Release Bulletin
Adaptive Server® Enterprise 12.5.4 for Mac OS X

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://sybooks.sybase.com.

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® Adaptive Server® Enterprise version 12.5.4. Server and client components are distributed on separate CDs.

For details on system requirements, including disk space and RAM, see the installation guide for your platform.

For more information specific to jConnect™ for JDBC™, jisql, and Ribo, see the jConnect documentation.

2.1 Installation kit

The installation kit includes:

- The server CD – for contents list, see "Server components" on page 4.

- The PC-Client CD – contains software client components to be installed on Windows 2000, Windows XP Pro, and Windows 2003 computers.

- *Release Bulletin for Adaptive Server Enterprise Version 12.5.4 on Macintosh OS X* (this document)

- *Installation Guide for Adaptive Server Enterprise 12.5.4 on Macintosh OS X*.

2.2 Server components

The Server CD includes the following components:

- Sybase servers:
    - Adaptive Server 12.5.4
    - Adaptive Server Enterprise Monitor ™ Server 12.5.4
    - Historical Server 12.5.4

- Language Modules 12.5.4

- Adaptive Server Administration Tools
    - Sybase Central™ 4.3
    - Adaptive Server plug-in 12.5.4
    - Job Scheduler Templates and Utilities 2.2
    - SQL Advantage™

- Software Developer's Kit (SDK) 12.5.1, which includes the following:
    - Connectivity:
        - Open Client™ 12.5.1
        - Embedded SQL™/C 12.5.1
    - Monitor Client Library 12.5.4
    - XA Interface for Adaptive Server Distributed Transaction Manager 12.5.1

- jConnect for JDBC 5.5 and related utilities and documentation

- jConnect for JDBC 6.05 and related utilities and documentation

- OLE DB Provider by Sybase 12.5.4

- ODBC Driver by Sybase 12.5.4

2.3 PC-Client components

The PC-Client CD includes the following components:

- Software Development Kit (SDK) 12.5.1, which includes the following:

    - Open Client 12.5.1

    - Embedded SQL/C 12.5.1

    - Embedded SQL/COBOL 12.5.1

    - Monitor Client Library 12.5.4

    - XA Interface for Adaptive Server Distributed Transaction Manager 12.5.1

- Adaptive Server Data Providers:

    - ADO.NET 1.1

    - OLE DB Provider by Sybase 12.5.4

    - ODBC Driver by Sybase 12.5.4

- Language Modules 12.5.4

- jConnect 5.5 for JDBC and related utilities and documentation

- jConnect 6.05 for JDBC and related utilities and documentation

- Adaptive Server Administration Tools:

    - Sybase Central 4.3.0.2428

    - Adaptive Server Plug-in

    - Job Scheduler Templates and Utilities 2.2

    - SQL Advantage

    - Microsoft Cluster Server Administration Extensions

- InfoMaker™ 10.5

- PowerDesigner™ 12.0

- PowerTransfer™ 12.5.3

Note Adaptive Server version 12.5.4 contains new ODBC and OLE DB drivers developed by Sybase. The third-party rebranded ODBC and OLE DB Driver Kits included with previous versions are no longer shipped with the product.

See the Sybase Web site at http://www.sybase.com/detail?id=1040652 for the End of Life notification for these drivers.

2.4 Operating system updates

For a complete list of patches, contact your operating system representative. Do not use a patch that is earlier than the version suggested for your operating system. Use the patch recommended by the operating system vendor even if it supersedes the patch listed here.

3. Special installation instructions

This section provides information for installing Adaptive Server version 12.5.4 and later that is not included or should be corrected in the installation guide.

Note Sybase recommends that you not install an older version of a Sybase product in a *SYBASE* directory that already includes a newer Sybase products as this may not work. For example, if you install an older version of Replication Server™ on top of Adaptive Server 12.5.4, either Adaptive Server or Replication Server may be inoperable, depending on the options you selected during the installation process.

3.1 Running *dbcc checkcatalog*

Adaptive Server has been enhanced to validate the row and column length in database tables, using information stored within the system catalogs in that database. Any discrepancy is reported in the error log with this message:

```
Invalid column length: <length>. Value must be between
0 and <max col length> for '<row type>' row with minimum
row length of <min row length>.
```

This check requires accurate information within the system catalogs. If you have upgraded from an earlier version of Adaptive Server, verify that the information within the system catalogs is correct by running the dbcc checkcatalog on all databases after you have run the upgrade process, but before any database activity occurs.

Run dbcc checkcatalog(*<database name>*). If any errors are reported, fix them by running dbcc checkcatalog(*<database name>*, "fixall").

Dump the database after the fixes have been made.

3.2 Installing Adaptive Server version 12.5.4 with earlier versions

You can install Adaptive Server version 12.5.4 over an existing 12.5 or later version without having to perform an upgrade. Shutdown your servers, install the release on top of the existing release area. Do not configure any servers, then restart your servers.

For more information about post installation tasks, access the information at the MySybase Web site at http://my.sybase.com/detail?id=1013610.

3.3 General configuration steps for Kerberos

For information about installing Kerberos security software, see the white paper on the Sybase Web site at http://www.sybase.com/detail?id=1029260. This helps you get started with using Kerberos with Adaptive Server, OpenClient, OpenServer and jConnect applications.

3.4 Changing the default language

To change the language for messages, run sp_modifylogin to specify the preferred language. After installing version 12.5.4, the System Administrator must reinstall the appropriate locales using langinstall.

3.5 Known installation issues

This section describes known problems or issues that you may encounter during the installation process.

3.6 Post installation tasks

These tasks are updates from the post-installation tasks in the Installation Guides.

3.6.1 Running the *installmaster* script

Using isql, run the new installmaster script included with this release using the following syntax. Save the output of this step to an operating system file.

    isql -Usa -P<*sa password*> -S<*server name*> -n
    -i$SYBASE/$SYBASE_ASE/scripts/installmaster -o<*output file*>

Save the output of this step to an operating system file.

3.6.2 Rerunning the *installcommit* script

Rerun the installcommit script if you use two-phase commit or distributed transactions, you need to rerun the installcommit SQL script to restore the following stored procedures:

- sp_start_xact

- sp_abort_xact

- sp_remove_xact

- sp_stat_xact

- sp_scan_xact

- sp_probe_xac

Run the new installcommit script included with this release, using isql, if you have modified any of these Sybase system stored procedures (above) without changing the names. In executing installcommit it overwrites your modifications. In this case, you must reload the modified stored procedures after you run the installcommit script.

    isql -Usa -P<*sa password*> -S<*servername*> -n
    -i$SYBASE/$SYBASE_ASE/scripts/installcommit -o<*output file*>

Save the output of this step to an operating system file.

3.6.3 Rerunning the *installsecurity* script

 If the Adaptive Server Auditing functionality was enabled in your installation of Adaptive Server Enterprise, you need to rerun the installsecurity script.

If you have modified any of the Sybase system stored procedures installed by
this script without changing the names, executing installsecurity will overwrite
your modifications. You must reapply the modifications after you run the
installsecurity script.

Using isql, run the new installsecurity script included with this release.

```
isql -Usa -P<sa password> -S<servername> -n
-i$SYBASE/$SYBASE_ASE/scripts/installsecurity -o<output file>
```

Save the output to an operating system file.

3.6.4 Running the *instmsgs.ebf* script

from this release. Running the instmsgs.ebf script brings your Adaptive Server
Enterprise messages up to the level of this release.

Using isql, run:

```
isql -Usa -P<sa password> -S<server name> -n
-i$SYBASE/$SYBASE_ASE/scripts/instmsgs.ebf -o<output file>
```

Save the output of this step to an operating system file.

3.6.5 Running the *installjsdb* script

Stop Job Scheduler.

From an isql session, enter:

```
use sybmgmtdb
go
sp_js_wakeup "stop_js", 1
go
```

Run the installjsdb script included with this release:

```
isql -Usa -P<sa password> -S<server name> -n -
i$SYBASE/$SYBASE_ASE/scripts/installjsdb -o<output file>
```

Save the output of this step to an operating system file.

The installjsdb script looks for the *sybmgmtdb* database. The script updates Job
Scheduler tables and stored procedures.

Start Job Scheduler, then, using isql, enter:

```
use sybmgmtdb
go
sp_js_wakeup "start_js", 1
go
```

4. Special upgrade instructions

This section provides information for upgrading to Adaptive Server version 12.5.4 that is not included or should be corrected in the installation guide.

4.1 Upgrading Job Scheduler

If you are upgrading from Adaptive Server versions earlier than 12.5.3 ESD#2, you must run the installjsdb script from the new version anytime you upgrade Job Scheduler.

❖ **Upgrading Job Scheduler**

1   Disable Job Scheduler before you upgrade Adaptive Server:

```
sp_configure "enable job scheduler", 0
```

2   Upgrade Adaptive Server. See the installation guide for details.

3   Run the *installjsdb* script:

```
isql -Usa -Psa_password -Sservername -i
$SYBASE_ASE/scripts/installjsdb
```

Note The directory with the location of the isql executable (*$SYBASE_OCS/bin*) must be in your path.

The *installjsdb* script looks for the sybmgmtdb database. The script updates Job Scheduler tables and stored procedures.

4   Enable Job Scheduler:

```
sp_configure "enable job scheduler", 1
```

5   To start Job Scheduler, either restart the server, or enter:

```
use sybmgmtdb
go
sp_js_wakeup "start_js",1
go
```

4.1.1 Upgrading Job Scheduler templates (optional)

Sybase recommends that you upgrade the Job Scheduler templates. You must have *$SYBASE/$SYBASE_OCS/bin* directory in your *$path* so the isql executable is accessible.

1   Move to the Job Scheduler template stored procedure directory. For example:

```
cd $SYBASE/JS-12_5/Templates/sprocs
```

2   Run installTemplateProcs:

    installTemplateProcs *<servername> <username> <password>*

3   Move to the Job Scheduler template XML directory. For example:

```
cd $SYBASE/JS-12_5/Templates/xml
```

4   Run installTemplateXML.

installTemplateXML *<servername> <machinename>*
<serverport> <username> <password> [*<language_code>*]

5   Use en for the language_code or you may omit the parameter completely as en is the default.

4.2 Downgrading Job Scheduler

If you are downgrading to Adaptive Server versions 12.5.3 ESD#2 or earlier, you must run installjsdb script from the lower version anytime you downgrade Job Scheduler.

❖ **Downgrading Job Scheduler**

1   Disable Job Scheduler before you downgrade Adaptive Server:

```
sp_configure "enable job scheduler", 0
```

2   Downgrade Adaptive Server. See the installation guide for details.

3   Run the *installjsdb* script:

```
isql -Usa -Psa_password -Sservername -i
$SYBASE_ASE/scripts/installjsdb
```

Note The directory with the location of the isql executable (*$SYBASE_OCS/bin*) must be in your path.

4   Enable Job Scheduler:

```
sp_configure "enable job scheduler", 1
```

5   To start Job Scheduler, either restart the server, or enter:

```
use sybmgmtdb
go
sp_js_wakeup "start_js",1
```

```
go
```

4.3 Upgrade support for Adaptive Server version 12.5.4

Sybase supports upgrades from Adaptive Server versions 11.9.x, 12.0.x,12.5, and 12.5.x to Adaptive Server version 12.5.4.

5. Product and platform interoperability matrix

The following tables show the interoperability of Adaptive Server version 12.5.4 against other Sybase products across different platforms and versions, as well as client products. For specific platform or operating system level information, perform a search at the Sybase Certification Web page at http://certification.sybase.com/ucr/search.do for the appropriate platform certification.

Note 1   Even though two or more products might be interoperable, features introduced in a newer version of a product are not likely to be supported with older versions of the same or other products.

Note 2   Interoperability between big-endian and little-endian platforms has also been verified. Windows, Linux-32, and Sun Solaris x86 platforms are little-endian. IBM AIX, Sun Solaris, Linux on Power, and HP-UX are big-endian platforms.

Table 1 shows the interoperability of Adaptive Server version 12.5.x with other Sybase products.

Table 1: Adaptive Server 12.5.4 interoperability with other products

Platforms		OC/OS 12.5.1	OC/OS 15.0	jConnect 5.5	jConnect 6.0.x	ASE ODBC by Sybase 12.5x	ASE ODBC by Sybase 15.0x	ASE OLEDB by Sybase 12.5x	ASE OLEDB by Sybase 15.0x	ADO.NET 1.1x	OEM ODBC Driver Kit 5.00.0096	OEM OLEDB Driver Kit 2.70.0063	Replication Server 12.6	Replication Server 15.0.x
AIX	32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
HP-UX	32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	IA 64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
Linux	x86 32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	Pseries 64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	x64 64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	IA 64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
Mac OS X	32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
SGI	32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
Solaris	32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
	x86 32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
TruUnix (Alpha)	64-bit	X	X	X	X	X	X	X	X	X	X	X	X	X
Windows	x86 32-bit	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 2 shows the supported platforms of client products listed in Table 1.

Table 2: Supported client platforms

Client name	Version	Supported platform	
Open Client/Open Server	12.5.1	• AIX 32-bit	• Mac OSX 32-bit
		• AIX 64-bit	• SGI 32-bit
		• HP-UX 32-bit	• SGI 64-bit
		• HP-UX 64-bit	• Solaris 32-bit
		• HP-UX IA 32-bit	• Solaris 64-bit
		• HP-UX IA 64-bit	• Solaris x86 32-bit
		• Linux x86 32-bit	• Solaris Opteron 64bit
		• Linux Pseries 32-bit	• TruUnix (Alpha) 64-bit
		• Linux Pseries 64-bit	• Windows x86 32-bit
		• Linux x64 64-bit	
		• Linux IA 64-bit	
	15.0	• AIX 32-bit	• Solaris 32-bit
		• AIX 64-bit	• Solaris 64-bit
		• HP-UX 32-bit	• Solaris Opteron 32-bit
		• HP-UX 64-bit	• Solaris Opteron 64-bit
		• HP-UX IA 32-bit	• Windows x86 32-bit
		• HP-UX IA 64-bit	• Windows x64 64-bit
		• Linux x86 32-bit	
		• Linux x64 64-bit	
		• Linux Pseries 32-bit	
		• Linux Pseries 64-bit	
jConnect	5.5	• All	
	6.0x	• All	
ASE ODBC by Sybase	12.5.x	• Linux x86 32-bit	• Windows x86 32-bit
		• Linux x64 32-bit	• Windows x64 32-bit
		• Mac OSX 32-bit	
	15.0.x	• Linux x86 32-bit	• Windows x86 32-bit
		• Linux x64 32-bit	• Windows x64 32-bit
			• Windows x64 64-bit
ASE OLEDB by Sybase	12.5.x	• Windows x86 32-bit	• Windows x64 32-bit
	15.x	• Windows x86 32-bit	• Windows x64 32-bit
ADO.NET	1.1.x	• Windows x86 32-bit	• Windows x64 32-bit
OEM ODBC Driver Kit	5.00.0096	• Windows x86 32-bit	
OEM OLEDB Driver Kit	2.70.0063	• Windows x86 32-bit	

Client name	Version	Supported platform	
Replication Server	12.6	• AIX 32-bit	• Mac OSX 32-bit
		• HPUX 32-bit	• SGI 32-bit
		• HPUX IA 32-bit	• Solaris 32-bit
		• Linux x86 32-bit	• TruUnix (Alpha) 64-bit
		• Linux x64 32-bit	• Windows x86 32-bit
	15.0.x	• AIX 32-bit	• Linux x86 32-bit
		• HPUX 32-bit	• Linux x64 32-bit
		• HPUX IA 32-bit	• Solaris 32-bit
			• Windows x86 32-bit

Note You cannot order SDK 12.5.1 separately for Macintosh OS X. However, SDK 12.5.1 is shipped with Adaptive Server 12.5.4.

For the latest interoperability report on these products, see the MySybase Web site at http://my.sybase.com/detail?id=1026087.

6. Known problems

This section describes known problems and workarounds for Adaptive Server.

Note The System Problem Report (SPR) and Closed Problem Report (CPR) are no longer shipped with the Adaptive Server Enterprise releases. Known issues, once reported in the SPR, are now included in the Release Bulletin for the current version of Adaptive Server Enterprise. For more information on closed issues for Adaptive Server version 12.5.4 go to Support and Services, Solved cases at http://www.sybase.com/detail?id=1035398.

6.1 SSL and Replication Agent

[CR #391581]   An error occurs when you attempt to establish an SSL connection between Replication Agent version 12.5.3.a and Replication Server version 12.6 ESD #5.

Workaround: When you configure Adaptive Server for SSL, Replication Server creates a primary connection, but the Replication Agent Thread fails on the initial connection attempt. However, when you restart the Replication Agent thread, a successful SSL connection is established.

6.2 *alter table* and triggers with *if update()* clauses

[CR #199655, 343165]   If a trigger contains an if update() clause, data modifications that should fire the trigger that are performed after executing alter table add, alter table drop, alter table lock, or alter table modify may cause errors in column references. Triggers on the altered table that use an if update() clause in the body of the trigger to reference a column may not fire, or may fire incorrectly.

Workaround: After the alter table operation has completed, drop and re-create all triggers on the altered table. Doing so causes the if update() clause in the triggers to correctly reference the new columns by their new column offsets, so the trigger code executes correctly.

6.3 Truncation error using *select* with *power()* function and numeric argument

[CR #236723]   Using the select command with the function power(), and a numeric argument, results in a truncation error.

Workaround: Convert the numeric argument to a float.

6.4 Some messages returned incorrectly on UTF-8 servers

[CR #271646]   When the Adaptive Server default character set is UTF-8, the Adaptive Server Enterprise Replicator procedures sp_addreplicateart and sp_addreplicateconn return some error messages incorrectly.

This problem does not affect the function of these procedures.

Note Even though the error messages are not returned correctly, the errors are logged correctly in the Adaptive Server Enterprise Replicator log files.

Workaround: There is no workaround for this issue.

6.5 Cross-platform of parsed XML images

[CR #332012]   You cannot use bcp or replicate parsed XML image data between a big-endian platform and a little-endian platform, for example between a Solaris platform (big-endian) and a Linux or Windows platform (little-endian).

The term "parsed XML image data" refers to data of image datatype that is generated by the xmlparse built-in function.

Workaround: When you transfer XML data between platforms, transfer the character form of the XML documents rather than the parsed XML form. If you have not stored the character form of the XML documents, you can regenerate it from the parsed form. For example, if column xmlindexed of the xmldocuments table is an image column containing parsed XML image data, the following two commands append a new text column to the table and populate it with a character form of the documents contained in the xmlindexed column:

```
alter table xmldocuments add xmltext text
update xmldocuments set xmltext = xmlextract('/', xmlindexed)
```

Then you can use bcp or replicate the xmltext column from one platform to the other.

6.6 Memory allocation failure

[CR #350856]   If there is insufficient memory in the heap class, Adaptive Server stops responding.

Workaround: Double the heap class size.

6.7 Tape backup

You cannot backup directly to tape from Backup Server™ on Mac OS X.

Workaround: Use a third-party backup tool, for example BRN from the Toles Group.

6.8 Migration of stored procedures

[CR #328131]   sybmigrate does not migrate stored procedures that have a space character in their name, or belong to a procedure group.

Workaround: There is no workaround for this issue.

6.9 *cis connect timeout* and *enable SNMP* are not implemented

[CR #323177]   Configuration parameters cis connect timeout and enable SNMP are not currently implemented.

Workaround: Do not use these configuration parameters.

6.10 XP Server returns incorrect results

[CR #280073]   On all systems, using an extended stored procedure (ESP) with parameters may result in wrong data being sent to XP Server. Because of this, XP Server may return incorrect results.

This happens when there is no parameter declaration list in the ESP, but one or more parameters are supplied at execution time. Before CR #280073, all parameters supplied at execution time were sent to the XP Server, causing incorrect results. CR #280073 ignores all parameters supplied at execution time when the parameter declaration list is empty.

This does not cause any behavior change when the parameter declaration list in the ESP matches the parameters supplied at execution time.

If you are using ESPs without a parameter declaration list, and you supply parameters at execution time, drop and re-create the ESP in Adaptive Server. Make sure the parameter declaration list in the ESP matches the parameter list supplied at execution time

You can use trace flag 523 to revert to pre-CR #280073 behavior. This is a server-wide trace flag to be set when you restart Adaptive Server.

6.11 Network license daemon support

Adaptive Server version 12.5.2 and later has upgraded SySAM daemons and libraries (FlexLM) to version 8. The SySAM daemons (lmgrd and SYBASE) are backward compatible; the libraries are not. As a result, Adaptive Server 12.5.2 cannot check out licenses from earlier versions of the SySAM license daemons.

Workaround: Sites using the Network License Model should make sure that the central SySAM license daemons are upgraded before loading the libraries.

6.12 Configuring connectivity for clients accessing wide data

[CR #271822]   If you are using wide data (that is, data other than text and image that is greater than 255 bytes), and you are using the bulk library APIs, make sure you configure the connectivity capability for wide data. Failure to do so may result in memory corruption.

6.13 Upgrading check constraints

[CR #272941]   When you upgrade to Adaptive Server 12.5.0.1 or later, verify constraints that were created with the following criteria. They may not have been upgraded correctly.

- The check constraint was created as a named check constraint.

- Quoted identifiers were set to on while the constraint was created.

- Quote identifiers were used around the entire constraint name.

- The constraint name was a keyword, or not a legal identifier.

You see parser syntax errors after you have upgraded to Adaptive Server 12.5.0.1 and later, and when you first add data to the constrained column, or when you run dbcc upgrade_object.

To determine whether this problem occurs on your upgraded databases, run this command to check for syntax errors on your constraints and rules:

```
dbcc upgrade_object (dbname, rule)
```

Workaround: There are two workarounds to this problem:

- Issue alter table drop *constraint_name* to drop a constraint that was not upgraded successfully. Then issue alter table add *constraint_name*, and re-create the constraint.

- As System Administrator, manually update *syscomments.text* to add quoted identifiers to the constraints that did not successfully upgrade.

6.14 Handling multibyte character sets during migration

[CR #353079]   If you configure multibyte character sets after migrating data from system catalogs sysattributes and sysxtypes, the text columns in these catalogs are inconsistent with the multibyte character sets.

Workaround: Manually run dbcc fix_text on sysattributes and sysxtypes, to make the text columns consistent with the multibyte character sets.

6.15 LDAP User Authentification attribute

[CR #430808]   The minimum value for set_max_ldapua_native_threads is 1. This is valid for Linux. The following platforms are unable to set the attribute to less than fifteen:

- Sun Solaris

- IBM AIX

- HPUX

- Windows

- Tru64

Workaround: Do not set the attribute to less than 15.

6.16 Master device for MAC

[CR #431446]   If you select a 4k, 8k, or 16k as the Master device size, it is hardcoded to 100MB.

Workaround: If you need to build a server for 4k and above, you need to increase the master database size.

6.17 Changing server name

[CR #431446]   If you change the default Adaptive Server Enterprise server name, neither the backupserver nor xpserver name is changed dynamically.

Workaround: Change the backupserver and xpserver name when you change the Adaptive Server Enterprise server name from the default.

6.18 Delimiter *go*

[CR #432057]   Any occurrence of [gG][oO] in the text of a job command is seen as the batch delimiter go.

Workaround: There is no workaround as you cannot use identifiers containing the substring *go* or any other combination of upper and lower case "g" or "o".

For example: the command *use oligo* is split into *"use oli" "go"* when used in a scheduled job.

6.19 Truncating strings

[CR #367369]   Adaptive Server Enterprise 12.5.x truncates strings longer then 255 characters. Versions prior to Adaptive Server Enterprise 12.5.x do not.

The truncation message 9558 is produced. This is *not* an error message, and the message number 9558 is NOT printed. This truncation can lead to data loss.

Workaround: None.

6.20 *sp_help* with encryption key

[CR #393740]   sp_help prints incorrect information, such as blank name, owner, or object type when the name of an encryption key is specified.

Workaround: None.

6.21 Remote backup server and compressed dumps

[CR # 431904]   Using a remote Backup Server to dump a database using WITH COMPRESSION=<*compression level*> does not produce a compressed dump. Such dumps can only be loaded using a Remote Backup Server; since mixing dumps made on a Local Backup Server and loading them via the Remote Backup Server or vice versa does not work.

This problem is only applicable to the compression option WITH COMPRESSION=<*compression level*>.

6.22 PC-Client and Sybase Drivers

[CR #433446]   Some Windows environments can cause the Sybase DataAccess drivers (ODBC, OLEDB, ADO) not to install even under the "Full Installation" option.

This can be corrected by doing a "Custom Installation" of the drivers.

6.23 Async I/O support on SuSE platforms

[CR #403972]   Prior to Adaptive Server Enterprise12.5.3 ESD#2 release, Adaptive Server was able to automatically switch to using Posix Async i/o on Linux versions not supporting Posix interface to KAIO. SuSE discontinued support for librtkaio starting from SLES 9 Service Pack 1.

Due to the CR 376419 fix in Adaptive Server Enterprise 12.5.3 ESD#2, the server incorrectly reports that Adaptive Server is using KAIO while it is using Posix AIO on SLES 9 SP1. This can lead to unexpected behavior in Adaptive Server Enterprise.

Workaround: Adaptive Server Enterprise should be booted with traceflag 1630 on SLES 9 SP1 to explicitly enable Posix async i/o.

7. Product compatibilities

This section lists the Sybase components that are compatible with Adaptive Server Enterprise version 12.5 and later. For information about operating system requirements, see individual component documentation.

The following components have been tested for compatibility with Adaptive Server 12.5 and later:

*   Sybase Character Sets 3.0

*   Sybase Central viewer 4.x

*   ECDA option for ODBC 12.6

*   ECDA option for Informix 12.6

*   MainframeConnect DirectConnect for OS/390 12.6

*   ECDA option for Oracle 12.6

*   ECDA option for Microsoft SQL Server 12.6

*   ECDA option for DB2 Universal Database 12.6

*   ECDA option for AS/400 12.6

*   OpenSwitch 12.5

    Note OpenSwitch 12.5 does not support SSL.

*   jConnect for JDBC 5.5

*   jConnect for JDBC 6.05

*   Open Server™ 12.5.1

*   SDK 12.5.1

*   Open ServerConnect™ (CICS, IMS/MVS) 4.0

*   Open ClientConnect™ (CICS, IMS/MVS) 4.0

*   ODBC Driver for Adaptive Server 12.5.4

*   OLE DB Provider for Adaptive Server 12.5

*   InfoMaker™ 7.0.3

*   Replication Server 12.5, 12.6

*   Physical Architect™ 8.0

- XA-Library™ for CICS/ENCINA 11.1.1

- XA-Server™ for Tuxedo 11.1.1

Note Backup Server 12.5 is compatible with Backup Server 11.5.1 and later. Either server can be local or remote. Backup Server 12.5 is compatible with versions of Backup Server earlier than 11.9.2.1 *only* if the Backup Server 12.5 is the remote server.

7.1 Known compatibility issues

This section contains known compatibility issues and their workarounds.

7.1.1 Installing Replication Server with other Sybase software

Because there are incompatibilities among some Sybase components, Sybase strongly recommends that you install Replication Server, including Replication Server Manager (RSM) Server, in its own product directory, separate from other Sybase products.

7.1.2 Using Job Scheduler templates

Sybase recommends that you upgrade the Job Scheduler templates provided with Adaptive Server 12.5.4. The templates contain an important change that handles the 12.5.4 version number. To upgrade, install the XML from the *$Sybase/JS-12_5/Templates/xml* directory and the template stored procedures from the *$Sybase/JS-12_5/Templates/sprocs* directory. For more information on installing the templates, see the *Job Scheduler User's Guide*.

This upgrade should not interfere with any existing jobs. Existing jobs use the updated template stored procedures, and run as they have in the past.

Note If you have existing jobs created from templates delivered with a pre-12.5.2 Adaptive Server, see the 12.5.2 release bulletin for your platform and follow the upgrade steps there for the Job Scheduler templates. Then you can upgrade Job Scheduler templates using the above information.

---

8. Documentation updates and clarifications

This section describes changes and additions to the Adaptive Server documentation set.

8.1 Installation Guide for Adaptive Server Enterprise version 12.5.4

The following note should replace the Warning in Chapter 2 of the Installation Guide for Adaptive Server Enterprise verison 12.5.4 on Windows platforms.

Note Before running Adaptive Server version 12.5.4 on Windows 2000 you must update the Windows C run time libraries. You can do this in one of the following ways:

•   Install Windows 2000 Support Tools.

•   Download a patch *vcredist.exe* referred to in Microsoft Knowledge Base article # 259403. Find the patch the Microsoft Web site at http://support.microsoft.com/default.aspx?scid=http://support.microsoft.com:80/support/kb/articles/Q259/4/03.ASP&NoWebContent=1.

•   Install Microsoft Visual C++ 6.0.

8.2 *Web Services User's Guide*

Include the following in "Troubleshooting Issues" of Chapter 7, "Troubleshooting" in the *Web Services User's Guide*.

Issue

The sp_webservices add command may return the following error when generating proxy tables:

```
Warning: Row size (3347 bytes) could exceed row size limit, which is 1962
bytes.
Msg 208, Level 16, State 1:
Server 'JMALVARADO', Line 1:
tempdb..ws_4338e6e122cd4ef0a not found. Specify owner.objectname or uses to
check whether the object exists (sp_help may produce lots of output).
No proxy tables were created for the WSDL URL:
[http://www.xignite.com/xquotes.asmx?WSDL]
(return status = 0)
```

This error occurs because the remote server representing the Web Services Consumer has been added using sp_addserver with a class other than "sds." Use sp_helpserver in isql:

```
1> sp_helpserver ws
2> go
```

In this example, *ws* is the name of the Web Services Consumer. This is the default. The remote server class is returned in the indicated column of the result:

```
name network_name class ...
---- ------------ ----- ...
ws   ws           null  ...
```

User action   Change the class of the remote server to "sds" by using sp_dropserver and sp_addserver in isql:

```
1> sp_dropserver ws_name
2> go
...
1> sp_addserver ws_name, sds, ws_name
2> go
```

In this example, *ws_name* is the name chosen for the Web Services Consumer.

8.3 *Utility Guide*

The following are updates for the *Utility Guide*.

8.3.1 Omission from *sybmigrate*

The following information was omitted from the Chapter 8, Commands, for "sybmigrate" in the *Utility Guide*:

sybmigrate requires allow resource limits to be set to 0.

Note If metadata already exists on the target Adaptive Server, you cannot migrate server data.

SYBASE_JRE – defines the location of the Java runtime environment. This is generally set to the default value *$SYBASE/shared-1_0/jre-1_3* in the Adaptive Server release area. This environment variable overrides JAVA_HOME.

SYBASE_JRE defaults to *$SYBASE/shared-1_0/jre-1_3*.

8.3.2 Utilities moved

The following three utilities have been moved from
$SYBASE/$SYBASE_ASE/bin to *$SYBASE/$SYBASE_OCS/bin*:

- certauth

- certpk12

- certreq

8.4 *Reference Manual: Building Blocks*

The following are updates for the *Reference Manual: Building Blocks*.

8.4.1 @@identity

The value of *@@identity* changes each time an insert or select into attempts to
insert a row into a table. *@@identity* does not revert to its previous value if the
insert or select into statement fails or if the transaction that contains it is rolled
back.

Adding data using bcp does not change the *@@identity* value.

Workaround: None.

8.4.2 *syslogins* table

The status control bits in the syslogins Table 12-13 in the Reference Manual,
the bit 0x01 information in syslogins.status has been removed.

8.5 *Reference Manual: Commands*

The following are updates for the *Reference Manual: Commands*.

8.5.1 New parameter for *dbcc upgrade object*

The following description of the dbcc check command should be included in
Reference Manual: Commands.

Syntax

```
dbcc upgrade_object( {dbid | dbname},
{ compiled_object_name |
"view" | "procedure" | "default" |
"rule" | "default" | "trigger" },
[ "force" | "check" ] )
```

Keywords and options   check – checks syntax for the specified *compiled_object_name* in syscomments
                          in the specified database. Does not raise errors on occurrences of select.

Comments   • check is used to detect syscomments text corruption caused by Adaptive
                            Server defects that occurred before the upgrade. This syscomments text
                            corruption is serious because it causes upgrade to fail.

                          • If any error is reported by dbcc *upgrade_object* with check option, drop
                            and re-create the *compiled_object*.

8.5.2 *set* command option *explicit_transaction_require* not supported

The set command option explicit_transaction_require is not currently supported,
and should not appear in the *Adaptive Server Reference Guide* version 12.5.4.

8.5.3 *dump* and *load* database

Before you run dump database for a cross-platform dump and load, use the
following procedures to move the database to a transactional quiescent status:

1   Verify the database runs cleanly by executing dbcc checkdb and dbcc
    checkalloc.

2   To prevent concurrent updates from open transactions by other processes
    during dump database, use sp_dboption to place the database in a
    single-user mode.

3   Flush statistics to systabstats using sp_flushstats.

4   Wait for 10 to 30 seconds, depending on the database size and activity.

5   Run checkpoint against the database to flush updated pages.

6   Run dump database:

    a   Place the database in a single user mode by sp_dboption.

    b   Run sp_flashstats in the database.

    c   Run checkpoint in the database.

    d   Run dump database.

8.6 *Reference Manual: Procedures*

There are numerous changes and corrections to sp_monitorconfig. Replace the
reference pages in *Reference Manual: Procedures* for sp_monitorconfig with
this text.

Description	Displays cache usage statistics regarding metadata descriptors for indexes, objects, and databases. sp_monitorconfig also reports statistics on auxiliary scan descriptors used for referential integrity queries, and usage statistics for transaction descriptors and DTX participants.
Syntax	sp_monitorconfig "*configname*" [, "*result_tbl_name*"] [, "full"]
Parameters	• *configname* – is either all, or part of the configuration parameter name with the monitoring information that is being queried. Valid configuration parameters are listed in the "Usage" section. Specifying all displays descriptor help information for all indexes, objects, databases, and auxiliary scan descriptors in the server.

- "*result_tbl_name*" – is the name of the table you create, in which to save the stored procedure results. This is an optional parameter.

- "full" – returns a set of values for the configname that you specify. The values are:

  - config_val – reports the configured value.

  - system_val – reports the systems default value when there's no value configured.

  - total_val – reports the actual value used.

Examples   **Example 1**   Shows all items that are open:

```
sp_monitorconfig "open"

Configuration option is not unique.
option_name                      config_value run_value
------------------------------   --------------------
curread change w/ open cursors            1           1
number of open databases                 12          12
number of open indexes                  500         500
number of open objects                  500         500
open index hash spinlock ratio          100         100
open index spinlock ratio               100         100
open object spinlock ratio              100         100
```

Example 2   Shows the status for all configurations:

```
sp_monitorconfig "all"
-------------

Usage information at date and time: Oct 25 2002 10:36AM.
Name                     num_free  num_active  pct_act  Max_Used  Reused
-----------------------  --------  ----------  -------  --------  ------
 additional network memory     0          0     0.00         0      NA
```

```
audit queue size              100        0    0.00          0    NA
heap memory per user         4096        0    0.00          0    No
max cis remote connection       0        0    0.00          0    NA
max memory                  12404    21388   63.29      21388    NA
max number network listen       3        2   40.00          2    NA
max online engines              4        1   20.00          1    NA
memory per worker process    1024        0    0.00          0    NA
number of alarms               31        9   22.50          9    NA
number of aux scan descri     200        0    0.00          0    NA
number of devices               9        1   10.00          1    NA
number of dtx participant      500       0    0.00          0    NA
number of java sockets          0        0    0.00          0    NA
number of large i/o buffers     6        0    0.00          0    NA
number of locks              4673      327    6.54        408    NA
number of mailboxes            30        0    0.00          0    NA
number of messages             64        0    0.00          0    NA
number of open databases        6        6   50.00          6    No
number of open indexes        492        8    1.60          8    No
number of open objects        482       18    3.60         18    No
number of open partitions     447       53   10.60          0    NA
number of remote connections   20        0    0.00          0    NA
number of remote logins        20        0    0.00          0    NA
number of remote sites         10        0    0.00          0    NA
number of sort buffers        500        0    0.00          9    NA
number of user connection      23        2    8.00          2    NA
number of user processes        0        0    0.00          0    NA
partition groups             1024        0    0.00          0    NA
permission cache entries       15        0    0.00          0    NA
procedure cache size         2567      704   21.52        810    No
size of global fixed heap     150        0    0.00          0    NA
size of process object heap  1500       0    0.00          0    NA
size of shared class heap    1536        0    0.00          0    NA
size of unilib cache            0        0    0.00          0    NA
txn to pss ratio               16        0    0.00          0    NA
(return status = 0)
```

> **Example 3**   Shows 283 active object metadata descriptors, with 217 free. The
> maximum used at a peak period since Adaptive Server was last started is 300:

```
sp_monitorconfig "open objects"

Usage information at date and time: Apr 22 2002  2:49PM.
Name            num_free   num_active  pct_act   Max_Used   Reused
--------------  --------   ----------  -------   --------   ------
number of open  217        283         56.60     300        No
```

You can then reset the size to 330, for example, to accommodate the 300 maximum used metadata descriptors, plus space for 10 percent more:

```
sp_configure "number of open objects", 330
```

Example 4   Shows the maximum number of index metadata descriptors, which is 44:

```
sp_monitorconfig "open indexes"

Usage information at date and time: Apr 22 2002  2:49PM.
Name            num_free   num_active   pct_act   Max_Used   Reused
--------------  --------   ----------   --------  --------   ------
number of open  556        44           7.33      44         No
```

You can reset the size to 100, the minimum acceptable value:

```
sp_configure "number of open indexes", 100
```

Example 5   Shows the number of active scan descriptors as 30, though Adaptive Server is configured to use 200. Use the number of aux scan descriptors configuration parameter to reset the value to at least 32. A safe setting is 36, to accommodate the 32 scan descriptors, plus space for 10 percent more:

```
sp_monitorconfig "aux scan descriptors"

Usage information at date and time: Apr 22 2002  2:49PM.
Name            num_free   num_active   pct_act   Max_Used   Reused
--------------  --------   ----------   --------  --------   ------
number of aux s  170       30           15.00     32         No
```

Example 6   Adaptive Server is configured for five open databases, all of which have been used in the current session.

```
sp_monitorconfig "number of open databases"

Usage information at date and time: Apr 22 2002  2:49PM.
Name            num_free   num_active   pct_act   Max_Used   Reused
--------------  --------   ----------   --------  --------   ------
number of open  0          5            100.00    5          Yes
```

However, as indicated by the Reused column, an additional database must be opened. If all 5 databases are in use, an error may result, unless the descriptor for a database that is not in use can be reused. To prevent an error, reset number of open databases to a higher value.

Example 7   Only 10.2 percent of the transaction descriptors are currently being used. However, the maximum number of transaction descriptors used at a peak period since Adaptive Server was last started is 523:

```
sp_monitorconfig "txn to pss ratio"

Usage information at date and time: Apr 22 2002  2:49PM.
Name             num_free    num_active    pct_act    Max_Used    Reused
--------------   --------    ----------    --------   --------    ------
number of open   784         80            10.20      523         NA
```

Example 8   Using the optional parameter *result_tbl_name* to create a user table, saves the sp_monitorconfig result to this table:

```
create table sample_table(
    Name varchar(35), Num_free int,
    Num_active int, Pct_act char(6),
    Max_Used int, Reuse_cnt int,
    Date varchar(30))
```

The name of the table created becomes the second parameter of sp_monitorconfig:

```
sp_monitorconfig "number of alarms", sample_table

--------------
(return status = 0)

select * from sample_table

--------------
Name             Num_free Num_active Pct_act Max_Used Reuse_cnt Date
-----------      -------- ---------- ------- -------- --------- -------
number of alarms 29       11         27.50   11       -1 Dec 4 2002 10:20AM
(1 row affected)


sp_monitorconfig "number of devices", sample_table

--------------------
(return status = 0)

select * from sample_table

-----------------
Name            Num_free Num_active Pct_act MaxUsed Reuse_cnt Date
-----------     -------- ---------- ------- ------- -------- -------
number of alarms 29      11         27.50   11      -1 Dec 4 2002 10:20AM
number of devices 9      1          10.00   1       -1 Dec 4 2002 10:20AM
(2 rows affected)
```

The result set saved to the table accumulates until you delete or truncate the table.

Note If sample_table is in another database, you must provide its fully qualified name in quotes.

Example 9   Displays the configure_value, system_value, and run_value columns of all the configurations:

```
sp_monitorconfig "all", null, "full"
go

Usage information at date and time: Mar 23 2004  5:15PM.
```

Name	Configure Value	System Value	Run Value	Num_free	Num_active	Pct_act	Max_Used	Num_Reuse
additional network memory	0	496156	496156	334844	161312	32.51	161312	0
audit queue size	100	0	100	100	0	0.00	0	0
disk i/o structures	256	0	256	256	0	0.00	55	0
heap memory per user	4096	563	4096	4096	0	0.00	0	0
max cis remote connection	0	100	100	100	0	0.00	0	0
max memory	33792	0	33792	3452	30340	89.78	30340	0
max number network listen	5	0	5	4	1	20.00	1	0
max online engines	1	0	1	0	1	100.00	1	0
memory per worker process	1024	68	1024	1024	0	0.00	0	0
number of alarms	40	0	40	30	10	25.00	10	0
number of aux scan descri	200	25	200	200	0	0.00	0	0
number of devices	10	0	10	9	1	10.00	1	0
number of dtx participant	500	0	500	500	0	0.00	0	0
number of java sockets	0	50	50	50				

```
                            0    0.00                0                0
number of large i/o buffe            6                0                6                6
                            0    0.00                1                0
number of locks                   5000              334             5000             4905
                           95    1.90              446                0
number of mailboxes                 30                1               30               29
                            1    3.33                1                0
number of messages                  64                1               64               64
                            0    0.00                0                0
number of open databases            12                0               12                6
                            6   50.00                6                0
number of open indexes             500                0              500              481
                           19    3.80               45                0
number of open objects             500                0              500              135
                          365   73.00              367                0
number of open partitions          500                0              500              447
                           53   10.60               56                0
number of remote connecti           20                0               20               20
                            0    0.00                0                0
number of remote logins             20                0               20               20
                            0    0.00                0                0
number of remote sites              10                0               10               10
                            0    0.00                0                0
number of sort buffers             500                0              500              500
                            0    0.00                9                0
number of user connection           25                0               25               24
                            1    4.00                3                0
number of worker processe            0                0                0                0
                            0    0.00                0                0
partition groups                  1024                0             1024             1024
                            0    0.00                0                0
permission cache entries            15                0               15               15
                            0    0.00                0               77
procedure cache size              3271                0             4727                0
                         4727  100.00             8225              277
size of global fixed heap          150                0              150              150
                            0    0.00                0                0
size of process object he         1500                0             1500             1500
                            0    0.00                0                0
size of shared class heap         1536                0             1536             1536
                            0    0.00                0                0
size of unilib cache                 0           119386           119386           118922
                          464    0.39              464                0
txn to pss ratio                    16                0               16              400
                            0    0.00                0                0
(return status = 0)
```

Usage

- If the max cis remote connections configuration parameter has a config_value, the system_val reports a value of zero (0).

- If you reconfigure a resource using a value that is smaller than the original value it was given, the resource does not shrink, and the Num_active configuration parameter can report a number that is larger than Total_val. The resource shrinks and the numbers report correctly when Adaptive Server restarts.

- sp_monitorconfig displays cache usage statistics regarding metadata descriptors for indexes, objects, and databases, such as the number of metadata descriptors currently in use by the server.

- sp_monitorconfig also reports the number of auxiliary scan descriptors in use. A scan descriptor manages a single scan of a table when queries are run on the table.

- sp_monitorconfig monitors the following resources:

    additional network memory
    audit queue size
    heap memory per user
    max cis remote connection
    max memory
    max number network listeners
    memory per worker process
    max online engines
    number of alarms
    number of aux scan descriptors
    number of devices
    number of dtx participants
    number of java sockets
    number of large i/o buffers
    number of locks
    number of mailboxes
    number of messages
    number of open databases
    number of open indexes
    number of open objects
    number of open partitions
    number of remote connections
    number of remote logins
    number of remote sites
    number of sort buffers

number of user connections
number of worker processes
partition groups
permission cache entries
procedure cache size
size of global fixed heap
size of process object heap
size of shared class heap
size of unilib cache
txn to pss ratio

- The columns in the sp_monitorconfig output provide the following information:

    - num_free – specifies the number of available metadata or auxiliary scan descriptors not currently used.

    - num_active – specifies the number of metadata or auxiliary scan descriptors installed in cache (that is, active).

    - pct_active – specifies the percentage of cached or active metadata or auxiliary scan descriptors.

    - Max_Used – specifies the maximum number of metadata or auxiliary scan descriptors that have been in use since the server was started.

    - Reused – specifies whether a metadata descriptor was reused in order to accommodate an increase in indexes, objects, or databases in the server. The returned value is Yes, No, or NA (for configuration parameters that do not support the reuse mechanism, such as the number of aux scan descriptors).

- Use the value in the Max_Used column as a basis for determining an appropriate number of descriptors; add 10 percent for the final setting. For example, if the maximum number of index metadata descriptors used is 142, you might set the number of open indexes configuration parameter to 157.

- If the Reused column states `Yes`, reset the configuration parameter to a higher value. When descriptors need to be reused, there can be performance problems, particularly with open databases. An open database contains a substantial amount of metadata information, which means that to fill up an open database, Adaptive Server must access the metadata on the disk many times; the server can also have a spinlock contention problem. To check for spinlock contention, use the system procedure sy_sysmon. For more information, see the *Performance and Tuning Guide*. To find the current number of indexes, objects, or databases, use sp_countmetadata.

- To get an accurate reading, run sp_monitorconfig during a normal Adaptive Server peak time period. You can run sp_monitorconfig several times during the peak period to ensure that you are actually finding the maximum number of descriptors used.

- *result_tbl_name* creates a table using the following syntax. All the result information is saved in this table, which returns no standard output.

```
create table table_name(
    Name varchar(35), Num_free int,
    Num_active int, Pct_act char(6),
    Max_Used int, Reuse_cnt int,
    Date varchar(30))
```

- Some configuration parameters, such as *number of sort buffers* and *txn to pss ratio*, are dependent on the number of configured user connections, while other configuration parameters, such as *max number of network listeners*, are per engine.

- The output of sp_monitorconfig uses the number of user connections and online engines to calculate the values for the columns num_free, num_active, pct_act, and max_used.

- The updates on the internal monitor counters are done without using synchronization methods because of performance reasons. For this reason, a multi-engine Adaptive Server under heavy load might report numbers in the sp_monitorconfig output that are not completely accurate.

- You might see the number of active locks as greater than 0 on an idle system. These "active" locks are reserved and used internally.

Permissions   Only a System Administrator can execute sp_monitorconfig.

See also   **System procedures**   sp_configure, sp_countmetadata, sp_helpconfig, sp_helpconstraint, sp_sysmon

8.7 *System Administration Guide*

8.7.1 Auditing

In the *System Administration Guide*, Chapter 12, "Auditing," Table 12-6, Values in event and extrainfo columns, is incomplete.

Table 12-6 should include the following for the create index entry under:

"Other Information: Index name"

8.7.2 Disk partitions

When setting the devices for a disk partition, use either a character or block device for each device, not both.

8.7.3 *sp_audit "cmdtext"*

If you specify pass for an option and later specify fail for the same option, or vice versa, the result is equivalent to specifying on. Adaptive Server generates audit records regardless of whether events pass or fail permission checks.

The options for sp_audit are NULL, on, or off apply to all auditing options.

pass and fail apply to all options except cmdtext, errors, and adhoc. For these options, only on or off applies. The initial, default value of all options is off. If you select the cmdtext option to either pass or fail, Adaptive Server replaces the value with on

8.8 *Performance and Tuning Guide*

The following are updates for the *Performance and Tuning Guide*.

8.8.1 OAM-scans on DOL tables

OAM pages are used when performing a table scan on a data only locked (DOL) table. These OAM pages refer to allocation-units, which must then be scanned to find the extents on the pages for the table being scanned; when this scan is started, a list of pages is generated with the information in the allocation-page. Any newly allocated pages produced by another process in this allocation unit are not seen by the scanning process as they were not allocated when the scan began. This is due to the way DOL tables are implemented. To include the newly allocated pages:

- Use isolation level 3 type of scans (select with holdlock) or,

- add an index, which can be used to prevent a table scan, to the DOL-table, or,

- Convert the DOL table to an APL-table.

8.8.2 Optimizer and Abstract Plans

Correction: In Chapter 11, "Multiple Temporary Databases," the "Unchanged yet notable procedures" section noted the following for the sp_changedowner stored procedure:

> You cannot map system databases, including tempdb, to a default location. However, you can map user-created temporary databases.

This information is incorrect.

8.9 *XA Interface Integration Guide for CICS, Encina, and TUXEDO*

In Chapter 4, "Application Programming Guidelines" in the *XA Interface Integration Guide for CICS, Encina, and TUXEDO*, the introductory paragraph for the section, "Tightly coupled transactions," has been revised. The new text is shown below in italics:

The XA environment treats each thread or process that works on a transaction as a transaction branch. Each transaction branch is assigned a different xid and works independently of the other branches. However, all branches are committed or rolled back as a unit. *This applies to MTS/COM+ environments only, and only if you are using Client-Library™-based drivers that are older than version 3.6.*

8.10 *Transact-SQL User's Guide*

8.10.1 Sorting query results

In "Sorting Query results" in Chapter 3, the word "aggregates" has been dropped from this sentence:

"Adaptive Server does not allow subqueries, variables, and constant expressions in the order by list." A successful example in the following section, order by and group by, uses the aggregate function avg(price) in an order by clause:

```
order by avg(price)
```

8.11 *New Features Adaptive Server Enterprise 12.5.3a*

The following are updates for *New Features Adaptive Server® Enterprise 12.5.3a*.

Note The Adaptive Server Enterprise version 12.5.3a was released for the following platforms only: Sun Solaris 32-bit, Sun Solaris 64-bit, HP-UX 32-bit, HP-UX 64-bit, IBM AIX 64-bit, Windows, and Linux.

8.11.1 Auditing options

Following are updates to Table 2 in section 1.9.1 of *New Features Adaptive Server® Enterprise 12.5.3a*.

Table 3: Auditing options, requirements, and examples

Options	*login_name*	*object_name*	Database to be in to set the option	Command being audited
encryption_key (database-specific)	all	Database to be audited	Any	alter encryption key
				create encryption key
				drop encryption key
				sp_encryption

Example   Audits all the above commands in the pubs2 database:

```
sp_audit "encryption_key", "all", "pubs2", "on"
```

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 Sybase Technical Library CD, and the Technical Library 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 Technical Library CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader (downloadable at no charge from the Adobe Web site, using a link provided on the CD).

- The Technical Library CD contains product manuals and is included with your software. The DynaText reader (included on the Technical Library CD) allows you to access technical information about your product in an easy-to-use format.

  Refer to the *Technical Library Installation Guide* in your documentation package for instructions on installing and starting the Technical Library.

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

  To access the Technical Library 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   Click Certification Report.

3   In the Certification Report filter select a product, platform, and timeframe and then click Go.

4   Click a Certification Report title to display the report.

❖ **Finding the latest information on component certifications**

1   Point your Web browser to Availability and Certification Reports at http://certification.sybase.com/.

2   Either select the product family and product under Search by Base Product; or select the platform and product under Search by Platform.

3   Select Search to display the availability and certification report for the selection.

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

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

1   Point your Web browser to Technical Documents at http://www.sybase.com/support/techdocs/.

2   Click MySybase and create a MySybase profile.

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.