Release Bulletin
Adaptive Server® Enterprise Version 15.0 for Linux pSeries

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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® Adaptive Server® Enterprise version 15.0. 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 details on system requirements, including disk space and RAM, see the *Linux Installation Guide.*

2.1 Installation kit

The installation kit includes:

- The server CD – for contents list, see the *Installation Guide* for your platform.

- The PC-Client CD – contains software client components to be installed on Windows 2000, Windows XP Pro, and Windows 2003 computers.
- The Getting Started CD with the:
  - *Installation Guide* for your platform
  - *Configuration Guide* for your platform
  - *Release Bulletins* for your platform

2.2 Operating system requirements

Adaptive Server version 15.0 has the following minimum operating system requirements:

- RHEL release 3 update 3:
  - kernel 2.4.2.1-20.EL
  - kernel-hugemem 2.4.21-20.EL (for Large Memory Support, LMS)
  - glibc-2.3.2.95-27
  - compat-libstdc++-7.3-2.96.128
- SLES 9 – patch level 2
- For details on different Linux distributions supported and Operation System levels required access the Red Hat Web site at http://certification.sybase.com/ucr/search.do.

Note The lastest RH3 update that includes the required patch is RH3.0 Update6 after RH kernel 2.4.21-27.6.EL, and should be used at the minimum 64-bit kernel level. Please see “Running on RH3.0 64-bit distribution occasionally stops responding” on page 19 for more detail.

3. Special SySAM instructions

Starting with Adaptive Server version 15.0, the Sybase Software Asset Management System (SySAM) implementation has changed. With these changes, SySAM configuration is no longer optional and requires some changes in the Adaptive Server installation and configuration process. Review the updated SySAM implementation and plan your SySAM deployment before you install Adaptive Server.

Warning! Adaptive Server works for an initial period of thirty days without proper SySAM configuration. If your configuration does not identify a valid license within this thirty-day grace period, Adaptive Server shuts down.

See *What's New in Adaptive Server Enterprise?* for a brief description of version 15.0 SySAM changes. See Chapter 11 "SySAM Configuration" in the *Configuration Guide* for your platform for configuration and deployment options. See the *Adaptive Server Installation Guide* for your platform for information on pre-installation planning and SySAM installation procedures.

3.1 Monitoring Adaptive Server for SySAM issues

If Adaptive Server cannot obtain a license, SySAM evaluates whether the license can be issued under a grace period. Valid grace periods are described in "License availability and grace periods" in Chapter 11, "SySAM Configuration" Configuration Guide for you platform.

3.1.1 If the SySAM license cannot be acquired

If the license cannot be issued during a grace period, Adaptive Server either does not start, or the optional feature is not enabled. Such errors are reported in the Adaptive Server error log as:

```
00:00000:00000:2005/07/05 16:09:12.96 kernel  Sybase
Licensing: Using licenses from: /usr/u/sybase/
SYSAM-2_0/licenses
00:00000:00000:2005/07/05 16:09:13.06 kernel  Sybase
Licensing: Failed to obtain 1 license(s) for ASE_CORE
feature from license file(s) or server(s).
00:00000:00000:2005/07/05 16:09:13.06 kernel  Sybase
Licensing: Cannot find license file.
```

This error message indicates that the Adaptive Server cannot obtain a valid license, and why. If e-mail notification is enabled, an e-mail message with this information is also generated. You must fix the license failure before Adaptive Server or the optional feature can start.

3.1.2 Acquiring SySAM licenses within a grace period

If the license can be issued within a grace period, the issue is logged and Adaptive Server or the optional feature starts. The Adaptive Server error log entry in such cases looks similar to:

```
00:00000:00000:2005/07/05 15:46:08.84 kernel  Sybase
Licensing: Using licenses from: /opt/sybase/
SYSAM-2_0/licenses
00:00000:00000:2005/07/05 15:46:08.91 kernel  Sybase
Licensing: Checked out graced license for 1 ASE_CORE
(2005.0703) will expire Tue Jul  5 15:47:02 2005.
00:00000:00000:2005/07/05 15:46:08.91 kernel  Sybase
Licensing: Failed to obtain 1 license(s) for ASE_CORE
feature from license file(s) or server(s).
00:00000:00000:2005/07/05 15:46:08.91 kernel  Sybase
Licensing: Cannot find license file
```

If e-mail notification is enabled, an e-mail message with this information is generated. In such a case, Adaptive Server continues to operate normally until the issue causing license failure is fixed, or the grace period ends. The error message and e-mail notification indicate the date and time the grace period is scheduled to end. The error log entry and e-mail notifications are repeated with increasing frequency while Adaptive Server operates in grace period. Adaptive Server continues to operate normally during the grace period, but you must fix the issue causing the license failure. Once the issue is addressed, Adaptive Server automatically acquires the license and moves from grace period mode into normal mode.

Note If you obtain an Adaptive Server license from a network license server, Adaptive Server periodically executes a “heartbeat” with the network license server. A successfully acquired license may be invalidated during the heartbeat; for example, if the license has an expired date or if the network license server was restarted and other Adaptive Server instances acquired all available licenses before this instance could acquire a license. If this happens, Adaptive Server enters a grace period. This information is written in the error log, and is similar to the information written to the error log when you start the product.

Use the sp_lmconfig stored procedure without arguments to display the current status of various licenses Adaptive Server is using. Licenses issued during the grace period are marked “graced.”

3.2 SySAM Limitations

The SySAM network license server has these limitations:

1 You cannot start SySAM network license server until there is at least one “Served” license copied into the *licenses* directory. Obtain a served license from the Sybase Product Download Center at http:\www.sybase.com before starting the license server.

2 There can be only one SySAM network license server running on a single machine. To install the new license server on a machine that is already running a SySAM 1.0 license server, shut down the old license server and migrate the SySAM 1.0 licenses to SySAM 2.0. See the *Configuration Guide* for information about how to migrate SySAM licenses.

4. Special installation instructions

Adaptive Server Enterprise 15.0 includes new versions of the many supporting components. The most current version of other Sybase products (for example, Replication Server® 12.6 or Enterprise Connect™ Data Access 12.6) contain earlier versions of those same components. Installing Adaptive Server version 15.0 into the same directory with existing products should not impact the existing products. However, installing other products on top of Adaptive Server version 15.0 may result in one or more products not working correctly.

Sybase strongly recommends that you install Adaptive Server version 15.0 into its own directory. Where this is not practical and you must install other products, install Adaptive Server version 15.0 last.

If the installation stops responding see “ClearCase causes InstallShield to stops responding” on page 18 for information.

4.1 Limitations

Adaptive Server running on Linux Power does not support Job Scheduler, XA Interface, Directory Services, and Web Services. In addition, the following optional packages are currently not available on Linux: High Availability (HA), Distributed Transaction Management (DTM), and Enhanced Full Text Search (EFTS).

4.2 Runtime libraries required for Linux on Power installation

Warning! Linux on Power will not install without the following procedure.

❖ **Installing Visual Age xlc compiler runtime libraries**

Adaptive Server is compiled and linked with the Visual Age compiler, xlc version 7.0. Before installing Adaptive Server, you must install the runtime libraries for the Visual Age compiler.

1 To see whether the runtime libraries are installed, enter:

```
rpm -q vacpp.rte-7.0.0-0
```

If this command returns `"vacpp.rte-7.0.0-0"`, the Visual Age runtime packages are installed and you can skip the following steps.

If the above command returns the message that vacpp.rte-7.0.0-0 is not installed, you must install them.

2 Go to the IBM website at http://www-1.ibm.com/support/docview.wss?uid=swg24007906.

Follow the instructions to download and install the runtime libraries on your operating system. Select the package appropriate for your Linux distribution. For details on different Linux distributions supported and operation system level required, go to the Web site at http://certification.sybase.com/ucr/search.do.

3 After installing the xlc runtime libraries, verify that LD_LIBRARY_PATH is set to include the xlc runtime library path.

5. Special upgrade instructions

5.1 Upgrading compiled objects

Sybase recommends that, you read the section "Upgrading compiled objects with dbcc upgrade_object" in Chapter 6, "Troubleshooting," in the *Installation Guide* for Linux.

5.2 Upgrading compiled objects

Sybase recommends that as part of the post-upgrade tasks, you should see the "Upgrading compiled objects with dbcc upgrade_object" section in Chapter 6 of the *Adaptive Server version 15.0 Installation Guide* for your platform.

6. Product and platform interoperability

This section shows the interoperability of Adaptive Server, Replication Server, and Open Client/Server™ across different versions. For specific platform or operating system level information, go to the Sybase Web site at http://certification.sybase.com/ucr/search.do.

Table 1: Interoperability between Replication Server, Open Client/Server, and Adaptive Server

Adaptive Server 15.0	Adaptive Server/ Open Client Server 15.0	Adaptive Server/ Open Client Server 12.5.x	Adaptive Server / Open Client Server 12.0	Replication Server 12.6	Replication Server 12.5
IBM AIX	X	X	X	X	X
Sun Solaris	X	X	X	X	X
Windows 32-bit	X	X	X	X	X
HP-UX	X	X	X	X	X
Linux	X	X	N/A	X	X
Linux on Power	X	X	N/A	N/A	N/A

Legend

- X = products are compatible
- N/A = products are incompatible, or the product is not available for that version/platform combination

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 and Linux-32 platforms are little-endian. IBM AIX, Sun Solaris, Linux on Power, and HP-UX are big-endian platforms.

7. Changes that affect existing applications

Following are changes in Adaptive Server that affect your existing applications.

7.1 Installation, upgrade, and migration

Sybase has made the following directory structure changes:

- Adaptive Server components are in *ASE-15_0*, and Open Client and Open Services components are in *OCS-15_0*.
- In Adaptive Server version 15.0, all product components use JRE-1_4 instead of JRE-1_3. *JRE-1_3* has been replaced with *JRE-1_4* in the *$SYBASE/shared* directory.
- The licensing component (SySAM) is now available in the *SYSAM-2_0* directory.
- The Web Services offering directory has changed from *WS-12_5* to *WS-15_0*.

7.2 Changes that affect application behavior

7.2.1 Long-identifier changes

- Adaptive Server now supports long identifiers. There are new limits for the length of object names or identifiers: 255 bytes for regular identifiers, and 253 bytes for delimited identifiers. The new limit applies to most user-defined identifiers including table name, column name, index name and so on. Due to the expanded limits, some system tables (catalogs) and built-in functions have been expanded. For variables, "@" counts as 1 byte, and the allowed name is 254 bytes long.
- Change identifier names with corresponding application changes for binding values. Make sure your application is not binding names of identifiers with only 30 bytes, which was the previous limit. This may cause a variety of unexpected behaviors or error messages.

7.2.2 Query changes

- Some queries may now return general syntax error (message 102) instead of syntax error at line # (message 156).
- The order of result sets in Adaptive Server version 15.0 differs unless there is an order by clause in the query.
- Query compilation time may increase as the query processing engine looks for more ways to optimize the query.

- See *Query Processor* for details about query processing in Adaptive Server version 15.0.

7.2.3 Component Integration Services changes

- Functional compensation is not performed as much as in earlier versions. Adaptive Server version 15.0 sends queries to the remote server, and if the remote server raises any errors, they are returned to the client.

  For example, in Oracle, the function charlength includes blank spaces. Adaptive Server version 15.0 does not include charlength.
- NULL behavior differs in Oracle, ASA, and IQ—you must override ANSI NULL behavior for it to work like Adaptive Server version 15.0.
- Adaptive Server version 15.0 no longer pads char null, varchar, binary null, and varbinary datatypes for proxy tables.
- By default, cursors are READONLY. Declare cursors with for update to update through them.
- You must create an index if you are using updateable cursors.
- Component Integration Services engines no longer take special measures to re-declare cursors for back ends that close cursors on end tran.
- You must declare an explicit begin tran and end tran around cursor statements for DB2 servers.
- When you create a column constraint on java, text, image, and unitext types, message 11074 is raised.
- create table, create existing table, or create proxy table statements that contain a location clause are restricted to be the only statement in a batch. This also applies to select into statements that contain a location clause.

7.2.4 Error message changes

- Many messages have been changed to specify “ASE” in the error message.
- When creating a temporary table that already exists, Adaptive Server raises message 12822, instead of 2714.
- The identity column overflow message is now raised with message 587 instead of 4916.
- When you create a Java function that does not exist in the catalogs, message 14216 is raised instead of syntax error message 195.

- When a non-owner executes sp_procxmode to change the transaction mode associated with a stored procedure, error message 10354 is raised.
- Arithmetic overflow errors are now raised with message 3606 with severity 16.
- Message 2579 has been replaced with message 12907 in dbcc checktable output.

7.2.5 jConnect version 6.05 ships with Adaptive Server

Adaptive Server 15.0 ships only with jConnect™ for JDBC™ 6.05. If you have applications that are dependent on jConnect 5.5, Sybase recommends you either migrate those applications to jConnect 6.05 or use an existing jConnect 5.5 release area.

7.2.6 SQL Remote no longer ships on the PC-Client CD

SQL Remote has been replaced with a more flexible and powerful technology called MobiLink that provides bidirectional synchronization between ASA/UltraLite clients and various back-end databases, including Adaptive Server. To download the developer edition of MobiLink, go to the iAnywhere Web site at http://www.ianywhere.com/developeredition.

7.2.7 Table changes

- The following Monitoring and Diagnostic Access (MDA) tables have new columns:
  - monEngine
  - monCachedObject
  - monProcessObject
- monCachedObject now tracks cached pages based on indid and partitionid.
- sysindexes has the following new columns:
  - partitiontype
  - conditionid
  - status3
- The following sysindexes columns are now maintained in syspartitions:
  - doampg

    - ioampg
    - first
    - root

    These columns display 0 after you upgrade. The column base_partition is now obsolete and displays 0 after you upgrade.

- The syspartitions table is renamed to sysslices during the upgrade process, then the new table is empty and unused.
- syscomments gains a new column called partitionid.
- systabstats gains the following new columns:
    - partitionid
    - plldegree
    - statmoddate
- sysstatistics gains a new column called partitionid.
- There is a new type of object called a partition condition object, which has a row in sysobjects. A partition condition object is the representation of a tree for the partition table boundary conditions. The tree is stored in sysprocedures.
- sysobjects has the following new columns:
    - identityburnmax
    - spacestate
    - erlchgts
- sysstatistics stores the data change counters with formatid=108. The space required by sysstatistics increases due to the additional rows stored.
- Most system catalogs have been converted to the datarows-locking scheme. However, the DDLs continue to use the table-level locks. The row locking of the system catalogs can require a increase in the configuration parameter number of locks, depending on the DDLs in the application.
- The system catalogs converted to the datarows-locking scheme do not have a clustered index with indid equal to 1. The clustered indexes now have index ID greater than or equal to 2.

7.3 Changes that affect database administration operations

7.3.1 Usage of system built-in functions

Built-in functions that provide space information, such as data_pgs, reserved_pgs, used_pgs, ptn_data_pgs, and rowcnt have been replaced with data_pages, reserved_pages, used_pages, and row_count, respectively. See the *Adaptive Server Reference Manual: Building Blocks* for detailed information.

7.3.2 DDL and DML changes

- alter table… unpartition is not allowed on table with indexes (use alter table with 1 partition to remove the partitions).
- alter table on a partitioned table with max parallel degree less than the number of partitions may succeed without raising message 326.
- Creating clustered index on an empty partitioned table returns a new informational message, 1936.
- null column names are not allowed during view creation.
- A select that contains an aggregate from a proxy table that is mapped to an RPC with a parameter fails with error message 201.

7.3.3 System stored procedure changes

- The output of sp_help *object* has been changed. Specifically, `Data_Located_on_segment` has been removed, while `Computed_Column_Object` and information related to partitions have been added.
- The order of index_keys and index_description in the output of sp_helpindex has been changed.
- Major changes have been implemented to the output of sp_helpartition, and sp_helpsegment.
- sp_who returns “NULL” instead of blank in the hostname column for all system tasks.
- sp_who results in SQL command (insert or select) in the output. In earlier versions, sp_who returned select for the tasks that executed sp_who.
- sp_objectsegment now displays segment information for all partitions of the table.

- sp_lock output has a new column called partitionid, that currently has a value of 0, and is reserved for future use.
- sp_monitorconfig now accepts number of open partitions. When this procedure is executed with the parameter all, additional output for configuration parameter number of open partitions is displayed.
- The Metadata Cache Management section of sp_sysmon displays additional information pertaining to open partitions.

7.3.4 Common diagnostics changes including trace flag usage

- dbcc listoam output has changed substantially.
- The space state message printed in the old dbcc listoam output is now available as a new column spacestate in sysobjects.
- dbcc tablealloc output has changed.
- dbcc page output now displays the print partition ID instead of the object ID.
- dbcc checktable output on a partitioned table has been changed to provide partition-level information.
- dbcc checktable/tablealloc/indexalloc has new syntax for partition support.
- Output for this command has changed:

  REORG RECLAIM_SPACE <*tablename*> with RESUME
- reorg rebuild fails with message 11051 when table is in use by other tasks.
- Output of sp_dbcc_faultreport has been enhanced to show partition ID information.
- The hostname, program_name, hostprocess, and cmd columns in sysprocesses have been changed to varchar(30) and made nullable. select from sysprocesses returns NULL for these columns instead of space for system tasks.
- The “first” column in sysindexes is moved to “firstpage” column in syspartitions.
- The name column in syspartitions has been changed from index_name+_+tableid to index_name+_+ptn_id for partition table with indexes.
- The basic cost of the optimizer now includes CPU cost.

- Parallel costing is now performed only on base tables and indexes that are larger than 20 pages.
- For information about trace flags and diagnostics information, see the *Query Processor* for details about query processing in Adaptive Server version 15.0.

7.3.5 System resource changes

- Adaptive Server version 15.0 uses more procedure cache for several reasons, including:
  - The query processing engine now looks for more ways to optimize the query.
  - The execution engine avoids materialization of worktables and evaluates aggregations in memory as much as possible.
  - The data change counters maintained for the datachange() function allocate memory from procedure cache. The partition condition tree is cached in the procedure cache. Partition boundary values are allocated in the procedure cache, resulting in a required increase in procedure cache resources.
- A configuration parameter, max repartition degree, has been added. This parameter controls the maximum degree to which an intermediate data stream can be repartitioned. The default value of this parameter is 1, which indicates that repartitioning is not set and is bound by the number of online engines configured for Adaptive Server. For a query with a large number of tables, Adaptive Server version 15.0 can put an increased demand on auxiliary scan descriptors.

  Set the value of max repartition degree to a value lower than the number of engines to decrease resource usage. You may also need to configure a larger value for the auxiliary scan descriptor pool.
- Adaptive Server version 15.0 avoids worktable materialization and incurs more resources in auxiliary scan descriptors.
- During the upgrade process, max memory is increased by Adaptive Server if the new total logical memory is greater than max memory. The new value of max memory is set to the new value of total logical memory.
- During the upgrade process, number of open partitions is set to the same value as number of open indexes, resulting in increased memory usage. An open partition requires approximately 950 bytes.

7.3.6 Unpartitioning of user tables during upgrade

In version 15.0, each table partition must have a different partionid. To avoid the expense of changing the partitionid for each page during the upgrade process, Adaptive Server unpartitions any partitioned tables. You must repartition these tables when the upgrade process completes.

7.3.7 Space management changes

- System databases have increased in size by 2 allocation units. The master database has increased in size by 14 allocation units. The default user database size has increased by 2 allocation units.
- The upgrade process requires free space to convert system catalogs to the datarows-locking scheme. The typical requirement for free space is 125 percent of the largest system catalog. If you are upgrading from a 32-bit to 64-bit binary, additional space of 55 percent of sysprocedures is required.

7.3.8 Changes to transaction dump content

You can load a transaction dump from Adaptive Server version 11.9.2, 12.0x, or 12.5x over a database dump or transaction dump that has preceded it in the load sequence.

However, if that transaction dump contains a create index transaction, then load transaction recovery treats that transaction's sort record as the end of the log. Adaptive Server does not process any more log records in that transaction, and does not allow load transaction dumps in the load sequence. This message prints:

```
The pre-15.0 log for database '%.*s' includes a create
index incompatible with this server version and
operating environment. Only transactions completed
before create index will be recovered.
```

This behavior is much like the point-in-time recovery that is affected by the load transaction until_time option.

In contrast, Adaptive Server should successfully load any database dump from one of the earlier versions, regardless of its content.

There is no content limitation in load database or load transaction when using a dump from a version 15.0 Adaptive Server.

7.4 Open Client and Open Server changes

For information about changes that affect Open Client and Open Server, see most recent release bulletins for these products at the Sybase Web site at http://sybooks.sybase.com/as.html.

8. Known problems

This section describes known problems and workarounds for Adaptive Server.

8.1 Installation issues

This section contains information about known installation problems and their workarounds.

8.1.1 ClearCase causes InstallShield to stops responding

ClearCase causes InstallShield to stop responding

InstallShield may stop responding, and display this message: `Please wait while the installer checks your system information.` There are two known causes:

[CR #404068] The JRE used by InstallShield is in conflict with ClearCase.

Workaround: Turn off ClearCase before installing Adaptive Server. See your ClearCase administrator for details. You can turn ClearCase back on after installation.

[CR #402530] NFS-mounted device is inaccessible because the remote server is not responding. Verify this by executing `df -P` from a command prompt. You may instead see a message similar to: `NFS3 server not responding still trying`.

Workaround: Unmount the inaccessible device and retry the installation. You may need to restart the server.

Note You cannot use these workarounds on a 64-bit hardware system.

8.1.2 Uninstalling Adaptive Server

[CR #400959] If you install Adaptive Server 15.0 over of Replication Server version 12.6, then uninstall Adaptive Server, some files are not removed.

Workaround: There is no workaround for this issue.

8.2 Running on RH3.0 64-bit distribution occasionally stops responding

Due to a Red Hat 3.0 update 3 anomaly, Adaptive Server occasionally stops responding when kernel asynchronous I/O is enabled. When this happens, Adaptive Server generally displays a high CPU load—approximately 99%—without I/O. Adaptive Server can still accept connections, but cannot recover; you must restart the system to clear the process.

This problem has been reported to Red Hat and addressed in kernel 2.4.21-27.6.EL.

For more information, please access the Red Hat Web site at https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=138905.

8.3 Adaptive Server Replicator 15.0 supports only Adaptive Server 12.5 datatypes

Adaptive Server Replicator 15.0 does not support large identifiers, or these datatypes that are introduced in Adaptive Server version 15.0: bigint, unsigned bigint, unsigned int, unsigned smallint, unitext, computed columns, XML, and encrypted columns.

8.4 XML problems

8.4.1 Storing a parsed XML document in a *varbinary* column

[CR #400269] If you store a parsed XML document in a varbinary column, the document is truncated by one byte at the end. As a result, you cannot query that document.

Workaround: Do not store a parsed XML document in a varbinary column.

8.4.2 Cross-platform bulk copying of parsed XML images

[CR #400250, 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 datatype image that is generated by the xmlparse 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)
```

You can then use bcp or replicate the xmltext column from one platform to the other.

8.5 Web Services problems

8.5.1 Run scripts fail to find LDAP configuration file

[CR #401115] When you start the Adaptive Server Web Services engine, the *runws* script looks for LDAP configuration information in the *libtcl.cfg* file. If LDAP has not been configured, the following messages appear in the *producer.log* file

```
INFO [main] - Unable to locate LDAP configuration file-
libtcl.cfg.
INFO [main] - java.io.FileNotFoundException: LDAP
config File does not exist
```

Workaround: These messages are informational, and you can ignore them if your system is not configured to use LDAP directory services.

8.5.2 Alias names limited to 255 characters

[CR #400949] Alias names cannot be longer than 255 characters. If you use the addalias option of sp_webservices to add an alias longer than 255 characters, the alias name is truncated to 255 characters. No notification of this truncation is provided.

Workaround: Do not create alias names longer than 255 characters.

8.6 Interactive SQL and Adaptive Server plug-in issues

This section discusses Interactive SQL and Adaptive Server plug-in issues and their workarounds.

8.6.1 Opening XML files with Interactive SQL

[CR #400825] Interactive SQL displays a stack trace trying to open an XML file.

Workaround: There is no workaround for this issue.

8.6.2 Displaying messages next to result sets with Interactive SQL

[CR #386931] Interactive SQL does not display messages next to result sets, making it difficult to read the output of certain stored procedures that have multiple results and messages, such as sp_help.

Workaround: Use isql command line instead.

8.6.3 Running a script file with Interactive SQL

[CR #401391] Interactive SQL cannot run script files without a *.sql* extension.

Workaround: Instead of using "Run Script," use File | Open, and then run the script manually.

8.6.4 Connecting or disconnecting from pass-through servers using Interactive SQL

[CR #400436] The Adaptive Server connect to <*server_name*> and disconnect commands conflict with the Interactive SQL connect and disconnect commands.

Workaround: There is no workaround for this issue.

8.6.5 Interactive SQL Make Permanent button

[CR #400053] Interactive SQL Make Permanent button does not save options permanently.

Workaround: There is no workaround for this issue.

8.6.6 Interactive SQL does not generate plans for SQL statements using go

[CR #400362] The interactive SQL cannot generate plans for SQL statements separated with go.

Workaround: Eliminate go between SQL statements.

8.6.7 Connecting Adaptive Server plug-in to RepConnector

[CR #400709] The Adaptive Server plug-in cannot connect to Adaptive Server if RepConnector™ 2.5 and the Adaptive Server plug-in 15.0 are installed in the same *$SYBASE* location.

Workaround: Install RepConnector and the Adaptive Server plug-in into different *$SYBASE* directories.

8.6.8 Query support in Interactive SQL

[CR #398435] Interactive SQL does not support queries with a compute clause.

Workaround: Use isql from the command line instead.

8.6.9 Adaptive Server plug-in drag-and-drop server capability

[CR #400226] The Adaptive Server plug-in drag-and-drop server capability is sometimes not available.

Workaround: Use copy, cut, or paste instead, by right-clicking on the selected server and selecting Copy, Cut, or Paste.

8.6.10 Finding help in the Options dialog

[CR #399507] Interactive SQL cannot find the help topic HELP_SCEDITOR_TAB_CUSTOMIZATION in the Options dialog.

Workaround: Start Interactive SQL online help by selecting Help | Interactive SQL | Help. Open Using Interactive SQL Help and go through the list of topics for the information you need.

8.6.11 Unified Agent Framework RMI ports

[CR #398968] The Adaptive Server plug-in does not allow users to change the default Unified Agent Framework RMI port to anything other than 9999.

Workaround: Use 9999 as the default port.

8.6.12 Adaptive Server plug-in data panel for a table with a binary null column

[CR #382837] When a binary column has a length of less than 256, the Adaptive Server plug-in data panel for a table with a binary null column displays a value with trailing nulls.

Workaround: There is no workaround for this issue.

8.6.13 Starting Interactive SQL from a command line fails

[CR #402435] When trying to start Interactive SQL from the command line, an error is returned starting with:

```
"unrecognized option -path=....."
```

Workaround: Change the -path command line argument to -Dpath in the script file. The script file is located at:

- *$SYBASE/DBISQL/bin/dbisql* on UNIX

8.7 Statistics in system tables

[CR #399624] When you create or configure a server in, or upgrade a server to, Adaptive Server 15.0, index and table-level statistics are incorrect.

Workaround: Execute update index statistics on the following system tables:

- sysobjects
- sysindexes
- syscolumns
- systypes
- syslogins
- sysusers

8.8 Running checkstorage on an upgraded master device may report faults with the *syscharsets* catalog

[CR #401779] During the upgrade to Adaptive Server 15.0, a master device originally created either in Adaptive Server 11.9.x or 12.0.x may report errors on the syscharsets catalog. Adaptive Server reports these faults when you execute checkstorage on the upgraded master device. sp_dbcc_faultreport reports these faults.

Workaround: You can safely ignore these faults.

8.9 Monitor GUI does not start when the LDAP server is used

[CR #400784] When you start the Monitor Client GUI in an environment using LDAP instead of an *interfaces* file, the Monitor Client GUI cannot connect to any servers.

Workaround: Create an *interfaces* file with entries for the servers that are monitored and use this with the Monitor Client GUI.

8.10 Inserting into a table with *identity* column using *select distinct*

[CR #401753] If you have enabled parallel plan, and use select distinct into a table with an identity column and one of the select distinct list items is an expression or an implicit convert() expression, this query may cause cause a stack trace. Here is an example query:

```
create table tt(id numeric(5) identity not null, c1 int,
c2 int)
go
insert into tt select distinct c1, c2+1 from t
go
```

Workaround: Disable parallel plan for the query. For the example query, use:

```
insert into tt select distinct c1, c2+1 from t (parallel 1)
```

8.11 SySAM licenses are needed before upgrading Adaptive Server

[CR #401682] When you are upgrading from a version earlier than 15.0, Adaptive Server does not correctly calculate the grace period, which results in a failed upgrade.

Workaround: Before performing an upgrade, make sure you have obtained suitable licenses from the Sybase Product Download Center (SPDC). Check your Adaptive Server 15.0 installation to make sure that Adaptive Server can obtain the required licenses. See Chapter 11, "SySAM Configuration," in the *Configuration Guide* for your platform for more details.

8.12 Cross-platform loads

[CR #371289] Adaptive Server does not support cross-platform dumps and loads from one Adaptive Server version 15.0 to another. However, you can successfully use the dump and load commands from versions earlier than 15.0 to version 15.0.

Workaround: There is no workaround for this issue.

8.13 Running *dbcc checktable* or *dbcc checkdb* before bringing a database online

[CR #356308] If you run dbcc checktable or dbcc checkdb after loading a database, but before bringing it online, you may see errors due to a mismatch in the number of rows in systabstats data and index.

Workaround: Do not run dbcc checktable or dbcc checkdb until you have loaded and brought a database online.

8.14 Recovering from an upgrade during an *online database* command

[CR #401660] When you run load database where the dump database was executed in an earlier version of Adaptive Server, you may experience a system failure while running this database and you may see errors in the boot recovery database.

Workaround: Reload the database dump.

8.15 *allow backward scan* does not work

[CR #401543] The configuration parameter allow backward scan does not work in Adaptive Server version 15.0.

Workaround: If you are encountering increased deadlocks while executing backward scans, separate problematic scans:

1 Select the required rows into a temporary table in ascending order.

2 Select from the temporary table in descending order.

8.16 Modifying dbccdb schema for large identifiers

[CR #400680] The dbccdb database does not support workspace names longer than 30 characters.

Workaround:

1 In dbcc_exclusions table in dbccdb, modify the table_name column from varchar(30) to varchar(255).

2 In sp_dbcc_run_evaluatedb, to modify the *@wsname* local variable from varchar(30) to varchar(255).

8.17 Drop definition timetable corruption

[CR #397910] If an attempt to create a new table using select into fails, a subsequent dbcc checkcatalog in the target database may generate errors on missing rows between syscomments and sysprocedures. These errors occurs for the definition timetable that was created as part of the previously failed select into statement. One common instance of such failures is an insufficiently configured number of locks parameter, which can result in a 1204 error message.

Workaround: Drop the table referenced by the object ID in the error message. Reexecute the failed select into command after increasing the number of locks configuration parameter.

8.18 Manual upgrade with named cache fails

[CR #401279] If a named cache exists in the installation being upgraded and if you use a configuration file that does not contain the named cache configuration during upgrade, the upgrade fails.

Workaround: Use the sqlupgrade utility to perform the upgrade. sqlupgrade uses the configuration file from the installation being upgraded.

8.19 Running *diskrefit* to recover a corrupt master device can report errors

[CR #399678] If you start Adaptive Server using the -w master parameter, then immediately start it again using the -w model parameter, the master database reports that a page should belong to object 8, syslogs, but instead belongs to some other object. Additionally, tempdb may report 806 errors.

Workaround: Between these two operations, restart Adaptive Server with -m and then shut down.

8.20 Using an equijoin clause between two different length columns

[CR #401336] If you have an equijoin clause between two char() and char()/varchar() type columns of different lengths, and also use char_length() on one of the columns, the result of the char_length() is indeterminate. For example:

```
create table t1 (sid char(8), styp char(5))
go
create table t2 (sid char(16))
go
select char_length(a.sid)
from t1 a, t2 b
where a.sid=b.sid and styp = 'R1'
go
```

Workaround: Use convert() in char_length() to state explicitly which type you need for the char_length.

For example, in the above query, use:

```
select char_length(convert(char(8), a.sid))
from t1 a, t2 b
where a.sid=b.sid and styp = 'R1'
```

The same is true for binary() and varbinary() with data_length(), and unichar() and univarchar() with char_length().

8.21 *set statistics io* does not display I/O generated by worker processes

[CR #358654] After executing a parallel query, set statistics io does not display I/O counts generated by worker processes. It displays only the parent thread scan, logical I/O, and physical I/O counts.

Workaround: There is no workaround for this issue.

8.22 *alter table unpartition* errors

[CR #400988] If a server crashes following an alter table unpartition operation on very large tables, the server recovery after restart may leave the table in an inconsistent or corrupted state. dbcc check table and other commands affecting a table's pages may result in incorrect page errors. In some cases, the recovery process encounters timestamp mismatches on pages allocated to the table being unpartitioned. This form of corruption may occur when you issue a shutdown no wait command, and can affect very large tables with multiple OAM pages in the OAM chain for each partition.

Workaround: Run checkpoint <*database*> immediately following an unpartition operation. You can also issue a shutdown command without the no wait clause to avoid this form of corruption.

8.23 Replication Server compatibility issues

[CR # 382874] rs_init in Replication Server version 12.6 and earlier cannot create an RSSD database in Adaptive Server version 15.0.

Workaround: Create the RSSD database manually before using rs_init to create a new Replication Server if you do not use an Embedded RSSD. See the *Replication Server Administration Guide* for additional information.

8.24 Blank spaces in an *ldap* server entry

[CR #333307] If you have a blank space after your ldap server entry, dscp defaults to using the interfaces driver and does not connect to an ldap server.

Workaround: To use dscp to make an entry into an ldap server, enable ldap by editing the *$SYBASE/OCS-15_0/config/libtcl.cfg* file to add the ldap server you plan to use.

8.25 Dumping or loading databases with asynchronous I/O

[CR #335852] On a IA32 running Red Hat, running a dump or load database command with multi-stripe can cause Backup Server to stop responding when using asynchronous I/O. Backup Server uses asynchronous I/O by default.

Workaround: Start Backup Server using trace flag -D32 to force a synchronous I/O.

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

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

Workaround: Do not use these configuration parameters.

8.27 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.

8.28 Network package reallocation during reconfiguration

[CR #409471] If the dynamic reconfiguration on demand configuration parameter is set to 0, increasing the number of user connections may result in network packet allocation failure. However, network packet allocation succeeds when you make an actual user connection to Adaptive Server.

Workaround: Retry the same increase in number of user connections.

9. Product compatibilities

This section lists the Sybase components that are compatible with Adaptive Server Enterprise version 15.0. For information about operating system requirements, see individual component documentation.

Note DirectConnect 12.6 for Informix, MSSS, UDB does not support LDAP.

Note Component Integration Services and SSL are not supported on Adaptive Server version 15.0 for Linux.

The following components have been tested for compatibility with Adaptive Server version 15.0:

- Sybase Character Sets 3.0
- Sybase Central viewer 4.3

- ECDA option for ODBC 12.6
- ECDA option for Informix 12.6
- MainframeConnect DirectConnect for z/OS 12.6
- ECDA option for Oracle 12.6
- ECDA option for Microsoft SQL Server 12.6
- ECDA option for DB2 Universal Database 12.6
- OpenSwitch 12.5, OpenSwitch 12.5.1, ESD #2

Note OpenSwitch 12.5 does not support SSL.

- jConnect for JDBC 6.05
- jConnect for JDBC 5.5
- 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 by Sybase 12.5.1
- OLE DB Provider by Sybase 12.5.1
- ODBC Driver by Sybase 15.0
- OLE DB Provider by Sybase 15.0
- InfoMaker™ 7.0.3
- Replication Server® 12.6
- PhysicalArchitect™ 8.0
- XA-Library™ for CICS/ENCINA/Tuxedo 12.5.1

9.1 Known compatibility issues

9.1.1 Installing Enterprise Connect Data Access (ECDA) or MainframeConnect DirectConnect for z/OS with other Sybase software

Sybase strongly recommends you install the ECDA DirectConnect option or Mainframe Connect DirectConnect for z/OS, including DirectConnect Manager, into its own product directory.

9.1.2 jConnect 6.0 and sqldbgr

Due to missing components in jConnect 6.0, `sqldbgr` does not run correctly if you select a "Typical" installation. If you plan on using `sqldbgr`, select the "Full" installation option to install jConnect6.0.

9.1.3 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.

10. 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.

11. 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 also contains 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 can 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/.

11.1 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.

11.2 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.