

# Release Bulletin EAServer 6.2 for IBM AIX

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<b>Topic</b>	<b>Page</b>
1. Accessing current release bulletin information	2
2. Product summary	2
2.1 Version contents	3
2.2 Required system patches	3
3. Special installation instructions	4
3.1 Valid browser required for installation	4
4. Special upgrade instructions	4
5. Changed functionality in this version	4
6. Known issues	5
6.1 Getting OracleConnection in EAServer	5
6.2 Ant configuration fails after deploying EJB file	5
6.3 JDK does not include Sun JDBC-ODBC driver	5
6.4 Security risk	6
6.5 Failure to obtain correct license file	6
6.6 Log files in Eclipse plug-in Management Console	6
6.7 Obsolete HTTP server properties	6
6.8 Configuring a database type	7
6.9 Data source contents	7
6.10 SQL Anywhere database issues	7
6.11 Adaptive Server Enterprise 12.5.x	8
6.12 PowerBuilder issues	8
6.13 Migration tool issue	10
6.14 Web Services Toolkit issues	10
6.15 Miscellaneous issues	11
7. Documentation updates and clarifications	12
7.1 Automated Configuration Guide	12
7.2 CORBA Components Guide	16

Topic	Page
7.3 Enterprise JavaBeans User's Guide	18
7.4 New Features Guide	18
7.5 Security Administration and Programming Guide	19
7.6 System Administration Guide	20
7.7 Troubleshooting Guide	23
7.8 Web Services Toolkit User's Guide	25
8. Technical support	25
9. Other sources of information	25
9.1 Sybase certifications on the Web	26
9.2 Sybase EBFs and software maintenance	27
10. Accessibility features	27

## 1. Accessing current release bulletin information

A more recent version of this release bulletin may be available on the Web. To check for critical product or document information added after the product release, use the Sybase® Product Manuals Web site.

### ❖ Accessing release bulletins at the Sybase Product Manuals Web site

- 1 Go to Product Manuals at <http://www.sybase.com/support/manuals/>.
- 2 Select a product and language and click Go.
- 3 Select a product version from the Document Set list.
- 4 Select the Release Bulletins link.
- 5 From the list of individual documents, select the link to the release bulletin for your platform. You can either download the PDF version or browse the document online.

## 2. Product summary

Enclosed is Sybase EAServer version 6.2, which is compatible with this platform and operating system configuration:

- IBM AIX 5.3 (32-bit and 64-bit). The 64-bit is used for pure Java code.

## 2.1 Version contents

Enclosed is Sybase EAServer version 6.2, Build 62016. You may have a later build number if you have installed ESD patches for this release. If so, the cover letters provided with each patch contain the build number and additional documentation.

The EAServer 6.2 software is provided on a DVD.

Table 1 describes the products that EAServer 6.2 supports.

**Table 1: Product support**

<b>Product</b>	<b>Supported versions/builds</b>
Adaptive Server® Enterprise	12.5.x and 15.0.x
C++ compiler	IBM XL C/C++ 8.0
Eclipse	3.2.1
<i>Java Development Kits (JDKs):</i>	Versions:
1.5	1.5.0_SR3
1.6	1.6.0_00
Jetty	6.1
Oracle client	9.2.0.1 and 10g
PowerBuilder® virtual machine (PBVM)	10.5.1 (build 6021)
Apache Web server redirector plug-in	2.0.55
SQL Anywhere®	10.0.1
Web browsers	Internet Explorer 6.0 Firefox 2.0

## 2.2 Required system patches

Before installing EAServer, make sure your system has the required patches described in this section.

**For AIX 5.3** AIX 5300-03 Recommended Maintenance Level (Maintenance Level 3) must be installed. This maintenance package can be downloaded from the IBM Web site.

For information on obtaining maintenance files, see the IBM Fix Delivery Center at <http://www-933.ibm.com/eserver/support/fixes/>.

To verify the maintenance level of your system, run:

```
oslevel -r
```

On AIX 5.3 systems, the command should return:

5300-03

## 3. Special installation instructions

The *EAServer 6.2 Installation Guide* of your platform describes how to install the software.

### 3.1 Valid browser required for installation

(CR #466892) Before running the EAServer installer, a valid browser must exist on the target installation machine. Otherwise, selections on the Finish pane to launch the Readme and the Sybase Product Download Center (SPDC) Web site will not work.

## 4. Special upgrade instructions

The EAServer migration tool enables you to migrate a subset of entity types from a 5.x repository to the 6.2 repository, saving time by scanning only those entity types that you require. For details, see:

- *EAServer Migration Guide* – on the SyBooks Online Web site at [http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.dc00485\\_0600/html/easmig/title.htm](http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.dc00485_0600/html/easmig/title.htm).
- *EAServer 6.0.2 New Features Guide* – on the SyBooks Online Web site at [http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.dc38032\\_0602/html/new602/title.htm](http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.dc38032_0602/html/new602/title.htm). This book describes migration tool features that were introduced in version 6.0.2.

“Migration tool issue” on page 10 in this release bulletin describes problem that is known to occur during migration.

## 5. Changed functionality in this version

The *EAServer 6.2 New Features Guide* describes features added in this version. You can view this book on the SyBooks Online Web site at <http://infocenter.sybase.com/help/index.jsp>. Browse to the EAServer 6.2 collection, then select this title.

## 6. Known issues

This section describes known problems in this version of EAServer.

### 6.1 Getting OracleConnection in EAServer

(CR #538605) EAServer supports OracleConnection and its update batching mechanism in a multithreaded environment with high concurrency. For example, after obtaining the container-managed data source connection, *c*, the API at the client side calls the `getRealConnection` method.

### 6.2 Ant configuration fails after deploying EJB file

(CR #498829) You cannot complete the Ant configuration after you have deployed an EJB-JAR file. No information appears when you click Details in the Progress Information window.

*Workaround:* Restart EAServer after deploying a new EJB-JAR file.

### 6.3 JDK does not include Sun JDBC-ODBC driver

(CR #393342 and #484121) IBM does not ship a Sun JDBC-ODBC driver with its JDK. You can use the SQL Anywhere JDBC-ODBC driver instead.

*Workarounds:* Select one of the following options. Sybase recommends the first option:

- Set these database property values:
  - Database Type: Unknown
  - Database URL: `jdbc:odbc:EAS Demo DB V3`
  - User: `dba`
  - Password: `sql`
  - Driver Class: `ianywhere.ml.jdbcodbc.jdbc3.IDriver`
- Or, set these database property values:
  - Database Type: `SQL_Anywhere`
  - Database URL: `jdbc:odbc:driver=~/ASA100/client/lib32/libdbodbc10_r.so;uid=dba;pwd=sql;dsn=EAS Demo DB V3`

- User: dba
- Password: sql
- Driver Class: `ianywhere.ml.jdbcodbc.jdbc3.IDriver`
- Or, use one of the drivers that IBM recommends—see the IBM Java Web site at <http://www.ibm.com/developerworks/aix/library/au-javaphpaix3/>.

## 6.4 Security risk

(CR #434293) Do not use HTTP to connect to the Management Console; the administrative user ID and password are passed in plain-text format during the login process, thus posing a security risk.

*Workaround:* Use HTTPS to log in to the Management Console. To use HTTPS, you first need to obtain a certificate. If you use the sample (test) certificate that is included with EAServer, anyone with EAServer 6.0 has access to your private (test) key. Therefore, Sybase recommends that you use your own certificate.

## 6.5 Failure to obtain correct license file

(CR #430720) If you start EAServer using a remote desktop connection, the server does not obtain the correct license file.

*Workaround:* To enable the server to obtain the correct license file when you connect from a remote desktop, use a Virtual Network Computing (VNC) system, such as VMWare or RealVNC.

## 6.6 Log files in Eclipse plug-in Management Console

(CR #497641) The Eclipse plug-in Management Console does not allow you to view the log files remotely.

## 6.7 Obsolete HTTP server properties

(CR #452369) Beginning in version 6.2, EAServer no longer supports these HTTP properties:

- `httpUseCustomGetServerInfo`
- `httpProxyProtocol`
- `httpProxyPort`

- `httpGetServerInfoFrom`

Instead, EAServer reads these HTTP header fields:

- `host` – to determine the host and port the client used to connect.
- `sybaseredirectorheader` – to determine the protocol that was used to connect to a Web redirector.

If you call any of the `HttpRequest` methods, `getServerName`, `getServerPort`, or `getProtocol`, the values are retrieved from the browser. This is the same behavior that was achieved by setting `httpGetServerInfoFrom` to “source” in versions of EAServer earlier than 6.2.

## 6.8 Configuring a database type

If you specify values for both the `dataSourceClass` and `driverClass` properties when you configure a database type, the system uses the class defined by `dataSourceClass`, and ignores these properties:

- `driverClass`
- `databaseURL`, because it is used only by the driver class

## 6.9 Data source contents

(CR #496672) When you select the Data Sources folder on the left hand side of the Management Console, data source entries do not appear on the right side of the window. Other contents such as Welcome frame, Context Menu frame, and so forth appear on the right window.

*Workaround:* Set the Management Console as a trusted site. From the Internet browser:

- 1 Select Tools | Internet Options.
- 2 Select the Security tab.
- 3 Select Trusted sites and click Sites.
- 4 Click Add.

## 6.10 SQL Anywhere database issues

When you upgrade to EAServer 6.2, Adaptive Server® Anywhere (ASA) version 9.0.2 is upgraded to version 10.0, and the name of the database server changes from ASA to SQL Anywhere.

### 6.10.1 ODBC driver version

(CR #470030) The ODBC driver that you use with EAServer must be either the driver packaged with EAServer or a later version.

### 6.10.2 SQL Anywhere incompatible with jConnect driver

(CR #446037) With Adaptive Server Enterprise, EAServer uses an underlying jConnect™ for JDBC™ driver when users select `com.sybase.djc.sql.jit.SybaseDataSource3` as the database driver. However, the jConnect driver does not work with SQL Anywhere, so EAServer uses a JDBC-ODBC driver instead.

### 6.10.3 Setting the databaseURL property

(CR #467797) If the value of the `databaseURL` property is “[default]” when you create a new data source for either a `Sybase_ASA` or `SQL_Anywhere` database type, attempts to ping the database fail and this message displays:

```
Ping failed due to exception: Use of the JIT driver wrapper for SQL Anywhere requires use of the underlying IAnywhere JDBC/ODBC driver - please reconfigure data source 'asa10demo' to include the jdbcDataSource property. Please see the server log file for additional details.
```

*Workaround:* Set the `databaseURL` property to “`jdbc:odbc:driver=EAS 6.0 ASA;uid=dba;pwd=sql;eng=<asa10_db_alias>`,” where `<asa10_db_alias>` is the value of the `-n` parameter that is used when starting the database.

## 6.11 Adaptive Server Enterprise 12.5.x

(CR #447543) If you are using Adaptive Server Enterprise (ASE) version 12.5.x with EAServer, you may see this error:

```
"SELECT INTO command not allowed within multi-statement transaction"
```

*Workaround:* On the machine where Adaptive Server is installed, run:

```
$DJC_HOME/extras/jconnect-6.05/sp/sql_server12.5.sql
```

## 6.12 PowerBuilder issues

This section describes known problems using this version of EAServer with PowerBuilder.



### 6.12.1 JDBC database driver fails on AIX

(CRs #485463) If you are using the PowerBuilder Data Pipeline and a JDBC driver to pipe data to a database, the operation fails with a database error.

*Workaround:* None.

### 6.12.2 Customer-defined HTMLGenerator

(CR #434381) If a customer defines an HTMLGenerator, it does not display in the PowerBuilder IDE.

### 6.12.3 Migrating PowerBuilder Web applications

(CR #442234) If you migrate a PowerBuilder Web application from EAServer version 5.x to 6.x, the migration tool replaces the EAServer 5.x profile values that are defined in *WEB-INF/classes/jaguar.properties* with the EAServer 6.x values. When you run the migration tool, if the value that you specify for the 5.x host is different from the value you initially defined in the PowerBuilder IDE, the profile properties are not migrated correctly. For example, if you initially defined the 5.x host as “myhost,” specifying either “myhost.sybase.com” or the machine’s IP address causes the migration to fail.

### 6.12.4 Calling BigDecimal.toString

(CR #441516) Calling the JDK 1.5 toString command for a BigDecimal datatype returns the string representation of the BigDecimal value, using scientific notation if an exponent is needed. For example, if you call:

```
toString(new BigDecimal("0.000000000000000001"))
```

The return value is “1E-18.” This behavior change is documented by Sun.

*Workaround:* To return a string representation of a BigDecimal without an exponent, call toPlainString instead of toString.

### 6.12.5 Profile names cannot contain colons

(CR #406975) If you deploy a JSP target to EAServer, do not use a colon in the profile name. PowerBuilder writes EAServer profile information in *WEB-INF\classes\jaguar.properties*. If the EAServer profile name contains a colon, the related host name and port number cannot be retrieved from *jaguar.properties* at runtime.

### 6.12.6 Deployment fails for empty Web service

(CR #437435) To be successfully deployed, a Web service must contain at least one method.

### 6.12.7 Nontransactional components calling JagRollbackWork

(CR #434379) If a nontransactional component calls JagRollbackWork, no exception is thrown to the client. This transactional behavior changed in version 6.0.

*Workaround:* When you run the migration tool, set the EAServer 5.x host name to the same value that you initially defined using the PowerBuilder IDE.

### 6.12.8 Web and JSP targets

In the PowerBuilder Web DataWindow DTC Properties dialog for a Web or JavaServer Page (JSP) target, two instances of the DataWindow/HTMLGenerator component display when EAServer 6.2 is selected as the server.

## 6.13 Migration tool issue

(CR #437181) When you are migrating EAServer entities from version 5.x to version 6.2, the migrate tool does not migrate *sql.ini* content for Open Client™ Client-Library™ connections.

*Workaround:* Manually copy Open Client Client-Library connection information from the 5.x version of *sql.ini* to the 6.2 version.

## 6.14 Web Services Toolkit issues

### 6.14.1 Activating and deactivating Web services

(CR #448806) The *wstool* commands for activating and deactivating Web services, *wstool activate* and *wstool deactivate*, do not work.

### 6.14.2 Datatype mapping

(CR #449109) In EAServer 6.0, the Web services datatype-mapping version is set to 1.3, so *xsd:short* may be mapped to either the *short* or *unsignedByte* Java datatype. This causes some Web service tests to fail.

*Workaround:* Set the datatype-mapping version to 1.2, so xsd:short will always be mapped to the short datatype:

- 1 Start EAServer, and connect to the server using the Management Console.
- 2 Expand the Servers folder, and select the server.
- 3 On the General tab, find the WebServices Type Mapping Version field. The default value is 1.3.
- 4 Change the value to 1.2, and click Save.

### 6.14.3 Apache Scout

(CR #448380) The Apache Scout client method `BusinessLifeCycleManager.saveAssociations` fails, and a null pointer exception is returned.

### 6.14.4 Web services display in random order

(CR #422161) Selecting the Management Console options to display Web services either alphabetically or in descending order by date fail. Web services display in random order.

## 6.15 Miscellaneous issues

### 6.15.1 javax.management.openmbean.ArrayType error

(CR #485453) Calling the `javax.management.openmbean.ArrayType` function `public boolean isValue(Object object)` may return an error.

### 6.15.2 Untranslated exception

(CR #474902) When you deploy an EAServer entity, this line displays in the server log:

```
svc: java.lang.Error: Untranslated exception
```

but the function works correctly.

### 6.15.3 Management Console help link

(CR #468346) When you click the Help link in the Management Console, you may see an exception in the server log.

*Workaround:* Refresh the console.

### 6.15.4 Permission required to use JIT data sources

(CR #465348) You can use a JIT (just-in-time) data source to access a database only if you have permission to create tables in the database.

### 6.15.5 SSLServiceProvider.getGlobalProperty

(CR #436638) The SSLServiceProvider method for checking the status of FIPS, SSLServiceProvider.getGlobalProperty("fips140"), has not been implemented in EAServer 6.2.

## 7. Documentation updates and clarifications

This section contains updates and clarifications for the EAServer product manuals.

### 7.1 Automated Configuration Guide

#### 7.1.1 Chapter 3, "Using Scheduled Tasks"

(CR #477285) "Predefined tasks" does not include CleanupPBCookies task, which you can schedule to remove unwanted PowerBuilder cookies from your machine.

#### 7.1.2 Chapter 4, "Creating Service Components"

(CR #500334) In Table 4-1 of "Service component entity properties," the Component property that specifies how to define the remote interface for a service component is incorrect. The corrected text is:

```
ejb.components.mypackage.MyComponentRemote
```

or, for a local interface for a service component:

```
ejb.components.mypackage.MyComponentLocal
```

#### Writing a Java class as a service component

This procedure shows how to write a Java class as a service component using these methods:

- start()
  - run()
  - stop()
- 1 Use a text editor to write a Java file that includes the three Java methods.  
For example:

```
package serviceTest;
public class oneService {
    boolean bstop = false;
    public void start()
    {
        System.out.println("oneService start!");
        bstop = false;
    }

    public void run()
    {
        while(!bstop)
        {
            System.out.println("oneService runing...");
            try {
                Thread.sleep(1000);
            }catch (InterruptedException e) {
            }
        }
    }

    public void stop()
    {
        bstop = true;
        System.out.println("oneService stop!");
    }
}
```

- 2 Save and compile this Java file to a class file.
- 3 Create a JAR file for the class file.
- 4 Place the JAR file in *\$EAServer/lib/ext/*.
- 5 Log in to the Management Console.
- 6 Select the Service Components folder, right-click, and select Add.
  - a Type the name of the service component, for example, *oneservice*.
  - b Choose Finish.

- 7 Select *oneservice* from the Service Components subfolders.
  - a Type the name of the component in the Component property field on the right side of the Management Console window. For example, *serviceTest.oneService*.
  - b Select the Start Before Binding check box.
  - c Select Apply to save the new settings.
- 8 Select the Servers folder.
  - a Select the server where EAServer is running. For example, *zeus-deskwxp*.
  - b Select the Services tab.
  - c Select the service component that you have just created, for example, *oneservice* from the list.
  - d Select Apply to save the new settings.
- 9 Restart EAServer.

When you run the service component, the log file or console displays these messages:

```
oneService start!
oneService runing..."
```

If you stop EAServer, the log file or console displays this message:

```
oneService stop!"
```

### 7.1.3 Chapter 6, “Using jagtool and jagant”

#### Deploying applications

(CR #481055) When you use jagtool to deploy a self-contained application, you can configure the application to use all the classes from the internal class loader by setting the `disableResolveFirstBySystem` property to true. For example:

```
jagtool.bat deploy -type war -disableResolveFirstBySystem true foo.war
```

#### Obsolete jagtool commands

(CR #465796 and #447432) These jagtool commands are documented in the *Automated Configuration Guide*, but the commands are not supported in EAServer 6.0 and later:

- configure
- export
- exportconfig
- grantroleauth
- mergeprops
- props
- removeroleauth
- set\_props

## Generating stubs

(CR #462838) To generate stubs for a package or component, you can use the jagtool `gen_stubs` command. See the *Automated Configuration Guide* for more information about jagtool commands.

### Syntax

```
gen_stubs [-javastubs true|false] [-cppstubs true|false]
[-javastubjarname file-name] [-javastubcodebase path]
[-cppstubcodebase path] [-compilejavastubs true|false]
[-verbose true|false] entity
```

Option	Description
<i>javastubs</i>	Whether to generate Java stubs; the default is true.
<i>cppstubs</i>	Whether to generate C++ stubs; the default is true.
<i>javastubjarname</i>	If specified, the Java stubs are placed in a JAR file of the specified name. The file name must include the full path. If not specified, Java files are generated (the default).
<i>javastubcodebase</i>	The location of the code base for Java stubs; the default is <i>\$DJC_HOME/genfiles/java/stubs</i> .
<i>cppstubcodebase</i>	The location of the code base for C++ stubs; the default is <i>\$DJC_HOME/include</i> .
<i>compilejavastubs</i>	Whether to compile the generated Java stubs; the default is true.
<i>verbose</i>	Whether to produce verbose output while generating stubs; the default is false.
<i>entity</i>	The name of the entity for which stubs are being generated, in the form <i>EntityType:EntityName</i> , where <i>EntityType</i> is either “Package” or “Component.”

Return values

<b>Return value</b>	<b>Indicates</b>
0	The command ran successfully; the result is true/success.
2	The command did not run successfully; an exception was thrown.

## 7.2 CORBA Components Guide

### 7.2.1 Chapter 4, “Managing CORBA Packages and Components”

(CR #437366) You cannot use hyphens (“-”) in CORBA-component package names. CORBA-component packages are those that contain CORBA/C++, CORBA/Java, or PowerBuilder components.

### 7.2.2 Chapter 5, “Developing and Deploying PowerBuilder Components”

(CR #405138) You cannot use a hyphen (“-”) in the name of a PowerBuilder NVO method or variable. EAServer wraps NVOs as EJBs, and Java does not support method or variable names that contain hyphens.

#### Accessing data sources

(CR #533120) When accessing these predefined EAServer data sources from PowerBuilder components, set the default transaction object (SQLCA) to use the appropriate database type as shown in Table 2 on page 17.



**Table 2: Database type**

Database type	Description
JCM_Sybase	For ASE database: <code>sqlca.dbms="SYJ"</code>
JCM_Oracle or JCM_Oracle_Unicode	Oracle database which corresponds to the EAServer 5.x Oracle Call Interface (OCI) 9 and OCI10 native connection caches.  <code>sqlca.dbms="O90"</code> , or <code>sqlca.dbms="O10"</code>
JCM_Odbc or JCM_Odbc_Unicode	For any databases using ODBC driver:  <code>sqlca.dbms="ODBC"</code>
JCM_non-JCM JDBC- compliant	For any non-JCM JDBC-compliant database type:  <code>sqlca.dbms="JDBC"</code>

### Implementing method-level security for PowerBuilder components

(CR #488947) You can implement method-level security after deploying PowerBuilder components. To implement method-level security for a PowerBuilder component:

- 1 Add two users. For example, "Pass" and "Fail".
- 2 Change the role of the user "Pass" to admin-role. You can also define and use your role.
- 3 Deploy the *final\_test* NVO into EAServer from PowerBuilder.
- 4 Deploy *final\_test.jar* into EAServer from Web console or command line.
- 5 Run PowerBuilder client and click the Pass and Fail buttons.
- 6 Modify the `$EAServer/config/ejbjar-final_test-user.xml` file, as follows:

```
<setProperties
component="ejb.components.final_test.n_easerver_5_componentRemote">
  <transaction retry="false"/>
    <copyValues enable="false"/>
      <accessControl
        type="default"
        auditDeny="true"
        auditPermit="true"
      />
    <permitAccess method="of_return_name(String)" roles="admin-role"
ports="{ejb.allowedPorts}"/>
</setProperties>
```

- 7 Run the Ant Refresh followed by the Run Ant Recompile from the Management Console.
- 8 Run the PowerBuilder client.  
If the implementation is successful, the Pass button works.  
If you click Fail, the NO\_PERMISSION exception occurs.

## 7.3 Enterprise JavaBeans User's Guide

### 7.3.1 Chapter 3, "Developing EJB Clients"

(CR #498818) In the "Client runtime requirements" section, include this:

When using JDK 1.6, add this option in `$JAVA_HOME/bin/java`:

```
-Dsun.lang.ClassLoader.allowArraySyntax=true
```

This is because the JDK 1.6 on the client side provides the `allowArraySyntax` option to convert array from the server result data.

If clients run with a JRE, instead of a full JDK, you can prevent the client from trying to generate and compile stubs by setting the system property `djc.allowRuntimeCompile` to false for the Java command that starts the client application.

### 7.3.2 Chapter 4, "Creating Application Clients"

(CR #472302) In the section "Starting the runtime container," this example for starting an application client's runtime container is incorrect:

```
runclient.sh -client my_appclient -login true
```

The correct syntax is:

```
run-appclient.sh -client my_appclient -login true
```

## 7.4 New Features Guide

(CR #493619) The introduction in the ".NET client support" section in the *EAServer 6.1 New Features Guide* is incorrect. The corrected introduction is:

EAServer 6.1 includes .NET client support, and enables IIOP/IIOPS communication between .NET and J2EE distributed objects in EAServer.

## 7.5 Security Administration and Programming Guide

### 7.5.1 Chapter 6, “Using TLS and FIPS”

(CR #474337) The section “SSL/TLS and FIPS Support” describes how to enable FIPS support, “Enabling FIPS using the Certicom Java libraries.” Step 2 says to set the `com.sybase.ejb.fips` connection property to specify FIPS usage, but fails to specify the value. To enable FIPS support, set the value of `com.sybase.ejb.fips` to `true`; to disable, set the value to `false`.

### 7.5.2 Chapter 11, “Managing Keys and Certificates”

(CR #535090) The “Set-certificate” section of Chapter 11, “Managing Keys and Certificates” does not provide sufficient information. You must run a setup procedure before you can use the `set-certificate` script.

- If necessary, install the certificate authority (CA) root certificate into the server’s truststore. This enables the server to trust the client’s certificate.

By default, some CA root certificates are preinstalled, but you may need to add one or more for testing purposes.

- a If the root certificate is not preinstalled, obtain a root certificate from the certificate authority at <http://www.cacert.org/certs/root.txt>.
- b Copy the certificate text, including BEGIN and END lines, and save in a file named `root.crt` in `$DJC_HOME/Repository/Security/truststore.jks`.

```

...
-----BEGIN CERTIFICATE-----
...
-----END CERTIFICATE-----

```

- c The administrative user must install root certificates into the server’s truststore. To execute:

```
keytool -import -alias cacert.org -file root.crt
       -keystore $DJC_HOME/Repository/Security/truststore.jks
```

- Obtain client certificates.
  - a Request the client certificates from the CA at <http://wiki.cacert.org/wiki/ClientCerts>. Follow the instructions provided at this Web site to complete the request.
  - b Click Install Your Certificate to install the certificates into your Web browser.

- c For nonbrowser clients (including IIOPS), export the certificate from the browser with a private key in PKCS #12 format, then import into client's certificate keystore as appropriate.

Use the `keytool` command to perform these tasks. For more details about the `keytool` command, see “Managing keys and certificates on EAServer” in Chapter 11, “Managing Keys and Certificates.”

- d Obtain the certificate in RFC 1421-form (Base64-encoded X.509). Use the `keytool -help` command.

For other cases, consult with your CA to determine how to obtain the RFC 1421-form of certificate.

- e In *root.txt*, copy the certificate text, including BEGIN and END lines, and save in a file named *root.crt* in *\$DJC\_HOME/Repository/Security/truststore.jks* on the client side.

This is to set up client's trust certification.

- f The administrative user must register this certificate with an EAServer user using:

```
set-certificate test -file test.crt
```

## 7.6 System Administration Guide

### 7.6.1 Chapter 3, “Creating and Configuring Servers”

#### Adding and configuring service components

(CR #500334) The configuration property name for the Component property in Table 3-7 is incorrect. The correct property name is `serviceComponents`, as indicated below:

Property	Description
Component	<p>The name of the component that implements the service.</p> <p>For a user-defined service component, enter either:</p> <ul style="list-style-type: none"> <li>The class name of a simple Java class (must be in the server class path), or</li> <li>The fully-qualified name of an EJB local or remote interface; for example, <ul style="list-style-type: none"> <li><code>ejb.components.mypackage.MyCompLocal</code> or</li> <li><code>ejb.components.mypackage.MyCompRemote</code>.</li> </ul> </li> </ul> <p>The configuration property name is <code>serviceComponents</code>.</p>

### Adding and configuring listeners

(CR #549163) To prevent EAServer from trying to allocate too many Windows handles, Sybase recommends that you set the number of listener connections to a maximum of 1,000. If you are using a 64-bit JVM, EAServer can support about 5,000 connections instead of 1,000. You can set this configuration using the Management Console. On the listener's General tab, set the Maximum Number of Threads listener property to 1,000.

### Enabling password sharing

(CR #487210) By default, multiple users can start EAServer. However, to allow single user to start EAServer, configure EAServer with the `shared-data-protection-off` option. For example:

```
cd $EAServer/bin
configure.sh shared-data-protection-off
```

To allow multiple users to start EAServer, use the `shared-data-protection-on` option. For example:

```
cd $EAServer/bin
configure.sh shared-data-protection-on
```

### Configuring system logging

(CR #473658) "Configuring system logging" describes how to customize the location of the system log files, but the name of the variable (`DJC_JVM_ARGS`) is incorrect. The correct variable is `DJC_JVM_USER_ARGS`; for example:

```
set DJC_JVM_USER_ARGS=$DJC_JVM_USER_ARGS -Ddjcl.logFile=/myserver/myserver.log
```

```
-Ddjc.logFileMaxSize=5m -Ddjc.logFileRotation=true
```

---

**Note** If you customize the location of the system log files, only the HTTP log is rotated; the server log is not.

---

## 7.6.2 Chapter 4, “Database Access”

The section that describes how to configure a database type fails to explain that if you define both a `dataSourceClass` and a `driverClass`, EAServer uses only the `dataSourceClass` value—see “Configuring a database type” on page 7 in this release bulletin.

### Configuring data sources

(CR #531900) When using servers in a cluster, make sure these predefined data sources are all connected to the same database:

- cluster.db
- message.db
- tx\_manager

You can change the data sources using the Management Console.

## 7.6.3 Chapter 11, “Runtime Monitoring”

(CR #546885) The “Monitoring Web application and EJB statistics” section of Chapter 11, “Runtime Monitoring,” provides information about viewing statistics for Web applications and EJBs by accessing the Statistics node beneath an individual entity. However, this information is incorrect. There is no Statistics node available in the selected Web application component and EJB component.

## 7.6.4 Chapter 12, “Command Line Tools”

deploy

(CR #481055) When you deploy a self-contained application, you can configure the application to use all the classes from the internal class loader by setting the `disableResolveFirstBySystem` property to true. For example:

```
deploy.bat -disableResolveFirstBySystem foo.war
```

(CR #475510) The documentation that states the `deploy.sh` command line tool includes an `eas5naming` option is incorrect. This option is not supported.

(CR #475511) EAServer 6.2 does not support the `-jsr154filter` option for the `deploy.sh` command line tool. `-jsr154filter` may be supported in a later version of EAServer.

wlogin and wlogout

(CR #443144) The command line tools `wlogin` and `wlogout` support only this syntax:

```
wlogin.sh <host:port>
wlgout.sh <host:port>
```

Chapter 12 incorrectly states that you can pass the server name if it is defined in the local repository.

### 7.6.5 Chapter 13, “JNI Compiler”

(CR #472818) Before calling a generated proxy class, standalone clients must call either:

- `JNICC_CreateJavaVM` to initialize the JVM, or
- `JNICC_SetJavaVM(JavaVM* vm)` if the JVM has already been initialized.

### 7.6.6 Chapter 14, “Systems Management”

(CR #437261) EAServer supports Simple Network Management Protocol (SNMP) features that conform to the Java Specification Request JSR 77. The status of a server and its components are reported as Management Information Base objects, which can be polled, and can also be reported as SNMP traps.

## 7.7 Troubleshooting Guide

### 7.7.1 Chapter 1, “Monitoring Techniques”

This example shows how to configure the `log4j.properties` file.

#### ❖ Configuring Log4j

- 1 Use a text editor to create a `log4j.properties` file.

```
# Set root category priority to INFO and its only appender to CONSOLE.
#log4j.rootCategory=FATAL, CONSOLE
log4j.rootCategory=DEBUG, LOGFILE

# Set the enterprise logger category to FATAL and its only appender to CONSOLE.
# log4j.logger.org.apache.axis.enterprise=DEBUG, LOGFILE

# CONSOLE is set to be a ConsoleAppender using a PatternLayout.
```

```
log4j.appender.CONSOLE=org.apache.log4j.ConsoleAppender
log4j.appender.CONSOLE.Threshold=DEBUG
log4j.appender.CONSOLE.layout=org.apache.log4j.PatternLayout
log4j.appender.CONSOLE.layout.ConversionPattern=- %m%n

# LOGFILE is set to be a File appender using a PatternLayout.
log4j.appender.LOGFILE=org.apache.log4j.FileAppender
log4j.appender.LOGFILE.File=<install_directory>/axisserver.log
log4j.appender.LOGFILE.Append=true
log4j.appender.LOGFILE.Threshold=DEBUG
log4j.appender.LOGFILE.layout=org.apache.log4j.PatternLayout
log4j.appender.LOGFILE.layout.ConversionPattern=%-4r [%t] %-5p %c %x - %m%n
```

2 Put the *log4j.properties* file into *\$EAServer\_Home/lib*.

3 Change to *\$EAServer\_Home/bin* and execute:

```
run-server -
Dorg.apache.commons.logging.Log=org.apache.commons.logging.impl.Log4JLogger
```

4 Write a class named "Hello":

```
package sayhello;

public class Hello {
public String hello() {
return "hello";
}
}
```

5 Use Sybase Web Services Toolkit to deploy this class as a Web service and generate a client.

6 Run *Hello\_ServiceTestClient.java*.

7 Find the log file in *<install\_directory>\aixserver.log* and view the contents which should look similar to:

```
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
loadBundle: Ignoring MissingResourceException: Can't find bundle for
base name org.apache.axis.resource, locale zh_CN
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
Created org.apache.axis.i18n.resource, linked to parent null
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
getBundle(org.apache.axis.org.apache.axis.utils.resource,null,...)
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
loadBundle: Ignoring MissingResourceException: Can't find bundle for
base name org.apache.axis.utils.resource, locale zh_CN
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
loadBundle: Ignoring MissingResourceException: Can't find bundle for
base name org.apache.axis.resource, locale zh_CN
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle - Root
```



```

package not found, cross link to org.apache.axis.i18n.resource
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle - Root
package not found, cross link to org.apache.axis.i18n.resource
953 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
org.apache.axis.i18n.resource::handleGetObject (engineFactory)
1047 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
org.apache.axis.i18n.resource::handleGetObject (attachEnabled)
1063 [main] DEBUG org.apache.axis.i18n.ProjectResourceBundle -
org.apache.axis.i18n.resource::handleGetObject (oddDigits00)

```

## 7.8 Web Services Toolkit User's Guide

### 7.8.1 Chapter 9, "Using wstool and wstant"

(CR #464242) The Ant build example for the `exposeComponent` command is incorrect:

```

<wst_antTask command="exposeComponent"
entity="component:myPackage/myComponent"/>

```

The correct command is:

```

<wst_antTask command="exposeComponent"
entity="myPackage/myComponent"/>

```

## 8. Technical support

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support. If you have any questions about this installation or if you need assistance during the installation process, ask the designated person to contact Sybase Technical Support or the Sybase subsidiary in your area.

## 9. Other sources of information

Use the Sybase Getting Started CD, the SyBooks™ CD, and the Sybase Product Manuals Web site to learn more about your product:

- The Getting Started CD contains release bulletins and installation guides in PDF format, and may also contain other documents or updated information not included on the SyBooks CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader, which you can download at no charge from the Adobe Web site using a link provided on the CD.

- The SyBooks CD contains product manuals and is included with your software. The Eclipse-based SyBooks browser allows you to access the manuals in an easy-to-use, HTML-based format.

Some documentation may be provided in PDF format, which you can access through the PDF directory on the SyBooks CD. To read or print the PDF files, you need Adobe Acrobat Reader.

Refer to the *SyBooks Installation Guide* on the Getting Started CD, or the *README.txt* file on the SyBooks CD for instructions on installing and starting SyBooks.

- The Sybase Product Manuals Web site is an online version of the SyBooks CD that you can access using a standard Web browser. In addition to product manuals, you will find links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

To access the Sybase Product Manuals Web site, go to Product Manuals at <http://www.sybase.com/support/manuals/>.

## 9.1 Sybase certifications on the Web

Technical documentation at the Sybase Web site is updated frequently.

### ❖ Finding the latest information on product certifications

- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
- 2 Click Certification Report.
- 3 In the Certification Report filter select a product, platform, and timeframe and then click Go.
- 4 Click a Certification Report title to display the report.

### ❖ Finding the latest information on component certifications

- 1 Point your Web browser to Availability and Certification Reports at <http://certification.sybase.com/>.
- 2 Either select the product family and product under Search by Base Product; or select the platform and product under Search by Platform.
- 3 Select Search to display the availability and certification report for the selection.

❖ **Creating a personalized view of the Sybase Web site (including support pages)**

Set up a MySybase profile. MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

- 1 Point your Web browser to Technical Documents at <http://www.sybase.com/support/techdocs/>.
- 2 Click MySybase and create a MySybase profile.

## 9.2 Sybase EBFs and software maintenance

❖ **Finding the latest information on EBFs and software maintenance**

- 1 Point your Web browser to the Sybase Support Page at <http://www.sybase.com/support>.
- 2 Select EBFs/Maintenance. If prompted, enter your MySybase user name and password.
- 3 Select a product.
- 4 Specify a time frame and click Go. A list of EBF/Maintenance releases is displayed.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as a Technical Support Contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click Edit Roles to add the “Technical Support Contact” role to your MySybase profile.

- 5 Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

## 10. Accessibility features

This document is available in an HTML version that is specialized for accessibility. You can navigate the HTML with an adaptive technology such as a screen reader, or view it with a screen enlarger.

EAServer and the HTML documentation have been tested for compliance with U.S. government Section 508 Accessibility requirements. Documents that comply with Section 508 generally also meet non-U.S. accessibility guidelines, such as the World Wide Web Consortium (W3C) guidelines for Web sites.

The online help for this product is also provided in HTML, which you can navigate using a screen reader.

For information on using EAServer without a mouse, see “Keyboard navigation” in Chapter 2, “Management Console Overview,” in the *EAServer System Administration Guide*.

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**Note** You might need to configure your accessibility tool for optimal use. Some screen readers pronounce text based on its case; for example, they pronounce ALL UPPERCASE TEXT as initials, and MixedCase Text as words. You might find it helpful to configure your tool to announce syntax conventions. Consult the documentation for your tool.

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For information about how Sybase supports accessibility, see Sybase Accessibility at <http://www.sybase.com/accessibility>. The Sybase Accessibility site includes links to information on Section 508 and W3C standards.

For a Section 508 compliance statement for EAServer, go to Voluntary Product Assessments at [http://www.sybase.com/detail\\_list?id=52484](http://www.sybase.com/detail_list?id=52484), and click the link for EAServer.