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ALDSP 3.0/3.2/3.01 Release Notes

AquaLogic Data Services Platform provides read and write access to information in relational databases, web services, Java functions, XML files, delimited files, and other types of disparate data.

Once developed, application developers — using access technologies such as the ALDSP mediator API, JDBC, SQL, or Workshop controls — can invoke ALDSP operations as a means of providing their applications with access to integrated, updateable data from their enterprise.

Metadata, security, and cache management facilities are provided through the Data Services Platform Console (dspconsole).

Notes:

- This document covers:
  - ALDSP 3.0
  - ALDSP 3.2
  - ALDSP 3.01

  References to ALDSP 3.0 in the notes should be seen as applying to all three releases unless otherwise indicated.

- BEA AquaLogic® Data Services Platform was originally named Liquid Data for WebLogic®. Some artifacts of the original name remain in the product, path, and other artifacts.

Contents

Revision Policy

AquaLogic Data Services Platform Release Notes is subject to revision between releases. The most recent version can be found at:

http://edocs.bea.com/aldsp/docs30/relnotes/relnotes.html

For assistance in tracking unresolved issues please contact BEA Customer Support.

What's New?

http://edocs.bea.com/aldsp/docs32/dsp32wiki/what's%20new.html

Product Installation and Upgrade

http://edocs.bea.com/aldsp/docs30/install/index.html

Configuration Information

Supported Configurations

For support information on vendor operating systems, JDK, and hardware support, see either:

- **ALDSP 3.0 and 3.01:** Supported Configurations for BEA AquaLogic Data Services Platform 3.0 or
- **ALDSP 3.2:** Supported Configurations for BEA AquaLogic Data Services Platform 3.2

Client Support

For this release, client applications are supported on the following JDKs:

- BEA JRockit 1.4.2 and Sun 1.4.2
- BEA JRockit 5.0 and Sun 5.0

Supported Interoperability Products

This section describes the following interoperability products that are supported for use with ALDSP 3.0.

ALDSP 3.0 and 3.2 Product and Version Support

Product	Version Supported	Configuration Required
WebLogic Portal	9.2 and 10.0 (WLP to ALDSP only)	No
WebLogic Integration	9.2 (WLI to ALDSP only)	In some cases

AquaLogic Service Bus	2.6, 2.61, 3.0	No
AquaLogic Enterprise Security	3.0	No
AquaLogic Enterprise Repository	3.0.0.2	No
WebLogic Workshop	**ALDSP 3.2:** 9.2 MP2 (for ALDSP Control only), 10.0 MP1, 10.1, 10.2 **ALDSP 3.0:** 9.2 MP2, 10.1, 10.2	In some cases

Special Configuration Instructions for WLI and WebLogic Workshop

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Configuration Instructions for WebLogic Integration 9.2 (WLI to ALDSP only)

ALDSP 3.0/3.01 only:
WebLogic Integration 9.2 was shipped and tested with an older version of `binxml.jar`. To invoke ALDSP 3.0 services such as ALDSP Control, Web Services API, or Mediator API from WLI under WebLogic 9.2, it is necessary to use the current version of this file. There are two ways to do this:

- You can change the WLI server classpath from:

```
${WL_HOME}/server/lib/binxml.jar
```

  to the ALDSP 3.0 version:

```
${ALDSP_HOME}/lib/binxml.jar
```

- Alternatively, you can simply place the following first in your PRE_CLASSPATH:

```
${ALDSP_HOME}/lib/binxml.jar
```

Although there are no known issues associated with this change, making this switch may cause unexpected behavior in WLI.

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Configuration Instructions for WebLogic Workshop in conjunction with the ALDSP Control

ALDSP 3.2

If you have installed ALDSP 3.2 into a *<BEA_HOME>* containing an existing 10.0, 10.0MP1, 10.1, or 10.2 version of Workshop, no link copy is needed to ALDSP Control-enable Workshop. Similarly, if you install ALDSP independently and then install a supported version of Workshop and configure Workshop to use the same Eclipse installation as ALDSP, no link copy is required.

The following table clarifies this requirement:

ALDSP Version	Requirement to copy a link ALDSP configuration file to Workshop?
3.0	Yes.
3.2 **3.01**	Yes, unless a supported version of Workshop (10.0, 10.0MP1, 10.1, or 10.2) is installed in the same <*BEA_HOME*>.

ALDSP Control Configuration Instructions for 3.0 and Some 3.2 Installations

The following table describes the compatibility matrix between ALDSP and Workshop. The location of configuration files and where they need to be installed in order for Workshop to operate as a client of an ALDSP Control is specified.

ALDSP 3.0

Workshop Version	Source, Link File, Destination
9.2	**Source:** <*aldsp_home*>/eclipse-plugin/worksh **File:** com.bea.dsp.ide.control.feature.link **Destination:** <*workshop92_home*>/workshop92/ec
10.1, **10.2**	**Source:** <*aldsp_home*>/eclipse-plugin/worksh **File:** com.bea.dsp.ide.control.feature.link **Destination:** <*bea_home*>/tools/eclipse_pkgs/1.1/

ALDSP 3.2 and 3.01

Workshop Version	Source, Link File, Destination
10.0, **10.0MP1**	**Source:** <*aldsp_home*>/eclipse-plugins/worksh **File:** **ALDSP 3.2:** com.bea.aldsp32.eclipse.plugins.work **ALDSP 3.01:** com.bea.aldsp301.eclipse.plugins.wo **Destination:** <*bea_home*>/tools/eclipse32/eclipse/

9.2MP2	**Source:** <*aldsp_home*>/eclipse-plugins/worksh **File:** **ALDSP 3.2:** com.bea.aldsp32.eclipse.plugins.work **ALDSP 3.01:** com.bea.aldsp301.eclipse.plugins.wo **Destination:** <*workshop92_home*>/workshop92/ec
10.2	**Source:** <*aldsp_home*>/eclipse-plugins/worksh **File:** **ALDSP 3.2:** com.bea.aldsp32.eclipse.plugins.work **ALDSP 3.01:** com.bea.aldsp32.eclipse.plugins.work **Destination:** <*bea_home*>/tools/eclipse_pkgs/1.1/

JDBC Driver Support for Reporting Tools

The following section provides information on JDBC driver support for reporting applications used with the AquaLogic Data Services Platform 3.0 JDBC driver:

Application and Version	JDBC Native	OpenLink ODBC/JDBC Lite Bridge
Crystal Reports XI	Supported	
Business Objects XI, Release 2		Supported
Hyperion BI 9+, Interactive Reporting		Supported
Microsoft Access 2000		Supported
Microsoft Excel 2000		Supported

Standards Support

The following Web services standards supported for this release:

Standards	Version
SOAP	1.1, 1.2
WSDL	1.1
JAX-RPC	1.1
SDO	2.1
XML Schema	1.0
XQuery	July 2004 Draft

Product Limitations and Workarounds

This section lists known limitations associated with the current BEA ALDSP release that users may encounter. Information regarding these limitations includes:

- A CR (change request) number for each issue.
- Applicable platform.
- Detailed description of the problem and workarounds, where applicable.
- Date, if the item is added or changed after the general availability release of the product.

Known Product Limitations and Possible Workarounds

Change Request Number	Release Found	Release Addressed	Field Descriptions
CR364732	**3.2, 3.01**		**Using complex types with simple content from an ALDSP 3.2 (or ALDSP 3.0.1) client to an ALDSP 3.0 server may generate an optimistic locking failure errors.**
			All.
			Using complex types with simple content from an ALDSP 3.2 (or ALDSP 3.0.1) client and serializing it to an ALDSP 3.0 server may generate an optimistic locking failure due to incorrect processing of the change summary on the ALDSP 3.0 server.
			Upgrade the ALDSP 3.0 server to an ALDSP 3.2 (or ALDSP 3.0.1) server if using a complex type with simple content.
CR364443	**3.2**		**Manually adding a new server and modifying a data service may generate an unexpected exception in WorkSpace Studio 1.1.**
Platform			All.

Description			WorkSpace Studio 1.1 may generate the following unexpected exception after you manually add a new server and then modify a data service: `org.apache.xmlbeans.XmlException: Thread AWT-EventQueue-0: The 0th supplied input is not a schema document: its type is N= at org.apache.xmlbeans.impl.schema.S at sun.reflect.GeneratedMethodAccess Source) at sun.reflect.DelegatingMethodAcces at java.lang.reflect.Method.invoke(M at org.apache.xmlbeans.XmlBeans.comp at org.apache.xmlbeans.XmlBeans.comp` Specifically, WorkSpace Studio 1.1 can generate the exception when you do the following: 1. Click the Servers tab and add a new server. 2. Double-click a data service (a .ds file) to display the data service in the Overview tab. 3. Add an operation by right-clicking in the Overview area and choosing Add Operation.
Workaround			Contact BEA Customer Support to request patch E36K for ASDSP 3.2.
CR366025	**3.2**		**Reinstalling ALDSP 3.2 generates the following error: "A BEA product or component is already installed in this directory."**

Platform			All.
Description			The error appears when attempting to reinstall ALDSP 3.2 in a <BEAHOME> directory where ALDSP 3.2 and any of the following have been installed and uninstalled: • WebLogic Platform 10.2 • WebLogic Portal 10.2 • AquaLogic Service Bus (ALSB) 3.0 • AquaLogic Integrator (ALINT) 3.0
Workaround			When reinstalling ALDSP 3.2, choose a new <BEAHOME> directory.
CR354149	**3.2**	**3.2**	**Alias names in user-defined SQL queries may be ignored when creating SQL query-based data services using non-core supported databases.**
Platform			All.
Description			JDBC version 4.0 slightly modified the semantics of the following methods: `java.sql.ResultSetMetadata.getCo` `java.sql.ResultSetMetadata.getCo` In JDBC 3.0 and earlier, the `getColumnName()` method returned aliases as specified by the SQL AS clause. In JDBC 4.0, the call instead returns the original column name, if available. Column aliases are available using the `getColumnLabel()` method.

Solution			Do the following: 1. Create a custom XML provider. 2. Set the following attribute: `custom-rdb-provider/database-obje` Set the attribute to `column-label` to have the driver use the `getColumnLabel()` method to retrieve the alias (or actual name if there is no alias). Set the attribute to `column-name` to have the driver use the `getColumnName()` method. ⚠ The attribute is optional; if it is not present then the value of the parent provider is used. Note that AbstractSQLProvider uses the `getColumnName()` method.
CR359755	**3.2**		**Stored procedures may return an incorrectly rounded value for the MONEY datatype using the BEA SQL Server JDBC driver.**
Platform			All (using BEA SQL Server JDBC driver).
Description			When using the BEA SQL Server JDBC driver, stored procedures may incorrectly round MONEY datatype values. For example, consider

			the following stored procedure:
			`ALTER PROCEDURE [wireless].[SP_SMALLMONEY_OUT] ( @P_ID VARCHAR(10), @P_SMALLMONEY SMALLMONEY OUT ) AS BEGIN SELECT @P_SMALLMONEY = C_SMALLMONEY FROM ALL_DATATYPES WHERE C_ID = @P_ID END`
			Using an original value of 234.4000 in the database, the BEA SQL Server driver returns the following incorrect value:
			`234`

Workaround			Contact BEA Customer Support to request the BEA SQL Server JDBC Driver Version 3.4.0057. Alternatively, use the Microsoft SQL Server JDBC driver.
CR361824	**3.2**		**A source upgrade of a Workshop 8.1 JWS to Workshop 10 may cause failures when communicating with old clients.**
Platform			All.
Description			A source upgrade of a Workshop 8.1 JWS to Workshop 10 may generate different WSDL definitions and cause failures when communicating with old clients.
Workaround			There are several functionality changes between Workshop 8.1 JWS and Workshop 10 JWS implementations.

			Refer to the following link to identify and resolve source upgraded jws files in Workshop 10: http://edocs.bea.com/wlw/docs102/gu
CR362948	**3.2**		**The `fn-bea:delete()` and `fn-bea:replace-value()` XQuery mutator functions generate an error when the path contains '//' in the final level.**
Platform			All.

Description			When using the `delete()` or `replace-value()` XQuery mutator functions, the system generates an error if the path ends with `//@attribute` or `//element_of_a_simple_type`. Consider the following procedure:
			`declare procedure tns:test_delete_path_descendant-c { declare $cust as element(xs1:Customer) := ds1:getCustomerById(3); declare $ce as changed-element(xs1:Customer); set $ce := fn-bea:enable-changes($cust); set $ce := fn-bea:delete($ce, './/@USE'); ds1:updateCustomer($ce); }`
			The procedure generates the following error because `.//@USE` is used to specify the path when calling the `fn-bea:delete()` function:
			`{bea-err}MUT007: Could not construct an XPath that selects the parent node for XPath ".//@USE"`

			Note that the path can contain '//' but not preceding the final level in the path. For example, the following is valid:
			`x//y/z`
			But, the following generates an error:
			`x//z`
			Note also that you can specify `//element_of_a_complex_type` at any level.

Workaround			None.
CR362224	**3.2**		**ALDSP 3.2 does not push down operations on BIT datatypes.**
Platform			All (using Microsoft SQL Server and Sybase).
Description			Unlike ALDSP 3.0, ALDSP 3.2 does not push down operations on BIT datatypes when using Microsoft SQL Server or Sybase databases.
Workaround			None.
CR366180	**3.2**		**Tabular view in the Test tab of WorkSpace Studio 1.1 may incorrectly switch the display of @attr and element values.**
Platform			All.
Description			When displaying results in the Test tab of WorkSpace Studio 1.1, an element value may appear in the @attr column and the @attr

			value may appear in place of the first element.
Workaround			Use the Tree view or Text view to display the results.
CR364732	**3.2**		**Using complex types with simple content from an ALDSP 3.2 client to an ALDSP 3.0 server may generate an optimistic locking failure errors.**
Platform			All.
Description			Using complex types with simple content from an ALDSP 3.2 client and serializing it to an ALDSP 3.0 server may generate an optimistic locking failure due to incorrect processing of the change summary on the ALDSP 3.0 server.
Workaround			Upgrade the ALDSP 3.0 server to an ALDSP 3.2 server if using complex type with simple content.
CR366431	**3.2**		**Business Objects and Crystal Reports Table Browser displays the same column name multiple times.**
Platform			All.
Description			Publishing data service functions to a SQL map using the same table name in multiple schemas can cause certain reporting tools, such as Business Objects and Crystal Reports, to display the same column name multiple times (as many times as the table is published) in the Table

			Browser user interface.
Workaround			Do not use the same table name in multiple schemas when publishing data service functions to a SQL map.
CR365752	**3.2**		**Data Services Studio user interface behavior is replaced with Workspace Studio after installing ALDSP 3.2 in an existing ALDSP 3.0 BEA_HOME directory.**
Platform			All.
Description			When installing ALDSP 3.2 in the same BEA_HOME directory as a current installation of WebLogic Server 9.2.2 and ALDSP 3.0, the installation application recognizes the presence of Data Services Studio (Eclipse 3.2.2) and installs new plug-ins for both WorkSpace Studio 1.1 and Data Services Studio. After the installation is complete, the Data Services Studio user interface behavior is replaced with Workspace Studio.
Workaround			Install ALDSP 3.2 in a new BEA_HOME directory.
CR365527	**3.2**		**ALDSP classpath patch does not appear in the server logs.**
Platform			All.
Description			After using the BEA Smart Update tool to install the ALDSP classpath patch, a record of the patch does not appear in the server logs.

Workaround			To get the patch information, do the following:
			1. Set the domain path by running:
			`setDomainEnv.cmd`
			or
			`setDomainEnv.sh`
			2. Run the `java weblogic.version -verbose` command to print the version. The output appears similar to the following:
			`WebLogic Server Temporary Patch for CR345472 Thu Jan 17 16:13:48 EST 2008 ImplVersion: 10.0.1.0WebLogic Server Temporary Patch for CR322355 Tue Oct 23 10:53:45 PDT 2007 ImplVersion: 10.0.1.0AquaLogic DataServices Platform 3.2 10.0 SP1 2008-03-21 15:32:50 PDT Patch for CR365525 ImplVersion: 10.0.1.0`

CR357742	**3.0**	**3.2**	**Unable to start the AquaLogic Data Services Platform 3.0 sample domain from the QuickStart page.**
Platform			All.
Description			When attempting to launch the ALDSP 3.0 sample domain by clicking the "Start AquaLogic Data Services Platform 3.0" link on the QuickStart page, a pop-up window

			appears displaying the following message: `The link to this application has not been implemented yet. Check this out later!`
Workaround			Click Start -> BEA Products -> BEA AquaLogic Data Services Platform -> Examples -> Start Examples Server to start the sample domain.
CR258884	**3.0**		**Security filter decisions are not audited.**
Platform			All.
Description			Security filter decisions (XQuery functions for security) are not audited.
Workaround			None.
CR345482	**3.0**		**Hyperion Interactive Reporting System is not supported.**
Platform			All.
Description			ALDSP 3.0 does not support the Hyperion Interactive Reporting System.
Workaround			None.
CR339279	**3.0**		**Upgrading ALDSP 2.5 projects that include multibyte characters may generate errors and produce garbled characters.**
Platform			All.
Description			When upgrading an ALDSP 2.5 project that includes multibyte characters to ALDSP 3.0, the following error may appear in the log

			view:
			`'Some characters cannot be mapped'`
			Similarly, when opening the updated data service file, the following error may appear:
			`'Exception Message: 'Some characters cannot be mapped 'MS932'`
			Garbled characters may also appear in the data service file.

Workaround			The data service file was properly upgraded. Reopen the data service file to have the multibyte characters appear properly.
CR266307	**3.0**		**Namespace URIs can become invalid when using file and folder names containing embedded spaces.**
Platform			All.
Description			ALDSP does not support file and folder names containing one or more embedded spaces. This can cause namespace URIs to become invalid during certain operations such as a Refactor > Move and Refactor > Rename, among others.
Workaround			Do not create file or folder names containing embedded spaces.
CR350103	**3.0**		**ALDSP license changes unexpectedly after installing a new version.**
Platform			All.

Description			ALDSP uses the first license found in the AquaLogic Data Services Platform license group (in the license.bea file). If you install multiple versions of ALDSP, your license may change unexpectedly because of the order of the licenses, as shown in the following segment: `<license-group format='1.0' product='AquaLogic Data Services Platform' release='3.0'> <license component='Data Services Runtime' cpus='unvalued' expiration='2008-01-28' ip='any' licensee='BEA Evaluation Customer' signature='ZgOAWQ...' type='EVAL' units='5' /> <license component='Data Services Runtime' cpus='unvalued' expiration='2008-06-04' ip='any' licensee='BEA Evaluation Customer' serial='616351266349-23435327998`  `signature='MC4CFQ...' type='EVAL' units='unlimited' /> </license-group>` Note that in this example, the number of "units" in the license changes from an unlimited number to five.
Workaround			If you have multiple versions of ALDSP installed, do the following: 1. Verify that the most flexible license appears first in the

			AquaLogic Data Services Platform license group (in the license.bea file). 2. Restart the server.
CR346860	**3.0**		**ALDSP 2.5 SDOGen Web service clients need additional steps to run in backward compatibility mode.**
Platform			ALDSP 2.5
Description			ALDSP 2.5 Web service clients that use static SDOGen do not work out-of-the-box after the ALDSP server and the DSP Control/JWS is source upgraded.
Workaround			To use static SDOGen Web service clients, do the following: 1. In the source upgraded JWS file, modify the portName attribute of the @WLHttpTransport annotation and ensure that it matches the entry present in the 8.1 generated WSDL. 2. Generate the WSDL file for the JWS and save the file to a local disk. 3. Remove the parameterOrder attribute from the WSDL file. 4. Use the saved WSDL file in the client instead of the WSDL file dynamically available from the JWS. For example, consider the following WebLogic

			8.1 call:
			`String wsdl = 'http://acme/services/CustReadCtr soapCtrl = new weblogic.jws.proxies.CustReadCtr`
			Modify the statement to match the following:
			`String wsdl ='file://local/services/CustReadC weblogic.jws.proxies.CustReadCtr soapCtrl = new weblogic.jws.proxies.CustReadCtr`

CR351310, CR351492	**3.0**		**Missing entries in the generation log.**
Platform			All.
Description			The generation log may not contain entries for target entities that cannot be updated. In this case, the update map may be incomplete.
Workaround			None.
CR337329	**3.0**		**Running ALDSP 3.0 in the same domain as WebLogic Integration (WLI) 9.2 can cause conflicts.**
Platform			ALDSP 3.0 and WebLogic Integration 9.2
Description			ALDSP 3.0 and WLI 9.2 install incompatible versions of the xquery.jar file. The software installed by ALDSP 3.0 is a newer version and is not certified for use with WLI 9.2.
Workaround			Do not create a domain that is provisioned for ALDSP 3.0 and WebLogic Integration

			9.2.
CR354314	**3.0**	**3.2**	**Changes made to multiple dataspaces in a single session do not apply to all dataspaces at runtime.**
Platform			All.
Description			After acquiring a lock for a session, making changes to multiple dataspaces, and committing the session, the changes are reflected only in a single dataspace. Restarting WebLogic Server causes the changes to be reflected in all modified dataspaces.
Workaround			Make changes to only a single dataspace during a session. After committing the session, start a new session to make changes to another dataspace.
CR344413	**3.0**		**Importing an AquaLogic Service Bus (ALSB) SB proxy or accessing an ALSB SB proxy physical data service requires the ALSB sbresource servlet to be available.**
Platform			All.
Description			When importing web services that are routed through an ALSB SB proxy, ALDSP requests the SB proxy WSDL through the ALSB sbresource servlet. Similarly, when accessing a physical data service that was created using the ALSB SB proxy, the ALDSP runtime retrieves the SB

			proxy WSDL through the ALSB sbresource servlet. Both operations require that the ALSB sbreource servlet be available and running.
Workaround			Ensure that the ALSB sbreource servlet is deployed and running.
CR343216	**3.0**		**Oracle timestamp with time zone returns an incorrect value.**
Platform			Oracle 9i (using the BEA Oracle JDBC driver).
Description			The timestamp (with time zone) returned using the BEA Oracle JDBC driver may be incorrect.
Workaround			Use the native Oracle JDBC driver.
CR341851	**3.0**		**An upgraded JWS that returns an XMLBean type will not compile.**
Platform			Workshop for WebLogic Platform 9.2.2
Description			All operations on an upgraded JWS that returns an XMLBean type will have a compile error similar to the following after the upgrade: `The name 'getCustomerByIdResult' specified in javax.jws.WebResult is different to the XmlBean name of 'CUSTOMER'` The message indicates that the return type does not match the element name defined by the XMLBean schema.

Workaround			Remove the @WebResult annotation or change the name to match the schema type.
CR338622	**3.0**	**3.2**	**Test View in ALDSP does not perform full XML Schema validation of the results of an operation.**
Platform			All.
Description			Schema validation behavior has changed from ALDSP 2.x to ALDSP 3.0. Using ALDSP 2.x, schema validation occurs on the query return. In ALDSP 3.0, the validation is performed at the SDO structural level and does not constitute a full schema validation.
Workaround			During testing, temporarily wrap the function body using the XQuery validate construct to validate the results of calling the function against the XML Schema, as shown in the following example: `validate { xquery expression }`
CR342747	**3.0**		**Crystal Reports is unable to use read functions (accepting no parameters) published as stored procedures.**
Platform			Crystal Reports (using the JDBC driver).
Description			Using a read function (accepting no parameters) published as a stored procedure

			with Crystal Reports generates an exception similar to the following: `java.sql.SQLException: Invalid stored procedure reference: ReportingToolCertDataServices.Xtr at com.bea.dsp.jdbc.exceptions.DSPEx at com.bea.dsp.jdbc.driver.CallableD`
Workaround			Publish the read function without parameters as a table instead of a stored procedure.
CR345630	**3.0**		**The ALDSP 2.5 server side streaming API cannot be used in ALDSP 3.0 without modification.**
Platform			All.
Description			In ALDSP 2.5, the streaming API is available on the server side only when used in the same ALDSP 2.5 application as a local Mediator API client. ALDSP 3.0, however, no longer uses the J2EE deployment model for dataspace deployment. As a result, a client using the ALDSP 2.5 streaming API cannot be deployed inside an ALDSP 3.0 dataspace. Doing so results in the following exception: `javax.naming.LinkException.`
Workaround			ALDSP 3.0 supports the streaming API for all Java Mediator API clients (remote and local). Modify the streaming API client code to use the ALDSP 3.0 Java Mediator API

			and use the streaming facility in this API.
CR317803	**3.0**		**Unable to display data lineage graph using the Metadata Browser with Netscape 8.1.**
Platform			Microsoft Windows, Netscape 8.1
Description			When using Netscape 8.1, clicking the Data Lineage tab in the Metadata Browser may not display the data lineage graph nor prompt to download and install the SVG viewer.
Workaround			To view data lineage graphs using Netscape 8.1, do the following: 1. Close the Netscape browser. 2. Download and install SVG viewer plug-in. 3. Copy the NPSVG3.dll file to the <NetscapeHome>/plugins folder. 4. Restart the Netscape browser. Alternatively, you can use the tabular view of the Metadata Browser to display the data lineage.
CR343348	**3.0**		**The fn:doc() and fn-bea:collection() functions cannot be accessed using the client API.**
Platform			All.
Description			ALDSP 3.0 does not offer access to the fn:doc() and fn-bea:collection() functions through the

			client API. These functions can cause security vulnerabilities and are therefore blocked from client access. The functions are, however, available for use within data service XQuery bodies.
Workaround			None.
CR318031	**3.0**		**The Eclipse IDE displays the following error message: "An out of memory error has occurred."**
Platform			All.
Description			When working with the Eclipse IDE, an "Internal Error" dialog appears displaying the following error message: "An out of memory error has occurred...Do you want to exit the workbench?"

Workaround			Do the following:
			1. Edit the configuration file. When using the Data Service Studio to launch Eclipse, edit the $<ALDSP_HOME>/bin/aldsp.ini file. When using Eclipse independent of Data Service Studio, edit the eclipse.ini file.
			2. Specify the following memory parameters for the Eclipse IDE:
			`-vm`
			`<JDK_home>/jre/bin/java.exe`
			`-clean`
			`-vmargs`
			`-Xms256m`
			`-Xmx1024m`
			`-XX:PermSize=128m`

CR347480	**3.0**		**Upgrading an application to ALDSP 3.0 may produce the following error message: "This project needs to migrate WTP metadata."**
Platform			All.
Description			When upgrading an application from ALDSP 2.5 to ALDSP 3.0, the following error may appear under the Problems tab: `This project needs to migrate WTP metadata`
Workaround			This is an Eclipse error and can occur independent of ALDSP. Do the following: 1. Using Studio, rename the project. 2. Select the project in the Project Explorer and choose Project > Build Automatically from the main menu to toggle the feature off. 3. Select the project in the Project Explorer and choose Project > Clean from the main menu. 4. Close and relaunch Studio. 5. Optionally, rename the project to the original name. 6. Select the project in the Project Explorer and choose Project->Build Automatically from the main menu to

			toggle the feature on.
CR347074	**3.0**		**Changes to the database definition are not reflected in PreparedStatement calls or in the data service after updating the metadata.**
Platform			All.
Description			SQL queries use the PreparedStatement interface which, by default, is cached by the WebLogic Server. The default JDBC PreparedStatement cache size for is 10. This can result in incorrect prepared statements being used from the cache when database table or column definitions have changed between prepared statement calls.
Workaround			Set the PreparedStatement cache size to 0 when the database table definitions are changed. Using the WebLogic Server Administration Console, do the following: 1. Click to expand the Services, JDBC, and Connection Pool nodes to display the list of connection pools in the current domain. 2. Click the connection pool that you want to configure. A dialog displays in the right pane showing the tabs associated

			with this instance. 3. Click the Configuration tab, then click the Connections tab. 4. In Statement Cache Size, enter zero (0) for the number of statements to cache per connection per connection pool instance. 5. Click Apply to save your changes. 6. Reset the value of the PreparedStatement cache size to the original value.
CR297695	**3.0**		**An "optimistic locking failure" exception can occur if Oracle checks for an empty string when the actual value is null.**
Platform			Oracle
Description			Oracle stores both empty strings and null strings as NULL, and both are always returned as NULL which may cause an optimistic locking error during an update operation. Consider the following mapping: `<SomeElement>{ data($db_row/VARCHAR_COLUMN)}</So` where VARCHAR_COLUMN is a database column of VARCHAR type. In this case, the element is always created even when the column value is NULL. An SDO mapping would therefore map an empty

			element to the empty string value "". When the updated element is submitted to the database, the following exception occurs: DataServiceException: Optimistic locking failure The exception occurs because the DSP-generated SQL statements instruct Oracle to check for an empty string when the actual value is NULL.
Workaround			Map the column to an optional element, as shown in the following: `<SomeElement?>{ data($db_row/VARCHAR_COLUMN)}</So` This ensures that the element is not created if the column value is NULL.
CR345834	**3.0**		**Expensive functions in LET clauses, such as calls to web services, may be invoked multiple times resulting in degraded performance.**
Platform			All.
Description			XQuery 3.0 inlines LET clauses that are used only once. This can affect the number of times an expensive function, such as a web service, is called. For example, consider the following query: `declare function tns:test($id1 as xs:string, $id2 as xs:string ){ let $order1 := tes:getOrder($id1)/OrderDetail`

			<pre>let $order2 :=
			  for $x in
			tes:getOrder($id2)/OrderDetail
			  return
			  <ORDER>
			<ORDER_ID>{fn:data($x/stns:order
			  </ORDER>
			
			  for $o1 in
			$order1
			  return
			  <ORDER>
			<ORDER_ID>{fn:data($o1/stns:orde
			<ORDER_DATE>{fn:data($o1/stns:or
			<TOTAL_ORDER_AMOUNT>
			  {
			fn:data($o1/stns:totalOrderAmount
			}</TOTAL_ORDER_AMOUNT>
			  <STATUS>
			  {
			$order2[$o1/stns:orderDate
			=
			$o1/stns:estimatedShipDate]
			}</STATUS>
			  </ORDER>
			};</pre>
			In this example, ALDSP 3.0 inlines both $order1 and $order2 since each are used only once after being defined. This causes the system to perform repeated evaluations of the web service calls as part of the FOR clause (instead of retrieving the saved values from the variables) resulting in degraded performance.

Workaround			Configure ALDSP to prevent the inlining of expensive LET clauses in loops by doing the following: 1. Set the following system property to false: <pre>weblogic.xml.query.compiler.INLIN</pre> 2. Restart the WebLogic Server. By default this property is set to true (which is also the default behavior of ALDSP 2.5).

CR314392	**3.0**		**An exception occurs when deploying an ALDSP 3.0 application generated using Workshop for WebLogic 9.2 MP1 or earlier.**
Platform			ALDSP 3.0, Workshop for WebLogic 9.2 MP1 or earlier.
Description			An exception can occur when deploying an ALDSP 3.0 application (using the Admin Console) using a WSDL file generated from Workshop for WebLogic 9.2 MP1 or earlier. ALDSP does not support WSDL files generated using Workshop for WebLogic 9.2 MP1 or earlier.
Workaround			Generate the WSDL using Workshop for WebLogic 9.2 MP2 and then rebuild and redeploy the application.
CR321293	**3.0**		**The server is unable to locate a referenced schema file specified using the Eclipse XSD Editor.**
Platform			Eclipse XSD Editor on Microsoft Windows
Description			Microsoft Windows does not distinguish case in file and folder names. Therefore, the Eclipse XSD Editor on Microsoft Windows will not flag an error when you specify a schema file name using incorrect case. For example, the editor will not flag the following entry when the actual schema file name is ProfileView.xsd:

			`<xsd:import namespace="urn:test" schemaLocation="profileView.xsd"/`
Workaround			Verify the case when referencing schema file names using the Eclipse XSD Editor on Microsoft Windows.
CR327132	**3.0**		**A schema is generated with "minOccurs=0" for all columns, not just columns that are not null.**
Platform			Informix (using BEA XA and BEA Non-XA JDBC drivers).
Description			When creating a schema using an Informix database with either BEA XA or BEA Non-XA drivers, a schema is generated with "minOccurs=0" for all columns, not just columns that are not null.
Workaround			None.
CR327305	**3.0**		**The nativeSize of data types appears as zero (0) after importing tables using Sybase drivers.**
Platform			Sybase (using Sybase JDBC drivers)
Description			When using Sybase drivers, the nativeSize of data types appear as zero (0) after importing tables, as shown in the following sample output: `xquery version "1.0" encoding "WINDOWS-1252"; (::pragma xds <x:xds xmlns:x="urn:annotations.ld.bea.c targetType="t:sqlQuery"`

			<pre>xmlns:t="ld:SY/datasource/TC_SQLW
			<creationDate>yyyy-mm-ddThh:mm:ss
			<relationalDB
			name="datasource"
			providerId="Sybase-12.5.2"/>
			<field
			xpath="FIRST_NAME"
			type="xs:string">
			<extension
			nativeXpath="FIRST_NAME"
			nativeType="varchar"
			nativeTypeCode="12"
			nativeSize="0"
			nativeFractionalDigits="0"/>\\
			<properties
			nullable="false"/>
			</field>
			<field
			xpath="LAST_NAME"
			type="xs:string">
			<extension
			nativeXpath="LAST_NAME"
			nativeType="varchar"
			nativeTypeCode="12"
			nativeSize="0"
			nativeFractionalDigits="0"/>\\
			<properties
			nullable="false"/>
			</field></pre>

Workaround			Use the BEA Sybase JDBC drivers.
CR327820	**3.0**		**Certain SQL queries may generate a schema with a missing element name.**
Platform			Sybase

Description			When using Sybase, SELECT statements similar to the following may generate schemas with a missing element name:
			<pre>SELECT
			t1.PRODUCT_ID,
			sum(t2.QUANTITY)
			FROM PRODUCT t1
			JOIN
			CUST_ORDER_LINE_ITEM_APPL
			t2 on
			(t1.PRODUCT_ID =
			t2.PRODUCT_ID)
			GROUP by
			t1.PRODUCT_ID</pre>

Workaround			Specify aliases for the columns in the SQL statements. For example, you could rewrite the previous SELECT statement as

			follows: `SELECT t1.PRODUCT_ID as PRODUCT_ID, sum(t2.QUANTITY) as QUANTITY FROM PRODUCT t1 JOIN CUST_ORDER_LINE_ITEM_APPL t2 on (t1.PRODUCT_ID = t2.PRODUCT_ID) GROUP by t1.PRODUCT_ID`
CR328457	**3.0**		**The Oracle JDBC driver and the BEA Oracle JDBC driver return different lengths for CHAR output parameters in stored procedures.**
Platform			Oracle (using the Oracle JDBC driver and BEA Oracle JDBC driver).
Description			The Oracle driver and the BEA Oracle driver may return different lengths for CHAR output parameters in stored procedures. For example: `CREATE OR REPLACE PROCEDURE MYPROCEDURE1(P_CHAR_OUT OUT CHAR) ...<procedure_body>...` In this example, P_CHAR_OUT is the output parameter returned by the stored procedure.
Workaround			None.
CR328861	**3.0**		**Ad-hoc queries in DSP controls that return XML that does not conform to the declared XML type generate an exception.**
Platform			All.
Description			When writing ad-hoc queries in a DSP

			control, if the ad-hoc query returns XML that does not conform to the declared XML type, the following exception is generated while marshalling the SDO data object.
			`java.lang.IllegalArgumentExceptio`
			`A type with this name 'ADDRESS_TYPE@urn:schemas-bea-cor already exists in this type system.`
			`<ComponentHandler.handleRequest:1`
			`java.lang.IllegalArgumentExceptio`
			`A type with this name 'ADDRESS_TYPE@urn:schemas-bea-cor already exists in this type system.`

Workaround			Ensure that ad-hoc queries in DSP controls conform to the XML schema for the return type.
CR331184	**3.0**		**An exception occurs while parsing a NEIM schema.**
Platform			All.

Description			An XmlException exception similar to the following may occur while parsing a NEIM schema (when attempting to create a data service and associated schema, for example):
			`org.apache.xmlbeans.XmlException`
			`D:\Eclipse Workspaces\DSPDemo\NEIM\Schema\le`
			`error: Problem parsing referenced XML resource - D:\Eclipse Workspaces\DSPDemo\NEIM\Schema\le`
			`error: Unexpected element: CDATA`
			`at org.apache.xmlbeans.impl.schema.S`
			This may be caused by extra newline and whitespace characters at the end of the file.

Workaround			Remove any newline or whitespace characters from the end of the NEIM schema file.
CR332755	**3.0**		**An exception can occur when using the ALDSP 2.5 JDBC driver with ALDSP 3.0 applications.**
Platform			All.
Description			When attempting to get a connection using the ALDSP 2.5 JDBC driver (ldjdbc.jar) with an ALDSP 3.0 application, an IncompatibleClassChangeError exception can occur similar to the following: `Exception in thread "main" java.lang.IncompatibleClassChange Implementing class at java.lang.ClassLoader.defineClass Method) at java.lang.ClassLoader.defineClass at java.security.SecureClassLoader.d`
Workaround			Contact BEA Customer Support to request the patch for CR333047 (patch file: CR333047_810sp6.jar) and add the file to your client classpath.
CR333489	**3.0**		**XQueries may return an incorrect timestamp using the BEA XA driver.**
Platform			Oracle (using the BEA XA JDBC driver).
Description			The BEA XA driver may return an incorrect timestamp when issued a query similar to the following: `<result> { for $i in`

			f1:DATA_TIMESTAMP_ZONE()
			return
			<row>
			{$i/C_ID}
			{
			if
			(fn:data($i/C_TIMESTAMP_ZONE_3)
			instance of
			xs:dateTime) then
			<C_TIMESTAMP_ZONE_3>
			<type>TIMESTAMP_ZONE</type>
			<xmltype>xs:dateTime</xmltype>
			<data>{fn:data($i/C_TIMESTAMP_ZON
			</C_TIMESTAMP_ZONE_3>
			else
			<C_TIMESTAMP_ZONE_3></C_TIMESTAMP
			}
			</row>
			}
			</result>
			
			In this example, the expected return value is the following:
			<C_TIMESTAMP_ZONE_3>
			<type>TIMESTAMP_ZONE</type>
			<xmltype>xs:dateTime</xmltype>
			<data>1999-04-15T08:00:00-07:00</
			</C_TIMESTAMP_ZONE_3>
			
			The BEA XA driver instead returns the following:
			<C_TIMESTAMP_ZONE_3>
			<type>TIMESTAMP_ZONE</type>
			<xmltype>xs:dateTime</xmltype>
			<data>1999-04-09T17:20:00+09:00</
			</C_TIMESTAMP_ZONE_3>

Workaround			Use the Oracle native XA JDBC driver.
CR333689	**3.0**		**XQueries may return inconsistent results using the BEA XA driver.**
Platform			Oracle (using the BEA XA JDBC driver).
Description			The BEA XA driver may return inconsistent results when issued a query similar to the following: declare namespace ns = "ld:test/RDBMS/OR-CR/DATA_NUMBER" declare namespace ns1 = "ld:test/RDBMS/OR-CR/DATA_FLOAT" declare namespace

```
ns2 =
"ld:test/RDBMS/OR-CR/DATA_NUMBER_
declare namespace
ns3 =
"ld:test/RDBMS/OR-CR/DATA_NUMBER_
declare variable
$ext as xs:decimal
external;

<result>
{
   <column>
   {
      let $x :=
for $y in
ns:DATA_NUMBER()
      where
($y/C_ID  mod 2)
ne 0
      return
$y/C_NUMBER mod
$y/C_ID
         return(
            <all>
<test1>{$x}</test1>
<sql>{fn-bea:get-sql($x)}</sql>
            </all>
         )
      }
   </column>
}
{
   <const>
   {
      let $x :=
for $y in
ns1:DATA_FLOAT()
      where
$y/C_ID gt
($y/C_FLOAT mod 2)
      return
fn:concat(
xs:string($y/C_ID),
xs:string( 5 mod
4))
         return(
            <all>
<test2>{$x}</test2>
<sql>{fn-bea:get-sql($x)}</sql>
            </all>
         )
      }
   </const>
}
{
   <func>
   {
      let $x :=
for $y in
ns2:DATA_NUMBER_N_S()
      where
fn:string-length(xs:string($y/C_
eq fn:abs( -5 mod
4)
      return
fn:concat(
xs:string($y/C_NUMBER_38_38
), xs:string(4 mod
5))
         return(
            <all>
<test3>{$x}</test3>
<sql>{fn-bea:get-sql($x)}</sql>
            </all>
         )
      }
   </func>
```

```
}
{
   <join>
   {
      let $x:= for
$y in
ns:DATA_NUMBER()
      for $z in
ns2:DATA_NUMBER_N_S()
      where
$y/C_ID eq $z/C_ID
      return
$y/C_NUMBER mod
$z/C_NUMBER_38_38
         return(
            <all>
<test1>{$x}</test1>
<sql>{fn-bea:get-sql($x)}</sql>
            </all>
         )
   }
   </join>

}
{
   <orderby>
   {
      let $x:= for
$y in
ns:DATA_NUMBER()
      where true()
      order by
$y/C_ID mod
$y/C_NUMBER
      return
$y/C_ID mod
$y/C_NUMBER
         return(
            <all>
<test1>{$x}</test1>
<sql>{fn-bea:get-sql($x)}</sql>
            </all>
         )
      }
   </orderby>
}
</result>
```

In this example, the expected return value is the following:

```
<result><column><all><test1>1.1E-
2.33</test1><sql>SELECT
MOD(t1.'C_NUMBER',CAST(t1.'C_ID'
AS NUMBER)) AS c1
FROM
'CRM'.'DATA_NUMBER'
t1
WHERE
(MOD(t1.'C_ID',2)
!=
0)</sql></all></column><const><a
21
31</test2><sql>SELECT
(TO_CHAR(t1.'C_ID')
|| '1') AS c1
FROM
'CRM'.'DATA_FLOAT'
t1
WHERE
(CAST(t1.'C_ID' AS
```

```
NUMBER) &gt;
MOD(t1.'C_FLOAT',2.0))</sql></al
.1234
.14</test3><sql>SELECT
(TO_CHAR(t1.'C_NUMBER_38_38')
|| '4') AS c1
FROM
'CRM'.'DATA_NUMBER_N_S'
t1
WHERE
(NVL(LENGTH(TO_CHAR(t1.'C_ID')),0
=
1)</sql></all></func><join><all><
-1.1E-30
0.03</test1><sql>SELECT
MOD(t1.'C_NUMBER',CAST(t2.'C_NUMB
AS
NUMBER)) AS c1
FROM
'CRM'.'DATA_NUMBER'
t1
JOIN
'CRM'.'DATA_NUMBER_N_S'
t2
ON (t1.'C_ID' =
t2.'C_ID')</sql></all></join><ord
9.0E-31
0.67</test1><sql>SELECT
MOD(CAST(t1.'C_ID'
AS
NUMBER),t1.'C_NUMBER')
AS c1
FROM
'CRM'.'DATA_NUMBER'
t1
ORDER BY
MOD(CAST(t1.'C_ID'
AS
NUMBER),t1.'C_NUMBER')
ASC</sql></all></orderby></result
```

The BEA XA driver instead returns the following:

```
<result><column><all><test1>1.1E-
2.33</test1><sql>SELECT
MOD(t1.'C_NUMBER',CAST(t1.'C_ID'
AS NUMBER)) AS c1
FROM
'CRM'.'DATA_NUMBER'
t1
WHERE
(MOD(t1.'C_ID',2)
!=
0)</sql></all></column><const><al
21
31</test2><sql>SELECT
(TO_CHAR(t1.'C_ID')
|| '1') AS c1
FROM
'CRM'.'DATA_FLOAT'
t1
WHERE
(CAST(t1.'C_ID' AS
NUMBER) &gt;
MOD(t1.'C_FLOAT',2.0))</sql></al
.1234
.14</test3><sql>SELECT
(TO_CHAR(t1.'C_NUMBER_38_38')
|| '4') AS c1
FROM
```

			<pre>'CRM'.'DATA_NUMBER_N_S'
			t1
			WHERE
			(NVL(LENGTH(TO_CHAR(t1.'C_ID')),
			=
			1)</sql></all></func><join><all>
			-1.1E-30
			0.03</test1><sql>SELECT
			MOD(t1.'C_NUMBER',CAST(t2.'C_NUME
			AS
			NUMBER)) AS c1
			FROM
			'CRM'.'DATA_NUMBER'
			t1
			JOIN
			'CRM'.'DATA_NUMBER_N_S'
			t2
			ON (t1.'C_ID' =
			t2.'C_ID')</sql></all></join><ord
			9.0E-31
			0.67</test1><sql>SELECT
			MOD(CAST(t1.'C_ID'
			AS
			NUMBER),t1.'C_NUMBER')
			AS c1
			FROM
			'CRM'.'DATA_NUMBER'
			t1
			ORDER BY
			MOD(CAST(t1.'C_ID'
			AS
			NUMBER),t1.'C_NUMBER')
			ASC</sql></all></orderby></result</pre>

Workaround			Use the Oracle native XA driver.
CR334116	**3.0**		**RequestConfig.OUTPUT_FILENAME and invokeToFile() causes a DASException to occur.**
Platform			All.
Description			The RequestConfig.OUTPUT_FILENAME capability has been removed from ALDSP 3.0. Similarly, the mediator function invokeToFile() is no longer available in ALDSP 3.0 Note that the RequestConfig.OUTPUT_FILENAME flag is still available to ensure backward compatibility with certain methods, however, the feature is no longer supported in ALDSP 3.0 and causes the DASException to occur if used.

Workaround			None.
CR324401	**3.0**		**Binary string datatype parameters to DB2 stored procedures may cause an exception to occur.**
Platform			DB2
Description			Using binary string datatype parameters (for bit data) with DB2 stored procedures may cause an XQueryTypeException similar to the following to occur: `Caused by: weblogic.xml.query.exceptions.XQ [ad-hoc], line 3, column 39: {err}XP0004: Invalid static type: {http://www.w3.org/2001/XMLSchema at weblogic.xml.query.compiler.TypeM at weblogic.xml.query.compiler.Expre`
Workaround			Do not use binary string datatype parameters with DB2 stored procedures.
CR329108	**3.0**		**Projects are not listed when added during new server configuration.**
Platform			All.
Description			Projects do not appear under a configured server in the Server View when you complete the following steps: 1. You create a new server and then delete the server (maintaining the configured runtime). 2. You create a new dataspace runtime

			(the target runtime is defined but not the target deployment server). 3. You add a new server using the same runtime created earlier. 4. You add the project while creating the server.
Workaround			When adding the project, click 'Finish' on the 'Add and Remove Projects' screen instead of 'Click Next and Finish.'
CR339199	**3.0**		**SQL substitution statements do not work in applications migrated from ALDSP 2.5 to ALDSP 3.x dataspaces.**
Platform			All.
Description			SQL substitution statements created for ALDSP 2.5 may no longer work after the application is migrated to an ALDSP 3.0 dataspace. This is because the original SQL statements may have changed between ALDSP 2.5 and ALDSP 3.0.
Workaround			When migrating applications from ALDSP 2.5 to ALDSP 3.0 dataspaces, recreate and test any SQL substitution statements.
CR351305	**3.0**		**Microsoft Visual Studio displays an error when referencing data service libraries containing functions**

			that return item().
Platform			Microsoft Visual Studio/ADO .NET
Description			ADO .NET does not support WSDL files that use xs:anyType as the return value. Since ALDSP converts functions that return item() to anyType*, Visual Studio displays an error similar to the following when attempting to reference data services containing these types of functions: `Custom tool error: Unable to import WebService/Schema. Unable to import binding 'librarySoapBinding' from namespace 'ld:Logical/library_ws'. Unable to import operation 'XqueryNoInputOutput'. The element, XqueryNoInputOutputResponse, from namespace, ld:Logical/library_ws, was imported in two different contexts: (StructMapping, MembersMapping).`
Workaround			Do not .NET-enable data service functions that return item().
CR349648	**3.0**		**ADO.NET cannot handle a WSDL file that has multiple Schema type sections importing types in an identical target namespace.**
Platform			All.
Description			ALDSP can generate WSDL files that have multiple type sections referring to an identical target namespace. Although this is a legitimate WSDL file,

			ADO.NET is unable to process this type of WSDL file. The following provides a couple of situations in which you may encounter this ADO.NET limitation: • A web services map refers to functions in a data service with a key, thereby bringing in the return type schema and key schema. Typically the return type schema and key schema are in the same namespace. The resulting WSDL file would therefore have a type section for each schema while the namespace for both type sections would be identical. • A web services map refers to a set of data service files that have return types in the same namespace. This would also result in a WSDL file that would have a type section for each schema while the namespace for both type sections would be identical. Similarly, there are other scenarios that can result in this situation.
Workaround			Do one of the following: • Associate a user-created EDS key that does not have the same

			namespace as the return type namespace. • Expose functions and procedures that do not have keys. • Limit web service maps to a single data service so that the resulting WSDL file does not include multiple types with an identical target namespace.
CR349102	**3.0**		**XQSE procedures and functions do not support element-level security.**
Platform			All.
Description			Read-only library functions and non-read-only library procedures of a data service do not support element-level security. Element-level and data-driven security apply only to read and navigate functions.
Workaround			As an alternative to element-level security, you can make relevant XQSE functions and procedures protected or private, and write a single-line XQuery wrapper function for functions and procedures that you need to make public.
CR348492	**3.0**		**Eclipse-based tools are installed on Solaris and HP/UX-based systems even though they are not officially supported on these platforms.**

Platform			Solaris and HP/UX.
Description			In silent/console mode, the AquaLogic Data Services Platform installer application installs Eclipse on Solaris and HP/UX-based systems and creates links to the client tools.
Workaround			Do not use the tools on Solaris and HP/UX-based systems. The ALDSP Eclipse-based IDE tools are supported on Microsoft Windows and Linux-based platforms. The tools are not supported on Solaris and HP/UX-based systems.
CR347980	**3.0**	**3.2**	**Missing vertical scroll bar in the Design View when viewing a schema tree.**
Platform			All.
Description			The vertical scroll bar does not appear when viewing a schema in the Design View if no functions exist. This is true even if the schema tree expands beyond the currently displayed view.
Workaround			Adding a function displays the scroll bar.
CR347865	**3.0**		**The tree display in the Test View may not display fonts correctly on Linux-based systems.**
Platform			Linux.
Description			When using AquaLogic Data Services Platform on Linux-based systems, the default Linux font size may

			render text in the tree display of the Test View too large, resulting in labels that are vertically clipped.
Workaround			Decrease the default Linux desktop application font size to 8 point or smaller by choosing Application > Preferences > Font > Application Font. If you do not have the Application menu on your desktop, consult the Linux documentation on how to set application fonts.
CR346978	**3.0**		**Unable to specify a key for certain types of entity data services.**
Platform			All.
Description			When attempting to manually select the fields to specify the key for a web-service-based data service, the AquaLogic Data Services Platform (Eclipse ALDSP perspective) may display an "Invalid Key Specified" dialog indicating that the system cannot save the schema file.
Workaround			To specify the key for a data service, the following conditions must be met: • The key schema element must be in the same namespace as the EDS return type namespace. • The key schema element and the path selector elements must be

			in the same namespace as key schema element namespace.
CR346456	**3.0**		**The ALDSP perspective does not appear in Eclipse following installation of ALDSP.**
Platform			Eclipse
Description			A pre-installed version of Eclipse configured to use JDK1.4 will not be able to detect an ALDSP installation.
Workaround			When using a pre-installed version of Eclipse, configure Eclipse to use JDK 150_10 or higher.
CR339726	**3.0**		**Deploying a dataspace with name longer than 64 characters is not supported.**
Platform			All.
Description			Dataspace names are limited to 64 characters. Attempting to deploy a dataspace with a name longer than 64 characters causes a 'Name not valid' message to appear in the ALDSP Console.
Workaround			Use dataspace names with fewer than 64 characters.
CR339900	**3.0**		**An illegal URI error message is displayed when creating a new logical data service.**
Platform			All.
Description			When creating a new logical data service, including preceding or embedded spaces in the schema file or folder

			name causes an illegal URI error message to appear, similar to the following: `ERROR: ld:JoinPattern/Logical/CustAddrCr line 9, column 125: {err}XQ0046: 'ld:JoinPattern/Logical/schemas/ CUSTOMER_ADDRESS_CREDIT_INNER_JOI illegal URI UpdatePattern/JoinPattern/Logical CustAddrCredit_1toM_1toM_Inner_Jo line 9 1188433233135 3403`
Workaround			Do not include preceding or embedded spaces in schema file and folder names.
CR352843	**3.0**		**AquaLogic Data Services Platform 3.0 requires two Workshop for WebLogic 9.2 MP2 patches to be applied following installation.**
Platform			Workshop for WebLogic 9.2 MP2
Description			Two required Workshop for WebLogic 9.2 MP2 patches are not automatically applied as part of the AquaLogic Data Services Platform 3.0 installation process. ⚠ This issue does not apply to ALDSP 3.2.
Workaround			After installing ALDSP 3.0, manually apply the following Workshop for WebLogic 9.2 MP2 patches using the smartupdate tool: • RQSU • PF7M The patches are in the 'downloaded' state after ALDSP

			3.0 installation. You must have Workshop for WebLogic 9.2 MP2 installed to apply the patches.
CR343891	**3.0**		**Asynchronous operations do not propagate the transaction context.**
Platform			All.
Description			Asynchronous web services and Java controls do not propagate the transaction context, regardless of the transaction requirements or settings (such as ReadTransaction). Asynchronous operations are likewise unable to start new transactions.
Workaround			None.
CR352226	**3.0**	**3.2**	**When performing certain tasks after adding an external function, an error message may appear.**
Platform			All.
Description			After adding an external function, one of the following errors may appear: • Clicking the Source tab may cause a "Resource is out of sync with the file system" error to appear. • Clicking the Source tab and modifying the code may cause the following update conflict error message to appear: "The file

			has been changed on the file system. Do you want to overwrite the changes?" • Right-clicking to delete an existing function from the Overview page may cause the following refactoring message to appear: 'The file "..." is out of sync with the underlying file system."
Workaround			Click Refresh in the Project Explorer. Alternatively, you can click "Yes" to overwrite the file.
CR338127	**3.0**	**3.2**	**Unable to display data lineage graph using Solaris-based web browsers.**
Platform			Firefox web browser on Solaris.
Description			The Solaris version of the Firefox web browser does not include a native SVG viewer or plug-in. Therefore, you cannot display a graphical view of the data lineage.
Workaround			Display the data lineage using the tabular view.
CR338237	**3.0**	**3.2**	**Unable to display data lineage graph using HP-UX-based web browsers.**
Platform			Firefox web browser on HP-UX.
Description			The HP-UX version of the Firefox web browser does not include a native SVG viewer or

			plug-in. Therefore, you cannot display a graphical view of the data lineage.
Workaround			Display the data lineage using the tabular view.
CR352805	**3.0**		**Unable to deploy Java projects upgraded using ALDSP 3.0.**
Platform			All.
Description			When upgrading Java projects (required by a data service) using ALDSP 3.0, the upgrade process adds Java 6.0 facets that makes the Java projects non-deployable in a WebLogic Server 9.2 MP2 environment.
Workaround			Do the following: 1. In the \.settings\org.eclipse.wst.commo file of the upgraded Java project, change the line <installed facet='jst.java' version='6.0'/> to <installed facet='jst.java' version='5.0'/>. 2. In the \.settings\org.eclipse.jdt.core.pre file of the upgraded Java project, change the value of the following properties from 1.6 to 1.5: • org.eclipse.jdt.core.compile • org.eclipse.jdt.core.compile • org.eclipse.jdt.core.compile
CR343934	**3.0**	**3.2**	**Starting to service administration requests on a deployed dataspace that is in the active state generates an**

			error.
Platform			All.
Description			When a deployed dataspace is already in the active state, clicking to start servicing administration requests causes a deployment exception to be logged and displays the following message: `EAR activation for dataspace '<name>' failed. Cause(s): - [Deployer:149156] Illegal state for operation start: 'STATE_ACTIVE'`
Workaround			Do not start servicing administration requests on a deployed dataspace that is in the active state. Instead, do the following: 1. Stop the dataspace. 2. Click to start servicing administration requests
CR352634	**3.0**		**Certain data service functions cannot be published as stored procedures.**
Platform			All.
Description			The following types of data service functions cannot be published as stored procedures: • Functions with side-effects (procedures) • Functions with a simple return type
Workaround			None.
CR333331	**3.0**		**SQL query generates**

			an "Extra characters at the end of a datetime or interval" error.
Platform			Informix, all UNIX (using the Informix XA JDBC driver).
Description			When using the native Informix XA driver, certain SQL queries may generate an "Error executing SQL query: Extra characters at the end of a datetime or interval" error, as shown in the following example: `Caused by: com.bea.ld.wrappers.rdb.exception [ad-hoc], line 10, column 1: {bea-err}RDBW0004: [ifrtl20ds]: [SELECT DISTINCT t1.cc_type AS c1 FROM rtlall_20:informix.credit_card t1, rtlall_20:informix.address t2 WHERE ((t1.customer_id = t2.customer_id) AND (t1.exp_date >= {ts '2007-01-01 00:00:00'}) AND (t2.city = 'San Jose'))]: Error executing SQL query: Extra characters at the end of a datetime or interval. at com.bea.ld.wrappers.rdb.exception`
Workaround	**3.0**		Use the BEA Informix JDBC driver.
CR344349			**A query produces an invalid XML character in the resulting document.**
Platform			DB2 (using the native DB2 JDBC driver).
Description			When using the native DB2 driver, a query may produce an invalid XML character

			(Unicode: 0x0) in the resulting document.
Workaround			Use the BEA DB2 JDBC driver.
CR345306	**3.0**		**SOAP 1.2 encoding not supported for ALDSP native web services.**
Platform			All.
Description			ALDSP supports SOAP 1.1 and 1.2, and uses the version to determine the type of SOAP binding to create during WSDL generation. The default is 1.1. SOAP 1.2 encoding is not supported. Encoding is an optional feature defined by the SOAP 1.2 specification.
Workaround			Create JAX-RPC handlers to handle encoded messages.
CR355266	**3.0**		**ALDSP 2.5 applications using JPD calls fail to work with ALDSP 3.0.**
Platform			All.
Description			ALDSP 3.0 does not support applications migrated from ALDSP 2.5 to ALDSP 3.0 that use JPD call outs in update overwrites.
Workaround			This feature is not available in ALDSP 3.0. Future versions of ALDSP will support this feature.
CR294861	**3.0**		**An exception occurs if a timestamp with time zone is fetched before LONG_RAW.**
Platform			All (using the Oracle JDBC driver).
Description			When using an Oracle

			database, if a timestamp with a time zone is fetched before a LONG_RAW a "... Stream has already been closed" exception occurs. This is consistent with the way Oracle handles LONG_RAW fetched before blob and clob.
Workaround			Reverse the fetch order of timestamp with time zone and LONG_RAW when using Oracle.
CR286359	**3.0**		**When importing or synchronizing metadata with an Oracle database, the native width of float elements may be incorrectly calculated.**
Platform			All (using the BEA Oracle JDBC driver).
Description			When importing or synchronizing metadata with an Oracle data source, the width of float elements may be rendered incorrectly (15 instead of 6 or 9). This problem has been observed when using the WebLogic JDBC Oracle driver (version 3.0.5.0).
Workaround			Metadata synchronization using Oracle's native JDBC driver (Oracle.jdbc.driver.OracleDriver) did not exhibit this problem. Therefore, if the width of native float elements is an issue use the Oracle JDBC driver.
CR292257	**3.0**		**Duplicate names are allowed when mapping stored procedures to data**

			services during metadata import.
Platform			All.
Description			The SQL name mapping user interface may allow more than one stored procedure with the same name to be configured under the same schema. However, if more than one stored procedure with the same name is configured, the user will see unexpected results in the JDBC metadata API and on execution of the procedures via JDBC.
Workaround			In the Publish Data Service Functions for SQL Use wizard, manually rename stored procedures so that there are no duplicate names.
CR291781	**3.0**		**Excel Add-in will initially attempt to reuse HTTP basic authentication login credentials for all Web services hosted on the same port.**
Platform			All.
Description			In cases where multiple Web services are configured in a single Excel worksheet, and these Web services are hosted by the same host machine and port number, the Excel Add-In will initially attempt to reuse the previously accepted username/password for these services. If the username/password is not valid for a particular Web service, a login

			dialog will be displayed. Subsequent Web service invocations during the same Excel session will use the correct login information for each service.
Workaround			No action has to be taken, unless it is not deemed acceptable that an attempt is made to authenticate a web service call initially with incorrect credentials. In such cases Web services requiring different credentials should be grouped in different servers OR Web services requiring different credentials hosted on the same host/port should be used on separate Excel worksheets.
CR290239	**3.0**		**Several underlying WSDL Element definition attributes and Attribute definition attributes are not currently supported in the AquaLogic Data Services Platform Excel Add-in.**
Platform			All.
Description			The following Element definition attributes are currently unsupported: • substitutionGroup • default • fixed • form • abstract • block • final The following Attribute definition attributes are currently unsupported:

			• default • fixed • form • abstract • block • final
Workaround			Any WSDL containing the definition attributes listed above may not function as expected. If problems are encountered, remove these definition attributes from your WSDL.
CR284834	**3.0**		**You need to maximize performance when accessing data in an Informix database through ALDSP.**
Platform			All using Informix database systems.
Description			The WebLogic Informix JDBC driver is less performant than the native Informix JDBC driver when accessing data through AquaLogic Data Services Platform.
Workaround			No workaround necessary, but for best performance with Informix data use the native JDBC driver.
CR279492	**3.0**		**When using a data service based on a Web service at runtime, a validation error may occur if form and/or elementFormDefault do not match. This happens because redefinition of the 'Form' attribute is not supported.**
Platform			All.
Description			At design time, if:

			• The elementFormDefault attribute in the primary schema does not match the elementFormDefault attribute in an imported or included schema, or • if the form attribute of an element does not match the elementFormDefault attribute in the primary schema then at runtime validation errors will occur when accessing Web service-based data services.
Workaround			The elementFormDefault in the primary schema and any imported or included schemas should match prior to compilation. Also, the form attribute of the element should match the elementFormDefault in the primary schema.
CR288384	**3.0**		**The Data Lineage feature in AquaLogic Data Services Platform administration console requires the X11 graphical environment in Linux and UNIX environments.**
Platform			UNIX and Linux
Description			The following error: `java.lang.NoClassDefFoundError: sun/awt/X11GraphicsEnvironment`

			may occur while accessing the Data Lineage feature of AquaLogic Data Services Platform Administration Console. The circumstances arise when the Administration Server hosting AquaLogic Data Services Platform Administration Console is running on a Linux or UNIX host with one of the following conditions (not an exhaustive list): • A headless environment is in use — for example, without monitor and/or X server. • With a monitor, but the user running the administration server is not the same user logged-in from the monitor, and therefore, does not have display permissions to the default display (:0.0).
Workaround			To resolve this issue, set the following headless property to true: `-Djava.awt.headless=true` The property can be found in the Weblogic Server startup script (startWeblogic.sh) in the section of the script where the server is started.
CR283262	**3.0**		**Unable to add criteria**

			to SQL when using MS Excel with EasySoft or OpenLink.
Platform			All.
Description			In Microsoft Query, adding a query criteria using the Add Criteria window, (Criteria ?Add Criteria) throws an error message when accessing AquaLogic Data Services Platform data sources.
Workaround			To work around this issue: 1. In the Microsoft Query window, select the Records menu option. If the Automatic Query option is checked, then clear this option. 2. Click View > Criteria. This will add a Criteria window to the query window into which you can enter appropriate criteria. 3. To execute query with the criteria added, click Records > Query Now.
CR264597	**3.0**		**String comparison operations involving MS-SQL (and Sybase) may return incorrect results when the comparison operation is computed by MS-SQL.**
Platform			All.
Description			See CR264597 Details
Workaround			See CR264597 Details
CR204243	**3.0**		**When casting**

			xs:decimal from an xs:integer or xs:long, resulting values may not be precisely correct.
Platform			All.
Description			As above.

Workaround			To avoid the possibility of an incorrect result use a string literal instead of an xs:integer literal. For example instead of:
			`xs:decimal( 9223372036854775807 )`
			use:
			`xs:decimal( "92233720368547758 07" )`

CR260587	**3.0**		**An exception during an SDO update operation can occur if the order of elements in the client diffgram is changed and the Validate option is active.**
Platform			All, using ADO.NET clients.
Description			Sometimes the order of elements in a diffgram changes, potentially leading to datagraph validation failure.
Workaround			If possible, turn off validation for the operation.
CR265950			**End-point name changes do not take effect for operations in document style Web services.**
Platform			All.

Description			Document style Web services use input (call parameter) types to determine the Web service operation being invoked. The operation name is not included in the SOAP request. For this reason, overwriting the operation name as part of an end point change does not work for document style Web services.
Workaround			None.
CR256214	**3.0**		**Some DBMS systems may not properly handle "pushed down" constants.**
Platform			Database platforms for which only generic support is provided.
Description			SQL statements sent to base (not specifically supported) database platforms use a "best guess" as to the syntax for string literal. Such formulations may not work in all cases. An example of this is MySQL which requires every backslash `[aldsp2: \ ]` to be escaped with another backslash. Such cases are not handled by SQL generation code and might result in invalid SQL being generated.
Workaround			There are two possible workarounds for this problem: • Convert constants to parameters by using an external

			variable instead of a constant. For example: `where $customer_id eq fn-bea:fence("CUSTOMER001")` • Properly escape the XQuery string literal according to the rules of the underlying database.
CR248407	**3.0**		**Metadata import wizard fails to detect in/out parameters.**
Platform			All.
Description			In some situations associated with MSSQL and Sybase stored procedures, a resultset is returned which is not automatically detected.
Workaround			First, manually build a schema that is mapped to the output of the resultset. Then, when importing metadata use the wizard, add a ROWSET and link it to the previously created schema.
CR242938	**3.0**		**Multi-dimension soap arrays are not supported in RPC mode.**
Platform			All.
Description			The Web services wrapper provided by AquaLogic Data Services Platform only supports single-dimension arrays in RPC style Web services.
Workaround			None.
CR224815	**3.0**		**The initial invocation**

			of a Web service from an application server typically takes more time than subsequent calls. If the timeout value is less than the time required for the first call, the alternate expression (typically a timeout error) will be evaluated.
Platform			All.
Description			There is "startup overhead" the first time that a web service is invoked. The overhead can exceed the timeout threshold, leading to the specified timeout error.
Workaround			When setting timeout on expressions that have a Web service invocation, set the timeout value to be greater than the measured amount of time required for the first invocation.
CR239369	**3.0**		**XQueries may generate invalid SQL for databases not supporting UPPER and LOWER (SQL-92). Also, empty input handling for base databases (databases not specifically support) as well as Oracle deviates from the XQuery specification when UPPER(null) or LOWER(null) is pushed down to the database level.**
Platform			All platforms running base databases and Oracle databases.
Description			There are two aspects to this problem:

			• XQueries containing upper-case() or lower-case() functions are pushed down for database processing as UPPER and LOWER. Some databases may not support these SQL-92 keywords, however. In such cases the generated SQL will be invalid and upon execution will fail. • Similarly, input handling by base databases (as well as Oracle databases) may not match the XQuery specification. The reason for this is that the XQuery specification requires that functions *return an empty string* if input is an empty sequence. However, when these functions are pushed down, they *return an empty sequence* instead. This happens because LOWER(NULL) is NULL in SQL.
Workaround			Use the fn-bea:Fence() function to prevent pushdown of upper-case() or lower-case() functions to the database. Example:

			lower-case(fn-bea:fence(...))
CR207637	**3.0**		**An exception appears for XQuery functions accessing metadata derived from Microsoft SQL Server stored procedures containing xs:decimal.**
Platforms			All.
Description			When importing a stored procedure from Microsoft SQL Server, the BEA JDBC driver incorrectly maps SQL decimal type to schema integer (xs:int) type.
Workaround			During stored procedure import, change the data type from xs:int to xs:decimal. Alternatively, you can change the imported data service's metadata to specify the schema type for the affected column to be xs:decimal.
CR203394	**3.0**		**ROWTYPE input cursor is not supported when creating a data service from a stored procedure.**
Platform			All.
Description			Stored procedure IN and INOUT cursors containing ROWIDs are not currently supported for metadata import.
Workaround			Avoid importing metadata on stored procedures which required use of IN or INOUT ROWID parameters.
CR214585	**3.0**		**Erroneous results**

			may occur when using fn:matches() with a regular expression containing a caret (^).
Platform			All.
Description			The match beginning-of-line operator (^) in regular expressions produces erroneous results when used with fn:matches().
Workaround			Do not use fn:matches() with a regular expression containing a caret (^).
CR215251	**WLS 9.0**		**Identifiers within two characters of the maximum length allowed by the DBMS may result in an error.**
Platform			All platforms running Sybase (and possibly other) databases.
Description			Some DBMS systems place limits on the length of identifiers (30 in the case of Sybase). AquaLogic Data Services Platform places single quotes around queries being pushed to the database, effectively reducing the maximum identifier length by two characters (28 in the case of Sybase).
Workaround			Possible options include renaming the table or creating a view with a shorter name.
CR226019	**3.0**		**Access control policies associated with a data service function may disappear if the function's number of parameters is changed.**

Platform			All.
Description			A data service function's signature is its QName and the number of parameters (arity) of the function. If you set security policies on a function and then change the number of parameters to the function, the function is treated as new and any previously set policies will no longer be in effect.
Workaround			If a function's arity is changed, reapply security policies to that function.
CR213916	**3.0**		**BEA Informix JDBC driver does not return nullability information.**
Platform			All platforms running Informix.
Description			The BEA Informix driver does not return information about table column nullability (that is, it is marked as unknown). During metadata import the minOccurs of the elements corresponding to the columns in the generated XML schemas is set to 0.
Workaround			Modify the imported metadata files by changing the minoccurs value for the nullable columns from 0 to 1.
CR214983, CR211701, CR201821	**3.0**		**MSSQL VARIANT datatype has only limited support.**
Platform			All.
Description			There are two limitations with this MSSQL VARIANT data

			type (sql_variant): • For SQL_VARIANT data type update will fail. • You cannot read a null value for the SQL_VARIANT data type.
Workaround			None available.
CR221015, CR319972	**3.0**		**During metadata import the BEA Sybase JDBC driver may not display all tables to which user has authorized access.**
Platform			All platforms accessing Sybase through the BEA Sybase JDBC driver.
Description			During metadata import the BEA Sybase JDBC driver may not show all tables which have been granted access to the user.
Workaround			This is a BEA Sybase driver limitation. For the import purpose, you can change to dbo user to see the full complement of available tables.
CR202963	**3.0**		**When using BEA Oracle JDBC driver with a TIMESTAMP values, stored procedures are truncated.**
Platform			All platforms running Oracle with the BEA Oracle JDBC driver.
Description			When using the BEA's Oracle JDBC driver, if a stored procedure returns a TIMESTAMP value then the value gets truncated at the milliseconds level. For example, if the value

			was:
			`1997-01-31 09:26:50.124`
			then the stored procedure will return a
			`1997-01-31 09:26:50.0`
			value.

Workaround			Use the Oracle JDBC driver stored procedures that returning TIMESTAMP values.
CR223429, CR228802	**3.0**		**Sybase JDBC driver does not support a getBlob() call.**
Platform			All platforms running Sybase with the Sybase JDBC driver.
Description			The AquaLogic Data Services Platform cache configuration does not work if using Sybase JDBC driver because the configuration implementation uses a getBlob( ) call on the JDBC driver. The Sybase JDBC driver does not support getBlob( ).
Workaround			Use the BEA JDBC driver for Sybase databases when utilizing Sybase as the AquaLogic Data Services Platform cache data source.
CR214730	**3.0**		**SQL Server JDBC driver incorrectly renders the tinyint maximum value.**
Platform			All platforms running SQL Server with the

			SQL Server JDBC driver.
Description			The SQL Server tinyint maximum value of 255 gets interpreted as -1 by the Microsoft SQL Server JDBC driver.
Workaround			Use the BEA JDBC driver for SQL Server.
CR223486, CR226239, CR226171	**3.0**		**The Informix JDBC driver does not support standard JDBC syntax for specifying TIMESTAMP values.**
Platform			All platforms running Informix with the Informix JDBC driver.
Description			The Informix native driver does not support standard JDBC syntax for specifying TIMESTAMP values. For example: `1979-03-01 00:00:00.0` is not supported.
Workaround			Use the BEA JDBC driver for Informix.
CR199675	**3.0**		**The BEA JDBC driver for Oracle does not support UROWID column type for data retrieval.**
Platform			All platforms running Oracle with the BEA JDBC driver.
Description			When using BEA JDBC driver for Oracle, retrieving UROWID returns an error, identified by the following message: `[aldsp2:BEA][aldsp2:Oracle JDBC Driver]Internal error: Net8`

			`protocol error`
Workaround			Use the Oracle JDBC driver if your data contains UROWID column type.
CR212515	**3.0**		**The Oracle stored procedure returning PL/SQL RECORD, BOOLEAN, or table with non-scalar element types is not supported.**
Platform			All platforms using Oracle.
Description			Oracle stored procedure limitations are detailed in the following currently-available document: http://www.stanford.edu/dept/itss/do
Workaround			None available
CR202041	**3.0**		**Metadata for SQL Server stored procedures returning CURSOR output cannot be created.**
Platform			All platforms using SQL Server.
Description			When importing metadata from SQL Server, stored procedures that return CURSOR output are not supported.
Workaround			Modify the imported data service file to identify the correct data type for the cursor.
CR227440	**3.0**		**Metadata for DB2 stored procedures returning CLOB data cannot be created.**
Platform			All platforms using DB2.
Description			When importing metadata from DB2, stored procedures

			returning CLOB data are not supported.
Workaround			None available.
CR265965	**3.0**		**Updating or deleting Oracle's CHAR/NCHAR with trailing blanks failed with an Optimistic locking failure message using Oracle JDBC driver.**
Platform			All using Oracle's non-XA JDBC driver.
Description			With Oracle's non-XA JDBC driver, CHAR and NCHAR columns can only be updated if the number of characters is 1024 or less.
Workaround			Where possible use BEA's Oracle JDBC driver (Type 4).
CR202962	**3.0**		**Oracle stored procedures containing CHAR or NCHAR as input may cause a Server error.**
Platform			All.
Description			If you have Oracle stored procedures that use an INOUT parameter, you may get an error when you run a stored procedure using AquaLogic Data Services Platform. The error is similar to: java.lang.RuntimeException: ORA-01460: unimplemented or unreasonable conversion requested ORA-06512: at "WIRELESS.SP_CHAR", line 17
Workaround			Modify your stored procedure call by

			reducing the size of the INOUT parameter using TRIM. See aldsp2:Sample code related to CR202962, in aldsp2:Listing 1.

Supplemental Release Note Documentation

This section contains code and other additional information related to previously described release notes.

CR264597 Details

Summary

String comparison operations involving MSSQL (and Sybase) may return incorrect results when the comparison operation is computed by MSSQL.

Description

Depending on the database and server configuration, MSSQL Server may use case-insensitive collation for string comparison operations (this is the default configuration). This is in contrast to XQuery string comparison operations, which are case-sensitive.

When generating SQL, the AquaLogic Data Services Platform currently does not take database string collation into account. This can lead to different results being produced by expressions that are "pushed down" to an MSSQL database, as compared to the results from their evaluation by the XQuery engine.

The following types of expressions are affected:

- string comparison operations
- string functions: fn:contains( ), starts-with( ), ends-with()
- order by clauses
- group by clauses.

For example, consider the following two-row, two-column table based on:

CUSTOMER(ID, FIRST_NAME)

ID	FIRST_NAME
1	John
2	john

The following XQuery might return different results depending whether it is evaluated by the database or not.

```
for $c in CUSTOMER()
where $c/FIRST_NAME eq "john"
return $c/ID
```

According to XQuery semantics, this query should return:

```
   <ID>2</ID>
```

as only the second record matches the selection criteria.

However, when the AquaLogic Data Services Platform pushes the query to the underlying MSSQL database, the following SQL is generated:

```
SELECT t1."C_ID" AS c1
FROM "CUSTOMER" t1
WHERE t1."FIRST_NAME" = "john"
```

This might result in both records being returned by the MSSQL database (with case-insensitive string collation set):

```
<ID>1</ID>
<ID>2</ID>
```

Workaround

There are several workarounds to conforming with XQuery semantics for string comparisons when pushing computations down to MSSQL.

Option 1

Consider changing the collation setting that the database uses for string comparisons. See "SQL Server Collation Fundamentals" document located as of this writing at:

http://msdn.microsoft.com/library/default.asp?url=/library/en-us/architec/8_ar

Collation can change on a server, database or column level basis.

Option 2

Use the fn-bea:fence( ) function to block pushdown. In the above example, this would be rendered as:

```
for $c in CUSTOMER()
where fn-bea:fence(data($c/FIRST_NAME)) eq "john"
return $c/ID
```

Notice, however, that this approach may negatively impact performance since the AquaLogic Data Services Platform engine now must fetch and process the entire table.

To optimize performance, consider replicating the comparison operation in the query, thus allowing one copy to be evaluated by the database while keeping the second copy on the AquaLogic Data Services Platform engine. The following query illustrates such an approach:

```
for $c in CUSTOMER()
where $c/FIRST_NAME eq "john"
where fn-bea:fence(data($c/FIRST_NAME)) eq "john"
return $c/ID
```

This approach limits the number of results that the XQuery engine must process but still applies the second selection in order to obtain the correct XQuery semantics.

CR202962 Listing 1

Here is the sample code for CR202962:

```
** CREATE OR REPLACE PROCEDURE WIRELESS.SP_CHAR
(P_CHAR_IN IN CHAR,
P_CHAR_OUT OUT CHAR,
P_CHAR_INOUT IN OUT CHAR,
P_ID_OUT OUT VARCHAR2 )
IS
TEMP VARCHAR2(10);
BEGIN
SELECT C_ID INTO P_ID_OUT
FROM WIRELESS.ALL_DATATYPES
WHERE C_CHAR = P_CHAR_IN;

SELECT C_CHAR INTO P_CHAR_OUT
FROM WIRELESS.ALL_DATATYPES
WHERE C_ID = '2';

SELECT C_ID INTO TEMP
FROM WIRELESS.ALL_DATATYPES
WHERE C_CHAR = P_CHAR_INOUT;

SELECT 'WORK' INTO P_CHAR_INOUT
FROM WIRELESS.ALL_DATATYPES
WHERE C_ID = TEMP;
END;
/
to adjust the size of PCHAR_INOUT using TRIM (see highlighted code)
CREATE OR REPLACE PROCEDURE WIRELESS.SP_CHAR
(P_CHAR_IN IN CHAR,
P_CHAR_OUT OUT CHAR,
P_CHAR_INOUT IN OUT CHAR,
P_ID_OUT OUT VARCHAR2 )
IS
TEMP VARCHAR2(10);
\*ACHAR CHAR(500);

BEGIN
ACHAR := trim(P_CHAR_INOUT);
\*
SELECT C_ID INTO P_ID_OUT
```

```
FROM WIRELESS.ALL_DATATYPES
WHERE C_CHAR = P_CHAR_IN;

SELECT C_CHAR INTO P_CHAR_OUT
FROM WIRELESS.ALL_DATATYPES
WHERE C_ID = '2';

SELECT C_ID INTO TEMP
FROM WIRELESS.ALL_DATATYPES
\*WHERE C_CHAR = ACHAR; // used to fail here
\*
SELECT 'WORK' INTO P_CHAR_INOUT
FROM WIRELESS.ALL_DATATYPES
WHERE C_ID = TEMP;

END;
/
```

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