



FREE eBook

LEARNING talend

Free unaffiliated eBook created from
Stack Overflow contributors.

#talend

Table of Contents

About.....	1
Chapter 1: Getting started with talend.....	2
Remarks.....	2
Examples.....	2
Installation or Setup.....	2
Chapter 2: Connecting Components.....	3
Examples.....	3
If / OnComponent / OnSubjob.....	3
Chapter 3: Types conversion in Talend.....	4
Introduction.....	4
Examples.....	4
Table of Conversions.....	4
Chapter 4: Using Date in Talend.....	5
Examples.....	5
Parsing a date.....	5
Automatic date parsing.....	5
Credits.....	7

About

You can share this PDF with anyone you feel could benefit from it, downloaded the latest version from: [talend](#)

It is an unofficial and free talend ebook created for educational purposes. All the content is extracted from [Stack Overflow Documentation](#), which is written by many hardworking individuals at Stack Overflow. It is neither affiliated with Stack Overflow nor official talend.

The content is released under Creative Commons BY-SA, and the list of contributors to each chapter are provided in the credits section at the end of this book. Images may be copyright of their respective owners unless otherwise specified. All trademarks and registered trademarks are the property of their respective company owners.

Use the content presented in this book at your own risk; it is not guaranteed to be correct nor accurate, please send your feedback and corrections to info@zzzprojects.com

Chapter 1: Getting started with talend

Remarks

This section provides an overview of what talend is, and why a developer might want to use it.

It should also mention any large subjects within talend, and link out to the related topics. Since the Documentation for talend is new, you may need to create initial versions of those related topics.

Examples

Installation or Setup

Detailed instructions on getting talend set up or installed.

Read **Getting started with talend online**: <https://riptutorial.com/talend/topic/9503/getting-started-with-talend>

Chapter 2: Connecting Components

Examples

If / OnComponent / OnSubjob

There are 2/3 options to connect components together in Talend. You should always try to use OnSubjob connectors. This saves a lot of headaches. You'll see from the examples why.

What happens when you mix the connection types / What is the execution order?

1. If
2. OnComponent
3. OnSubjob

Keep in mind that the If connections gets evaluated runtime, which means if you use globalMap then be really careful about the order.

For example:

```
(Boolean)globalMap.get("failure") == true -> calls a subjob that resets this failure flag.  
(Boolean)globalMap.get("failure") == false -> calls a subjob that lets the main job continue,  
because the failure path resetted the flag.
```

What is the a difference?

If and Oncomponent connections act as a function call. Which makes the Garbage collector to keep all the local data stored in memory. This could cause "memory leaks".

OnSubjob connections on the other hand let the subjob complete and return, thus the GC will free up some of the memory.

Other than the memory there's also a few things you need to keep in mind. If you have a data flow that reads from / writes to file, you should always go with OnSubjobOk as the data file will be closed once the job completes. If you use onComponent it can happen that the file is not saved hence you start working with a 0 byte file, and after the job completes you'll see a file with content. It's logical but really hard to figure out.

Read Connecting Components online: <https://riptutorial.com/talend/topic/9542/connecting-components>

Chapter 3: Types conversion in Talend

Introduction

A list of type conversion in talend with some examples.

Examples

Table of Conversions

From	To	Example
String	Integer	<code>Integer.parseInt(str)</code> OR <code>Integer.valueOf(str).intValue()</code>
String	Date	<code>TalendDate.parseDate("dd-MM-yyyy", str)</code>
String	BigDecimal	<code>new BigDecimal(str)</code>
String	Float	<code>Float.parseFloat(str)</code> OR <code>Float.valueOf(str).floatValue();</code>
String	Long	<code>Long.parseLong(str)</code> OR <code>long l = Long.valueOf(str).longValue()</code>
String	Double	<code>double d = Double.valueOf(str).doubleValue()</code>
Date	String	<code>TalendDate.formatDate("yy-MM-dd", row1.myDate)</code>
Float	String	<code>row1.myFloat.toString()</code>
Float	BigDecimal	<code>new BigDecimal(Float.toString(row1.myFloat))</code>
Float	Double	<code>(float)d</code>
Float	Integer	First round : <code>Math.round()</code> , <code>Math.ceil()</code> , <code>Math.floor()</code> then cast the result to Integer
Long	Int	<code>(int)(row1.var + 0)</code> The max possible value is 2147483647
Long	String	<code>row1.myLong.toString()</code>
Integer	Long	<code>row1.myInteger.longValue()</code>
Integer	BigDecimal	<code>new BigDecimal(row1.myInteger)</code>
Integer	Float	<code>new Float(row1.myInteger)</code>
Integer	String	<code>variable+""</code> OR <code>variable.toString()</code>
BigDecimal	Integer	As with Float, BigDecimal can have decimal places, so will need to be rounded prior to casting to Integer
BigDecimal	String	<code>row1.myBigDecimal.toString()</code>
Double	String	<code>String str = Double.toString(d)</code>
Double	Float	<code>double d = f</code>

Read Types conversion in Talend online: <https://riptutorial.com/talend/topic/9516/types-conversion-in-talend>

Chapter 4: Using Date in Talend

Examples

Parsing a date

Parsing date is used when having an input typed as `String` and when it is needed to get it as a `Date`. The class `TalendDate` contains method `TalendDate.parseDate("pattern", "stringDate")`.

Pattern here is the **input** pattern, and not the expected output pattern.

Usage : For an input string like "2017-05-03 17:09:00" , the call will be :

```
TalendDate.parseDate("yyyy-MM-dd HH:mm:ss", "2017-05-03 17:09:00")
```

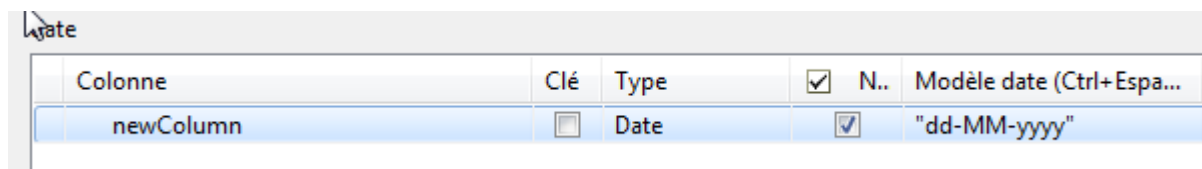
The result could be a date like :

```
2017-05-03 17:09:00
```

or

```
03/05/2017
```

Depending on the **output pattern** which is defined outside the `parseDate` method.

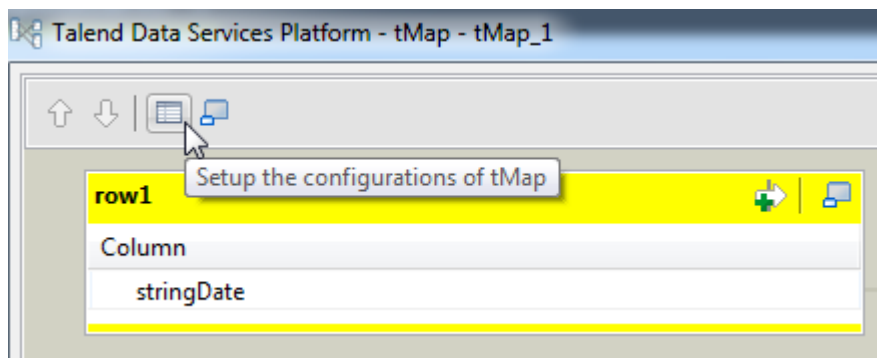


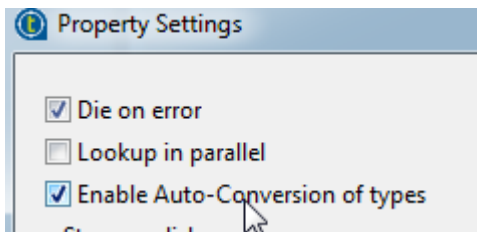
Colonne	Clé	Type	<input checked="" type="checkbox"/> N..	Modèle date (Ctrl+Espa...
newColumn	<input type="checkbox"/>	Date	<input checked="" type="checkbox"/>	"dd-MM-yyyy"

Automatic date parsing

Since Talend 6.3 , an option in `tMap` allows to automatically convert types. When activated, output pattern is used as the expected input pattern to automatically convert data.

First, activate the option :





Then modify output pattern, used as the input pattern :

date					
Colonne	Clé	Type	<input checked="" type="checkbox"/> N..	Modèle date (Ctrl+Espace disponible)	
newColumn	<input type="checkbox"/>	Date	<input checked="" type="checkbox"/>	"yyyy-MM-dd'T'HH:mm:ss'Z'"	

Read Using Date in Talend online: <https://riptutorial.com/talend/topic/9873/using-date-in-talend>

Credits

S. No	Chapters	Contributors
1	Getting started with talend	Community
2	Connecting Components	Balazs Gunics
3	Types conversion in Talend	Théo Capdet
4	Using Date in Talend	Corentin