



Talend Real-time Big Data Platform

Release Notes

6.4.1

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System Requirements

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

Big Data: New Features

1. Enhancements of Spark Job designer

1. Spark 2.1 is now fully supported
2. More components are available in Spark Batch and Spark Streaming Jobs regarding the following technologies or domains:
 - Google Cloud Platform: Cloud storage, BigQuery, Dataproc distribution and Pub/Sub.
 - Matching components: tMatchIndex and MatchIndexPredict.
 - Natural language processing components: tNLPPreprocessing, tCompareColumns, tNLPMModel, tCompareColumns and tNLPPredict.
 - Data Mapper component in Spark Streaming Jobs: tHMapRecord.
3. Enhancements of existing components:
 - Some Data Mapper components and tDataPrepRun.
 - Support for Hive partitioning has been added to tHiveOutput.
 - Fully support for Kafka 0.10. on Kerberos.

2. Enhancements of Hadoop connection wizard

- Context-smart Hadoop connections:

When defining this connection, you can contextualize the connection parameters using values from different Hadoop environments such as from a test and a production environments, in order to adjust the connection and the Jobs using the connection to the proper environments at runtime by only one click.

- The advanced Spark properties can be centralized in the Hadoop connection wizard for reuse in Spark Jobs.
- Retrieving Hadoop configuration via Jobserver:

If your local machine does not have access permissions to your Ambari or Cloudera manager, you can select a "Retrieve by Jobserver" check box and select your Jobserver to use this Jobserver to fetch the configurations from Cloudera Manager or Ambari.

3. Upgraded support for Hadoop

1. New versions of the following Hadoop distributions are supported:
 - Dataproc 1.1

- Cloudera CDH V5.10
- Cloudera Altus (technical preview) in Spark Jobs
- EMR V5.4/5.5
- HDInsights 3.6
- Hortonworks Data Platform V2.6

4. Talend Administration Center

Non-Big Data	Big Data
Data Management Platform	Real Time Big Data Platform
Data Services Platform	Real Time Big Data Platform
Master Data Management Platform	Real Time Big Data Platform

In case you combine both types, a new **Big Data Enabled** user option is available in Talend Administration Center to grant selected users with Big Data capabilities. A Big Data Enabled user counts for one user in your Big Data license.

This option is also available for the following objects in Talend Administration Center: User Groups, Projects, Project authorizations and Project references. For instance, users which are not Big Data enabled cannot be assigned to a Big Data project.

5. Enhanced Azure support

- Talend Studio now supports retrieving/writing data from/into an Azure Storage table via the two new components tAzureStorageInputTable and tAzureStorageOutputTable.

Big Data: Deprecated Items

The following feature is deprecated in the current release. Deprecated features are no longer recommended for use and may cease to exist in future versions of the product.

- The tAlfrescoOutput component
- The HL7 metadata wizard and the tHL7Input and tHL7Output components

The support for the following Hadoop distributions

- From Hortonwork Data Platform V1.2.0 to Hortonwork Data Platform V2.3.2
- Apache 1.0.0
- From Cloudera CDH 4 to Cloudera 5.4
- From MapR 2.0.0 to MapR 4.1.0
- From Amazon EMR 1.0.3 to Amazon EMR 4.0.0
- From Pivotal HD 1.0.1 to Pivotal HD 2.0
- From Microsoft HD Insight 3.1 to Microsoft HD Insight 3.2

Big Data: Bug Fixes / Change Log

1. Bug Fixes

In addition to the above new features a number of minor improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our bug tracking system for more details on the individual issues:

- <https://jira.talendforge.org/issues/?filter=25944>.

Big Data: Known Issues

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

<https://jira.talendforge.org/issues/?filter=25945>.

Note that this list shows issues from both Talend's Community and Subscription products.

Data Integration: New Features

1. Tutorial videos upon Studio start-up

The Studio now comes with a series of embedded tutorial videos to help users get started. For some operating systems, you may need to install an MP4 decoder/player to play the videos.

2. Deployment versioning and customization

Talend Studio now allows you to manage deployment versions and release/snapshot publishing for selected Jobs globally or individually, and customize deployment information including the group ID, deployment version, and release/snapshot publishing for a particular Deployment tab of the Job in the Job view.

3. Enhanced Nexus artifact repository configuration

When connected to the Talend Administration Center, the Studio now automatically fetches Nexus artifact repository settings, while allowing you to define Nexus repository settings according to your own preferences.

4. Automatic project reference relationships creation on Git push

When you push for the first time a local Git branch created on a project with referenced projects, provided that you have the project references management right, the project reference relationships will be automatically created on the remote repository for your branch.

5. Options at Git push failure

In case of Git push failure, the Studio now allows you to let the Studio update your local Git repository and try a push again automatically, or to stop the push action and update your local Git repository and push again manually.

6. AWS CodeCommit support

The Studio can now connect to an AWS CodeCommit Git repository if configured in the Talend Administration Center.

7. New default TAC username

Talend Studio now uses `security@company.com` instead of `admin@company.com` as the default user name to connect to the Talend Administration Center and fetch a license.

8. Compiler Compliance Level configuration for code generation

The Studio now allows you to quickly switch the JDK compiler compliance level between Java 7 and Java 8 through project settings.

9. Installation and sharing of components delivered out of the release cycle (technical preview)

The Studio now allows you to download and install new components made available out of the release cycle via the Install Additional Packages wizard at Studio start-up or through the Help menu. The downloaded and installed components are then automatically shared on Nexus based on your Nexus artifact repository settings.

10. System routines

The following system routines have been added into Talend Studio:

1. **Relational:** *isNull*
2. **StringHandling:** *SUBSTR*, *LTRIM*, *RTRIM*, *LPAD*, *RPAD*, *INSTR*, and *TO_CHAR*
3. **TalendDate:** *TO_DATE*, *ADD_TO_DATE*, and *TO_CHAR*
4. **TalendStringUtil:** *DECODE*

11. Component enhancements

11.1. Smart tMap

1. You can now quickly search an input or output schema column or multiple columns among hundreds of them in one go.
2. You can now set an expression on multiple output columns in a batch manner.

11.2. Enhanced NetSuite support

1. The NetSuite components have been switched to the new framework to improve user experience.
2. A new component, tNetsuiteConnection, has been created to allow NetSuite connection reuse.
3. The record type selector of tNetsuiteInput and tNetsuiteOutput has been improved to provide access to NetSuite's record type views.
4. The NetSuite components are now able to retrieve customizations from NetSuite - custom record types and custom fields.
5. The tNetsuiteOutput component now supports the native Upsert operation provided by NetSuite.
6. The tNetsuiteOutput component now supports batch processing of records.

11.3. Amazon SQS support

1. Two new SQS components, tSQSMessageDelete which allows you to delete a message from a queue, and tSQSMessageChangeVisibility which allows you to change the visibility timeout of a message, have been added into Talend Studio.
2. The tSQSInput component now allows you to specify the maximum number of messages to return.

11.4. Marketo support

1. The existing Marketo components, tMarketoInput, tMarketoListOperation and tMarketoOutput, have been switched into the new framework and the user interface has been slightly changed.
2. Two new components, tMarketoConnection which allows you to open a connection to Marketo, and tMarketoBulkExec which allows you to import leads or custom objects into Marketo from a local file in the REST API mode, have been created in the new framework.
3. The tMarketoOutput component now allows you to delete leads.
4. The tMarketoInput and tMarketoOutput components now support retrieving and writing custom objects data from/into Marketo.
5. The tMarketoInput and tMarketoOutput components now support dynamic schema.
6. The tMarketoListOperation and tMarketoOutput components support collecting the rows on error using a Row > Reject connection when not in batch mode.
7. A new Marketo metadata wizard has been created, which allows you to centralize the Marketo connection and retrieve the schema of the interested custom objects using REST API.

11.5. Microsoft Azure support

1. The existing Azure Storage components, tAzureStorageConnection, tAzureStorageContainerCreate, tAzureStorageContainerDelete, tAzureStorageContainerExist, tAzureStorageDelete, tAzureStorageGet,

tAzureStorageList, and tAzureStoragePut, have been switched into the new framework and the user interface has been slightly changed.

2. A new Azure Storage Blob component tAzureStorageContainerList, which allows you to list all containers in a given Azure Storage account, has been created in the new framework.
3. Talend Studio now supports managing Azure Storage queues and messages via the seven new components tAzureStorageQueueCreate, tAzureStorageQueueDelete, tAzureStorageQueueInput, tAzureStorageQueueInputLoop, tAzureStorageQueueList, tAzureStorageQueueOutput and tAzureStorageQueuePurge created in the new framework.
4. All existing and new Azure Storage components now support using a shared access signature to access the storage resources without the need for the account key.
5. A new Azure Storage metadata wizard has been created, which allows you to centralize the Azure Storage connection and retrieve the schema of the interested containers, queues and tables.
6. Talend Studio now allows you to manage data in Azure SQL Data Warehouse via the seven new components tSQLDWHClose, tSQLDWHCommit, tSQLDWHConnection, tSQLDWHInput, tSQLDWHOutput, tSQLDWHRollback and tSQLDWHRow.

11.6. Microsoft CRM support

1. The tMicrosoftCrmInput and tMicrosoftCrmOutput components now support ONLINE v2016.
2. The tMicrosoftCrmInput and tMicrosoftCrmOutput components now allow you to specify the maximum number of reconnect attempts to the Microsoft CRM database after the token is expired for ONLINE v2011 and v2016(odata).

11.7. Salesforce support

1. The tSalesforceConnection component has been improved by adding the function of saving or reusing the connection session file.
2. The tSalesforceInput component now supports generating the schema columns based on the specified query and generating the query based on the specified module and schema columns. For the limitations you should be aware of when using this feature, please refer to [tSalesforceInput Limitations](#).
3. The tSalesforceInput component now supports PK (Primary Key) chunking when extracting a large number of records or when the query consistently times out.
4. The tSalesforceOutput component has been improved to allow Salesforce.com to return Salesforce ID for both inserted and updated records.

11.8. SAP support

1. The SAP function module Z_TALEND_READ_TABLE used by Talend Studio has been upgraded to TEDK900218.zip.
2. The tSAPDSOInput and tSAPInfoCubeInput components now support specifying the search condition(s) used to filter the data to be retrieved.

3. The tSAPDSOInput and tSAPInfoCubeInput components now support the dynamic schema.
4. The SAP ELT function has now been supported by the two new components tELTSAPInput and tELTSAPMap (technical preview).

11.9. Snowflake support

1. Four new Snowflake components, tSnowflakeConnection, tSnowflakeInput, tSnowflakeOutput and tSnowflakeClose, which allow you to read/write data from/into a Snowflake table, have been created in the new framework.
2. A new Snowflake metadata wizard has been created, which allows you to centralize the Snowflake connection and retrieve the schema of the interested tables.

11.10. JDBC ELT and SCD support

1. The ELT JDBC components, tELTJDBCInput, tELTJDBCMap, and tELTJDBCOutput now support specifying the metadata mapping file for the database to be used. The supported databases are Exasol, Netezza and Redshift. Other databases may work, but have not been tested.
2. The tELTJDBCOutput component now supports performing an action on the specified table.
3. A new component tJDBCSCDELT, which allows you to track data changes in a source database table using Type 1 and/or Type 2 Slowly Changing Dimensions (SCD) and write the dimension data into a specified SCD table, has been created.

11.11. Others

1. The tFileOutputDelimited component now supports throwing an exception if the specified output file already exists.
2. The DB Version drop-down list is moved from the tELTSybaseOutput component to the tELTSybaseMap component.
3. The tJMSInput component now supports looking up a destination with the JNDI (Java Naming and Directory Interface) name.
4. The tEXAOutput component now supports the dynamic schema.

12. Version upgrades

12.1. Metadata Bridge

Talend Metadata Bridge has now been upgraded to version 9.1.

12.2. EXASOL

EXASOL v6.0 is now supported.

12.3. Excel

Excel 2016 is now supported.

12.4. Microsoft CRM

Microsoft CRM 2016 and Dynamics 365 are now supported.

12.5. Salesforce

Salesforce has been upgraded to v39.

12.6. SAP

SAP BW 7.5 is now supported.

12.7. Sybase

Sybase v16.0 is now supported.

12.8. NetSuite

The NetSuite components now support NetSuite 2016.

13. Talend Administration Center

1. You can combine non-Big Data and Big Data licenses, as the matrix below specifies.

Non-Big Data	Big Data
Data Management Platform	Real Time Big Data Platform
Data Services Platform	Real Time Big Data Platform
Master Data Management Platform	Real Time Big Data Platform

In case you combine both types, a new **Big Data Enabled** user option is available in Talend Administration Center to grant selected users with Big Data capabilities. A Big Data Enabled user counts for one user in your Big Data license.

This option is also available for the following objects in Talend Administration Center: User Groups, Projects, Project authorizations and Project references. For instance, users which are not Big Data enabled cannot be assigned to a Big Data project.

2. Admin rights have been segregated:

The **Security Administrator** role allows to manage users, licenses, security configuration and can access rights management. Security Administrators are free of charge.

The **Administrator** role manages takes on the other administration tasks.

3. The new default admin user is security@company.com with the role **Security Administrator** and the type **No Project Access**.

4. **Data Quality** user and project types have been renamed **Data Management**.

5. A new right **Project references management** is required to access the **Project reference** page. This right is granted by default to Administrator, Designer and Operational Manager roles.

6. Ten additional custom roles allow you to define custom combinations of user rights.

7. In case LDAP is used, it is possible to not explicitly specify LDAP attributes for SVN/Git credentials fields in Talend Administration Center. Users will provide their credentials when connecting to Talend Studio.

8. For SSO, custom mappings between Talend Administration Center and the SAML assertion can be configured.

9. For SSO, non-email login can be used.

10. The Sonatype Nexus provided with Talend Administration Center has been upgraded to version 2.14.3-02.

Data Integration: Deprecated, Removed and Hidden Items

1. Deprecated Items

1. In the Studio, the following are deprecated in the current release:

- The tAlfrescoOutput component
- The HL7 metadata wizard and the tHL7Input and tHL7Output components
- The Component Designer perspective
- The Axis WebService (WAR) and Axis WebService (ZIP) build job types
- The Enable commandline server option used to add a remote CommanLine server

2. The following Talend Administration Center web service APIs are deprecated in the current release:

- ConfigurationStateHelperService
- AdministratorWebService

3. The following Talend Administration Center features are deprecated in the current release:

- Publisher - consider using the Maven-based build instead
- SVN/GIT-based tasks in Job Conductor - consider using the Nexus tasks instead
- Backup (SVN + DB) - SVN and DB admins are responsible for performing the required backups
- Repository Browser

4. The Repository Migration feature of the Repository Manager is deprecated in the current release.

You should rely on deploying release version tasks from Nexus. In this case, you do not need to migrate repositories.

Note that the deprecated features are no longer recommended for use and may cease to exist in future versions of the product.

Data Integration: Bug Fixes / Change Log

1. Bug Fixes

In addition to the above new features a number of minor improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our bug tracking system for more details on the individual issues:

- <https://jira.talendforge.org/issues/?filter=25929>

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=25682>

<https://jira.talendforge.org/issues/?filter=25928>

Note that this list shows issues from both Talend's Community and Subscription products.

1. tSalesforceInput Limitations

The following SOQL queries are not supported for the guess schema and guess query features of tSalesforceInput:

- the SOQL query using the aggregate function
- the SOQL query using the TYPEOF expression
- the SOQL query using alias
- the prefix in the SOQL query is the same as the module name after FROM

For example, `SELECT Account.Name, (SELECT Contact.LastName FROM Account.Contacts) FROM Account` is not supported, while `SELECT Name, (SELECT LastName FROM Contacts) FROM Account` that performs the same function is supported.

- the SOQL query with multiple modules after FROM

For example, `SELECT Contact.Firstname, Account.Name FROM Contact, Contact.Account` is not supported. However, the child-to-parent and parent-to-child relationship queries are supported, so this query can be improved to `SELECT Firstname, Account.Name FROM Contact`.

- the SOQL query using toLabel()
- the field with the underscore character '_' in its name

2. Java PSU not supported

Talend is only supported on Java CPS Versions, not Java PSU.

Some users reported problems using Talend Studio with Java PSU versions (such as jdk8_u92), but when reverting to a Java CPS Version (such as jdk8_u91) the problem was resolved.

See also: <http://www.oracle.com/technetwork/java/javase/cpu-psu-explained-2331472.html>.

3. Collation limitation with Access

Since 6.0, the Access components in *Talend Studio* support only the General collation mode.

4. OAuth mode in the Salesforce wizard

To establish a Salesforce connection using OAuth2 authentication, you need first to execute a Talend Job to obtain your token file and then initialize it in the wizard.

5. Installation on Mac OS X Sierra

By default, Mac OS X Sierra sets all downloaded files to "quarantine". This prevents you running the Studio.

To launch Talend Studio on Mac OS X Sierra, do the following:

1. Unzip the Studio as usual.
2. Open a **Terminal** window on the folder where you unzipped your Studio.
3. Execute either of the following commands.

```
xattr -d com.apple.quarantine *
```

or

```
xattr -c *
```

You can now launch the Studio as usual.

Data Mapper: New Features

- A new component, tHMapRecord, that lets you map records in a Spark Streaming environment. It takes one input connection from an upstream component, such as tKafkaInput, and can have one or many output connections to other components.
- In the SAP IDoc importer, you can now choose between using the latest segment release or a previous one.
- A new option has been added to the New Structure wizard for CSV files, which lets you generate a default header for files which do not have one.
- For Spark components, when reading XML, JSON, IDOCS, EDI and HL7v2 files, the Start With option now lets you enter a regular expression to match the start of a record.
- Avro files are now supported as input files for Spark components.
- User interface enhancements have been made to the tHMap configuration wizard.

Data Mapper: Deprecated Items

1. Deprecated Items

The following features are deprecated in the current release. Deprecated features are no longer recommended for use and may cease to exist in future versions of the product.

- Database support is deprecated from version 6.4.1. There will be no more developments and features using JDBC drivers, and you are encouraged to use other Data Integration components instead

Data Mapper: Bug Fixes / Change Log

1. Bug Fixes

In addition to the above new features a number of minor improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our JIRA bug tracking system for more details on some of these issues:

- <https://jira.talendforge.org/issues/?filter=25954>

Data Mapper: Known Issues and Known Limitations

We encourage you to consult the JIRA bug tracking tool for a full list of open issues and to see which issues will be fixed in the upcoming release:

<https://jira.talendforge.org/issues/?filter=25955>

1. Java PSU not supported

Talend is only supported on Java CPS Versions, not Java PSU.

Some users reported problems using Talend Studio with Java PSU versions (such as jdk8_u92), but when reverting to a Java CPS Version (such as jdk8_u91) the problem was resolved.

See also: <http://www.oracle.com/technetwork/java/javase/cpu-psu-explained-2331472.html>.

2. Installation on Mac OS X Sierra

By default, Mac OS X Sierra sets all downloaded files to "quarantine". This prevents you running the Studio.

To launch Talend Studio on Mac OS X Sierra, do the following:

1. Unzip the Studio as usual.
2. Open a **Terminal** window on the folder where you unzipped your Studio.
3. Execute either of the following commands.

```
xattr -d com.apple.quarantine *
```

or

```
xattr -c *
```

You can now launch the Studio as usual.

3. Installation on recent versions of Mac OS X with Gatekeeper

Users with a recent version of Mac OS X may need to update their Gatekeeper settings to install Talend products. Gatekeeper is available from OS X 10.7.5.

To do so:

1. Click the Apple icon, and then click **System Preferences**.
2. Under **System Preferences**, click **Security & Privacy**.

3. Under **Security & Privacy**, click the **General tab**.
4. Click the lock icon next to **Click the lock to make changes**, and then identify yourself using the user name and password for an account with administrator rights. Only administrators can change the security settings.
5. Under **Allow apps download from**, select the **Anywhere** radio button then confirm your choice in the dialog box that opens.
6. Close all windows, so that your Mac automatically locks the **Security & Privacy** settings for you again.
7. Install Talend Studio (or whatever other executable you want to install) by following the usual installation procedure. Note that, when you double click the **Talend-Studio-macosx-cocoa.app** file, you will see a warning saying that it is an application downloaded from the Internet, but if you click **Open**, your Mac should let you install it without further issues.
8. Once you have completed the installation process, you can repeat the above steps to return your **Security & Privacy** settings to their previous value if you want.

ESB: New Features

1. Studio

1.1. General

- The Studio now supports a local Talend Runtime in the Studio to test Routes and Data Service Jobs easily within the OSGI Runtime environment. (The local Talend Runtime is set via **Window > Preferences > Talend > Run/Debug > ESB Runtime** in the Studio.)
- Deployment versioning and customization - Talend Studio now allows you to manage deployment versions and release/snapshot publishing for selected Jobs (ESB: Jobs, Routes and Services) globally or individually, and customize deployment information including the group ID, deployment version, and release/snapshot publishing for a particular Deployment tab of the Job (ESB: Job, Route and Service) in the Job view (ESB: Job or Services view).
- Enhanced Nexus artifact repository configuration - When connected to the Talend Administration Center, the Studio now automatically fetches Nexus artifact repository settings, while allowing you to define Nexus repository settings according to your own preferences.

1.2. Data Services (REST)

- The tRESTRRequest and tRESTRClient components are enhanced to support the Open ID Connect authentication type.
- The tRESTRRequest component is enhanced to expose the Swagger specification and to support the Swagger UI at runtime, which provides an online API Documentation in human-readable form to explore the API.

1.3. Data Services (SOAP)

There are no new features in this release.

1.4. Route Builder

- The cCXF component is renamed cSOAP.
- The cCXFRS component is renamed cREST with the following enhancements.
 - Support for the Open ID Connect authentication type.
 - New options to expose the Swagger specification and to support the Swagger UI at runtime, which provides an online API Documentation in human-readable form to explore the API.
- The cConfig component can now upload and manage external jars in Talend Artifact Repository, which provides much easier usage for Route developers to share libraries across the team.

- The cTalendJob component is enhanced with a new option **Fast Job Invocation** in the advanced settings to bind the life cycle of the embedded Talend Job to the start and stop state changes of the connected Camel Endpoint.
- Routelets have now more options to take over context parameter from the parent Routes.

2. Runtime

- Apache Karaf is upgraded to 4.1.1.
- Apache CXF is upgraded to 3.1.11.
- Apache ActiveMQ is upgraded to 5.14.5.
- Apache Camel is upgraded to 2.17.6.
- ESB Microservices uses the embedded Tomcat 8.0.44.
- Talend Runtime uses the Eclipse Jetty 9.3.14.
- The Service Registry service is enhanced to support Service Metadata.
- Talend Identity Management Service is no longer available with Talend ESB in the `add-ons/tidm` folder. It is replaced by the general Talend Identity and Access Management (Talend IAM) with the Talend Platform installation.

3. Administration Center (TAC) and CommandLine

3.1. TAC

- The Service Registry page is enhanced to support management of the Service Metadata.

3.2. CommandLine

There are no new features in this release.

ESB: Deprecated and Removed Items

1. Deprecated Items

The following features are deprecated in the current release. Deprecated features are no longer recommended for use and may cease to exist in future versions of the product.

- Support for Spring Dynamic Modules on Talend Runtime

The Spring Dynamic Modules on Talend Runtime is deprecated from version 6.3 onwards.

- Support for Archiva artifact repository

The Archiva artifact repository is deprecated from version 5.6 onwards.

- Support for Hyperic Plugins

The Hyperic Plugins to monitor the related Talend ESB Services (CXF), Routes (Camel), Messaging (AMQ) and Runtime (Karaf) with VMWare vRealize Hyperic (Hyperic HQ) are deprecated from version 6.3 onwards.

2. Removed Items

There are no removed features in this release.

ESB: Bug fixes and change log

In addition to the above new features a number of improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our bug tracking system for more details on the individual issues:

- Talend ESB 6.4.0 Release Notes Report: <https://jira.talendforge.org/secure/ReleaseNote.jspa?projectId=10186&version=21102>.
- Talend ESB 6.4.1 Release Notes Report: <https://jira.talendforge.org/secure/ReleaseNote.jspa?projectId=10186&version=22022>.

As Talend ESB is based on Talend Unified Platform, you will find general changes of the Studio and Administration Center (TMC) which apply to all Talend Subscription products in Talend UP (TUP) and Talend DI (TDI) JIRA Projects.

ESB: Known Issues

We encourage you to consult the JIRA bug tracking tool for a full list of Known Issues. This report of Known Issues is intended to highlight issues which might be of broader interest or impact for easier accessibility. The report does not represent the full list of known bugs.

<https://jira.talendforge.org/issues/?filter=25953>.

Note that this list shows issues from both Talend's Community and Subscription products.

1. Installer

1.1. Installation on Mac OS X Sierra

By default, Mac OS X Sierra sets all downloaded files to "quarantine". This prevents you running the Studio.

To launch Talend Studio on Mac OS X Sierra, do the following:

1. Unzip the Studio as usual.
2. Open a **Terminal** window on the folder where you unzipped your Studio.
3. Execute either of the following commands.

```
xattr -d com.apple.quarantine *
```

or

```
xattr -c *
```

You can now launch the Studio as usual.

1.2. Installation on recent versions of Mac OS X with Gatekeeper

Users with a recent version of Mac OS X may need to update their Gatekeeper settings to install Talend products. Gatekeeper is available from OS X 10.7.5.

To do so:

1. Click the Apple icon, and then click **System Preferences**.
2. Under **System Preferences**, click **Security & Privacy**.
3. Under **Security & Privacy**, click the **General** tab.
4. Click the lock icon next to **Click the lock to make changes**, and then identify yourself using the user name and password for an account with administrator rights. Only administrators can change the security settings.

5. Under **Allow apps download from**, select the **Anywhere** radio button then confirm your choice in the dialog box that opens.
6. Close all windows, so that your Mac automatically locks the **Security & Privacy** settings for you again.
7. Install Talend Studio (or whatever other executable you want to install) by following the usual installation procedure. Note that, when you double click the **Talend-Studio-macosx-cocoa.app** file, you will see a warning saying that it is an application downloaded from the Internet, but if you click **Open**, your Mac should let you install it without further issues.
8. Once you have completed the installation process, you can repeat the above steps to return your **Security & Privacy** settings to their previous value if you want.

1.3. Custom Installation of Talend Runtime and Job-Server on the same server might cause port conflicts [\[TUP-832\]](#)

Symptoms: If you install Talend Runtime and Job-Server as Service on the same machine, you need to make sure that you change the Job-Server port of the standalone Job-server. Otherwise these ports will be in conflict with the Job-Server included in Talend Runtime, which uses the same default ports as the standalone Job-Server.

Workaround: As a workaround, consider first if you really need the standalone Job-Server, the Talend Runtime (which also includes a Job-Server, for DI use only), or if you need both on the same machine. Only in the last case you should make sure that you use other port during the setup for the standalone Job-Server (a configuration page is shown during installation).

2. Studio

2.1. Route Builder beans cannot be organized in packages [\[TESB-3701\]](#)

Symptoms: 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.

Workaround: None

2.2. XML payload content is not fully displayed in trace or debug mode

Symptoms: 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.

Workaround: 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.

2.3. Modifications to components in the source Route are not propagated to test cases [\[TESB-17405\]](#)

Symptoms: When you change the configuration of a component in a Route, the changes are not propagated to the related Route test cases automatically.

Workaround: You can close the test case and reopen it to get the changes in the components propagated in the test case.

3. Runtime

3.1. OSGi Container fails to log messages that were sent to system.err / system.out [\[TESB-11603\]](#)

Symptoms: In the tesb.log file you will not see any messages which were sent via system.err or system.out.

Workaround: 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.

3.2. Container Shutdown takes long in some cases if the Event Logging Feature is installed [\[TESB-19808\]](#)

Symptoms: The Shutdown time is minutes instead of seconds in some cases when the Event Logging Feature is installed and messages still needs to be delivered.

Workaround: If you encounter this issue, you can set the parameter `org.apache.aries.blueprint.preemptiveShutdown = false` in the `container/etc/config.properties`.

4. Microservices

4.1. cHttp in Microservices cannot use the Microservice HTTP port. [\[TESB-19655\]](#)

Symptoms: Routes with cHTTP as consumer (providing a HTTP Endpoint) will fail in a Microservice deployment if they use the same port as the microservice container because Port 8065 is used as the Microservice Default HTTP Port.

Workaround: If you encounter this issue, just use another port that is different from the default Microservice Port.

ESB: Known Limitations

This section contains limitations on how you use the product that you need to be aware of.

1. General

All ESB use cases (Routes, REST and SOAP Data Services) require Java 8 now. Talend ESB Studio and Talend ESB Runtime only support Java 8.

2. Studio

2.1. Java PSU not supported

Talend is only supported on Java CPS Versions, not Java PSU.

Some users reported problems using Talend Studio with Java PSU versions (such as jdk8_u92), but when reverting to a Java CPS Version (such as jdk8_u91) the problem was resolved.

See also: <http://www.oracle.com/technetwork/java/javase/cpu-psu-explained-2331472.html>.

2.2. Only WS-I Basic Profile compliant WSDL documents are supported

All WSDL service descriptions should be at least WS-I Basic Profile compliant if you want to use them in the ESB Studio. See <http://ws-i.org/deliverables/workinggroup.aspx?wg=basicprofile> for more information. Other WSDL documents might also work but they are more likely to fail.

2.3. Activity Monitoring Console / Components only with limitations

The Activity Monitoring Console as provided in the Studio and the related Dashboard screens can be used to visualize tLogCatcher, tStatCatcher and tFlowMeterCatcher events. In Talend Enterprise ESB there are some limitations that you need to consider for these components and the related features in the Studio:

- tLogCatcher can be used in Data Services and Jobs, but the tLogCatcher component must be explicitly included in the Job and the use of a database for logging is recommend in this environment (Talend Runtime - OSGi Container).
- tStatCatcher (including the use of the tStaCatcher option provided in the Advanced Settings of some Components) and tFlowMeterCatcher can be used only in Jobs which are not defined as **Keep Listening** but not in Data Services (where the operations are implemented in **Keep Listing** Jobs). Also these components

must be explicitly included in the Job and the use of a database for logging is recommended in this environment (Talend OSGi container).

- tLogCatcher, tStatCatcher and tFlowMeterCatcher by the entire Activity Monitoring Console feature cannot be used within Routes developed using the Route designer with the Studio, which means Jobs called by cTalendJob are not supported to use these components at all.
- Note that you can use the AMC view in Talend Enterprise ESB Studio but the related AMC Web-Console in TAC is only provided with a license which contains the DI Product (for example, Talend Platform for Data Services license).

2.4. tWaitForXXX components are not supported in Talend ESB Data Services and tRoute Jobs

The **tWaitForFile**, **tWaitForSqlData** and **tWaitForSocket** components are not supported to be used in ESB Data Services (REST&SOAP) or in **tRouteInput** based Jobs (cTalendJob use cases).

2.5. tRunJob is supported with limitations

The tRunJob can be used in general within Data Services and Routes (with cTalendJob), but it is recommended to avoid it and consider some specific testing upfront if you use it. Additionally, the **Use dynamic job** option is not supported within ESB Routes or Data Services.

3. Runtime

3.1. Rest Services built from the Studio by the Build Job -> OSGI Bundle for ESB option do not install the Talend Data Mapper feature automatically

Symptoms: When you deploy a REST Provider, REST Client or SOAP Consumer Job which was built by the Build Job -> OSGI Bundle for ESB option with the existence of a tHMap component, the Talend Data Mapper Feature on Runtime is not automatically installed (as the jar cannot contain a feature file).

Workaround: Use the Publish option and deploy it via the ESB Conductor, in which case the Talend Data Mapper feature is automatically installed. Or install the Talend Data Mapper feature manually either by the `features:install talend-data-mapper` command or via the Talend Runtime Web Console (Karaf Admin Web UI).

3.2. Talend LogServer privacy

Symptoms: When using Talend-LogServer, by default, event logs are stored without specific security protection and as such all logs are visible to anyone with access to the server (via an HTTP URL within your network).

Workaround: For information on how to deactivate the Talend Administration Center Logging Screen and Talend Log Server, see the article about *How to disable the display of log events on the Logging page of Talend Administration Center* on Talend Help Center (<https://help.talend.com>).

3.3. OpenID authentication does not supports username containing capital letters

Symptoms: OpenID authentication only supports usernames in lower case. If the username contains capital letters, Talend STS (Security Token Service) will throw an exception that the user is not found.

Workaround: If you want to use OpenID authentication, the username must be all in lower case.

3.4. Runtime shutdown on Ctrl+C when data is actively printed to the console (Windows Only)

Symptoms: On Windows only and only when the Talend Runtime Console is used (not with the SSH Client), a Ctrl+C issued by the user when the console actively prints out data (for example, using `log:display` or `log:tail`) can result in a shutdown event for the container.

Workaround: Beside avoiding the use of Ctrl+C in these cases, it is recommended to use the SSH Client to prevent this issue to appear at all.

4. Administration Center (TAC) and CommandLine

There are no known limitations at this time.

ESB: Migration V6.3.x to 6.4.x

Note: this section provides details relevant for the ESB migrating from V6.3.x to 6.4.x

1. Studio

The ESB Studio requires a new installation. You need to export your 6.3.x projects from your local 6.3.x workspace and import the project with the ESB Studio 6.4.x. If you use a shared (remote) Project you need to upgrade Talend Administration Center first, and then connect to your remote project without further actions required.

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.

2. Runtime

The ESB Runtime (OSGi Container) requires a new installation. See also [Compatibility notes on Studio Data Services and Studio Routes](#) for details.

3. Administration Center

Talend Administration Center requires a new installation, please follow the migration chapter in the *Talend Migration Guide*.

The ESB related pages in Talend Administration Center 6.4 are not backward compatible with older versions of the containers except the ESB Conductor, which still supports the deployment and undeployment of tasks into 6.3.x, 6.2.x, 6.1.x, 6.0.x, 5.6.x and 5.5.x containers in addition to 6.4 containers.

Please also consider to use the new **Migration** page in the Administration Center to compare the project before and after migration.

The Talend Identity Management (Talend IDM) service (based on Apache Syncope) provided with Talend ESB in the `add-ons/tidm` folder is no longer available within the Talend ESB package, but is now replaced by a more general Talend Identity and Access Management (Talend IAM) service, which uses port 9080 by default instead of 8080. The Identity Service URL in the ESB Identity and Access Management part of the TAC Configuration Page need to be updated accordingly. If you used Talend ESB with Talend IDM (based on Apache Syncope 1.2) before, you must either re-enter the users and roles (which are now the Groups in Syncope 2.0.2), or follow the migration steps for Apache Syncope 1.2 to Apache Syncope 2.0 as described in <https://syncope.apache.org/docs/reference-guide.html#migration-from-apache-syncope-1-2>. Talend ESB used Users / Roles and User to Role assignments in Syncope 1.2. Now in Syncope 2.0.2 (the currently version in Talend IAM) you will have Users / Groups and User to Group assignments after the migration or in case you re-enter the users manually. Make sure that Groups are used in the place of Roles before in Syncope 1.2.

4. Compatibility notes on Studio Data Services and Studio Routes

If you want to run your existing Data Services or Routes on the new 6.4.x Container, you need to re-build, re-publish and re-deploy the Studio models to use the latest code changes.

We support the mixed installation and use of Talend ESB container 6.3.x/6.2.x/6.1.x/6.0.x/5.6.x with Data Services and Routes generated by Talend ESB Studio 6.3.x/ 6.2.x/6.1.x/6.0.x/5.6.x and the Talend ESB Infrastructure Services in 6.4.x.

Note that due to a change in the `container/etc/org.talend.esb.job.saml.policy` file to use an SHA2 instead of SHA1 algorithm suite, if you run on previous versions of Talend Runtime older than 6.4.1, you need an updated policy using the Basic128Sha256 AlgorithmSuite. This only affects clients who need to communicate with a 6.4.1 provider and who use the design time SAML Token authentication option (tESBConsumer > Authentication > SAML Token). Clients and 6.4.1 provider that use the Service Registry are not affected by this change as they get the policies from the Service Registry.

ESB: Hints and Notes

1. Studio

1.1. cAMQP requires the Client ID to be set

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 `clientId` 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:

```
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
```

2. Runtime

2.1. 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.

3. ESB Java Development

3.1. Using PropertyPlaceholder for Web-Containers

When creating Talend ESB web archives for services using Spring contexts, note that all instances of `PropertyPlaceholderConfigurer` must contain the following properties to avoid placeholder resolution problems during startup of Spring contexts:

```
<property name="ignoreUnresolvablePlaceholders" value="true" />
<property name="ignoreResourceNotFound" value="true" />
```

4. Notes about Git support

- The Git implementation done in Talend has a similar behavior as the SVN one.

- All branches/tags are visible for all projects on the same Git repository. Therefore, if you create some branches/tags for one project, all other projects on the same Git repository will have the same list.
- About the unlock mode: Any item modified will be kept locally, and will never be committed / pushed to the server until the item is unlocked. Project items will be stored temporarily on the stash system of Git if needed, so that they are not pushed until they are unlocked.

5. Microservices

5.1. Context parameters naming for Microservices Deployments

During processing of context parameters for Microservices, be aware of the following two special topics that influence the processing of context parameter during the execution of Microservices. (only for Microservices but not for Talend Runtime)

- Context parameter might be overwritten by OS environment variable which can lead to unexpected side effects. To avoid this, try to use unique names which are not in conflict with names you use in your OS environment.

Among the following parameters, Spring Boot will take the OS environment variable as the first level variable of the highest priority. If you specified the variable with the same name as the system's, it will take system's.

- Commandline arguments,
- OS environment variables.
- Application properties packaged inside your jar.
- Context parameters with some characters, for example, underscore and numbers surrounded by underscores, will be treated according to the Spring Relaxed binding which can lead to unexpected behaviour for your Routes. See <https://github.com/spring-projects/spring-boot/wiki/Relaxed-Binding-2.0> for the transformations and avoid these character and character combinations in your context parameter to prevent conflicts or use them accordingly to take advantage of this effect.

Data Quality: New Features

1. Talend Studio preferences

- A preference page has been added to the Studio preferences to enable users to set the default frequency table parameters. Users can now choose the default number of results shown in frequency and low frequency tables, when viewing analysis results in the Profiling perspective.

2. Data quality components

- Two new matching components, which work in Apache Spark framework, have been introduced in *Talend Studio*, namely *tMatchIndex*, which allows you to index a clean data set in ElasticSearch, and *tMatchIndexPredict*, which allows you to match new records against a data set indexed in ElasticSearch.
- New natural language processing components, which work in Apache Spark framework, have been introduced in *Talend Studio*: *tNLPPreprocessing* which allows you to prepare a text sample, *tNLPMModel* which allows you to create a model for named entity recognition tasks, *tCompareColumns* which compares the values of two columns and can generate features for your model learning tasks and *tNLPPredict* which allows you to automatically label text data with your own model or generic models.
- Much improvement has been done on the *tRuleSurvivorship* component especially to manage conflict rules.
- Much improvement has been done on the *tPatternCheck*, *tPatternExtract* and *tMultiPatternCheck* components.
- Users can now customize the schema of the *tQASBatchAddressRow* component.
- The *tMatchPairing* and *tMatchModel* components directly connects to *Talend Data Stewardship*. The labelling task can now be done with *Talend Data Stewardship*.

Data Quality: Deprecated components

The tQASAddressIncomplete, tQASAddressUnknown and tQASAddressVerified components are deprecated and hidden from the Palette of the Studio by default, but they will continue to work in Jobs users import from older releases.

Data Quality: Bug Fixes / Change Log

A number of improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our bug tracking system for more details on the individual issues:

- <https://jira.talendforge.org/issues/?filter=25683>

Data Quality: Known Issues and Known Limitations

We encourage you to consult the JIRA bug tracking tool for a full list of open issues and to see which issues will be fixed in the upcoming release:

- <https://jira.talendforge.org/issues/?filter=25939>

1. Java PSU not supported

Talend is only supported on Java CPS Versions, not Java PSU.

Some users reported problems using Talend Studio with Java PSU versions (such as jdk8_u92), but when reverting to a Java CPS Version (such as jdk8_u91) the problem was resolved.

See also: <http://www.oracle.com/technetwork/java/javase/cpu-psu-explained-2331472.html>.

2. Installation on Mac OS X Sierra

By default, Mac OS X Sierra sets all downloaded files to "quarantine". This prevents you running the Studio.

To launch Talend Studio on Mac OS X Sierra, do the following:

1. Unzip the Studio as usual.
2. Open a **Terminal** window on the folder where you unzipped your Studio.
3. Execute either of the following commands.

```
xattr -d com.apple.quarantine *
```

or

```
xattr -c *
```

You can now launch the Studio as usual.

3. Installation on recent versions of Mac OS X with Gatekeeper

Users with a recent version of Mac OS X may need to update their Gatekeeper settings to install Talend products. Gatekeeper is available from OS X 10.7.5.

To do so:

1. Click the Apple icon, and then click **System Preferences**.
2. Under **System Preferences**, click **Security & Privacy**.

3. Under **Security & Privacy**, click the **General tab**.
4. Click the lock icon next to **Click the lock to make changes**, and then identify yourself using the user name and password for an account with administrator rights. Only administrators can change the security settings.
5. Under **Allow apps download from**, select the **Anywhere** radio button then confirm your choice in the dialog box that opens.
6. Close all windows, so that your Mac automatically locks the **Security & Privacy** settings for you again.
7. Install Talend Studio (or whatever other executable you want to install) by following the usual installation procedure. Note that, when you double click the **Talend-Studio-macosx-cocoa.app** file, you will see a warning saying that it is an application downloaded from the Internet, but if you click **Open**, your Mac should let you install it without further issues.
8. Once you have completed the installation process, you can repeat the above steps to return your **Security & Privacy** settings to their previous value if you want.

Data Preparation: New Features

This new version brings environment awareness, semantic types management enhancements, operationalization of preparations in Spark Streaming Jobs, connectivity with more data sources, preparation versioning, as well as new functions to apply on your data.

1. Preparation versioning

You now have the possibility to create versions at any moment during your preparations. Use these versions to track changes over time, but most of all to ensure that it is always the same state of a preparation that is used in Talend Standard or Spark Jobs.

2. Promote preparations across environments

You can now work more easily with several Talend Data Preparation environments. Export your preparations from a source environment, and then import them back to the target environment.

3. Single Sign-On

Another step towards a unified platform: Talend Data Preparation, as well as Talend Data Stewardship, now supports Single Sign-On authentication.

4. Interface for semantic type management

Talend Dictionary Service can now be used directly via the Talend Data Preparation interface, making it easier to add, remove or enrich the semantic types used in the application. In addition, compound semantic types are now supported, allowing you to group several semantic types under one category.

5. Self-service connectors

More data sources are available than before. You can now clean, fix and format data directly imported from Salesforce and Amazon S3 in self-service.

In addition, you can export your datasets and preparations back to Amazon S3, to benefit from the highest security and availability standards, with no limit of volume and no constraints of installation and upgrade.

6. Big data

The tDataprepRun component can now be used to apply one of your preparations in a Spark Streaming Job designed in Talend Studio.

7. New functions

Several new functions have been added or updated to improve the enrichment and cleansing possibilities:

- Contains ...
- Convert dates
- Convert distance
- Convert duration
- Delete multiple columns
- Remove consecutive characters
- Remove trailing or leading characters

Data Preparation: Bug Fixes / Change Log

1. Bug Fixes

In addition to the above new features a number of minor improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our bug tracking system for more details on the individual issues:

- <https://jira.talendforge.org/secure/ReleaseNote.jspa?version=21700&styleName=Text&projectId=11631>

Data Preparation: 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=25937>.

Note that this list shows issues from both Talend's Community and Subscription products.

Data Stewardship: New Features

1. New capabilities

Talend Data Stewardship is empowered by the below new capabilities:

- **Grouping campaign:** It is possible now to train the Spark matching model based on data stewards' decisions. Native integration between the Spark matching components and Data Stewardship has been introduced.

Grouping campaigns can also be used for classification/arbitration of groups of records.

- **MDM integrated matching based on Data Stewardship:** Integrated matching is now natively processed in MDM and is based on Data Stewardship to match records which have not been merged automatically.
- **Data model impact analysis:** It is possible now to perform any change on your data model without any restriction.
- **SSO integration:** Another step towards a unified platform, Talend Data Stewardship as well as Talend Data Preparation now supports Single Sign-On authentication.
- **Service Level Agreement (SLA) on task resolution:** Campaign owners can now define due dates at campaign level and also at task level, i.e. from the studio.

2. Enhancements

Talend Data Stewardship is empowered by the below enhancement:

- A new semantic type management User Interface has been integrated in Talend Data Stewardship.
- A new compound semantic type has been introduced.
- The "first valid value" survivorship rule has been introduced in Merging campaigns.
- It is possible now to bulk assign tasks.
- It is possible now to bulk select arbitration choices in Merging and Grouping campaigns.

Talend Data Stewardship: Bug Fixes / Change Log

1. Bug Fixes

In addition to the above new features a number of minor improvements within the entire product and significant bug fixes have been made.

See the corresponding Change Log on our bug tracking system for more details on the individual issues:

- <https://jira.talendforge.org/issues/?filter=25948>

Data Stewardship: Known Issues

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

- <https://jira.talendforge.org/issues/?filter=25921>.

Talend Installer: Known Issues

1. Installation on machines with 8 CPUs

If you are using a machine with 8 logical CPUs, there might be an error with the Installer during the decompression phase.

To prevent this, execute the Installer from the command line and add the following parameter:

```
--parallel-decompression-cores 4
```

2. On Windows Server the first service Initialization after the installation for Talend Data Stewardship, Talend Data Preparation and Talend MDM might fail (**TINSTL-1074**)

Description:

1. Installing multiple Talend Components on the same Windows Server instance as a service:
 - Talend Administration Center
 - Talend Identity and Access Management
 - Talend Data Preparation
 - Talend Data Stewardship
 - Talend DQ Dictionary
 - Talend MDM Server
2. Install all of it as Windows Services
3. Proceed to installation

Current result:

- Installation is successful.
- Windows services are created.
- Windows services are done for being started.

But none of the applications are available. User can't connect:

- Talend Data Stewardship
- Talend Data Preparation
- Talend MDM server

Expected result:

As services are created, and available with "Started" status, all the applications should be available straight after installation.

Workaround:

1. Stop all the services one by one.
2. Restart all the services one by one.

Talend Installer: Known Limitations

1. Embedded MongoDB doesn't support SSL configuration ([TINSTL-1084](#))

The MongoDB embedded into the Installer doesn't support secured / SSL configuration mode.

Workaround:

To install a platform with secured connection with MongoDB, install a MongoDB edition which supports this feature and perform an installation connecting to this external MongoDB instance.

2. The Installation of some services on Windows does not support directories containing a space ([TINSTL-1076](#))

When Installing Talend Services on Windows, some services (Talend Identity and Access Management, MongoDB - which is a prerequisite for Talend Data Preparation and Talend Data Stewardship) do not support spaces in the installation directory (i.e. C:\Program Files).

Workaround:

Avoid installation into a directory containing spaces.

Documentation

1. 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>.

Talend Help Center has undergone a major refurbishment for this release.

2. 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 6.4.1)
- 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_60).
- 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
- the ensuing results that differ from your expected results.

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

- The Talend User's Forum at [Talend Forum](#).
- 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.