

Talend Open Studio for ESB Release Notes

7.2.1

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Adapted for 7.2.1. Supersedes previous releases.

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The content of this document is correct at the time of publication.

However, more recent updates may be available in the online version that can be found on [Talend Help Center](#).

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JSON, JSR 305: Annotations for Software Defect Detection in Java, JUnit, Jackson Java JSON-processor, Java API for RESTful Services, JAXB, Jaxen, Jettison, Jetty, Joda-Time, Json Simple, MetaStuff, Mondrian, OpenSAML, Paracel JDBC Driver, PostgreSQL JDBC Driver, Resty: A simple HTTP REST client for Java, Rocoto, SL4J: Simple Logging Facade for Java, SQLite JDBC Driver, Simple API for CSS, SshJ, StAX API, StAXON - JSON via StAX, Talend Camel Dependencies (Talend), The Castor Project, The Legion of the Bouncy Castle, W3C, Woden, Woodstox : High-performance XML processor, XML Pull Parser (XPP), Xalan-J, Xerces2, XmlBeans, XmlSchema Core, Xmlsec - Apache Santuario, Zip4J, atinject, dropbox-sdk-java: Java library for the Dropbox Core API, google-guice. Licensed under their respective license.

System requirements

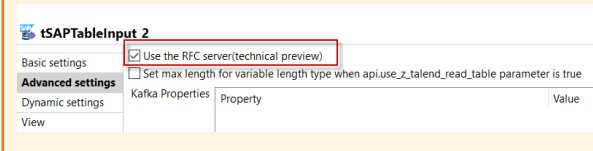
Users should refer to the Talend Installation and Migration Guide on the Talend Help Center (<http://help.talend.com>) for more information on Installation and System Requirements.

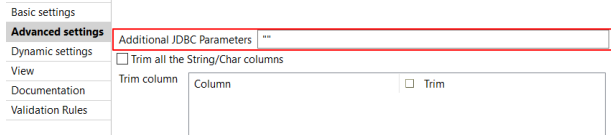

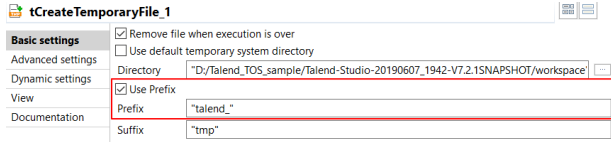
Talend Open Studio for ESB: new features

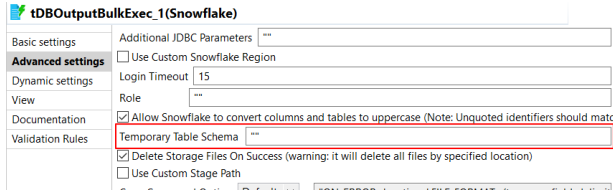
ESB: new features

Feature	Description
FIFO Queue support in cAWSSQS	New queue attributes Message GroupId Strategy(for FIFO queue) and Message DeduplicationId Strategy(for FIFO queue) can now be configured in the advanced settings of the cAWSSQS component.
Core Framework updates	<ul style="list-style-type: none"> • Apache Karaf 4.2.4 • Apache CXF 3.3.1 • Apache Camel 2.23.1 • Apache ActiveMQ 5.15.9 • Spring Framework 5.1 • Spring Boot 2.1
Supported Messaging Brokers for SOAP/JMS and within Routes (cJMS/cWMQ)	<ul style="list-style-type: none"> • Apache ActiveMQ 5.15.9 • IBM WebSphere MQ 8.5, 9.0, 9.1
Java 11 support	Java 11 is now supported for ESB Data services and Routes.

Data Integration: new features

Feature	Description
Eclipse upgrade	The Talend Studio is now based on Eclipse 4.10 to benefit the latest features that Eclipse offers.
Java 11 support	The Talend Studio can now run on Java 11.
No-Internet mode	Now Studio users can launch the Talend Studio without Internet access.
Enhanced SAP support	<p>tSAPTableInput and tELTSAPMap let you select the Use the RFC server option, which allows you to directly extract large volumes of data from an SAP application.</p> <div style="border: 1px solid orange; padding: 5px; margin: 10px 0;"> <p>Warning: This feature is in technical preview status and an experimental feature.</p> </div> 
Enhanced Microsoft CRM support	Microsoft Dynamics WebAPI v9.1 (2018) is now supported.
Additional JDBC parameters support in components	<p>Studio users can now provide additional JDBC parameters in the following components:</p> <ul style="list-style-type: none"> • tFirebirdInput, tFirebirdOutput, tFirebirdRow • tIngresInput, tIngresOutput, tIngresRow, tIngresSCD • tInterbaseInput, tInterbaseOutput, tInterbaseRow

Feature	Description
	<ul style="list-style-type: none"> tNetezzaBulkExec, tNetezzaInput, tNetezzaNzLoad tParAccelBulkExec, tParAccelInput, tParAccelOutput, tParAccelOutputBulkExec, tParAccelRow, tParAccelSCD tPostgresPlusBulkExec, tPostgresPlusInput, tPostgresPlusOutput, tPostgresPlusRow, tPostgresPlusSCD, tPostgresPlusSCDELT tPostgresqlBulkExec, tPostgresqlInput, tPostgresqlOutput, tPostgresqlOutputBulkExec, tPostgresqlRow, tPostgresqlSCD, tPostgresqlSCDELT tVectorWiseInput, tVectorWiseOutput, tVectorWiseRow 
Additional JDBC parameters support in metadata connections	Studio users can now provide additional JDBC parameters for all database connections in the metadata wizard.
Components renamed	<p>The following components are renamed:</p> <ul style="list-style-type: none"> tSalesforceWaveBulkExec to tSalesforceEinsteinBulkExec tSalesforceWaveOutputBulkExec to tSalesforceEinsteinOutputBulkExec
Json Web Token audience	<p>Studio users can now set Json Web Token audience in the following components:</p> <ul style="list-style-type: none"> tSalesforceConnection tSalesforceInput tSalesforceOutput tSalesforceBulkExec tSalesforceGetDeleted tSalesforceGetUpdated tSalesforceOutputBulkExec tSalesforceGetServerTimeStamp 
Default Salesforce API version changed	The default Salesforce API version changed to 45.0.
New check box available for the tCreateTemporaryFile component	<p>Studio users can now specify a prefix in temporary filenames in the tCreateTemporaryFile component.</p> 
Specifying a schema for the temporary table	<p>Studio users can now specify a schema for the temporary table in the following components:</p> <ul style="list-style-type: none"> tSnowflakeBulkExec tSnowflakeOutputBulkExec

Feature	Description
	
<p>Support for PostgreSQL 11</p>	<p>The following components now support PostgreSQL 11 when the database version is 9.0 or later:</p> <ul style="list-style-type: none"> • tPostgresqlBulkExec • tPostgresqlCDC • tPostgresqlConnection • tPostgresqlInput • tPostgresqlInvalidRows • tPostgresqlOutput • tPostgresqlOutputBulkExec • tPostgresqlRow • tPostgresqlSCD • tPostgresqlSCDELTA • tPostgresqlValidRows
<p>Support for UUID database type</p>	<p>The following components now support UUID type when the database version is Vertica 9.0 or later:</p> <ul style="list-style-type: none"> • tVerticaBulkExec • tVerticaConnection • tVerticaInput • tVerticaOutput • tVerticaOutputBulkExec • tVerticaRow • tVerticaSCD

Talend Open Studio for ESB: bug fixes

In addition to the new features a number of minor improvements within the entire products and significant bug fixes have been made. See the corresponding Change Logs on our bug tracking system for more details on the individual issues:

Module	Change Log
ESB	https://jira.talendforge.org/issues/?filter=29830

Talend Open Studio for ESB: deprecated and removed items

ESB: deprecated and removed items

Item	Description
BPM: Expose Process as Service	The support for creating a Rest or SOAP Service directly from a Bonita BPM Process is deprecated from 7.0.1 onwards.
BPM: ESB Connectors	The ESB REST, SOAP Data Service and ESB Route connector for Bonita BPM is deprecated from 7.0.1 onwards.
SAM Server	The SAM Server is deprecated from 7.0.1 onwards as we plan to combine the SAM and Event Logging Feature into one solution within a future release of Talend ESB. Nevertheless the feature to capture Service Activity Events on Talend Runtime will still be possible. But the way we capture them and the way we transport and handle them on the server side will change in a future version and we will no longer provide an explicit SAM Server.
SWAGGER UI	The SWAGGER UI within RESTful Data Services and Routes (tRESTRequest / cREST) are deprecated. We plan to provide a similar feature with the API design and testing. The product portfolio will also be added in future Talend Cloud of 7.x versions.
tRunJob Support for Data Service and Route use cases	The use of tRunJob for ESB use cases within Data Services and Routes is deprecated. For the current release please see also ESB: known issues and known limitations on page 12.

Data Integration: deprecated and removed items

Feature	Description
Publishing settings	The following settings are deprecated from Talend 7.1 onwards: <ul style="list-style-type: none"> • Publish to SpagoBI • Publish to Spagic
MicrosoftAX components	The following MicrosoftAX components are deprecated from Talend 7.2 onwards: <ul style="list-style-type: none"> • tMSAXInput • tMSAXOutput
Sage X3 components	The following Sage X3 components are deprecated from Talend 7.2 onwards: <ul style="list-style-type: none"> • tSageX3Input • tSageX3Output

Feature	Description
OleDB components	<p>The following OleDB components are deprecated from Talend 7.2 onwards:</p> <ul style="list-style-type: none"> • tOleDBInput • tOleDBOutput • tOleDBRow
CentricCRM components	<p>The following CentricCRM components are deprecated from Talend 7.2 onwards:</p> <ul style="list-style-type: none"> • tCentricCRMInput • tCentricCRMOutput
SugarCRM components	<p>The following SugarCRM components are deprecated from Talend 7.2 onwards:</p> <ul style="list-style-type: none"> • tSugarCRMInput • tSugarCRMOutput
SAS components	<p>The following SAS components are deprecated from Talend 7.2 onwards:</p> <ul style="list-style-type: none"> • tSasInput • tSasOutput
SPSS components	<p>The following SPSS components are deprecated from Talend 7.2 onwards:</p> <ul style="list-style-type: none"> • tSPSSInput • tSPSSOutput • tSPSSProperties • tSPSSStructure
MySQL 4 support	The support for MySQL 4 is deprecated.

Talend Open Studio for ESB: known issues and limitations

ESB: known issues and known limitations

We encourage you to consult the JIRA bug tracking tool for a full list of open issues:

<https://jira.talendforge.org/issues/?filter=29831>

All ESB use cases (Routes, REST and SOAP Data Services) require Java 8.

Studio

Limitation	Description
Java PSU not supported	<p>Talend is only supported on Java CPU Versions, not Java PSU.</p> <p>Some users reported problems using Talend Studio with Java PSU versions (such as jdk8_u92), but when reverting to a Java CPU Version (such as jdk8_u91) the problem was resolved.</p> <p>See also: http://www.oracle.com/technetwork/java/javase/cpu-psu-explained-2331472.html</p>
Only WS-I Basic Profile compliant WSDL documents are supported	<p>All WSDL service descriptions should be at least WS-I Basic Profile compliant if you want to use them in Talend Studio. See http://ws-i.org/deliverables/workinggroup.aspx?wg=basicprofile%20for%20more%20information. Other WSDL documents might also work but they are more likely to fail.</p>
tRunJob is supported with limitations	<p>The tRunJob component is supported with limitations, which means that only S4 (Minor) support cases are accepted and no patches are provided. If you use tRunJob within Data Services and Routes (with cTalendJob), support is provided on a "best effort" basis only. In most cases, there are class loading issues which can sometimes be resolved but not always.</p> <p>This is because tRunJob is not designed to work in a Service/Route style (ESB) deployment, so regular support is not provided if you decide to use it, even though it may work in many cases. If you used tRunJob in the past, it is recommended to change your Job Design to use Joblets instead.</p> <p>For DI and non-ESB use cases, it is still a valuable component and will have full support as before.</p> <p>Additionally, the Use dynamic job option is not supported within ESB Routes or Data Services at all.</p>
Issue	Workaround
Route Builder beans cannot be organized in packages [TESB-3701]	None

Issue	Workaround
Beans in a route build can be used to add Java code for the route builder routes, however all beans are currently located in one single package.	
<p>XML payload content is not fully displayed in trace or debug mode</p> <p>When starting a Data Service Job in trace/debug mode, the content of the Document fields of the flows is not displayed fully - only the first line of the XML payload is shown.</p>	If you need to see the XML data you can place a tLogRow component anywhere in your models. Keep in mind that Talend Studio also allows you to disable this component, so that you can enable it for testing inside Talend Studio, but disable it for export or publishing.
Filter can be applied with the CI for ESB to limit the Data Services and Routes which get built and deployed by the CI Builder maven plugin. Nevertheless when a Route uses cTalendJob, it will only work in case the Job and the Route are both part of the filter (criteria).	A recommendation would be to name the Job(s) with the same name as the Route with any extra details after the Route name. By this, the Route and the Job(s) would have the same starting name and would apply to a filter on this partial name. Alternative you can build the entire project where this limitation would also not exist.

Runtime

Issue	Workaround
<p>OSGi Container fails to log messages that were sent to system.err / system.out [TESB-11603]</p> <p>In the tesb.log file you will not see any messages which were sent via system.err or system.out.</p>	If you encounter this issue, you can run the same scenario in Console mode as the system.err and system.out will show up on the console.

Data Integration: known issues and known limitations

We encourage you to consult the JIRA bug tracking tool for a full list of open issues:

<https://jira.talendforge.org/issues/?filter=29826>

Talend Open Studio for ESB: migration

ESB: migration from 6.x.x to 7.2.1

Studio

Item	Description
ESB Studio upgrade	The ESB Studio requires a new installation. You need to export your 6.x, 7.0 or 7.1 projects from your local workspace and import the project with the ESB Studio 7.2.1.
Studio project upgrade	Studio projects can be used without any manual migration. When the Data Services, Jobs and Routes are opened in the ESB Studio, the components that need changes will be upgraded automatically.

Runtime

Item	Description
ESB Runtime upgrade	The ESB Runtime (OSGi Container) requires a new installation. See also Compatibility notes on page 14 for details.

Compatibility notes

Item	Description
Talend ESB container migration	<p>If you want to run your existing Data Services or Routes on the new 7.2.1 Container, you need to re-build, re-publish and re-deploy the Studio models to use the latest code changes.</p> <p>We support the mixed installation and use of Talend ESB container 6.x with Data Services and Routes generated by Talend ESB Studio 6.x and the Talend ESB Infrastructure Services in 7.2.1.</p>
Studio Routes migration	From 6.3.1 onwards, the cMessageEndpoint Libraries are not shipped with the ESB Studio anymore. For more information about how to use Routes generated by ESB Studio older than 6.3.1, see the <Studio_Home>/esb/Readme_cMessageEndpoint_Libraries.txt for details.
Migration of Studio Jobs using SAP with a Talend Runtime Connection Pool	With Talend Runtime 7.1.x and 7.2.x, it is required that the shared connection pool has a fixed name SAP_CONNECTION_POOL. If you have changed it, you need to update your models to use this fixed value.

Talend Open Studio for ESB: hints and notes

ESB: hints and notes

Studio

Item	Description
cAMQP requires the Client ID to be set	<p>When you use the cAMQP component in the Route Builder, make sure you always set the Client ID to a unique value which is not used in other Routes (the <code>clientId</code> header in cAMQP advanced settings.) If more than one cAMQP based Routes are executed in the same Talend Runtime container and the Client ID is not set, you will see some exceptions like:</p> <pre>org.springframework.jms UncategorizedJmsException: Uncategorized exception occurred during JMS processing; nested exception is javax.jms.JMSEException: Broker: localhost - Client: tlnD-spappala(6968):2 already connected from tcp://127.0.0.1:49729</pre>

Runtime

Item	Description
Copying an ESB Container might lead to unexpected behaviour	A Talend Runtime container which was started once can't be copied to a different directory or machine. We recommend to always use the container that is shipped with the product.

Documentation

Talend Help Center

Find out more about how to get the most out of your Talend products on the Talend Help Center:
<http://help.talend.com>.

Open issues

We encourage you to consult the JIRA bug tracking tool for a full list of open issues:
<https://jira.talendforge.org/issues/?filter=18375>

Reporting defects and issues

As a customer of Talend with a valid support contract, you can use our Talend Online Helpdesk or you can contact our customer support by phone and e-mail as stated in your contract.

Often the following information is needed and would help us to more easily evaluate your issue:

- Product and Version which you used (for example, Talend Data Fabric 7.1.1)
- Operating System, for example, Windows Server 2008 R2 SP1 (64bit)
- Version of Java Platform JDK / JRE in use (for example, ORACLE JDK 1.8.0_161)
- Log files and/or screenshots

Also, in order to ensure that the technical support team has sufficient information to help you, describe at least the following in detail:

- your actions up to the point when the problem occurred
- the results you expected

In addition to our support helpdesk, you can also use our community support tools:

- [Talend Community](#).
- You can also look into the [Talend Bug Tracker](#).
- Just keep in mind that only cases you create via one of the Talend Support channels in our Talend Support Helpdesk are treated under the service level agreements we provided in the related contract to you.