

Sybase® Enterprise Portal – Enterprise Edition Version 5.0 for Sun Solaris

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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 release of the product CD, use the Sybase Technical Library Product Manuals Web site.

❖ Accessing release bulletins at the Technical Library Product Manuals Web site

- 1 Go to Product Manuals at <http://www.sybase.com/support/manuals/>.
- 2 Follow the links to the appropriate Sybase product.
- 3 Select the Release Bulletins link.
- 4 Select the Sybase product version from the Release Bulletins list.

- 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 Enterprise Portal version 5.0, which is compatible with the following:

Operating systems

Sun Solaris 2.8 (also known as SunOS 5.8 and as Solaris 8)

Supported browsers

- http version 1.1
- Netscape version 4.79 on Solaris

Portal Interface and Portal Studio can be accessed on Windows NT using:

- Internet Explorer versions 5.0, 5.5, and 6.0
- Netscape version 4.76

Note See “Highlighted problems with Netscape” on page 18 for a detailed description of known issues of using Netscape with Enterprise Portal.

2.1 Urgent EBF to fix authentication failure

This section discusses the requirements for Enterprise Portal.

2.1.1 Installing EBF 12853

Users with an Enterprise Portal – Enterprise Edition installation must install EBF 12853, which addresses an urgent problem. Enterprise Portal 5.0 uses JAR files provided by Sun Microsystems. These files are digitally signed, and the digital certificates on some of these files expire on July 28, 2005. If EAServer is stopped and restarted after this date, connections cannot authenticate to Enterprise Portal.

Follow the instructions in “Sybase EBFs and software maintenance” on page 70 to download EBF 12853. Follow the installation instructions in the cover letter provided with the EBF.

2.2 Version contents

The Enterprise Portal version 5.0 packaging includes:

- Media
 - EP Adaptive Server® Enterprise version 12.5 CD
 - EAServer version 4.1.2 CD
 - Enterprise Security version 2.5.2 CD
 - EP Portal Interface and Search CD
 - PowerJ® version 4.1.0 CD
 - PowerDesigner® version 9.5 CD
- Documentation
 - *Enterprise Portal Installation Guide for Sun Solaris*
 - *Enterprise Portal Release Bulletin for Sun Solaris* – this document
 - Online help text

❖ Obtaining the Enterprise Portal Technical Library CD

You can obtain your free copy of the Enterprise Portal Technical Library CD and the *Technical Library CD Installation Guide*.

To obtain the CD:

- 1 Go to Sybase eShop at <http://eShop.sybase.com>.
- 2 Enter code EPTL9J2 into the Promo Search box at the top of any page, then click Go.
- 3 Place the product in your shopping cart and proceed through the checkout process.

The CD contains the following Enterprise Portal manuals in both DynaText and PDF formats:

- *Enterprise Portal 5.0 Administration Guide* – describes the portal administration tasks that are necessary once development is complete.
- *Enterprise Portal 5.0 Developer's Guide* – describes how to develop and deploy portlets, portals, and their associated components, such as pages, catalogs, and so on.

- *Enterprise Security Guide* – explains the Enterprise Security architecture and describes how to set up both basic and advanced security models for an enterprise.
- *Portal Interface User's Guide* – gives an overview of Enterprise Portal and what new services and features are available in Enterprise Portal version 5.0.

The Technical Library CD also contains the following related manuals:

- *EAServer documents* – are available in PDF and DynaText formats on the CD, and in HTML format in the EAServer software installation.
- *PowerDesigner documents* – are available in PDF and DynaText formats.
- *PowerJ documents* – are available in PDF and DynaText formats.
- *jConnect for JDBC documents* – Enterprise Portal includes the jConnect™ for JDBC™ driver to allow JDBC access to Sybase database servers and gateways. The *jConnect for JDBC Programmer's Guide* is included on the CD in PDF and DynaText formats.

These manuals are also available online at Product Manuals at <http://www.sybase.com/support/manuals> in PDF and html formats.

2.3 Component limitations

Adaptive Server You must purchase a “full” version of Adaptive Server Enterprise to use Monitor Server to monitor Adaptive Server or to use Adaptive Server for anything other than Enterprise Portal internal metadata storage.

3. Special installation instructions

The *Enterprise Portal Installation Guide for Sun Solaris* contains detailed installation instructions. This section describes special installation instructions for Enterprise Portal that are not in the installation manual.

3.1 Pre-installation check

Check to see whether a SySAM installation is running on your system. You may need to preserve an earlier SySAM installation because it contains important license information for existing Sybase products.

If you have determined that your existing SySAM installation can be removed, follow the instructions in “Removing an existing SySAM installation.” Otherwise, follow the instructions in “Using an existing SySAM installation” on page 6.

❖ **Removing an existing SySAM installation**

- 1 Delete `/usr/tmp/lockSYBASE` if it exists on your system.
- 2 Shut down the existing SySAM by entering the following, where *filepath* is the full path to the *license.dat* file:

```
$SYBASE/SYSAM-1_0/bin/lmutil lmdown -c filepath
```

- 3 Run the SySAM uninstaller. See Chapter 6, “Uninstalling Enterprise Portal 5.0” in the *Enterprise Portal Installation Guide* for instructions on uninstalling SySAM.

3.1.1 Using an existing SySAM installation

This section describes the steps for using an existing SySAM license for both Enterprise Portal versions 2.5 or later, and for products other than Enterprise Portal versions 2.5 or later.

❖ **Using an existing SySAM installation for Enterprise Portal versions 2.5 or later**

Follow these steps if the SySAM installation is managing licenses for Enterprise Portal versions 2.5 or later:

- 1 Follow the *Enterprise Portal Installation Guide* to install Adaptive Server into your target directory. Adaptive Server looks for the *SYSAM-1_0* directory in the same installation location as itself. If it is not there, you must set the `LM_LICENSE_FILE` environment variable with the correct location of the SySAM *license.dat* file.

Add the following lines to `$SYBASE/ASE-12_5/install/RUN_servername`, where *servername* is the name of your Adaptive Server:

```
LM_LICENSE_FILE=$SYBASE/SYSAM-1_0/licenses/license.dat
export LM_LICENSE_FILE
```

For `$SYBASE`, you must provide the full path to your existing *SYSAM-1_0* directory.

- 2 Restart Adaptive Server.

❖ **Using SySAM that is managing licenses for Sybase products other than Enterprise Portal versions 2.5 or later**

- 1 Shut down the existing SySAM daemon:
 - a Delete `/usr/tmp/lockSYBASE` if it exists on your system.
 - b Enter the following, where *filepath* is the full path to *license.dat*:


```
$SYBASE/SYSAM-1_0/bin/lmutil lmdown -c filepath
```
- 2 Follow the *Enterprise Portal Installation Guide* to install Adaptive Server. When you get to the SySAM panel, select “Use the locally installed SySAM.”
- 3 Follow the *Enterprise Portal Installation Guide* to enter your license certificate information.
- 4 Follow the *Enterprise Portal Installation Guide* to complete your Adaptive Server installation.
- 5 Shut down the newly installed SySAM daemon that started as part of the Adaptive Server installation:
 - a Delete `/usr/tmp/lockSYBASE` if it exists on your system.
 - b Shut down the newly installed SySAM by entering the following, where *filepath* is the full path to *license.dat*:


```
$SYBASE/SYSAM-1_0/bin/lmutil lmdown -c filepath
```
- 6 Append the contents of the newly created *license.dat* file, located in your target `/SYSAM-1_0/licenses/license.dat` install directory, to the existing *license.dat* file.
- 7 Run the SySAM uninstaller to remove the newly installed SySAM. See Chapter 6, “Uninstalling Enterprise Portal 5.0” of the *Enterprise Portal Installation Guide*, for instructions on uninstalling SySAM.
- 8 Adaptive Server looks for the `SYSAM-1_0` directory in the same installation location as itself. If it is not there, you must set the `LM_LICENSE_FILE` environment variable with the correct location of the SySAM *license.dat* file.

Add the following lines to `$SYBASE/ASE-12_5/install/RUN_servername`, where *servername* is the name of your Adaptive Server:

```
LM_LICENSE_FILE=$SYBASE/SYSAM-1_0/licenses/license.dat
export LM_LICENSE_FILE
```

For `$SYBASE`, you must provide the full path to your existing `SYSAM-1_0` directory.

9 Restart Adaptive Server.

3.2 Fixing improper Adaptive Server configurations

[CR #298723] If you configure Adaptive Server incorrectly, or if you do not have sufficient memory, you may see the following error in your *Jaguar.log* or in the Portal and Studio *datamanager.log* when you install Enterprise Portal:

Cannot initialize the Java Virtual Machine because the Java class library (\$SYBASE/\$SYBASE_ASE/lib/runtime.zip) is either missing, corrupted, or incompatible with the current server release. Contact your System Administrator for help.

Workaround: Make sure that you have properly defined your SYBASE_ASE environment variable before you run your Adaptive Server.

❖ Setting your SYBASE_ASE environment variable in Solaris

1 Shut down your Adaptive Server:

```
isql -Usa -P -Sservername
1> shutdown
2> go
```

2 Go to the installation directory for your Adaptive Server, and set up your environment:

- In C shell:

```
cd $SYBASE
source ASE-12_5/SYBASE.csh
source OCS-12_5/SYBASE.csh
cd $SYBASE\ASE-12_5\install
startserver -f RUN_servername
```

- In Bourne shell:

```
cd $SYBASE
source . ASE-12_5\SYBASE.sh
source . OCS-12_5\SYBASE.sh
cd $SYBASE\ASE-12_5\install
startserver -f RUN_servername
```

If setting your SYBASE_ASE environment variable does not solve the problem, your Adaptive Server might have insufficient memory.

❖ **Increasing the amount of memory for Adaptive Server**

- 1 Log in to your Adaptive Server.

```
isql -Usa -P -Sservername
```

- 2 Determine your existing configuration for process object heap using the `sp_configure` system procedure:

```
1> sp_configure "size of process object heap"
2> go
```

Parameter Name	Default	Memory Used	Config Value
Run Value	Unit	Type	
size of process object heap	1500	3076	1500
1500	memory pages(2k)	dynamic	

(1 row affected)
(return status = 0)

- 3 Increase this parameter to a level that allows your Java Virtual Machine to operate. If the value you enter causes an insufficient memory error, increase the memory, and reexecute `sp_configure`:

```
1> sp_configure "size of process object heap", 2000
2> go
```

Msg 5861, Level 16, State 2:
Server 'tangelo', Procedure 'sp_configure', Line 599:
The current 'max memory' value '33792', is not sufficient to change the parameter 'size of process object heap' to '2000'. 'max memory' should be greater than 'total logical memory' '34288' required for the configuration.
(return status = 1)

```
1> sp_configure "max memory", 34288
2> go
```

Parameter Name	Default	Memory Used	Config Value
Run Value	Unit	Type	
max memory	33792	68576	34288
34288	memory pages(2k)	dynamic	

(1 row affected)

Configuration option changed. The SQL Server need not be rebooted since

the option is dynamic.

Changing the value of 'max memory' does not increase the amount of memory Adaptive Server uses.

(return status = 0)

```
1> sp_configure "size of process object heap", 2000
```

```
2> go
```

Parameter Name	Default	Memory Used	Config Value
Run Value	Unit	Type	
size of process object heap	1500	4076	2000
2000	memory pages (2k)	dynamic	

(1 row affected)

Configuration option changed. The SQL Server need not be rebooted since the option is dynamic.

Changing the value of 'size of process object heap' to '2000' increases the amount of memory ASE uses by 1000 K.

(return status = 0)

3.3 Installing Adaptive Server Enterprise

[CR #296641] The uninstallation script for Adaptive Server Enterprise contains a hard-coded Java Runtime Environment (JRE) path. For this reason, you must install Adaptive Server components either before installing anything else, or into the same directory where you installed your first set of Enterprise Portal applications. If you do not do this, the uninstallation script cannot run.

Workaround: Edit the *uninstallASE.sh* script to set the JAVA variable to the location of a JRE.

3.4 Post-installation tasks

This section discusses post-installation tasks for Enterprise Portal components.

3.4.1 Removing the installation CD

[CR #299005] If you cannot eject the CD from the CD drive after your installation, make sure the NFS server is not running if the CD is mounted on a shared remote machine:

```
# cd /etc/init.d
# nfs.server stop
# eject
```

If you mount the CD locally on your system, and the CD does not eject, the Solaris operating system and the Volume Manager may be holding the CD drive. Perform the following:

```
# ps -wwgxu|grep vold
# kill -9 <ps in a>
# umount /vol
# /usr/sbin/vold -t -v -L 99 -l /var/adm/vold.debug_log
# eject
```

3.4.2 Installation of Adaptive Server can generate DTC error message

[CR #296891] After successful installation of Adaptive Server, the Adaptive Server error log displays this error message:

```
The DTC Operation Cannot load XOLE HLP.DLL - failed with
error (0x0)
```

xolehlp.dll is a Microsoft *.dll* file that belongs to the product MSDTM. The MSDTC connection is attempted by the kernel because the environment must be initialized very early in the kernel, before parameteres are analyzed. If the DTC environment cannot be initialized, the error message displays.

Workaround: This error message can be ignored.

3.4.3 Applying the EAServer patch

[CR #299018] If you experience problems after you install Portal Enterprise, reapply the following EAServer patch.

```
cd $JAGUAR
cp -r $SYBASE/PortalStudio-5_0/war/EAServer/EAS_41210patch/Solaris/*
```

Where:

- *\$SYBASE* – is the SYBASE directory

- `$JAGUAR` – is the EAServer home directory

Note `$JAGUAR` is not created during the installation process automatically.

3.4.4 Errors after installing Enterprise Security

[CR #296619] After successful installation of Enterprise Security, you may get some SRVLIB errors related to a `PROFILE_ALLOC` on some security related listeners. This could affect the security functions of Portal Interface.

Workaround: None.

3.5 Performing a clean uninstallation

[CR #299001] Unsuccessful uninstallations of Enterprise Portal components can create extra directories in their uninstaller directories in subsequent reinstalls if:

- You run the uninstall script to uninstall any of the Enterprise Portal components, and;
- The component's uninstall directory, `$SYBASE/uninstallers/<component_name>`, is not cleaned up during the uninstallation.

A reinstallation of the affected component creates an unnecessary subdirectory in the its uninstall directory, such as:

`$SYBASE/uninstallers/<component_name>/2`

To allow subsequent uninstall operations to work, move all files from this subdirectory to the level above:

```
% mv $SYBASE/uninstallers/component_name/2/*. *
    $SYBASE/uninstallers/component_name
```

4. Special upgrade instructions

The *Enterprise Portal Installation Guide for Sun Solaris* contains detailed upgrade and downgrade instructions. Sybase strongly recommends that you read this information before you upgrade or downgrade Enterprise Portal.

5. Changed functionality in this version

This section describes new or changed functionality in the following Enterprise Portal components:

- “Portal Interface” on page 13
- “Portal Studio” on page 13
- “Systems Management” on page 14
- “Enterprise Security” on page 14

5.1 Portal Interface

Portal Interface provides numerous features to help you easily develop, deploy, and administer your enterprise’s portal solution.

Portal Interface lets your users:

- Create as many personal pages as they want
- Organize groups of pages using tab sets
- Personalize portlet locations and page column layout
- Quickly create personal or shared portlets using one-click technology

See the *Portal Interface User’s Guide* and the Portal Interface online help for details. The guide is on the Enterprise Portal Technical Library CD that is available for Enterprise Portal version 5.0. See “Obtaining the Enterprise Portal Technical Library CD” on page 4 for more information.

5.2 Portal Studio

The Portal Studio includes tools that allow you to quickly and easily collect, store, and retrieve content. You can automate the collection and updating so that as each of those sources change, the changes appear on your Web site.

Portal Studio is a graphical user interface that lets you quickly create portal pages filled with dynamically updated portlets. You can also aggregate information for rapid portlet development.

See the *Portal Studio User’s Guide* for complete details. This document is on the Enterprise Portal Technical Library CD that is available for with Enterprise Portal version 5.0. See “Obtaining the Enterprise Portal Technical Library CD” on page 4 for more information.

5.3 Systems Management

Enterprise Portal 5.0 includes an enterprise-level systems management framework that simplifies the administration of the portal. All administration is centralized within one easy-to-use console rather than separate administration interfaces. You can visually monitor each installed component, such as a Web server, application server, database server, or Replication Server within a customizable tree structure.

The Systems Management Web-based console is called the “Sybase Enterprise Web Console.”

5.4 Enterprise Security

Sybase Enterprise Portal version 5.0 introduces a new Security Management application programming interface (SMAPI) and offers several enhancements. This section contains a brief summary of these enhancements. The *Enterprise Security Guide* (also known as the *Enterprise Portal Security Guide*) includes a complete description of new security features. See “Obtaining the Enterprise Portal Technical Library CD” on page 4 for instructions on obtaining the manual.

5.4.1 Security component name change

The Enterprise Portal Security component is now called “Enterprise Security” rather than “Enterprise Portal Security,” “Enterprise Portal Advanced Security,” or “EAServer Security.”

5.4.2 Security GUI name change

The Enterprise Security graphical user interface is now called “Security Manager,” instead of “Security Admin GUI.”

5.4.3 Password security enhancements

Enterprise Security has been enhanced to provide more secure storage of user passwords. Enterprise Security now allows password verification while at the same time removing vulnerability to decryption and discovery of user passwords in the event that the system’s encryption key is compromised.

Salted passwords provide increased protection against precalculated dictionary attacks. Salting a password means adding a random (or pseudo-random) string of binary data to password data before it is encoded into the strings that are stored in the Access Control Database (ACDB).

5.4.4 Security Management API

Enterprise Security includes the Security Management application programming interface (SMAPI), which allows you to manage your portal security programmatically. You can also develop your own front-end tool that uses the SMAPI to manage your security data. The SMAPI replaces the Object Management API, providing greater functionality that is easier to use.

This version of Enterprise Security provides a default implementation for managing the data in your ACDB. To customize your implementation, contact Sybase Professional Services.

5.4.5 Proxy authentication

The SMAPI can retrieve authentication information and proxy that information to secured assets, facilitating single sign-on to back-end data sources. The Enterprise Security SMAPI implements user-, role-, and asset-based authentication information management. You must write your own custom application that invokes the API that retrieves the proxy authentication information to implement single-sign on capabilities.

Proxy authentication information identifies a user via user name and password (credentials), and the URL used to connect to the data source or service. When the user logs in to a system secured with Enterprise Security, the proxy authentication information can be retrieved from the ACDB and presented to the back-end data source to authenticate the user without requiring the user to reenter his user name or password.

To use proxy authentication information for single sign-on, the data source (asset) must first be defined in the ACDB. The proxy authentication mechanism merely determines whether the user credentials allow him or her to access the back-end data source; it does not enforce the user's privileges to read, write, update, or execute commands on the data source.

5.4.6 Self-registration

The SMAPI allows a custom-written EJB client application to invoke the self-registration feature, so new users can register their user information to the system. This removes the burden from the security officer who, in the past, was required to register all new users, then assign roles and asset access permissions for each new user.

Self-registration group

Enterprise Security allows new users of Sybase components to register their user information directly to the system. Once they have registered, they become a member of the self-registration group. Members of this group can then access the assets that group is allowed to access.

Every member of this group has the same permissions to access enterprise components. All previously registered users maintain their access permission according to permissions granted to their original roles.

Enterprise Security supports only one self-registered group, which is, by default, installed into the root organization. This allows users to self-register in the root organization or any of the suborganizations. For example, if the self-registration group is created in an organization called Sybase, the user can self-register only in the organization Sybase and the Sybase suborganizations.

5.4.7 Subject account management

The SMAPI also includes a SubjectManagement API that allows all users to update their own user information, removing the burden from the security officer, who historically had to register all users and make all changes to a user account.

Managing user information

All users can update user information in their own account. However, they cannot delete the account entirely; the security officer must delete any unwanted or unused accounts.

User authentication information is stored in the ACDB, a JDBC-compliant database that is configured by default when you configure Sybase Enterprise Security. The default implementation of the SubjectManagement API in the SMAPI supports access to and modification of data in the ACDB. If you use a different data store to store authentication and authorization information, you must write and deploy your own implementation of SubjectManagement.

To implement the subject management feature, you must develop and deploy your own EJB client that calls the Enterprise Security SubjectManagement API.

5.4.8 Authorization delegate

Enterprise Security stores authentication and authorization information in a JDBC-compliant database. If you are using Enterprise Security with Enterprise Portal, the database is installed in the Adaptive Server product by default.

Enterprise Security implements an authorization delegate that isolates the authorization logic from the PortalSession object, and allows you to store authorization information in a different data store.

Previously, when users logged in to the portal or EAServer via a user name and password, the PortalSession accessed the ACDB directly to check for access permissions.

Enterprise Security now implements an authorization delegate that establishes a connection to the data store where the authorization information is stored, and retrieves authorization information. The underlying data store and the format of the authorization information is hidden from the PortalSession object.

5.4.9 Enterprise Security and EAServer

This section describes new or changed functionality with Enterprise Security and EAServer.

Assigning EAServer roles

When using Enterprise Security with EAServer, you must create roles and add users to the roles using Security Manager. You must then map each role to an EAServer role.

EAServer security

EAServer provides a mechanism by which applications can extend and maintain an authenticated session beyond the lifetime enforced by EAServer. This mechanism uses the methods CtsSecurity::SessionInfo::setName and CtsSecurity::AuthService::getCallerPrincipal.

If these methods are implemented, then you must authorize users by implementing either a role service or an authorization service. The internal role checking performed by EAServer does not work unless you add an alternate user name to the authorized user's list for the role. Because the alternate user name that is set using the setName API can be dynamic, the role service or authorization service should work in tandem with the authentication service to authorize the user.

6. Known problems

This section describes known problems in the following Enterprise Portal version 5.0 components:

- “Highlighted problems with Netscape” on page 18
- “Highlighted problems with Portal Interface” on page 20
- “Highlighted problems with Portal Studio” on page 25
- “Highlighted problems with Portal Search” on page 26
- “Highlighted problems with Enterprise Security” on page 27
- “Highlighted problems with Sybase Enterprise Web Console” on page 30
- “Highlighted problems with EAServer” on page 31
- “Highlighted problems with Message Bridge for Java” on page 48
- “Highlighted problems with Web Services Toolkit” on page 52

These problems are identified with Change Request (CR) numbers, to which you can refer when contacting Sybase Technical Support. Workarounds are provided where available.

6.1 Highlighted problems with Netscape

[CRs #296140] Sybase only supports the version of Netscape listed in “Supported browsers” on page 3. In addition, Netscape can behave unpredictably because of the way it handles:

- Javascript
- Virtual memory
- Threading and timing

User information is not harmed when a Netscape browser crashes. If this happens, users can open a new browser window and log back in to continue where they left off.

The following describes specific known problems with Netscape:

6.1.1 Portals using HTTP port 80 can experience Javascript errors in Netscape

[CR #298005] When the portal is configured to use the HTTP port 80 on EAServer, Netscape version 4.7x browsers can experience JavaScript errors during login.

When the EAServer ServerProperties for the HTTP Config tab have the Domain Name set, Jaguar returns a port number in the URL sent to the browser during login processing. Netscape users are unable to log in.

Workaround: There are two options:

- Enable an HTTPS listener for EAServer, then set the `global.properties.xml` “secure” property from “off” to “on.” This allows Netscape to log in without errors.
- Unset the Domain Name property for EAServer.

6.1.2 Basic Search does not handle carriage returns

[CR #298582] The text-entry area in the Basic Search portlet of the Portal Interface is a multiple-line text field. In Netscape, you get an error when you:

- 1 Search the portal (not the Internet).
- 2 Press Enter, which adds a carriage-return line feed.
- 3 Click Cancel or Search.

Doing this results in the following error message:

A network error occurred while Netscape was receiving data. (Network error: connection reset by peer. Try connecting again.)

If you click OK, nothing happens; you see a message that the document is done, but nothing displays.

Workaround: Do not press Enter. Instead, use the mouse to click Search.

6.1.3 Netscape 4.79 and the scroll bar in Advanced Search

[CR #296283] You cannot scroll in the Advanced Search portlet when using Netscape 4.79, even after you refresh the window.

Workaround: Although you can click any button in the Advanced Search portlet to launch a new Netscape browser window outside of the portlet to scroll normally, Sybase recommends that you use Netscape 4.76 instead.

6.1.4 Cannot use secure content portlets

Netscape does not allow access between domains that include port numbers 80 and 443. For this reason, Netscape users cannot create secure content portlets.

Workaround: This is a Netscape issue, and no solution is currently available to solve this problem. For this reason, Sybase does not support the use of secure content portlets in Netscape.

6.1.5 “Add Page Group” and “Reorder Page Group” are not pop-up windows

Unlike other browsers, in Netscape version 4.79, the Add Page Group and Reorder Page Group functions in Manage Pages are not pop-up windows.

6.1.6 Portal Interface does not display correctly with large fonts

If you select larger fonts to view Portal Interface in Netscape version 4.79, options may not be visible in your browser window.

Workaround: Set your font size to 12 points or lower.

6.1.7 Portal Interface can crash your browser when you click “Refresh page” rapidly

Portal Interface can crash your browser if you click the “Refresh page” link continuously or rapidly.

6.2 Highlighted problems with Portal Interface

This section describes problems with Portal Interface.

6.2.1 Jaguar.log displays a message whenever you create a new agent

[CR #298610] The following message appears in the *Jaguar.log* file whenever you create a new agent in Portal Interface:

```
Newagent: Missing uid param
```

Workaround: You can safely ignore this message.

6.2.2 *datamanager.log* file continues to grow

[CR #298569] New data continues to get added into the *datamanager.log* file located at */tmp/logs*, and the file continues to grow in size.

Workaround: Monitor the size of the file, and periodically reduce its size. To reduce its size, you must first shut down EAServer. You can restart EAServer after you have pruned the file.

6.2.3 Edit welcome portlet on guest page logs user out

[CR #298860] The Edit link on the guest page Welcome portlet title bar does not work. You should not edit this portlet on the guest page.

Workaround: None.

6.2.4 Redundant warning fills *JaguarhttpServlet.log* file

[CR #298568] A redundant warning in the *JaguarhttpServlet.log* file can cause this file to get extremely large. Eventually this results in the log file filling up and stopping the server.

Workaround: Limit the size of *JaguarhttpServlet.log*.

- 1 Use JagManager to connect to EAServer. Open the Servers folder in the left pane and right-click Jaguar and select Server Properties from the pop-up.
- 2 Click the HTTPConfig tab.
- 3 On the bottom of this tab labelled “HTTP Logging,” click Log Type and select Servlet Log from the drop-down list.
- 4 When the you see a display of “Log File Size (Bytes)” input, enter in some size (such as 1000000) to limit the *JaguarhttpServlet.log* file size to a Megabyte.
- 5 Reboot Jaguar.

From this point forward, whenever the *JaguarhttpServlet.log* reaches the specified log size limit that you entered, the log automatically rolls over. The existing log is then renamed, and a new *JaguarhttpServlet.log* file is started.

Periodically remove the old rolled-over log files to prevent the disk from filling up.

6.2.5 Pages display incorrectly when portlets use default <DIV> tags

[CR #298291] Using <DIV> tag portlets by default within portal properties causes many portlets and pages to display incorrectly.

The portal may have difficulty running in <DIV> tag-only mode (mode 2) alone because portlets that contain links for additional content may not display properly using only <DIV> tags. Problems have been confirmed running the portal in Internet Explorer version 6.0 using a setting of 2 for tile_style in the *global.properties.xml* file.

Workaround: The default and recommended setting for tile_style is mode 3 – mixed mode, which uses either an <IFRAME> or a <DIV> tag, depending on which tag is more appropriate to the portlet’s content.

6.2.6 No-access message when timing out on Manage Channels portlet

[CR #298272] If your security session times out on the Manage Channels portlet, you see the following message even if you have administrator privileges:

You do not have admin role to access this page.

Workaround: Return to the portal login to log back in. You can then see the *channel admin* page again.

6.2.7 Database portlets without default values display incorrectly

[CR #297613] When you create database portlets that allow user input, the portlets display incorrectly when you do not provide default values.

Workaround: You must provide default values when creating database portlets.

6.2.8 One-click capture does not work when capturing off-site URLs

[CR #291630] When creating a portlet, clicking Next to start the one-click capture process does not work if the content you want to capture is located on a different server from the Web page you started from.

Workaround:

- 1 Copy the URL of the link you want to capture from.
- 2 Return to the Content Capture window, labeled “Step 1 of 3.”
- 3 Paste the URL of the link and click Go.
- 4 Continue with the capture process.

Note This CR also affects Portal Studio users.

6.2.9 Two Advanced Search portlets on same page causes error

[CR #298587] When using Internet Explorer, placing two Advanced Search portlets on the same page can cause a system-exception error such as the following:

```
SystemException: UNKNOWN  
(PortalSearchServices/Search/getCountOfDatabases -  
@127.0.0.1)
```

Workaround: Refresh the two portlets.

6.2.10 Clear Settings option on Advanced Search does not reset database selection

[CR #296387] If you select a partial list in Advanced Search, clicking Clear Settings does not reset the database selection to search all databases.

Workaround: Use the following:

- 1 In the Databases field, select the databases that appears in the Selected column.
- 2 Click the left arrow (“<<”) button to move the databases from the Selected to Available columns.
- 3 When you have moved all the databases to the Available column on the left, “(Search in all data sources)” appears in the Selected column, and you can start a new search.

6.2.11 Some portlets display and function incorrectly when using https in URL

[CR #296180] Starting a Sybase Portal session using an *https* URL causes some portlets to display and function incorrectly.

Workaround: Do not start a Sybase Portal session using *https*. The portal redirects your browser to *https* URLs as necessary to keep session information confidential if the “secure” parameter is on in the global properties file.

6.2.12 Individual search portlets have no help pages

[CR #295531] Individual search portlets have no help pages of their own.

Workaround: Use the master help index.

6.2.13 Must click Done to save name changes in Edit Page Group window

[CR #294574] When changing Page Group names and the order of the pages in the Edit Page Group window, selecting the Done button by using the Enter key does not save your changes.

Workaround: You must use a mouse button and click Done instead.

6.2.14 Deleting objects does not remove them from the database

[CR #292932] When you delete objects such as a catalog portlet or page in Portal Studio, or a personal portlet, page, or page group in Portal Interface, the objects are marked as deleted in the portal database but are not actually removed.

Workaround: None. In addition, you must periodically increase the size of the database to accommodate the records marked “deleted.”

6.2.15 Agent list portlet does not refresh automatically

[CR #292328] When creating a new agent with the agent portlet, you do not initially see the new agent.

Workaround: Refresh the agent list portlet manually to see the new agent.

6.2.16 Portlet titles are treated as URLs

[CR #292023] Currently, all portlets are created with the title treated as a URL (a link). If the specified link is invalid, an error displays. This is scheduled to be addressed in a future release.

6.2.17 Portal database is created on the master device

[CR #292217] By default, the portal and Portal Search databases in this release are created on the Adaptive Server master device.

Workaround: For production Adaptive Servers, Sybase recommends that you do not place application databases such as these on the Adaptive Server master device. Move the databases from the master device before going into production.

See the *Adaptive Server Enterprise System Administration Guide* for details on how you can dump and reload the database into a different device.

6.2.18 The Portal hangs when the transaction log is full

[CR #293083] If the entldb or portaldatabase transaction logs are full, the portal hangs.

Workaround: Increase the log size or set the threshold to truncate it.

6.2.19 New PortalAdmin user cannot get catalog page

[CR #292878] The new PortalAdmin user cannot get the catalog page that has a J2EE PortalAdmin role associated with it.

Workaround: After changing the user's set of roles, you can manually flush the permission cache by using JagManager. Right-click Roles and select Refresh to flush the permission cache.

Alternatively, change the permissionCache timeout value to a very small value to limit the window of inconsistency.

In *Jaguar.props*, change the following property (in seconds):

```
com.sybase.jaguar.server.authorization.permcachetimeout=7200
```

6.3 Highlighted problems with Portal Studio

This section describes problems with Portal Studio.

6.3.1 JSP templates do not preview executed JSP content

[CR #298378] When you create JSP content in Portal Studio using JSP templates, the preview of the template is the JSP text only; you have not yet compiled the code.

Workaround: None.

6.3.2 New XSL templates must be saved twice

[CR #298865] After creating a new XSL template in the Portal Studio and assigning it to an XML element, the XSL is not applied to the XML source and nothing displays in the portlet.

Workaround:

- 1 Save the XSL template a second time.
- 2 Open the template in the Template Editor, and click Save.

The XSL should correctly apply to the XML source in the XML element.

6.3.3 User cannot change location of Help URL

[CR #295710] Once you add a URL to the Help URL of a new portlet, you cannot change that URL.

Workaround: None.

6.3.4 User cannot reassign the J2EE roles

[CR #292875] When editing the catalog properties, J2EE roles properties are missing, so the J2EE roles cannot be reassigned.

Workaround: Reassign the J2EE roles:

- 1 Select the catalog from Catalog Manager, and click Edit.
- 2 Perform a “Save as” from the Catalog Builder.

6.4 Highlighted problems with Portal Search

This section describes problems with Portal Search.

6.4.1 Problems when PortalUser role is removed from a channel

[CR #293574] Sometimes, there are intermittent problems when the PortalUser role is removed from a channel. You may get a “Page Not Found” error on the Manage Channel portlet, or a null on the channel list.

Workaround: None.

6.4.2 Turning off iframe makes the search portlets unusable

[CR #293546] If you deselect the iframe option in the Edit function of a portlet to disable inline floating frames, the search portlets will not be usable.

Workaround: When you edit portlets, do not deselect the iframe option.

6.4.3 Portal Search and Portal Indexer default ports

[CR #290768] The default port for Portal Search is 8500. The default port for the Portal Search index is 8501. These defaults can be changed by editing the *DRE.ini* file located in *\$SYBASE/PortalSearch-5_0/Engine*. After editing the file, restart the DRE.

6.4.4 Error message in Jaguar.log file

[CR #293313] In an environment with multiple EAServers, users may receive this type of error message:

```
"getUserInfo(user:) : Caught exception
```

```
:org.omg.CORBA_OBJECT_EXIST: minor code: 0 completed:
No".
```

In a scenario where EAServer 1 (Portal with Search portlets) connects to EAServer 2 (Portal with Search EJBs), the error message appears in the *Jaguar.log* file of the first EAServer.

Workaround: You can ignore this message.

6.5 Highlighted problems with Enterprise Security

This section describes problems with Enterprise Security.Cann

6.5.1 Registered users registered must still confirm registration

[CR #293905] Users who are already registered within Enterprise Security must still confirm their registration when using the portal for the first time. This might be the case for customers who are upgrading from previous version of Enterprise Portal.

Users should enter the same name and password within the login portlet that is registered for them in Enterprise Security entitlement database (ACDB). The portal then presents a registration page with the fields already filled with the users' information. Users must then click "I agree to the terms and conditions" to go into the portal.

Workaround: None.

6.5.2 Security Management API does not automatically support certificate authentication

[CR #277742] The Security Management application programming interface (SMAPI) does not support setting the PKIName field for a subject. Specifically, the SMAPI does not allow you to create a subject who logs in to the environment with a certificate.

❖ Creating a subject who logs in to the environment with a certificate

- 1 Create a subject using the SubjectManagement home interface in the SMAPI:

```
SubjectManagementHome home = ctx.lookup(. . . .);
SubjectManagement subject = home.create(. . . .);
```

- 2 Find the subject using SubjectIntf in OMAPI:

```
SubjectIntfHome shome = ctx.lookup(. . .);
```

```
SubjectIntf s = home.create();
```

- 3 Get the `primaryKey` of the newly created subject. This is the `SubjectDN` to be passed into `Objmgmt`:

```
String subjectDN = (String) subject.getPrimaryKey();
Subject subject = s.findSubject(subjectDN);
```

- 4 Set the `PKIName` field of the subject and update the subject:

```
subject.pkiName = CertificateDN;
s.updateSubject(subject);
```

See “Subject account management” on page 16 for more information.

6.5.3 Login problem with clustered servers

[CR #270887] If you run Enterprise Security in an `EAServer` cluster where all the servers are not on the same platform, you may have login problems with Security Manager. Every time the cluster synchronizes, it overwrites the *security.properties* file. Attempts to log in to Security Manager fail because the `com.sybase.ep.security.sessionssvcs.key_file` property has absolute paths, which are not transported across platforms.

❖ Workaround

- 1 Use Jaguar Manager to connect to the primary server.
- 2 Highlight the `sybepsecurity` application, and select `File | Application Properties`.
- 3 On the `Application Files` tab, delete the file `java\classes\com\sybase\ep\security\security.properties`.

If you make changes to one *security.properties* file, you must make the same changes to all others in the cluster.

6.5.4 Web server plug-in cannot be part of EAServer cluster

[CR #269710] To use the secure Web plug-in, the `EAServer` installation handling the Web server plug-in cannot be part of a cluster.

Workaround: Configure the secure Web plug-in to connect to a server that is not a cluster member.

6.5.5 Priority field unavailable in Create Nonconformances dialog

[CR #232784] In the Create or Update Nonconformances dialog box, the field name “Priority” is dimmed as if you are not allowed to make an entry.

Workaround: You can enter integers in the Priority field.

6.5.6 JDBC SBO does not provide qualification or asset checking

[CR #216352] The JDBC secure business object (SBO) builds queries as database..tablename. For databases that rely on owner qualification (such as Oracle and DB2), the JDBC SBO does not provide asset checking or owner-based qualification of a table.

Workaround: For maximum security and reliability, send to the SBO for JDBC XML requests of type “SQL:pass through,” which provide proper execution of the SQL statement by the back-end server.

6.5.7 Cannot use uppercase letters when creating protected URLs

You cannot use uppercase letters when you create a protected URL.

Workaround: Enter all protected URLs in lowercase only.

6.5.8 Highlighted problems with Security Manager

This section describes problems with Security Manager.

Users cannot change their own passwords

[CR #277812] Even though the new Security Management application programming interface (SMAPI) allows users to self-register, Security Manager has not been updated to provide a graphical interface where users can change their own passwords.

Workaround: None. You can create your own GUI that interfaces with the SMAPI to provide a place where users can change their user information, but the current Security Manager does not.

Error when displaying properties in object tree

[CR #277097] When you click on an asset listed in the object tree on the left pane of Security Manager and select Properties, the GUI displays a “Selection Error.”

Workaround: Select the asset in the right pane, and click Properties, or right-click the asset in the left pane and select Display Properties.

Error messages do not display when creating duplicate of existing role or access control element

[CRs #217278, #217017] No error message displays if you attempt to create a duplicate of an existing role or access control element.

Workaround: Do not create duplicate roles or two access control elements with the same name and different permissions.

6.6 Highlighted problems with Sybase Enterprise Web Console

This section describes problems with Sybase Enterprise Web Console.

6.6.1 User name and password for Adaptive Server, Backup Server, and Monitor Server

[CR #271457] You cannot read or update Backup Server or Monitor Server through the Sybase Enterprise Web Console after changing the access permissions on Adaptive Server.

Workaround: This is expected behavior. Because Backup Server and Monitor Server are subcomponents of Adaptive Server, the read and update roles must be consistent; that is, you must set the same roles for all subcomponents of a component.

The roles (read or update) assigned to Adaptive Server, Backup Server and Monitor Server are all the same; that is, all the read roles must match, and all the update roles must match.

Treat the roles for these three products as if they were for one product, with one set of read roles and one set of update roles across all three subcomponents.

For example, you might assign Admin Role to ReadRole, and Portal Security Officer to the Update Role. These roles must be the same for *all* three products.

Note The same restriction applies to PortalSearch and PortalIndexer: the roles for these two components must be consistent. However, they need not be the same as the Adaptive Server/Backup Server/Monitor Server roles.

6.6.2 Component Property Settings must match values of underlying product

[CR #270948] Property values that are set under a component's Settings folder are used by the agents to manage their underlying products.

If you change the value of *EAServer_iiop_passwd*, the new value is not used as a new EAServer password; the value of *EAServer_iiop_passwd* is simply used by the EAServer agent to interact with EAServer.

Workaround: This is expected behavior. Do not change a component's property values under the Settings folder to a value that does not match the underlying product. If you do, the agent cannot connect, and the component status changes to red.

If you do have to change the property values, the values you enter should be set to match the values as used in the underlying product.

6.7 Highlighted problems with EAServer

This section describes problems with EAServer.

6.7.1 Unexpected deadlock errors

If you see unexpected deadlock or slow database throughput when executing transactional components, check for the following setting in the properties of the component that initiates the transaction:

```
com.sybase.jaguar.component.iso_level=serializable
```

This setting causes the transaction to run with serializable isolation level, which can cause deadlocks or degraded performance. For components that are not EJB 1.0 beans, delete this setting using the All Properties tab in the component properties dialog box. This setting was erroneously used as a default for new components in past versions of EAServer.

If the component is an EJB 1.0 session bean, verify that the Transaction Isolation Level setting on the Transactions tab matches your application requirements.

6.7.2 Concurrent client connections are limited

Concurrent client connections to EAServer are limited by the operating system limit for the number of file descriptors that can be opened in one process.

Workaround: Before you start the server, set the file descriptor limit in the shell where you plan to start the server. For example, to set the limit to 1024:

- 1 Using a text editor, open the *bin/serverstart.sh* file.
- 2 Below the first comment block, add this line:

```
ulimit -n 1024
```

See your UNIX documentation for more details on the `ulimit` command.

6.7.3 SySAM does not run if file descriptors set to higher than 1024

[CR #276729] If the maximum number of file descriptors is set to a value higher than 1024, SySAM does not run.

Workaround: To avoid this problem:

- 1 Set the file descriptor limit to 1024, using one of these commands:

- In Bourne or Korn shell:

```
ulimit -n 1024
```

- In C shell:

```
limit descriptors 1024
```

- 2 Run SySAM.
- 3 To run EAServer with a higher limit than this, use another shell. See “Concurrent client connections are limited” on page 31 for more information.

6.7.4 C++ compiler compatibility

Compiler compatibility for components

C++ components must be compiled with the Solaris C++ compiler version 4.2 or a compatible compiler that generates code that is compatible with version 4.2 of the Application Binary Interface (ABI).

C++ compiler compatibility for clients

[CR #273205, #273182] For C++ clients that are compiled with the Solaris C++ compiler version 4.2, you must set the `JAGUAR_CLIENT_ROOT` variable at runtime. Set `JAGUAR_CLIENT_ROOT` and `JAGUAR` to the full path name of your EAServer server or client installation directory.

C++ clients can be compiled with the Solaris C++ compiler version 5.0 or 6.0. For these clients, you must set the environment variable JAGCLIENT_CC_VER to the compiler version at runtime. When this variable is set to “5.0” or “6.0”, the client runtime loads compatible versions of these client libraries, which provide security and transaction support:

Client libraries for version 5.0 and 6.0 compilers	Client libraries for version 4.2 compilers
<i>libjtssecct50.so</i>	<i>libjtssecct.so</i>
<i>libjotsclnt50.so</i>	<i>libjotsclnt.so</i>
<i>libEncina_nodce50.so</i>	<i>libEncina_nodce.so</i>
<i>libEncinaClientJaguar50.so</i>	<i>libEncinaClientJaguar.so</i>

6.7.5 Sun bug causes errors when compiling JavaServer Pages

[CR #277637] When compiling JavaServer Pages, you might receive errors with a message similar to the following:

```
Apr 17 16:56:14 2002: java.lang.InternalError: jzentry == 0
Apr 17 16:56:14 2002: at java.util.zip.ZipFile$2.nextElement (ZipFile.java:297)
Apr 17 16:56:14 2002: at sun.tools.java.ClassPath.GetFiles (ClassPath.java:183)
```

This issue is an intermittent and rarely seen Java compiler bug (Sun bug #435705), which is present in the JDK 1.3 version used by EAServer.

Workaround: If you encounter this issue, you may be able to eliminate the problem by updating the JDK 1.3 version in your EAServer installation. See the Sun Web site at <http://developer.java.sun.com/developer/bugParade/bugs/4353705.html> for more information.

6.7.6 Cannot enable some OTS tracing properties

[CR #261215] These CORBA Object Transaction Service (OTS) tracing properties are defined in EAServer but not used, so you cannot enable OTS tracing with these properties:

- com.sybase.jaguar.server.ots.log
- com.sybase.jaguar.server.ots.logFile
- com.sybase.jaguar.server.ots.logSetting

See the Encina Web page at http://www.transarc.ibm.com/Support/encina/docs/trace_guide/node7.html for information about how you can use environment variables to enable OTS tracing.

6.7.7 Compiling stubs and skeletons with JDK 1.2.2 causes stack trace

[CR #289315] EAServer uses the JDK 1.2.2 compiler to compile stubs and skeletons. There is a rarely seen bug in the JDK 1.2.2 compiler that results in a stack trace similar to this:

```
Jul 08 17:41:44 2002: sun.tools.java.CompilerError: checkMeet(), no abstract
method
Jul 08 17:41:44 2002: at
sun.tools.java.MemberDefinition.checkMeet(MemberDefinition.java:663)
Jul 08 17:41:44 2002: at
sun.tools.java.ClassDefinition.collectOneClass(ClassDefinition.java:1357)
Jul 08 17:41:44 2002: at
sun.tools.java.ClassDefinition.collectInheritedMethods(ClassDefinition.java:1
504)
Jul 08 17:41:44 2002: at
sun.tools.java.BinaryClass.basicCheck(BinaryClass.java:76)
```

Workaround: Compile stubs and skeletons manually using the JDK 1.3 or JDK 1.4 compiler:

- 1 In Jaguar Manager, highlight the package, and select File | Generate Stubs/Skeletons.
- 2 In the dialog box, deselect the Compile Java Stubs and Compile Java Skeletons check boxes.
- 3 Click Generate.
- 4 Manually compile the stubs and skeletons in *\$JAGUAR/html/classes* and *\$JAGUAR/java/classes* with a JDK 1.3 or higher compiler.

6.7.8 Jaguar Manager issues

This section describes problems with Jaguar Manager.

Do not use All Properties tab to set properties

[CR #257202] In property dialog boxes, do not use the All Properties tab to set properties that can be set on other tabs. For example for components:

- Use the Java Classes tab to set the property `com.sybase.jaguar.component.java.classes`.
- Set automatic persistence properties such as `mapField` and `mapQuery` properties on the Persistence tab.

If you set these properties on the All Properties tab, changes are overwritten with the property values displayed on the other tabs.

Names must be unique when adding methods using tree view

When adding methods using the tree view in the component's interfaces folder, method names must be unique among all home, local, and remote interfaces supported by the component.

Workaround: Use one of the following techniques:

- Define the component interfaces in Java, then import them into Jaguar Manager.
- In Jaguar Manager, add the method using the tree view under the top-level IDL folder instead of using the component's interfaces folder.

Online help looks incorrectly formatted

[CR #291500] In some cases, when you click a link in the content, the JavaHelp content pane is redrawn incorrectly. The new content is moved down, with some of the old content visible in the top of the content pane.

Workaround: Move the scroll bar slightly to redraw the contents correctly.

Help for Filter Properties missing

[CR #291596] The help topic for Filter Properties is missing.

Workaround: See Chapter 21, "Using Filters and Event Listeners," in the *EAServer Programmer's Guide* for information on configuring filters.

Help for mapping filters missing

[CR #291966] The help topic for mapping filters is missing.

Workaround: See Chapter 19, "Creating Web Applications," in the *EAServer Programmer's Guide* for information on mapping filters.

Help buttons for exporting connectors inoperable

[CR #291392] In the Export wizard for exporting a J2EE connector as a RAR file, the Help button does not work.

Workaround: For help with this procedure, select File | Jaguar Manager | Help, then browse to the Connectors topic, section “Exporting a Connector.”

6.7.9 Configuring listeners

If you configure listeners with port numbers lower than 1024, you must start the server while logged in as the system root account. This presents a security risk because the server accepts network connections while running as root.

Workaround: To minimize this risk:

- 1 Create a C++ service component with a start method that calls the `setuid` or similar system C routine to change the effective user ID to an account with minimal privileges (at least read/write privileges on the EAServer installation directory and the files and directories within).
- 2 Install the service component in EAServer.
- 3 Optionally, configure the `jagsrv` executable to run as “root”.

6.7.10 Message service issues

This section describes problems with the message service.

Deleting message queues

[CR #274966] To delete a message queue, you must first remove any listeners that are attached to the queue. If you attempt to delete a message queue that has an active listener, the message queue is not deleted, and an exception is thrown. This problem occurs whether you are using Jaguar Manager, `jagtool`, or `jagant`.

Workaround: To remove a listener from a message queue:

- 1 In Jaguar Manager, select either Active Queues or Configured Queues.
- 2 Highlight the message queue, and select File | Properties.
- 3 In the Properties dialog box, select the Listeners tab.
- 4 Highlight the listener name and click Delete.

Running in clusters

[CR #258376] When running in an EAServer cluster, the message service may hang when adding a selector. This problem occurs when some, but not all members of the cluster have an IIOP or IIOPS listener host name set to “localhost”.

Workaround: Set the listener host name to the machine name for all servers in the cluster.

JMS, transacted sessions, and threads

You cannot use two concurrent threads within a single transacted session to send or receive messages. Attempts to do so result in an `INVALID_TRANSACTION` exception.

Workaround: Create a separate transacted session for each thread that you use to send or receive messages. This restriction applies to messages received both synchronously and asynchronously; that is, regardless of whether you call “receive” or use a message listener.

Configuration errors force EAServer into Admin mode

If the message service is installed but configured incorrectly or cannot connect to its database, EAServer starts in Admin mode.

Workaround: Verify that you can ping the message service database, and if necessary, reconfigure the message service. See Chapter 8, “Setting up the Message Service,” in the *EAServer System Administration Guide* for more information.

Using non-ASCII characters

[CR #258873] Non-ASCII text does not display correctly when using the message service database.

Workaround: To store, retrieve, and display non-ASCII text correctly when using the message service database, you must do one of the following:

- When you specify the Server Name for the message service connection cache, define the character set using a jConnect URL of this form:

```
jdbc:sybase:Tds:<host>:<port>?charset=<charset>
```
- Change the character set of the message service database to be consistent with the language you are using:

- a Using a text editor, open the *MessageServiceConfig.props* file located in the *EAServer /Repository/Component/CtsComponents* directory.
- b Change the datatype of the varchar columns in the SQL schemas to varbinary.
- c Drop any tables that contain a column with a datatype you changed from the message service database.

Temporary message queues time out

[CR #287123] By default, temporary message queues time out after 60 seconds of inactivity.

Workaround: To increase this value, you can do one of two things:

- Set the connection factory's CONFIG_QUEUE property to the name of a message queue with a reasonably high timeout value. Subsequently, each temporary message queue you create that uses this connection factory inherits the properties of the queue assigned to CONFIG_QUEUE.
- Set the value at the global level so all temporary message queues use the same timeout value. To do this, edit the *MessageServiceConfig.props* file, located in the *EAServer /Repository/Component/CtsComponents* directory, and set the session.timeout property to the appropriate number of seconds.

6.7.11 Persistent component support

The following are known issues with support for container-managed persistence in EJB entity beans.

Nonmapped tables

When using the “nonmapped tables” option for automatic persistence of entity components, automatic table creation works only for Sybase Adaptive Server Anywhere and Sybase Adaptive Server Enterprise database types.

EJB QL limitations

EAServer provides full support for EJB query language (EJB QL) in EJB 2.0 CMP entity beans, except for queries that take a parameter of type object reference.

CMP beans cannot display some Asian language strings

[CR #289457] If the server's character set property is set to iso_1, CMP entity beans cannot retrieve Asian language strings that use another character set. Data is converted to iso_1 and nonmappable characters are lost.

Workaround: Change the server's codeset to UTF-8 or an Asian character set that matches the data. To change the server's codeset in Jaguar Manager, display the Server Properties dialog box and set the Codeset property on the General tab.

Prepared statement use with Adaptive Server Anywhere

When using Adaptive Server Anywhere with a CMP entity bean, you may see this error message:

```
ASA Error -685: Resource governor for prepared
statements exceeded
```

Workaround: Edit the database type properties file in the EAServer *Repository/DatabaseType* subdirectory. Look for a line that contains "statementCache" and edit the setting to look like the following:

```
com.sybase.jaguar.databasetype.statementCache=false
```

If the statementCache setting is not present, add the line above to the file.

6.7.12 Quoted column names when using Oracle databases

In Oracle, quoting a column name in SQL makes the column name case sensitive. The Oracle SQL parser translates unquoted column names to uppercase. If the column names in the table are not uppercase, quote all references to column names in field and query mappings for a component to ensure the names match the actual column names after the queries are parsed. If you are using EAServer automatic table creation, all column references must be consistent in the use of quotes and letter case.

6.7.13 Sample program issues

This section describes problems with sample programs.

AuthServiceDemo sample

[CR #273318] The *readme.html* file for the AuthServiceDemo sample refers to an incorrect property name. The property referred to as `com.sybase.jaguar.component.adminipaddress` should be `com.sybase.jaguar.component.jagadminipaddress`.

SecurityDemo sample

[CR #290444] You can run the SecurityDemo sample as described in the following.

❖ Running the SecurityDemo sample

- 1 Import the JAR file:
 - a Highlight the top-level Packages folder and choose File | Deploy | Jaguar JAR.
 - b Browse to the *html/classes/Sample/SecurityDemo* directory in your EAServer installation, and select the file *SecurityDemo.jar*.
 - c Click OK to import.
- 2 Install the package to the Jaguar server:
 - a Expand the Servers folder, then expand the Jaguar icon.
 - b Highlight the Installed Packages folder under the Jaguar server and choose File | Install Package.
 - c Click Install an Existing Package.
 - d Choose SecurityDemo from the list and click OK.
- 3 Generate stubs and skeletons:
 - a Expand the Packages folder and highlight the SecurityDemo package. Choose File | Generate Stubs/Skeletons...
 - b Select Generate Stubs.
 - c Select Generate Java Stubs and change the type to CORBA if another type is displayed in the drop-down list.
 - d Select Generate Java Files.
 - e Change the Java code base to the *html/classes* directory in your EAServer installation location; for example:

`C:\EAS\EAServer\html\classes`

- f Select the Compile Java Stubs option.
 - g Select Generate Skeletons.
 - h Change the Java code base to the *html/classes* directory in your EAServer installation location; for example:

```
C:\EAS\EAServer\html\classes
```
 - i Select Compile Java Skeletons.
 - j For Java Version, select JDK 1.2 and Above.
 For Generation Strategy, select Full.
 - k Click Generate.
- 4 Edit the *UserCredentialsClient.java* client source file to add the following import statement above the existing import statements:


```
import SecurityDemo.*;
```
 - 5 Compile the *UserCredentialsClient.java* client source file with the *jc* script provided in your EAServer installation. For example:


```
cd $JAGUAR/html/classes/Sample/SecurityDemo
%JAGUAR%/bin/jc UserCredentialsClient.java
```
 - 6 Copy the *easclient.jar* and *easj2ee.jar* files from *java/lib* in your installation to the *html/classes* directory.
 - 7 The client applet must be run in Sun's Java Plug-in, version 1.3 or later. If necessary, download and install the plug-in from the Sun Web site at <http://java.sun.com/products/plugin/index.html>.
 - 8 Edit the *runsecdemo.html* file. Replace the <APPLET></APPLET> tag and its contents with the following:

```
<OBJECT classid="clsid:8AD9C840-044E-11D1-B3E9-00805F499D93"
  WIDTH = 600 HEIGHT = 400 codebase=
  "http://java.sun.com/products/plugin/1.3/jinstall-13-win32.cab#Version
  =1,3,0,0" >
<PARAM NAME = CODE VALUE =
  "Sample/SecurityDemo/UserCredentialsClient.class">
<PARAM NAME = CODEBASE VALUE = "/classes">
<PARAM NAME = ARCHIVE VALUE = "easj2ee.jar,easclient.jar">
<PARAM NAME = "type" VALUE = "application/x-java-applet;version=1.3">
<PARAM NAME="scriptable" VALUE="false">
<PARAM NAME = "org.omg.CORBA.ORBClass" VALUE = "com.sybase.CORBA.ORB">
<PARAM NAME = "compName" VALUE = "SecurityDemo/JUserCredentialTest">
<COMMENT>
```

```

<EMBED type="application/x-java-applet;version=1.3"
  CODE = "Sample/SecurityDemo/UserCredentialsClient.class"
  CODEBASE = "/classes"
  ARCHIVE = "easj2ee.jar,easclient.jar"
  WIDTH = 600 HEIGHT = 400
  org.omg.CORBA.ORBClass="com.sybase.CORBA.ORB"
  compName="SecurityDemo/JUserCredentialTest"
  scriptable=false
  pluginspage=
    "http://java.sun.com/products/plugin/1.3/plugin-install.html">
<NOEMBED>
</COMMENT>
<H2>This would be a Cool Applet, but you are not running a Java enabled
browser...</H2>
</NOEMBED>
</EMBED>
</OBJECT>

```

9 Edit the *runcsecdemo.html* file. Replace the <APPLET></APPLET> tag and its contents with the following:

```

<OBJECT classid="clsid:8AD9C840-044E-11D1-B3E9-00805F499D93"
  WIDTH = 600 HEIGHT = 400 codebase=
    "http://java.sun.com/products/plugin/1.3/jinstall-13-win32.cab#Version
    =1,3,0,0" >
<PARAM NAME = CODE VALUE =
  "Sample/SecurityDemo/UserCredentialsClient.class">
<PARAM NAME = CODEBASE VALUE = "/classes">
<PARAM NAME = ARCHIVE VALUE = "easj2ee.jar,easclient.jar">
<PARAM NAME = "type" VALUE = "application/x-java-applet;version=1.3">
<PARAM NAME="scriptable" VALUE="false">
<PARAM NAME = "org.omg.CORBA.ORBClass" VALUE = "com.sybase.CORBA.ORB">
<PARAM NAME = "compName" VALUE = "SecurityDemo/CUserCredentialTest">
<COMMENT>
<EMBED type="application/x-java-applet;version=1.3"
  CODE = "Sample/SecurityDemo/UserCredentialsClient.class"
  CODEBASE = "/classes"
  ARCHIVE = "easj2ee.jar,easclient.jar"
  WIDTH = 600 HEIGHT = 400
  org.omg.CORBA.ORBClass="com.sybase.CORBA.ORB"
  compName="SecurityDemo/CUserCredentialTest"
  scriptable=false
  pluginspage=
    "http://java.sun.com/products/plugin/1.3/plugin-install.html">
<NOEMBED>
</COMMENT>
<H2>This would be a Cool Applet, but you are not running a Java enabled

```

```
browser...</H2>
</NOEMBED>
</EMBED>
</OBJECT>
```

- 10 To run the Java security demo, load this URL in the browser where the Java Plug-in is installed, substituting the server machine name for *host*:

```
http://host:8080/classes/Sample/SecurityDemo/runsecdemo.html
```

- 11 To run the C++ security demo, load this URL in the browser where the Java Plug-in is installed, substituting the server machine name for *host*:

```
http://host:8080/classes/Sample/SecurityDemo/runcsecdemo.html
```

6.7.14 Makefile for C components

[CR #272553] When you generate stubs and skeletons for a package that contains C components, the *make.unix* file may be generated with incorrect file names. For example, with these files:

```
/sybase/EAServer/cpplib/cPkg/cComp.h
/sybase/EAServer/cpplib/cPkg/cComp.c
/sybase/EAServer/cpplib/cPkg/create.c
/sybase/EAServer/cpplib/cPkg/destroy.c
/sybase/EAServer/cpplib/cPkg/method1.c
/sybase/EAServer/cpplib/cPkg/method2.c
/sybase/EAServer/cpplib/cPkg/make.unix
```

make.unix can contain these lines:

```
LIB_OBJECTS = impl.o skel.o

impl.o: impl.hpp
$(CC) $(CCFLAGS) $(CCINCLUDE) -c impl.cpp

skel.o: impl.hpp skel.cpp
$(CC) $(CCFLAGS) $(CCINCLUDE) -c skel.cpp
```

Workaround: Make these changes to the *make.unix* file:

- 1 Replace the line `LIB_OBJECTS = impl.o skel.o` with these lines:

```
LIB_OBJECTS = create.o destroy.o method1.o method2.o cComp.o
```

```
.C.o:
$(CC) $(CCFLAGS) $(CCINCLUDE) $<
```

- 2 Remove these lines:

```
impl.o: impl.hpp
$(CC) $(CCFLAGS) $(CCINCLUDE) -c impl.cpp

skel.o: impl.hpp skel.cpp
$(CC) $(CCFLAGS) $(CCINCLUDE) -c skel.cpp
```

6.7.15 Static page caching

[CR #289297] Because of static page caching, a Web application's static resources can still be accessed after you delete the Web application. To ensure that the static resources cannot be accessed, you must remove them from the cache. You can accomplish this in any of the following ways:

- Flush the cache
- Restart the server
- Wait for the static resources to time out

6.7.16 Korean language issues

This section describes problems with the Korean language.

Korean fonts display incorrectly

[CR #289236] When running EAServer with JDK 1.2.2, Korean characters do not display correctly in Jaguar Manager.

Workaround: Replace *font.properties.ko*, located in *\$JAGUAR/jdk/jdk1.2.2/jre/lib*, with the same file located in *\$JAGUAR/jdk/jdk1.3/jre/lib*.

Server names cannot contain Korean characters

[CR #291309] If you create a server name that includes Korean characters, the server does not start because the *<servername>.props* file is created incorrectly. You may see errors similar to these in the server's log file:

```
Aug 5 15:10:31 2002: Repository::local: failed to open
/testarea/jaguar.412.d10/Repository/Server/??1.props
Aug 5 15:10:31 2002: Server is running in 1PC Transaction mode.
Aug 5 15:10:31 2002: Starting Jaguar CTS
Aug 5 15:10:31 2002: Server's native codeset is iso_1
Aug 5 15:10:31 2002: Library: 'libjjdk12.so' for component type 'java'
Aug 5 15:10:31 2002: Repository::local: failed to open
/testarea/jaguar.412.d10/Repository/Server/??1.props
```

```
Aug 5 15:10:31 2002: Java JIT Compiler enabled
Aug 5 15:10:31 2002: Java component debugging disabled
Aug 5 15:10:32 2002: Java virtual machine initialized: java version 1.3.1_01
Aug 5 15:10:32 2002: Java virtual machine initialized: Java HotSpot(TM) Client
VM (version 1.3.1_01, mixed mode)
Aug 5 15:10:32 2002: Bad Repository: /testarea/jaguar.412.d10/Repository
Aug 5 15:10:32 2002: java.io.FileNotFoundException:
/testarea/jaguar.412.d10/Repository/Server/???1.props
```

Oracle databases and Korean language data

[CR #289080] Some Oracle databases support iso_* character sets but not the UTF-8 character set. If you set the server's Codeset property to UTF-8, Korean language data is inserted into an Oracle database incorrectly. When the codeset is set to iso_1, Korean language data is inserted correctly.

6.7.17 Systems Management issues

This section describes problems with Systems Management.

GUI not refreshed when services are started or stopped

[CR #291350] If you start or stop a service using the Sybase Enterprise Web Console, the display is not refreshed to show the new state of the service. For example, if the SySAM service is running, and you select Enterprise Portal Manager | Components by Host | *Your Machine Name* | SySAM Service, and click StopService, the tree view is updated to display a red icon with an "X", which indicates the SySAM service is stopped. However, in the details pane, the value for the Started property is not changed to "false."

Alternatively, if the SySAM service is running, and you select Enterprise Portal Manager | Components by Host | *Your Machine Name* | SySAM Service | Functions | StopService, and click Execute Methods, a message box says "Execution Successful," and the service is stopped. You can verify this at a command prompt using:

```
$SYBASE/SYSAM-1_0/bin/lmutil lmstat -c
```

However, the tree view icon is not updated, and the details pane in the SySAM Service folder inaccurately displays "true" as the Started property value.

Only one active session allowed

[CR #273894] On one machine, you can have only one active Systems Management session.

Workaround: Do not invoke more than one active System Management session.

Cannot save log file data from browser

[CR #274011] After a getlog operation, you cannot use the browser's Save command to save the log file to your hard drive.

Workaround: Cut and paste the log file data from the browser into a file.

Unnecessary warnings

[CR #274010] Unnecessary warnings display for minor operations, such as getlogfile.

Workaround: None. You can safely ignore these warnings.

6.7.18 Setting agent properties with Agent View

[CR #289698] You may see one of the errors displayed below if you attempt to configure an agent using Agent View, as in this procedure:

- 1 In Agent View, under SYBASE_Easnew_MIB_Sybeasv1, click name=ServerControl. This displays the Mbean View page.
- 2 Change the value of ServerControlHost to the current host name.
- 3 Change the value of ServerStartCmd to `serverstart -servername`.
- 4 Click Apply.
- 5 Go back to the Agent View page.
- 6 Under serverTable, click:

```
serverEntry.serverInstance=iiop//${JAGUAR_HOST_NAME}/9000 (agent1)
```

- 7 Click Restart or Shutdown.

472 MBean Failure

The MBeanServer throws a JMRuntimeException when calling operation[restart] of [serverTable:serverEntry.serverInstance=iiop//\${JAGUAR_HOST_NAME}/9000 (agent1)] : javax.management.RuntimeMBeanException: RuntimeException thrown in operation restart

472 MBean Failure

The MBean

```
[serverTable:serverEntry.serverInstance=iiop//${JAGUAR_HOST_NAME}/9000  
(agent1)] throws an MBeanException when calling [shutdown]:  
javax.management.snmp.SnmpStatusException: Shutdown failednull
```

Workaround: Configure agent properties using Systems Management. See Chapter 14, “Using the Systems Management Web Console,” in the *EAServer System Administration Guide* for instructions.

6.7.19 HTTP request parameters parse incorrectly when using ‘=’ character

[CR #290851] HTTP request parameter names and values may be parsed incorrectly if you use ‘=’ characters in parameter values, rather than the special character code “%3d”. For URLs generated in code, you can use `java.net.URLEncoder.encode(String)` to escape ‘=’ in parameter names and values. This escapes other characters that should not be plain text according to the MIME specification for URLs. You cannot do this on full URLs or URIs; the token separators are escaped into hex codes if you do. See the Java Web page at <http://java.sun.com/j2se/1.3/docs/api/java/net/URLEncoder.html> for more information on what characters are converted to hex escapes.

Workaround: Use “%3d” rather than the equals sign in parameter values.

6.7.20 Entrust integration

[CR #265266] If you use SSL listeners that rely on the Entrust PKI software, you may encounter problems due to a symbol conflict between the EAServer and Entrust libraries, *libjtssecsrv.so* and *libEntrust.so*, respectively.

6.7.21 Temporary files not removed

[CR #272350] When importing or exporting an application using Jaguar Manager, temporary files may not be removed. The import and export processes create temporary files, which they should automatically remove when the process completes.

Workaround: If the temporary files are not deleted automatically, you can manually delete the files.

6.7.22 Clients using JDK 1.2.2

[CR #288063] For clients that use JDK 1.2.2, configure the `BOOTCLASSPATH` as follows:

```
-Xbootclasspath:$JAGUAR/java/lib/easclient.jar:
```

```
$JAGUAR/java/lib/easserver.jar:$JAVA_HOMEjre/lib/rt.jar
```

6.8 Highlighted problems with Message Bridge for Java

This section describes problems with Message Bridge for Java™.

This version of EAServer includes Message Bridge for Java™ version 2.1.1, hereafter referred to as Message Bridge. See the *Sybase Message Bridge for Java User's Guide* for more detailed information about these features:

- A GUI used during design to access all Message Bridge features
- Importers that support DTDs and XSDs (XML schema definitions)
- Schema compilers to generate DataBeans
- Developer artifacts that support using DataBeans

6.8.1 Message Bridge requires JDK

Message Bridge generates Java code, compiles it, creates JAR files from the classes, and generates javadoc. Because javac is not bundled with a JRE, you need a JDK to compile the generated code.

Workaround: Currently, the GUI finds the location of the JDK using the JDK_HOME environment variable set in *msgbridge.sh*. For example, in *msgbridge.sh*, change:

```
JDK_HOME=$JAVA_HOME
```

to:

```
JDK_HOME=<your_JDK_directory>
```

If you do not set JDK_HOME in *msgbridge.sh* and JAVA_HOME does not point to a valid JDK, you see this error message during code generation:

```
One or more errors were encountered during code generation.
java.io.IOException: CreateProcess:...
```

6.8.2 Path with JDK 1.3 required to run Message Bridge samples

[CR #278430] To run the Message Bridge samples, the JDK 1.3 binary must be in your path. Run the following to find out if it is:

```
java -version
```

Workaround: If “1.3” does not appear in the output, edit the *run.sh* file for each sample that you want to run. Change the text at the beginning of each file from:


```
java classpath ...
```

to:

```
$JAGUAR/MessageBridge/_jvm/bin/java classpath ...
```

The *run.sh* files that run the samples are located in *\$JAGUAR/MessageBridge/samples/<sample_type/sample_name>*, where *sample_type/sample_name* can be any one of:

```
dtd/attributes
dtd/bookstore
dtd/recursive
dtd/mixed_content
dtd/any_content
dtd/view
xsd/datatypes
xsd/soap
xsd/stock_portfolio
xsd/attributes
misc/build_xml
```

6.8.3 Unique definition names are required in a schema group

When you import a DTD, Message Bridge allows you to designate which element in the DTD is the root for the message definition you create. Message Bridge creates your message definition and names it after the DTD you import. If you create multiple message definitions from the same DTD, Message Bridge automatically names each message definition using the name of the DTD. It does not give each new message definition a unique name.

Workaround: Rename the message definition. After you create a message definition, right-click the message definition in the Message Bridge GUI directory tree, and select Rename.

6.8.4 XML schemas are not validated by Message Bridge

[CR #259388] XML schemas are not validated when you import them into Message Bridge, but are checked for *well-formedness*. However, a well-formed schema may be invalid and generate nonfunctional code.

Workaround: Sybase recommends that you use a validation tool to validate the XML schema before you import it.

6.8.5 Stack trace error occurs during import

[CR #259594] In the Add Message Schema dialog box, verify that the MetaData Source Importer type is correct for the type of file that you are importing.

Workaround: When you import from a DTD, select the DTD Importer option in the Message Bridge GUI. Otherwise, a stack trace error message is generated.

6.8.6 Importing a schema that includes other schemas

[CR #242836] When importing a schema that includes other schemas using external entity references, check the location of the corresponding schema files.

Workaround: If they do not reside in the same directory as the primary schema, define the `com.sybase.DataBean.EntityResolver.dtds` system property on the Message Bridge GUI command line. This property applies to DTDs and XSDs.

❖ Defining the `com.sybase.DataBean.EntityResolver.dtds` property

Set the value of this property by supplying the directory locations of the referenced schemas. Separate directories with semicolons.

- 1 To modify the Message Bridge GUI command line, change to the *bin* subdirectory of the Message Bridge installation.
- 2 Using a text editor, open the *msgbridge.bat* file, and search for the line that begins with `java -Duser.home="%MB%"` . . .
- 3 Insert another command line argument that sets the `EntityResolver` system property. For example, if the directory to be specified is *C:\temp*, modify that line of the script as follows:

```
java -Dcom.sybase.DataBean.EntityResolver.dtds=C:\temp
-Duser.home="%MB%" . . .
```

- 4 Save *msgbridge.bat*.

6.8.7 Importing large schemas requires more memory

[CR #256425] Importing large schemas causes an `OutOfMemory` exception to be thrown.

Workaround: To increase the amount of memory available, set the maximum Java heap size:

- 1 Using a text editor, open the *MessageBridge/bin/msgbridge.bat* file.
- 2 Look for the line that begins `java -Duser.home="%MB%"`.
- 3 Insert `"-Xmx <size n>"` after `"java"` in the file. For example, this code sets the maximum heap size to 256MB:

```
java -Xmx 256M -Duser.home="%MB%" -Dinstall.path="%MB%"
-Djdk.home="%JDK_HOME%"
-classpath %_mbclasspath% com.sybase.mworks.msgws.MB
```

Sybase recommends that you set the maximum heap size to large values to prevent a very large DTD or XML schema from causing a "VM out of memory" error.

For more information about this argument, see the JVM documentation from Sun.

6.8.8 Project does not save or restart correctly

[CR #259683] If the Message Bridge GUI cannot load your project at start-up, make a backup copy of the files in the *projects\default* subdirectory in your Message Bridge installation.

Workaround: Make sure you have a copy of *mwrepo.xml*. Sybase Technical Support might be able to help you load your project if they can have access to the project data. If the problem cannot be solved, you must reinstall Message Bridge.

6.8.9 Uninstall does not remove every file

[CR #239428] When you run the Message Bridge uninstall, all the files are not automatically removed.

Workaround: After running the Message Bridge uninstall, manually remove any files that remain in the *MessageBridge* directory.

6.8.10 If *mb4j.lock* is not automatically removed

[CR #273313] The Message Bridge GUI creates an *mb4j.lock* file for your default project in the *MessageBridge* subdirectory. A project is a set of files containing information about imported schemas and code generation settings. The default project is automatically opened and maintained by the GUI.

If the lock file already exists when a new GUI instance is started, the following message appears:

Another instance of Message Bridge for Java (TM) has already opened the project and is still running.

When you close this message, the GUI shuts down. When the original GUI instance is closed, the lock file is removed and another GUI instance may be started.

Under unusual circumstances, such as an out-of-memory error, the Java virtual machine may abort without giving the GUI a chance to remove the lock file.

Workaround: In this case, you must remove the lock file manually. The lock file is a zero-length file which can be deleted like any other file.

Warning! Deleting the lock file when it is legitimately protecting the project may cause corruption of the project.

6.9 Highlighted problems with Web Services Toolkit

This section describes problems with Web Services Toolkit.

6.9.1 *jar* command does not preserve execute permissions

[CR #263006] After extracting the files from the *SoapClientSample.jar* file, you must add execute permissions to the *soapsample* and *proxyviewer* files to run these scripts.

6.9.2 *InitialContext* properties must be established

EJBs have several *InitialContext* properties that you can set. The Web Services Toolkit allows you to set these properties either in a properties file or through the *init-params* property for the SOAP servlet. If a property is set in both a file and as an *init-param*, the *init-param* value takes precedence. If a property is not specified in either place and there is a default value, the default value is used. Otherwise, the property value is null. See Chapter 8, “Creating Enterprise JavaBeans Clients,” in the *EAServer Programmer's Guide* for more information about *InitialContext* properties.

The only property whose default value differs from the one defined in the *EAServer Programmer's Guide* is *provider.url*. If you do not set this property, the value defaults to the *hostname* on port 9000.

In the *webservices.props* file, located in the *Webservices* subdirectory of your EAServer installation, you can set the following properties for EJB invocation. Each of these properties corresponds directly to the EJB InitialContext properties defined in Chapter 8 of the *EAServer Programmer's Guide*:

```
webservices.ejb.provider.url
webservices.ejb.security.principal
webservices.ejb.security.credentials
webservices.ejb.CGInterval
webservices.ejb.http
webservices.ejb.HttpUsePost
webservices.ejb.IdleConnectionTimeout
webservices.ejb.RetryCount
webservices.ejb.RetryDelay
webservices.ejb.socketReuseLimit
webservices.ejb.ProxyHost
webservices.ejb.ProxyPort
webservices.ejb.SSLCallback
webservices.ejb.pin
webservices.ejb.certificateLabel
webservices.ejb.qop
webservices.ejb.useEntrustID
webservices.ejb.entrustUserProfile
webservices.ejb.entrustPassword
webservices.ejb.entrustIniFile
webservices.ejb.userData
webservices.ejb.WebProxyHost
webservices.ejb.WebProxyPort
webservices.ejb.HttpExtraHeader
```

You can override each of the properties above by setting the following SOAP servlet init-params:

```
ejb.providerUrl
ejb.securityPrincipal
ejb.securityCredentials
ejb.GCInterval
ejb.httpTunnel
ejb.httpUsePost
ejb.IdleConnectionTimeout
ejb.RetryCount
ejb.RetryDelay
ejb.socketReuseLimit
ejb.ProxyHost
```

```
ejb.ProxyPort  
ejb.SSLCallback  
ejb.pin  
ejb.certificateLabel  
ejb.qop  
ejb.useEntrustID  
ejb.entrustUserProfile  
ejb.entrustPassword  
ejb.entrustIniFile  
ejb.userData  
ejb.WebProxyHost  
ejb.WebProxyPort  
ejb.HttpExtraHeader
```

6.9.3 Scroll bar does not initially work

[CR #261865] When you are editing your WSDL Web Services properties, you can select the XML tab in the Web Services Properties dialog box. When the XML pane first appears, the scroll bar does not work. Once you resize the pane, the scroll bar works.

6.9.4 Do not use spaces or slashes in WSDL document names

[CR #265129] In the Web Services Toolkit GUI, when you create a name for WSDL documents, the text fields for naming are not validated. Using spaces and slashes can potentially cause problems.

6.9.5 Double-clicking the SOAP Management Utilities folder does not open it

[CR #262342] The Utilities appear in the Details pane. Double-clicking the Utilities folder in the right Details pane does not open it.

Workaround: To open the SOAP Management Utilities folder in the left pane of Sybase Central, double-click the folder.

6.9.6 Class loader collisions in user-defined types

[CR #271998] A user-defined type registration requires that the user declare the class and the serializer and deserializer classes associated with the class.

Workaround: Use Jaguar Manager to edit the package properties; see Chapter 28, “Configuring Custom Java Class List,” in the *EAServer Programmer’s Guide* for details. These classes must be associated with Web Services Toolkit elements as follows:

- The user class and its associated serializer and deserializer classes must be defined in the Web Services Tools package.
- Only the serializer and deserializer classes must be defined in the Web Services Web application.

For example, for the class `com.mycompany.mypackage.SimpleClass` with the serializer class `com.mycompany.mypackage.SimpleClassSerializer` and the deserializer class `com.mycompany.mypackage.SimpleClassDeserializer`, you must either add these classes to the Web Services Tools package’s Java Classes property:

```
com.mycompany.mypackage.SimpleClass
com.mycompany.mypackage.SimpleClassSerializer
com.mycompany.mypackage.SimpleClassDeserializer
```

Or, add:

```
com.mycompany.mypackage.*
```

Additionally, you must add the following to the Web Services Web application’s Java Classes property:

```
com.mycompany.mypackage.SimpleClassSerializer
com.mycompany.mypackage.SimpleClassDeserializer
```

Note If the files are in *.jar* archives, then they must be in separate archives, and the archives must be declared accordingly.

For example, if *SimpleClass.jar* contains the `SimpleClass` class and *SimpleClassSerialization.jar* contains the serializer and deserializer classes, then the Web Services Tools package Java Classes property must contain *SimpleClass.jar* and *SimpleClassSerialization.jar*. The Web Services Web application Java Classes property need contain only *SimpleClassSerialization.jar*.

6.9.7 Duplicate user-defined datatype names

[CR #263351] Do not create duplicate names when you create a user-defined datatype in the Manage User-Defined Types dialog box.

6.9.8 Class names not validated

[CR #263399] In the Manage User-Defined Types dialog box, the class names for Datatype, Serializer, and Deserializer are not validated to ensure the names meet the Java rules for naming files and classes.

6.9.9 User-defined datatype registration

[CR #265114] If an object is being serialized with custom serializers, the service that uses that serialized object will not show up when you want to add a service to a WSDL document.

Workaround: Follow the procedure below to avoid this situation when adding a service that contains user-defined datatypes to a WSDL document.

To register a user-defined datatype, you must declare the class, and the serializer and deserializer classes associated with the class. You must associate these classes with Web Services Toolkit elements as follows:

- 1 Both the user class and its associated serializer and deserializer classes must be defined for the Web Services Tools package.
- 2 Only the serializer and deserializer classes must be defined for the Web Services Web application.

For example, if you have a class named `com.mycompany.mypackage.SimpleClass` with a serializer class `com.mycompany.mypackage.SimpleClassSerializer` and a deserializer class `com.mycompany.mypackage.SimpleClassDeserializer`, you must add this to the Java Classes property of the Web Services Tools Package:

```
com.mycompany.mypackage.SimpleClass  
com.mycompany.mypackage.SimpleClassSerializer  
com.mycompany.mypackage.SimpleClassDeserializer
```

or `com.mycompany.mypackage.*`

You must also add this to the Web Services Web application's Java classes property:

```
com.mycompany.mypackage.SimpleClassSerializer  
com.mycompany.mypackage.SimpleClassDeserializer
```

If the files are in JAR archives, they must be in separate archives, and the archives must be declared accordingly.

For example, if *SimpleClass.jar* contains the *SimpleClass* class and *SimpleClassSerialization.jar* contains the serializer and deserializer classes, then the Web Services Tools package Java classes property would contain *SimpleClass.jar* and *SimpleClassSerialization.jar*, and the Web Services Web application Java classes property would contain only *SimpleClassSerialization.jar*.

See Chapter 7, “Selecting an EAServer Component for Your Web Service,” in the *Web Services Toolkit User’s Guide* for more information.

6.9.10 Overloading functions

[CR #289010] Because of the way EAServer deploys functions and how Web Services Toolkit allows you to define a Web service, avoid function overloading.

For example, if you have a stateless EJB with two functions, *processOrder* (string order) and *processOrder* (byte [] order), EAServer deploys the functions as *processOrder__string* and *processOrder__BCD_Binary*, since the IDL does not support function overloading.

When the Java stubs are generated, the Java files contain two functions with the prototypes *processOrder* (string order) and *processOrder* (byte [] order).

When using WST to define a new WSDL document and a new Web service, your options are the IDL defined methods.

This creates two Web services with method names *processOrder__string* and *processOrder__BCD_Binary*, which do not match the name of the functions within the stub files. This generates an error at runtime.

Workaround: None. Do not overload functions.

6.9.11 Cannot log in to UDDI sites

[CR #290386] From the Web Services Toolkit | UDDI Entries | File | UDDI Site Login dialog box, you cannot log in to either the IBM Test Registry or the IBM Production Registry UDDI sites; a UDDI Site Connection Failure error is returned.

Workaround: None.

6.9.12 Creating SOAP ClientProxy JAR files

[CR #290483] *Workaround:* To create a SOAP client proxy JAR file using the Web Services Toolkit | SOAP Management | Utilities | Create SOAP Client Proxy dialog box, you must use the Browse button when selecting a WSDL file name.

6.9.13 Multiple user-defined types

[CR #288916] When multiple user-defined types of the same datatype are specified, Web Services Toolkit, at runtime, recognizes only the last type defined in the *user.encoding.props* file.

Workaround: Create only one user-defined type of each datatype.

6.10 Highlighted problems with PowerBuilder

This section describes problems with PowerBuilder.

6.10.1 PowerBuilder JDBC support files

[CR #273623] To use JDBC or JDBC connection caches from PowerBuilder components, you must add the PowerBuilder JDBC support classes to the EAServer CLASSPATH environment variable. These classes are in *pbjdbc12.jar*, which is installed in the following EAServer subdirectory:

Shared/PowerBuilder/html/classes

Workaround: Move the files in this directory to the EAServer *html/classes* directory. Edit the file *bin/user_setenv.sh* in your EAServer installation. If this file does not exist, create a text file with this name in the EAServer *bin* subdirectory. Add a CLASSPATH setting that includes the location of the PowerBuilder *pbjdbc12.jar* file. For example:

```
CLASSPATH=$JAGUAR/html/classes/pbjdbc12.jar export CLASSPATH
```

If you created *bin/user_setenv.sh*, change the file permissions to allow execution. For example, at a command prompt, enter:

```
cd /opt/EAServer/bin
chmod 755 user_setenv.sh
```

6.10.2 NULL values in calls to PowerBuilder components

When deploying PowerBuilder components to EAServer, you can select the “Allow NULL values in method parameters” option. Selecting this option prepares the deployed component to accept null-valued arguments. Since CORBA does not allow nulls in method calls, an additional null-indicator Boolean array is passed as the last argument to all PowerBuilder component method calls. The elements of the array correspond to the PowerBuilder function arguments, and each element indicates whether the corresponding argument is null. When calling PowerBuilder components from PowerBuilder clients or other PowerBuilder components, the initialization of this array is handled transparently. When calling a PowerBuilder component with this setting from a non-PowerBuilder component or a non-PowerBuilder client, you must initialize a null-indicator array and pass it as the last parameter to the method call.

[CR #263647] When calling PowerBuilder components that accept null parameters from non-PowerBuilder clients, if the null-indicator array is not properly initialized by the client, the PowerBuilder component may fail and be destroyed.

Workaround: Do one of the following:

- When calling PowerBuilder components that allow null input parameters from non-PowerBuilder components, make sure the null-indicator array is properly constructed and initialized, or
- Upgrade to build 10148 of PowerBuilder 7.0 VM or a later build when available.

6.10.3 Some PowerScript blob functions do not work correctly

[CR #290780] Some PowerScript blob functions do not work correctly on Solaris. In the following code, the Integer function should return an int from the blob, but it does not:

```
blob{6} myblob
int myint
myblob = blob("~025~000")
myint = Integer(myblob)

if myint <> 25 then
    return "***** FAILED *****: integer from blob"
end if
```

Workaround: None. This is scheduled to be addressed in later builds of PowerBuilder.

7. Product compatibilities

This section discusses product compatibilities for the following components:

- “Earlier EAServer (Jaguar CTS) versions” on page 60
- “PowerBuilder” on page 60
- “PowerDesigner” on page 61
- “PowerJ” on page 61

7.1 Enterprise Security Web server plug-in and EAServer Web server redirector plug-in

[CR #296595] You cannot install both the Enterprise Security Web server plug-in and the EAServer Web server redirector plug-in on the same Apache server on Solaris.

7.2 Earlier EAServer (Jaguar CTS) versions

Clients using IIOP and earlier versions of the EAServer (or Jaguar CTS®) client runtime files can connect to EAServer. To manage EAServer, you must use an installation and use Jaguar Manager, jagtool, or a client that calls the EAServer management APIs.

7.3 PowerBuilder

This version of EAServer includes the following PowerBuilder virtual machine (PBVM):

- PowerBuilder 7.0.3 – build 10180

In addition, the PowerBuilder 8.0.2 Solaris PBVM (from build 9506) will be available from the EAServer page of the Sybase downloads site at <http://downloads.sybase.com/swx/sdsummary.stm?productId=128&client=support>, and its corresponding PowerBuilder NT client software build is available for download from the PowerBuilder page of the Sybase downloads site at <http://downloads.sybase.com/swx/sdsummary.stm?productId=29&client=support>.

If you previously received a private PowerBuilder EBF version containing newer file versions, do not install the PowerBuilder support files included in this version.

If you choose to install the PowerBuilder support files contained in this version:

- Before installing this version, back up your existing *Sybase/Shared/PowerBuilder* directory (for example, */work/Sybase/Shared/PowerBuilder*) by copying the directory contents to another location.
- In the setup program, on the Select Products to Install window, click Customize for Sybase EAServer features, and choose the PowerBuilder Support features.
- After the installation completes, ensure that the corresponding PowerBuilder version is installed on PowerBuilder client machines. To run PowerBuilder components in EAServer, the runtime dynamic shared libraries for the version of PowerBuilder in which the components were developed must be available on the server. The PowerBuilder runtime files on the client and the server must be at the same build level. Using different build levels on client and server machines may result in unpredictable behavior or data corruption.

You can access and download the corresponding PowerBuilder NT client software builds from the PowerBuilder page of the Sybase downloads site at

<http://downloads.sybase.com/swx/sdsummary.stm?productId=29&client=support>

- Perform a full rebuild of your PowerBuilder application in the Library Painter, to ensure that all descendant objects are synchronized with their ancestors and to incorporate any compiler fixes in your code.

7.4 PowerDesigner

EAServer includes support files that enable it to run with PowerDesigner 9.0. The files are located in the EAServer *SupportPowerDesigner* subdirectory.

Check the PowerDesigner Web page at

<http://www.sybase.com/products/powerdesigner> for updated versions of these files.

7.5 PowerJ

EAServer is compatible with PowerJ 4.1. To upgrade from PowerJ 4.0 to 4.1, download the software from the PowerJ downloads page of the Sybase downloads site at http://www.sybase.com/detail_list/1,6902,2677,00.html.

You cannot use earlier PowerJ versions for direct deployment or debugging of EAServer components and Web applications. However, you can deploy applications from earlier PowerJ versions by creating J2EE JAR, EAR, or WAR format archives and importing these with Jaguar Manager.

8. Documentation updates and clarifications

Enterprise Portal version 5.0 creates a repository that holds information about the software you have installed and configured. In the Enterprise Portal version 5.0 documentation and software, this repository is called the CIM Repository.

This section discusses updates and clarifications for the following documents:

- “EAServer Security Administration and Programming Guide” on page 62
- “EAServer System Administration Guide” on page 62

8.1 *EAServer Security Administration and Programming Guide*

This section discusses updates and corrections to the *EAServer Security Administration and Programming Guide*.

8.1.1 Chapter 12, *Managing Keys and Certificates*

Asian-language certificate data In Asian-language editions of EAServer, you can enter an Asian-language date in the Certificate Signing Request wizard in Security Manager. before generating requests that contain UTF-8 characters. Before before generating requests that contain UTF-8 characters, check with your certificate authority (CA) whether UTF-8 data is supported.

8.2 *EAServer System Administration Guide*

This section discusses updates and corrections to the *EAServer System Administration Guide*.

8.2.1 Chapter 3, *Creating and Configuring Servers*

Running servers as Windows services The procedure that describes how to install EAServer as a Windows service incorrectly states that you set the Java runtime version on the Server Properties | Java VM tab. This tab no longer exists. You set the Java version on the command line, as correctly described in the last step of this procedure.

Server Properties: Handlers In the Server Properties dialog box, the Handlers tab allows you to specify event handlers that support the Open Server™ event-based programming model. These handlers are called only for events triggered by clients that connect to an Open Server listener. For more information, see Appendix B, “Migrating Open Server Applications to EAServer,” in the *EAServer Programmer’s Guide*.

Server Properties: HTTP Config The properties below should be set to control the URL that is returned when clients connect to EAServer through a proxy server that does not filter and modify the location header in HTTP redirect response packets. A fully qualified URL must be returned in HTTP redirect responses, including the protocol, host, and port. When a client connects to EAServer through a proxy server and requests a page that requires redirection, the redirection URL must include the proxy server address and not the EAServer address. Some proxies, such as the EAServer redirector plug-in, automatically filter and modify the redirection URL. Some proxies do not; for example, hardware SSL engines often do not filter any packets in the base protocol. In these cases, you must configure the following properties to ensure that the proxy address and protocol appear in the redirection URL, rather than the address used for the connection from the proxy to EAServer:

- **Domain Name** If this property is set to specify a domain name, the host name in redirection URLs will be “www” rather than the host name set in the EAServer listener. For example, if the Domain Name is specified as `.foo.com` and EAServer runs on host `abc`, the redirection host would be `www.foo.com` rather than `abc.foo.com`. If specifying a domain name, include the leading dot, for example `.foo.com` rather than `foo.com`. If using jagtool, set this property as `com.sybase.jaguar.server.http.domainname`.

When a domain name is specified, the address used in the location header for redirect response packets is composed as follows:

```
protocol://wwwdomain:port
```

Where:

- *protocol* – is the value of the Proxy Protocol setting, or if not set, the protocol of the original request from the proxy to EAServer, which may not match the protocol used by the base client’s connection to the proxy.
- *domain* – is the value of the Domain Name setting.
- *port* – for HTTP URLs is the value of the Proxy HTTP Port setting or 80 if not set. For HTTPS URLs, *port* is the value of the Proxy HTTPS Port setting or 443 if not set.

- **Proxy Protocol** When a domain name is specified, the protocol for redirection URLs. Specify HTTP or HTTPS. If not set, the protocol matches that of the request sent from the proxy to EAServer. This may not match the original protocol. For example, the client may use HTTPS to connect to the proxy, which uses HTTP to connect to EAServer. In this case, you must set the Proxy Protocol to HTTPS. Otherwise the client Web browser may refuse to connect to the redirected URL because of the switch from HTTPS to HTTP. If using jagtool, set this property as `com.sybase.jaguar.server.http.proxyprotocol`.
- **Proxy HTTP port** When a domain name is specified, this setting specifies the port to embed in HTTP redirection URLs. The default is 80. When a domain name is not specified, this setting is ignored. If using jagtool, set this property as `com.sybase.jaguar.server.http.httpport`.
- **Proxy HTTPS port** When a domain name is specified, this setting specifies the port to embed in HTTPS redirection URLs. The default is 443. When a domain name is not specified, this setting is ignored. If using jagtool, set this property as `com.sybase.jaguar.server.http.httpsport`.

8.2.2 Chapter 6, *Clusters and Synchronization*

[CR #275138] In an EAServer cluster, if any server in the cluster has an IIOP or IIOPS listener host name set to “localhost” and you attempt to synchronize the cluster, the process fails. This configuration also prevents the message service from working. You must set each listener host name to the machine name.

[CR #291471] When you synchronize an EAServer Web application, these files are distributed to the remote network:

- The Web application’s context root directory and its contents
- Files specified by the `com.sybase.jaguar.component.files` property

To configure the `com.sybase.jaguar.component.files` property, use the Additional Files tab in the Web Application Properties dialog box. For more information, see “Component properties: Additional Files,” in Chapter 4, “Defining Components,” in the *EAServer Programmer’s Guide*.

8.2.3 Chapter 7, *Load Balancing, Failover, and Component Availability*

[CR #275316] In “Implementing Sybase Failover for high availability systems,” there are instructions for configuring a connection cache and an XA resource. The documentation specifies “DBuid” and “DBpasswd” as the user name and password, respectively. You must replace these values with a user name and password that are valid to access the database.

8.2.4 Chapter 9, *Web Server Redirector Plug-in*

[CR #278720] There might be some confusion with the documented use of the variables JAGUAR_HOME and APACHE_ROOT. These variables are used to represent the installation directories for EAServer and the Apache Web server, respectively.

This is a correction for running the Apache Web server:

- 1 Set the LD_LIBRARY_PATH environment variable in the shell used to start the Apache Web Server to include *APACHE_HOME/libexec*.
- 2 Run:

```
./apachectl start
```

8.2.5 Chapter 13, *Using jagtool and jagant*

The default host name for jagtool is the value of the JAGUAR_HOST_NAME environment variable as set in the *\$JAGUAR/bin/setenv.sh* script.

[CR #274966] The documentation for *jmsdelete* states that if you delete a message queue, its listeners are also deleted. This is incorrect. If you attempt to delete a message queue that has an active listener, the message queue is not deleted and an exception is thrown. You must remove any listeners that are attached to a queue before you can delete the queue—see “Deleting message queues” on page 36 of this document.

[CR #279110] The documented syntax for using the *setjagadminpasswd* command in an Ant build file is incorrect. To change the jagadmin password, use the following syntax:

```
<jag_setjagadminpasswd [serverName="server_name"]  
oldpassword="old_password" newpassword="new_password" />
```

where:

- *server_name* – is the name of the server.
- *old_password* – is the current jagadmin password.

- *new_password* – is the new jagadmin password.

[CR #273573] In EAServer 4.1.2 and later versions, the jagtool exportconfig option has an additional option, -easerverpropsonly, to specify whether the generated XML file should include all properties or only those properties that are not set in an equivalent J2EE deployment descriptor for the entity. Specify -easerverpropsonly true to exclude properties that are set in the deployment descriptor. The default, -easerverpropsonly false, specifies that all properties are included in the generated XML file.

8.2.6 Chapter 14, *Using the Systems Management Web Console*

The name of the Web-based console for systems management has been changed to “Sybase Enterprise Web Console,” and the name of the Systems Management access point has been changed to Enterprise Portal Manager.

In the Enterprise Portal Manager, each service now has a Service Settings folder, which allows you to see component installation properties and view or change the start mode, caption, and description. When you click the plus-sign icon of a Service Settings folder, you see these properties in the right pane:

- StartMode – the mode used by the Agent Manager to determine whether to automatically start the component. This field can be:
 - blank – undetermined.
 - Automatic – Agent Manager automatically starts the component.
 - Manual – the component must be started manually by the user.

To change this setting, select either Automatic or Manual at the bottom of the right pane, then click Apply. Or, click Reset to return the property value to its original state.

Note This is not the same as the Windows NT service entry setting.

- *Name* – a unique system-determined ID that is prepended with the name of the machine on which the middleware (EAServer) is installed.
- *InstallDate* – the date the component was installed.
- *OID* – currently unused.
- *UpdateRole* – the security role the user needs to have assigned to them to update or change a component’s settings. The default role is “Admin.”
- *Agent* – the Java class that implements the logic behind service management.

- *Status* – the status of the component: OK (running), Stopped (not running), or Unknown (state unknown).
- *SystemName* – the name of the component’s host machine.
- *SystemCreationClassName* – used as part of the CIM Repository *key* structure. Refers to the CIM class name of the system on which Sybase Enterprise Web Console is installed.
- *CreationClassName* – CIM key data. What the CIM class is for this instance.
- *Started* – whether the service has ever been started, true or false.
- *ReadRole* – the security role (if set) needed to read service information.
- *Description* – any meaningful user-defined description of the component. This is used only for the user’s reference. To change this setting, enter the new description, and click Apply. Or, click Reset to return the property value to its original state.
- *Caption* – the name that displays for the component in the left pane tree view. To change this setting, enter the new caption, and click Apply. Or, click Reset to return the property value to its original state.

8.2.7 Chapter 15, *Using the SNMP Agent*

The section “Configuring agent properties in Jaguar Manager” refers to “three tabs: General, Configuration, and Backup Agents”. The tab titles are General, Backup, and All Properties. The remainder of this section contains correct instructions for configuring the agent properties. This error also occurs in the Agents topic on online help.

8.2.8 Appendix B, *Repository Properties Reference*

Note the following corrections and newly documented properties:

Component properties

com.sybase.jaguar.component.load The documented value `afterBegin` is not valid. If included in the list of values, this value is ignored.

The default value of `beforeInvoke, beforeRemove` is required for EJB 2.0 compliance and is safe for all compliant entity bean implementations. If your implementation of `ejbRemove` does not require any field values other than the primary key, you can remove `beforeRemove` from the value. Doing so improves performance by eliminating unnecessary database queries.

com.sybase.jaguar.component.store The default value of `afterCreate`, `afterInvoke` is required for EJB 2.0 compliance and is safe for all compliant entity bean implementations

If you insert values in the `ejbCreate` method, and do not modify any field values in the `ejbPostCreate` method, you can safely remove `afterCreate` from the setting. Doing so improves performance by eliminating redundant updates to the database.

You can use the `beforeCompletion` setting rather than `afterInvoke` if all updates to one table come from one entity bean, and you do not mind if finder methods return stale values because updates are deferred during a transaction. While this setting yields the best performance, you may get the wrong result with architectures where more than one component can update a table, for example, if two entity beans in one transaction update the same table, or if updates from session and entity beans are mixed in one transaction.

com.sybase.jaguar.component.timestamp This component property is documented incorrectly. This property specifies the concurrency control model used to avoid conflicting updates from entity components that use automatic persistence. The syntax matches the `Timestamp` field on the Persistence/General subtab of the Component Properties dialog box. See Chapter 25, “Managing Persistent Component State” in the *EAServer Programmer’s Guide* for more information.

com.sybase.jaguar.component.state.ts This component property is not used by EAServer.

Connection cache properties

com.sybase.jaguar.connccache.replaceorwithcolon If this property is set to true, pipe characters, ‘|’, in the server URL for JDBC connection caches are replaced with ‘:’ before calling the JDBC driver’s `setServerName()` method.

Server properties

com.sybase.jaguar.server.jvm.displayOptions To instruct EAServer to write the current JVM properties to the *serverName.log* server log, set the new server property `com.sybase.jaguar.server.jvm.displayOptions` to `true`; the default value is `false`.

com.sybase.jaguar.server.jvm.options This is a correction for the `com.sybase.jaguar.server.jvm.options` property. To set the property to multiple values, separate the values with commas; for example:

```
com.sybase.jaguar.server.jvm.options=value1,value2
```

To set the property to a value that includes commas, wrap the value in single quotes; for example:

```
com.sybase.jaguar.server.jvm.options='value1, with a comment'
```

9. 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.

10. 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/>.

10.1 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 Select Products from the navigation bar on the left.
- 3 Select a product name from the product list and click Go.
- 4 Select the Certification Report filter, specify a time frame, and click Go.
- 5 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 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.

10.2 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.

