



Talend Open Studio for Big Data

Installation and Upgrade Guide

6.0.0

Adapted for v6.0.0. Supersedes previous releases.

Publication date: July 2, 2015

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Table of Contents

| | |
|--|-----------|
| Preface | v |
| 1. General information | v |
| 1.1. Purpose | v |
| 1.2. Audience | v |
| 1.3. Typographical conventions | v |
| 2. Feedback and Support | v |
| Chapter 1. Prior to installing the Talend products | 1 |
| 1.1. Installation requirements | 2 |
| 1.2. Studio specific prerequisites | 3 |
| 1.2.1. Installing database client software (for bulk mode) | 3 |
| 1.2.2. Installing the XULRunner package (for Linux users) | 3 |
| 1.3. Compatible Platforms and Java environments | 3 |
| Chapter 2. Installing Talend Studio for the first time | 5 |
| 2.1. Downloading and installing Talend Studio | 6 |
| 2.2. Launching Talend Studio | 6 |
| 2.2.1. Launching the Studio | 6 |
| 2.3. Configuring Talend Studio | 7 |
| 2.3.1. Identify required external modules | 7 |
| 2.3.2. Install external modules | 10 |
| Chapter 3. Upgrading your Talend products | 13 |
| 3.1. Backing up the environment | 14 |
| 3.2. Upgrading the Talend projects in the Studio | 14 |
| Appendix A. Supported Third-Party System/Database/Business Application Versions | 15 |
| A.1. Supported systems, databases and business applications by Talend components | 16 |
| A.2. Supported Hadoop distribution versions | 17 |

Preface

1. General information

1.1. Purpose

This Installation Guide explains how to install, configure and upgrade the *Talend* modules and related applications. For detailed explanation on how to use and fine-tune the *Talend* applications, please refer to the appropriate Administrator or User Guides of the *Talend* solutions.

Information presented in this document applies to *Talend* products **6.0.0**.

1.2. Audience



This guide is for administrators and users of the *Talend* products.



The layout of GUI screens provided in this document may vary slightly from your actual GUI.

1.3. Typographical conventions

This guide uses the following typographical conventions:

- text in **bold**: window and dialog box buttons and fields, keyboard keys, menus, and menu and options,
- text in **[bold]**: window, wizard, and dialog box titles,
- text in *courier*: system parameters typed in by the user,
- text in *italics*: file, schema, column, row, and variable names,
- text in *italics*: file, schema, column, row, and variable names,
- The  icon indicates an item that provides additional information about an important point. It is also used to add comments related to a table or a figure,
- The  icon indicates a message that gives information about the execution requirements or recommendation type. It is also used to refer to situations or information the end-user needs to be aware of or pay special attention to.
- Any command is highlighted with a grey background or code typeface.

2. Feedback and Support

Your feedback is valuable. Do not hesitate to give your input, make suggestions or requests regarding this documentation or product and find support from the **Talend** team, on **Talend**'s Forum website at:

<http://talendforge.org/forum>



Chapter 1. Prior to installing the Talend products

This chapter provides useful information on software and hardware prerequisites you should be aware of, prior to starting the installation of the *Talend* modules.



In the following documentation:

- recommended: designates an environment recommended by *Talend* based on our experiences and customer usage;
- supported: designates a supported environment for use with the listed component or service;
- supported with limitations: designates an environment that is supported by *Talend* but with certain conditions explained in notes.

1.1. Installation requirements

To make the most out of the *Talend* products, please consider the following hardware and software requirements.

Memory usage heavily depends on the size and nature of your *Talend* projects. However, in summary, if your Jobs include many transformation components, you should consider upgrading the total amount of memory allocated to your servers, based on the following recommendations.

Table 1.1. Memory usage

| Product | Client/Server | Recommended alloc. memory |
|---------------|---------------|-------------------------------|
| <i>Studio</i> | Client | 3GB minimum, 4 GB recommended |

The same requirements also apply for disk usage. It also depends on your projects but can be summarized as:

Table 1.2. Disk usage

| Product | Client/Server | Required disk space for installation | Required disk space for use |
|---------------|---------------|--------------------------------------|-----------------------------|
| <i>Studio</i> | Client | 3GB | 3+ GB |

Ulimit settings on Unix systems

- To make the most out of the *Talend* server modules and improve performance on Unix systems, you should set the limit of system resources (ulimit) to unlimited.

Environment variable configuration: on Windows

Prior to installing your *Talend* solutions, you have to set the `JAVA_HOME` Environment variable:

- Define your `JAVA_HOME` and `JDK_HOME` environment variables so that they point to the JDK directory.

Example: if the JDK path is `C:\Java\JDKx.x.x\bin`, you must set the `JAVA_HOME` and `JDK_HOME` environment variables to point to: `C:\Java\JDKx.x.x`.



It is highly recommended that the full path to the server installation directory is as short as possible and does not contain any space character. If you already have a suitable JDK installed in a path with a space, you simply need to put quotes around the path when setting the values for the environment variable.

Environment variable configuration: on Linux

Prior to installing your *Talend* solutions, you have to set the `JAVA_HOME`, `JDK_HOME` and `Path` environment variables:

- Find the JDK home dir and export it in the `JAVA_HOME` and `JDK_HOME` environment variables.

Example:

```
export JAVA_HOME=/usr/lib/jvm/jdk1.7.0_40/
export JDK_HOME=/usr/lib/jvm/jdk1.7.0_40/
export PATH=$JAVA_HOME/bin:$PATH
export PATH=$JDK_HOME/bin:$PATH
```

- Add these four lines at the end of the global profiles in the `/etc/profile` file or in the user profiles in the `~/.profile` file.

Note that after changing one of these files you have to log on again.

For more information on how to set the `JAVA_HOME` and `JDK_HOME` variables on Unix and Windows systems, see the online [Oracle documentation](#).

1.2. Studio specific prerequisites

To use the Studio properly, you first need to install external programs specific to bulk components (if you want to use Oracle, Sybase, Informix or Ingres bulk functionality).

1.2.1. Installing database client software (for bulk mode)

Some bulk components, like Oracle, Sybase, Informix or Ingres, require database client software to run properly:

- OracleBulkExec uses the *sqlldr* external utility. This utility is available in Oracle clients that must be installed on the computer.
- Informix uses the *dbload* external utility.
- Ingres uses the *sql* external utility.
- Sybase uses the *bcp.exe* external utility. This utility is asked for in the Sybase bulk components' **Basic Settings** view. For more information, see *tSybaseBulkExec*, *tSybaseOutputBulk* and *tSybaseOutputBulkExec* components on the appropriate *Talend Components Reference Guide*.

1.2.2. Installing the XULRunner package (for Linux users)

On Linux, the XULRunner package is required to run the Studio.

The XULRunner package version that is recommended is XULRunner v1.9.2.28.

The XULRunner packages versions that are supported are v1.8.x - 1.9.x and v3.6.x.

1. Download XULRunner version from [this location](#).
2. Unpack the archive file in the same directory where you unpacked the studio archive, but do not unpack it within the Studio folder.
3. Add the following line at the end of the Studio *.ini* file that corresponds to your Linux architecture:

```
-Dorg.eclipse.swt.browser.XULRunnerPath=</usr/lib/xulrunner>
```

where *</usr/lib/xulrunner>* is the *xulrunner* installation path.

For example, if you have unpacked the Studio in a directory under your user home directory */home/<user>/Talend/*, you need to add the following to the *.ini* file:

```
-Dorg.eclipse.swt.browser.XULRunnerPath=/home/<user>/Talend/xulrunner/
```

1.3. Compatible Platforms and Java environments

Please refer to the following grids for a summary of supported OS and Java Runtime environments.

Table 1.3. Java environments

| Support type | Vendor | Version |
|---|-----------------|---------|
| Recommended | Oracle Java/JDK | 8 |
| Supported | Oracle Java/JDK | 7 |
| Supported with limitations ¹ | IBM Java/JDK | 7 |

1. Only supported for CommandLine, JobServer and Talend ESB, and only on Operating Systems Suse SLES and AIX.

For more information on Java specificities (version, OS compatibility), please see the Knowledge Base articles on [Talend Help Center](#).

Table 1.4. Talend Studio

| Support type | OS | | Version | Processor |
|--------------|---------|---|-----------------------|------------|
| Recommended | Unix | Linux Ubuntu | 12.04 | 64-bit |
| | Windows | Microsoft Windows Professional | 7 | 64-bit |
| Supported | Unix | Linux Ubuntu | 12.04 | 32-bit |
| | | Linux Ubuntu | 14.04 | 32-/64-bit |
| | | Redhat Linux Enterprise Server Edition/ CentOS | 7.1 | 64-bit |
| | | Redhat Linux Enterprise Server Edition/ CentOS | 6.x -> 6.1 | 64-bit |
| | | SUSE SLES | 11 | 32-/64-bit |
| | | Windows | Microsoft Windows | 8.1 |
| | Mac OS | Microsoft Windows | 8 | 64-bit |
| | | Microsoft Windows Professional | 7 | 32-bit |
| | | OS X | Yosemite/10.10 | 64-bit |
| | | OS X | Mavericks/10.9 | 64-bit |
| Deprecated | Mac OS | OS X | Mountain Lion/10.8 | 64-bit |
| | | OS X | Lion/10.7 | 64-bit |



Chapter 2. Installing Talend Studio for the first time

We strongly encourage you to read the [Prior to installing the Talend products](#) before starting this chapter.

This chapter details the procedures required to install Talend Studio.

2.1. Downloading and installing Talend Studio

Download

1. Get the archive file from the [download section of the Talend website](#).

Note that the `.zip` file contains binaries for ALL platforms (Linux/Unix, Windows and MacOS).

2. Once the download is complete, extract the archive file on your hard drive.



It is recommended to avoid spaces and long names in the target installation directory path.

Configure the memory settings

- If you want to tune the memory allocation for your JVM, you only need to edit the `.ini` file corresponding to your executable file. For example:
 - For *Talend Studio* on 32bit-Windows, edit the file: `TOS_BD-win32-x86.ini`;
 - For *Talend Studio* on Linux, edit the file: `TOS_BD-linux-gtk-x86.ini`.

The default values are:

```
-vmargs -Xms40m -Xmx500m -XX:MaxPermSize=128m
```

If you only have 512MB of memory on your computer, you can specify the memory allocation as following, for example:

```
-vmargs -Xms40m -Xmx256m -XX:MaxPermSize=64m
```

Learn more on <http://www.oracle.com/technetwork/java/hotspotfaq-138619.html>

2.2. Launching Talend Studio

The following procedures describe how to launch the Studio, how to log in the Studio and how to create your first project.

2.2.1. Launching the Studio

Launch the Studio

- On Windows, double-click the executable file to launch *Talend Studio*.

On Unix-like systems, add execution rights on the desired `TOS_BD-*` binary before launching it.

On a standard Linux box, the command is:

```
$ chmod +x TOS_BD-linux-gtk-x86.sh
$ ./TOS_BD-linux-gtk-x86.sh
```

On Mac OS X, launch the following file:

TOS_BD-macosx-cocoa.app/Contents/MacOS/TOS_BD-macosx-cocoa

Public license

- First screen is a license screen. In the **[License]** window that appears, read and accept the terms of the license agreement to proceed to the next step.

Login and first project

1. As first time user, you need to set up a new project or you can also import a Demo project which gathers numerous job samples.

Select what you want to do next:

Create a new project:

Import a demo project

Import an existing project

Always ask me at startup

2. To import a demo project, select **Import a demo project** and click **Finish**. In the dialog box that opens, select the project you want to import.

To create a new project, select **Create a new project** and enter the name of your project in the corresponding field.

3. Click **Finish** when complete, to open a welcome window and launch the Studio.

2.3. Configuring Talend Studio

Talend Studio requires specific third-party Java libraries or database drivers (*.jar* files) to be installed to connect to sources and targets. Those libraries or drivers, known as external modules, can be required by some of *Talend* components. Due to license restrictions, *Talend* may not be able to ship certain external modules within *Talend Studio*.

2.3.1. Identify required external modules

When you launch *Talend Studio* or select **Help > Install Additional Packages** in the *Talend Studio* menu, if any external modules are found missing for any features, the **[Additional Talend packages]** wizard opens, showing the **Optional** and **Required third-party libraries** check boxes. Make sure these check boxes are selected and click **Finish** to open the **[Download external modules]** dialog box, which lists all the available external modules, displays the license terms under which the external modules are provided, and lets you install all the modules at a single click. For more information, see [Install external modules](#).

On your design workspace, if a component requires the installation of external modules before it can work properly, a red error indicator appears on the component. With your mouse pointer over the error indicator, you can see a tooltip message showing which external modules are required for that component to work.

When you open the **Basic settings** or **Advanced settings** view of a component for which one or more external modules are required, you will see a piece of highlighted information about external modules, followed by an **Install** button. Clicking the **Install** button opens a wizard that will show you the external modules to be installed.

The **Modules** view lists all the modules required to use the components embedded in the Studio, including those Java libraries and drivers that you must install to get the relevant components working.

If the **Modules** view is not shown under your design workspace, go to **Window > Show View... > Talend** and then select **Modules** from the list.

| Status | Context | Module | Description | Required |
|---------------|----------------------|-------------------------|------------------------------------|-------------------------------------|
| Not installed | tJasperOutput | batik-xml-1.7.jar | Required for using this component. | <input checked="" type="checkbox"/> |
| Not installed | tJasperOutputExec | batik-xml-1.7.jar | Required for using this component. | <input checked="" type="checkbox"/> |
| Installed | tCloudStart | bcprov-jdk16-1.46.jar | Required for using this component. | <input type="checkbox"/> |
| Installed | tCloudStop | bcprov-jdk16-1.46.jar | Required for using this component. | <input type="checkbox"/> |
| Installed | plugin:bcprov | bcprov_1.51.0.jar | | <input type="checkbox"/> |
| Installed | tESBConsumer | bcprov_1.51.0.jar | Required for using this component. | <input type="checkbox"/> |
| Installed | tESBConsumer | bcprov_1.51.0.jar | Required for using this component. | <input checked="" type="checkbox"/> |
| Installed | tRESTClient | bcprov_1.51.0.jar | Required for using this component. | <input type="checkbox"/> |
| Installed | tRESTClient | bcprov_1.51.0.jar | Required for using this component. | <input checked="" type="checkbox"/> |
| Not installed | tBonitaInstantiat... | bonita-client-5.2.3.jar | Required for using this component. | <input type="checkbox"/> |
| Not installed | tBonitaDeploy | bonita-client-5.2.3.jar | Required for using this component. | <input type="checkbox"/> |
| Not installed | tBonitaInstantiat... | bonita-client-5.3.jar | Required for using this component. | <input type="checkbox"/> |


The table below describes the information presented in the **Modules** view.

| Column | Description |
|--------------------|--|
| Status | <p>points out if a module is installed or not installed on your system.</p> <p>The icon indicates that the module is not necessarily required for the corresponding component listed in the Context column.</p> <p>The icon indicates that the module is absolutely required for the corresponding component.</p> |
| Context | <p>lists the name of Talend component using the module. If this column is empty, the module is then required for the general use of <i>Talend Studio</i>.</p> <p> This column lists any external libraries added to the routines you create and save in the Studio library folder. For more information, see the <i>Talend Studio User Guide</i>.</p> |
| Module | lists the module exact name. |
| Description | explains why the module/library is required. |
| Required | the selected check box indicates that the module is required. |

In addition to the **Modules** view, the Studio provides a mechanism that enables you to easily identify, download and install most of the required third-party modules from the **Talend** website and directs you to valid websites for the rest.

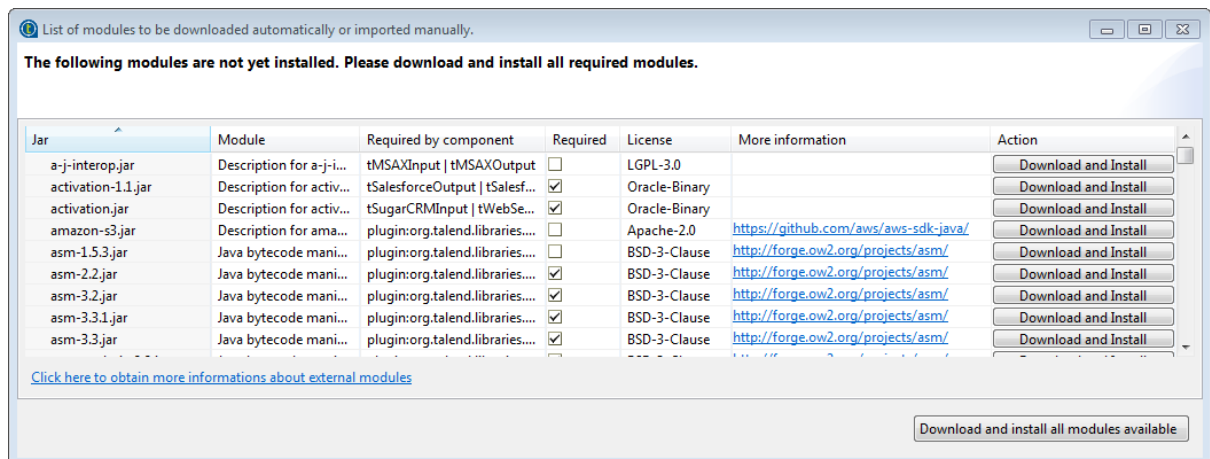
A Jar installation wizard appears whenever any required external module is found missing for any feature in the Studio, including when you:

- drop a component from the **Palette** if one or more external modules required for that component to work are missing in the Studio, or
- click the **Guess schema** button in the **Component** view of a component if one or more external modules required for that component to work are missing in the Studio,

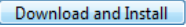


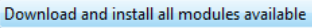

- click **Install** on the top of the **Basic settings** or **Advanced settings** view of a component for which one or more required external modules are missing,
- run a Job that involves components for which one or more required external modules are missing, or
- click the  button in the **Modules** view.



When you click this button, the wizard that appears will list all the required external modules that are not integrated in the Studio.



The table below describes the information presented in the wizard.

| Item | Description |
|---|--|
| Jar | The file name of the external module. |
| Module | A short description about the nature of the module. |
| Required by component | Lists the components that require the external module. |
| Required | The selected check box indicates that the module is required. |
| License | The license under which the module is provided. |
| More information | Provides the URL of the valid website where you can find more information about this module and download the module manually. |
| Action | <p>: Click to open the [Download external modules] dialog box to download and install the module, which is available on the Talend website;</p> <p>Open in browser : Click the link to open the valid website to download the module, which is not available on the Talend website, and then click the jar button to import the downloaded module into your studio;</p> <p>: You need to find and download the module yourself and click the jar button to import it into the your studio.</p> |
|  | Click to open the [Download external modules] dialog box to download and install all the required modules that are available on the Talend website. |
| Do not show again | <p>Select to prevent the wizard from appearing again unless you click the  button in the Modules tab view.</p> <p>This check box shows only when you drop a component, or guess the schema of a database, that requires an external module, or click the Install button on the Component tab of a component that requires an external module.</p> |
| Click here to obtain more information about external modules | Click to go to Talend online documentation on installing third-party modules. |

This wizard lists the external modules to be installed, the licenses under which they are provided, and the URLs of the valid websites where they are downloadable, and allows you to download and install automatically all the

modules available on the Talend website and download those not available on the **Talend** website by following the links provided in the **Action** column and then install them into your Studio manually.

When you drop a component, or guess the schema of a database, that requires an external module for which neither the Jar file nor its download URL information is available on the **Talend** website, the Jar installation wizard does not appear, but the **Error Log** view will present an error message informing you that the download URL for that module is not available. You can try to find and download it by yourself, and then install it manually into the Studio.



To show the **Error Log** view on the tab system, go to **Window > Show views**, then expand the **General** node and select **Error Log**.

2.3.2. Install external modules

To download and install modules in the Studio

To download and install external modules automatically, do the following:

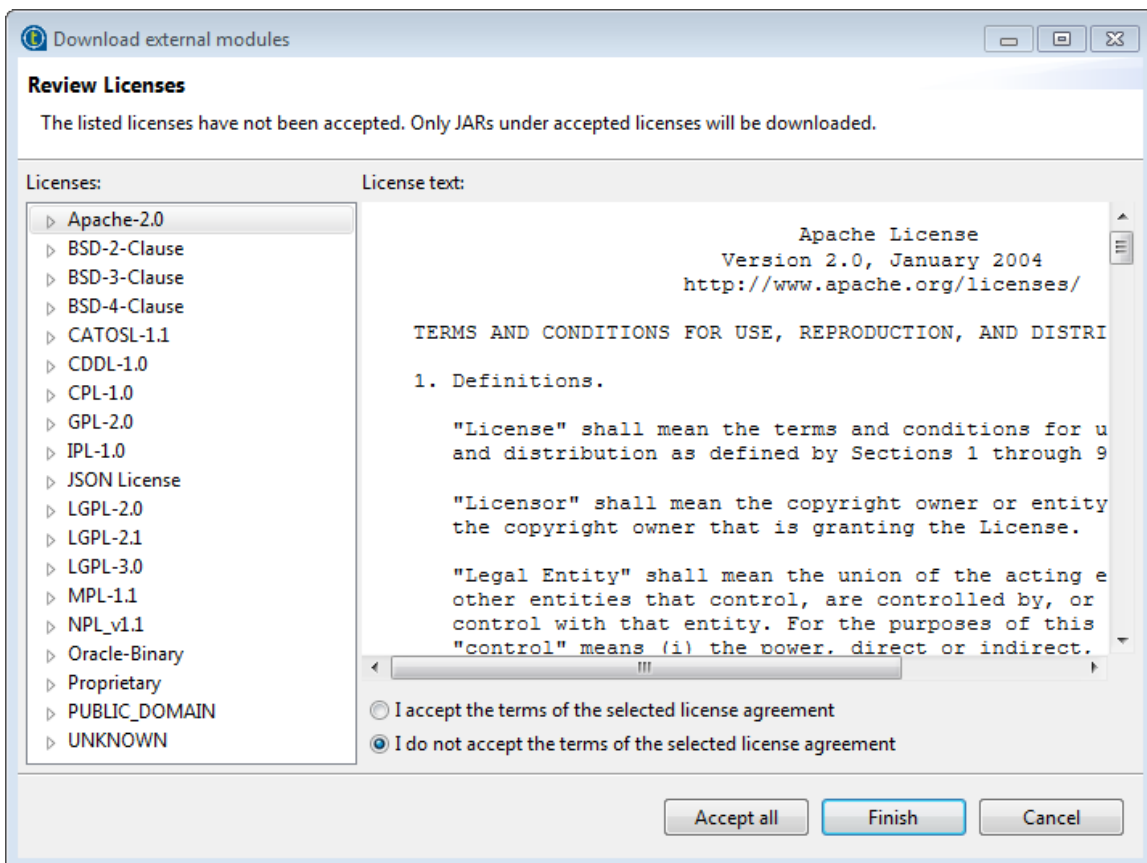


*If you are working behind a network proxy, make sure you have correctly set up your proxy before you can download and install external modules in your Studio. To access the proxy settings, select **Window > Preferences** from the menu to open the [Preferences] window, then expand the **General** node and click **Network Settings**.*

1. In the Jar installation wizard, click the **Download and Install** button to install a particular module, or click the **Download and install all modules available** button to install all the available modules, or select **Help > Install Additional Packages** from the menu to open the [Additional Talend Packages] wizard. From this wizard, make sure the Optional and Required third-party libraries check boxes are selected and click **Finish**. The [Download external modules] dialog box opens.



This [Additional Talend Packages] wizard appears automatically when you launch *Talend Studio* if any additional packages, including external modules, need to be installed for any features to function in the Studio.



2. To download and install the external module(s) provided under a particular license, select that license from the **Licenses** pane, review the license terms, select the **I accept the terms of the license agreement** option, and click **Finish** to start the download and installation process.


To download and install all external modules provided under all the listed licenses, click the **Accept all** button to start the download and installation process.

Upon installation of the chosen external module or modules, a dialog box appears to notify you about the number of modules successfully installed and/or about the modules failed to install, if any.

To install manually an external module you already have in your local file system, do the following:



Talend Open Studio for Big Data does not come with the JDBC drivers for Oracle databases due to Apache license restrictions. For Oracle9i, the required JDBC driver downloadable from Oracle website is named *ojdbc14.jar*, the same as that for Oracle 10g. To enable the JDBC driver for Oracle9i you have downloaded to work in **Talend Open Studio for Big Data**, you have to change the file name to *ojdbc14-9i.jar* before installing it into the Studio.

1. Click the  button in the upper right corner of the **Modules** view or in Jar installation wizard to browse your local file system.

If the **Modules** view is not shown under your design workspace, go to **Window > Show View... > Talend** and then select **Modules** from the list.

2. In the **[Open]** dialog box of your file system, browse to the module you want to install, double-click the *.jar* file, or select it and then click **Open** to install it.

The dialog box closes and the selected module is installed in the library folder of the current Studio.

You can now use the component dependent on this module in any of your Job designs.

To install modules in CommandLine

If you use the Studio and CommandLine on different machines, you need to retrieve the downloaded *.jar* files and add them in CommandLine.

1. Make sure CommandLine is not started, then download the external modules from the **Modules** view as explained in the previous procedure.
2. Copy the downloaded *.jar* files from `<StudioPath>/lib/java` and paste them into `<CommandLinePath>/lib/java`, where `<StudioPath>` and `<CommandLinePath>` are the installation directories of the Studio and CommandLine respectively.

Note that the `<CommandLinePath>/lib/java` folder is not created by default, it is created the first time you start the CommandLine application.

3. Restart CommandLine.

You can now use the component dependent on these modules.

To install modules downloaded from external websites

Some modules are not available on the **Talend** website but can be downloaded directly from external websites. Once downloaded, these modules must be placed in specific folders.

- For the studio, the downloaded modules must be placed in the following folder:

`<StudioPath>/lib/java`



Chapter 3. Upgrading your Talend products

This chapter describes the various operations required to migrate version of the *Talend* solutions.

We assume that you have installed and configured these solutions as described in the [Installing Talend Studio for the first time](#).

The migration and upgrade process includes the following mandatory steps:



These steps usually need to be completed in the following order.

1. Backing up the environment, see the [Backing up the environment](#).
2. Upgrading the Talend projects in the Studio, see the [Upgrading the Talend projects in the Studio](#).

3.1. Backing up the environment

Before you start migrating your *Talend* solutions, make sure your environment is correctly backed up.


The environment backup process includes the following mandatory steps:



These steps usually need to be completed in the following order.

1. Saving the local projects, see [Saving the local projects](#).

Saving the local projects

1. Launch the Studio.
2. Click the  icon and export your local projects to an archive file.

3.2. Upgrading the Talend projects in the Studio

Importing your local projects

1. Launch the new Studio you have just installed.
2. In the login window, select **Import**, then import the archive file containing your local projects.

The local projects are displayed in the **Project** list and appear on the Studio **Repository** view.



For more information on how to export local projects to an archive file, see [Saving the local projects](#).



Appendix A. Supported Third-Party System/ Database/Business Application Versions

This document provides the information about the versions of the systems or databases or business applications supported by Talend Studio.

A.1. Supported systems, databases and business applications by Talend components





The access to these systems, databases and business applications varies depending on the Studio you are using.
























































| Systems/Databases | Versions | OS | Available with... |
|-------------------|---|-------------------------------|---|
| Alfresco | 2.1 | N/A ¹ | All Talend products |
| Amazon Redshift | Initial release of Amazon Redshift | N/A ¹ | All Talend products |
| AS/400 | V5R2 to V7R2 | N/A ¹ | All Talend products |
| Access | 2003/2007 | Windows | Talend products with Data Integration (DI), Master Data Management (MDM), Enterprise Service Bus (ESB) or Big Data |
| Bonita | 5.2.3/5.3.1/5.6.1/5.10.1 | N/A ¹ | All Talend products |
| Cassandra | 2.0.X/2.1.X (Deprecated versions: 1.1.2/1.2.2) | Windows + Linux | Talend products with Big Data |
| CouchBase | 2.0 | Windows | Talend products with Big Data |
| CouchDB | 1.0.2 | Windows | Talend products with Big Data |
| DB Generic | ODBC | Windows | All Talend products |
| DB2 | 9.5/9.7 | Windows + Linux | All Talend products |
| EXASolution | 4 | Windows | Talend products with DI, MDM, ESB or Big Data |
| FireBird | 2.1 | Windows + Linux | Talend products with DI, MDM, ESB or Big Data |
| Greenplum | 4.2.1.0 | Windows (client only) + Linux | Talend products with DI, MDM, ESB or Big Data |
| HSQLDb | 1.8.0 | N/A ¹ | Talend products with DI, MDM, ESB or Big Data |
| Informix | 11.50 | Windows + Linux | All Talend products |
| Ingres | 9.2 | Windows + Linux | All Talend products |
| Interbase | 7 and above | N/A ¹ | Talend products with DI, MDM, ESB or Big Data |
| JavaDB | 6 | Windows + Linux | Talend products with DI, MDM, ESB or Big Data |
| LDAP | No version limitation | Windows + Linux | All Talend products |
| Microsoft AX | Dynamics AX 4.0 Dynamics AX 2012 | N/A ¹ | All Talend products |
| Microsoft CRM | 2011 4.0 | N/A ¹ | All Talend products |
| MS SQL Server | 2000/2003/2005/2008/2012 | Windows + Linux | All Talend products |
| MaxDB | 7.6 | N/A ¹ | Talend products with DI, MDM, ESB or Big Data |
| MongoDB | 2.5.X/2.6.X/3.0.X | Windows + Linux | Talend products with Big Data |
| MySQL | Mysql4 Mysql5 | Windows + Linux | All Talend products |
| Netezza | 7.2 | Windows + Linux | All Talend products |
| Neo4j | 1.X.X/2.X.X | Linux | Talend products with Big Data |
| OleDb | 2000/2003/2005/2007/2010 | N/A ¹ | All Talend products |

| Systems/Databases | Versions | OS | Available with... |
|---------------------|-------------------------------------|------------------|--|
| Oracle | Oracle 8i/9i/10g/11g/11g (11.6)/12c | Windows + Linux | All Talend products |
| ParAccel | 3.1/3.5 | N/A ¹ | Talend products with DI, MDM, ESB or Big Data |
| PostgreSQL | 9.X.X and all previous versions | Windows + Linux | All Talend products |
| PostgresPlus | 8.3 | Windows + Linux | Talend products with DI, MDM, ESB or Big Data |
| Salesforce | until V26 | Windows + Linux | All Talend products |
| SAP | 4.6 | Windows | All Talend products |
| SAP Hana | 1.0 | Windows | All Talend products |
| SQLite | 3.6.7 | Windows + Linux | All Talend products |
| Sybase | 12.5/12.7/15.2/15.5/15.7 | Windows + Linux | All Talend products |
| SybaseIQ | 12.5/12.7/15.2 | Windows + Linux | All Talend products |
| Teradata | 12/13/14/15 | Windows + Linux | All Talend products |
| VectorWise | 2 | Windows + Linux | Talend products with DI, MDM, ESB or Big Data |
| Vertica | 3/3.5/4/4.1/5.0/5.1/6.0/6.1 | Windows + Linux | Talend products with DI, MDM, ESB or Big Data |
| VtigerCRM | Vtiger 5.0 Vtiger 5.1 | N/A ¹ | All Talend products |

1. The test information is not available yet.

A.2. Supported Hadoop distribution versions

- : officially supported.
- : not officially supported.
- : Kerberos kinit mode only.
- : Kerberos kinit mode and keytab mode.

| | | HBase | HCatalog | HDFS | Hive | | Oozie | Pig | Spark | | Sqoop | Talend MapReduce |
|------------|------------------------------|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Hive1 ² | Hive2 ² | | | Standalone | YARN | | |
| HDP | V1.0.0 (deprecated) |  |  |  |  |  |  |  |  |  |  |  |
| | V1.2.0 (Bimota) |  |  |  |  |  |  |  |  |  |  |  |
| | V1.3.0 (Condor) |  |  |  |  |  |  |  |  |  |  |  |
| | V2.0.0 (BigWheel) |  |  |  |  |  |  |  |  |  |  |  |
| | V2.1.0 (Baikal) ³ |  |  |  |  |  |  |  |  |  |  |  |

| | | HBase | HCatalog | HDFS | Hive | | Oozie | Pig | Spark | | Sqoop | Talend MapReduce |
|----------|------------------------|---------|----------|---------|--------------------|--------------------|---------|---------|------------|---------|---------|------------------|
| | | | | | Hive1 ² | Hive2 ² | | | Standalone | YARN | | |
| | V2.2.0 ³ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✗ ■■ | ✗ ■■ | ✓ ■■ | ✓ ■■ |
| Apache | 0.20.2 | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ | ✗ |
| | 0.20.203 | ✓ | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | 0.20.204 | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | 1.0.0 | ✓ ■■ | ✗ | ✓ ■■ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✗ | ✗ | ✗ | ✓ ■■ |
| | 0.90.1 | | | | 0.7.1 | | | 0.9.1 | | | | |
| Cloudera | CDH3 (deprecated) | ✓ | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | CDH4 (from 4.0 to 4.2) | ✓ ■■ | ✗ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✓ ■■ |
| | CDH4.3 + (YARN mode) | ✓ ■■ | ✗ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✓ ■■ |
| | CDH 5.0 (YARN mode) | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✓ ■■ |
| | CDH 5.1 (MR mode) | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ | ✗ | ✓ ■■ | ✓ ■■ |
| | CDH 5.1 (YARN mode) | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ | ✗ | ✓ ■■ | ✓ ■■ |
| | CDH 5.4 (YARN mode) | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✓ ■■ |
| MapR | 1.2.0 (deprecated) | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 2.0.0 | ✓ | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 2.1.2 | ✓ | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 2.1.3 | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 3.0.1 | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 3.1.0 | ✓ | ✓ ■■ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 4.0.1 (YARN mode) | ✓ | ✓ ■■ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | 4.1.0 (YARN mode) | ✓ | ✓ ■■ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | HBase | HCatalog | HDFS | Hive | | Oozie | Pig | Spark | | Sqoop | Talend MapReduce |
|----------------------|-------------------------|---------|----------|---------|--------------------|--------------------|-------|---------|------------|------|---------|------------------|
| | | | | | Hive1 ² | Hive2 ² | | | Standalone | YARN | | |
| Amazon EMR | Apache 1.0.3 | ✓ ■■ | ✗ | ✓ ■■ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✗ | ✗ | ✗ | ✓ ■■ |
| | Apache 2.4.0 | ✓ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ | ✓ |
| | MapR 1.2.8 (deprecated) | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ | ✗ |
| Pivotal HD | 1.0.1 | ✓ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✗ | ✗ | ✓ | ✓ |
| | 2.0 | ✓ ■■ | ✗ | ✓ ■■ | ✓ ■■ | ✓ ■■ | ✗ | ✓ ■■ | ✗ | ✗ | ✓ ■■ | ✓ ■■ |
| Microsoft HD Insight | 3.1 | ✗ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | ✓ |
| Custom ¹ | | | | | | | | | | | | |

1. This enables the connection between the Studio and a custom Hadoop distribution not yet officially supported in the Studio. For further information, see the sections describing how to connect to a custom Hadoop distribution of the Talend Big Data Getting Started Guide or the documentation of any related component that creates the connection to a Hadoop distribution, such as tHDFSConnection.

2. In the Standalone mode, Hive 1 does not support the Kerberos security.

3. This option also allows you to connect to a Teradata's Hadoop platform. For further information about the version of the Hortonworks Data Platform used in the Teradata platform you are using, see Teradata's related documentation.

For further information about the versions of all the supported third-party systems/databases, see [Supported systems, databases and business applications by Talend components](#).

