SAP®

SAP Sybase Event Stream Processor 5.1 SP03

Windows

Contents

Contents

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 SP03.

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.

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

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 virtualizaton.

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 Solaris x64.

Known Installation Issues

Installation issues for this version of Event Stream Processor.

Table 2. Known Installation Issues

CR#	Description
668057	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. If you install Event Stream Processor in the same directory as older SAP products, do not uninstall.
681675	When starting the SySAM license server, you may receive an error indicating failure to connect to the license server. This version of SAP 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 **sysam configuration** 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. 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.
707308	When installing ASE 15.0.3 ESD#4 with ESP 5.1 already installed in the same diretory, if you execute $SYBASE\SYBASE.bat followed by **isql -v**, you may receive an error. Backup SYBASE.bat before installing ASE 15.0.3 ESD #4.
715637	When you are installing on Windows overtop 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.
716148, 716109 and 716131	Settings in a response file, generated by performing a Typical installation or by running the console installer, are not recognized when performing a silent installation. To work around this issue, generate a correct response file manually or by running the GUI installer and performing a Custom installation. Refer to the sample response file in the *Installation Guide*.

CR#	Description
720308	The installer may hang or encounter issues without reporting an error condition. This is usually caused when the temporary directory has insufficient disk space.
	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:
	`LAX_DEBUG=true; export LAX_DEBUG`

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	When running example projects from the Welcome Page, the Stream View is empty for some streams.
	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.
	Set the interval back to its default value of 1 before working with any other projects.
717372	The ESP input adapter is available in the Studio palette. The adapter is required for internal processing, but it is not a supported adapter.
	If you want to connect to another Event Stream Processor project, use stream binding instead. For more information, see the *Studio Users Guide*.

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.
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.

CR#	Description
725950 731446	If one or more projects in a cluster repeatedly shut down unexpectedly, you might need to increase the heartbeat timeout value the cluster uses to ensure that projects are running. The default value is 7500 milliseconds (7.5 seconds). **Workaround:** 1. To confirm that the heartbeat timeout is the problem, check the project log (`ESP_HOME/cluster/projects/<cluster-name>/<workspacename>.<project-name>.<instance-number>/esp_server.log`, or in a Studio cluster, `<user's-home-dir>/SybaseESP/5.1/workspace/<workspace-name>.<project-name>.<instance-number>/esp_server.log`). Look for a 720011 message that includes a last contact delta value. The message looks similar to this: ``` 2013-02-22 01:20:55.036 | 12611 | container | [SP-2-720011] (5741.829) sp(12589) Manager.heartbeatApplication() asked to stop. Last contact delta=20568 ``` The delta value is the time in milliseconds between the final contacts between the project and the cluster. If the delta value is close to or larger than the heartbeat timeout value, try increasing the heartbeat timeout value. 2. In an editor, open the node configuration file, `ESP_HOME/cluster/nodes/<nodename>/<node-name>.xml`. 3. Replace the Manager element with this code: ``` <Manager enabled="true"> <!-- The ApplicationHeartbeatTimeout node is op- tional --> <!-- The first Manager in the Cluster will de- termine the value Cluster wide --> <!-- The value is in milliseconds --> <ApplicationHeartbeatTimeout>7500</Application- HeartbeatTimeout> </Manager> ``` **Note:** This is the top-level Manager element, not a Manager element in the Cache | Managers section. 4. Replace the default value of ApplicationHeartbeatTimeout, 7500, with a value larger than the last contact delta found in your log. For example, to increase the timeout to 15 seconds, enter 15000. 5. Copy the new Manager section into the `<node-name>.xml` file for every manager node in the cluster. 6. Restart the cluster, shutting down controller-only nodes first, then manager nodes, and starting all the manager nodes before the controller-only nodes. See the *Configuration and Administration Guide* for detailed instructions.

CR#	Description
743703	When using esp_subscribe, the output may be missing 'ESP_FLAGS="s"'.
	To work around this issue, set the project time-granularity property to a value greater than 1.

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.
680661	The Platform Input and Platform Output adapters are not supported by Event Stream Processor. The `platform_in.cnxml` and `platform_out.cnxml` files are included in the installation, but are for internal use only.
684922 and 684945	When running the Reuters OMM adapter in interactive publish mode, you may experience intermittent stability issues when connected directly to `rmdstest-client` (a Reuters utility bundled with their server).

695586	When using the Database Input adapter and the getData() built-in SPLASH function in the flex stream, there is a compatibility issue between JDK7 and the JDBC driver for MSSQL (3.0.1301.101 and 4.0 CTP3). The problem occurs when mapping a `datetime2` datatype into Event Stream Processor `timestamp` or `string` datatypes as the adapter executes queries such as a SELECT statement. The value that is read in is incorrect. To work around this issue, use the SQL convert() built-in function to cast a `datetime2` column into a `varchar`. For example, modify a SELECT statement like this:
	
	```select c_bigdatetime from newalltypes```
	
	into this:
	
	```select convert(varchar(30), c_bigdatetime, 121) from newalltypes```
	
	where the third argument value of 121 is the format to which the `datetime2` field will be converted.

CR#	Description
714685	You must make a few changes so that Java external adapters from Event Stream Processor 5.0 are compatible with ones from 5.1. • 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.
715027	A custom internal adapter that was written using the 5.1 version of the `GenericAdapterInterface.h` file is not compatible with an adapter that was written using the 5.0 version. To make these adapters compatible in 5.0, change the following function signatures for these files to the 5.1 version: • change `int getTotalRowsProcessed(void*)` to `int64_t getTotalRowsProcessed(void*)` • change `int getNumberOfBadRows(void*)` to `int64_t getNumberOfBadRows(void*)` • change `int getNumberOfGoodRows(void*)` to `int64_t getNumberOfGoodRows(void*)`
715811	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. To avoid this issue, ensure that the publisher issues a "close" on the socket connection before exiting.
716339	The CSV Input adapter does not process the last line of the CSV input file. To ensure that all data in the file is processed, add an empty line at the end of the file.
716843	If you stop the Database Input adapter while it is reading data and then start it again, the adapter does not start and therefore, does not complete reading data. To work around this issue, restart the ESP Server, and if you did not configure the adapters to start automatically, then manually start the Database Input adapter.
716844	If you drop the table that the Database Input adapter is polling data against, the adapter crashes. To work around this issue, restart the ESP Server, and if you did not configure the adapters to start automatically, then manually start the Database Input adapter.
N/A	Install Microsoft .NET Framework version 4.0 or higher prior to installing the ESP Add-In for Microsoft Excel.

CR#	Description
730001	When using schema discovery for the SAP HANA Output adapter, no schema is discovered if you specify a table name prefixed by its schema name. Also, if you have the same table name appearing under multiple schemas in your target SAP HANA database, schema discovery returns incorrect columns.
736995	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. 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.
| 737158 | 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`).<br><br>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:<br><br>```
$JDK_HOME/bin/java" $ADAPTER_JAVA_FLAG "-Duser.dir=
$ESP_ADAPTER_HOME/config" "-Djavax.net.ssl.keyStore=
$ESP_ADAPTER_HOME/bin/wsclient.jks" "-Dja-
vax.net.ssl.keyStorePassword=password" -cp "$ADAPT-
ER_CLASSPATH" $ADAPTER_CLASS "$ADAPTER_CONFIG_FILE"
$ADAPTER_COMMAND
``` |

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 `money` into `money(4)` by default. Manually replace all `money(4)` instances with `money` in the `.ccx` 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	SPLASH lets you define "record event" variables such as: `[integer key1;	integer d1; string t1;] var1;` 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.

Known Issues for SDKs

Learn about known issues for the Event Stream Processor SDKs.

Table 9. SDK Issues

CR#	Description
| 682112 | When using the .NET SDK, to avoid memory leaks when running the example, in the `SubsriberExample.cs` file located in the `$ESP_HOME/examples/net/SubscriberExample` folder, replace:<br><br>```
while (!done)
{
    event1 = subscriber.get_next_event(espError);

    switch (event1.getType())
    {
...
...
    }

}
```<br>with<br>```
while (!done)
{
    event1 = subscriber.get_next_event(espError);

    switch (event1.getType())
    {
...
...
    }
    event1.release();

}
``` |
| 715262 | 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. |

Known Issues for PowerDesigner Modeling

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

Table 10. PowerDesigner Modeling Issues

CR#	Description
721684	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. To work around this issue, add the "Everyone" user to the %"PowerDesigner 16"% folder and give it ReadWrite permission.

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*.

Table 11. Documentation Changes for the Studio Users Guide

CR#	Description
680686	The guide should state: 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. Remove this third duplicate: 1. In the Visual Editor, click **Remove all shapes from diagram** ⊗ to clear out all the shapes. 2. Click **Add all shapes** ⊞ to get the original stream or window and the second duplicate stream or window back. 3. Give the duplicate stream window a unique name.

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

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