

# Dököll Solutions, Inc.

## IBM | Oracle

Domino Designer, JDeveloper, DB2, WebLogic,  
JSF, Xpages, Web Services

### Part Two - B

#### System Requirements

Software Used	Language Used	Protocol/Framework Used
Microsoft Windows 7, 8, 10	VBScript, Batch	Active Directory
Microsoft Internet Explorer	N/A	TCPIP, HTTP
Google Chrome	N/A	TCPIP, HTTP
Mozilla FireFox	N/A	TCPIP, HTTP
Oracle JDeveloper Version 12..x IDE	CSS, HTML, JavaScript, Java	HTTP, TCPIP, Java Server Faces
Oracle Integrated WebLogic Server 12.x	WSDL	HTTP, TCPIP
IBM DB2 Express-C v9.7.4	SQL	SQL Database Server
IBM Notes Domino Designer 8.5.3	CSS, HTML, JavaScript, Java, JavaAgent, XML	HTTP, TCPIP, Xpages

#### Disclaimer:

Information contained in the following is presented as is. This tutorial assumes you have basic programming and software configuration knowledge. All tutorials are based on Oracle Fusion Middleware and IBM Lotus Notes products, including and not limited to items stated in System Requirements. Should you need to familiarize yourself with JDeveloper or Domino Designer environments, prior to continuing this tutorial, please stop now, and see our Tutorials page: [www.dokollolutionsinc.com](http://www.dokollolutionsinc.com) or consult your favourite or preferred Search Engine/Company sites for support...

#### Introduction:

Continuing from last effort, Data readily available in IBM Notes Domino back-end View; Xpages form button submitted a date record to the back-end... a JavaAgent

needs to perform the Web Service call...

Now, you need to run that Agent to view the results in the Console program... A good way to this is by going through your Notes Client, and use menus there- Tools to launch the Java Web Console...

### **Run JavaAgent, Results in Java Web Console**

At this point we assume IBM Lotus Notes Domino Designer is running, a connection to IBM DB2 has been established and you have submitted a record to back-end via Xpages form button.

**Note:** It is a good idea to first launch the Integrated Oracle WebLogic Server prior to Deploying applications. Follow instructions and screenshots below to create an application from scratch within minutes using the JDeveloper IDE-

You should now launch the JavaAgent from your Lotus Notes Client menu and the service call to JDeveloper should complete within 30 seconds, 1 minute at most; at which point you would check the Java Web Console program (Figure 6c) for the results ... areas of interest is highlighted below for your convenience.

## **Steps:**

- (1) Go to JDeveloper, Create a New ADF Fusion Application (Figures 1a, 1b)
- (2) Name the application appropriately,
- (3) Add proper package, example com.dokoll.solutions.inc.WebServs
- (4) Choose right ADF technologies, accept defaults for Model & View Controller
- (5) Create a Database connection to Allegation table in DB2 (to be used in Part 2)
- (6) Create a Java Class for Static Web Service (Figures 2a, 2b)
- (7) Convert Java Class into Web Service
- (8) Test and Deploy Web Service (Figures 3a, 3b)
- (9) Copy Web Service WSDL URL Figures 4a - 4h)
- (10) Create IBM Notes Domino Consumer Service using WSDL (Figures 5a, 5d)
- (11) Manage the Consumer Service Properties of Domino Designer
- (12) Create JavaAgent to Consume the new Web Service (Figure 6a)
- (13) Import Web Service Consumer into JavaAgent (Figure 6a)
- (14) Reference WebService Call in JavaAgent code (Figure 6a)
- (15) Run JavaAgent in IBM Notes Client (Figure 6d)
- (16) Look in JavaAgent Console for Resultset (Figure 6d, 6e)
- (17) Make Copies of Both Applications

**TechNotes:** If you are here, this means you have previously gone through Part One

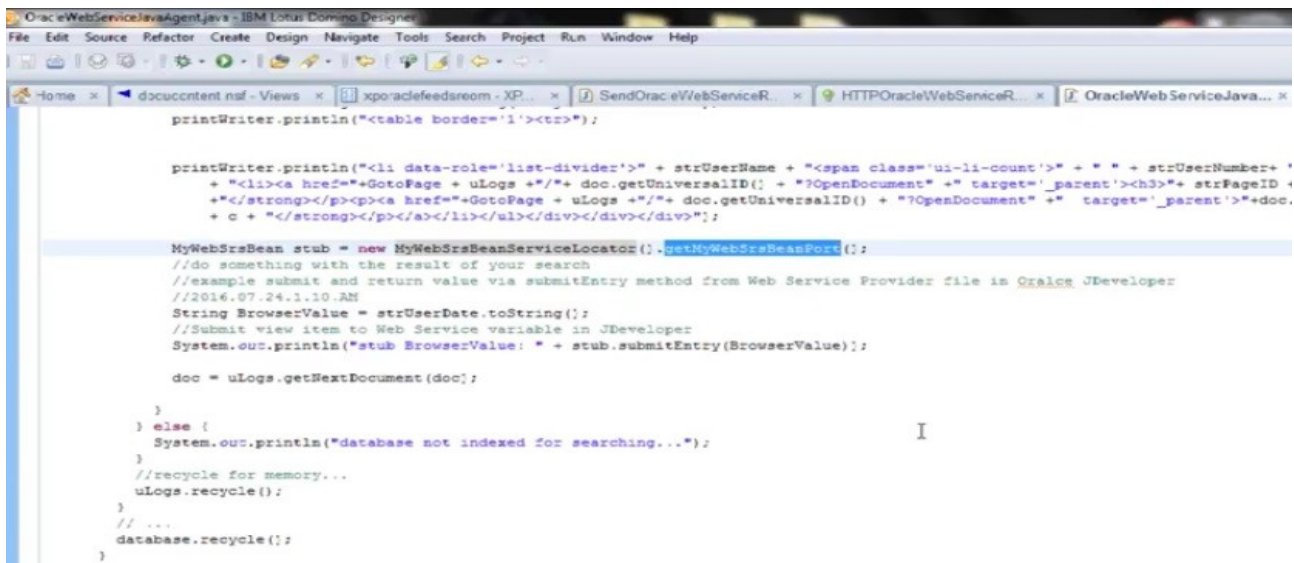
of this tutorial- You can choose to take a look now to make more sense of the following tutorial...

**Objective:** Modify properties for IBM Notes Domino Consumer Web Service, make Web Service call...

## Step 11

### Figure 6a

JavaAgent running the show, pulling in Web Service WSDL via URL, and posting message added to prior Xpage file, using JavaBean button method...



```
OracleWebServiceJavaAgent.java - IBM Lotus Domino Designer
File Edit Source Refactor Create Design Navigate Tools Search Project Run Window Help

printWriter.println("<table border='1'><tr>");

printWriter.println("<li data-role='list-divider'> " + strUserName + "<span class='ui-li-count'> " + " + strUserNumber+
+ "<li><a href='"+GotoPage + uLogs +"/'+ doc.getUniversalID() + "?OpenDocument" + " target='_parent'><h3>"+ strPageID +
+ "</strong></p><p><a href='"+GotoPage + uLogs +"/'+ doc.getUniversalID() + "?OpenDocument" + " target='_parent'>"+doc.
+ c + "</strong></p></a></li></ul></div></div></div>");

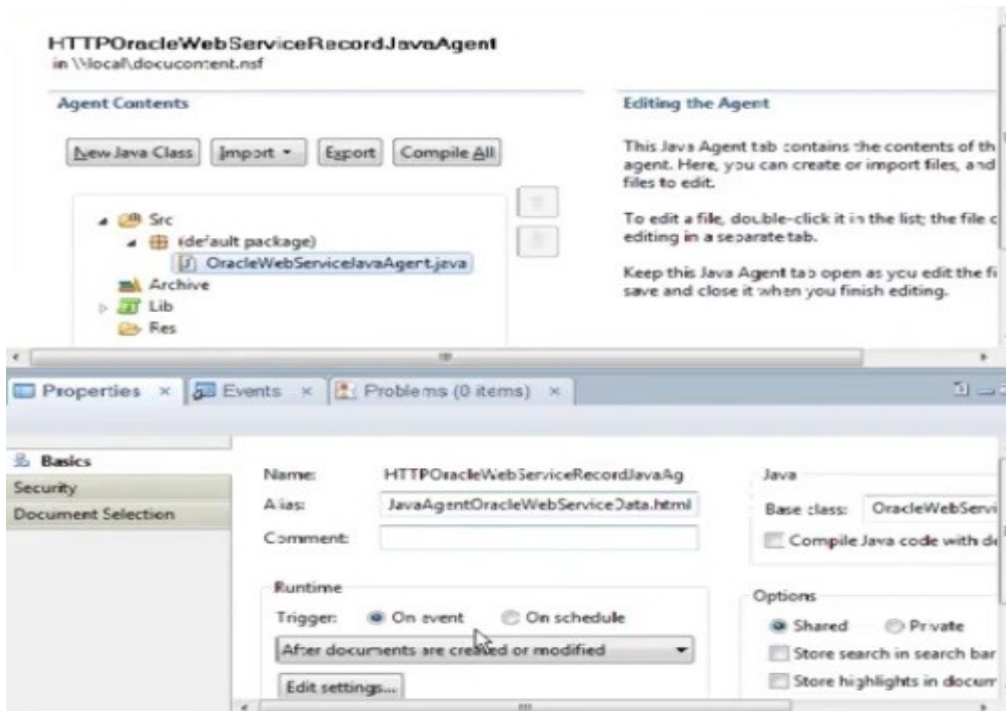
MyWebSrsBean stub = new MyWebSrsBeanServiceLocator().getMyWebSrsBeanPort();
//do something with the result of your search
//example submit and return value via submitEntry method from Web Service Provider file in Oracle JDeveloper
//2016.07.24.1.10.AM
String BrowserValue = strUserData.toString();
//Submit view item to Web Service variable in JDeveloper
System.out.println("stub BrowserValue: " + stub.submitEntry(BrowserValue));

doc = uLogs.getNextDocument(doc);

}
} else {
System.out.println("database not indexed for searching...");
}
//recycle for memory...
uLogs.recycle();
}
// ...
database.recycle();
}
```

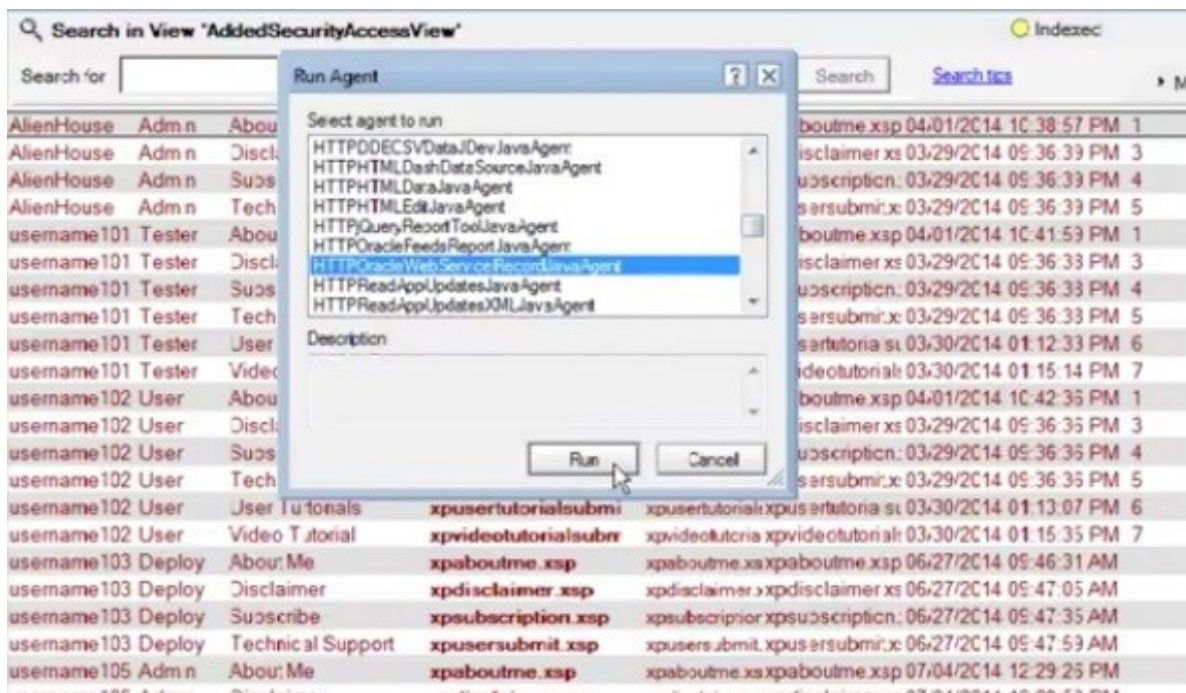
### Figure 6b

Be sure to look at properties files of either your Web Service or JavaAgent, in some cases additional configuration is necessary... you will have errors in your program, or items may not work as expected if you're not careful...



**Figure 6c**

Manually, run the JavaAgent, after search/submit string from Xpages file button- Goal is to obtain the date submitted to SubjectDateCreated inputText box on the Xpage (date string similar to 2016.01.01.1.11.AM is added to back-end View) will be available in WebService via Oracle JDeveloper, when pulled, into Java Console on the IBM Notes Domino side of the process-



**Figure 6d**

Launch Java Web Console to view the results posted from Oracle JDeveloper Web Service Provider and IBM Notes Domino, Consumer Service...

```
Java Console
stub.getName(): Howdy, your Site No is: XYZ00789
database obtained...c:\Program Files (x86)\IBM\Lotus\Notes\Data\docucontent.nsf
View obtained...UserWebServicesViewListings
database is indeed indexed for searching...
<html>
<head>
<title>jQuery Report</title>
<meta charset=utf-8>
<meta name=viewport content=width=device-width, initial-scale=1>
<link rel=stylesheet href=/docucontent.nsf/mobi/e/app/tree/css/themes/default/jquery.mobile-1.2.0.css />
<link rel=stylesheet href=/docucontent.nsf/mobi/e/app/tree/docs/_assets/css/jqm-decs.css?>
<script src=/docucontent.nsf/mobi/e/app/tree/js/jquery.js> </script>
<script src=/docucontent.nsf/mobi/e/app/tree/docs/docs/_assets/js/jqm-decs.js> </script>
<script src=/docucontent.nsf/mobi/e/app/tree/js/jquery.mobile-1.2.0.js> </script>
</head>
<body>
<div align=left>
<div data-role=content align=left>
<div class=content-secondary>
<ul data-role=listview data-theme=d data-divide-theme=d>
<li data-theme=a>Oracle Web Services Report</li>
<table border=1><tr>
<li data-role=list-divider>AlienHouse<span class=ui-li-count> Admin</span></li><li><li><a href=http://localhost/docucontent.nsf/UserWebServicesViewListings/1DD0442EBFE32C85257FFA001F6C01?OpenDocument target=_parent><h3>http://
stub.BrowserValue: Howdy, your Site No is: 2016.07.24.01.41 AM
```

**Figure 6e**

Just another look to highlight the results read through Lotus Notes Client...

See next segment of the tutorials, excited to try a connection to DB2 (using code from this exercise) in the next version of the program, with Oracle JDeveloper, IBM DB2, and Lotus Domino Designer

```
Java Console
stub.getName(): Howdy, your Site No is: XYZ00789
database obtained...c:\Program Files (x86)\IBM\Lotus\Notes\Data\docucontent.nsf
View obtained...UserWebServicesViewListings
database is indeed indexed for searching...
<html>
<head>
<title>jQuery Report</title>
<meta charset=utf-8>
<meta name=viewport content=width=device-width, initial-scale=1>
<link rel=stylesheet href=/docucontent.nsf/mobi/e/app/tree/css/themes/default/jquery.mobile-1.2.0.css />
<link rel=stylesheet href=/docucontent.nsf/mobi/e/app/tree/docs/_assets/css/jqm-decs.css?>
<script src=/docucontent.nsf/mobi/e/app/tree/js/jquery.js> </script>
<script src=/docucontent.nsf/mobi/e/app/tree/docs/docs/_assets/js/jqm-decs.js> </script>
<script src=/docucontent.nsf/mobi/e/app/tree/js/jquery.mobile-1.2.0.js> </script>
</head>
<body>
<div align=left>
<div data-role=content align=left>
<div class=content-secondary>
<ul data-role=listview data-theme=d data-divide-theme=d>
<li data-theme=a>Oracle Web Services Report</li>
<table border=1><tr>
<li data-role=list-divider>AlienHouse<span class=ui-li-count> Admin</span></li><li><li><a href=http://localhost/docucontent.nsf
stub.BrowserValue: Howdy, your Site No is: 2016.07.24.01.41 AM
```

**Conclusion**

You are now able to communicate between two different IDEs via Web Services, with Oracle JDeveloper as the Provider Web Service, and IBM Notes Domino as the Recipient (Consumer)... You are successful at submitting a record via Xpages form, with JavaBean method driving button code, submitted record is then picked up using JavaAgent, process runs to open the Oracle JDeveloper Web Service, pass the date String over, returning a 'date' String value, submitted to Java Console program...



## **Tutorials:**

### **IBM DB2 in Oracle Products**

[https://www.youtube.com/watch?v=7C8mU4ap47Y&index=4&list=PLLOJ\\_OmDhsPSWnwEXFCqkHMNjuo2p-](https://www.youtube.com/watch?v=7C8mU4ap47Y&index=4&list=PLLOJ_OmDhsPSWnwEXFCqkHMNjuo2p-)

### **Oracle SQL Developer**

[https://www.youtube.com/watch?v=S2TcjulXij4&index=1&list=PLLOJ\\_OmDhsPSWnwEXFCqkHMNjuo2p-UAC](https://www.youtube.com/watch?v=S2TcjulXij4&index=1&list=PLLOJ_OmDhsPSWnwEXFCqkHMNjuo2p-UAC)

### **Oracle Jdeveloper**

[https://www.youtube.com/watch?v=2kBNlaKDWwg&list=PLLOJ\\_OmDhsPSWnwEXFCqkHMNjuo2p-UAC&index=3](https://www.youtube.com/watch?v=2kBNlaKDWwg&list=PLLOJ_OmDhsPSWnwEXFCqkHMNjuo2p-UAC&index=3)

## **Related Info:**

Visit prior video tutorials to create connection to IBM DB2 Express-C

### **IBM DB2 Database**

<http://www.dokollsolutionsinc.com/CutAndPasteDB2DataLoad.html>

### **IBM DB2 DataSource**

<http://www.dokollsolutionsinc.com/CutAndPasteDB2DataSourceLoad.html>

For all Questions and comments, please add a Quick note to our Contact form, or visit our social media networks

### **Contact**

<http://www.dokollsolutionsinc.com/apptrendscontactemail.php>

### **Facebook**

<https://www.facebook.com/Dököll-Solutions-Inc-233555900032117/>

### **Google+**

<https://plus.google.com/u/0/+DököllSolutions/posts>

### **Twitter**

<https://twitter.com/DokollSolutions>

### **YouTube**

<https://www.youtube.com/channel/UCSImDTpK0oe7QrPsYOE4nww>

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