Release Bulletin Open Server[™] 15.5 for Sun Solaris

Document ID: DC75902-01-1550-02

Last revised: July 26, 2011

Topic	Page
1. Electronic Bug Fix (EBF) downloads for security fixes	2
2. Accessing current release bulletin information	2
3. Product summary	3
3.1 Product components	3
3.2 Patches	3
3.3 POSIX threads and pthreads libraries	3
3.4 IPv6 support	4
3.5 Sample files	4
4. Special installation and configuration instructions	4
4.1 Installing EBFs	5
4.2 Required applications	5
4.3 Installing Open Server 15.5 on top of Open Server 15.0	5
4.4 Running InstallAnywhere and InstallShield Multiplatform	5
installers	
4.5 Modifying interfaces file entries with dscp or dsedit	6
5. Changed functionality in this version	6
6. Known problems	6
6.1 Open Server call leaks memory on Sun Solaris platforms	6
6.2 Installer issues	6
6.3 Availability with 64-bit libraries	8
7. Programming issues	8
7.1 Upgrading to a new version	8
7.2 Linking static libraries	8
7.3 Link to usr/lib/lwp	8
7.4 Programming with thread-safe libraries	9
7.5 Timeslice property and multithreaded library versions	9
8. Product compatibility and interoperability	9

Copyright 2011 by Sybase, Inc. All rights reserved. Sybase trademarks can be viewed at the Sybase trademarks page at http://www.sybase.com/detail?id=1011207. Sybase and the marks listed are trademarks of Sybase, Inc. ® indicates registration in the United States of America. SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. Java and all Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. Unicode and the Unicode Logo are registered trademarks of Unicode, Inc. All other company and product names mentioned may be trademarks of the respective companies with which they are associated.

Topic	Page
8.1 Compatibility and interoperability matrix	9
8.2 Guidelines for installing Open Server with other Sybase	11
products	
9. Technical support	11
10. Other sources of information	11
10.1 Sybase certifications on the Web	12
10.2 Sybase EBFs and software maintenance	13
11. Accessibility features	13

1. Electronic Bug Fix (EBF) downloads for security fixes

Due to possible security vulnerabilities, Sybase® strongly recommends that you use the appropriate EBF to fix these issues. For instructions, see Urgent Customer Notification Web Page at

Known issues described in this release bulletin may have been fixed in other EBFs released for this product. Get EBFs and maintenance reports describing latest fixes from the Sybase Support Page at http://www.sybase.com/support.

2. Accessing current release bulletin information

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

Accessing release bulletins at the Sybase Product Documentation Web site

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

3. Product summary

Enclosed is Sybase Open ServerTM version 15.5, which is available on:

- Sun Solaris SPARC 32-bit and 64-bit
- Sun Solaris x86-64 32-bit and 64-bit

For the most current list of supported operating systems, see the Sybase platform certifications page at http://certification.sybase.com/ucr/search.do. For a list of platforms, compilers, and third-party products Open Server is built and tested on, see the *New Features Open Server 15.5 and SDK 15.5 for Windows, Linux, UNIX, and Mac OS X.*

3.1 Product components

For a list of Open Server components and the platforms on which these components are supported, see the SDK and Open Server New Features for Microsoft Windows, Linux, UNIX, and Mac OS X.

3.2 Patches

Sun Solaris 8 SPARC 32-bit and 64-bit, and Sun Solaris 10 x86-64 32-bit and 64-bit require patch 108993-18 or later.

3.3 POSIX threads and pthreads libraries

Open Server uses POSIX threads. When you use threaded libraries $(*_r)$, link with the pthreads library.

See the *Open Client and Open Server Programmers Supplement for UNIX* for information on Open ClientTM libraries.

Note DB-LibraryTM does not support any type of thread interface.

The thread-safe version of Open Client libraries are written using POSIX threads. All multithreaded libraries use the naming pattern *_r.a for static libraries or *_r.so for shared libraries. For multithreaded applications, use libraries with the "_r" suffix, such as libcs_r.a. For non-multithreaded applications, use libraries without the "_r" suffix, such as libcs.a.

3.4 IPv6 support

As of this release, Open Server on Sun Solaris platforms support IPv6.

Below is an *interfaces* file entry where the last two server addresses are in IPv6 format:

```
BARNARD_OS

master tcp ether barnards.sybase.com 18200
query tcp ether barnards.sybase.com 18200
master tcp ether barnards.v6.sybase.com 18200
query tcp ether barnards.v6.sybase.com 18200
master tcp ether
fd77:55d:59d9:165:203:baff:fe68:aa12 18200
query tcp ether
fd77:55d:59d9:165:203:baff:fe68:aa12 18200
```

Note All master and query lines in the *interfaces* file must begin with a tab.

3.5 Sample files

You can find sample files in the Open Server installation directory \$\$YBASE_\$\SYBASE_OCS\$/sample.

4. Special installation and configuration instructions

See the *Software Developer's Kit and Open Server Installation Guide* for your platform for instructions about installing Open Server. If applicable, see "Guidelines for installing Open Server with other Sybase products" on page 11 of this release bulletin.

Warning! If you install both Open Server and SDK in the same directory, Sybase recommends that you use the same version and ESD levels. Because Open Server and SDK share files, using different version and ESD levels can cause product failures.

For instructions on configuring your environment, see the *Open Client and Open Server Configuration Guide* for your platform.

For information on compiling and executing Open Client and Open Server applications, including the sample programs, see the *Open Client and Open Server Programmers Supplement* for your platform.

4.1 Installing EBFs

To ensure that your installation is the most current, Sybase strongly recommends that, after installing Open Server, you download and install the corresponding latest available EBF. You can download product updates from Sybase Downloads at http://downloads.sybase.com.

Each Open Server release includes a subset of the SDK. Thus, Open Server EBFs contain two separate version strings: one for the Open Server EBF, and one for the SDK files such as Client-Library, isql, and bcp.

For example, in an Open Server product, the Server-Library version string might be *Server-Library/15.5/P-EBF17391-17390*, and the Client-Library string might be *Client-Library/15.5/P-EBF17930*. In these version strings, 17931 identifies the Open Server EBF, and 17930 identifies the Client-Library file as well as other SDK files.

To verify that you are using the correct version of Open Server, check the version string of the Open Server library:

strings libsybsrv.a | grep Sybase

4.2 Required applications

The Open Server installer requires *gzip*. Ensure that the path to *gzip* is set in the \$PATH environment variable.

4.3 Installing Open Server 15.5 on top of Open Server 15.0

Open Server version 15.5 is a shelf replacement for version 15.0. When you install Open Server 15.5 into an existing Open Server 15.0 directory, version 15.5 files overwrite the 15.0 files. Sybase recommends that you back up your Open Server 15.0 directory before you install Open Server 15.5.

4.4 Running InstallAnywhere and InstallShield Multiplatform installers

Some of the files generated by InstallAnywhere and InstallShield Multiplatform share the same file names. This becomes an issue when you use both InstallAnywhere and InstallShield technologies to install or uninstall products in the same installation directory, because files that are used by both installers are overwritten or removed without warning. Sybase recommends that you do not use InstallShield and InstallAnywhere to install to or uninstall from the same installation directory.

4.5 Modifying interfaces file entries with dscp or dsedit

Use dscp or dsedit to modify directory service entries. See the *Open Client and Open Server Configuration Guide for UNIX* for details about these utilities.

5. Changed functionality in this version

Changed functionality for Open Server is described in the *New Features Open Server 15.5 and SDK 15.5 for Windows, Linux, UNIX, and Mac OS X.*

6. Known problems

This section describes all of the known issues that exist for this version.

6.1 Open Server call leaks memory on Sun Solaris platforms

[CR #417041] freeaddrinfo leaks memory when Open Server on Sun Solaris 8 (SPARC) 32-bit and 64-bit calls freeaddrinfo for each getaddrinfo call.

Workaround: Download and install the #111328-04: SunOS 5.8_x86: libsocket patch.

6.2 Installer issues

This section describes the known problems you might encounter when installing Open Server.

6.2.1 Installer fails to launch when path to setup.bin contains ".."

[CR #595582] The installer fails to launch if you specify a path to setup.bin that contains "..".

Workaround: Ensure that the path to setup.bin does not contain "..".

6.2.2 Uninstallation process stops responding

[CR #595573] The uninstallation program stops responding when you select Delete from the Delete User Files screen and then click Previous from the Uninstall Complete screen. Delete User Files and Uninstall Complete are the last two screens shown in the uninstallation program.

Open Server 15.5 6. Known problems

Workaround: Do not return to the Delete User Files screen after you have selected Delete.

6.2.3 Installer cannot use tar to extract from the Open Server suite archive

[CR #593410] You see this error when the installer uses the GNU tar tool to extract files from the Open Server suite archive:

The included VM could not be unarchived (TAR). Please try to download the installer again and make sure that you download using 'binary' mode. Please do not attempt to install this currently downloaded copy.

Workaround: Define /usr/bin/tar in \$PATH.

6.2.4 Installation fails on Sun Solaris SPARC

[CR #593148] When the file descriptor limit is set to "unlimited", the installer fails with this message:

Workaround: Set the "hard" file descriptor limit to a number.

6.2.5 Feature names are not validated when installing in silent mode

[CR #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.

6.2.6 "./setup.bin: !: not found" message appears

[CR #579988] You see this error message when you install Open Server:

```
Preparing to install...
./setup.bin: !: not found
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...
```

Workaround: Ignore the message and continue. A case has been opened with Flexera to address this issue.

6.3 Availability with 64-bit libraries

Open Server is available on 64-bit versions. Use the -DSYB_LP64 flag to compile applications that use the 64-bit libraries.

7. Programming issues

This section describes programming issues relevant to Open Server.

7.1 Upgrading to a new version

Sybase recommends the following:

- Rebuild all statically linked applications (srvlib), using the new version of the software. Recompile and relink the applications using the new header files and libraries.
- For dynamically linked applications, recompile and relink using the SDK libraries that now include "syb" in the library names.

Note If you have made any changes to the application files, you must recompile.

Ensure that the runtime libraries are for the same major release as the version used to build the application.

7.2 Linking static libraries

[CR #575063] When statically linking the Open Client and Open Server libraries, you must link your application to *librt*, the Realtime Extensions library. Static linking requires that you add -lrt to your *makefile*.

7.3 Link to usr/lib/lwp

For Solaris 8, Open Server requires that the *libthread.so* you use is the one located in /usr/lib/lwp. Link your application using one of the following methods:

- Use:
 - -R/usr/lib/lwp
- Set the LD LIBRARY PATH variable to include /usr/lib/lwp.

7.4 Programming with thread-safe libraries

To use the Sybase thread-safe libraries, you must compile and link your code with thread safety options. You must use the -mt-D_REENTRANT option on the cc command.

7.5 Timeslice property and multithreaded library versions

The SRV_S_TIMESLICE Open Server property is not supported if you use the multithreaded versions of the Sybase libraries. Applications can set this property, but it has no effect; therefore, you must change existing application code that depends on timeslice events before relinking with the multithreaded libraries.

Applications can call srv_capability to determine if the timeslice feature is supported.

8. Product compatibility and interoperability

This section contains information about products that are compatible with Open Server 15.5 For a list of platforms, compilers, and third-party products Open Server is built and tested on, see *New Features Open Server 15.5 and SDK 15.5 for Windows, Linux, UNIX, and Mac OS X.*

8.1 Compatibility and interoperability matrix

Table 1 shows the compatibility and interoperability matrix of Open Server, SDK, Adaptive Server® Enterprise, and Replication Server® across versions. For specific platform information, refer to the respective product certification reports.

Although two or more products can be interoperable, remember that new features introduced in a newer version of a product may not be supported with older versions of the same or other products.

Open Server SDK Adaptive Server Replication Server 15.5 15.5 15.0 12.5.1 15.5 15.0.x 12.5.x 15.5 15.2 15.1 15.0.1 12.6 HP HP-UX Х n/a n/a n/a n/a Х Х Х PA-RISC 32-bit HP HP-UX n/a n/a n/a n/a n/a Х Х Х Х Х Х PA-RISC 64-bit

Table 1: Compatibility and Interoperability matrix

Open Server	SDK			Adaptive Server			Replication Server				
15.5	15.5	15.0	12.5.1	15.5	15.0.x	12.5.x	15.5	15.2	15.1	15.0.1	12.6
HP HP-UX Itanium 32-bit	x	х	Х	n/a	n/a	n/a	n/a	n/a	n/a	X	Х
HP HP-UX Itanium 64-bit	х	х	Х	х	X	х	X	Х	х	n/a	n/a
IBM AIX POWER 32-bit	х	Х	Х	n/a	n/a	х	n/a	Х	Х	х	Х
IBM AIX POWER 64-bit	X	Х	Х	Х	x	х	х	n/a	n/a	n/a	n/a
Linux x86 32-bit	X	Х	Х	Х	x	х	х	Х	х	х	X
Linux x86-64 64-bit	X	Х	Х	Х	x	х	X	n/a	n/a	n/a	n/a
Linux POWER 32-bit	x	х	х	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Linux POWER 64-bit	X	х	Х	х	X	х	X	х	Х	n/a	n/a
Sun Solaris SPARC 32-bit	х	Х	Х	Х	x	х	n/a	Х	Х	х	Х
Sun Solaris SPARC 64-bit	X	Х	Х	Х	x	х	х	n/a	n/a	n/a	n/a
Sun Solaris x86-64 32-bit	х	Х	Х	n/a	n/a	х	n/a	Х	х	n/a	X
Sun Solaris x86-64 64-bit	х	Х	Х	Х	x	х	X	n/a	n/a	n/a	n/a
Microsoft Windows x86 32-bit	х	х	X	X	X	х	х	х	х	Х	X
Microsoft Windows x86-64 64-bit	x	x	Х	х	X	n/a	X	n/a	n/a	n/a	n/a

LEGEND: x = compatible; n/a = product not available or does not work with Open Server on that platform.

Note The SDK and Open Server compatibility information shown in Table 1 is relevant only if the compatible products are installed in different \$SYBASE directories.

Additional considerations

- For Open Server and SDK to be compatible, header files included in an
 application must be the same version level as the library with which the
 application is linked.
- Bulk-Library routines cannot be used in applications that call Open Server.
- Open Server applications that are based on DB-Library are not supported in version 11.x or later.

8.2 Guidelines for installing Open Server with other Sybase products

Below are guidelines for installing Open Server on the same server with other Sybase products:

- In general, Sybase recommends that you place the new installation of Open Server in a separate directory from other Sybase products such as Replication Server, OpenSwitch™, Enterprise Connect™ Data Access, and Sybase® IQ, unless Sybase Tech Support has specifically recommended that you install Sybase products in the same directory to address an issue.
- Sybase recommends that you do not mix versions of SDK and Open Server in the same directory. For example, do not install SDK 15.5 in a directory containing Open Server 12.5.1—in this case, upgrade both SDK and Open Server to 15.5.

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 and the Sybase Product Documentation Web site to learn more about your product:

- The Getting Started CD contains release bulletins and installation guides in PDF format. 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 Sybase Product Documentation Web site is accessible using a standard Web browser. In addition to product documentation, you will find links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

To access the Sybase Product Documentation Web site, go to Product Documentation 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 Partner Certification Report.
- 3 In the Partner Certification Report filter select a product, platform, and timeframe and then click Go.
- 4 Click a Partner 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.

11. Accessibility features

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

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

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

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