

# SYNTHESYS.NET INTERACTION STUDIO Web Service Input Actions

Name	WebService URL Enter the WebService URL		
Settings			
WebService URL	WebService URL http://10.100.100.86/testwebs	ervice/noproperties.asmx	
WebService Properties	Please click update button if th	Update ere is change in the webservice.	
WebService Methods	Execution URL (if different)		
Output Parameters		₹.	
		Back Next > Finish Cano	el
bservice Input Actio	n Wizard		
	n Wizard WebService Properties Set values for the WebService prope	rties	<b>8</b>
me	WebService Properties	rties	
me	WebService Properties Set values for the WebService prope		
me	WebService Properties         Set values for the WebService properties         Image: Set values for the WebService properties         Image: Set value fo	rties	
me ttings sbService URL ebService	WebService Properties Set values for the WebService prope		000
me tings sbService URL ebService	WebService Properties         Set values for the WebService properties         Image: Set values for the WebService properties         Image: Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value	0000000-0000-0000-0000-0000-000000000	
me ttings ebService URL ebService operties ebService Methods	WebService Properties         Set values for the WebService properties         Image: Set values for the WebService properties         Image: Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value	0000000-0000-0000-0000-0000-000000000	
me ttings ebService URL ebService operties ebService Methods	WebService Properties         Set values for the WebService properties         Image: Set values for the WebService properties         Image: Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value	0000000-0000-0000-0000-0000-000000000	
bservice Input Actio ime ttings ebService URL ebService Methods ebService Methods	WebService Properties         Set values for the WebService properties         Image: Set values for the WebService properties         Image: Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value Set value Set value Set value         Image: Set value	0000000-0000-0000-0000-0000-000000000	



# WEBSERVICE INPUT ACTION

SYNTHESYS INPUT ACTION WIZARD	3
Name	3
Settings	4
WebService URL	5
WebService Properties	5
WebService Methods	6
Output Parameters	7
Returning Data from the Web Service to Web Controls	9



## SYNTHESYS INPUT ACTION WIZARD

The Web Service Input Action enables connection to a web service in order to return data for use in a Synthesys webflow at runtime.

The speed at which the data is returned depends on the speed of the external data source that the input action is attached to. Synthesys has been configured to display the message '**Retrieving Data From External Source has timed out – please retry'**, if no data has been returned within 5 seconds. Pressing 'Retry' will eventually return the required data.

In the Synthesys Interaction Studio, select <sup>Service Input Action</sup> from the Core Actions part of the Toolbox and drop it at the desired part of the Webflow.

#### Name

The first page of the *Webservice Input Action Wizard* prompts you to enter a name for the Web Service Input Action.

Webservice Input Action Wizard				
Name	Name Set Display Name and Internal name for the Action.			
Settings	Assign a Display Name and an internal name			
WebService URL	Display Name Web Service Demo			
WebService Properties				
WebService Methods				
Output Parameters				
	< Back Next > Finish Cancel			



#### Settings

In the *Settings* page of the Wizard, under the **Webflow Filter** option, you can choose to make the web service request as soon as the parameters (set later) are available, i.e. *"As soon as possible*", or to make the request to call the web service "*When passed through"*, i.e. when the agent passes through the input action (which is invisible to the agent) in the webflow.

Webservice Input Action Wizard				
Name	Select when the action should occur.			
Settings	Webflow Filter When passed through			
WebService URL	As soon as possible When passed through Re:Evaluate			
WebService Properties				
WebService Methods				
Output Parameters				
	<pre></pre>			

Option	Used			
As soon as possible	to make a request to the web service as soon as the parameters are available.			
	If the web service is only likely to be invoked once within a webflow, it is more efficient to call the web service as soon as possible, to ensure that the data is returned to the webflow and available to the agents as soon as possible, avoiding possible delays due to slow response of the web service.			
When passed through	to make a request to the web service when the agent passes through the input action in the webflow.			
	If the same web service is likely to be invoked more than once in the webflow, this option is preferable, to avoid returning invalid data to the webflow.			
	Ticking the <i>Re-Evaluate</i> checkbox, the web service can be called multiple times, and agents navigating backwards and forward in the webflow can send new data in the parameters to return different data, if required.			



### WebService URL

In the WebService URL part of the wizard

• Enter the details of the web service that you wish to call into the *WebService URL* field.



If the URL that is used at runtime is different to that used at design time when taking test calls then, additionally, you can enter or calculate the *Execution URL* into the Execution URL field.

Ensure that the URL is set correctly, otherwise the web service action will fail at run time

Name	WebService URL Enter the WebService URL
Settings	
WebService URL	WebService URL http://10.100.100.86/testwebservice/noproperties.asmx
WebService Properties	Update Please click update button if there is change in the webservice.
WebService Methods	
Output Parameters	Execution URL (if different)
	< Back Next > Finish Cancel

## **WebService Properties**

This page will display any properties that are available from the web service, and allows the user to set the values of these properties.

Webservice Input Act	ion Wizard	
Name	WebService Properties Set values for the WebService propertie	s 💐
Settings	<u>€</u>	
WIG THE	CorrelationTokenValue	
WebService URL	CorrelationId	0000000-0000-0000-0000-0000000000000000
	CorrelationUpdatedTime	
WebService Properties	Depth	0
WebService Methods		
Output Parameters		
	< B.	ack Next > Finish Cancel



#### **WebService Methods**

The *WebService Methods* page displays the methods that are available from the web service and allows users to specify any data that is required for these methods.

1. Select the web service method you wish to call from the drop down list, to display the corresponding parameters available for this method.

Webservice Input Ac	tion Wizard	
Name	WebService Methods Select a WebService method to execute	<b>\$</b>
Settings	WebService Method	
WebService URL	Begin End Fetch	
WebService Properties	G Fetch adld	-
WebService Methods	orderld	
Output Parameters		
	<u> </u>	
	< Back Next > Finish	Cancel

2. Next, set the values to be passed to each parameter. These can be hard coded or you can set a calculation using the calculations **f** icon, to make the parameter dynamic.

Webservice Input Ac	tion Wizard	
Name	WebService Methods Select a WebService method to execute	
Settings	WebService Method	
WebService URL	Input Parameters	
WebService Properties	Fetch 12342	
WebService Methods	orderld	
Output Parameters		<b>•</b> 1
	< Back Next	> Finish Cancel



#### **Output Parameters**

This page will display any Output parameters that will be returned as a result of calling the web service.

Within this interface you can set which pieces of data get stored in the Synthesys database as part of the webflow data. Simply set the radio to **Yes** to store the data or **No** to not store the data.

Webservice Input Action Wizard					
Name	Output Parameters Select the WebService method	d output paramete	rs		<b>\$</b>
Settings	Output Parameters (Non Value Ty	ipes)			
WebService URL				<u> </u>	elect Fields
WebService	🗆 Misc				-
Properties	begin		O Yes	No     No	
	end		O Yes	⊙ No	
WebService Methods	error		O Yes	No	
	fetchedAdCopyType		Yes	O No	
	fetchedAdStatus		Yes     Yes	C No	
Output Parameters	fetchedAdvertiserName		Yes     Yes	O No	
	fetchedAdvertiserSegment		Yes	O No	
	fetchedAdvertiserTrustLevel		Yes	O No	-
					_
		< Back	Next >	Finish	Cancel

To manipulate individual elements of any complex-type output parameters returned by the web service, **select** the name of the **complex-type parameter from the drop down list.** 

Webservice Input Act	ion Wizard			
Name	Output Parameters Select the WebService method output	t parameters		
Settings	Output Parameters (Non Value Types)			
WebService URL	RetValue (Customer) RetValue (Customer) টে∰ 2 ↓ UUU மே			Select Fields
WebService	🗆 Misc			-
Properties	RetValue_Customer_name	O Yes	⊙ No	
	RetValue_Customer_type	O Yes	⊙ No	
WebService Methods	RetValue_Customer_Value	O Yes	⊙ No	
Output Parameters				
	<	Back Next>	Finish	Cancel

Next, click the **Select Fields** button.



In the *Non Value Type Fields Selection* dialog, select any parameters that need to be stored in the database or are required in the webflow.

No	Non Value Type Fields Selection (RetValue)		
	<ul> <li>□ RetValue</li> <li>□ Customer</li> <li>□ dsc</li> <li>□ dscSpecified</li> <li>□ IsNull</li> <li>□ IsNulSpecified</li> <li>□ MulSpecified</li> <li>□ Mupe</li> <li>□ Value</li> </ul>		
	Cancel		

They will then be added to the list of output parameters as below.

Webservice Input Act	tion Wizard			
Name	Output Parameters Select the WebService method output parameters			
Settings	Output Parameters (Non Value Types)			
WebService URL	RetValue (Customer)		Select F	Fields
WebService	🗆 Misc			-
Properties	RetValue_Customer_name	O Yes	No	
	RetValue_Customer_type	O Yes	No	
WebService Methods	RetValue_Customer_Value	O Yes	⊙ No	
Output Parameters	<u> </u>			<b>v</b>
		< Back Next >	Finish Car	ncel

#### Requirements of the Web Service:

- 1. The web service must be accessible from the Synthesys application server.
- 2. The web service must only contain Simple Properties, i.e. Int, String, Date etc. Complex custom types are not yet supported.
- 3. Arrays are not currently supported as output parameters.



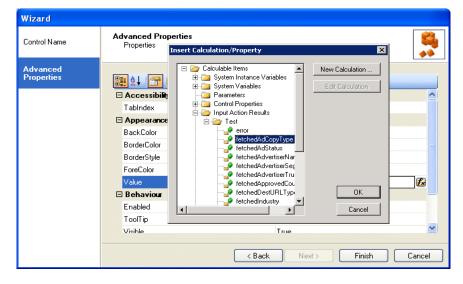
### **Returning Data from the Web Service to Web Controls**

The data that is returned to the web service is stored in the output parameters of the web service.

To display information from the *Web Service Input Action* in your webflow, **drop a web control**, for example a *Memo* control, into a **section after** the *Web Service Input Action*.

In the *Advanced Properties* screen of the control, *set a calculation* to the property *Value* pressing the calculations icon. In the *Insert Calculation/Property* editor subsequently displayed, you can either

• select the value directly from the Input Action Results directory, or



• create a calculation to format the data to be displayed.

Press OK to update the Advanced Properties page and then Finsh.

Wizard		
Control Name	Advanced Properties Properties	<b>%</b>
Advanced Properties	<b>:</b> 	
	Accessibility	<u>^</u>
	TabIndex	0
	Appearance	
	BackColor	
	BorderColor	
	BorderStyle	NotSet
	ForeColor	
	Value	<% Synthesys.External.WebServiceInp 🕼
	🗆 Behaviour	
	Enabled	True
	ToolTip	
	Visible	True
		< Back Next > Finish Cancel

Returning Data from the Web Service to List type Web Controls



If you wish to return the data into a list type control, for example a *Radio, Checkbox, Drop Down list or List control*, the property that needs to be set is *Items.* 

The *calculation type* has to be a *ListItemCollection*. If you receive the data as a comma separated string, a calculation must be written, to reformat the data as a list item collection.

Wizard			
Control Name	Advanced Properties Properties		
Settings	2↓ 2 3		
1.1.19.1.2			<u>^</u>
Validation	TabIndex	0	
	□ Appearance		
Advanced	BackColor		
Properties	BorderColor		
	BorderStyle	NotSet	
	Columns	1	
	ForeColor		
	Items	(Collection)	
	Label		
	SelectedText	Yes	
	SelectedValue	Yes	×
		<pre>&lt; Back Next &gt; Finis</pre>	h Cancel

Once the data has been returned into the Webflow, add a ListBox to the Webflow.

Hybrid - SJ Test Acco       Elle     Edit       Yew     Tool       Toolbox	s <u>Window H</u> elp	Control (5JTestListControl) (Version 2.0) - Synthesys Net Interaction Studio	_ <b>.</b> ×
Core Controls  Controls	ListBox Control Wizar Control Name Settings Validation Advanced Properties		
Toolhox 🗊 Webflow	Them List	< Back Next> Finish	Cancel

Create a *calculation* to reformat the 'data comma separated string' to a '*List Item collection'.* 

Example of Calculation to Convert Comma separated string to a ListBoxItem:



🗋 🕶 💕 🖌 🛃 🛛 🔏 🧠 polbox			
Core Controls         Address         Address         CheckBox         DateTimePicker         DropDownList         Edit         Image         ListBox         Memo         Radio         Custom Controls         EigerDebit         MatchcodeAddress         Media	ListBox Control W Control Name Settings Validation Advanced Properties	Advanced Properties Insert Calculation/Property × Calculable Items System Instance Variables System Variables Parameters Control Properties Control Properties Control Properties Control Properties Calculation Function Results Calculation Function ReturnedData() As ListItemCollection Dm lic As New ListItemCollection	
			Cancel

The Calculation once added will convert the returned data into a List.

In the Synthesys Protal, the data returned from the Web Service is subsequently displayed in a ListBox in the Webflow.

📁 5J Test List Control - ListBox - Windows Internet Explorer		
SYNTHESYS.net		
	ListBox	
InputAction ListBox	Account1 Account2 Account3 Account4	



The speed at which the data is displayed depends on the speed of the external data source used by the customer. If no data is returned within 5 seconds, a message will inform users that '**Retrieving Data From External Source has timed out – please retry'**.

Agents can press 'Retry' and eventually the required data will be returned.