SYBASE®

An **SAP®** Company

Release Bulletin

Adaptive Server® Enterprise

15.7 ESD #2

Linux

Contents

Product Summary

This release bulletin provides late-breaking information about Adaptive Server® Enterprise version 15.7 ESD #2. A more recent version may be available on the Web.

Adaptive Server Enterprise server and client components are distributed on separate CDs or DVDs.

Installation kit
The installation kit includes:

- Server media (CD or DVD)
- PC-Client media
- Getting Started media with the following documentation, specific to your platform:
    - Installation guide
    - Release bulletin (this document)

Adaptive Server Interoperability

Interoperability of Adaptive Server against other Sybase® products, across different platforms, versions, and client products.

Interoperability between big-endian and little-endian platforms has been verified. Windows, Linux x86-32, Linux x86-64, Sun Solaris x86-32, and Sun Solaris x86-64 are little-endian platforms. IBM AIX, Linux on Power, Sun Solaris SPARC, and HP-UX on Itanium are big-endian platforms.

Note: To use new features of Adaptive Server, make sure that your client supports them. See the client-specific documentation for information about the features your client supports. You may need to upgrade your client to use certain Adaptive Server features.

Table 1. Supported Client Platforms for Adaptive Server

Client Name	Version	Supported Platform
Open Client™/Open Server™	15.7	• AIX 32-bit • AIX 64-bit • HP-UX IA 32-bit • HP-UX IA 64-bit • Linux x86 32-bit • Linux x64 64-bit • Linux Pseries 32-bit • Linux Pseries 64-bit • Solaris 32-bit • Solaris 64-bit • Solaris x86 32-bit • Solaris x86 64-bit • Windows x86 32-bit • Windows x86 64-bit
	15.5	• AIX 32-bit • AIX 64-bit • HP-UX 32-bit • HP-UX 64-bit • HP-UX IA 32-bit • HP-UX IA 64-bit • Linux x86 32-bit • Linux x64 64-bit • Linux Pseries 32-bit • Linux Pseries 64-bit • Solaris 32-bit • Solaris 64-bit • Solaris x86 32-bit • Solaris x86 64-bit • Mac OS X Intel 32-bit • Windows x86 32-bit • Windows x86 64-bit

Client Name	Version	Supported Platform
Adaptive Server Enterprise Extension Module for Python	15.7	• AIX 64-bit • HP-UX IA 64-bit • Linux x64 64-bit • Linux Pseries 64-bit • Solaris 64-bit • Solaris x86 64-bit • Windows x86 64-bit
Adaptive Server Enterprise Extension Module for PHP	15.7	• AIX 64-bit • HP-UX IA 64-bit • Linux x64 64-bit • Linux Pseries 64-bit • Solaris 64-bit • Solaris x86 64-bit • Windows x86 64-bit
Adaptive Server Enterprise Database Driver for PERL	15.7	• AIX 32-bit • HP-UX IA 32-bit • Linux x64 64-bit • Linux Pseries 32-bit • Solaris 32-bit • Solaris x86 32-bit • Windows x86 64-bit
jConnect™ for JDBC™	6.0.x, 7.0.x	• All

Client Name	Version	Supported Platform
ODBC by Sybase	15.7	• Linux x86 32-bit • Linux x64 32-bit • Linux x64 64-bit • AIX 64-bit • HP-UX IA 64-bit • Linux Pseries 64-bit • Solaris 64-bit • Solaris x86 64-bit • Windows x86 32-bit • Windows x64 32-bit • Windows x64 64-bit
	15.5.x	• Linux x86 32-bit • Linux x64 32-bit • Linux x64 64-bit • Mac OS X Intel 32-bit • Windows x86 32-bit • Windows x64 32-bit • Windows x64 64-bit
OLE DB by Sybase	15.7, 15.5.x	• Windows x86 32-bit • Windows x64 32-bit • Windows x64 64-bit
ADO.NET	2.x, 4.x	• Windows x86 32-bit • Windows x64 32-bit • Windows x64 64-bit

Client Name	Version	Supported Platform
Replication Server®	15.5, 15.6	• IBM AIX POWER 64-bit • HP-UX IA 64-bit • Linux x86 32-bit • Linux x86-64 64-bit • Linux on POWER 64-bit • Sun Solaris SPARC 64-bit • Sun Solaris x86-64 64-bit • Microsoft Windows x86 32-bit • Microsoft Windows x86-64 64-bit
	15.2	• IBM AIX POWER 32-bit • IBM AIX POWER 64-bit • HP-UX IA 64-bit • Linux x86 32-bit • Linux x86 64-bit • Linux on POWER 64-bit • Sun Solaris SPARC 32-bit • Sun Solaris SPARC 64-bit • Microsoft Windows x86 32-bit • Microsoft Windows x86 64-bit
Replication Manager plug-in	15.5, 15.6	• IBM AIX POWER 64-bit • HP-UX IA 64-bit • Linux x86 32-bit • Linux x86 64-bit • Linux on POWER 64-bit • Sun Solaris SPARC 64-bit • Sun Solaris x86 64-bit • Microsoft Windows x86 32-bit • Microsoft Windows x86 64-bit

Client Name	Version	Supported Platform
	15.2	• IBM AIX POWER 32-bit • IBM AIX POWER 64-bit • HP-UX IA 64-bit • Linux x86 32-bit • Linux x86 64-bit • Linux on POWER 64-bit • Sun Solaris SPARC 32-bit • Sun Solaris SPARC 64-bit • Microsoft Windows x86 32-bit • Microsoft Windows x86 64-bit

Note: Adaptive Server is supported on Sybase Control Center 3.2.7.

Product Compatibility

Learn about Adaptive Server compatibility.

Password Compatibility with Replication Server

There are some compatibility issues with replicating logins and roles between different versions of Adaptive Server.

You can replicate logins from Adaptive Server version 15.0.2 and later to earlier server versions only during the password downgrade period when **allow password downgrade** is set to 1.

You cannot replicate roles with passwords from Adaptive Server 15.7 and later to earlier server versions.

In-Row LOB Column Replication

The semantics and interface for replicating in-row LOB columns in Adaptive Server 15.7 is the same as that for LOB columns in versions earlier than 15.7.

To mark in-row LOB columns for replication, use:

```
sp_setrepcol table_name [, {column_name | null} [,
{do_not_replicate | always_replicate |
replicate_if_changed}]] [, use_index]
```

In addition, when replicating an in-row LOB column on the primary database, you can store the replicated data in-row or off-row, depending on the replicated database and replicated table settings. For example, if the page size is smaller in the replicate than in the primary, the

replicated table row size is smaller, and the replicated LOB does not fit in-row; therefore the in-row value on the primary may be replicated as an off-row LOB value on the replicate.

Changes That Affect Existing Applications

Learn about changes in Adaptive Server 15.7 that affect your existing applications.

Changes to Sybase Central

Sybase Central ASE plug-in is no longer included in the Adaptive Server installation image. Use Sybase Control Center 3.2.7 to manage your Adaptive 15.7 ESD#2 servers.

Sybase no longer maintains Sybase Central. However, if required, you can download Sybase Central Plug-ins by going to the http://www.sybase.com/downloads site, then clicking on **Maintenance Releases and Bug Fixes (EFBs)**.

Backup Server and IBM Tivoli Storage Manager

Use a local backup server for dump and load to the IBM Tivoli Storage Manager; you cannot use a remote backup server.

You can configure the IBM Tivoli Storage Manager on a different host machine than the local backup server.

Open Client and Open Server

For information about changes that affect Open Client and Open Server, see the most recent release bulletins for these products on the Sybase Web site.

For information about new features, see the *New Features Bulletin Open Server 15.7 and SDK 15.7 for Windows, Linux, and UNIX.*

Adaptive Server Extension Modules and Drivers

The extension modules for PHP and Python, and the database driver for Perl, allow developers to execute queries against an Adaptive Server database.

For information about the PHP and Python extension modules and the database driver for Perl, see:

- *Adaptive Server Enterprise Extension Module for Python Programmers Guide*
- *Adaptive Server Enterprise Extension Module for PHP Programmers Guide*
- *Adaptive Server Enterprise Database Driver for Perl Programmers Guide*

For installation instructions, see the *Software Developers Kit and Open Server Installation Guide.*

Command Line Version of ddlgen

The location of the command-line version of **ddlgen** has been changed.

In Adaptive Server versions 15.7 ESD #1 and earlier, the command-line version of **ddlgen** was located in:

- Unix - $SYBASE/ASEP/bin
- Windows - %SYBASE%\ASEP\bin

In Adaptive Server version 15.7 ESD #2 and later, **ddlgen** is located in:

- Unix - $SYBASE/ASE-15_0/bin
- Windows - %SYBASE%\ASE-15_0\bin

Compressed LOB Column Replication

Only Adaptive Server 15.7 ESD #1 and later, and Replication Server 15.7.1 and later support compressed LOB column replication. All intermediate Replication Servers in the route from Adaptive Server must also be version 15.7.1 and later.

Changed Functionality

Learn about late-breaking functionality changes in Adaptive Server version 15.7.

Support for db2 Server Class

Adaptive Server does not support server class db2.

To use **db2**, migrate your **db2** server class to **direct_connect** class.

Replication Management Support for Granular Permissions

Granular permission features are not supported for replication management.

Granular permissions, which allows you to construct site-specific roles or restrict system administrators and database owners from accessing user data, have been introduced in Adaptive Server 15.7 ESD #2. Granular permissions is currently not supported by Replication Server, or supported in following related system stored procedures:

- **sp_config_rep_agent**
- **sp_help_rep_agent**
- **sp_reptostandby**
- **sp_setrep**

- **sp_start_rep_agent**
- **sp_stop_rep_agent**
- **sp_setrepcol**
- **sp_setrepdb**
- **sp_setrepdbmode**
- **sp_setrepdefmode**
- **sp_setreplicate**
- **sp_setrepproc**
- **sp_setreptable**

Plan Sharing Recommendations for 15.7 ESD #2 SAP ERP Customers

Disabling the plan sharing feature in Adaptive Server 15.7 ESD #2 for SAP® ERP Customers.

The plan sharing feature is disabled by default. It is automatically enabled when the configuration option **enable functionality group** is turned on. Sybase recommends disabling the plan sharing feature until the next version update is issued. For SAP ERP installation, where **enable functionality group** is on, the "Plan Sharing" feature can be turned off by using the following:

```
sp_configure 'enable plan sharing', 0
```

Installation and Configuration

Get last-minute information about installation, configuration, and upgrading and downgrading that was omitted from your installation guide, or that needs special emphasis.

Special Installation Instructions

Learn about special installation instructions for this version of Adaptive Server.

Installing the ASE Plug-in
Before installing the ASE Plug-in on top of Adaptive Server, shut down the Adaptive Server. If you do not shut down the server, the installation will fail. The entry in the log file states that a problem occurred while attempting to overwrite a JRE 7 file because the file is open.

Installing PC-client

When running **autorun** to install PC-client, an error is raised stating that you are installing a 64-bit pc-client in a location that has 32-bit pc-client. To workaround this issue, run **setup.exe** from within the pcclient32 subdirectory to install PC-client.

Installing Adaptive Server Plug-ins

Install Adaptive Server and all associated plug-ins in the same location.

Amendments to the response file for silent installation

For Adaptive Server 15.7 ESD#2, the installer requires non-NULL passwords that are at least six characters long for the Adaptive Server sa login, and the Sybase Control Center logins uafadmin and sccadmin.

To perform a silent Adaptive Server installation using a response file, the response file should have the following additional rows:

```
SY_CFG_ASE_PASSWORD=<ASE sa password>
```

```
CONFIG_SCC_CSI_SCCADMIN_PWD=<Sybase Control Center admin password>
```

```
CONFIG_SCC_CSI_UAFADMIN_PWD=<Sybase Control Center agent admin
password>
```

The passwords for sccadmin and uafadmin logins need not be the same as the password for sa login.

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 MainframeConnect™ DirectConnect™ for z/OS, including DirectConnect Manager, into its own directory.

See also
* *Downloading Sybase EBFs and Maintenance Reports* on page 26

Special Licensing Instructions

Learn about special licensing instructions for this version of Adaptive Server.

SySAM Licensing Checkout

If Adaptive Server was licensed using a per-processor license type in previous releases, the license quantity was determined at startup.

Adaptive Server periodically checks the number of processors it can use and attempts to check out additional licenses for any increase. Adaptive Server shuts down after 30 days if additional licenses are not made available within this period. See the *SySAM Users Guide* for details regarding license grace.

SySAM Fails to Check Out License for Adaptive Server Small Business Edition

Under some circumstances with the Small Business Edition of Adaptive Server, you cannot install Adaptive Server, or it does not start in a virtual environment.

When this occurs, Adaptive Server reports an error similar to this:

```
Cannot determine the total number of processor
cores on the machine from within this virtual system.
The ASE_CORE ("CH") license type is restricted for use on
a machine with a maximum of 2 processor chips regardless
of whether the virtual system is limited to use fewer
processor chips. You need to run 'sysamcap' on the physical
machine (or virtual-machine/partition control domain) and
set the reported environment variable prior to running
Installer.
```

This error is raised when:

- Adaptive Server is running on a virtual system that does not have access to the processor counts of the physical machine (this applies to all virtual environments except AIX LPAR and HP-UX vPar), or
- Adaptive Server is using a license type that is restricted for use to a machine with no more than a specific number of processors; for example, you cannot use Adaptive Server Enterprise Small Business Edition on a machine with more than two processor chips.

Workaround:

1. Run the **sysamcap machine** command on the physical machine or control domain for the virtualization technology (e.g., the VMware ESX console or XEN dom0).
2. Prior to running the product or product installer, set the environment variable reported.

See the SySAM Sub-capacity licensing section of the *SySAM Users Guide* for more information.

Sub-capacity licensing

Learn about sub-capacity licensing for this version of Adaptive Server.

Sybase offers sub-capacity licensing options for Sybase IQ Enterprise Edition and Adaptive Server Enterprise Edition. Sub-capacity licensing refers to licensing a Sybase product on a subset of the CPUs available on a physical machine.

Platform support

Table 2. SySAM virtualization sub-capacity compatibility

Vendor	Product	Platform support	Virtualization type
HP	nPar	HP IA 11.31	Physical partition
	vPar		Virtual partition
	Integrity Virtual Machines with Resource Manager		Virtual machine
	Secure Resource Partitions		OS containers
IBM	LPAR	AIX 6.1, AIX 7	Virtual partition
	dLPAR		Virtual partition
Sun	Dynamic System Domains	Solaris 10	Physical partition
	Solaris Containers/Zones with Solaris Resource Manager		Virtual partition
	Sun Logical Domain (LDOM)		Virtual partition
Intel, AMD	VMWare ESX Server* Guest O/S: Windows	VMWare ESX 3.5, ESX 4.0 and ESX 4.1, ESXi4.1, ESXi 5.0, Guest OS: Windows 2008 R2, Windows 7	Virtual machine
	VMWare ESX Server Guest OS: Linux, Sun Solaris x64	VMWare ESX 3.5, ESX 4.0 and ESX 4.1, ESXi4.1, ESXi 5.0, Guest OS: RH 5.5, SuSE 11, Sun Solaris x64	Virtual machine
	Xen**, KVM, DomainU: Windows	Windows 2008 R2, Windows 7	Virtual machine

Vendor	Product	Platform support	Virtualization type
	Xen, KVM, DomainU: Linux	RH 5.5, SuSe 11	Virtual machine
	Hyper-V	Windows 2008 R2	Virtual machine

* VMWare ESX Server excludes VMWare Workstation, and VMWare Server.

** Xen excludes Sun Solaris x64.

Enabling Sybase sub-capacity licensing
You must have a sub-capacity licensing agreement with Sybase before you can enable sub-capacity licensing. As with other Sybase licenses, you must generate a license key. For specific steps, see the *SySAM Quick Start Guide*.

Note: Keep your license server up-to-date.

Although the installation media include a copy of the most recent SySAM license server, Sybase recommends that you periodically check for license server updates on the Maintenance Releases and Bug Fixes (EBFs) link at *http://www.sybase.com/support*. See *Obtaining Help and Additional Information* on page 26.

Special Configuration Instructions

Special configuration instructions for this version of Adaptive Server.

Configure Adaptive Server for Clients Using EPEP Algorithm

An Adaptive Server can be configured to require the Extended Plus Encrypted Password (EPEP) login protocol using **sp_configure**.

An additional value has been added to **sp_configure 'net password encryption reqd'** to indicate that the server should only allow incoming clients using EPEP algorithm.

The configuration parameter **net password encryption reqd** supports a value of 3, which indicates the server should only allow incoming clients that are using EPEP login protocol. The values 0, 1, and 2 will also allow EPEP login protocol to be used when a client that supports the login protocol attempts to use it with an Adaptive Server that implements the EPEP login protocol.

Setting the value to 2 or 3 increases network memory in order to support the maximum configured connections using this protocol. The **additional network memory** configuration parameter is used to dynamically add more memory to the network memory pool used by EPEP. When the value is set to 3, the KPP Handler goes into sleep status. This is because there

is no need to provide new RSA key pair for every connection. You can use the **sp_who** command to check the KPP Handler status.

Note: Adaptive Server supports two versions of the login protocol using RSA asymmetric encryption. See "Securing login passwords on the network" in the *Security Administration Guide* for more information.

Special Upgrade and Downgrade Instructions

Get last-minute instructions for upgrading, downgrading, and migrating different versions of Adaptive Server.

Special Downgrade Instructions

Learn about special downgrading instructions for this version of Adaptive Server.

Use sp_downgrade_esd to downgrade from Adaptive Server 15.7 ESD #2 to either 15.7 or 15.7 ESD#1

If you are downgrading from Adaptive Server 15.7 ESD #2 to either 15.7 or 15.7 ESD #1, do not use the **sp_downgrade** system procedure. Instead, use **sp_downgrade_esd** to downgrade both Adaptive Server, as well as any databases you may have upgraded to 15.7 ESD #2. See *Downgrading to an Earlier Version of Adaptive Server 15.7* in the installation guide for your platform.

sp_downgrade_esd does not check tables which are configured for in-row LOB compression

When downgrade from Adaptive Server 15.7 ESD #2 to either 15.7 ESD #1 or 15.7, **sp_downgrade_esd** does not check tables when data compression and LOB compression is enabled for tables with in-row LOB column .

Workaround: Manually run the following query on each database to check for in-row LOB compressed tables. This query reports table names configured for in-row LOB compression.

```
select distinct convert(varchar(39), o.name) as 'check these tables'
from syscolumns c, sysobjects o, syspartitions p
where o.id = c.id and o.id = p.id
and (o.sysstat3 & 28672 != 0
    or (p.ptndcompver is not null and p.ptndcompver > 0))
and ((c.lobcomp_lvl is not null and c.status2 & 131072 = 0)
    or ((o.lobcomp_lvl is not null and o.lobcomp_lvl > 0)
        or (o.sysstat3 & 2048 != 0))
    or (p.lobcomp_lvl is not null and p.lobcomp_lvl > 0))
and (c.inrowlen is not null) and (c.inrowlen > 0)
go
```

Note: The correct procedure to downgrade in-row LOB compressed tables is to **set compression = none** using **alter table** and run **reorg rebuild** for each table before downgrade.

Loading Database Dumps into Earlier Versions

You cannot dump a database on this version of Adaptive Server and then load this dump into a database on a server running an earlier (15.x) version of Adaptive.

TIPSA Flag 0x4000 Error After Upgrade

The flag 0x4000 in TIPSA is set in Adaptive Server versions earlier than 15.7. This flag can cause unexpected errors after an upgrade to Adaptive Server 15.7.

The TIPSA 0x4000 flag is used by the LOB compression feature in Adaptive Server 15.7. After an upgrade to Adaptive Server 15.7, an LOB column with this flag set will be mistakenly treated as a compressed LOB column, which will result in unexpected errors. Use the following command to correct the flag issue after an upgrade to Adaptive Server 15.7.

dbcc rebuild_text()

Known Installation Issues for Adaptive Server

Learn about known installer issues and workarounds. Known issues are listed in descending order of Change Request (CR) numbers.

CR #	Description
709431	**SAMPLE_RS cannot be created after RS 15.7.1 installed upon ASE 15.7 ESD#2**
	When Adaptive Server 15.7 ESD #2 and Replication Server 15.7.1 are installed in the same directory, the creation of a sample Replication Server will fail.
	Workaround: Do not install Replication Server and Adaptive Server in the same directory.
706268	**RMP cannot be loaded after Adaptive Server 15.7 ESD #2 is installed upon RMP 15.7.1**
	When Adaptive Server is installed upon RMP 15.7.1, an error is produced when starting Sybase Central indicating that RMP has not been started properly and cannot be loaded.
	Workaround: Unset the SYBASE_JRE7 environment variable that is set in SYBASE {csh	env	sh} file before starting Sybase Central:
	For C-Shell (SYBASE.csh): unsetenv SYBASE_JRE7
	For Bourne Shell (SYBASE.sh):
	SYBASE_JRE7=
	export SYBASE_JRE7
	For Bash(?) Shell (SYBASE.env): SYBASE_JRE7=.

CR #	Description
692496	**Configuring tempdb device for HA** When installing an Adaptive Server to be used in an HA configuration, the **sp_companion** stored procedure **configure** command may fail due to duplicate device names for the tempdbdev logical device. **Workaround**: Do not specify the "Tempdb Device" (set the value of this field to blank) when configuring the secondary server during ASE installation. • If additional tempdb space is required on either server, log into this server after installation is complete and use the alter database command to increase the size of tempdb. • If additional disk space is required to allocate the tempdb database, use the disk init command to create a new database device for tempdb. • If a new device is created, the logical device name should be unique between the two servers.
688101	**Cannot start Sybase Central for Sybase IQ 15.4 after uninstalling Adaptive Server 15.7.** If you install Adaptive Server Enterprise 15.7 and Sybase IQ 15.4 in the same directory, and then uninstall Adaptive Server, you cannot then start Sybase Central for IQ. This problem occurs because shared files are removed by Adaptive Server uninstaller. **Workaround**: Use the following workaround if the version of Sybase Central installed with IQ 15.4 cannot be started after you uninstall Adaptive Server 15.7: 1. Recreate the \$SYBASE/shared/JavaHelp-2_0 directory JavaHelp-2_0, if necessary. 2. Copy the \$SYBASE/IQ-15_4/java/jh.jar file to the \$SYBASE/shared/JavaHelp-2_0 directory. 3. Reload or register the IQ plugin in SC, if necessary.
683486	**Cannot use DBISQL from Sybase Central after installing RMP 15.2 and RMP 15.7. on top of Adaptive Server 15.7.** **Workaround**: To enable DBISQL to launch, add the following into `scjview.sh` java arguments. `-Disql.repositoryDirectory="$SYBROOT/DBISQL/bin"` **Note:** In some cases single quotes are used to enclose the directory path. Check the existing file to determine whether to use single or double quotes.

CR #	Description
678912	**Cannot use DBISQL from Sybase Central after installing RMP on top of Adaptive Server 15.7.** **Workaround**: To enable DBISQL to launch, add the following into `scjview.sh` java arguments. `-Disql.repositoryDirectory='$SYBROOT/DBISQL/bin'`
671351	**Installing Adaptive Server 15.7 on top of Replication Agent™ 15.2 causes SySAM errors.** **Workaround**: Before installing Adaptive Server 15.7, modify the SySAM file permissions to include write permissions.
625837	**Cannot share machine-level license by different Linux PowerPC operating systems on IBM logical partitions.** The machine ID for Linux PowerPCs on IBM logical partitions is the virtual machine's MAC address, which means that SySAM cannot identify a unique machine ID for Linux on IBM logical partitions. **Workaround**: None. You cannot share a machine license between different operating systems.

592553	**On Linux, to run the installer in Chinese, Japanese, or Korean, you must install one of these RPM packages:.**
	
	• RedHat 5.x:
	  • fonts-chinese
	  • fonts-japanese
	  • fonts-korean
	• SuSE 10.x:
	  • ttf-founder-traditional (Traditional Chinese)
	  • sazanami-fonts (Japanese)
	  • baekmuk-ttf (Korean)

590282	**You cannot use the tab and arrow keys to navigate the Choose Product Features pane of the installation or uninstallation program.** **Workaround**: Use the mouse to click in the Install or Uninstall window. This sets the focus on the window and allows you to navigate using your keyboard.

CR #	Description

589483	**If the df command stops responding, the installation stops responding before the pre-installation summary pane appears.**
	
	Workaround:
	
	1. Identify the network file system (NFS) mounts that may have problems:
	`strace -e statfs, statfs64 df`
	2. Use the **umount** command to unmount an identified NFS mount:
	`umount -l <path>`
	3. Repeat the above steps until there are no more NFS mounts that have stopped responding.
	
	The **umount** command requires **root** permission. If the **umount** command unmounts the NFS, you may have to restart your machine.

588793	**Installing Adaptive Server 15.5 and later versions that use Install Anywhere on older directories that have been installed with InstallShield Multiplatform can lead to incompatibility issues.** These issues occur while using products installed with different installer technologies: • If you install products using Install Anywhere or InstallShield Multiplatform on top of a product installed using the other installer, the same files included in both installers are silently overwritten by the later installation. • If you run either the Install Anywhere or InstallShield Multiplatform **uninstaller**, the same files installed by both installers are removed without any indicating messages. **Workaround**: Do not install products that use Install Anywhere and products that use InstallShield Multiplatform in the same directory.
586169	**gzip must be installed on the machine for installer to succeed.** The installer reports: `gzip: Not Found` **Workaround**: Install **gzip** on your machine and make sure it is included in the path.
583979	**The installer does not validate feature names specified in the response file when you install in silent mode.** **Workaround**: Ensure that the specified feature names are correct.

Known Issues for Adaptive Server

Learn about known issues and apply workarounds for Adaptive Server. Known issues are listed in descending order of Change Request (CR) numbers.

Sybase does not include system problem reports (SPRs) and closed problem reports (CPRs) with Adaptive Server Enterprise. You can search the Web site for solved cases. Click **Support > Services > Solved Cases**.

CR #	Description
714061	**The *forwrowcnt* column in the systabstats table does not change after running online reorg rebuild**
	The number of forwarded rows in the *forwrowcnt* column of the systabstats table does not zero out after running the **online reorg rebuild** command.
	Workaround: Run **update statistics** on the table after running **online reorg rebuild**.

CR #	Description

713855	**An exception is raised when migrating from Adaptive Server versions, 12.5.4 through 15.0 to version 15.7 ESD #2 using sybmigrate**
	
	An exception is raised due to inconsistencies between roles that exist in the sysusers table of the source server and the roles that exist in the sysusers table of the target server.
	
	Workaround:
	
	1. In the source and target server, run the query:
	```\nselect u.* from sysusers u, syssrvroles r where\nu.name = r.name and r.srid < 31 order by u.uid\n```
	2. Compare the results of the above query retrieved from the source and target servers.
	3. In source server, insert rows returned from the query into master.dbo.sysusers table. These rows contain server roles that exist in target sysusers table and do not exist in the source sysusers table.
	4. Run sybmigrate -m setup
	5. Delete the same rows that you inserted in step 3 from source's master.dbo.sysusers.
	
	For example, when migrating from Adaptive Server 15.0 to Adaptive Server 15.7 ESD #2.
	
	1. Run the following query in the source and target servers:
	```\nselect u.* from sysusers u, syssrvroles r where\nu.name = r.name and r.srid < 31 order by u.uid\n```
	Your query shows you need to insert one row (-2, 16398, 16398, 'keycustodian_role', NULL) into the source master.dbo.sysusers table.
	2. Run the following SQL in the source server:
	```\nuse master\nexec sp_configure 'allow updates to system tables' 1\ninsert sysusers values(-2, 16398, 16398,\n'keycustodian_role', NULL)\nexec sp_configure 'allow updates to system tables',\n0\n```
	3. Run sybmigrate -m setup
	4. Run the following SQL in the source server:
	```\nuse master\nexec sp_configure 'allow updates to system tables' 1\ndelete sysusers where name = 'keycustodian_role'\nexec sp_configure 'allow updates to system tables',\n0\n```

CR #	Description
713631	**Create index in parallel with descending keys may fail with error 832**
	In some cases, when the creation of an index in parallel mode using the **WITH CONSUMERS=**_number_ option is executed, and the configuration parameter **enable functionality group** is on, Adaptive Server may generate the following error:
	``` Error 832: Unable to place buffer 0x4e498f68 holding logical page 2344 in sdes for object <table name> - there is no room in sdes aux keep pool. ```
	The following is an example of a command that may generate the error message:
	``` 1> create index ind on tab(a desc,b, c) with consumers = 3 2> go ```
	Workaround: This is an internal error that does not lead to data corruption. Traceflag 549 could be used to avoid running into this error.
713464	**Create index in parallel with descending keys may fail with error 1503**
	In some cases, when the creation of an index in parallel mode using the **WITH CONSUMERS=**_number_ option is executed, and the configuration parameter **enable functionality group** is on, Adaptive Server may generate the following error:
	``` Msg 1503, Level 20, State 2: Line 1: Sort Internal Error: ```
	``` The Root page of right/left sub-index tree is missing. Command has been aborted. ```
	The following is an example of a command that may generate the error message:
	``` 1> create index ind on tab(a desc,b, c) with consumers = 3 2> go ```
	Workaround: This is an internal error that does not lead to data corruption. Traceflag 549 could be used to avoid running into this error.

CR #	Description
696072	**In some Cluster Edition configurations, Adaptive Server 624 and 69x errors may occur in rare circumstances during database replication of a database or replication of tables within a database.** In active-active or active-passive cluster configurations, you can configure RepAgent to run on only one node of the cluster. These errors may occur in rare circumstances when RepAgent reads an older image of database log pages that is on disk while the latest image is on another node. **Workaround**: Sybase recommends that for: • Active-passive configuration – run RepAgent on the active node to ensure that data and log pages are on the same node as RepAgent. • Active-active configuration – start Adaptive Server with the 16872 trace flag to prevent log page corruption and 69x errors. However, using this flag degrades the server performance.
695625	**This message is reported by Open Client applications connecting to Adaptive Server Enterprise:** `ct_send(): network packet layer: internal Client Library error: State error: trying to write when connection is expecting a read.` This message is reported in some cases when Kerberos message confidentiality service is turned on. **Workaround**: Reconnect to the server with confidentiality service turned off.
694912	**The sybcluster localize utility does not function properly and exceptions are raised.** If the `$SYBASE/SYBASE_ASE/locales` directory contains files or directories that are not server-related locales files, the sybcluster localize utility does not function properly. If unrelated files are in the locales directory, the localize command aborts and raises an exception at the beginning phase. If an unrelated directory is in the locales directory, the charset selection menu is shown incorrectly and localize may abort during further processing. **Workaround**: Do not place files or directories unrelated to localization in the `$SYBASE/SYBASE_ASE/locales` directory.
684556	\ **The select for update semantics introduced in version 15.7 do not support datapages-locked tables.** **select for update** support exists only for datarows-locked pages.

CR #	Description
627114	**On Linux RHEL 5, not all of shared memory is released when hugepages are in use.** Due to Linux kernel bug, Adaptive Server configured with hugepages on Linux has memory leaks when shutdown an Adaptive Server. https://bugzilla.redhat.com/show_bug.cgi?id=593131. **Workaround**: Install Linux kernel patch for this bug to resolve the memory leak.
595923	**There are two known issues with transfer table**: • When creating a unique index that is using the **ignore_dup_key** property, importing a row with a key that is already present in the table leads to an error, and the import is aborted. This differs from when a duplicate key is inserted with **bcp** or with a regular **insert** statement, since in those cases, the row is discarded, and the transaction continues. • When an **insert** trigger exists, the trigger is not fired when data is inserted through **transfer table...from**. **Workaround**: None.
589269	**Adaptive Server may stop responding during start-up.** If you are using the in-memory database or relaxed-durability database feature, Adaptive Server may run into a timeslice error during start-up if it cannot access the license server as it starts. **Workaround**: Make sure Adaptive Server can access the license server.
578921	**On Linux SUSE Enterprise 11 systems, configuring an Adaptive Server fails with SEGV while retrieving user ID and password from Network Information Service (NIS).** While creating the PCA-JVM, Adaptive Server can retrieve ID and password information using Network Security Services (NSS), but not NIS. **Workaround**: Use either of these: • In /etc/nssswitch.conf, specify the retrieval order to be either "compat" or "files NIS." • Add the ID and password for the user starting the Adaptive Server to the local files /etc/passwd and /etc/shadow. This ensures that the ID and password information is available locally, and that contacting NIS is unnecessary. If it is impossible to add the user information to local files, ensure that the Name Service Cache Daemon (NSCD) is running on the server host machine. The NSCD maintains a cache of the ID and password information that is consulted prior to dispatching a request to the NIS for this information.

CR #	Description
558020	**dsedit fails with translation table syntax errors.**
	When you try to enter a new server entry or a port number, the **dsedit** utility fails and displays parsing errors similar to:
	``
	Warning: translation table syntax error:
	Unknown keysym name: osfActivate. Warning: ... found while parsing
	':<Key>osfActivate: ManagerParentActivate()'. Warning:
	String to TranslationTable conversion
	encountered errors. Warning: translation table syntax error:
	Unknown keysym
	name: osfBeginLine. Warning: ... found while parsing
	':<Key>osfBeginLine:
	ManagerGadgetTraverseHome()'
	``
	These errors indicate that the X-server program that renders graphics is not cached or set up as the default for the environment.
	Workaround: Set the environment variable XKEYSYMDB:
	``
	% setenv XKEYSYMDB "/usr/share/X11/XKeysymDB"
	``
478875	**In the Adaptive Server plug-in, you cannot drop a connected instance; your connection is lost as soon as the instance is shut down.**
	Workaround: Before shutting down the instance to drop, connect to another instance in the cluster.

Documentation Updates

Read about updates, corrections, and clarifications to the documentation released with Adaptive Server .

- New Feature Guide, Version 15.7, ESD #2, Hash-Based Update Statistics
  The New Feature Guide describes the **update statistics** configuration parameter **hashing** which enables Adaptive Server to gather hash-based statistics. The range of values for the **hashing** option are:
  - off – no hashing
  - on – hashing on all columns
  - partial – hashing only for low unique count columns
  - default – off

  An example showing that three parameters are required for this option is missing from the documentation.
  The following is an example of using **update statistics** using the hashing option:
  ```
  sp_configure 'update statistics hashing', 0, 'on'
  ```

- System Administration Guide – **lock timeout pipe active**

  The default value and the range of values for **lock timeout pipe active**, as described in the Adaptive Server Enterprise 15.7 System Administration Guide are incorrect. The documentation currently states:

  Default value 1 (off) Range of values 0 (on), 1 (off)

  The correct values are:

  Default value 0 (off) Range of values 1 (on), 0 (off)

- System Administration Guide – *Setting the maximum failed logins for specific roles*

  The documentation provides an incorrect example to set the maximium failed logins for a role. The example:

  ```
  create role intern_role with passwd "temp244", maximum failed
  logins 20
  ```

  Should be changed to:

  ```
  create role intern_role with passwd "temp244", max failed_logins
  20"
  ```

- System Administration Guide – *Setting the maximum failed logins for specific roles*

  The documentation provides an incorrect example to set the maximium failed logins for a role. The example:

  ```
  create role intern_role with passwd "temp244", maximum failed
  logins 20
  ```

  Should be changed to:

  ```
  create role intern_role with passwd "temp244", max failed_logins
  20"
  ```

- System Administration Guide – *Changing the maximum failed logins for specific logins*

  The documentation provides an incorrect example to to change the maximium failed logins for a login. The example:

  ```
  alter login joe max failed attempts 40
  ```

  Should be changed to:

  ```
  alter login joe modify max failed attempts 40
  ```

- System Administration Guide – *Changing the maximum failed logins for specific roles*

  The documentation provides incorrect examples to remove overrides or change the maximium failed logins for a role. The example to change the maximum failed logins allowed for "physician_role" to 5, should be:

  ```
  alter role physician_role set max failed_logins 5
  ```

  The example to remove the overrides for the maximum failed logins for all roles should be changed to:

  ```
  alter role "all overrides" set max failed_logins -1
  ```

- Updates to third-party licensing

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