



**Release Bulletin**

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**Sybase Event Stream Processor**  
**5.0**

Windows

DOCUMENT ID: DC01709-01-0500-06

LAST REVISED: June 2012

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Sybase, Inc., One Sybase Drive, Dublin, CA 94568.

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# Accessing Current Documentation

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 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

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 Sybase Event Stream Processor 5.0.

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**Note:** The current release is referred to as 5.0, but version strings in the installed software indicate 5.0 ESD#2. This ESD is cumulative and provides minor fixes and updates since the initial release of Sybase Event Stream Processor 5.0 and version 5.0 ESD #1. Version 5.0 ESD #2 is a full installation of Event Stream Processor, and replaces the original version 5.0.

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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.

## 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.

See the *Migration Guide* for information on migrating from Sybase Aleri Streaming Platform to Sybase Event Stream Processor 5.0.

## Sub-capacity Licensing

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Sub-capacity licensing refers to licensing a Sybase product on a subset of the CPUs available on a physical machine. Learn about sub-capacity licensing for this version of Event Stream Processor.

**Table 1. SySAM Virtualization Sub-capacity Compatibility**

Vendor	Product	Platform Support	Virtualization Type
Intel, AMD	VMWare ESX Server* Guest O/ S: 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	Xen,** DomainU: Windows	Windows 2008 R2, Windows 7	Virtual machine

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

\*\* Xen excludes Sun 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 Sybase 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 Sybase products, do not uninstall.</p>
681675	<p>When starting the SySAM license server, you may receive an error indicating failure to connect to the license server.</p> <p>This version of Sybase Event Stream Processor includes both Internet Protocol Version 4 (IPv4) and Internet Protocol Version 6 (IPv6) versions of the SySAM license server software. Use the <b>sysam configuration</b> command to choose the version of the license server based on your environment. By default, the IPv4 version of the license server is configured. This may result in an error if you have previously enabled IPv6 on the license server host.</p> <p>You can run both IPv6 and IPv4 on the same host by using the IPv4 address when specifying the SySAM server, rather than the using the host name.</p>
682298	<p>On Windows 7, 64-bit, you cannot uninstall from the console.</p> <p>To uninstall, use the graphic uninstaller.</p>
681866	<p>On Windows XP systems, you cannot use the uninstaller to uninstall Event Stream Processor with a valid served license.</p> <p>Remove remaining files manually.</p>
682858	<p>The custom installation option in the installer lets you select specific components to install and does not place restrictions on what you select or clear. As a result, you have the option of installing the Studio only. However, a standalone installation of the Studio cannot compile projects.</p> <p>To ensure all your installed instances of the Studio can compile projects, always install the Server with the Studio.</p>

CR#	Description
692135	<p>When upgrading from Event Stream Processor 5.0 to Event Stream Processor 5.0 ESD #1, if you install ESD #1 to the same location as version 5.0, the Server, Studio, and adapters are detected as already installed. A message prompts you to uninstall the "Sybase Event Stream Processor 5.0 ESD #1 xxx." This message is incorrect because ESD #1 is not already installed. The message should read "Sybase Event Stream Processor 5.0 xxx."</p> <p>Choose not to uninstall and proceed with the installation.</p>

## Known Issues

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

### Known Issues for Event Stream Processor Studio

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Learn about known issues and apply workarounds for ESP Studio.

**Table 3. Studio Issues**

CR#	Description
680405	<p>When you convert a project from AleriML to CCL and the project contains Windows file paths, you cannot run the resulting project in Studio Visual Authoring.</p> <p>This is because Windows file paths use a single backslash character (\), which the CCL compiler views as an escape character. This condition prevents the project from loading in Studio Visual Authoring. To load the project, manually replace the single backslashes with double backslashes (\\). For example, change <code>C:\Temp\store</code> to <code>C:\\Temp\\store</code>.</p>
680621	<p>If a join has two input connectors and one connector is deleted, the columns belonging to the deleted input connector are not deleted.</p> <p>Manually remove the column expressions belonging to the deleted input connector.</p>
681508	<p>When defining adapter properties in Studio, you can select a specific file from the file system. Windows file paths include a single backslash (\) as the file separator. However, the CCL compiler views the backslash as an escape character and therefore interprets the path incorrectly.</p> <p>Therefore, when working with Windows paths within Studio, manually change the single backslash file separator to a double backslash (\\).</p>



CR#	Description
682399	When using the Connector tool in the Visual Editor, you can connect from a stream or window to a named schema but you cannot connect from a named schema to a stream or window.
682543	Deleting the key column from a named schema does not update the CCL editor. The CCL editor shows the column as a primary key and the project does not compile successfully.  Inline schema does not cause this problem. Update the project in the CCL editor to compile successfully.
683166	Setting the <b>dir</b> property to configure schema discovery for the File CSV Input and File XML Input adapters fails to set the <b>file</b> property.  Set the <b>dir</b> property and the <b>file</b> property separately to be able to browse and select the specific file, and then use schema discovery.
690176	When running example projects from the Learning perspective, the Stream View is empty for some streams.  If you are running a project in the Learning perspective and you are working with a small data set, work around this issue by changing the <b>stream view pulsed subscribe interval</b> value to 0.  Set the interval back to its default value of 1 before working with any other projects.

## Known Issues for Event Stream Processor Server

Learn about known issues and apply workarounds for the Server.

**Table 4. Server Issues**

CR#	Description
671971	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.  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".
674280	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.

## Known Issues

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.
675321	If you are using an external function that returns a string, do not assign this string to the arena. Otherwise, an unrecoverable error occurs when the Server later tries to release the memory used by the returned string because the memory would have already been released by the Server when the record was processed.
681199	The cluster server appears to start normally if you start the server using a port that is in use by other software. However, the cluster server may behave erratically and report this error when attempting to connect: <code>ERROR - No such handler: Cluster.getPublicKey</code> Use a port that has not yet been used to start the cluster server.
689875	In a multi-node cluster, if the oldest node is a manager and controller combination node, and there is at least one project running, killing this specific node may cause the cluster to become unresponsive.  To avoid this issue, do not include a manager and controller combination node in the cluster.

## 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
680661	The Platform Input and Platform Output adapters are not supported by Event Stream Processor. The <code>platform_in.cnxml</code> and <code>platform_out.cnxml</code> files are included in the install, but are for internal use only.

CR#	Description
692062	<p>On Windows 32 and 64-bit platforms, Excel does not recognize the <b>SybaseRTP</b> function for the ESP Add-In for Microsoft Excel.</p> <ol style="list-style-type: none"> <li>1. In Excel, select <b>Office Button &gt; Excel Options &gt; Add-Ins &gt; Go...</b></li> <li>2. Click <b>Automation</b>.</li> <li>3. Select <b>SybaseRTP.Rtp</b>, and click <b>OK</b>.</li> <li>4. A dialog appears stating "Cannot find Add-In mscoree.dll".</li> <li>5. Click <b>No</b>.</li> </ol>
N/A	Install Microsoft .NET Framework version 2.0 or higher prior to installing the ESP Add-In for Microsoft Excel.

## Known Issues for Migration

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Learn about known issues for migration and the **esp\_aml2ccl** utility.

**Table 6. Migration Issues**

CR#	Description
684802	The <b>esp_aml2ccl</b> utility converts <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

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Learn about known issues and apply workarounds for CCL.

**Table 7. CCL Issues**

CR#	Description
657188	The <b>power()</b> function can process only NULL values of float type.
682005	<p>On Windows 64-bit platforms, invoking the CCL function <b>xmlserialize()</b> causes <code>esp_server.exe</code> to fail.</p> <p>This issue does not occur on Windows 32-bit platforms.</p>

## Known Issues for SPLASH

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Learn about known issues and apply workarounds for SPLASH.

**Table 8. SPLASH issues**

CR#	Description
662913	<p>You can globally define dictionary and vector data structures; however, limit global use to reading them. Only one stream should write to a dictionary or vector data structure; while that stream is writing, no other stream should write to or read from that data structure. The underlying objects used to manage the global dictionary or vector data structures are not thread-safe. A stream must have exclusive access to the global dictionary or vector data structure while writing. Allowing other streams to access these data structures while one stream is writing may result in server failure.</p> <p>Additionally, limit the use of these data structures to relatively static data (such as country codes) that are read by multiple streams, but that will not need to be updated during processing. Writing the data to the dictionary or vector must be completed before any streams read it.</p> <p>All operations that read a global dictionary or vector should perform an isnull check, as shown here:</p> <pre data-bbox="448 881 1180 986">&gt;typeof(streamname) rec := dict[symbol]; if( not (isnull(rec)) { // use rec }</pre>
693571	<p>SPLASH lets you define “record event” variables such as:</p> <pre data-bbox="448 1052 1180 1078">[ 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

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Learn about known issues for the .NET SDK.

**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 data-bbox="427 552 1180 835"> while (!done) {     event1 = subscriber.get_next_event(espError);      switch (event1.getType())     {     ...     ...     } } </pre> <p>with</p> <pre data-bbox="427 899 1180 1211"> while (!done) {     event1 = subscriber.get_next_event(espError);      switch (event1.getType())     {     ...     ...     }     event1.release(); } </pre>

## Documentation Changes

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



**Table 10. Documentation Changes for the Installation Guide**

CR#	Description
N/A	In the section on obtaining a license, the Installation Guide now includes information on how to obtain a license from the SAP Service Marketplace (SMP).

**Table 11. Documentation Changes for the Adapters Guide**

CR#	Description
703834	<p>The section on the RAP adapter shows you how to stop the RAP adapter when it is running in the background. The Adapters Guide incorrectly states that you can stop it by entering <code>kill -11 processID</code> in the command line.</p> <p>The correct command is:</p> <pre>kill -15 processID</pre>
N/A	The section on the JMS adapter shows you how to configure a queuing system for the JMS adapter. It should also mention that, to run the adapter, you must obtain and place vendor specific JMS jar files in the <code>\$ESP_HOME/java</code> folder and restart the Server.

**Table 12. Documentation Changes for the Studio Users Guide**

CR#	Description
680686	<p>The guide should state:</p> <p>When you create a duplicate named window or stream in the Visual Editor, then save your file and switch to the Text Editor, a third duplicate of the original stream or window is created. You can see this third duplicate only when you switch back to the Visual Editor.</p> <p>Remove this third duplicate:</p> <ol style="list-style-type: none"> <li>1. In the Visual Editor, click <b>Remove all shapes from diagram</b>  to clear out all the shapes.</li> <li>2. Click <b>Add all shapes</b>  to get the original stream or window and the second duplicate stream or window back.</li> <li>3. Give the duplicate stream window a unique name.</li> </ol>
681269	<p>The guide should state:</p> <p>Studio returns an error when a project refers to a schema from an imported file but the project compiles without errors.</p> <p>Refresh the file by closing the project. Alternatively, create the files in the opposite order.</p>
682387	<p>To redeploy a project after making changes to a running project:</p> <ol style="list-style-type: none"> <li>1. From the Authoring perspective, compile a project and start it.</li> <li>2. In the Run-Test perspective, do some work with the project.</li> <li>3. Stop the project.</li> <li>4. In the Authoring perspective, make changes to the project and the start it. An error displays and the Run-Test console states that a failure occurred because the application already exists. This is because the project still exists on the server in a stopped state.</li> <li>5. To redeploy, remove the project from the Run-Test server view, and then start the new version from the Authoring perspective.</li> </ol>
702771	<p>The Studio Users Guide incorrectly indicates that the correct format for entering a tooltip comment is:</p> <pre data-bbox="391 1385 823 1407">/**InsertTooltipCommentHere*/</pre> <p>The correct format is:</p> <pre data-bbox="391 1477 810 1499">/*InsertTooltipCommentHere*/</pre>

**Table 13. Documentation Changes for the CCL Programmers Guide**

CR#	Description
643882	Delta streams are allowed key transformation only when performing aggregation, join, or flex operations. Because a delta stream does not maintain state, you cannot define a delta stream on a window where the keys differ.
683896	<p>This guide documents the <i>argName</i> argument of the <b>CREATE LIBRARY</b> statement as required:</p> <pre data-bbox="391 447 1177 574">CREATE LIBRARY libraryName LANGUAGE {C JAVA} FROM file-Name( returnType funcName (argType argName,...); ...);</pre> <p>This is an optional argument, and should be documented as <i>[argName]</i>:</p> <pre data-bbox="391 644 1177 770">CREATE LIBRARY libraryName LANGUAGE {C JAVA} FROM file-Name( returnType funcName (argType [argName],...); ...);</pre>

**Table 14. Documentation Changes for the Administrators Guide**

CR#	Description
682458	There are undocumented restrictions on user name and password credentials for the interactive mode of the <b>esp_cluster_admin</b> tool. Credentials may contain alpha numeric characters but must always start with an alphabetic character. For example, password <b>12345678</b> is invalid, whereas <b>P12345678</b> is valid.
682913	References to the "port number used by your Event Stream Processor installation" are referring to the port number of your cluster cache.



**Table 15. Documentation Changes for the .NET SDK Guide**

CR#	Description
648988	<p>The guide should state:</p> <p>In general terms, the return code from a Publish call indicates whether or not the row was successfully transmitted. Any error that occurs during processing on the Event Stream Processor (such as a duplicate insert) will not get returned. The precise meaning of the return code from a Publish call depends on the access mode and the choice of synchronous or asynchronous transmission.</p> <p>When using callback or select access mode, the return only indicates whether or not the SDK was able to queue the data. The indication of whether or not the data was actually written to the socket will be returned by the appropriate event. The callback and select access modes do not currently support synchronous publishing.</p> <p>When using direct access mode, the type of transmission used determines what the return from the Publish call indicates. If publishing in asynchronous mode, the return only indicates that the SDK has written the data to the socket. If publishing in synchronous mode, the return from the Publish call indicates the response code the Event Stream Processor sent.</p> <p>In no case will errors that occur during processing (such as a duplicate insert) be returned by a Publish call.</p>

**Table 16. Documentation Changes for the Utilities Guide**

CR#	Description
682458	<p>There are undocumented restrictions on user name and password credentials for the interactive mode of the <b>esp_cluster_admin</b> tool. Credentials may contain alpha numeric characters but must always start with an alphabetic character. The document also provides an invalid sample password of <b>1234</b>.</p>

**Table 17. Documentation Changes for Command-Line Messages**

CR#	Description
697065	<p>The command-line help for <b>esp_convert</b>, <b>esp_upload</b>, and <b>esp_subscribe</b> mention options <b>-1</b> and <b>-2</b>, which are no longer supported and should not be used. These options have been removed from the documentation.</p>

## Obtaining Help and Additional Information

Use the Sybase Getting Started CD, Product Documentation site, and online help to learn more about this product release.

- The Getting Started CD (or download) – contains release bulletins and installation guides in PDF format, and may contain other documents or updated information.
- Product Documentation at <http://sybooks.sybase.com/> – is an online version of Sybase documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. In addition to product documentation, the Web site also has links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, Community Forums/Newsgroups, and other resources.
- 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.

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**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.

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## Technical Support

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Get support for Sybase 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 Sybase Technical Support or the Sybase subsidiary in your area.

## Downloading Sybase EBFs and Maintenance Reports

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Get EBFs and maintenance reports from the Sybase Web site or the SAP® Service Marketplace (SMP). The location you use depends on how you purchased the product.

- If you purchased the product directly from Sybase or from an authorized Sybase reseller:
  - a) Point your Web browser 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 Sybase product under an SAP contract:
  - a) Point your browser to <http://service.sap.com/swdc>.
  - b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

## Sybase 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](http://www.sybase.com/detail_list?id=9784)
- For platform certifications, go to <http://certification.sybase.com/ucr/search.do>

## Creating a MySybase Profile

MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

1. Go to <http://www.sybase.com/mysybase>.
2. Click **Register Now**.

## Accessibility Features

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

Documentation for Sybase products 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.

Sybase 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.

## Obtaining Help and Additional Information

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**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.

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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.