



Release Bulletin

SAP Open Server™ 16.0

Sun Solaris

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Product Summary

This release bulletin provides information about SAP® Open Server™ 16.0.

SAP Open Server version 16.0 is compatible with these operating system configurations.

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

For the most current list of supported operating systems, see the platform certifications page at <http://certification.sybase.com/ucr/search.do>. For a list of platforms, compilers, and third-party products SAP Open Server is built and tested on, see the *New Features Bulletin SAP Open Server 16.0 and SDK for SAP ASE 16.0 for Windows, Linux, and UNIX*.

Product Components

For a list of SAP Open Server components and the platforms on which these components are supported, see the *New Features Bulletin SAP Open Server 16.0 and SDK for SAP ASE 16.0 for Windows, Linux, and UNIX*.

Patches

Patches required for SAP Open Server 16.0.

The required patch for Solaris SPARC 32-bit is:

- 141414-10 or later

The required patches for Solaris SPARC 64-bit are:

- 144488-17 or later
- 119963-24 or later for SUNWlibc

The required patch level for Sun Solaris x86 32-bit and x86-64 64-bit is:

- 141445-09 or later

POSIX Threads and Pthreads Libraries

SAP 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 Client libraries.

Note: DB-Library™ 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`.

IPv6 Support

SAP Open Server supports IPv6 for platforms.

As of this release, SAP Open Server on Solaris platforms supports IPv6.

Below is an `interfaces` file entry where the last two server addresses are in IPv6 numeric 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.

Sample Files

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

Availability with 64-bit Libraries

Use the -DSYB_LP64 flag to compile applications that use the 64-bit libraries.

Compatibility and Interoperability Matrix

Compatibility and interoperability matrix shows the compatibility and interoperability matrix of SAP Open Server, SDK for SAP® ASE, SAP® Adaptive Server® Enterprise (SAP® ASE), and SAP® 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.

SAP Open Server	SDK for SAP ASE			SAP ASE				SAP Replication Server					
16.0	1 6. 0	1 5. 5	1 5. 0	1 6. 0	1 5. 5 5	1 5. 0. x	1 2. 5. x	1 5. 7	1 5. 5	1 5. 2	1 5. 1	1 5. 0. 1	1 2. 6
Solaris SPARC 32-bit	x	xx	x	n/ a	nx / a	x	x	n/ a	n/ a	x	x	x	x
Solaris SPARC 64-bit	x	xx	x	x	xx	x	x	x	x	n/ a	n/ a	n/ a	n/ a
Solaris x86 32-bit	x	xx	x	n/ a	nn/ /a a	n/ a	x	n/ a	n/ a	x	x	n/ a	x
Solaris x86-64 64-bit	x	xx	x	x	xx	x	x	x	x	n/ a	n/ a	n/ a	n/ a
LEGEND: x = compatible; n/a = product not available or does not work with SAP Open Server on that platform.													

Note: The SDK for SAP ASE and SAP Open Server compatibility information shown in the Compatibility and Interoperability matrix is relevant only if the compatible products are installed in different `$SYBASE` directories.

Additional considerations

- For SAP Open Server and SDK for SAP ASE 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 SAP Open Server.
- SAP Open Server applications that are based on DB-Library are not supported in version 11.x or later.

Guidelines for Installing SAP Open Server with Other SAP Products

Guidelines for installing SAP Open Server on the same server with other SAP products.

- In general, SAP recommends that you place the new installation of SAP Open Server in a separate directory from other SAP products such as SAP Replication Server, SAP® OpenSwitch™, Enterprise Connect™ Data Access, and SAP® IQ, unless SAP Technical Support has specifically recommended that you install SAP products in the same directory to address an issue.
- SAP recommends that you do not mix versions of SDK for SAP ASE and SAP Open Server in the same directory. For example, do not install SDK for SAP ASE 16.0 in a directory containing Open Server 15.5—in this case, upgrade both SDK for SAP ASE and SAP Open Server to 16.0.

Special Installation and Configuration Instructions

Instructions for SAP Open Server installation and configuration.

See the *SDK for SAP ASE and SAP Open Server Installation Guide* for your platform for instructions about installing SAP Open Server.

Warning! If you install both SAP Open Server and SDK for SAP ASE in the same directory, SAP recommends that you use the same version and ESD levels. Because SAP Open Server and SDK for SAP ASE 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 SAP® Open Client™ and SAP Open Server applications, including the sample programs, see the *Open Client and Open Server Programmers Supplement* for your platform.

See also

- *Guidelines for Installing SAP Open Server with Other SAP Products* on page 4

Installing EBFs

To ensure that your installation is the most current, SAP recommends that, after installing SAP Open Server, you download and install the corresponding latest available EBF.

1. Download product updates from Downloads at <http://downloads.sybase.com>.
2. To verify that you are using the correct version of SAP Open Server, check the version string of the SAP Open Server library:

```
strings $SYBASE/OCS-16_0/lib/libsybsrv.a | grep SAP
```

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

For example, in an SAP Open Server product, the Server-Library version string might be `Server-Library/16.0/P-EBF17391-17390`, and the Client-Library string might be `Client-Library/16.0/P-EBF17930`. In these version strings, 17931 identifies the SAP Open Server EBF, and 17930 identifies the Client-Library file as well as other SDK for SAP ASE files.

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. SAP recommends that you do not use InstallShield and InstallAnywhere to install to or uninstall from the same installation directory.

Changed Functionality in this Version

Changed functionality for SAP Open Server is described in *New Features Bulletin SAP Open Server 16.0 and SDK for SAP ASE 16.0 for Windows, Linux, and UNIX*.

Known Issues

Review known issues and workarounds, listed by Change Request (CR) number.

Note: If you have a Sybase® support contract, you can search the Sybase Web site for solved cases. Choose **Support > Solved Cases** or go to <http://search.sybase.com/search/simple.do?mode=sc>. You need a MySybase account to view solved cases in the archive.

If you have an SAP® support contract, use the Sybase xSearch to search for knowledge-based articles and solved cases. Go to the SAP Sybase Support Portal at <http://service.sap.com/sybase/support>, log in, and select **KBAs & Solved cases** to start the xSearch.

Key to issue types:

- **RTC** – SAP® Release to Customer tracking number.
- **CSN** – SAP Customer Services Network tracking number.
- **CR** – Sybase® Change Request number.
- **AG** – Agentry® tracking number.
- **N/A** – No tracking number.

Installer Issues

Known issues and workarounds, if any, that you might encounter when installing SAP Open Server.

Table 1. Installer Issues

CR#	Description
593410	You see this error when the installer uses the GNU tar tool to extract files from the SAP Open Server suite archive: <pre>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.</pre> Workaround: Define /usr/bin/tar in \$PATH.
593148	When the file descriptor limit is set to “unlimited”, the installer fails with this message: <pre>awk: insufficient memory for string storage Context is: >>> <<<</pre> Workaround: Set the “hard” file descriptor limit to a number.

CR#	Description
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.

Programming Issues

Known programming issues and workarounds, if any, relevant to SAP Open Server.

Table 2. Programming Issues

CR#	Description
	Upgrading to a new version Workaround: SAP 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.
682932	Generic 64-bit x86 Workaround: On Solaris x86-64 (64-bit), the libraries are built using generic 64-bit x86 instructions.
575063	Linking static libraries Workaround: When statically linking the SAP Open Client and SAP Open Server libraries, you must link your application to <code>librt</code>, the Realtime Extensions library. Static linking requires that you add <code>-lrt</code> to your <code>makefile</code>.
	Programming with thread-safe libraries Workaround: To use the Sybase thread-safe libraries, you must compile and link your code with thread safety options. You must use the <code>-mt -D_REENTRANT</code> option on the <code>cc</code> command.

CR#	Description
	Timeslice Property and Multithreaded Library Versions Workaround: The SRV_S_TIMESLICE SAP 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.

Documentation Changes

Updates, corrections, and clarifications to the documentation released with SAP Open Server 16.0.

Batched Parameters Samples

See *Support for batched parameters* under 15.7 *New Features for ESD #4* in the *New Features Bulletin SAP Open Server and SDK for SAP ASE 16.0 for Windows, Linux, and UNIX*.

resultlen Parameter Description for cs_convert Routine

Correction to *resultlen* parameter description for **cs_convert** routine in the *Open Client and Open Server Common Libraries Reference Manual*.

The reference manual incorrectly documents that **cs_convert()** sets **resultlen* to CS_UNUSED when **cs_convert()** fails; **cs_convert()** does not set **resultlen* to CS_UNUSED upon failure.

Consider the return value of **cs_convert()** rather than the value of **resultlen* to check if the routine has succeeded.

Obtaining Help and Additional Information

Use the Product Documentation site and online help to learn more about this product release.

- Product Documentation at <http://sybooks.sybase.com/> – online documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. The Web site also has links to other resources, such as white papers, community forums, maintenance releases, and support content.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the *Adobe* Web site.

Note: A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.

Technical Support

Get support for SAP® products.

If your organization has purchased a support contract for this product, then one or more of your colleagues is designated as an authorized support contact. If you have any questions, or if you need assistance during the installation process, ask a designated person to contact Technical Support as specified in your contract:

- Sybase Technical Support or the Sybase subsidiary in your area
- SAP Technical Support

Customers with an SAP support contract can obtain support for this product at the SAP support site, <http://service.sap.com/sybase/support>. You can also find information about Sybase support migration at this location (login may be required).

Customers with a Sybase support contract can obtain support for this product at <http://www.sybase.com/support> (login required).

Downloading Product Updates

Get maintenance releases, support packages and patches, and related information.

- If you purchased the product directly from Sybase or from an authorized Sybase reseller:
 - a) Go to <http://www.sybase.com/support>.
 - b) Select **Support > EBFs/Maintenance**.

- c) If prompted, enter your MySybase user name and password.
- d) (Optional) Select a filter, a time frame, or both, and click **Go**.
- e) Select a product.

Padlock icons indicate that you do not have download authorization for certain EBF/Maintenance releases because you are not registered as an authorized support contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click **My Account** to add the “Technical Support Contact” role to your MySybase profile.

- f) Click the **Info** icon to display the EBF/Maintenance report, or click the product description to download the software.
- If you ordered your product under an SAP contract:
 - a) Go to <http://service.sap.com/swdc> and log in if prompted.
 - b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

Product and Component Certifications

Certification reports verify Sybase product performance on a particular platform.

To find the latest information about certifications:

- For partner product certifications, go to http://www.sybase.com/detail_list?id=9784
- For platform certifications, go to <http://certification.sybase.com/ucr/search.do>

Accessibility Features

Accessibility ensures access to electronic information for all users, including those with disabilities.

Documentation for this product is available in an HTML version that is designed for accessibility.

Vision impaired users can navigate through the online document with an adaptive technology such as a screen reader, or view it with a screen enlarger.

HTML documentation has been tested for compliance with accessibility requirements of Section 508 of the U.S Rehabilitation Act. 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 may 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 the Sybase Accessibility site: [*http://www.sybase.com/products/accessibility*](http://www.sybase.com/products/accessibility). The site includes links to information about Section 508 and W3C standards.

You may find additional information about accessibility features in the product documentation.

