Design a high level process flow

Configure

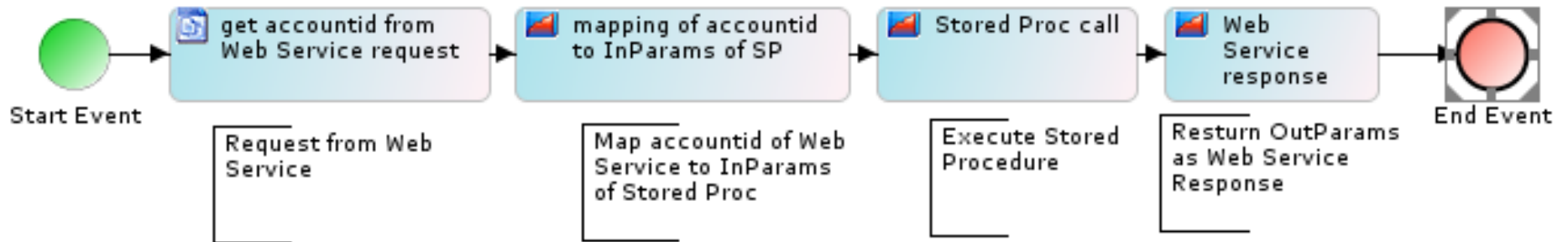
Configure all the activities in the process flow

Deploy

Publish as RESTful API

Design: Process Flow

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



Configure – Stored Procedure Service

Go to Develop > Services > Miscellaneous > Stored Procedure

Services > Miscellaneous > Stored Procedure ✓

Delete + Create New Quick Search

<input type="checkbox"/>	Name	Description	Owner	Project Name	Modified
<input type="checkbox"/>	SPAccount ✓	Stored proc to get account profile	demouser	UseCase_StoredPr...	01/02/14...

Name* SPAccount X

Description* Stored proc to get account profile

Database Info* FinancialsDB_sqlserver ✓

Stored Procedure Name* dbo.accountprofile Browse ✓

Stored Procedure Parameters

In Params @accountid varchar

Out Params @accountname varchar ,@fundtype varchar ,@balance int ,@fundname varchar ,@year varchar ,@allocation int

InOut Params

Configure – Process Flow – Context Source

Context Source – Provide parameterName as 'restRequest'

The screenshot displays a process flow configuration interface. On the left, a 'Repository View' tree shows the 'ContextSource' activity selected under the 'Source' category. The main workspace shows a process flow starting with a 'Start Event', followed by an activity labeled 'get accountid from Web Service request' (with a red checkmark above it), then 'mapping of accountid to InParams of SP', and finally a 'Stop Event'. Below the workspace, the 'Properties' tab is active, showing a table of configuration parameters for the selected activity.

Name	Value
Activity Maximum Retries on Failure	
Activity Wait Time(in seconds) between Retries	
Character Set Encoding	None
Document Repository	false
eventContextEnabled	false
Format	PLAIN_TYPE
ID	
Label	get accountid from Web Service request
Name	ContextSource
parameterName	restRequest
source	
streamNames	
Synch	true
Type	ContextSource

Configure – Process Flow – Put-Context Var

Repository View > Actions > Put-Context Var

The screenshot shows the Oracle BPM Studio interface. On the left is the 'Palette' with 'Put-Context-Var' selected. The main canvas shows a process flow starting with a 'Start Event', followed by an activity 'get accountid from Web Service request' (with a note 'Request from Web Service'), and then 'mapping of accountid to InParams of SP' (with a note 'Map accountid of Web Service to InParams of Stored Proc'). A 'Context Variable Information' dialog is open, showing a table of variables and a configuration window for the selected variable.

Activity Name	Variable Name	Variable Value
Service.SPAccount.InParam...		\$\$accountid\$\$

Context Variable Information dialog fields:

- Activity Name : [Dropdown]
- Variable Name : Service.SPAccount.InParams.accountid
- Variable Value : \$\$accountid\$\$

A close-up of the 'Context Variable Information' dialog. It contains the following fields:

- Activity Name : [Dropdown]
- Variable Name : Service.SPAccount.InParams.accountid
- Variable Value : \$\$accountid\$\$

Buttons: Done, Cancel



Configure – Process Flow – Stored Procedure

Repository View > Miscellaneous > Stored Procedure

The screenshot displays the Adeptia workflow designer interface. On the left is the 'Repository View' pane, which is expanded to show 'Miscellaneous' > 'Stored Procedure'. The 'SPAAccount' entity is selected. The main workspace shows a process flow diagram with the following steps:

- Start Event
- Activity: 'get accountid from Web Service request' (Label: 'Request from Web Service')
- Activity: 'mapping of accountid to InParams of SP' (Label: 'Map accountid of Web Service to InParams of Stored Proc')
- Activity: 'Stored Proc call' (Label: 'Execute Stored Procedure') - This activity is highlighted with a red checkmark.
- Activity: 'Web Service response' (Label: 'Resturn OutParams as Web Service Response')

Below the diagram is the 'Properties' pane for the selected 'Stored Proc call' activity. It includes a table with the following data:

Name	Value
Activity...	0
Activity...	60
ID	192168001036138871624260200090
Label	Stored Proc call
Name	SPAAccount
source	
streamName	
Synch	true
Type	StoredProcedure

Configure – Process Flow – Put-Context Var

Repository View > Actions > Put-Context Var

The screenshot displays the configuration of a 'Put-Context Var' action. On the left, the 'Repository View' shows a tree of actions, with 'Put-Context-Var' selected. The main workspace shows the 'Edit Context Variables' dialog box. This dialog contains a table with the following data:

Activity Name	Variable Name	Variable Value
	restResponse	{ "accountname": "\$\$Service..."

Below this table is a 'Context Variable Information' dialog box, which provides a detailed view of the selected variable. It shows the 'Variable Name' as 'restResponse' and the 'Variable Value' as '"allocation": "\$\$Service.SPAccount.OutParam:'. The background process flow diagram includes a 'Web Service response' activity and an 'End' terminal, both marked with red checkmarks.

```
{  
  "accountname": "$$Service.SPAccount.OutParams.accountname$$",  
  "fundtype": "$$Service.SPAccount.OutParams.fundtype$$",  
  "balance": "$$Service.SPAccount.OutParams.balance$$",  
  "year": "$$Service.SPAccount.OutParams.year$$",  
  "allocation": "$$Service.SPAccount.OutParams.allocation$$"  
}
```

Deploy – Publish as RESTful Web Service

Services > Web Services > Provider ✓

Synchronize Delete Create New Quick Search

<input type="checkbox"/>	Name	Description	Owner	Style	WSDL	Project Name	Modified
<input checked="" type="checkbox"/>	account ✓	account profile	demou...	REST	View	UseCase_Stor...	01/02/...

Name*

Description*

Character Set Encoding*

Publish Type SOAP REST

Resource End Path*

Process Flow Name*

Resource Parameter

#	Name	Value	Style
1			
2			
3			Query
4			Query

No. of Rows at Position Add Row Remove Row

Add Method

Method Parameter

#	Method Type	Action
1	GET	Edit Delete

Method Type*

Method Parameter

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

No. of Rows at Position Add Row Remove Row

Presentation

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

Project: View and manage activities for this use case

Projects

List of activities included in project "UseCase_StoredProc_Call" ✓

◀ Back Move ↻ Quick Search

<input type="checkbox"/>	Name	Description	Owner	Modified
[-] Database Info (1)				
<input type="checkbox"/>	FinancialsDB_sqlserver	database connection	demouser	01/02/14 20:29
[-] Process Flow (1)				
<input type="checkbox"/>	UseCase_SP_Account_Call	call SP and get account profile	demouser	01/02/14 20:54
[-] Stored Procedure (1)				
<input type="checkbox"/>	SPAccount	Stored proc to get account profile	demouser	01/02/14 20:30
[-] Web Service Provider (1)				
<input type="checkbox"/>	account	account profile	demouser	01/02/14 20:36

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Thank You!



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