

Talend Real-time Big Data Platform

Migration Guide

6.4.1

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Preface

1. General information

1.1. Purpose

This Migration Guide explains how to upgrade and migrate 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 **6.4.1**.

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 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,
- 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

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https://community.talend.com/



Chapter 1. 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 *Talend Installation Guide*.

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 *Backing up the environment*.
- 2. Re-installing CommandLine, see *Re-installing CommandLine*.
- 3. Upgrading the administration database, see *Upgrading the administration database*.
- 4. Re-installing JobServer, see *Re-installing JobServer*.
- 5. Upgrading Talend Dictionary Service, see Migrating from Talend Dictionary Service version 6.3.x to 6.4.x.
- 6. Upgrading *Talend Administration Center* Web application, see *Upgrading Talend Administration Center web application*.
- 7. Upgrading Nexus Artifact Repository, see *Upgrading the Nexus Artifact repository*.
- 8. Getting and managing the License key, see Getting and managing the License key.
- 9. Upgrading the Talend projects in the Studio, see *Upgrading the Talend projects in the Studio*.
- 10.Upgrading Talend Runtime, see *Upgrading Talend Runtime*.
- 11. Upgrading Talend Data Stewardship, see Migrating from Talend Data Stewardship version 6.3.x to 6.4.x.
- 12. Upgrading Talend Data Preparation, see Migrating from Talend Data Preparation version 1.X/2.0 to 2.1
- 13. Upgrading the Talend Data Quality Portal, see Upgrading the Talend Data Quality Portal.

The Talend Data Stewardship.	Stewardship Cons	ole is deprecated	since Talend 6.4.	Consider migrating	to Talend Data

1.1. Backing up the environment

Before you start migrating your *Talend* solutions, make sure your environment is correctly backed up and your *Talend Administration Center* configuration settings are saved.

The environment backup process includes the following mandatory steps:



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

- 1. Saving the configuration parameters, see Saving the configuration parameters.
- 2. Saving the local projects, see Saving the local projects.
- 3. Stopping the services, see Stopping the services.
- 4. Backing up the administration database, see Backing up the administration database.
- 5. Backing up the Git or SVN repository, see Backing up the Git or SVN repository.
- 6. Backing up the archive folder holding the generated tasks, see Backing up the archive folder holding the generated tasks.

Saving the configuration parameters

- 1. Log on to *Talend Administration Center* as Administrator.
- 2. Click **Configuration** on the menu tree view to the left. The **Configuration** page opens on the workspace.
- 3. Click the **Export parameters** button located at the top of the **Configuration** page to export your system parameters and settings into a file.

This file will be used when your new instance of *Talend Administration Center* will be set up in order to easily restore your configuration parameters. It also includes information related to the user environment, such as database vendor and version, application server and version, disk space usage and so on.



Please note that this operation only saves the parameters of the Configuration page. The business information (user, project, task creation, etc.) is retrieved during the database migration. For more information about this migration, see *Upgrading the administration database*.

Saving the local projects

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

Stopping the services



All users should be disconnected from Talend Studio.

Prerequisite:

- Save the path to the archive folder in a file as this path is needed in the Backing up the archive folder holding the generated tasks step. This path is defined in the **Generated jobs folder** field of the **Job conductor** node in the **Configuration** file.
- Before you start the backup operations, make sure the following modules/services are stopped:

- · Tomcat,
- · CommandLine,
- · JobServer,
- · SVN,
- · Artifact repository.

For more information about the various services, refer to the Talend Installation Guide.

Backing up the administration database

Backing up the project administration database (*talend_administrator*) is mandatory before starting the migration process.

• If you migrate from database X to database X (ex: from MySQL to MySQL), the database backup is performed directly in the web application in the first step of the migration process. For more information on how to migrate the *Talend Administration Center* database, see *Upgrading the administration database*.

If you migrate from database X to database Y (ex: from H2 to MySQL), you need to back up the administration database manually:

In case your database is MySQL

Execute the following dump command:

On Windows:

```
mysqldump -u tisadmin -ptisadmin talend_administrator >
c:/<DB_Backuppath>/DumpTalendAdministrator.sql
```

On Linux:

```
mysqldump -u tisadmin -ptisadmin talend_administrator >
/home/<DB_Backuppath>/DumpTalendAdministrator.sql
```

If you want to load this back-up file to the talend_administrator database in case of error:

```
mysql -u tisadmin -ptisadmin
talend_administrator</home/<DB_Backuppath>/DumpTalendAdministrator.sql
```

where *tisadmin*, *ptisadmin* and *talend_administrator* are respectively your login, password and database name that you are required to use to connect to the administration database for *Talend* projects.

In case your database is H2

Copy the following files:

```
<Applicationpath>/WEB-INF/Database/talend_administrator.h2.db
```

<Applicationpath>/WEB-INF/Database/talend_administrator.trace.db

as well as subdirectory talend_administrator.lobs.db and its content.

Save these files in a convenient and safe place for backup.

Note that, if your database is H2, an automatic backup is performed every day and at each startup and shutdown of the application server. Oldest backups are deleted when their number is above 30. All these parameters are set by default in the *configuration.properties* file, you can customize them according to your need. For more information, see the *Talend Installation Guide*.

For more information on how to migrate the *Talend Administration Center* database, see *Upgrading the administration database*.

Backing up the Git or SVN repository

After you backed up the administration database, you need to back up the SVN repository where all projects items and metadata are stored. If you are using Git, you do not have any backup operation to perform.

To back up your SVN repository, proceed as follow:

 Execute locally the following command on the machine hosting the SVN repository, using the svnadmin dump command:

```
$> svnadmin dump /talend/svn/repotis > svn_repotis.dump
```

where /talend/svn/repotis is the path on the hard drive where the repository is stored and > is the copy command into a dump file

2. If you need to restore your SVN repository:

Shut down the subversion daemon and delete the /talend/svn/repotis repository.

3. Create again the repository from the backup file, using this command:

```
$> mkdir /talend/svn
$> svnadmin create /talend/svn/repotis
$> svnadmin load /talend/svn/repotis < svn_repotis.dump</pre>
```

where /talend/svn/repotis and svn_repotis.dump are the respective path and name used to store the dump file you created.



Beware that only the repository is restored, not the users.

Backing up the archive folder holding the generated tasks

Before migrating your *Talend* products, back up the archive folder holding the tasks generated by the CommandLine of the current version.

• To backup this folder, simply copy its content into a folder of your choice.

1.2. Re-installing CommandLine

After the environment is properly backed-up, you are required to extract the new clients of *Talend* and reinstall CommandLine on the relevant systems as described in the *Talend Installation Guide*.



Upon reinstalling, it is recommended to create a new directory and thus to use a new path for your CommandLine.

1.3. Upgrading the administration database

This section describes how to upgrade the *Talend Administration Center* database. Note that the database backup is a mandatory step in the migration process.

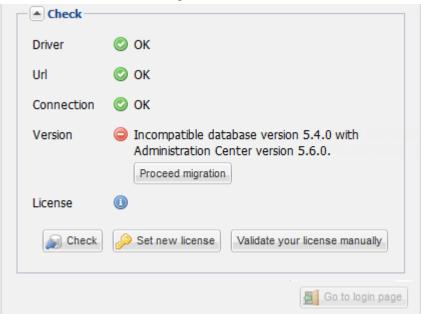
Prerequisites:

- Back up your database.
- Make sure the drivers of the databases are installed on the machine where the migration is performed.

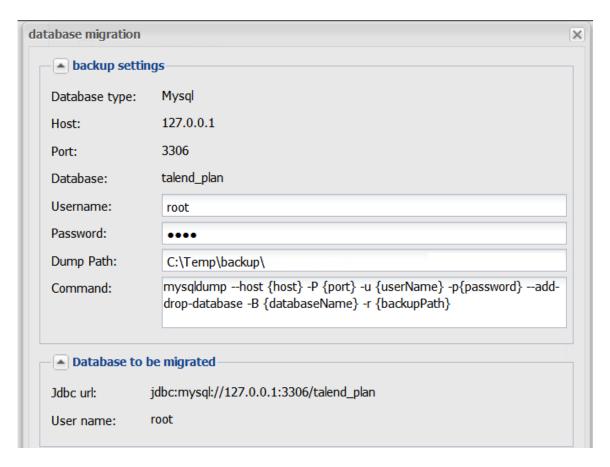
The source and target databases must be of the same type. To migrate from a database X to a database Y, for example from H2 to MySQL, first see *Talend Installation Guide*.

To migrate your database, proceed as follows:

- 1. Stop the Tomcat server.
- 2. To avoid errors during the migration process, increase the memory of Tomcat as explained in *Talend Installation Guide*.
- 3. Delete the old *Talend Administration Center* application .war file in <*TomcatPath>/webapps* to undeploy it.
- 4. Delete the *<TomcatPath>/work* directory to empty Tomcat cache.
- 5. Put the new *Talend Administration Center* application .war file in <*TomcatPath*>/webapps .
- 6. Start Tomcat.
- 7. Open a Web browser and type in the application URL. The database configuration page opens and a message indicates that the database version needs to be updated.



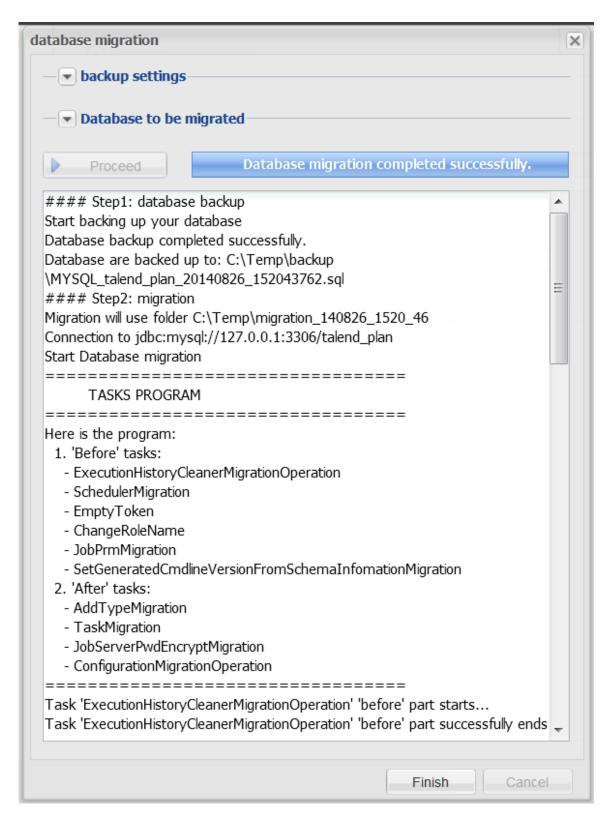
8. Click **Proceed migration** to start the migration process. A dialog box opens.



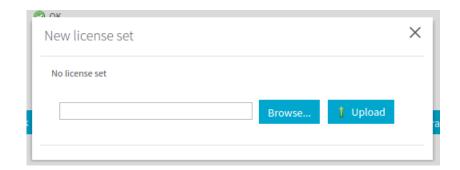
In the backup settings area, check your database connection information and enter the path to your folder where the backed up database will be stored in the Dump Path field.

The command used to migrate the database can be updated according to your needs. If you are migrating an Oracle database from *Talend Administration Center* 5.6.x to *Talend Administration Center* 6.x, make sure the -Dtalend.schema=<schemaName> parameter is present in the migration command.

10. Click **Proceed** to start the database backup and migration operation.



- 11. When the message **Database migration completed successfully** shows, click **Finish**. The database is migrated and a *.zip* file holding the backed up database is created in the folder you have defined previously.
- 12. On the database configuration page, set your new license then log in the Web application. The database migration process is finished.



1.4. Upgrading the Nexus Artifact repository

The following section describes how to migrate from an existing Nexus instance to a Nexus version that is compatible with a Talend product version 6.x or higher while keeping your configuration settings and the artifacts you have previously published to the repository.

For more information on the Nexus repository and how to use it with the Talend products, see the *Talend Installation Guide*.

Backing up the existing Nexus working directory

In the Nexus installation directory, the *sonatype-work* folder is the Nexus work directory which contains the Nexus configuration and data storage (repositories, settings, logs, published artifacts, etc.).

For more information on the different Nexus directories, read the Sonatype Nexus documentation.

• To backup the existing Nexus data, make sure Nexus is shut down and copy the < OldNexusInstallationDirectory>/sonatype-work folder to the location of your choice.

Updating to the new Nexus instance

Inside the new *Talend Administration Center* application archive file, you will find the *Artifact-RepositoryNexus-VA.B.C.D.E.zip* file that contains the Nexus artifact repository.

- 1. Unzip and install the new Nexus instance, as described in the *Talend Installation Guide*.
- 2. Paste the backed up *sonatype-work* folder in the *<NewNexusInstallationDirectory>/sonatype-work* folder. When you start the new instance of Nexus it will read the existing repository configuration from the *sonatype-work* folder.

Executing the migration script

Inside the *Artifact-RepositoryNexus-VA.B.C.D.E.zip* archive file, you will also find the *migration-A.B.C* folder that contains the migration script as well as a *.properties* file that you can update in order to adapt the script to your Nexus repository.

- 1. Copy the <*NewNexusInstallationDirectory*>/migration-A.B.C folder to the location of your choice.
- 2. Open the following file and check that the Nexus URL and login connection information correspond to your Nexus instance. If not, update them and save your changes.
 - migration-A.B.C/nexus.properties
- 3. Browse to the *migration-A.B.C* folder and execute the following command:

```
java -jar <nexus-migration-A.B.C.jar>
```

in which <nexus-migration-A.B.C. jar> corresponds to the *.jar* file name that is in the *migration-A.B.C* folder.

The new Nexus configuration will be merged with your existing data at next start-up.

(Optional) For users who use HTTPS protocol to access their Nexus instance without a known certificate

If you already have a Nexus instance with an SSL certificate that is not recognized in your Java environment, you need to do the following.

1. Download the certificate from the Nexus server:

```
openssl s_client -connect <server>:<port> -showcerts > myserver_cert
```

2. Install it into the Java instance used to launch the migration tool:

```
keytool -importcert -trustcacerts -file myserver_cert -alias ca_alias -keystore
"<JRE_HOME>\lib\security\cacerts"
```

1.5. Re-installing JobServer

You are now ready to reinstall your JobServer(s) on the relevant systems as described in the *Talend Installation Guide*.

Please note that **Talend** JobServer is not compatible with *Talend Studio* versions prior to 6.0.

Please note that this reinstallation is NOT mandatory and depends on the compatibility between the Talend Administration Center application and the existing JobServer. For a detailed list of compatibilities between these two applications, see the *Talend Installation Guide*.



Upon reinstalling, it is recommended to create a new directory and thus to use a new path for your JobServer(s).

1.6. Migrating from Talend Dictionary Service version 6.3.x to 6.4.x

The following sections describe how to migrate Talend Dictionary Service 6.4, depending on how you installed MongoDB during the version 6.3 installation.

1.6.1. Migrating from Talend Dictionary Service 6.3.x installed with an embedded MongoDB



The Talend Dictionary Service migration must be performed before attempting to migrate Talend Data Stewardship or Talend Data Preparation.

Before you begin:

- You have downloaded Talend Dictionary Service 6.4.
- 1. Install Talend Dictionary Service 6.4.x with the embedded MongoDB, and do not start the instance.

For more information about the Talend Dictionary Service installation and configuration procedures, see the *Talend Installation Guide*.

If you have installed Talend Dictionary Service 6.4 in service mode, stop the instance and MongoDB and delete the database as follows:

a. Open a mongo shell as Talend Dictionary Service database user and execute the following commands:

```
cd <install_dir>/mongodb/bin
./mongo dqdict -u dqdict-user -p duser --port 27017
```

b. Switch to Talend Dictionary Service database:

```
use dqdict
```

c. Drop the database:

```
db.runCommand( { dropDatabase: 1 } )
```

d. Exit mongo shell:

exit

- 2. If you have performed any custom configuration to the 6.3 version of the <Tomcat>/conf/data-quality.properties file, you can port them to the 6.4 version of the file.
- 3. Stop your instance of Talend Dictionary Service 6.3.x but keep MongoDB running.
- 4. Back up the MongoDB instance used for Talend Dictionary Service 6.3.x.

To backup your MongoDB, open a command prompt window and execute the following command:

```
mongodump -h <source_mongodb_host>:<source_mongo_port> -d <source_database> -u
<source_mongodb_user> -p <source_mongodb_password> -o <dump_output>
```

The default value for the embedded MongoDB properties are the following:

Table 1.1.

Property	Value
mongodb.host	localhost
mongodb.port	27017
mongodb.database	dqdict
mongodb.user	dqdict-user
mongodb.password	duser

- 5. Stop MongoDB of Talend Dictionary Service 6.3 and start MongoDB of the 6.4. version.
- 6. Restore the backup performed on the 6.3.x MongoDB, on the 6.4.x MongoDB instance.

To restore your MongoDB, open a command prompt window and execute the following command:

```
mongorestore -h <source_mongodb_host>:<source_mongo_port> -d<source_database> -u
<source_mongodb_user> -p <source_mongodb_password> dump\
```

7. Recreate the MongoDB indexes by executing the following commands:

```
cd ./<install_dir>/dq_dict/database
./create_mongodb_indexes.sh
```

- 8. Start Talend Dictionary Service 6.4.x.
- 9. Go to the /dq_dict/database/functionalMigration folder and execute the
 functionalMigration.batfunctionalMigration.sh script.

When prompted, enter the login name and the password for the against MongoDB database user:

- Login: dqdict-user
- Password: duser

You are now ready to use Talend Dictionary Service 6.4.x.

1.6.2. Migrating from Talend Dictionary Service 6.3.x installed with an external MongoDB



The Talend Dictionary Service migration must be performed before attempting to migrate Talend Data Stewardship or Talend Data Preparation.

Before you begin:

- You have downloaded Talend Dictionary Service 6.4.
- 1. Stop your instance of Talend Dictionary Service 6.3.x but keep MongoDB running.
- 2. Backup your MongoDB, while it is still running, using the following command:

```
mongodump -h <source_mongodb_host>:<source_mongo_port> -d <source_database> -u
<source_mongodb_user> -p <source_mongodb_password> -o <dump_output>
```

- 3. Stop your MongoDB instance.
- 4. Install MongoDB 3.4.2 and start it.

Talend Dictionary Service 6.4 uses the 3.4.2 version of MongoDB.

5. Restore MongoDB, open a command prompt window and execute the following command:

```
<mongo_path>/bin/mongorestore -h <mongo_host>:<mongo_port> -u <mongo_dq_username> -p
<mongo_dq_password> -d <mongo_dq_database> <backup_location>
```

6. Recreate the MongoDB indexes by executing the following commands:

```
cd ./<install_dir>/dq_dict/database
./create_mongodb_indexes.sh
```

7. Install Talend Dictionary Service 6.4.x with the external MongoDB, and configure it with the same settings as your 6.3.x instance, especially the links to your Talend Administration Center and point to MongoDB 3.4.2.

For more information about the Talend Dictionary Service installation and configuration procedures, see the *Talend Installation Guide*.

- 8. If you have performed any custom configuration to the 6.3 version of the <Tomcat>/conf/data-quality.properties file, you can port them to the 6.4 version of the file.
- 9. Start Talend Dictionary Service 6.4.x.
- 10. To optionally import the new semantic types added in the 6.4.x version, go to the *<pathToTheInstallationFolder>/dq_dict/database/functionalMigration* folder and execute the *functionalMigration.batfunctionalMigration.sh* script.

When prompted, enter the login name and the password for the dqdict MongoDB database user:

• Login: dqdict-user

· Password: duser

You are now ready to use Talend Dictionary Service 6.4.x.

1.7. Upgrading Talend Administration Center web application

The following sections describe how to migrate Talend Administration Center web application, which is an important step that allows you to retrieve the configuration parameters previously set in the application as well as the Jobs you have previously generated. Note that you need some privileges to be able to back up the web application database.

1.7.1. Database privileges for Talend Administration Center

To be able to manage the Talend Administration Center database (create, edit or drop tables for example), the administrator user must have the following system privileges:

- Create
- Read
- Update
- Delete

In order to perform database backup operations in the web application, this user also needs to be able to execute the <database> dump command into the target database schema.

1.7.2. Clearing your previous Talend Administration Center files

If you migrate to the same Tomcat server

1. Via the Tomcat manager, undeploy the previous version of the *Talend Administration Center* in Tomcat.

2. Delete all the remnants as well as the *Talend Administration Center* folder (highlighted in **bold**) from the Tomcat Web application folder:

<TomcatPath>/work/Catalina/localhost/<ApplicationPath>

3. Delete the content of the *temp* folder from the Tomcat Web application folder:

<TomcatPath>/temp

To avoid issues during the first connection to *Talend Administration Center*, do not delete the temp folder itself.

- 4. Flush the browser cache.
- 5. Reinstall the *Talend Administration Center .war* file (org.talend.administrator.war).

To do this, follow the procedure described in details in the *Talend Installation Guide*.

Note that, if you want to rename the *Talend Administration Center* application during migration, the best practice is to rename the backup of the old application, in order to always keep the same URL for the application that is currently installed. For example, rename the backup application *org.talend.administrator.old* and keep the *org.talend.administrator* default name for the application that is currently installed.

6. Restart Tomcat.

If you migrate to a new Tomcat server

- 1. To avoid port conflicts, make sure the old Tomcat instance as well as the old *Talend Administration Center* are stopped.
- 2. Install the new Tomcat server as well as the *Talend Administration Center .war* file.

If you have previously set a CATALINA_HOME system variable, make sure to update it.

Note that, if you want to rename the *Talend Administration Center* application during migration, the best practice is to rename the backup of the old application, in order to always keep the same URL for the application that is currently installed. For example, rename the backup application *org.talend.administrator.old* and keep the *org.talend.administrator* default name for the application that is currently installed.

3. Restart Tomcat.

1.7.3. Setting up your Talend Administration Center configuration back

1. In your Internet browser address bar, type in the *Talend Administration Center* URL to open the **Login** page.

http://<IPAddress>:<Port>/<TalendAdministrationCenterWebApplicationName>/

where <TalendAdministrationCenterApplicationName> is the name for *org.talend.administrator*, if it was changed when deploying the .war.

For example: http://10.42.10.56:8080/MyTAC/

2. On the **Login** page, click the **Go to db config page** link.



If the **Go to db config page** link of the **Login** page is hidden, you need to activate it from the configuration.properties file.

- 3. You will be prompted to enter a password to unlock the page. By default the password is "admin".
- 4. On the **Database Configuration** page, click the **Import parameters** button.
- 5. In the [Parameters Import] dialog box, click Browse to browse to the *administrator_config.txt* file that contains the parameters exported from *Talend Administration Center*, and then click the Upload button.

Your configuration settings are now ported over.

1.7.4. Migrating external libraries

If you migrate to a newer *Talend Administration Center* application, it is recommended to transfer the shared external libraries that were stored in another repository to the pre-configured Nexus repository --called *talend-custom-libs-release* that is embedded in the *Talend Administration Center* archive file.

- If you migrate from a version 5.x to a version 6.x, you need to move the libraries from your Subversion libraries repository to the new *talend-custom-libs-release* Nexus repository.
- If you migrate from version 6.0, 6.1 or 6.2, you need to move the libraries from the *talend-custom-libs* Nexus repository to the new *talend-custom-libs-release* Nexus repository.

If so, you need first to execute the Nexus migration script that is embedded in the *Talend Administration Center* archive file. For more information, see *Upgrading the Nexus Artifact repository* in the *Talend Migration Guide*.

From Subversion to Nexus

- 1. Go to the *Talend Administration Center* **Database configuration** page.
- 2. Click **Transfer libraries** to open the [**Transfer libraries**] window, select the **SVN to Nexus** tab and fill in the connection information to the Subversion repository where your libraries are stored.

The connection information to the new Talend Nexus repository (talend-custom-libs-release) are filled in by default.

3. Click **Transfer** to start the migration of your libraries. A progress bar indicates the status of the migration, and a message is displayed to confirm the migration success.

Your external libraries are now stored in the Talend Nexus repository.

From Nexus to Nexus

- 1. Go to the *Talend Administration Center* **Database configuration** page.
- 2. Click **Transfer libraries** to open the [**Transfer libraries**] window, select the **Nexus to Nexus** tab and fill in the connection information to the Nexus repository where your libraries are stored.

The connection information to the new Talend Nexus repository (talend-custom-libs-release) are filled in by default.

3. Click **Transfer** to start the migration of your libraries. A progress bar indicates the status of the migration, and a message is displayed to confirm the migration success.

Your external libraries are now stored in the Talend Nexus repository.

1.7.5. Retrieving the previously generated tasks

The tasks scheduled in the previous version of *Talend Administration Center* were generated via the CommandLine of the same version, but you may not need to recompile these tasks with the new CommandLine.

These binaries are located in a folder that is defined in the **Generated jobs folder** parameter of the **Job conductor** node in the **Configuration** page. In this archive folder, all generations of a specific task are stored in a dedicated sub-folder.

If you used the **Export parameters** and **Import parameters** options to retrieve your configuration settings, the path to your existing archive folder is automatically preserved.

For more information on how to visualize the generation version in the Job Conductor module, see the *Talend Administration CenterUser Guide*.

If you want to force the regeneration and did not use the **Export parameters** and **Import parameters** options, simply update the path to the archive folder in the **Configuration** page.



If you wish to continue using the old version of the *Talend Administration Center* application in parallel with the new installation, you must create a new archive folder, copy the content of the old folder in the new folder and fill in the path to this new folder in the **Configuration** page.

1.8. Getting and managing the License key

In the case of migration from one version to another, you might be required to manage a license key at various application levels: *Talend Administration Center*, *Talend Studio* and possibly the *Talend Activity Monitoring Console*.

Before starting to use *Talend Administration Center*, you need to enter your license key:

- 1. Click **License** on the navigation bar.
- 2. Then click **Edit License key**.
- 3. Copy-paste the license key.



If your Web access is restricted, you may need to click **Validate your license manually** to perform the validation of your license key. Follow the instructions on screen.

For more information about the license key request, see the *Talend Installation Guide*.

Then to be able to launch the Studio, copy and paste the License key in a file (without extension) that you will place at the root of the application installation directory.



This license key is required for the Studio to start.

1.9. Upgrading the Talend projects in the Studio

Depending on the nature of your projects, follow one of the following procedures.

Importing your local projects

- 1. Launch the new Studio you have just installed.
- 2. In the login window, select **Import existing project(s) as local** from the **Action** list, 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.

Retrieving your remote projects

As your existing projects are stored on a remote SVN repository, you just need to link it to the new version of your Studio to retrieve the projects you have previously created. To so, proceed as follows:

- 1. Launch the new Studio you have just installed.
- 2. In the login window, configure the connection to the SVN server where your projects are stored.

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



For more information on how to back up the projects and metadata stored in the SVN repository, see Backing up the Git or SVN repository.

1.10. Upgrading Talend Runtime

In order to migrate your Talend Runtime, proceed as follows:

- 1. Install the new Talend Runtime as described in the *Talend Installation Guide*.
- 2. Re-deploy all your artifacts in the new Talend Runtime.

1.11. Migrating from Talend Data Stewardship version 6.3.x to 6.4.x

This section describes the two different procedures to migrate to Talend Data Stewardship 6.4, depending on how you installed MongoDB during the version 6.3 installation.

1.11.1. Migrating from Talend Data Stewardship 6.3.x installed with an embedded MongoDB



If you have installed and used Talend Dictionary Service to create custom semantic types or update the predefined ones, you must migrate Talend Dictionary Service before migrating Talend Data Stewardship. See Migrating from Talend Dictionary Service version 6.3.x to 6.4.x.

Before you begin:

- You have downloaded Talend Data Stewardship 6.4.
- 1. Install Talend Data Stewardship 6.4 with an embedded MongoDB and do not start the instance.

For more information about the Talend Data Stewardship installation and configuration procedures, see the *Talend Installation Guide*.

If you have installed Talend Data Stewardship 6.4 in service mode, stop the instance and MongoDB and delete the database as follows:

a. Open a mongo shell as Talend Data Stewardship database user and execute the following commands:

```
cd <install_dir>/mongodb/bin
./mongo tds -u tds-user -p duser --port 27017
```

b. Switch to Talend Data Stewardship database:

```
use tds
```

c. Drop the database:

```
db.runCommand( { dropDatabase: 1 } )
```

d. Exit mongo shell:

exit

- 2. If you have performed any custom configuration to the 6.3 version of the <Data_Stewardship_Path>/
 conf/data-stewardship.properties file, you can port them to the 6.4 version of the file.
- 3. Stop your instances of Talend Data Stewardship 6.3 but keep MongoDB running.
- 4. Backup your MongoDB dump from the 6.3 version, open a command prompt window and execute the following command:

The default values for the MongoDB properties are the following:

Table 1.2.

Property	Value
mongodb.host	localhost
mongodb.port	27017
mongodb.database	tds
mongodb.user	tds-user
mongodb.password	duser

- 5. Stop MongoDB of Talend Data Stewardship 6.3 and start MongoDB of the 6.4. version.
- 6. Restore your MongoDB dump in the 6.4 version, open a command prompt window and execute the following command:

```
<mongo_path>/bin/mongorestore -h <mongo_host>:<mongo_port> -u <mongo_tds_username> -
p <mongo_tds_password> -d <mongo_tds_database> <backup_location>
```

7. Start Talend Data Stewardship 6.4.

You are now ready to use Talend Data Stewardship 6.4.

1.11.2. Migrating from Talend Data Stewardship 6.3.x installed with an external MongoDB



If you have installed and used Talend Dictionary Service to create custom semantic types or update the predefined ones, you must migrate Talend Dictionary Service before migrating Talend Data Stewardship. See Migrating from Talend Dictionary Service version 6.3.x to 6.4.x.

Before you begin:

- You have downloaded Talend Data Stewardship 6.4.
- 1. Stop your instances of Talend Data Stewardship 6.3 but keep MongoDB running.
- 2. Backup your MongoDB, while it is still running, using the following command:

For more information; see the MongoDB documentation.

- 3. Stop your MongoDB instance.
- 4. Install MongoDB 3.4.2 and start it.

Talend Data Stewardship 6.4 uses the 3.4.2 version of MongoDB.

5. Restore MongoDB, open a command prompt window and execute the following command:

```
<mongo_path>/bin/mongorestore -h <mongo_host>:<mongo_port> -u <mongo_tds_username> -
p <mongo_tds_password> -d <mongo_tds_database> <backup_location>
```

6. Install Talend Data Stewardship 6.4 with an external MongoDB and configure it with the same settings as your 6.3 instance, especially the links to your Talend Administration Center and point to MongoDB 3.4.2.

For more information about the Talend Data Stewardship installation and configuration procedures, see the *Talend Installation Guide*.

- 7. If you have performed any custom configuration to the 6.3 version of the <Data_Stewardship_Path>/ conf/data-stewardship.properties file, you can port them to the 6.4 version of the file.
- 8. Start Talend Data Stewardship 6.4.

You are now ready to use Talend Data Stewardship 6.4, and you can uninstall Talend Data Stewardship 6.3.

1.12. Migrating from Talend Data Preparation version 1.X/2.0 to 2.1

This section describes the two different procedures to migrate to Talend Data Preparation 2.1, depending on how you installed MongoDB during the version 1.X/2.0 installation.

1.12.1. Migrating from Talend Data Preparation 1.X/2.0 installed with an embedded MongoDB



If you have installed and used Talend Dictionary Service to create custom semantic types or update the predefined ones, you must migrate Talend Dictionary Service before migrating Talend Data Preparation. See Migrating from Talend Dictionary Service version 6.3.x to 6.4.x.

Before you begin:

- You have downloaded Talend Data Preparation 2.1.
- You have stopped Talend Data Preparation 1.X/2.0.
- 1. Install Talend Data Preparation 2.1 with the embedded MongoDB, and do not start the instance.

For more information about the Talend Data Preparation installation and configuration procedures, see the *Talend Installation Guide*.

If you have installed Talend Data Preparation 2.1 in service mode, stop the instance and MongoDB and delete the database as follows:

a. Open a mongo shell as Talend Data Preparation database user and execute the following commands:

```
cd <install_dir>/mongodb/bin
./mongo dataprep -u dataprep-user -p dprep --port 27017
```

b. Switch to Talend Data Preparation database:

```
use dataprep
```

c. Drop the database:

```
db.runCommand( { dropDatabase: 1 } )
```

d. Exit mongo shell:

exit

- 2. Start Talend Data Preparation version 2.1.
- 3. Stop Talend Data Preparation version 2.1.

These two steps are necessary for the migration process to work.

- 4. If you have performed any custom configuration to the 1.X/2.0 version of the <Data_Preparation_Path>/ config/application.properties file, you can port them to the 2.1 version of the file.
- 5. To retrieve the content of the dataset storage folder used for Talend Data Preparation 1.X/2.0, and migrate it to version 2.1, complete the next step according to the your situation:
 - If you have never modified the value of the dataset.content.store.file.location property, copy the content of the <Data_Preparation_Path>\data\store\datasets\content folder used in 1.X/2.0, and paste it in the 2.1 installation folder, following the same path.
 - If you have set a custom value for the dataset.content.store.file.location property, make sure that you set the same value in the application.properties file for the 2.1 version.
- 6. Start the MongoDB instance of Talend Data Preparation 1.X/2.0.
- 7. Back up the MongoDB instance used for Talend Data Preparation 1.X/2.0.

To backup your MongoDB, open a command prompt window and execute the following command:

```
mongodump -h <source_mongodb_host>:<source_mongo_port> -d <source_database> -u
<source_mongodb_user> -p <source_mongodb_password> -o <dump_output>
```

The default value for the embedded MongoDB properties are the following:

Table 1.3.

Property	Value
mongodb.host	localhost
mongodb.port	27017
mongodb.database	dataprep
mongodb.user	dataprep-user
mongodb.password	dprep

- 8. Stop MongoDB of Talend Data Preparation 1.X/2.0 and start MongoDB of the 2.1 version.
- 9. Drop the database of the Talend Data Preparation 2.1 MongoDB.
 - a. Open a mongo shell as Talend Data Preparation database user and execute the following commands:

```
cd <install_dir>/mongodb/bin
./mongo dataprep -u dataprep-user -p dprep --port 27017
```

b. Switch to Talend Data Preparation database:

```
use dataprep
```

c. Drop the database:

```
db.runCommand( { dropDatabase: 1 } )
```

d. Exit mongo shell:

exit

10. Restore the backup performed on the 1.X/2.0 MongoDB, on the 2.1 MongoDB instance.

To restore your MongoDB, open a command prompt window and execute the following command:

```
<mongo_path>/bin/mongorestore -h <mongo_host>:<mongo_port> -u <mongo_tdp_username> -
p <mongo_tdp_password> -d <mongo_tdp_database> <backup_location>
```

11. Start Talend Data Preparation 2.1.

You are now ready to use Talend Data Preparation 2.1.

1.12.2. Migrating from Talend Data Preparation 1.2 installed with an external MongoDB



If you have installed and used Talend Dictionary Service to create custom semantic types or update the predefined ones, you must migrate Talend Dictionary Service before migrating Talend Data Preparation. See Migrating from Talend Dictionary Service version 6.3.x to 6.4.x.

Before you begin:

- You have downloaded Talend Data Preparation 2.1.
- 1. Stop your instance of Talend Data Preparation 1.X/2.0 but not MongoDB.
- 2. Back up the MongoDB instance used for Talend Data Preparation 1.X/2.0.

To backup your MongoDB, open a command prompt window and execute the following command:

```
mongodump -h <source_mongodb_host>:<source_mongo_port> -d <source_database> -u
<source_mongodb_user> -p <source_mongodb_password> -o <dump_output>
```

- 3. Stop your 1.X/2.0 MongoDB instance.
- 4. Install MongoDB 3.4.2 and start it.

Talend Data Preparation 2.1 uses the 3.4.2 version of MongoDB.

5. Install Talend Data Preparation 2.1 with the external MongoDB, and configure it with the same settings as your 1.X/2.0 instance.

For more information about the Talend Data Preparation installation and configuration procedures, see the *Talend Installation Guide*.

- 6. If you have performed any custom configuration to the 1.X/2.0 version of the <Data_Preparation_Path>/ config/application.properties file, you can port them to the 2.1 version of the file.
- 7. To retrieve the content of the dataset storage folder used for Talend Data Preparation 1.X/2.0, and migrate it to version 2.1, complete the next step according to the your situation:
 - If you have never modified the value of the dataset.content.store.file.location property, copy the content of the <Data_Preparation_Path>\data\store\datasets\content folder used in 1.X/2.0, and paste it in the 2.1 installation folder, following the same path.
 - If you have set a custom value for the dataset.content.store.file.location property, make sure that you set the same value in the application.properties file for the 2.1 version.
- 8. Start Talend Data Preparation 2.1.
- 9. Stop Talend Data Preparation 2.1.

These two steps are necessary for the migration process to work.

- 10. Start the version 3.4.2 instance of MongoDB.
- 11. Drop the database of the Talend Data Preparation 2.1 MongoDB.
 - a. Open a mongo shell as Talend Data Preparation database user and execute the following commands:

```
cd <install_dir>/mongodb/bin
./mongo dataprep -u dataprep-user -p dprep --port 27017
```

b. Switch to Talend Data Preparation database:

```
use dataprep
```

c. Drop the database:

```
db.runCommand( { dropDatabase: 1 } )
```

d. Exit mongo shell:

exit

12. Restore MongoDB, open a command prompt window and execute the following command:

```
<mongo_path>/bin/mongorestore -h <mongo_host>:<mongo_port> -u <mongo_tdp_username> -
p <mongo_tdp_password> -d <mongo_tdp_database> <backup_location>
```

13. Start Talend Data Preparation 2.1.

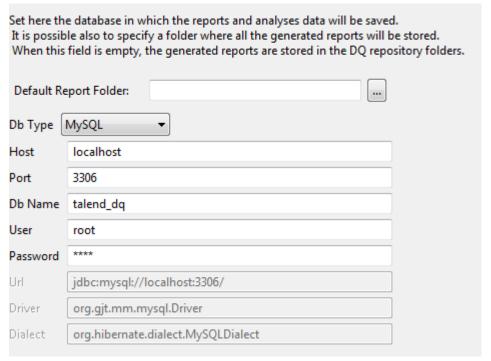
You are now ready to use Talend Data Preparation 2.1.

1.13. Upgrading the Talend Data Quality Portal

Prerequisite: Make sure you have properly backed up the database schemas (called *tdqportal* and *talend_dq* by default) before you start the migration.

Configuration in the Studio

- 1. Run the *Talend Studio*.
- 2. Click the **Window** menu and select **Preferences**.
- 3. In the tree view of the [Preferences] dialog box, click the Talend node, then click Profiling and Reporting.
- 4. Configure the Datamart by filling in the details of the *talend_dq* database schema.



- Click Apply.
- 6. Accept when the Studio prompts you to upgrade the database.

The *talend_dq* database schema is upgraded.

Configuration in the Installer

1. Run the Talend Installer.

2. In the Portal configuration step of the wizard, fill in the information of the two existing schemas (*tdqportal* and *talend_dq*) and complete the installation.

Upgrade Talend Data Quality Portal the configuration

This procedure only applies if you are migrating from a version of *Talend Studio* prior to 6.x to version 6.0 or later.

- 1. Log in Talend Data Quality Portal using the administrator credentials.
- 2. Click the **Repository Management** button and in the menu that opens, click the **Import/export**.
- 3. Click the **Browse...** button to browse your system to the zip file you want to import.
- 4. Select the Jasper report engine you are using, then click **Next**.
- 5. Select the data source you want to migrate, then click **Next**.
- 6. Check the meta data conflicts. In a case of a migration, select No in the drop-down list.

Re-create the users and their roles

This procedure only applies if you are migrating from a version of *Talend Studio* prior to 6.x to version 6.0 or later.

Once the Talend Data Quality Portal is migrated, you should re-create the users and their roles. To do that, proceed as follows:

- 1. Go to the **Roles Management** page and create the roles corresponding to your needs following the procedure described in *Talend Data Quality Portal User and Administrator Guide*.
- 2. Go to the **Users Management** page and create the users corresponding to your needs following the procedure described in *Talend Data Quality Portal User and Administrator Guide*.



Chapter 2. Migrating your projects and generating reports

If you migrated to a newer version of *Talend Administration Center* and want to retrieve your existing projects, you may want to migrate these projects. *Talend Administration Center* allows you to select the projects to be migrated and to generate corresponding reports using the Commandline applications.

The **Migration Check** page of *Talend Administration Center* allows you to:

- connect the previous version of your CommandLine application to the new one,
- migrate each existing project,
- generate and download a report for each migration.

2.1. Prerequisites

To perform a migration of your projects, you need to have previously:

- launched the CommandLine application that was connected to the previous version of *Talend Administration Center* (old CommandLine) and set its parameters on the **Configuration** page of the web application.
- launched the CommandLine application that is connected to the current version of *Talend Administration Center* (new CommandLine) and set its parameters on the **Configuration** page of the web application.
- backed up the SVN repository that contains your existing projects (using the svnadmin dump command) and restored it to a new SVN repository.
- (optional, to optimize the migration reports) installed patches in the CommandLine in order to know more precisely whether the Jobs were generating successfully in the previous versions. For more information on how to improve the Migration Check report, see the documentation on Talend Help Center.

(Optional) By default, migration reports are stored in the following folders: /Talend/MigrationCheck/reports on Linux or C:/Talend/MigrationCheck/reports on Windows. If you want to edit the default path to the folder where your reports will be stored, you need to do so in the configuration.properties file:

1. Open the following file:

<TomcatPath>/webapps/org.talend.administrator/WEB-INF/classes/configuration.properties

2. Add the following parameter and value, then save your changes:

```
migrationCheck.conf.reportPath=<FolderPath>
```

where <FolderPath> corresponds to the path to the folder where you want to store your migration reports.

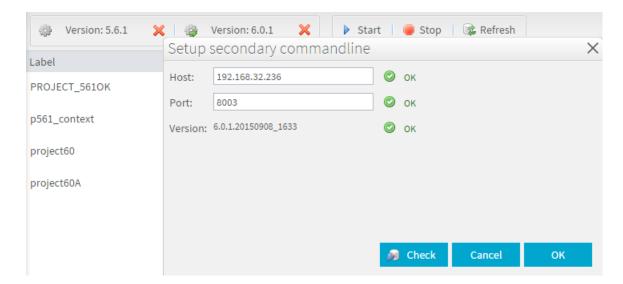
2.2. Migrating projects

To migrate your projects, proceed as follows:

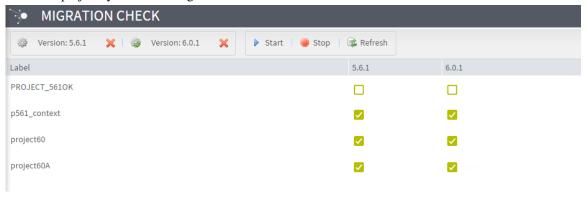
1. In the **Menu** tree view of *Talend Administration Center*, click **Migration Check** to open the corresponding page.

You can also access it by clicking the **Project Check** button in the **Database configuration** page of the web application.

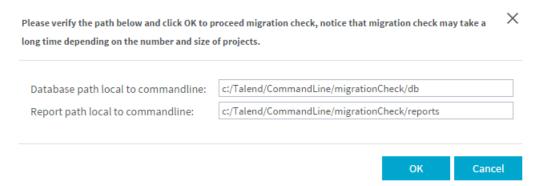
2. Click the CommandLine buttons on the top toolbar to configure the connections to both source (old) and target (new) CommandLine applications.



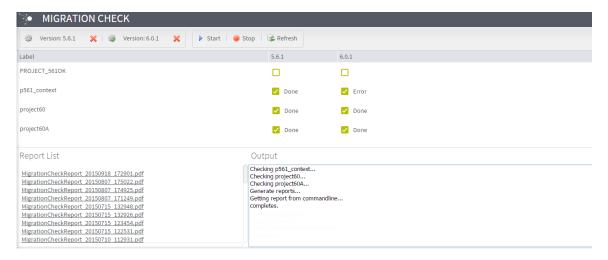
3. Select the projects you want to migrate.



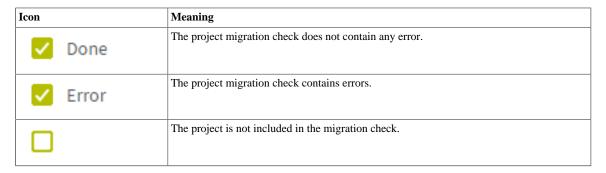
- 4. Click **Start** on the top toolbar to start the migration of your projects.
- 5. In the pop-up window that opens, enter the paths to the local directories where the database and report will be stored and click **OK**.



6. The migration starts and reports are generated. For more information on reports, see *Accessing detailed* reports on migration.



The migration check results are listed in the project list.



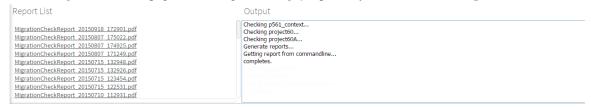
2.3. Accessing detailed reports on migration

Once you have migrated your existing projects, you are able to visualize the reports containing the details of the migration. By default these reports are stored in your local machine but they can also be downloaded directly from *Talend Administration Center*.

Note that, by default, the Migration Check reports give you details about the compilation status of the Jobs generated in the latest version of the product. Talend offers you the possibility to optimize the migration reports by installing patches in the CommandLine in order to know more precisely whether the Jobs were generating successfully in the previous versions. For more information on how to improve the Migration Check report, see the documentation on Talend Help Center.

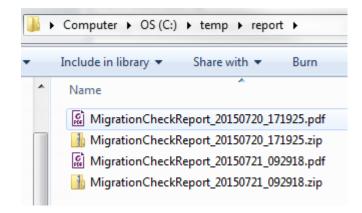
From Talend Administration Center

On the Migration Check page, click the generated .pdf report of your choice in the Report List area.



On your local machine

• Go to the directory where reports are stored (path directory you have defined before migration). See *Migrating projects* for more information.



The generated reports contain details about migration status, JDK version used, project and Job errors.

Talend Migration Check



Project List

Project	5.6.1	6.0.1
P561_CONTEXT	OK	2 items compile failed 2 jars missing 0 components missing
PROJECT60	OK	ОК
PROJECT60A	OK	ОК

To obtain more details regarding a project migration check, click the name of a project. The number of items migrated, missing components or libraries and so on are listed.

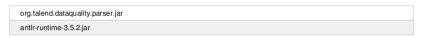
Talend Migration Check



Details of P561_CONTEXT

Project Name	P561_CONTEXT					
Description						
Project Type	DI					
Author	admin@company.com					
Product Version	Talend Data Fabric-6.0.1.20150908_1633					
	5.6.1		6.0.1			
	Total Count	Failed Count	Total Count	Failed Count		
Job	0	0	1	1		

Jars missing in 6.0.1







Appendix A. Compatibility tables

This Appendix provides information on compatibility between different versions of the different **Talend** tools.

A.1. Compatible execution servers

Make sure the execution server version is compatible with the *Talend Administration Center*, CommandLine and Studio versions.

Note that the information contained in this section is valid at the date of publication, but may be subject to change at a later date.

Table A.1. Job servers (JobServer and job server in Talend Runtime)

		Job Server	Job Server	Job Server	Job Server
	Version	6.1.x	6.2.x	6.3.x	6.4.x
Talend Administration Center, Studio, CommandLine	6.1.x	4			
Talend Administration Center, Studio, CommandLine	6.2.x	4	4		
Talend Administration Center, Studio, CommandLine	6.3.x	4	*	4	
Talend Administration Center, Studio, CommandLine	6.4.x	4	4	4	4

Table A.2. ESB OSGI servers (Talend Runtime)

		Talend Runtime (ESB OSGI Server)		Talend Runtime (ESB OSGI Server)	
	Version	6.1.x	6.2.x	6.3.x	6.4.x
Talend Administration Center, Talend ESB Infrastructure Services	6.1.x	4			
Talend Administration Center, Talend ESB Infrastructure Services	6.2.x	✓	✓		
Talend Administration Center, Talend ESB Infrastructure Services	6.3.x	4	*	*	
Talend Administration Center, Talend ESB Infrastructure Services	6.4.x	4	✓	✓	*