ADF Code Corner

74. Hands-on: How to use the ADF URL Data Control for parametrized queries



Abstract:

This hands-on tutorial shows how to use the ADF URL Data Control to access the Oracle JDeveloper twitter account to display recent messages in an ADF Faces table. It also shows how to change the ADF URL Data Control configuration to show messages of other twitter users.

Duration: 60 Minutes

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Oracle ADF Code Corner is a loose blog-style series of how-to documents that provide solutions to real world coding problems.

Disclaimer: All samples are provided as is with no guarantee for future upgrades or error correction. No support can be given through Oracle customer support.

Please post questions or report problems related to the samples in this series on the OTN forum for Oracle JDeveloper: <u>http://forums.oracle.com/forums/forum.jspa?forumID=83</u>

Introduction

This Oracle JDeveloper hands-on steps the user through the basic steps required to work with the Oracle ADF URL Data Control. It also explains the data control behavior beyond of this exercise.

At runtime, a table is displayed that contains most recent Oracle JDeveloper tweets.

Note This hands-on focuses on the functional part and not how-to create a good looking page. All the steps to follow are the minimum it takes to build a little sample that accesses Twitter from the URL Data Control and show the query results.

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Wed Oct 27 01:47	A public API to get the value originally read for an Entity Attribute from the database http://		false	28848213614
Wed Oct 27 00:45	ADF Faces: How to Prevent Closing of Dialog When Pressing Enter Key http://dlvr.it/7bLYL		false	28843030963
Tue Oct 26 23:42:	oracle.jbo.InvalidObjNameException: JBO-25005 http://dlvr.it/7bGDT		false	28837505667
Tue Oct 26 22:40:	ADF-BC Master-Detail/Tree Application http://dlvr.it/7b9wB		false	28832267490
Tue Oct 26 21:38:	Working with Dates in the Model Layer http://dlvr.it/7b5BG		false	28827597854
Mon Oct 25 23:23:	Enabling Validation for Table Filters http://dlvr.it/7XRsw		false	28735480334
Mon Oct 25 22:20:	Porting existing Forms application with C(R)UD stored procedures to ADF http://dlvr.it/7XLqJ		false	28730358427
Mon Oct 25 21:08:	Iterating/traversing arrays in BPM http://dlvr.it/7XFXX		false	28725128169
Mon Oct 25 20:06:	Exporting/Importing MDS Metadata and Promoting MDS Labels for Oracle ADF 11g and Oracl		false	28721055521
Mon Oct 25 18:32:	Classic Mistakes with Oracle ADF Internal APIs - Part 2 http://dlvr.it/7WzTj		false	28715179373
Mon Oct 25 17:28:	Classic Mistakes with Oracle ADF Internal APIs - Part 1 http://dlvr.it/7WsDF		false	28710872855
Mon Oct 25 17:24:	ADF Insider: Classic Mistakes with Oracle ADF Internal APIs - Part 1. http://bit.ly/dlQw6R		false	28710551253
Fri Oct 22 22:25:0	OOW'10 Video Recording - Developing Large Oracle Application Development Framework 11g		false	28445134063
Fri Oct 22 21:36:2	How to Create WSDL Web Services with Oracle AS Adapter for Oracle Applications http://dlv		false	28441838415
Fri Oct 22 19:33:0	ADF 11g inputNumberSpinbox: Changing Value When Value is Null http://dlvr.it/7PKb5		false	28433615708
Fri Oct 22 18:30:0	How-to use the optimized component search in Oracle ADF Faces http://dlvr.it/7PDZQ		false	28429237913
Fri Oct 22 17:28:2	SDO: Implementing a HashMap like Service Data Objects http://dlvr.it/7P77y		false	28424901080
Thu Oct 21 18:47:	Selecting a node on an ADF Tree control sets the current record in a different data source ht		false	28051260422
Thu Oct 21 17:46:	Setting up JRebel with JDeveloper http://dlvr.it/7LZzN		false	28047155294
Done	Internet Pro	tected Mode: Off	4	▼ € 100% ▼

Note: If you experience problems to connect to the Twitter website during the hands-on, try setting or unsetting the Oracle JDeveloper proxy configuration and re-start JDeveloper. The browser proxy settings can be changed using the Tools | Preferences | Web Browser and Proxy

To complete this Oracle JDeveloper hands-on requires a recent version of Oracle JDeveloper 11g and the twitter.xsd schema file.

Building the URL Data Control Model

1. Open Oracle JDeveloper and start with a new application. You do this by selecting "New Application" in the Oracle JDeveloper Application Navigator or choosing File | New | Applications from the menu.

2. Select the "Generic Application" option, which allows us to define and configure projects as we need them.



3. Provide "TwitterUrlDC" as the Application name and "adf.sample.twitter" as the package prefix.

4. Press Next.



5. Enter "TwitterUserTweetUrlDC" as the project name. Note that the project name also determines the project folder the Java classes and metadata files are saved in.

4. The URL Data Control is part of the ADF Web Service binding. Select "Web Services" in the "Available" list and move it to the "Selected" list. The "Java" technology scope is automatically added.

🖕 Create Generic Applicat	ion - Step 2 of 3
Name your project	
Application Name Project Name	Project Name: TwitterUserTweetUrIDC Dirgctory: 350\jdeveloper\mywork\TritterUrIDC\TwitterUserTweetUrIDC
Project Java Settings	Project Technologies Generated Components Associated Libraries Available: Selected: ADF Business Components ADF Desktop Integration ADF Faces Web Services ADF Hobile Browser Selected: ADF Swing Image: Selected: Ant Database (Offline) E1B Technology Description: The Java programming language is a simple, object-oriented language designed to meet the challenges of application development in the context of heterogeneous, network-wide distributed environments.
Help	< Back Next > Finish Cancel

5. Press "Finish" to complete the project creation. The new project is configured with the required Java EE libraries for Web Services and Java development

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6. With the project selected, choose "New" from the right mouse button context menu.

7. Select the Business Tier | Web Services category and choose the "URL Service Data Control" entry.

All Technologies Current Project Technologies This list is filtered according to the current project's selected technologies, Image: Search Current Project Technologies			
Categories:	Items:	Show All Descriptions	
General	Sava Web Service		
Connections	Sava Web Service from WSDL		
Deployment Descriptors	S PL/SOL Web Service		
Deployment Profiles	S Web Service Proxy		
Java			
Projects			
Data Controls			
Web Services			
	URL Service Data Control Launches the Create URL Service Servic create a data control from a spreadshee	e Data Control wizard, with which you et file or an XML file.	
	🛃 Web Service Data Control		
Help OK Cancel			

8. Name the Data Control "TwitterUrlDataControl" and press the "Next" button

🕹 Create URL Service Data Control - Step 1 of 5		
Data Source		
Data Source Connection Parameters Data Format Finish	Specify a unique name for the data control. Name: TwitterUrlDataControl Connection: Create New Connection User Name: URL Endpoint: Source: Hint: You can use the format ##ParamName## to pass data from the page into the URL. For example: ?symbol=##ParamName##	
Help	< Back Next Enish Cancel	

9. Provide a name for the end point configuration and (optional) authentication. This information is stored in a connection registry and is identified by the name you provide. As the connection name, enter "TwitterQuery".

💩 Create URL Service Data	Control - Step 2 of 5	;
Connection		
Data Source Connection	Provide the HTTP aut	hentication details for the endpoint URL.
Connection	Na <u>m</u> e:	TwitterQuery
• Parameters	URL Endpoint:	http://twitter.com/statuses/user_timeline.xml
🖕 <u>Data Format</u>	Authentication Type:	None
Ú Finish	<u>U</u> sername:	
	Password:	
	<u>R</u> ealm:	
	Source:	?screen_name=jdeveloper
		Hint: You can use the format ##ParamName## to pass data from the page into the URL. For example: ?symbol=##ParamName##
Help		< Back Next Finish Cancel

10. As the "URL Endpoint", type http://twitter.com/statuses/user_timeline.xml (without the quotes). Twitter provides this API to access public tweets

11. Add "?screen_name=jdeveloper" (without the quote) into the "Source" field. This specifies the query parameters for the tweet to lookup.

12. Press "Next"

🔆 Create URL Service Data Control - Step 4 of 5		
Data Format		
Data Source <u>Connection</u> Parameters Data Format	Select the data format of the data source and specify the properties. Data Format: Spread Sheet Data - Delimiter Separated Value	
Einish	XML	
Help	<u>Einish</u> Cancel	

Note: If you can't connect to the URL, check your Oracle JDeveloper proxy setting in Tools | Preferences | Web Browser and Proxy. You may also test the Twitter API by typing

http://twitter.com/statuses/user timeline.xml?screen name=jdeveloper

into the browser URL field

13. Choose XML as the Data Format of the expected result set. As a result of selecting XML as the Data Format, the editor layout changes as shown in the next image.

14. In the XSD URL field, type the location you copied the twitter.xsd file to. Use the following entry, assuming twitter.xsd is located in the c:\temp directory

File:///c:/temp/twitter.xsd

The XS file is only used at design time for the Data Control to define the data structure. At runtime it is no longer needed so that this file does not need to be saved or deployed with the application.

15. Press "Next"

🕹 Create URL Service Data Control - Step 4 of 5		
Data Format		
Data Source Connection Parameters Data Format	Select the data format of the data source and specify the properties. Data Format:	
Einish	YSD_URL: file:///c:/temp/twitter.xsd XSL_URL:	
Help	< Back Next Finish Cancel	

What you should know: Twitter does not provide XML schema for their metadata service. For this how-to, the XSD is generated using "Trang" (<u>http://www.thaiopensource.com/relaxng/trang.html</u>). You may find other more up to date tools to generate XSD from XML content.

16. Click "Test URL Connection" to verify your configuration



Creating the ADF Faces View Layer

With the URL Data Control in place, it is time to build the user interface to display the Oracle JDeveloper tweets in a table.

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1. Choose File | New | General | Projects from the Oracle JDeveloper menu to create a new "Generic Project"

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Categories:	Items:	Show All Descriptions
General Applications Connections Deployment Descriptors Deployment Profiles Diagrams Java Projects Business Tier Data Controls Web Services Mall Items	 Generic Project Creates a basic project. The project is not preconfigured JDeveloper technologies but can be customized to includ available technologies. ADF Model Project ADF Swing Project ADF ViewController Project EJB Project Java Application Project Java Project Project from Existing Source Project from WAR File 	d with any le any of the
Help		OK Cancel

2. Name the new project "ViewController" and select the "ADF Faces" and "ADF Page Flow" technologies. Move the selected technologies to the "Selected". The "JSF, JSP and Servlet and Java entries are automatically added.

🕹 Create Generic Project - Step 1 of 2		
Name your project		
Project Name	Project Name: ViewController Directory: R 1PS3-5850\jdeveloper\mywork\TritterUrlDC\ViewController	
	Project recinologies Generated Components Associated Libraries Available: ADF Business Components ADF Page Flow ADF Desktop Integration ADF Page Flow Java ADF Mobile Browser ADF Swing JSF Ant Database (Offline) EJB HTML JavaBeans If echnology Description: ADF Swing is the data binding API provided by Oracle Application Development If ramework (Oracle ADF) for Swing controls. User interface developers use ADF Swing and Oracle ADF to create interactive Java forms based on the standard Image: Component Standard	
Help	< <u>Back</u> <u>Nert</u> > <u>Finish</u> Cancel	

3. Define a default package name, like "adf.sample.twitter"

💩 Create Generic Project -	Step 2 of 2
Configure Java settir	
Project Name Project Java Setting	Your new project starts with a default package, a source root directory, and an output directory. Default Package: adf.sample.twitter
	Java Source Path: veloper 11gR 1PS3-5850\jdeveloper\mywork\TritterUrIDC\ViewController\src Browse Output Directory:
	per 11gR 1PS3-5850 \ydeveloper \mywork \TritterUrIDC \ViewController \classes Browge
<>	
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4. Press "Finish" to create the new project

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Recently Opened Files	Replace <u>W</u> ith	•
t≡ViewController.ipr - St	Restore from Local History	
	Refresh ADF Library Degendencies in ViewController.jpr	
G	R Proj <u>e</u> ct Properties	

5. Select the ViewController project and choose "New" from the right mouse context menu

6. Select Web Tier | JSF from the New Gallery and choose "JSF Page"

New Gallery All Technologies Current Project Techn This list is filtered according to the current Image: Search Current Project Technologies	ologies project's <u>selected technologies</u> .	×
Categories:	Items:	Show All Descriptions
GeneralApplicationsConnectionsDeployment DescriptorsDeployment Descriptors	ADF Task Flow ADF Task Flow Template	
Deployment Profiles Diagrams Java Projects Web Tier	 JSF Page Launches the Create JSF Page dialog, in which you create JavaServer Faces (.jsp or .jspx) file. To enable this option, you must select a project or a file. 	ate a new skeleton e within a project in the
JSP 	Application Navigator.	
All Items	🚰 JSF Page Fragment	
	🛐 JSF Page Template	
Help		OK Cancel

7. Press "Ok" to open the Create JSF dialog

Create JSF Page	a type for the JSF P t <u>art Layout</u> to add a	age. Optionally reference a <u>Page Template</u> to include its ind configure an initial set of layout components.		
Elle Name: TwitterViewer.jspx Directory: D:\Oracle\JDeveloper11gR	1PS3-5850\jdevelop	er /mywork/TritterUrIDC/ViewController/public_html Bro Sallery	wse	
Igenda in Produce Derice Initial Page Layout and Content Blang Page Page Template Orace Three Or Quick Start Layout One Colu Brogs Page Implementation (UI component Help	Categories One Column Two Column Three Column	Image: specific state sta		Options □ Apply Themes One Column (Stretched) Child component will ++ ++ be stretched to fill this container. Dimension does not vary based on browser dimension. > Splitter with collapse direction. => Scrollable panel.
	Help]		OK Cancel

8. Provide "TwitterViewer.jspx" as the page name and choose a one column Quick Layout. This will help you layout the page by automatically stretching the table that you will put on this page later in the tutorial

▽ Data Controls	88 Y I
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9. Expand the DataControl panel and expand the "TwitterUrlDataControl" entry. If you don't see the Data Control entry, press the blue refresh icon.

10. Drag the "status" collection from the Data Controls panel and drop it on the JSF page

TwitterViewer.jspx			
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	<u>I</u> able	ADF T <u>a</u> ble ADF Read-only Table	
	Cancel	ADF Read-Only Dynamic T D ADF Pivot Table	Table

11. In he opened context menu, choose Table | ADF Read-only Table

Row Selection None Single Row Multiple Rows 	Enable Sorting Enable Eitering		
Columns:		🕂 🎇 🚰 Ungroup	
Display Label	Value Binding	Component To Use	
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Intersection (Section 2) (= id	ADF Output Text	
💴 <default></default>	favorited	ADF Output Text	
🚥 <default></default>	in_reply_to_screen_name	ADF Output Text	
ﷺ <default></default>	📼 in_reply_to_status_id	ADF Output Text	$\overline{\mathbf{Q}}$
ः <default></default>	📼 in_reply_to_user_id	ADF Output Text	4
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Intersection of the second	📼 text	ADF Output Text	4
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Help		OK Cancel	

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queries

12. In the table editor, select all attributes except "created_at", "id", "in_reply_to_screen_name", "retweeted" and "text".

Note: the UI of the dialog has changed between Oracle JDeveloper 11.1.1.3 and Oracle JDeveloper 11.1.1.4. So if the dialog you see differs from the screen shot, there is no need to worry

13. Delete the selected attributes

💩 Edit Table Columns		×
Row Selection Image: None Single Row Image: Multiple Rows] Enable Sorting] Enable Eiltering	
Columns:		🕂 🔀 Group Ungroup
Display Label	Value Binding	Component To Use
💴 <default></default>	created_at	ADF Output Text
🔤 <default></default>	💻 id	ADF Output Text
<pre>xva <default></default></pre>	in_reply_to_screen_name	ADF Output Text
<pre>xxa <default></default></pre>	retweeted	ADF Output Text
		OK Cancel

14. Reorder the attributes as shown in the image below

💩 Edit Table Columns		X
Row Selection Image: None Single Row Image: Multiple Rows	Enable Sorting Enable Eiltering	
Columns:		🕂 💥 Group Ungroup
Display Label	Value Binding	Component To Use
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Image: Second secon	📼 text	ADF Output Text
<pre>ssa <default></default></pre>	retweeted	ADF Output Text
<pre>xxa <default></default></pre>	in_reply_to_screen_name	ADF Output Text
Help		OK Cancel

15. Press "Ok"

16. Select the table in the visual editor or the Structure Window and open the Property Inspector (ctrl+shift+I)

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~~~~~~~~~~~			in_reply_to_screen_rid	retweeted	text	reated_at
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		🖪 I 🖈 🖻 I 🥒 🛛				
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<u></u>	<default> (none) blank</default>	HorizontalGridVisible				
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18 V	val: column:c4	ColumnBandingInter				
<b>~</b>	column:c5 last	FilterVisible:				
	<default> (true)</default>	Rendered:				
	column:c2 column:c3 val: column:c4 column:c5 last <default> (true)</default>	<ul> <li>RowBandingInterval</li> <li>ColumnBandingInter</li> <li>FilterVisible:</li> <li>Rendered:</li> <li>Text</li> </ul>				

17. Search for the "ColumnStretching" attribute and select the "text" column as the column to stretch. In the screenshot shown above, this was the 3rd column for us when creating the hands-on. This may be a different column index for you (you may have to try it out)

18. Click onto the JSF page in the visual editor and choose "Run" from the context menu



The browser should show the Twitter table as shown below.

<u>File Edit Vie</u>	w F <u>a</u> vorites <u>T</u> ools <u>H</u> elp		
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6 http://127.0.0.1	1:7101/TritterUrlDC-ViewController	🔊 🔹 🖶 🕇	Page  Safety  Tools  Q
created_at	text	retweeted	in_reply_to_screen_r id
Wed Oct 27 02:50	How to add FavIcon to the ADF page http://dlvr.it/7bWSD	false	28853295244
Wed Oct 27 01:47	A public API to get the value originally read for an Entity Attribute from the database http://	false	28848213614
Wed Oct 27 00:45	ADF Faces: How to Prevent Closing of Dialog When Pressing Enter Key http://dlvr.it/7bLYL	false	28843030963
Tue Oct 26 23:42:	oracle.jbo.InvalidObjNameException: JBO-25005 http://dlvr.it/7bGDT	false	28837505667
Tue Oct 26 22:40:	ADF-BC Master-Detail/Tree Application http://dlvr.it/7b9wB	false	28832267490
Tue Oct 26 21:38:	Working with Dates in the Model Layer http://dlvr.it/7b5BG	false	28827597854
Mon Oct 25 23:23:	Enabling Validation for Table Filters http://dlvr.it/7XRsw	false	28735480334
Mon Oct 25 22:20:	Porting existing Forms application with C(R)UD stored procedures to ADF http://dlvr.it/7XLqJ	false	28730358427
Mon Oct 25 21:08:	Iterating/traversing arrays in BPM http://dlvr.it/7XFXX	false	28725128169
Mon Oct 25 20:06:	Exporting/Importing MDS Metadata and Promoting MDS Labels for Oracle ADF 11g and Oracl	false	28721055521
Mon Oct 25 18:32:	Classic Mistakes with Oracle ADF Internal APIs - Part 2 http://dlvr.it/7WzTj	false	28715179373
Mon Oct 25 17:28:	Classic Mistakes with Oracle ADF Internal APIs - Part 1 http://dlvr.it/7WsDF	false	28710872855
Mon Oct 25 17:24:	ADF Insider: Classic Mistakes with Oracle ADF Internal APIs - Part 1. http://bit.ly/dlQw6R	false	28710551253
Fri Oct 22 22:25:0	OOW'10 Video Recording - Developing Large Oracle Application Development Framework 11g	false	28445134063
Fri Oct 22 21:36:2	How to Create WSDL Web Services with Oracle AS Adapter for Oracle Applications http://dlv	false	28441838415
Fri Oct 22 19:33:0	ADF 11g inputNumberSpinbox: Changing Value When Value is Null http://dlvr.it/7PKb5	false	28433615708
Fri Oct 22 18:30:0	How-to use the optimized component search in Oracle ADF Faces http://dlvr.it/7PDZQ	false	28429237913
Fri Oct 22 17:28:2	SDO: Implementing a HashMap like Service Data Objects http://dlvr.it/7P77y	false	28424901080
Thu Oct 21 18:47:	Selecting a node on an ADF Tree control sets the current record in a different data source ht	false	28051260422
Thu Oct 21 17:46:	Setting up JRebel with JDeveloper http://dlvr.it/7LZzN	false	28047155294
Done	😜 Internet   Pro	tected Mode: Off	🖓 🔻 🔍 100% 🔻

**Note:** If you wanted to refresh the table view to see recent Tweets posted by the account, drag and drop the loadData() method to the JSF page and add it as a command button. Pressing the button then re-executes the Data Control query. However, a similar use case is handled in a later section in this hands-on.

#### Changing the URL DC endpoint query

In this section, you will change the tweets displayed in the table to be read from the "adfcodecorner" Twitter account, or you may try your own Twitter account instead.

- 1. Select the TwitterViewer.jspx entry in the Oracle Application Navigator
- 2. Expand the Data Controls panel and select the "TwitterUrlDataControl" entry.
- 3. Choose "Edit Definition" from the context menu



#### 4. Change the "Source" field to read

?screen_name=adfcodecorner

Definition Properties - Step 1 of 1					
Common Properties					
Common Properties	• ConnectionName:	TwitterQuery	7~		
	RootElement:	statuses	~		
	SchemaLocation:	file:///c:/temp/twitter.xsd			
	Source:	?screen_name=adfcodecorner	~		
	TransformerLocation:		~		
< > >					
		< Back Next > Finish Ca	ncel		
L					

5. In the Application Navigator, select the DataControls.dcx entry and open the Structure Window



6. Select the "TwitterViewer.jspx" page entry and choose "Run" from the context menu to see the changed data.

### Changing the Twitter account dynamically

What we have not covered in this tutorial so far is the ability to specify variables in the query string you add as the "Source" information when configuring the URL Data Control. For example, instead of "hard coding" the twitter account to "jdeveloper" shown below

```
?screen_name=jdeveloper
```

you could use a variable ##screenName## instead

?screen name=##screenName##

Variables in the ADF URL DataControl are in the form of ##variable_name##. You could have defined a variable when building the ADF URL Data Control.

**Note:** Oracle JDeveloper attempts to verify the URL, which in the case of Twitter does not work well because Twitter does not accept requests to accounts that don't exist or non-public accounts. The empty variable string thus is bounced as unauthorized by Twitter. However, in this tutorial you will learn how to add variables after URL Data Control creation

1. In the Application Navigator, select the DataControls.dcx file

2. Expand the Data Controls panel and select the "TwitterUrlDataControl" entry. Choose "Edit Definition" from the context menu



3. In the opened dialog, change the "Source" string and replace the screen_name value from a string to the ##screenname## variable.

4. Finish the dialog

Definition Properties - Ste Common Properties	ep 1 of 1		x
Common Properties	ConnectionName:	TwitterQuery	~
	<ul> <li>RootElement:</li> <li>SchemaLocation:</li> </ul>	file:///c:/temp/twitter.xsd	``
	<ul> <li>Source:</li> <li>TransformerLocation:</li> </ul>	?screen_name=##screenname##	~

5. With the DataControls.dcx file selected in the JDeveloper Application Navigator, select the "TwitterUrlDataControl" entry in the Structure Window. Choose "Update" from the context menu to refresh the data control definition.



6. Save the Data Control project

7. Expand the Data Controls panel, which to this time shows the "loadData()" entry as it is not yet aware of the Data Control signature change.

8. Press the refresh icon on the Data Control panel



9. The "loadData" method should change after the refresh showing a String argument. If this is not the case ensure you saved the URL Data Control project after adding the variable to the "Source" configuration.

**Note**: You may have to refresh the Data Control panel more than once. Sometime JDeveloper doesn't seem to recognize the change at the first refresh.

Application	Run Mana				_
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⊡… <mark>}</mark> TwitterUrlDat È…⊞ <mark>loadData</mark>	taControl (String)				
Recently Opened	Files				
					$- \in \in \mathbb{C}$

**Note:** the previously TwitterViewer page no longer works after this change because it does not provide an input argument for the loadData() method. You can fix the binding later if you want. For the learning experience in this hands-on you are going to build a new JSF page for the dynamic Twitter access.



10. Select the View Controller project and choose "New" from the right mouse context menu

11. In the New Gallery, select Web Tier  $\mid$  JSF  $\mid$  JSF Page to create a new ADF Faces page

New Gallery      All Technologies      Current Project Technologies      This list is filtered according to the current project's <u>selected technologies</u> ,      Search Current Project Technologies				
Categories: Categories: Connections → Deployment Descriptors → Deployment Profiles → Diagrams → External Applications → Java → Projects → BPM Tier → SOA Tier → Applet → HTML → JSF → JSP	Items:       Show All Descriptions         Image: ADF Task Flow       Image: ADF Task Flow Based on Human Task         Image: ADF Task Flow Based on Human Task       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Flow Template         Image: ADF Task Flow Template       Image: ADF Task Template         Image: ADF Task Template       Image: ADF Task Template         Image: ADF Task Template       Image: ADF Task Template <t< th=""></t<>			
	OK Cancel			

12. Name the page "DynamicTwitterViewer.jspx" and choose the one column QuickStart layout

ADF CODE CORNER

🕹 Create JSF Page
Enter the name, directory, and choose a type for the JSF Page. Optionally reference a <u>Page Template</u> to include its content in this page, or apply a <u>Quick Start Layout</u> to add and configure an initial set of layout components.
Ele Name: DynamicTwitterViewer.jspx
Directory: D:\Oracle\JDeveloper11gR1PS3-5850\jdeveloper\mywork\TritterUrlDC\ViewController\public_html
✓ <u>C</u> reate as XML Document (*.jspx)
Render in Mobile Device
Initial Page Layout and Content
O Blan <u>k</u> Page
O Page Template Orade Three Column Layout 💌
Quick Start Layout
One Column (Stretched)
Browse
Page Implementation (UI components are not exposed in managed bean)
Help OK Cancel

13. Open the "Layout" section of the ADF Faces component list in the JDeveloper component palette [crl+shift+P]

14. Select the Panel Splitter component and drag it onto the JSF page

	Component Palette	
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	æ	0
2 I I	▽ Common Components	
	♦३♦ Bread Crumbs	_
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	·므· Carousel	
	🖳 Carousel Item	
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	🕮 Panel Form Layout	
	Panel Group Layout	
	* Panel Header	-
	Panel List	
	🛄 Panel Splitter	
	Derations	
2 I I I		6 4 4

15. Select the Panel Splitter component in the visual editor or the Oracle JDeveloper Structure Window and open the Property Inspector

16. In the Property Inspector search for the "Orientation" property

17. Set the orientation to "vertical"

Panel Splitter - Property Inspector				(	
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🖃 Common					^
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PositionedFromEnd:	<default> (false)</default>		•	$\sim$	
Collapsed:	<default> (false)</default>		•	$\sim$	
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🗆 Behavior					
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Collapsed:	<default> (false)</default>		-	$\sim$	
PartialTriggers:				$\sim$	
FirstLandmark:	<default> (none)</default>		•	$\sim$	
SecondLandmark:	<default> (none)</default>		-	~	v

18. Drag the loadData(String) method to the upper panel of the JSF page

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TwitterUser  ViewControl  ViewControl  ViewControl  Control  Cont	TweetUrIDC er ntent 3-INF e Flows <i>amicTwitterViewer.</i> tterViewer.jspx rces	jspx			< >
▽ Data Controls				7 69	7
	aControl (String)		Γ.	, ÎŦ	
Recently Opened	Files				<<<

19. Choose ADF Parameter Form from the context menu

Create	
<u>M</u> ethod	▶
ADF Parameter Form	
Cancel	

20. In the Data Controls panel, select the "status" collection and drag it to the page

21. In the opened context menu, choose the Table | Read Only Table option

Application Run Mana			DynamicTwitterViewer.jspx
	-	- 6	🚯 🔹 Show 👻 Full Screen Size 💌 🔕 None 🔍 Default
Projects      Immediated IserTweetLtDC	G № 7 • № •	•	#{screennamelabel} #{screenname.inputValue}
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TwitterUrlDataControl			
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22. In the table configuration dialog, select all columns, except "created_at", "id", "in_reply_to_screen_name", "retweeted" and "text"

23. Delete these columns by pressing the delete icon

Row Selection <ul> <li>None</li> <li>Single Row</li> <li>Multiple Rows</li> </ul>	Enable Sorting	
Columns:		🕂 🎇 Group Ungroup
Display Label	Value Binding	Component To Use Delete
Image: state	favorited	ADF Output Text     ADF Output Text
	<ul> <li>in_reply_to_screen_name</li> <li>in_reply_to_status_id</li> <li>in_reply_to_work_id</li> </ul>	A ADF Output Text
Image: Contraction       Image: C	retweeted	ADF Output Text
xxx <default></default>	<ul> <li>truncated</li> <li>user created at</li> </ul>	ADF Output Text
me <default></default>	user.id	A ADF Output Text
se <default></default>	user.favourites_count	A ADF Output Text
we <default> we <default></default></default>	<ul> <li>user.follow_request_sent</li> <li>user.followers_count</li> <li>user.following</li> </ul>	ADF Output Text
	La disci nonowing	

24. Rearrange the column order and make the "text" column becoming second after the "created_at" column

Edit Table Columns		×
Row Selection         Image: None         Single Row         Image: Multiple Rows	Enable Sorting	
Columns:		💠 🔀 Group Ungroup
Display Label	Value Binding	Component To Use
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<pre>sel <default></default></pre>	id 💷	ADF Output Text
🚾 <default></default>	in_reply_to_screen_name	ADF Output Text
আ <default></default>	retweeted	ADF Output Text
xxx <default></default>	💻 text	ADF Output Text
Help		OK Cancel

25. OK the dialog

26. Select the "loadData" button and open the Property Inspector.

27. Find the "PartialSubmit" property and set it to "true". This ensures the JSF page is not fully reloaded when pressing it

DynamicTwitterVie	wer.jspx			
🝓 🔹 Show 🕶 Full S	creen Size 🔻 🔕 None 🔹 Defau	lt	None 🗕 🖏 🧞 🖉 🖪 🔰	
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#{created_at}	#{text}	PartialTriggers:	<default> (false)</default>	✓
#{created_at}	#{text}	Disabled:	false true	· · ·
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		Action:		~
		ActionListener:	#{bindings.loadData.execute}	~
		Eccondary Wine	law	<u></u>

28. Select the table component and find its "PartialTriggers" property in the PropertyInspector.

**Note:** Make sure you selected the table and not a single column. Best is to verify this in the Oracle JDeveloper Structure Window

created_at	text		in_reply_to_screen_r retweeted	id	Carousel
#{created_at}	#{text}		#{in_reply_to_scret#{retweeted}	#{id}	Carousel
#{created_at}	#{text}		#{in_reply_to_scree#{retweeted}	#{id}	Choose C
#{created_at}	#{text}		#{in_reply_to_scre{#{retweeted}	#{id}	Choose C
	1				Choose D
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					📑 Dialog
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		Display/context			de Go Image
		EditingMode:	<default> (editAll)</default>	• •	P Go Link
		ContextMenuSelect:	<default> (true)</default>	• ~	🖥 Go Menu
		Immediate:	<default> (false)</default>	• • 🔋	🗔 Icon
		PartialTriggers:			✓ Layout
		RefreshCondition:		PartialTrigge	rs 🗶
		o Dooroe Circu	25	Edit	
		• Rangesize:	25	Expression	Builder
view 🔸 af:docume	ent#d1 👻 af:form#f1 👻 af	RenderHint:	<default> (immediate)</default>	<ul> <li>Reset to De</li> </ul>	lault
esign Source Bind	dings   Preview   History   <	L		Property	Help
				the IDs of	the components that
				should trigg	Jer a partial update.
				trigger com	ponents. If one of the
				trigger com	ponents receives an
				louont that	will course it to update

29. From the context menu of the "PartialTriggers" property, choose the "Edit" link.

30. In the Edit Property dialog, find the "loadData" command button and move it to the "Selected" list. **Note**: The load data button is not shown with its label in the "Edit Property" dialog, but its Id.

Edit Property: PartialTriggers Shuttle items from Available to Selected to define the list of scop an Id or an ancestor naming container requires an Id. Note that a references depending on their relationship to the current comport	ed ids for this component. If an item cannot be shuttled, it requires scoped ids use a combination of relative and absolute path nent.
Available: view document - d1 messages - m1 messages - m1 mes	Selected:
Id:db1	OK Cancel

31. To avoid errors, you don't want to query Twitter without an account name. In the visual JSF page editor, click the "Bindings" tab at the bottom of it

32. Press the alt+Home button (or alt+Pos on non US keyboards) to find the PageDef file in the Application Navigator

# How to use the ADF URL Data Control for parametrized queries



33. Select the PageDef file in the Application Navigator and open the Structure Window to see the binding details

34. Expand the executables | variables node and select the loadData_screenname entry

35. Open the Property Inspector and set the DefaultValue property to "jdeveloper" (without the quotes)

36. Save the project

37. Click onto the page in the visual editor or the Application Navigator and choose the "Run" option from the right mouse context menu

38. The screen renders with the table showing tweets of the "jdeveloper" account. Add "adfcodecorner" or your Twitter account name into the input field and press the loadData button.

File Edit View Eavorites Tools Help				
🖕 Favorites 🛛 🚔 鷆 ADF Blogs 🔻				
			Dama -	Cafety - Taala - 🙉 - »
bttp://127.0.0.1:/101/TritterUrIDC-ViewController.	•		Page +	
loadData screenname ideveloper				
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Wed Oct 27 02:50 How to add FavIcon to the ADF page	http://dlvr.it/7bWSD		false	28853295244
Wed Oct 27 01:47 A public API to get the value originally	read for an Entity Attribute from the database http://		false	28848213614
Wed Oct 27 00:45 ADF Faces: How to Prevent Closing of	Dialog When Pressing Enter Key http://dlvr.it/7bLYL		false	28843030963
Tue Oct 26 23:42: oracle.jbo.InvalidObjNameException:	JBO-25005 http://dlvr.it/7bGDT		false	28837505667
Tue Oct 26 22:40: ADF-BC Master-Detail/Tree Application	http://dlvr.it/7b9wB		false	28832267490
Tue Oct 26 21:38: Working with Dates in the Model Layer	http://dlvr.it/7b5BG		false	28827597854
Mon Oct 25 23:23: Enabling Validation for Table Filters htt	p://dlvr.it/7XRsw		false	28735480334
Mon Oct 25 22:20: Porting existing Forms application with	C(R)UD stored procedures to ADF http://dlvr.it/7XLqJ		false	28730358427
Mon Oct 25 21:08: Iterating/traversing arrays in BPM http	p://dlvr.it/7XFXX		false	28725128169
Mon Oct 25 20:06: Exporting/Importing MDS Metadata an	d Promoting MDS Labels for Oracle ADF 11g and Oracl		false	28721055521
Mon Oct 25 18:32: Classic Mistakes with Oracle ADF Inter	nal APIs - Part 2 http://dlvr.it/7WzTj		false	28715179373
Mon Oct 25 17:28: Classic Mistakes with Oracle ADF Inter	nal APIs - Part 1 http://dlvr.it/7WsDF		false	28710872855
Mon Oct 25 17:24: ADF Insider: Classic Mistakes with Ora	de ADF Internal APIs - Part 1. http://bit.ly/dlQw6R		false	28710551253
Fri Oct 22 22:25:0 OOW'10 Video Recording - Developing	Large Oracle Application Development Framework 11g		false	28445134063
Fri Oct 22 21:36:2 How to Create WSDL Web Services wi	th Oracle AS Adapter for Oracle Applications http://dlv		false	28441838415
Fri Oct 22 19:33:0 ADF 11g inputNumberSpinbox: Changi	ng Value When Value is Null http://dlvr.it/7PKb5		false	28433615708
Fri Oct 22 18:30:0 How-to use the optimized component	search in Oracle ADF Faces http://dlvr.it/7PDZQ		false	28429237913
Fri Oct 22 17:28:2 SDO: Implementing a HashMap like Se	vice Data Objects http://dlvr.it/7P77y		false	28424901080
Thu Oct 21 18:47: Selecting a node on an ADF Tree cont	rol sets the current record in a different data source ht		false	28051260422
Thu Oct 21 17:46: Setting up JRebel with JDeveloper http	p://dlvr.it/7LZzN		false	28047155294
Done	Internet   Pro	tected Mode: Off		🖓 🔻 🔍 100% 🔻

## Download

A zip file containing additional instructions and a completed solution can be downloaded as sample #74 from the ADF Code Corner website at:

http://www.oracle.com/technetwork/developer-tools/adf/learnmore/index-101235.html

#### RELATED DOCOMENTATION