

# **KNIME**

## **nodes blending**

Alessandra Santi

**KNIME** (pronunciato /naim/) è una piattaforma open source con licenza GPLv3 di analisi dati, reportistica e integrazione. Ha anche al suo interno componenti di machine learning e data mining.

fonte: <https://it.wikipedia.org/wiki/KNIME>



Blend & Transform



Model & Visualize



Deploy & Manage



Consume & Interact

L'interfaccia grafica di **KNIME** permette di assemblare i nodi per la preprocessazione dei dati

### ETL:

- Extraction
- Transformation
- Loading

per la modellazione, l'analisi dei dati e la visualizzazione.

fonte: <https://it.wikipedia.org/wiki/KNIME>



Blend & Transform



Model & Visualize



Deploy & Manage



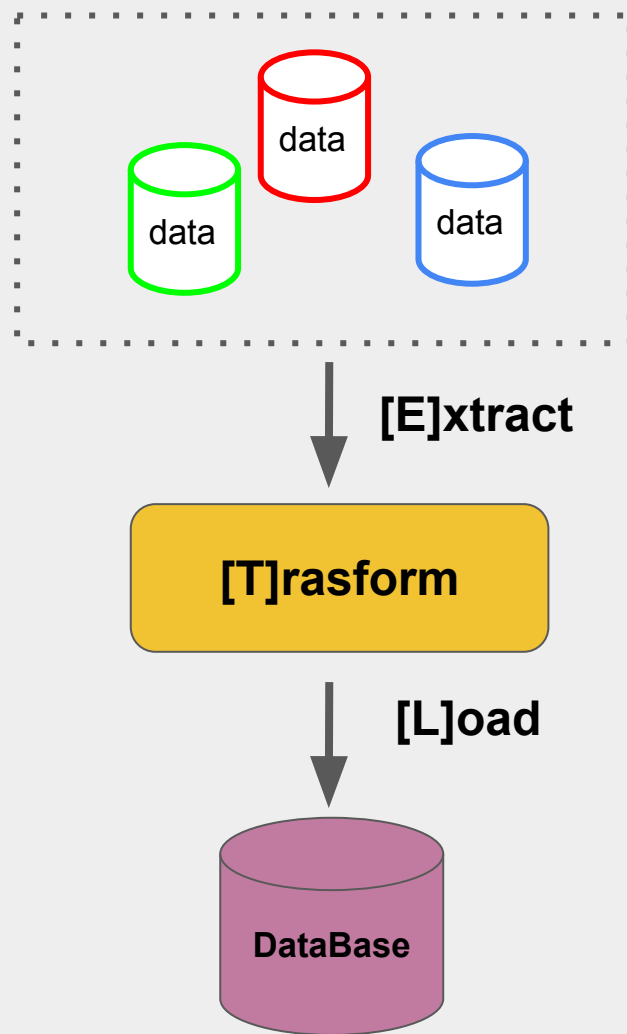
Consume & Interact

**Che cos'è l' ETL ?**

## Che cos'è l' ETL?

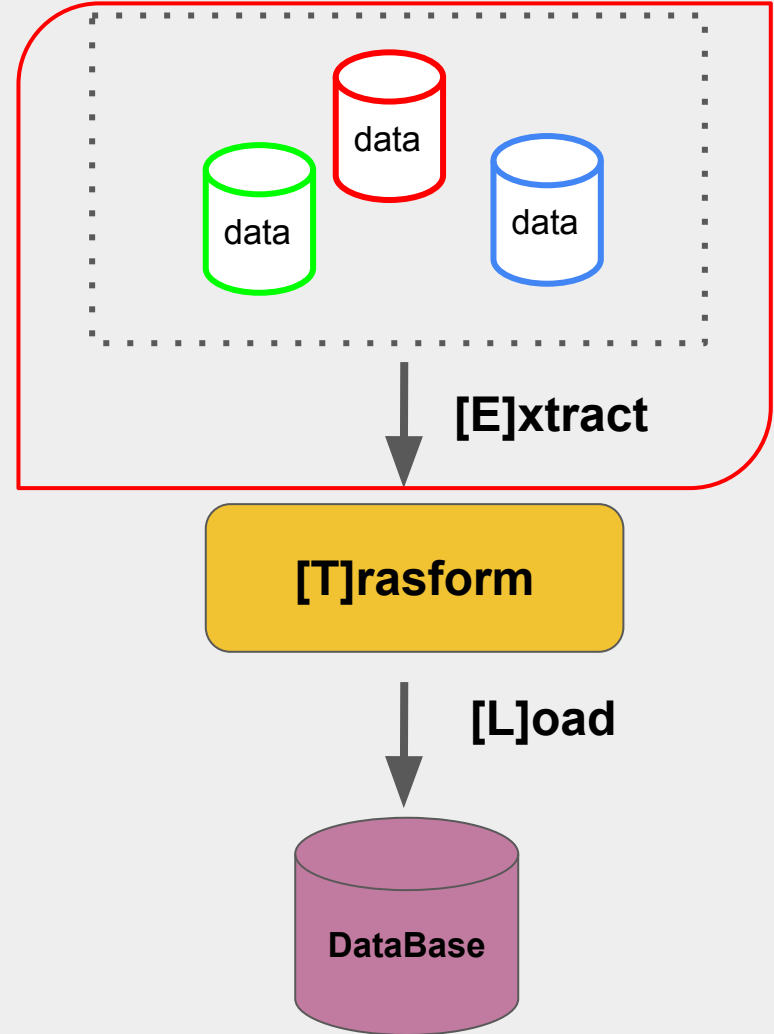
- **[E]xtract(ion)** = Estrarre
- **[T]ransform(ation)** = Trasformare
- **[L]oad(ing)** = Caricare

Processo che recupera i dati da più fonti **[E]**, li trasforma in formato standard **[T]** e li ricarica su un'altra fonte database **[L]**



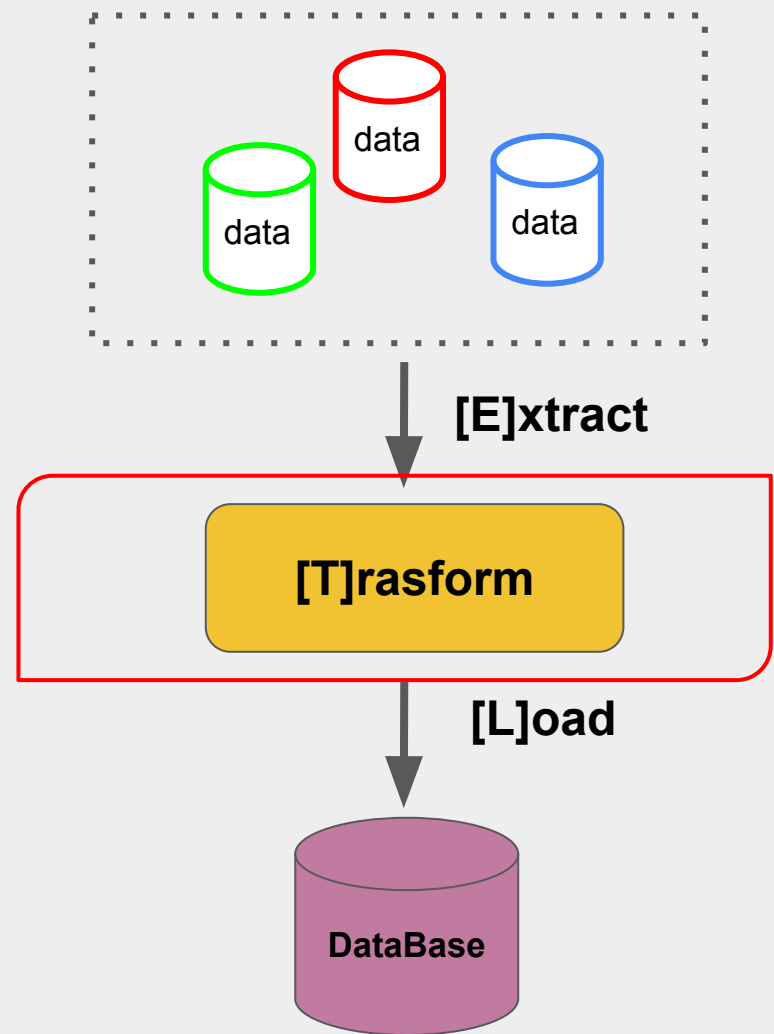
**ETL** → **[E]**xtract(ion) = Estrarre

- Database
- Fonti online e social media
- Dati aziendali (ERP)
- Applicazioni di vendita e marketing
- Dati da flussi di transazioni
- Sistemi di gestione delle relazioni con i clienti (CRM)
- Dati rilasciati da dei sensori



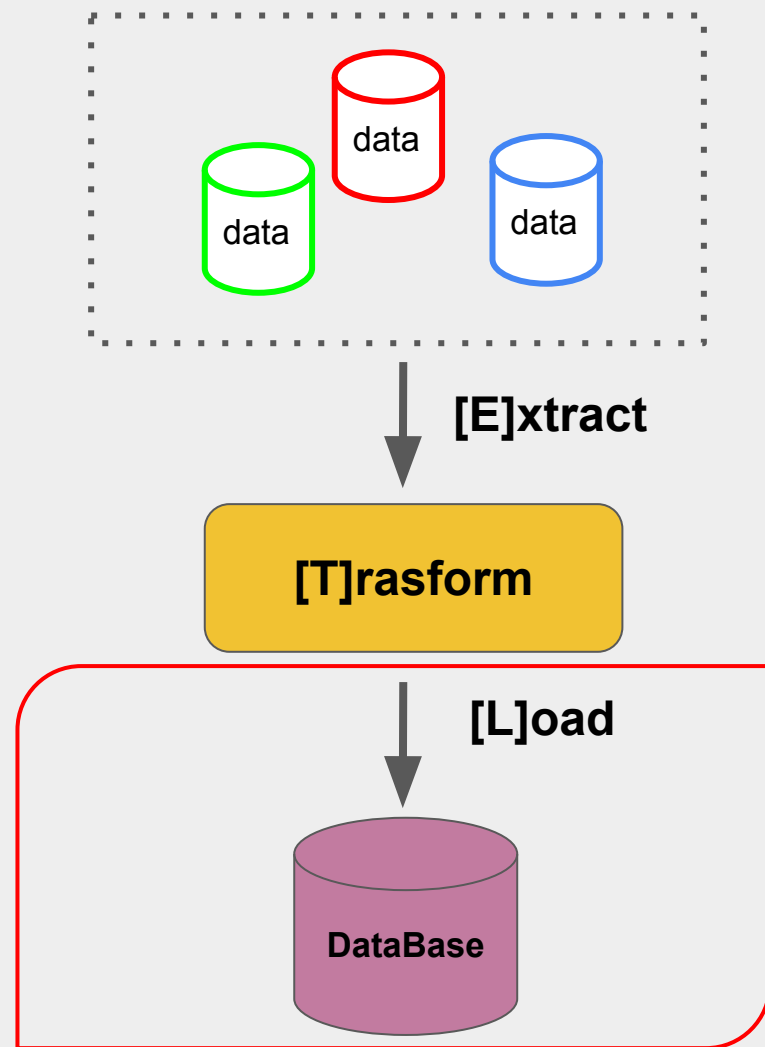
**ETL** → [T]ransform(ation) = Trasformare

- Standardizzazione dati
- Pulizia dati
- Eliminazione di ridondanza nei dati
- Controllo e verifica



**ETL** → [L]oad(ing) = Caricare

- Caricamento in batch (completo)
- Caricamento incrementale per attività' di Data Analytics
- Caricamento incrementale di allenamento per Machine Learning





# Progetto KNIME

Il progetto **KNIME** nasce nel 2004  
all'Università di Costanza in Germania.

La **K** iniziale deriva da **Konstanz**.  
**KNIME** = **Konstanz Information Miner**

Inizialmente focalizzato sulla ricerca  
farmaceutica



**Dove cercare KNIME ?**

**Dove cercare KNIME ?**

**in rete sul sito ufficiale [www.knime.com](http://www.knime.com)**

<https://www.knime.com/>



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# End to End Data Science

At KNIME, we build software to create and productionize data science using one easy and intuitive environment, enabling every stakeholder in the data science process to focus on what they do best.

[Explore KNIME Software](#)

[Read our Open Source Approach](#)



# **Contents:**

- **Community**
- **Learning**
- **Software**
- **Struttura, Nodi, Funzionamento**

# Community

<https://www.knime.com/>



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# KNIME Community

A global community of KNIME users, developers, educators, and researchers.

- **Users**
- **Extension Developers**
- **Educators**
- **Researchers**

fonte: <https://www.knime.com/knime-community>



## Users



See what the active community of data users and data professionals are doing with KNIME.

## Extension Developers



Create your own nodes and components and share with others on KNIME Hub.

## Researchers



Read more about how scientists use KNIME in their research.

## Educators



Material and ideas for integrating KNIME in your data science classes.

# KNIME Community

A global community of KNIME users, developers, educators, and researchers.

## Become Part of the Global Community

Access knowledge and get help from data scientists, domain experts, other users, customers, and partners on both KNIME Forum and KNIME Hub. And, share your own knowledge and insights, too!

fonte: <https://www.knime.com/knime-community>



Contributor Hall of Fame Just KNIME

all categories ▾ all tags ▾ **Categories** Latest Top

Category	Topics	Latest
<b>KNIME Analytics Platform</b> For discussions related to KNIME Analytics Platform	273 / month	A
<b>KNIME Extensions</b> For discussions related to KNIME Extensions and Integrations ■ Text Processing ■ Scripting ■ Reporting ■ Image Processing ■ REST ■ Big Data ■ Deep Learning	25 / month	A
<b>KNIME Announcements</b>	15	M

Welcome to the  
**KNIME Hub**  
Solutions for data science: find workflows, nodes and components, and collaborate in spaces.

🔍 Search workflows, nodes and more...

<b>12 035</b> Workflows	<b>4 203</b> Nodes	<b>1 094</b> Components	<b>221</b> Extensions
----------------------------	-----------------------	----------------------------	--------------------------

Visit KNIME Forum Visit KNIME Hub

- **KNIME Hub**

# KNIME Hub

KNIME Hub is the place where you can search for nodes, extensions, components, and workflows made available by the community.

You can use these as blueprints and building blocks in KNIME Analytics Platform, and build workflows to solve your data science use cases.

KNIME Hub can also be used to upload and organize workflows in a central place, and to collaborate with other users on your projects.

Via KNIME Hub you can:

- Find workflows, components uploaded by KNIME Community
- Upload and organize your workflows and components in projects
- Create and manage projects
- Collaborate with other users on your projects

<https://hub.knime.com/>

Welcome to the  
**KNIME Hub**

Solutions for data science: find workflows, nodes and components, and collaborate in spaces.

🔍 Search workflows, nodes and more...

**11 993**

Workflows

**4 203**

Nodes

**1 090**

Components

**221**

Extensions



# Ambiente simile a:

- **Rpubs** by RStudio

# Getting Started with RPubs

[RStudio](#) lets you harness the power of [R Markdown](#) to create documents that weave together your writing and the output of your R code. And now, with RPubs, you can publish those documents on the web with the click of a button!

## Prerequisites

You'll need [R](#) itself, [RStudio](#) (v0.96.230 or later), and the [knitr](#) package (v0.5 or later).

## Instructions

1. In RStudio, create a new R Markdown document by choosing `File | New | R Markdown`.
2. Click the `Knit HTML` button in the doc toolbar to preview your document.
3. In the preview window, click the `Publish` button.

# Learning



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[Explore KNIME Software](#)

[Read our Open Source Approach](#)



# Learning

Support material for getting started with KNIME: books, courses (online, onsite, and self-paced), technical documentation, certification, and more.

- **Getting Started Guide**
- **Software Documentation**
- **KNIME Hub**
- **KNIME Forum**

fonte:

[https://www.knime.com/learning?utm\\_source=website&utm\\_medium=popup&utm\\_campaign=release](https://www.knime.com/learning?utm_source=website&utm_medium=popup&utm_campaign=release)



## Getting Started Guide



Find your way around the workbench, learn the traffic light system, start building your own workflow.

[Get Started](#)

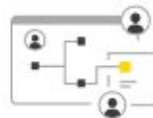
## Software Documentation



Read or download the technical documentation for KNIME Software.

[Access Documentation](#)

## KNIME Hub



Find solutions for data science - workflows, nodes and components, and collaborate in spaces.

[Visit Hub](#)

## KNIME Forum



Get answers to your data questions from the active, global community.

[Visit Forum](#)

# Learning

Support material for getting started with KNIME: books, courses (online, onsite, and self-paced), technical documentation, certification, and more.

- **KNIME Courses**
- **Certified Trainers**
- **KNIME Certification**
- **Tutorials**

fonte:

[https://www.knime.com/learning?utm\\_source=website&utm\\_medium=popup&utm\\_campaign=release](https://www.knime.com/learning?utm_source=website&utm_medium=popup&utm_campaign=release)



## KNIME Courses



Take a course - online, onsite, or self-paced - on a variety of topics.

Explore Courses

## Certified Trainers



Trusted trainers endorsed by KNIME for their excellence as instructors.

Meet Trainers

## KNIME Certification



Measure and certify your KNIME expertise.

Get Certified

## Tutorials



Visit our YouTube channel for tutorials, webinar recordings, and user talks.

Visit Channel

**filmato:**

**1\_communityLearning**

# Software

<https://www.knime.com/>



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# End to End Data Science

At KNIME, we build software to create and productionize data science using one easy and intuitive environment, enabling every stakeholder in the data science process to focus on what they do best.

Explore KNIME Software

Read our Open Source Approach





## KNIME Analytics Platform

KNIME Analytics Platform is the open source software for creating data science. Intuitive, open, and continuously integrating new developments, KNIME makes understanding data and designing data science workflows and reusable components accessible to everyone.



## KNIME Server

KNIME Server is the enterprise software for team-based collaboration, automation, management, and deployment of data science workflows as analytical applications and services. Non experts are given access to data science via KNIME WebPortal or can use REST APIs.



## KNIME Analytics Platform

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## KNIME Server

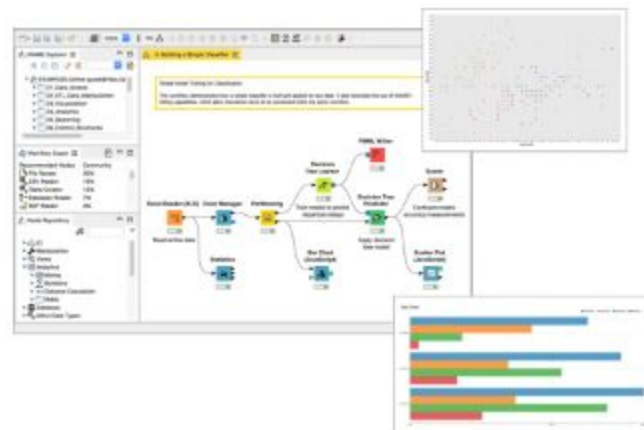
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# KNIME Analytics Platform

Creating Data Science

Download KNIME



KNIME Analytics Platform is the open source software for creating data science. Intuitive, open, and continuously integrating new developments, KNIME makes understanding data and designing data science workflows and reusable components accessible to everyone.

- Multiplatforma:
  - Linux
  - Mac
  - Microsoft



<https://www.knime.com/> download



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# Download KNIME Analytics Platform

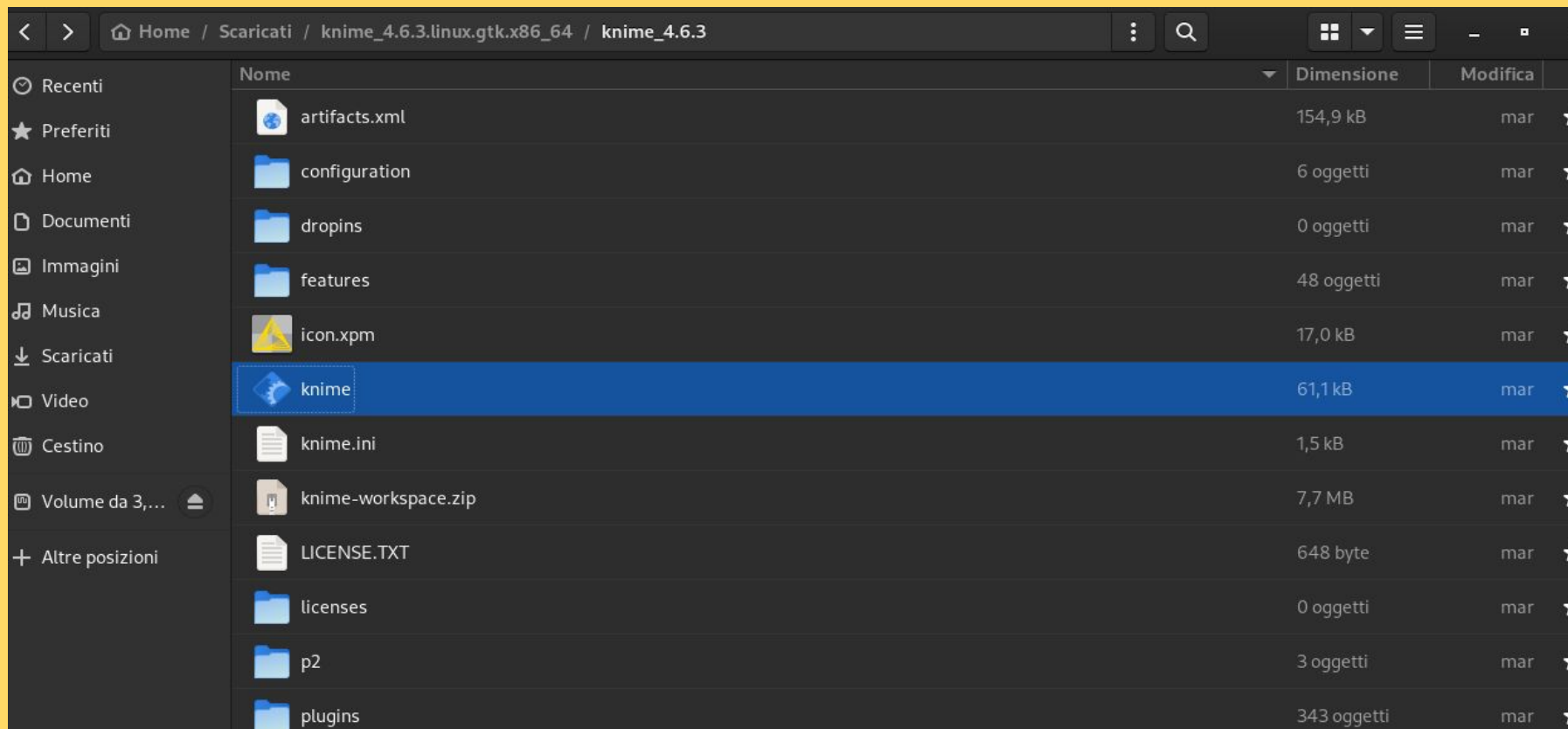
Get started in three simple steps.



Download the latest KNIME Analytics Platform for Windows, Linux, and macOS: **4.6.3**. This version is intended for end users and provides everything needed to immediately begin using KNIME as well as extend KNIME with extension packages developed by others.



# Installation(Linux)



# Installation (Linux)

★ Preferiti

🏠 Home

📁 Documenti

🖼 Immagini

🎵 Musica

⬇ Scaricati


📺 Video

📖 Cestino

🔊 Volume di

+ Altre posizioni

artifacts.xml



Open for Innovation  
**KNIME**

Version 4.6.3  
(Build September 30, 2022)

Installed Extensions:  
  
Starting KNIME Analytics Platform

Copyright by KNIME AG, Zurich, Switzerland, <http://www.knime.com/>, [contact@knime.com](mailto:contact@knime.com)

LICENSE.TXT

licenses

p2

plugins

README.txt

154,9 kB	mar	★
6 oggetti	mar	★
0 oggetti	mar	★
48 oggetti	mar	★
17,0 kB	mar	★
61,1 kB	mar	★
1,5 kB	mar	★
7,7 MB	mar	★
648 byte	mar	★
0 oggetti	mar	★
3 oggetti	mar	★
343 oggetti	mar	★
1,3 kB	mar	★



## KNIME Explorer



- ▶ My-KNIME-Hub (api.hub.knime.com)
- ▶ EXAMPLES (knime@api.hub.knime.com)
- ▼ LOCAL (Local Workspace)
  - ▶ Example Workflows

## Workflow Coach



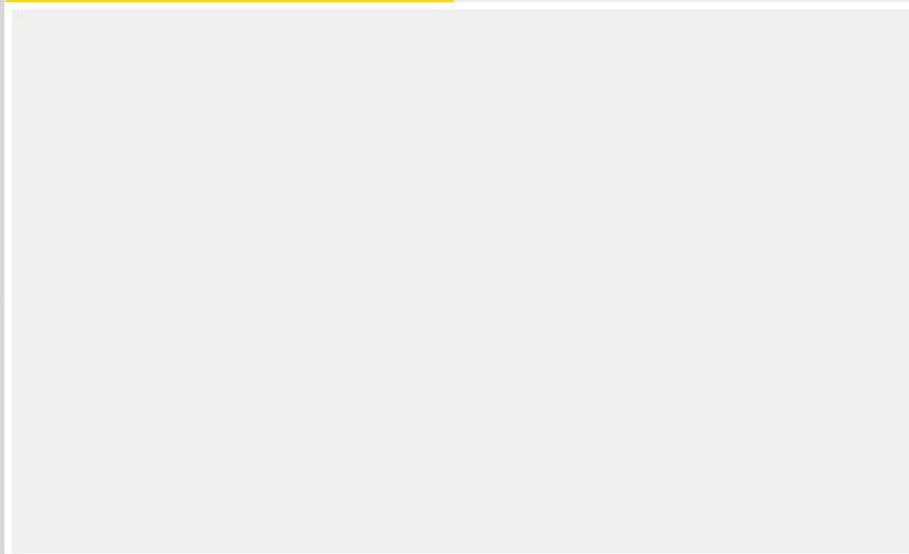
[Node recommendations only available with usage data](#)  
[Click here to configure ...](#)

## Node Repository



- ▶ IO
- ▶ Manipulation
- ▶ Views
- ▶ Analytics
- ▶ DB
- ▶ Other Data Types
- ▶ Structured Data
- ▶ Scripting
- ▶ Tools & Services
- ▶ KNIME Labs
- ▶ Workflow Control

## Welcome to KNIME Analytics Platform



## Descri...

## KNIM...



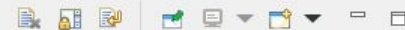
## Outline



There is no active editor that provides an outline.

## Console

## Node Monitor



## KNIME Console

```
*****
***      Welcome to KNIME Analytics Platform v4.6.3.v202209271016
***      Copyright by KNIME AG, Zurich, Switzerland
*****
Log file is located at: /home/alessandra/knime-workspace/.metadata/knime/kn:
```



### KNIME Explorer

- My-KNIME-Hub (api.hub.knime.com)
- EXAMPLES (knime@api.hub.knime.com)
- LOCAL (Local Workspace)
  - Example Workflows
    - 2020\_09\_23\_If\_Else
    - KNIME\_project1
      - Sentiment Predictor

### Workflow Coach

Node recommendations only available with usage data reporting.  
[Click here to configure ...](#)

### Node Repository

- IO
- Manipulation
- Views
- Analytics
- DB
- Other Data Types
- Structured Data
- Scripting
- Tools & Services
- KNIME Labs
- Workflow Control
- Workflow Abstraction

### 4: KNIME\_project1

### 3: Visual Analysis of Sales Da...

### Welcome to KNIME Analytics PL...

#### My First Workflow - Visualization of Sales Data

- Filter data to columns that contain relevant information
- Filter data to rows that you want to include in your analysis
- Visualize the data using a Stacked Area Chart and a Pie/Donut Chart

#### Data Access

- Provide file path

#### CSV Reader

Read sales\_2008-2011.csv

#### Data Preprocessing

- Filter columns and rows

#### Column Filter

Select "country", Exclude rows "date" and "amount" where country columns

#### Row Filter

Exclude rows where country unknown

#### Data Visualization

- Show sales by time and country

#### Stacked Area Chart

Sales by time

#### Color Manager

Assign colors based on country

#### Pie/Donut Chart

Sales by country

#### How-to

##### Configure a node

- Right click a node and select "Configure..."
- Or, double click a node

### Description

### KNIME Hub

## CSV Reader

Reads CSV files. To auto-guess the structure of the file click the Autodetect format button. If you encounter problems with incorrect guessed data types disable the Limit data rows scanned option in the Advanced Settings tab. If the input file structure changes between different invocations, enable the Support changing file schemas option in the Advanced Settings tab. For further details see the KNIME File Handling Guide [File Handling Guide](#).

**Note:** If you find that this node can't read your file, try the **File Reader** node. It offers more options for reading complex files.

This node can access a variety of different **file systems**. More information about file handling in KNIME can be found in the official [File Handling Guide](#).

### Dialog Options

#### Settings

##### Read from

Select a file system which stores the data you want to read. There are four default file system options to choose from:

- Local File System: Allows you to select a

### Outline

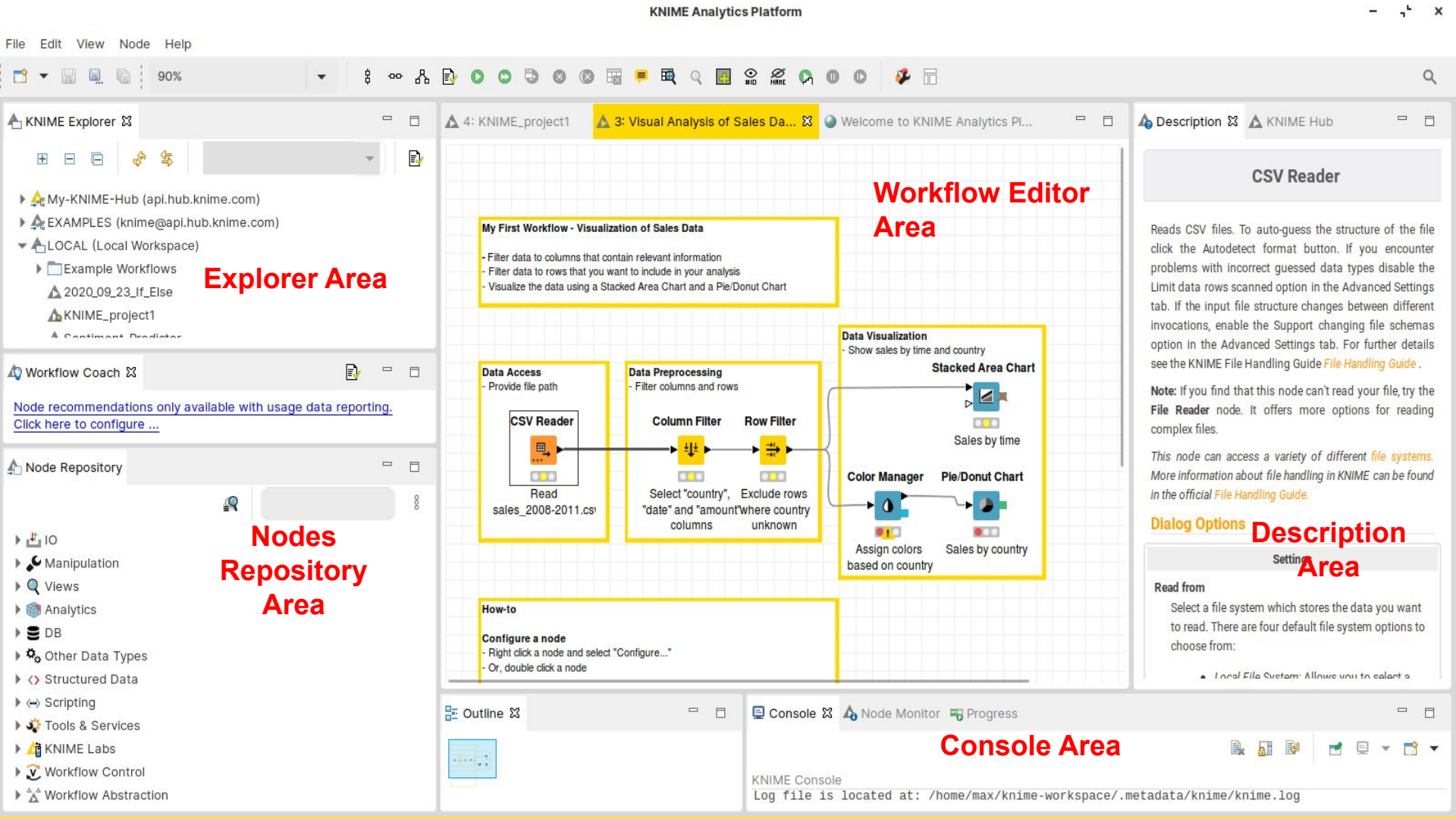
### Console

KNIME Console  
Log file is located at: /home/max/knime-workspace/.metadata/knime/knime.log

### Node Monitor

### Progress





Explorer Area

Workflow Editor Area

Nodes Repository Area

Description Area

Console Area



# **Confronto con altri ambienti di lavoro:**

- **RStudio**
- **Jupyter**

# RStudio

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Project: (None)

Environment History Connections Tutorial

Import Dataset 132 MiB

List

R Global Environment

Environment is empty

Files Plots Packages Help Viewer

Install Update

Name Description Version

User Library

<input type="checkbox"/>	askpass	Safe Password Entry for R, Git, and SSH	1.1	
<input type="checkbox"/>	assertthat	Easy Pre and Post Assertions	0.2.1	
<input type="checkbox"/>	backports	Reimplementations of Functions Introduced Since R-3.0.0	1.4.1	
<input type="checkbox"/>	base64enc	Tools for base64 encoding	0.1-3	
<input type="checkbox"/>	bdsmatrix	Routines for Block Diagonal Symmetric Matrices	1.3-6	
<input type="checkbox"/>	bit	Classes and Methods for Fast Memory-Efficient Boolean Selections	4.0.4	
<input type="checkbox"/>	bit64	A S3 Class for Vectors of 64bit Integers	4.0.5	
<input type="checkbox"/>	bitops	Bitwise Operations	1.0-7	
<input type="checkbox"/>	blob	A Simple S3 Class for Representing Vectors of Binary Data ('BLOBS')	1.2.3	
<input type="checkbox"/>	brew	Templating Framework for Report Generation	1.0-7	
<input type="checkbox"/>	brio	Basic R Input Output	1.1.3	
<input type="checkbox"/>	broom	Convert Statistical Objects into Tidy Tibbles	1.0.1	
<input type="checkbox"/>	bslib	Custom 'Bootstrap' 'Sass' Themes for 'shiny' and 'rmarkdown'	0.4.0	
<input type="checkbox"/>	cachem	Cache R Objects with Automatic Pruning	1.0.6	

```
1 ---
2 title: "R Notebook"
3 output: html_notebook
4 ---
5
6 This is an [R Markdown](http://rmarkdown.rstudio.com) Notebook. When you
7 execute code within the notebook, the results appear beneath the code.
8
9 Try executing this chunk by clicking the *Run* button within the chunk or
10 by placing your cursor inside it and pressing *Ctrl+Shift+Enter*.
11
12 ```{r}
13 plot(cars)
14
15 Add a new chunk by clicking the *Insert Chunk* button on the toolbar or by
16 pressing *Ctrl+Alt+I*.
17
18 When you save the notebook, an HTML file containing the code and output
19 will be saved alongside it (click the *Preview* button or press
20 *Ctrl+Shift+K* to preview the HTML file).
```

4:1 (Top Level) R Markdown

Console Terminal Jobs

R 4.1.3 ~/

R è un software libero ed è rilasciato SENZA ALCUNA GARANZIA.  
Siamo ben lieti se potrai redistribuirlo, ma sotto certe condizioni.  
Scrivi 'license()' o 'licence()' per maggiori dettagli.

R è un progetto collaborativo con molti contributi esterni.  
Scrivi 'contributors()' per maggiori informazioni e 'citation()' per sapere come citare R o i pacchetti nelle pubblicazioni.

Scrivi 'demo()' per una dimostrazione, 'help()' per la guida oppure 'help.start()' per la guida nel browser HTML.

# Jupyter (Jupyter-lab)

The screenshot displays the JupyterLab web interface. The top navigation bar includes a file browser on the left, a central code editor, and a right-hand output area. The file browser shows a directory structure with files like 'applications', 'icons', 'jupyter', 'man', and 'Untitled.ipynb'. The code editor contains three cells of Python code. The first cell imports 'pandas' as 'pd' and 'numpy' as 'np'. The second cell creates a pandas Series 's' with values [1, 3, 5, np.nan, 6, 8]. The third cell displays the variable 's', which is rendered as a table with indices 0 to 5 and values 1.0, 3.0, 5.0, NaN, 6.0, 8.0, with a dtype of float64. The bottom status bar indicates the current mode is 'Command', the kernel is 'Python 3', and the file is 'Untitled.ipynb'.

Untitled.ipynb - JupyterLab

localhost:8888/lab/tree/Untitled.ipynb

File Edit View Run Kernel Tabs Settings Help

Filter files by name

Name	Last Modified
applications	2 months ago
icons	a year ago
jupyter	a year ago
man	a year ago
Untitled.ipynb	seconds ago

Untitled.ipynb

```
[1]: import pandas as pd
import numpy as np

[2]: s = pd.Series([1, 3, 5, np.nan, 6, 8])

[3]: s
```

0	1.0
1	3.0
2	5.0
3	NaN
4	6.0
5	8.0
dtype: float64	

Simple 0 s 1 Python 3 | Idle

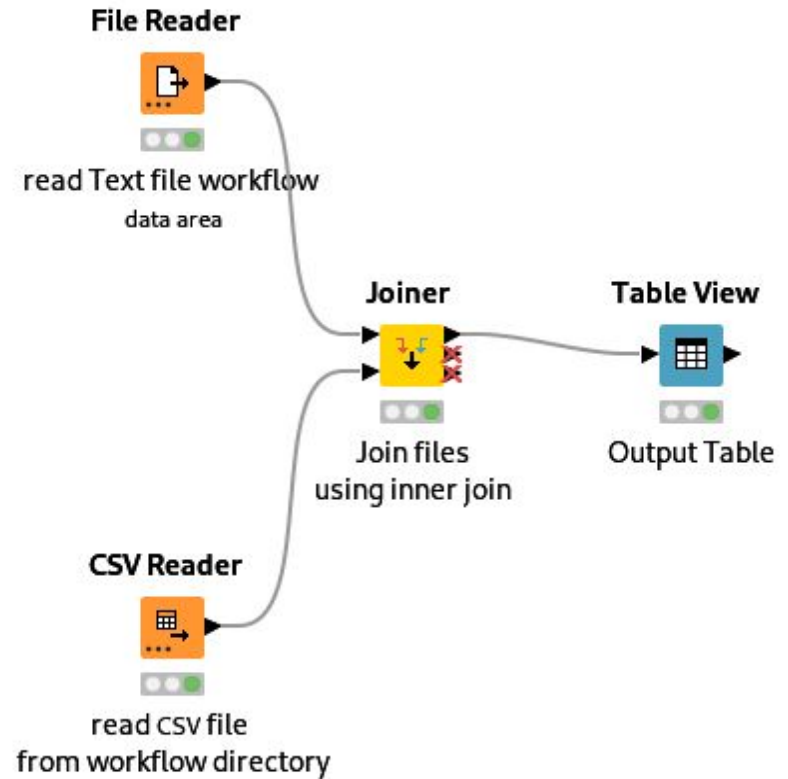
Mode: Command Ln 1, Col 2 Untitled.ipynb

**filmato:**

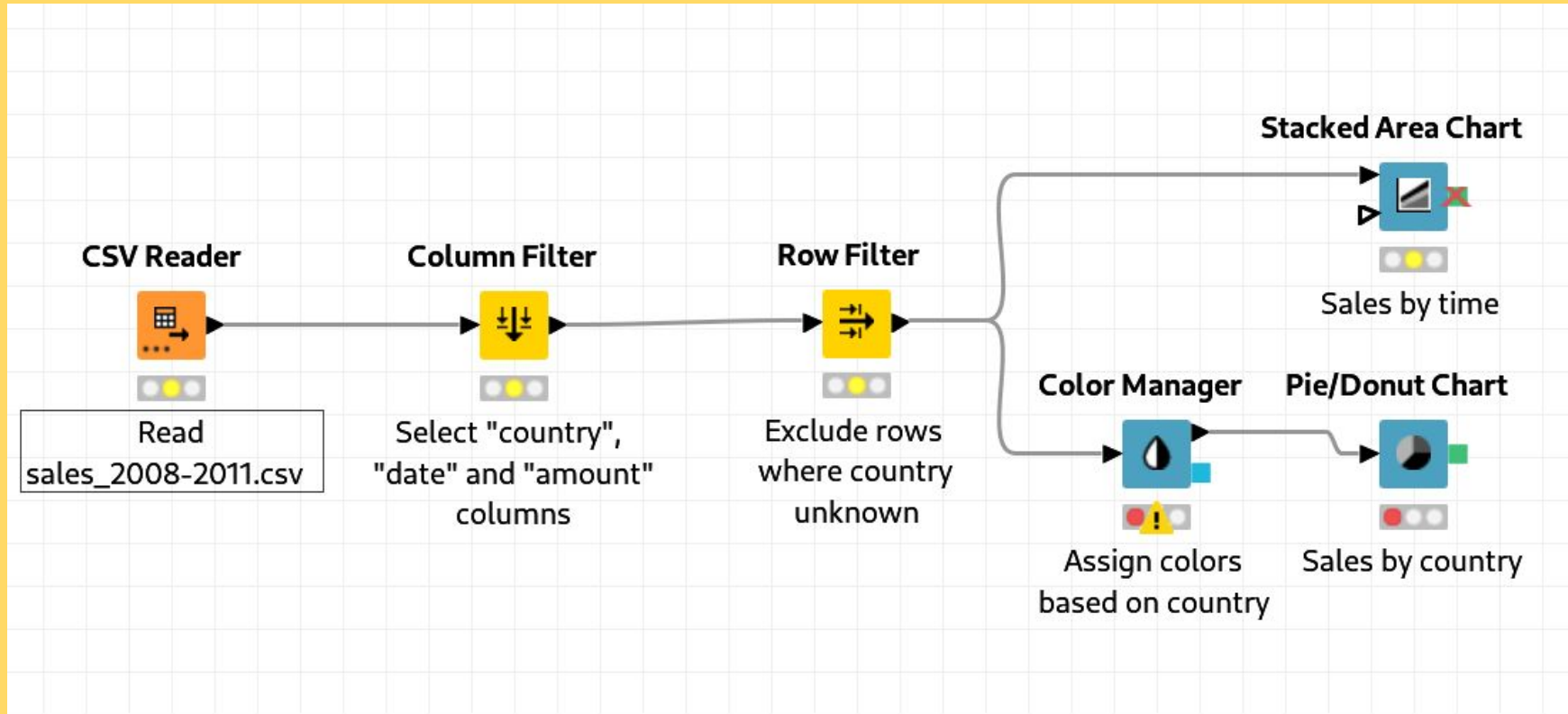
[2\\_download\\_avvioLinux](#)

- **Struttura Logica (Workflow)**
- **Elementi (Nodes)**
- **Funzionamento**

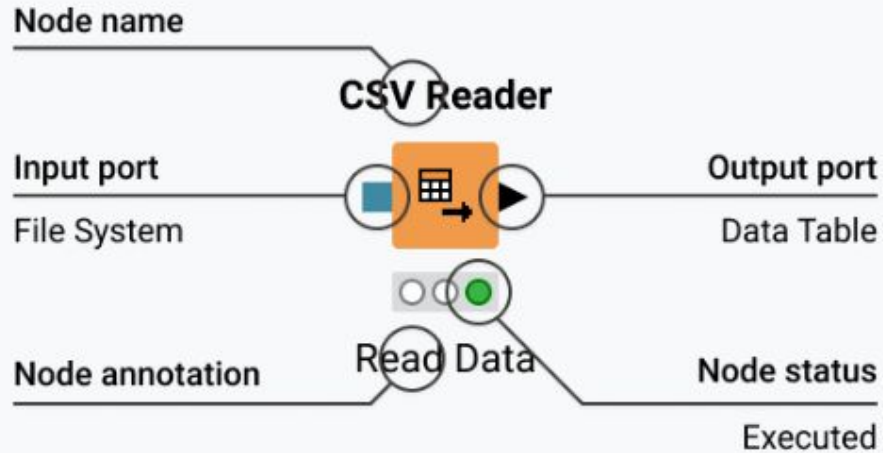
Strumento di analisi, reportistica, machine learning e data mining, basato su un **sistema di composizione di elementi grafici (Nodi)** tra loro **strutturalmente** e **logicamente interconnessi**.



# Struttura Logica (Workflow)



# Nodo





# Nodo → Semaforo degli stati



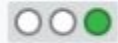
## Not configured

The node is waiting for configuration or incoming data.



## Configured

The node has been configured correctly, and can be executed.



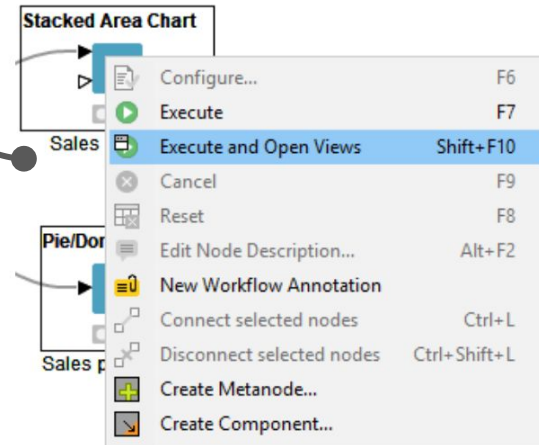
## Executed

The node has been successfully executed. Results may be viewed and used in downstream nodes.



## Error

The node has encountered an error during execution.



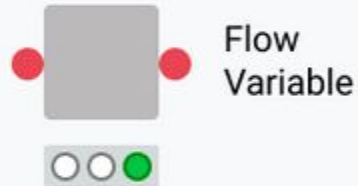
# Nodo —> Input output ports



Data  
Table



Database  
Connection



Flow  
Variable



Tree  
Ensemble  
Model



PMML  
Model



Image



Data  
Table

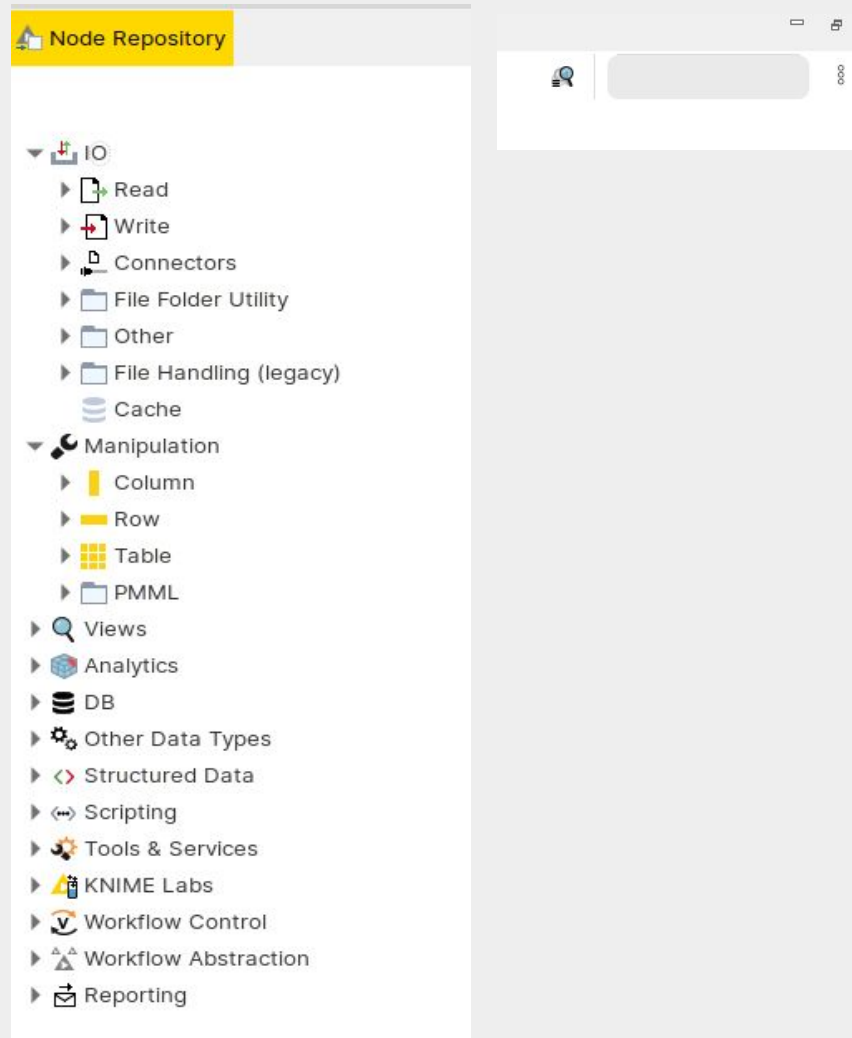
## Node Repository Area

Organizzata a menu per categoria Nodi

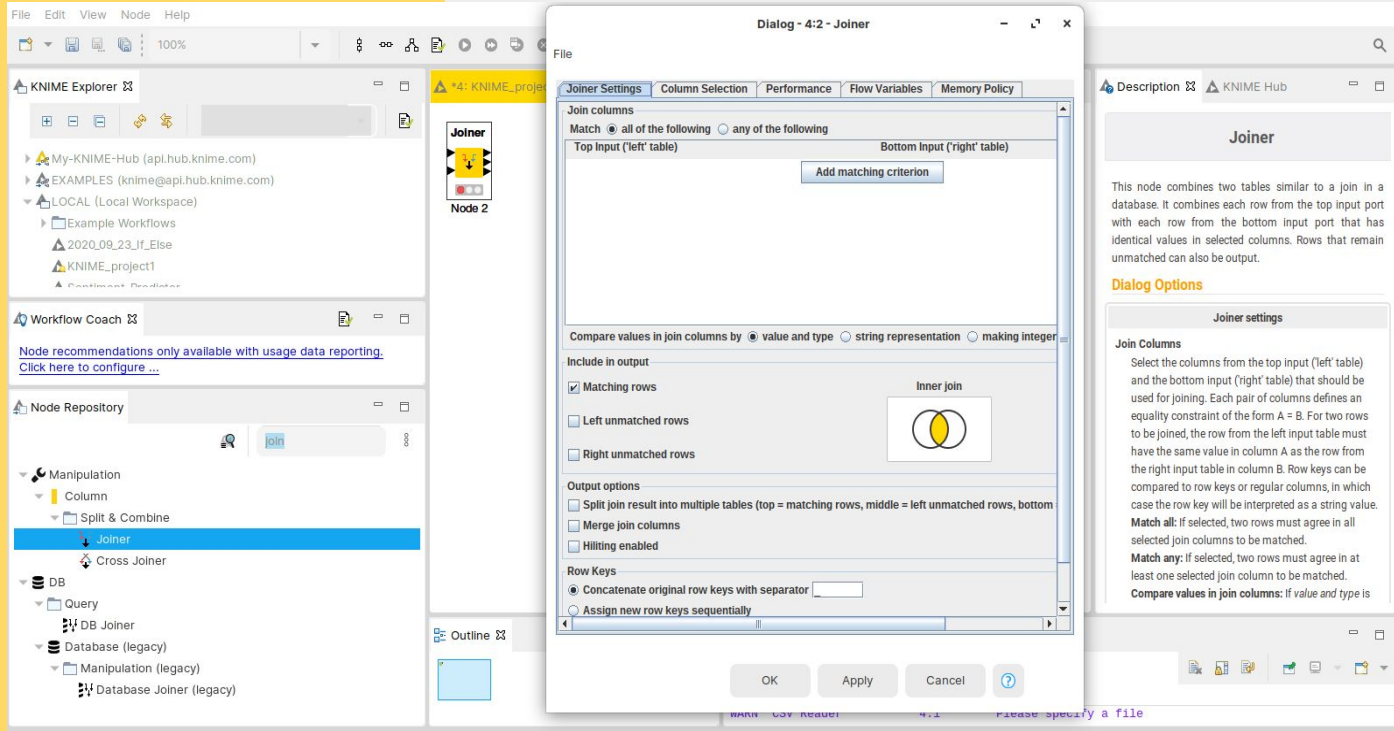
La selezione dei Nodi si puo' fare con **doppio clic** o **drag and drop** sull'Area di lavoro.

E' presente anche una **barra di ricerca**.

Per aggiungere Nodi con funzionalità diverse si accede a KNIME Hub.



Entrando dentro ai nodi si aprono delle maschere personalizzate di settaggio, dove selezionare, escludere, trascinare in modo visuale e grafico i parametri e gli attributi.



The screenshot displays the KNIME software interface with the 'Joiner' node selected in the Node Repository. The 'Joiner Settings' dialog box is open, showing the 'Join columns' tab. The dialog includes options for matching criteria (Match all of the following or any of the following), input tables (Top Input and Bottom Input), and output options (Include in output, Output options). The 'Join Columns' section shows a Venn diagram for 'Inner join'. The 'Row Keys' section shows options for concatenating original row keys or assigning new row keys sequentially.

**Joiner Settings**

Join columns  
Match ☒ all of the following ☐ any of the following

Top Input ('left' table) Bottom Input ('right' table)

Add matching criterion

Compare values in join columns by ☒ value and type ☐ string representation ☐ making integer

Include in output

☒ Matching rows ☐ Left unmatched rows ☐ Right unmatched rows

Inner join

Output options

☐ Split join result into multiple tables (top = matching rows, middle = left unmatched rows, bottom = right unmatched rows)

☐ Merge join columns

☐ Hitting enabled

Row Keys

☒ Concatenate original row keys with separator

☐ Assign new row keys sequentially

OK Apply Cancel ?

**Joiner**

This node combines two tables similar to a join in a database. It combines each row from the top input port with each row from the bottom input port that has identical values in selected columns. Rows that remain unmatched can also be output.

**Dialog Options**

**Joiner settings**

**Join Columns**

Select the columns from the top input ('left' table) and the bottom input ('right' table) that should be used for joining. Each pair of columns defines an equality constraint of the form  $A = B$ . For two rows to be joined, the row from the left input table must have the same value in column A as the row from the right input table in column B. Row keys can be compared to row keys or regular columns, in which case the row key will be interpreted as a string value.

**Match all:** If selected, two rows must agree in all selected join columns to be matched.

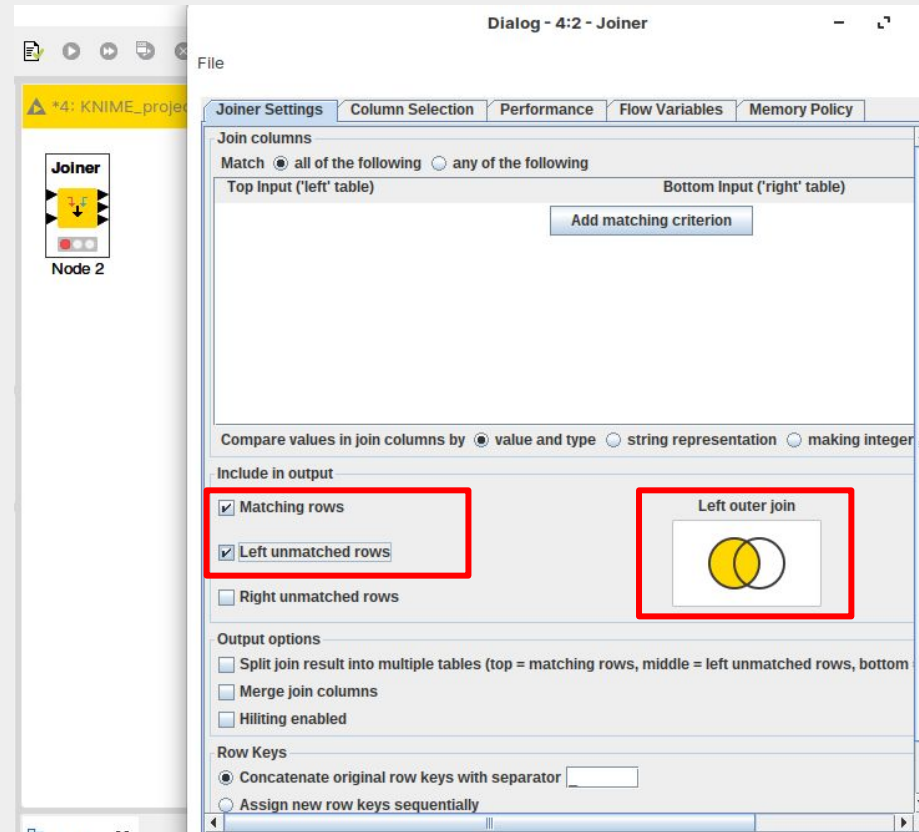
**Match any:** If selected, two rows must agree in at least one selected join column to be matched.

**Compare values in join columns:** If value and type is

Entrando dentro ai nodi si aprono delle **maschere personalizzate di settaggio**, dove selezionare, escludere, trascinare in modo visuale e grafico i parametri e gli attributi.

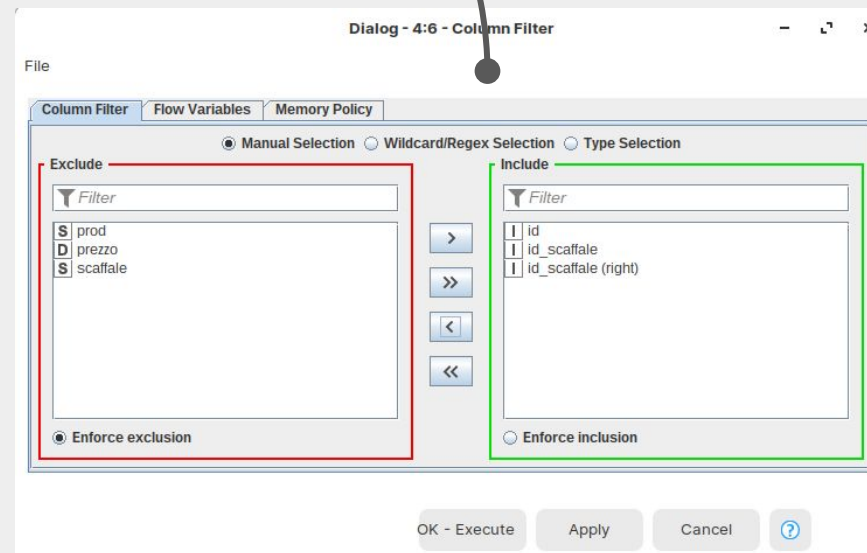
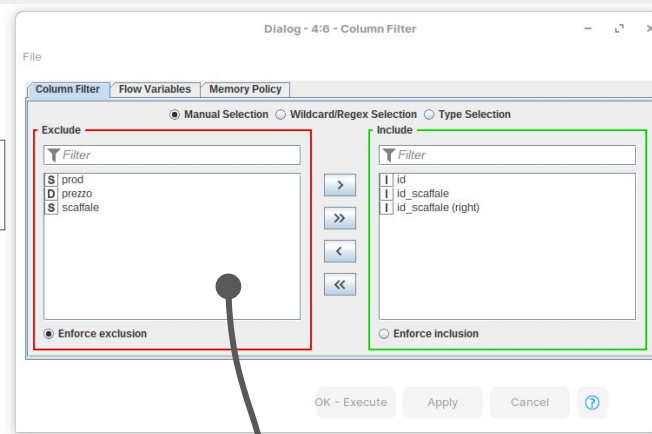
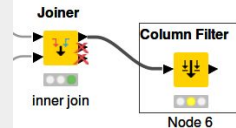
Esempio:

Nodo Join → Left outer Join



Entrando dentro ai nodi si aprono delle **maschere personalizzate di settaggio**, dove selezionare, escludere, trascinare in modo visuale e grafico i parametri e gli attributi.

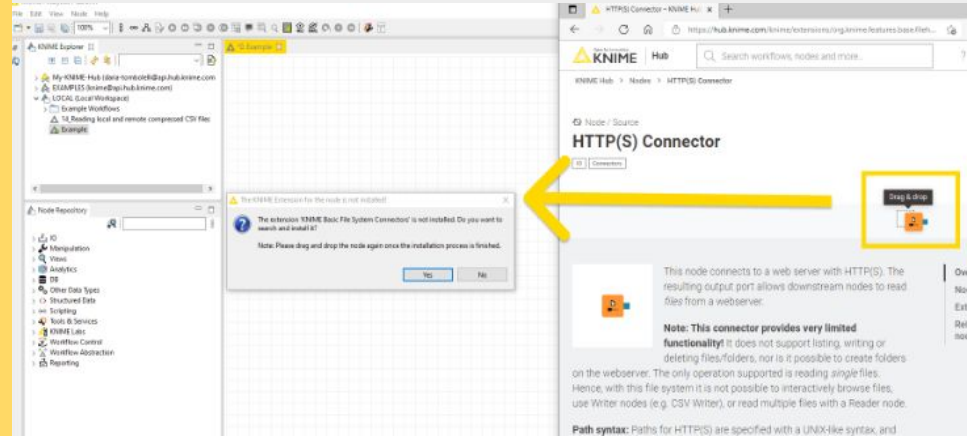
Esempio:  
Nodo Column Filter



# KNIME Hub

You can **drag & drop** nodes, components, extensions, and workflows from KNIME Hub to import them into KNIME Analytics Platform and use them right away to build your own workflow, install KNIME Extensions, and execute uploaded workflow into your local installation.

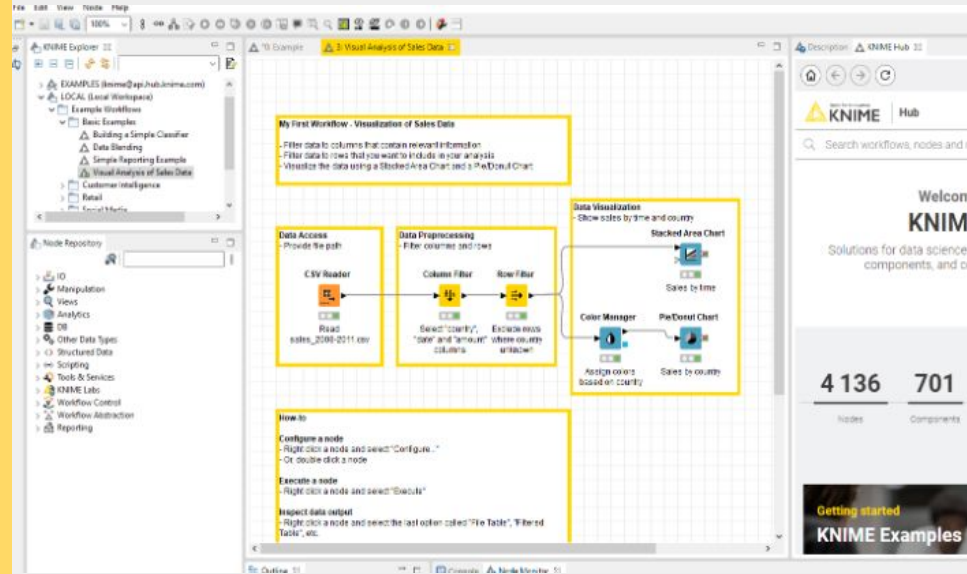
fonte: [https://docs.knime.com/latest/hub\\_user\\_guide/index.html#introduction](https://docs.knime.com/latest/hub_user_guide/index.html#introduction)



# KNIME Hub

A KNIME Hub view is also available in **KNIME Analytics Platform**. It is simply an integrated browser in the KNIME Analytics Platform workbench so you can use KNIME Hub in the panel as you would do in an external browser window. Enter your search query, hit enter, and then drag & drop nodes, components, workflows, or extensions to the workbench of KNIME Analytics Platform.





fonte: [https://docs.knime.com/latest/hub\\_user\\_guide/index.html#introduction](https://docs.knime.com/latest/hub_user_guide/index.html#introduction)





# <https://hub.knime.com/>

[All](#) [Workflows](#) [Nodes](#) [Components](#) [Extensions](#)

	<p>Node / Manipulator</p> <h3>Column Expressions</h3> <p>KNIME Labs Streamable</p>	<p>This node provides the possibility to append an arbitrary number of columns or modify existing columns using expressions. For eac...</p>
	<p>Node / Visualizer</p> <h3>Data Explorer</h3> <p>KNIME Labs JavaScript Views (Labs)</p>	<p>The Data Explorer node offers a range of options for displaying properties of the input data in an interactive view. The node sup...</p>
	<p>Node / Other</p> <h3>Write To Excel Template</h3> <p>Community Nodes AF Utilities ExcelUtil</p>	<p>This node writes the input data table into an existing Excel file without changing its formatting. Alternatively a new file will ...</p>
	<p>Node / Source</p> <h3>CSV Reader</h3> <p>IO Read Streamable</p>	<p>Reads CSV files. To auto-guess the structure of the file click the Autodetect format button. If you encounter problems with incor...</p>

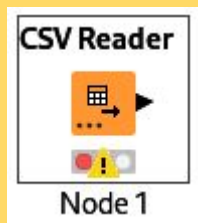
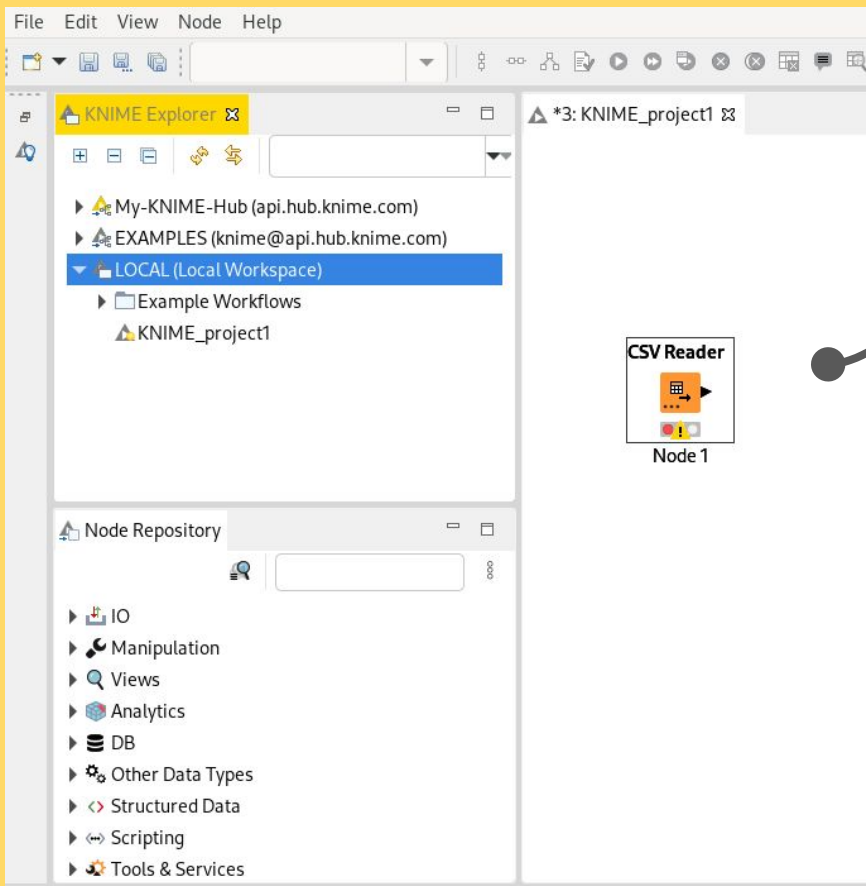


**filmato:**

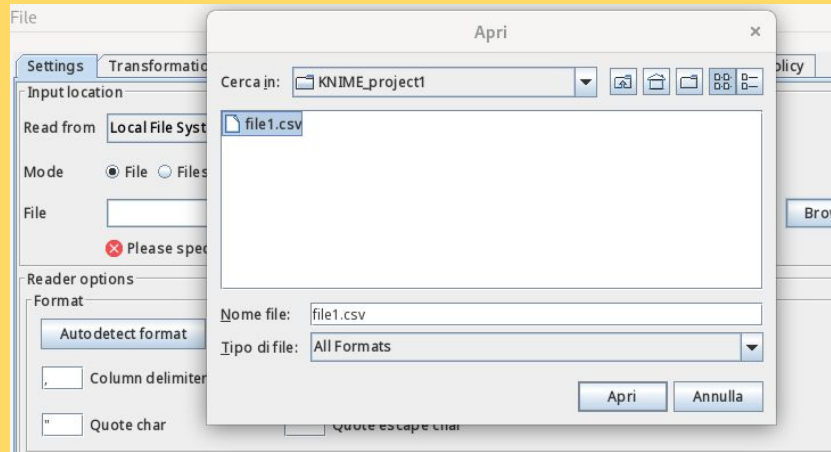
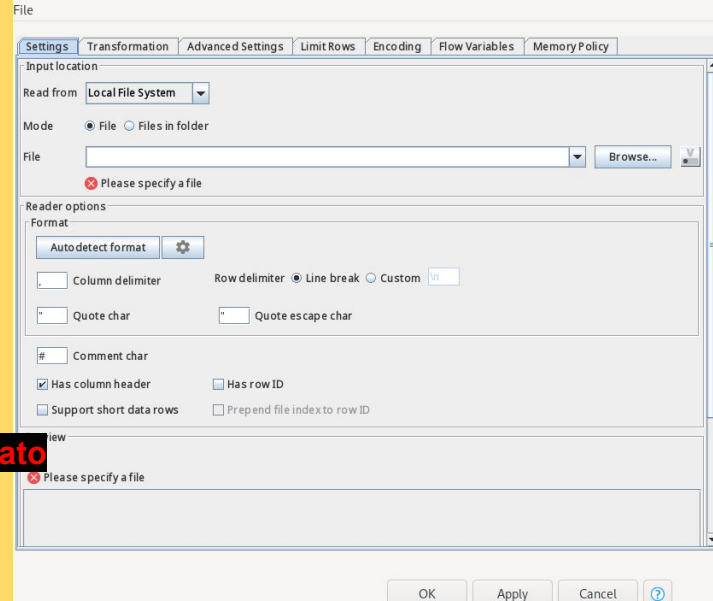
[3.0\\_importWorkFlow](#)

[3.1\\_importNodes](#)

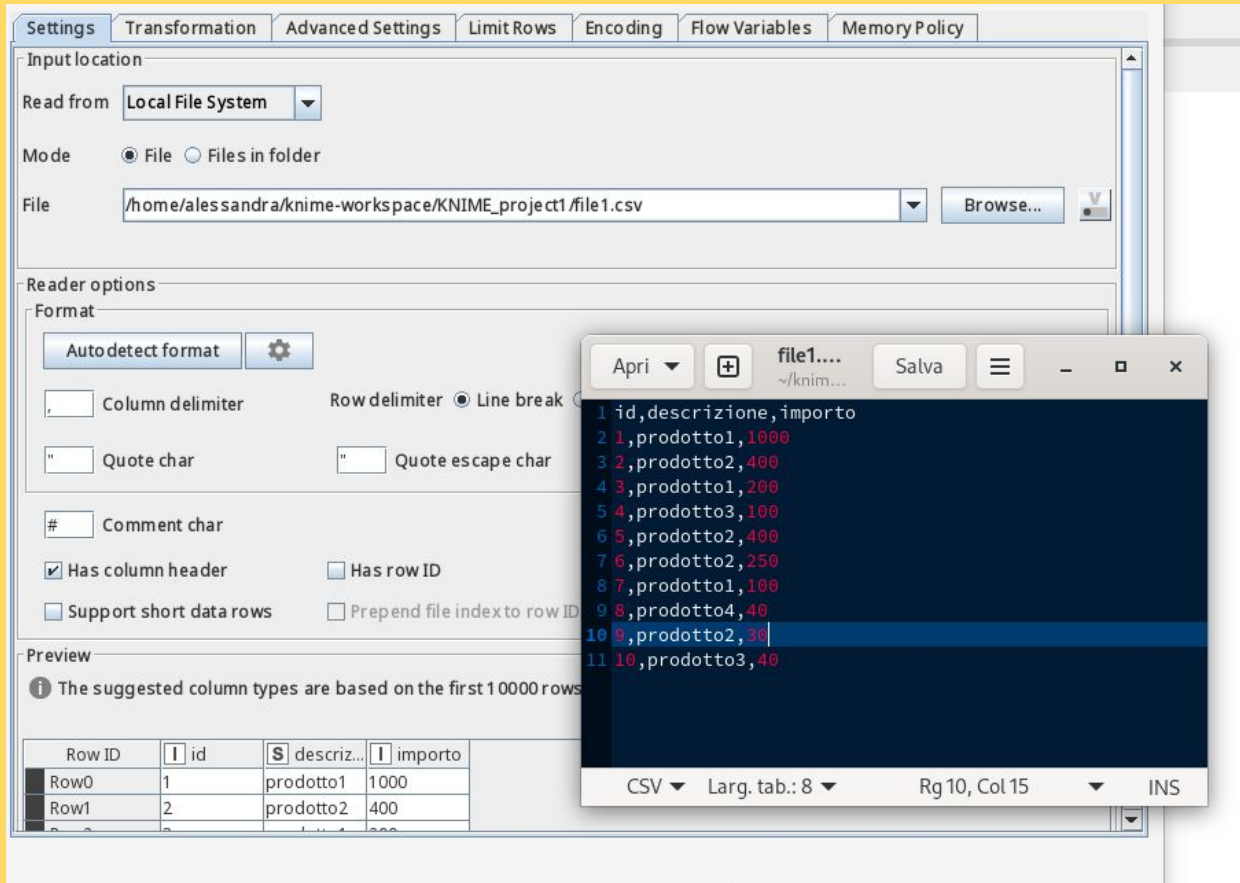
# Setting Node CSV Reader



**semaforo  
non configurato  
rosso**



# Execute Node CSV Reader



Settings Transformation Advanced Settings Limit Rows Encoding Flow Variables Memory Policy

Input location

Read from: Local File System

Mode: ☒ File ☐ Files in folder

File: /home/alessandra/knime-workspace/KNIME\_project1/file1.csv

Reader options

Format

Auto detect format

Column delimiter: , Row delimiter: ☒ Line break

Quote char: " Quote escape char: "

Comment char: #

☒ Has column header ☐ Has row ID

☐ Support short data rows ☐ Prepend file index to row ID

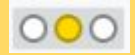
Preview

The suggested column types are based on the first 10000 rows

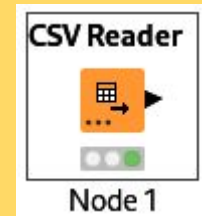
Row ID	id	descriz...	importo
Row0	1	prodotto1	1000
Row1	2	prodotto2	400



**semaforo  
configurato  
giallo**



**execute**



**semaforo  
eseguito  
verde**



# CSV Reader → Row Filter(labs)

File

Filter Criteria Flow Variables Memory Policy

Query View

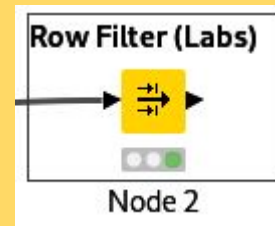
importo >= 0

Edit condition

importo >= 400

Add Condition Add Group Remove Group Delete

execute



Filtered - 3:2 - Row Filter

Table "default" - Rows: 3 Spec - Columns: 3 Properties

Row ID	id	descriz...	importo
Row0	1	prodotto1	1000
Row1	2	prodotto2	400
Row4	5	prodotto2	400

Aprì file1... Salva

```
1 id,descrizione,importo
2 1,prodotto1,1000
3 2,prodotto2,400
4 3,prodotto1,200
5 4,prodotto3,100
6 5,prodotto2,400
7 6,prodotto2,250
8 7,prodotto1,100
9 8,prodotto4,40
10 9,prodotto2,30
11 10,prodotto3,40
```

KNIME Explorer

\*3: KNIME\_project1

My-KNIME-Hub (api.hub.knime.com)

EXAMPLES (knime@api.hub.knime.com)

LOCAL (Local Workspace)

Example Workflows

KNIME\_project1

Node Repository

Scripting

Tools & Services

KNIME Labs

Column Expressions

Row Filter (Labs)

Row Splitter (Labs)

Variable Expressions

CSV Reader

Node 1

Row Filter (Labs)

Node 2

**esempi**

**filmati:**

[4\\_exampleProject](#)

[5\\_examplejoin](#)

[6\\_example\\_filter](#)

[7\\_exampleSalesData](#)

**grazie per l'attenzione :)**

Alessandra Santi