

# webMethods CloudStreams Server 10.2 Readme

**April 2018**

This is an innovation release. Innovation releases have a much shorter support cycle than standard releases. To learn more, please visit <http://empower.softwareag.com/innovationrelease/>.

This file contains important information you must read before using webMethods CloudStreams Server 10.2. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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## 1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

## 2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- WST-3634  
Migration of CloudStreams user assets to v10.2 is not supported.  
The `pub.cloudstreams.migration:migrate` service does not migrate user assets to v10.2. The following error is observed when this service is run on CloudStreams v10.2 with a package containing assets created on an older version:  
*"No CloudStreams migrator found for the package."*  
There is currently no workaround for this issue.
- WST-3646  
"SignatureDoesNotMatch" error appears while running an Amazon S3 cloud connector service. This error appears if the cloud connector service involves redirection and is created using AWS Signature Version 3.  
There is currently no workaround for this issue.

## 3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- A CloudStreams REST resource supports only one type of message builder and formatter for all response codes.
- CloudStreams does not support the RPC/encoded style WSDL.
- CloudStreams does not support the RPC/literal style WSDL.
- CloudStreams does not support sharing of Connector Virtual Services, Virtual Services, and Policies across nodes in a clustered setup. These artifacts should be manually deployed to a clustered node on need basis.
- CloudStreams SOAP services support sending an attachment through MTOM as a base64 encoded

input. The support to wrap an attachment as a XOPObject type and sending large attachments is not supported.

- CloudStreams REST services do not support multi-part mime messages in REST service signatures. However, you can prepare the multi-part mime message separately and send it to the REST cloud connector service as an *inputstream*.
- For SOAP based connectors, if the WSDL has multiple bindings for a given service, CloudStreams does not support changing multiple URLs dynamically to connect to the service endpoint.
- WebMethods Mediator and CloudStreams products are not compatible. The products must be installed on separate webMethods Integration Server instances.

## 4.0 Fixes Included in Each Release

This section lists the *latest fix level* that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

### **Release 10.2**

- WST\_10.1\_Fix4

### **Release 10.1**

- WST\_9.12\_Fix3

### **Release 9.12**

- WST\_9.10\_Fix4

### **Release 9.10**

- WST\_9.9\_Fix2

### **Release 9.9**

- WST\_9.8\_Fix2

### **Release 9.8**

- WST\_9.7\_Fix1

## 5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

### **Release 10.2**

- WST-3269  
Multiple errors are observed while executing cloud connector services concurrently.  
For some SaaS back ends, errors such as “Read timed out” and “Premature end of Content” are observed while invoking cloud connector services at the same time. This issue is found in the Apache HTTP library, which is currently used in CloudStreams.  
This issue is resolved.
- WST-3241  
Null JSON response is not supported by CloudStreams server.  
If a REST service returns Null as a JSON response, CloudStreams does not recognize or parse the Null JSON response.  
This issue is resolved.
- WST-3344  
CloudStreams Analytics dashboard does not display all the event records for a given date and time. In the CloudStreams Analytics dashboard, the grid in the Event tab does not show all the records for a given date and time. This is because MashZone NextGen considers date columns as dimension columns, as far as aggregation is concerned.  
This issue is resolved.
- WST-3352  
Provider charts in the API Usage tab of the CloudStreams Analytics dashboard also display data for inbound invocations.  
The provider charts should display data corresponding to the outbound (cloud connector service) invocations only. However, the charts also display data for inbound invocations, with the provider names being displayed as blank values.  
This issue is resolved.
- WST-3350  
Cloud connector services, which allow multiple operations/objects selection, do not persist duplicate operations/objects in the cloud connector service node.  
From v10.1, the CloudStreams server allows one resource/operation that can take/return multiple operations/objects in the request or response. For example, in the OData connector, you can select an operation as *changeset*, which allows you to select multiple operations/objects. For the *changeset* operation, if you select a combination of “create” and “Account” multiple times, even then it does

not get stored in the cloud connector service node.  
This issue is resolved.

- WST-2819  
CloudStreams fails to parse a response when the response formatter/builder is configured as “binary”, and the request Accept header is set to “application/json”.  
When the response formatter/builder for a cloud connector service is configured to “binary”, and the Accept header is configured to “application/json”, CloudStreams fails to parse the resulting back end response.  
This issue is resolved.

## **Release 10.1**

- WST-3213  
Issue while adding a custom field as document.  
Cloud connector service allows adding a custom field of type Document. When a custom field data type Document is added to a business object, and the field does not have any child fields, the field appears as a string in the cloud connector service signature.  
This issue is resolved.
- WST-3165  
CloudStreams fails to encode single quotes (') inside a querystring parameter.  
This issue occurs when you invoke back end queries that have single quotes, to quantify certain entity values as part of the filtering criteria, and the criteria is a part of the query string parameter. For example, a query that returns details of an account object for a certain id match is as follows: *Select id from account where id = '84'*. This issue prevents encoding the single quote ('), resulting in service execution failure.  
This issue is resolved.
- WST-3165  
CloudStreams fails to encode single quotes (') inside a querystring parameter.  
This issue occurs when you invoke back end queries that have single quotes, to quantify certain entity values as part of the filtering criteria, and the criteria is a part of the query string parameter. For example, a query that returns details of an account object for a certain id match is as follows: *Select id from account where id = '84'*. This issue prevents encoding the single quote ('), resulting in service execution failure.  
This issue is resolved.
- WST-3195  
CloudStreams does not throw a fault in case of a stream response, if the cloud connector service execution fails with client side fault issues.  
CloudStreams does not throw a fault in case of a stream response if the cloud connector service execution fails with client side fault issues. Instead of fault, the service execution returns a response

with a null body.  
This issue is resolved.

- WST-3192  
Error occurred while enabling the connection.  
While enabling the connection, the following errors are found:  
*Error occurred while enabling the connection: null and Connections alias already exist.*  
This issue is resolved.
- WST-2907  
Some of the alert messages shown in the CloudStreams Admin screens are not localized.  
The connectors enable, disable, and delete alert messages are not localized. The alert message shown while enabling the wire logging is also not localized.  
This issue is resolved.

## **Release 9.12**

- WST-3149  
CloudStreams connector uses the default proxy server alias of Integration Server even if the default proxy server alias is disabled.  
Now CloudStreams does not use the default proxy server alias if it is disabled in Integration Server and skips the proxy route for a connection, if the host name of the connection Provider URL is present in the Integration Server "Proxy Bypass" list.  
This issue is resolved.

## **Release 9.10**

- WST-2378  
CloudStreams does not support creating cloud connector services that have an array of JSON objects without the key/root in the request payload.  
In the absence of a parent root for the collection, it is not possible to represent the objects under the request payload. Because of this limitation, it is not possible to create or invoke services, which expect a root less array in the request payload.  
This issue is resolved.
- WST-2644  
Cloud connector services, which require mapping of parameters, fail to run.  
For a REST based connector, a parameter value cannot be assigned to another parameter by specifying a parameter to parameter mapping. This is because CloudStreams does not support parameter to parameter mapping.  
This issue is resolved. Parameter to parameter mapping is now supported.
- WST-2638  
CloudStreams is unable to handle excludeRoot properties in Request signature using XML.

For a REST based connector that communicates in XML, if the “excludeRoot” option is set to “true”, then while sending a Request to the back end, CloudStreams is not able to exclude the root of the Request.

This issue is resolved.

- WST-2639  
Cloud Connector service signature does not populate the picklist values.  
Cloud Connector service signature does not populate the picklist values even if the schema element has enumeration defined.  
This issue is resolved. Now cloud connector service signature field's picklist attributes are populated with enumerated values available from the schema.

## **Release 9.9**

- WST-2555  
Authentication failure when Twitter resources expect messages to be sent as a query parameter.  
Some Twitter resources expect messages to be sent as a query parameter. While using such resources, if the messages sent contain a space, authentication failure is observed.  
This issue is resolved.
- WST-2524  
User is not able to see service references or dependents for CloudStreams artifacts.  
While checking dependents or references for CloudStreams assets using Software AG Designer, the user is not able to see the service references or dependents.  
This issue is resolved.

## **Release 9.8**

- WST-2126  
Connections after given timeouts are not automatically refreshed using OAuth refresh tokens.  
If OAuth refresh tokens are provided and session management is turned on, CloudStreams connections are not refreshing the access tokens automatically using the provided refresh tokens.  
This functionality may work with only the Salesforce provider and without using any proxies in the connection.  
Workaround: Manually update the access tokens with the latest valid access tokens.
- WST-2142  
Virtual service deployment errors are reported by CloudStreams Server at startup, when a cluster is enabled.  
In a clustered environment, at server startup, when a CloudStreams Server node joins a cluster, for each virtual service deployed on that node, if there is a corresponding entry in the shared virtual services cache, the CloudStreams Server node attempts to undeploy the existing deployed service, and thereafter attempts to redeploy the same service using the shared cache data for that service

entry. Undeploy and subsequent redeploy of the connector virtual service fails with errors reported in the server logs.

Extract of the error for the default SOAP connector virtual service WmCloudStreams.SoapVS:

```
[CLS.0050.0212E] Unknown exception deploying virtual service: WmCloudStreams.SoapVS Cause: 0
[CLS.0050.0048E] Error getting endpoints for service:WmCloudStreams.SoapVS, Cause: Unknown
exception deploying virtual service: WmCloudStreams.SoapVS Cause: 0
[CLS.0030.0356E] VirtualServiceDeployer - unable to get endpoints for WmCloudStreams.SoapVS, caught
this: type (com.softwareag.pg.exceptions.PGException), msg (Error getting endpoints for
service:WmCloudStreams.SoapVS, Cause: Unknown exception deploying virtual service:
WmCloudStreams.SoapVS Cause: 0)
[CLS.0030.0363W] VirtualServiceDeployer.redeployUndeployedIfNecessary - service
(WmCloudStreams.SoapVS) caught this: type (com.softwareag.pg.exceptions.DeploymentException) message
(VirtualServiceDeployer - unable to get endpoints for WmCloudStreams.SoapVS, caught this: type
(com.softwareag.pg.exceptions.PGException), msg (Error getting endpoints for
service:WmCloudStreams.SoapVS, Cause: Unknown exception deploying virtual service:
WmCloudStreams.SoapVS Cause: 0 ))
```

This error is benign. Syncing up virtual service from shared cache is not supported in CloudStreams, so the sync up action performed by the node is redundant.

## 6.0 Documentation Changes

This section describes *significant* changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

### **Release 10.2**

- Large Data Configuration support
- GDPR Compliance
- MTOM support

### **Release 10.1**

- CloudStreams Analytics
- Deploying CloudStreams user-created assets

### **Release 9.12**

- TLS and security related information



- Wire logging information updated
- CloudStreams FAQ and Troubleshooting Guide updated

### **Release 9.9**

- The *webMethods CloudStreams FAQ and Troubleshooting* guide available at <http://documentation.softwareag.com/> provides FAQs and troubleshooting tips.

### **Release 9.8**

- Software AG documentation is now no longer available on the Software AG installer from this release. You can access all Software AG documentation on the [Documentation website](#).

## **7.0 Terminology Changes**

A release is listed in this section only if changes occurred in that release.

## 8.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

### Release 10.2

Added Item	Description
Changes in connection configuration fields	<p>The following new connection fields are added:</p> <ul style="list-style-type: none"><li>• Validate After Inactivity</li><li>• Enable Compression</li></ul> <p>The following connection fields are updated:</p> <ul style="list-style-type: none"><li>• Hostname verifier*</li><li>• Use Stale Checking**</li></ul> <p>The following connection fields are deleted:</p> <ul style="list-style-type: none"><li>• Element Character Set</li><li>• Wait For Continue Time</li><li>• Strict Transfer Encoding</li></ul> <p>*The Hostname verifier field exposes the following closed set of updated options:</p> <ul style="list-style-type: none"><li>• org.apache.http.conn.ssl.DefaultHostnameVerifier</li><li>• org.apache.http.conn.ssl.NoopHostnameVerifier</li></ul> <p>**The default value of <i>Use Stale Checking</i> has been set to <i>true</i>.</p>
Support for large data configuration	<p>Large data configuration enables CloudStreams to send and receive large binary streams over HTTP/HTTPS. If the new option <i>Handle Binary Streams</i> is enabled, then during outbound and inbound invocations, if the stream is greater than the <i>Threshold Size (bytes)</i>, the entire stream is not stored in memory. Threshold Size (bytes) is applicable only if <i>Handle Binary Streams</i> is enabled. Before enabling the large data handling capability of CloudStreams, configure the TSpace properties (watt.server.tspace.*) in the webMethods Integration Server Administrator.</p>
MTOM	<p>You can now transmit and receive binary content from SaaS providers in an optimized and efficient way using the Message Transmission Optimization Mechanism (MTOM).</p>

Added Item	Description
Enhanced Concurrency Support	CloudStreams server now handles concurrent executions of cloud connector services in a more efficient way. This improves how parallel requests are handled without running into concurrency issues.
Enhanced server redirection capabilities	CloudStreams server now supports redirection capabilities with other HTTP methods like PUT and DELETE too. This allows interacting with back ends like AWS S3 for redirected data transfers across different regions and geographies.

## **Release 10.1**

Added Item	Description
Support for form encoded parameter	You can now send simple key value parameters embedded in the Request Body for POST or PUT requests. This uses the default web form encoding, which is <i>application/x-www-form-urlencoded</i> .
CloudStreams Analytics dashboard now supported on MashZone NextGen instead of the legacy MashZone	You can now use the CloudStreams Analytics dashboard with Software AG Mashzone NextGen Server.
Deploy CloudStreams user-created assets using webMethods Deployer	You can now deploy CloudStreams user-created assets such as connections, connector services, and administrative assets or configurations such as oauth token, streaming provider, streaming subscriber and database settings that reside on source webMethods repositories to target webMethods runtime components (runtimes) using webMethods Deployer. You can deploy CloudStreams user-created assets in repository-based deployment only.

Added Item	Description
Support for Single or Multiple Operations and Multiple Business Objects with dependencies	<p>Software AG Designer now displays different Business Object panels based on the following scenarios:</p> <ul style="list-style-type: none"> <li>• Single Operation has a single Business Object</li> <li>• Single Operation has multiple Business Objects</li> <li>• Single Operation has multiple Business Objects with dependencies</li> <li>• Multiple Operations have multiple Business Objects</li> <li>• Multiple Operations have multiple Business Objects with dependencies</li> </ul>
Support for nested, hierarchical, or multi-level business objects	<p>Software AG Designer now displays nested, hierarchical, or multi-level business objects if the resource is designed to support nested business objects. You can expand the nested business objects to display the child-level objects.</p>
Support for NTLM basic authentication	<p>CloudStreams now supports NT LAN Manager (NTLM) authentication protocol. CloudStreams provides basic support for NTLM authentication protocol using the credentials connection group. Limited support is available in this release.</p>
Support for service signatures for back ends having very complex nested document structures	<p>You can now create service signatures for back ends with extremely complex and deep signature structures.</p>
Adding nested custom fields in the cloud connector service business object fields.	<p>You can now add complex nested custom fields while selecting a cloud connector service business object field. This is useful for SaaS back ends where the metadata is dynamic, for example, Amazon DynamoDB.</p>

## Release 9.12

Added Item	Description
Support for Transport Layer Security (TLS) 1.1 and 1.2	CloudStreams now supports the latest versions of TLS standard v1.1 and v1.2. Using Java Secure Socket Extension (JSSE) based libraries, CloudStreams supports TLS v1.1 and v1.2 for outbound connections.
Wire logging message	If you now enable the <b>Connection factory wire logging</b> option from the <b>CloudStreams &gt; Administration &gt; General</b> screen in the Integration Server Administrator, a warning message appears. The message informs the side effects of turning on this setting.

Changed Item	Description
Regrouping between <b>Basic</b> and <b>Advanced</b> views and reordering of fields within the <b>Credentials</b> , <b>Transport Protocol</b> , and <b>Request Headers</b> connection groups.	<p><b>Authentication Type</b> field is now moved ahead of the <b>Preemptive Auth</b> field so that fields in the <b>Basic</b> view stay ahead of the fields visible in the <b>Advanced</b> view for the <b>Credentials</b> connection group.</p> <p><b>Element Character Set</b> and <b>Strict Transfer Encoding</b> fields are moved to the <b>Advanced</b> view for the <b>Transport Protocol</b> connection group.</p> <p><b>Request Header Names</b> and <b>Request Header Values</b> fields are moved to the <b>Advanced</b> view for the <b>Request Headers</b> connection group.</p>

## Release 9.10

Deprecated Item	Replacement, if any
Software AG MashZone based CloudStreams Analytics dashboard.	The Software AG MashZone based CloudStreams Analytics dashboard is deprecated from this release.

## Changed Item

## Description

CloudStreams User Interface

The HTML-based utility used to administer webMethods CloudStreams has a new look and feel. Menu and screen locations have not changed and there is no change in the User Interface functionality.

## 9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

### Release 9.9

#### Added Service

#### Description

pub.cloudstreams.admin.service:batchupdate

The batchUpdate service complements the update service by allowing batches of CloudStreams connector service nodes to be updated in one operation. You can use the batchUpdate service to update multiple CloudStreams connector service nodes from a lower version of the connector API to a higher version.

#### Changed Service

#### Description

pub.cloudstreams.admin.service:update

This service allows you to update a CloudStreams connector service node from one version of connector API to a higher version for various attributes such as the *Connection Alias* and the *Virtual Service Name*. The changes in this service are two new input parameters, *simulate* and *force*.

## 10.0 Copyright Information

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## **11.0 Support**

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

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