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Introduction

AquaLogic Data Services Platform can be accessed through an AquaLogic Service Bus Transport. In this way AquaLogic Service Bus can make full use of data services. This approach also allows a more efficient and flexible approach to accessing data services as compared with exposing such services as Web services.

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Use ALSB 2.6.1 if you want to share the same WebLogic home directory with ALDSP.

ALDSP and ALSB Compatability Matrix

Data services created in ALDSP can be accessed through ALSB using the **DSP Transport**. The following table identifies compatibilities between ALDSP and ALSB releases. In most cases, instructions for making ALDSP Data Services available to ALSB using the DSP transport are provided.

ALSB and ALDSP Version Compatibility

AquaLogic Data Services Platform	AquaLogic Service Bus (DSP Transport)	Instructions for Making ALDSP Data Services Available to ALSB Using the DSP Transport
Version 2.5	Version 2.5	HTML
Version 2.5	Version 2.6	PDF
Version 3.0	Version 2.5	
Version 3.0	Version 2.6, 2.6.1	HTML PDF
Version 3.0	Version 3.0	HTML PDF

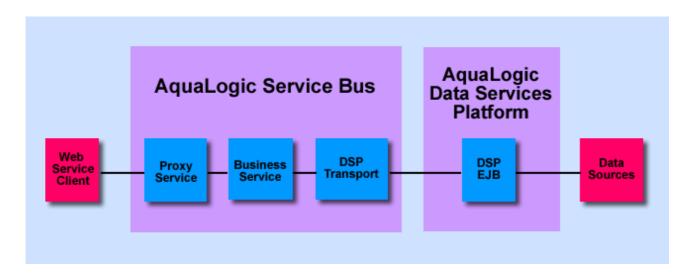
Enabling Data Services for ALSB

To make an ALDSP data service available to an ALSB client you need to:

- Generate a WSDL file for your data service and import the new WSDL into ALSB using the recommended procedure.
- Configure or create a business service based on the WSDL.
- Configure or create a proxy service based on the business service.

After you have completed these tasks you can invoke data services through the appropriate version of ALSB.

From Data Source to Web Service Client



Using the DSP Transport

The example in this section illustrates use of a data service in ALSB using the following versions.

	ALDSP	ALSB
Version(s)	3.0	2.6 / 2.6RP1
WebLogic Server	9.2	9.2

Actions Needed Within ALDSP

Step 1. Start Your Server

Start the AquaLogic Data Services server, if it is not already running. (For the purpose of this discussion, the sample RetailDataspace provided with AquaLogic Data Service Platform is used.)

Start > Programs > BEA Products > BEA AquaLogic Data Services Platform 3.0 > Examples > Start Examples Server



See also: Getting started ALDSP tutorial:

Creating Your First Data Services

Step 2. Generate a WSDL from the Data Service

You can generate a WSDL from your data service in two ways.

Option A. Generating a WSDL File Using Data Services Studio



Detailed instructions available at:

How To Generate a Web Service Map and WSDL from a Data Service

Option B. Export a WSDL Through the ALDSP Console

If a WS file is available, you can use the ALDSP Console to generate a WSDL file.

1. Launch the AquaLogic Data Services Console. On Windows you can do this by choosing:

Start > Programs > BEA Products > BEA AquaLogic Data Services Platform 3.0 > Examples > AquaLogic Data Services Console



Alternatively, type http://localhost:7001/dspconsole in your Web browser.

- 2. Log in. The sample uses 'weblogic' (without quotes) as both the username and password.
- 3. Click Service Explorer.
- 4. Navigate to the web service map (example: RetailWebServices.ws) corresponding to the data service for which you want to create the WSDL file.

- 5. Click View WSDL Definition in the General tab. ALDSP Console opens a new window and displays the WSDL definition.
- 6. Using a text editor, copy and paste the WSDL definition into a new text document and save the WSDL file.
- **Getting Started with ALDSP Administration**

If you've not already done so, build your data service application (deployment is automatic with a build). A deployed application is needed in order for a client processes to access data through your data services.

Step 3: Obtaining the Web Service Address

The URL address to the WSDL is needed. To obtain this address in Data Services Studio:

- 1. Right-click on the WS file (example: OrderService.ws)
- 2. Select Test Web Service
- 3. When the Test Client opens save the URL address. Here is the address for the OrderService example:

http://localhost:7001/RetailDataspace/RetailApplication/OrderManagement/OrderService.ws?WSDL

Actions Needed within ALSB

Step 4: Import the Data Service WSDL into AquaLogic Service Bus

The following generally describes the steps needed to import a WSDL generated in ALDSP into AquaLogic Service Bus.

1. Start the AquaLogic Service Bus server, if it is not already running. For the purposes of this example, the AquaLogic Service Bus example server and the Default project is used. On Windows you can do this by choosing:

Start > Programs > BEA Products > Examples > AquaLogic Service Bus > Start Examples Server

2. Launch the AquaLogic Service Bus Console. On Windows, choose:

Start > Programs > BEA Products > Examples > AquaLogic Service Bus > Service Bus Console



Alternatively, type http://localhost:7021/sbconsole in your Web browser.

- 3. Log in. The default user name and password is 'weblogic' (without quotes).
- 4. Create a new project (example: dataServiceTest).
- 5. Click on the name of your new project.

- 6. In the Project Explorer locate the Create Resource option.
- 7. From the Select Resource Type dropdown select:

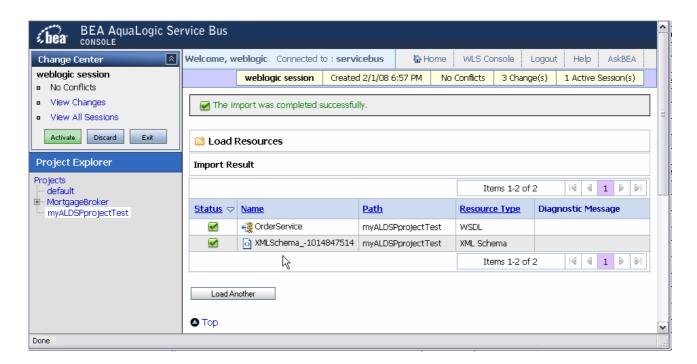
Bulk > Resources from URL

This opens the wizard from which you can import a WSDL and its associated schema. The following table covers the actions needed to continue the example.

Importing a WSDL as a Bulk Resource

	Wizard Page	Option	Action	Comment
1.	Load Resources from URL	URL/Path	paste the WSDL URL	The URL / Path is to the address of the WSDL you created (for an example see Obtaining the Web Service Address)
2.		Resource Name	enter any name	example: orderService
3.		Resource Type	enter WSDL	
4.			Next	
5.	Review Loaded Resources		click Import	

Load Resources from ALDSP WSDL Import



See also:

Loading Resources from a URL

Step 5: Create the Business Service

The following generally describes the steps needed to create a business service from a WSDL imported from ALDSP.

- 1. In the Project Explorer locate the Create Resource option.
- 2. From the Select Resource Type dropdown select Business Service.

This opens the wizard from which you can create a business service. The following table covers the actions needed to continue the example.

Creating Business Service for the ALDSP Sample Data Service

	Wizard Page	Option	Action	Comment
1.	Creating a Business Service - General Config	Service Name	enter name	example: orderService
2.		Description	any description	
3.		Service Type	WSDL Web Service	browse to web service
4.		Select a WSDL	double click on the created WSDL	example: orderService
5.	Select WSDL definitions	bindings or ports	click on a SoapBindings or SoapPort	example: OrderServiceSoapBindir
6.			click Submit	
7.	Creating a Business Service - General Config		Next	
8.	Creating a Business Service - Transport Config	Protocol	dsp	
9.		Endpoint URI	enter name of ALDSP project example:	
			t3://localhost:7001,	RetailDataspace
10.			click Add	

11.		Next	Accept defaults
12.		Next	Accept defaults
13.		Save	

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See Also:

Creating and Configuring Business Services

Step 6: Create the Proxy Service

The following generally describes the steps needed to create a proxy service.

- 1. In the Project Explorer locate the Create Resource option.
- 2. From the Select Resource Type dropdown select Proxy Service.

This opens the wizard from which you can create a proxy service. The following table covers the actions needed to continue the example.

Creating a Proxy Service for the ALDSP Sample Data Service

	Wizard Page	Option	Action	Comment
1.	Creating a Proxy Service - General Config	Service Name	enter name	example: orderService
2.		Description	any description	
3.		Service Type	click on Business Service	browse to business service
4.	Select Business Service	Select a WSDL	click on the radio button associated with the relevant business service	example: orderService
5.			click Submit	
6.	Creating a Proxy Service - General Config		Next	example: defaults are OK
7.	Creating a Proxy Service - Transport Configuration		Next	example: defaults are OK
8.	Create a Proxy Service - HTTP Transport Configuration		Next	example: defaults are OK
9.	Create a Proxy Service -	_	Next	example: defaults are OK

	Message Level Security Configuration		
10.	Create a Proxy Service - Operation Selection Configuration	Next	example: defaults are OK
11.		Save	

In practice you would most likely identify the encryption key, digital signature key, and SSL client authentication key. However, for the example, none of these need to be identified.

The AquaLogic Data Service Platform transport uses the character set provided by the proxy service. Therefore if the default character set needs to be changed prior to invoking a data service transport, the conversion encoding needs to be handled within the proxy service itself.



See also:

Creating and Configuring Proxy Services

Step 7: Test Your Setup

The following steps would allow you to test access to the ALDSP data service through the proxy generated in the above steps.

- 1. Activate your session; click Submit.
- 2. In the Project Explorer locate the created proxy service (example: orderService).
- 3. Select the Launch Test Console icon under Actions. The Proxy Service Testing console appears.
- 4. From the Available Operations dropdown select your data service operation (example: getOrderByCustID)
- 5. Modify the Payload with the information needed by the data service (example: CUSTOMER3)

ord:getOrderByCustID xmlns:ord="ld:RetailApplication/OrderManagement/OrderService.ws">
anbsp; <ord:custID>CUSTOMER3</ord:custID>
/ord:getOrderByCustID>

6. Click Execute. The data appears in the response document.

Request and Response from the ALSB Test Console



See Also

Using the AquaLogic Service Bus Console

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