



Release Bulletin

SAP Sybase Event Stream Processor 5.1 SP04

Windows

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Accessing Current Documentation

SAP® Sybase® Event Stream Processor periodically provides online documentation updates. Therefore, more recent versions of your documents 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.

To access documentation at the Sybase Product Documentation Web site:

1. Go to Product Documentation at <http://www.sybase.com/support/manuals/>.
2. Select **Sybase Event Stream Processor**.
3. Select your version from the Document Set list.
4. Select the link to the document you want to read. For most documents, you can either download the PDF version or browse the document online.

Product Summary

SAP Sybase Event Stream Processor enables you to create and run your own complex event processing applications to derive continuous intelligence from streaming event data in real time.

This release bulletin discusses known issues, workarounds, and late-breaking documentation updates for SAP Sybase Event Stream Processor 5.1 SP04.

For information about supported platforms and operating systems, see the *Installation Guide*.

For information about new features in this release, see the *New Features Summary*.

For information about accessibility, see *Accessibility Features* in this release bulletin.

Download Requirements for Separately Licensed Adapters

When you order separately licensed adapters in addition to Event Stream Processor, download only one copy of the Event Stream Processor CD image per platform.

For convenience, the Sybase Product Download Center (SPDC) and the SAP Service Marketplace (SMP) make the Event Stream Processor CD image available on its own and with each separately licensed adapter. However, when you order separately licensed adapters with

Event Stream Processor, you only require one instance of the CD image for each platform you are using. If you are using a single platform, download a single copy of the CD image.

Ensure you download a separate license for each adapter in addition to the license for Event Stream Processor.

Security Recommendations

SAP strongly recommends that you enable operating system file access auditing capabilities to monitor and control the access of adapter and server configuration files. This is especially important for files containing passwords.

Installation and Upgrade

Get last-minute information about installation and upgrading that was omitted from or incorrect in your installation guide, or requires special emphasis.

Sub-capacity Licensing

Sub-capacity licensing refers to licensing an SAP product on a subset of the CPUs available on a physical machine. Event Stream Processor supports sub-capacity licensing through SySAM virtualization.

Table 1. SySAM Virtualization Sub-capacity Compatibility

Vendor	Product	Platform Support	Virtualization Type
Intel, AMD	VMWare ESX Server* Guest OS: Windows	VMWare ESX 3.5, ESX 4.0 and ESX 4.1, Guest OS: Windows 2008 R2, Windows 7, Windows XP	Virtual machine
Intel, AMD	VMWare ESXi Server* Guest OS: Windows	VMWare ESXi 4.1, 5.0 Guest OS: Windows 2008, Windows 7, Windows XP	Virtual machine
Intel, AMD	Xen,** DomainU: Windows	Windows 2008 R2, Windows 7	Virtual machine
Intel, AMD	KVM: Windows	Windows 2008, Windows 7, Windows XP	Virtual machine

Vendor	Product	Platform Support	Virtualization Type
Microsoft	Hyper-V: Windows	Windows 2008, Windows 7, Windows XP	Virtual machine

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

** Xen excludes Solaris x64.

Known Installation Issues

Installation issues for this version of Event Stream Processor.

Table 2. Known Installation Issues

CR#	Description
668057	<p>If you install Event Stream Processor using InstallAnywhere in the same directory as older SAP products that also use InstallShield, uninstalling one of the products may make other products unusable because some shared components are removed by the uninstaller.</p> <p>If you install Event Stream Processor in the same directory as older SAP products, do not uninstall.</p>
707308	<p>When installing ASE 15.0.3 ESD#4 with ESP 5.1 already installed in the same directory, if you execute \$SYBASE\SYBASE.bat followed by isql -v, you may receive an error.</p> <p>Backup SYBASE.bat before installing ASE 15.0.3 ESD #4.</p>
715637	<p>When you are installing on Windows ovetop of an existing Event Stream Processor 5.1 installation, and files from that installation are in use, the installer reboots the system at the end of the installation without warning.</p>
720308	<p>The installer may hang or encounter issues without reporting an error condition. This is usually caused when the temporary directory has insufficient disk space.</p> <p>To check the status and view messages of the installation, start a console install using the LAX_DEBUG environment variable. This is an installer debug environment variable that reports issues with the installation as they arise. To start a console install using this environment variable, use a command line to set its value to true prior to running the installer:</p> <pre>LAX_DEBUG=true; export LAX_DEBUG</pre>

CR#	Description
751735	<p>If you disable SSL during a custom installation, the installer disables SSL at the cluster level, but not at the project level. As a result, only certain ESP client utilities, such as <code>esp_cluster_admin</code> and ESP Studio, are able to connect to the server until you disable SSL at the project level. To do this, comment out all of the lines containing references to either <code>"ssl-key-file"</code> or <code>"ssl-key-file-encrypted"</code> in the <code>node1.xml</code> cluster configuration file. Then, restart the cluster.</p> <p>Note that this issue does not apply to Studio's <code>localnode.xml</code> file.</p>

Known Issues

Learn about known issues and apply workarounds for SAP Sybase Event Stream Processor.

Known Issues for SAP Sybase Event Stream Processor Studio

Learn about known issues and apply workarounds for ESP Studio.

Table 3. Studio Issues

CR#	Description
690176	<p>When running example projects from the Welcome Page, the Stream View is empty for some streams.</p> <p>If you are running a project from the Welcome Page and you are working with a small data set, work around this issue by changing the stream view pulsed subscribe interval value to 0.</p> <p>Set the interval back to its default value of 1 before working with any other projects.</p>
740939	<p>Service entries that were discovered and listed in the Data Services view are duplicated when you shutdown and reopen Studio. Every service will have two entries listed in the Data Service view.</p>
745766	<p>When manually inputting a decimal type that has no integer in SAP Sybase ESP Run-Test perspective, the default value shows as .12345 when it should show as 0.12345. The default value of .12345 can be published to a stream or window, and the Stream View can show the default value as 0.12345.</p>

CR#	Description
750082	<p>The TimeFormat property is not available in the Adapter Properties dialog in Studio for certain adapters. You can edit the TimeFormat property directly in the cnxml file. The following adapters are affected:</p> <ul style="list-style-type: none"> • File/Hadoop Input and Output Adapter • FTP CSV Input and Output Adapter • JMS CSV Input and Output Adapter • Socket CSV Input and Output Adapter • File/Hadoop Event XML Input and Output Adapter • FTP Event XML Input and Output Adapter • JMS Event XML Input and Output Adapter • Socket Event XML Input and Output Adapter • File/Hadoop JSON Input and Output Adapter • JMS Object Input and Output Adapter
752449	<p>When using the SAP Sybase ESP plugin to SAP HANA Studio, if you attempt to create a REFERENCE by dragging and dropping an SAP HANA table into the SAP Sybase ESP Visual Editor using the SAP HANA Navigator, SAP Sybase ESP fails to create the REFERENCE.</p> <p>To successfully create a REFERENCE, in the SAP Sybase ESP Visual Editor, add a REFERENCE shape to the diagram and use the discovery option to associate the REFERENCE with the appropriate SAP HANA table.</p>

Known Issues for Event Stream Processor Server

Learn about known issues and apply workarounds for the Server.

Table 4. Server Issues

CR#	Description
671971	<p>By default, the RSA login uses the "SHA1withRSA" signature algorithm and the "MD5" digest algorithm. If you change the signature and digester methods in the cluster configuration, make the same changes to the SIGN_ALGORITHM and DIGEST_ALGORITHM environment variables.</p> <p>For example, values for the SIGN_ALGORITHM environment variable are "SHA1withRSA" (default), "MD5withRSA", and "SHA1withDSA" (Java only). Possible values for the DIGEST_ALGORITHM environment variable are "MD5" (default) and "SHA1".</p>
674280	<p>Avoid using retention with input windows that use a log store. While the compiler does not flag this as an error, the retention policy on input windows that use a log store may not work as expected after recovery.</p>

CR#	Description
674786	In the case of the ESP Server crashing, if you have a join-based window using a log store, one source window using a log store, and another source window using a memory store and being derived from a window using a log store, the data in the join window is recovered up to the crash, but new records uploaded to the ESP Server do not get joined. When all the source windows use a log store, the same records that are uploaded to the ESP Server get joined.
744905	The compiler crashes when the for loops iterator is inside of a switch statement . The error is caused by the switch statement being compiled twice. Each compilation adds the for loops iterator and counter twice to the list of local registers. The first compilation is done only to determine characteristics of the compilation without generating bytecode; a copy of the compile state is used to determine characteristics and is then destroyed.

Known Issues for Event Stream Processor Adapters

Learn about known issues and apply workarounds for adapters supported by Event Stream Processor.

Table 5. Adapter Issues

CR#	Description
650777	For the Database Input adapter, when data is converted between the database and Event Stream Processor datatypes (numeric) that have different ranges, the JDBC and ODBC drivers may handle these operations differently. For example, the conversion may get rejected or convert into an incorrect value, and so on.
714685	<p>You must make a few changes so that Java external adapters from Event Stream Processor 5.0 are compatible with ones from 5.1.</p> <ul style="list-style-type: none"> For all Java external adapters, due to changes in authentication types between versions, you can use only LDAP, RSA, or Kerberos (not ticket) authentication types if you want compatibility between 5.0 and 5.1 adapters. To make the 5.0 external FIX Input adapter compatible with the 5.1 version, add the maxPubPoolSize parameter to the 5.0 file connectors configuration files. This property was optional in 5.0 but is required in 5.1. If you want to start the 5.0 external FIX Input adapter with the 5.1 configuration file, remove the inputBuffer property from the 5.1 configuration file as this property is not valid in 5.0.
715811	<p>When the peer program publishing to the adapter does not close its socket connection cleanly, the adapter's state becomes DEAD and it no longer accepts connections.</p> <p>To avoid this issue, ensure that the publisher issues a "close" on the socket connection before exiting.</p>

CR#	Description
N/A	Install Microsoft .NET Framework version 4.0 or higher prior to installing the ESP Add-In for Microsoft Excel.
7369 95	<p>When using the Web Services (SOAP) Input and Output adapter, if the return values or parameters of a Web service contain a datatype derived from an ABAP decimal datatype, the Axis2 framework throws a RuntimeException error message.</p> <p>To work around this issue, convert any ABAP decimal datatypes to string datatypes, and use string datatypes instead of decimal datatypes to define a Web service interface.</p>
7371 58	<p>If the Web server for the Web Services (SOAP) adapter is using X.509 authentication, it requires four specific properties and the adapter_config.xml file does not accept two of these properties (javax.net.ssl.keyStore and javax.net.ssl.keyStorePassword).</p> <p>To work around this issue, add -Djavax.net.ssl.keyStore=%ESP_ADAPTER_HOME%\bin\wsclient.jks and -Djavax.net.ssl.keyStorePassword=password to the last command line of the adapter.bat file. For example:</p> <pre>%JDK_HOME%\bin\java" %ADAPTER_JAVA_FLAG% "-Duser.dir= %ESP_ADAPTER_HOME%\config" "-Djavax.net.ssl.keyStore= %ESP_ADAPTER_HOME%\bin\wsclient.jks" "-Djavax.net.ssl.key- StorePassword=password" -cp "%ADAPTER_CLASSPATH%" %ADAPT- ER_CLASS% "%ADAPTER_CONFIG_FILE%" %ADAPTER_COMMAND%</pre>
7466 68	<p>When you update from a previous Support Package to the current Support Package, the installer creates a new com.sybase.cep.studio.libs_5.1.0.v(date) directory under %ESP_HOME%\studio\plugins, but does not delete the old version of the directory. As a result, you end up with two copies of the same directory, but with different date stamp suffixes.</p> <p>If you are working with the SAP RFC adapter, you are instructed to copy files into this directory. To successfully enable the RFC directory, first:</p> <ol style="list-style-type: none"> 1. Shut down ESP Studio. 2. Remove the version of the com.sybase.cep.studio.libs_5.1.0.v(date) directory with the oldest date stamp. 3. Copy the jar file into the new (and now only remaining) com.sybase.cep.studio.libs_5.1.0.v(date) directory as instructed in the <i>Adapters Guide</i>. For details, see <i>Adapters Currently Available from SAP > SAP RFC Input and Output Adapter > Enabling the RFC Adapter</i>.

CR#	Description
7487 13	<p>For the Socket JSON Input Adapter, the jsonRootpath parameter in the cnxml file is marked as required. The jsonRootpath is not required for the Socket JSON Output Adapter, which makes the two formats incompatible.</p> <p>To work around this issue:</p> <ol style="list-style-type: none"> 1. Edit <code>toolkit_file_json_input.cnxml</code> and change this parameter to optional as follows: <pre><Parameter id="jsonRootpath" label="JSON Root Path" descr="Specify a rootpath for the JSON data." type="string" use="optional" /></pre> 2. Go to <code>%ESP_HOME%\adapters\framework\instances\file_json_input\adapter_config.xml</code> and delete the word <code>entities</code> from the rootPath parameter in the <code>adapter_config.xml</code> file so it looks like: <pre><Module type="formatter"> <InstanceName>MyJsonInFormatter</InstanceName> <Name>JsonStringToEspFormatter</Name> <Next>MyInStream_Publisher</Next> <Parameters> <JsonStringToEspFormatterParameters> <DateFormat>yyyy-MM-dd HH:mm:ss.SSS</DateFormat> <TimestampFormat>yyyy/MM/dd HH:mm:ss</Time- stampFormat> <ColumnMappings> <ColsMapping streamname="" rootpath=""> <Column>display_text</Column> <Column>domain_role</Column> <Column>offset</Column> <Column>length</Column> </ColsMapping> </ColumnMappings> </JsonStringToEspFormatterParameters> </Parameters> </Module></pre>
7489 88	<p>For the File/Hadoop CSV Output Adapter, the <code>adapter_config.xml</code> file in <code>%ESP_HOME%\adapters\framework\instances\file_csv_output</code> is mislabeled as <code>file_xmllist_output</code>.</p> <p>Therefore, to see statistics for this adapter when working with the <code>_ESP_Adapter_Statistics</code> metadata stream, look for an adapter with type <code>file_xmllist_output</code>.</p>
7492 69	<p>If your web page cannot read JSON data created by ESP using the File JSON Output Adapter, you need to manually modify each file created by ESP into a format that your web page can read.</p>

CR#	Description
750281	The Adapter Toolkit Blacklist prevents valid projects from running if the command to be executed by the adapter contains any of the following strings: "mv ", " rm ", "del ", "rm ".
751543	When installing the NYSE Adapter on a Windows 64-bit platform, the license agreement page appears again after clicking Next . Select the the geographic location and accept the license terms again; then click Next to proceed.

Known Issues for Migration

Learn about known issues for migration and the **esp_aml2ccl** utility.

Table 6. Migration Issues

CR#	Description
684802	The esp_aml2ccl utility converts <code>money</code> into <code>money (4)</code> by default. Manually replace all <code>money (4)</code> instances with <code>money</code> in the <code>.ccx</code> file.

Known Issues for CCL

Learn about known issues and apply workarounds for CCL.

Table 7. CCL Issues

CR#	Description
657188	The power() function can process only NULL values of float type.

Known Issues for SPLASH

Learn about known issues and apply workarounds for SPLASH.

Table 8. SPLASH issues

CR#	Description
693571	<p>SPLASH lets you define “record event” variables such as:</p> <pre>[integer key1; integer d1; string t1;] var1;</pre> <p>While you can conveniently reference the individual columns in “var1” using dot notation, you can only do this after the record event variable has been initialized. Once the record event has been initialized, you can access columns directly using dot notation (for example, count := var1.d1; or var1.t1 := 'Tuesday;'). If you try to set column values using dot notation before initializing the record event with the bracket notation, the compiler will not flag an error, but the record will not yet exist and the assignment will fail.</p>

Known Issues for SDKs

Learn about known issues for the Event Stream Processor SDKs.

Table 9. SDK Issues

CR#	Description
682112	<p>When using the .NET SDK, to avoid memory leaks when running the example, in the <code>SubscriberExample.cs</code> file located in the <code>\$ESP_HOME/examples/net/SubscriberExample</code> folder, replace:</p> <pre>while (!done) { event1 = subscriber.get_next_event(espError); switch (event1.getType()) { } }</pre> <p>with</p> <pre>while (!done) { event1 = subscriber.get_next_event(espError); switch (event1.getType()) { } event1.release(); }</pre>
715262	<p>If a .NET application that compiled with the .NET SDK dll in ESP5.0 cannot run in ESP5.1, compile it with the .NET SDK dll in ESP5.1.</p>

Known Issues for PowerDesigner Modeling

Learn about known issues and apply work arounds for PowerDesigner modeling.

Table 10. PowerDesigner Modeling Issues

CR#	Description
721684	<p>On Windows 2008 R2, if PowerDesigner was installed to the default directory (system program folder), you will receive the following error when importing CCL into an ESP schema: "There was an error in compiling the given CCL. Please check the log file." This is because the default permission of the system program folder is ReadOnly and therefore, PowerDesigner cannot write CCL into the % "PowerDesigner 16"%\Examples\ESP directory.</p> <p>To work around this issue, add the "Everyone" user to the % "PowerDesigner 16"% folder and give it ReadWrite permission.</p>

Documentation Changes

Read about updates, corrections, and clarifications to the documentation released with SAP Sybase Event Stream Processor.

Please check the Free Download Terms document for more recent updates to third-party licensing details. The document is at: http://www.sybase.com/softwarelicenses/third_party_legal.

For secure transportation setup using SSL between the SAP Sybase Event Stream Processor ASE adapter and the ASE database, please see the topic on *New Features for SP120 > OpenSSL in ODBC, OLE BD, ADO.NET, Open Client and Open server in New Features Bulletin for Open Server and SDK 15.7 SP121*, located [here](#).

Table 11. Documentation Changes for the Installation Guide

CR#	Description
756043	<p>The ESP plugin for SAP HANA Studio will not install in HANA Studio newer than 1.0.60</p> <p>The documentation erroneously states that, using the SAP installer, you can automatically install the ESP plugin for SAP HANA Studio into version 1.0.60 or later. In fact, the automatic installation of the ESP plugin works for versions 1.0.60 up to and including version 1.0.69.</p> <p>As of version 1.0.70, SAP HANA Studio uses Eclipse version 4.3.x, whereas ESP Studio SP04 is based on Eclipse 4.2.2. Because of these differences, the automatic installation process is only supported with the versions of SAP HANA Studio listed above.</p> <p>For information on manually installing the ESP plugin into any other versions of SAP HANA Studio, please contact your technical support representative.</p>

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:

Obtaining Help and Additional Information

- 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>. The site includes links to information about Section 508 and W3C standards.

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

