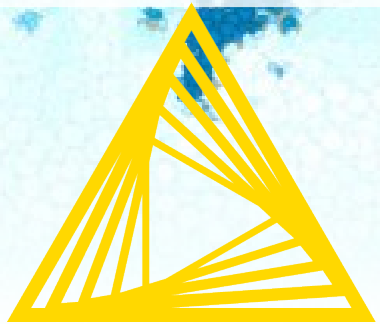


Seminario: Introducción a **KNIME**



Open for Innovation

KNIME

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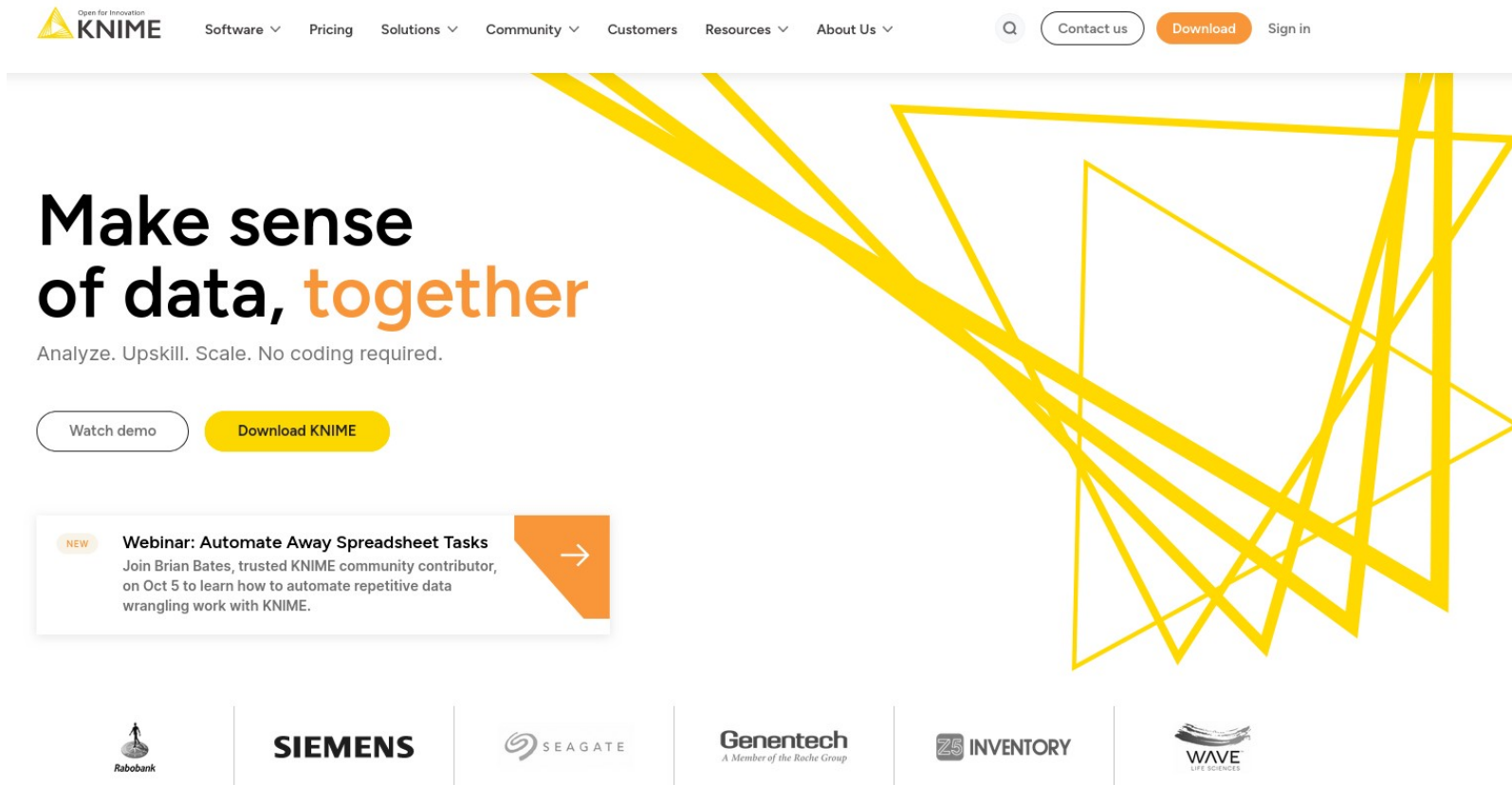
KNIME—se pronuncia [naim]— es una plataforma para análisis de datos que es:

- ❑ Software Libre.
- ❑ Gratuita.
- ❑ Integra otras plataformas como **BIRT** (para creación de informes), **WEKA** (para minería de datos), **R** y **Python** (para análisis estadísticos y visualización), además de otras extensiones como ETL, informes, visualización y *big data*.
- ❑ Muy adecuada como herramienta docente para IN por el tamaño del *software* y facilidad de instalación e uso.

Instalación

- Instalar la versión de 64 bits y elegir el máximo de RAM.
- Versión actual: 5.1.1.
- Extensiones útiles para la asignatura (instalar más adelante):
 - KNIME & Extensions
 - KNIME HTML/PDF Writer
 - KNIME Interactive R Statistics Integration
 - KNIME JfreeChart
 - KNIME Weka Data Mining Integration (3.7)
 - KNIME Labs Extensions
 - KNIME XGBoost Integration

Instalación: www.knime.com



The image shows the top portion of the KNIME website. The header includes the KNIME logo with the tagline 'Open for Innovation', a navigation menu with links for Software, Pricing, Solutions, Community, Customers, Resources, and About Us, and a search bar. Below the header, the main content area features a large yellow geometric graphic on the right. The text 'Make sense of data, together' is prominently displayed, with 'together' in orange. Below this, the tagline 'Analyze. Upskill. Scale. No coding required.' is shown. Two buttons, 'Watch demo' and 'Download KNIME', are provided. A 'NEW' badge highlights a webinar titled 'Webinar: Automate Away Spreadsheet Tasks' by Brian Bates, scheduled for Oct 5. The footer displays logos for partner companies: Rabobank, SIEMENS, SEAGATE, Genentech (a member of the Roche Group), ZS INVENTORY, and WAVE LIFE SCIENCES.

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Software ▾ Pricing Solutions ▾ Community ▾ Customers Resources ▾ About Us ▾

Q Contact us Download Sign in

Make sense of data, together

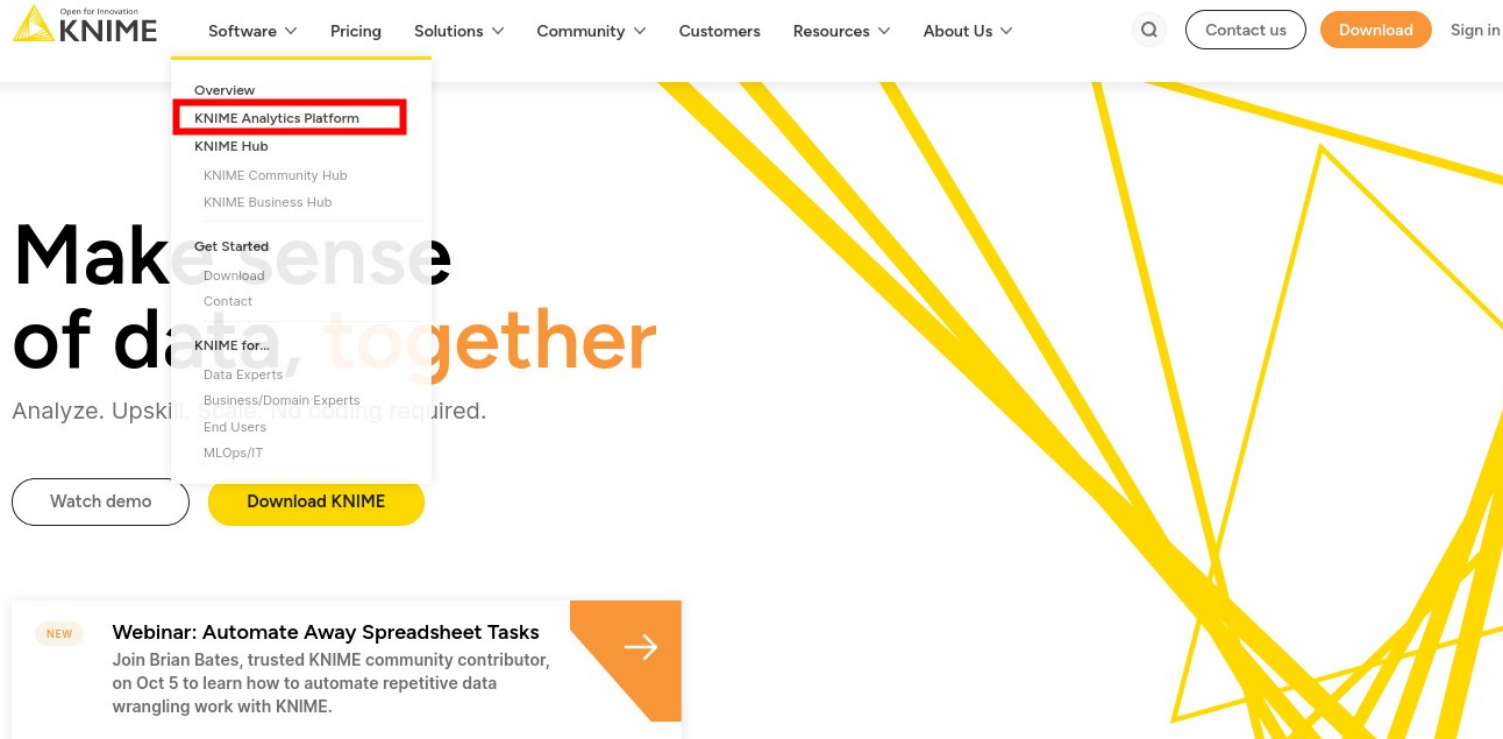
Analyze. Upskill. Scale. No coding required.

Watch demo Download KNIME

NEW Webinar: Automate Away Spreadsheet Tasks
Join Brian Bates, trusted KNIME community contributor, on Oct 5 to learn how to automate repetitive data wrangling work with KNIME.

Rabobank SIEMENS SEAGATE Genentech
A Member of the Roche Group ZS INVENTORY WAVE
LIFE SCIENCES

Instalación: www.knime.com



The screenshot shows the KNIME website homepage. The navigation menu is open, highlighting the 'KNIME Analytics Platform' option. The main content area features the text 'Make sense of data, together' and 'Analyze. Upskill. Collaborate. No coding required.' Below this are buttons for 'Watch demo' and 'Download KNIME'. A sidebar on the right contains a 'NEW' badge and a link to a webinar titled 'Webinar: Automate Away Spreadsheet Tasks'.

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Overview
KNIME Analytics Platform
KNIME Hub
KNIME Community Hub
KNIME Business Hub

Get Started
Download
Contact

KNIME for...
Data Experts
Business/Domain Experts
End Users
MLOps/IT

Make sense of data, together
Analyze. Upskill. Collaborate. No coding required.

Watch demo Download KNIME

NEW Webinar: Automate Away Spreadsheet Tasks
Join Brian Bates, trusted KNIME community contributor, on Oct 5 to learn how to automate repetitive data wrangling work with KNIME.

Instalación

If you haven't done so already, why not sign up for our newsletter and other updates? We obviously won't share your contact information with anyone and we also won't fill your mailbox with clutter.

If you're new to the KNIME family, let us help you get started with a short series of introductory emails. These will get you up and running as quickly as possible and introduce you to resources that will maximize your success with KNIME Analytics Platform.

Email

Company / Organization

First Name

Last Name

Country

Select your Role

Select your Department

Would you mind telling us how you heard about KNIME?

☐ I'd like to receive regular news updates from KNIME and accept the [privacy policy](#).

☐ ... In addition to the above, I would like to receive three getting started emails.

***KNIME uses the information you provide to share relevant content and product updates and to better understand our community. You may unsubscribe from these emails at any time.**

Download

Instalación

Download the latest KNIME Analytics Platform for Windows, Linux, and macOS: **5.1.1**. 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.

Windows

Microsoft Defender SmartScreen may block download in its attempt to prevent malicious software installations.
To solve the problem [click here](#).

KNIME Analytics Platform for Windows (installer)

The installer adds an icon to the desktop and suggests suitable memory settings

Download (530 MB)

KNIME Analytics Platform for Windows (self-extracting archive)

The self-extracting archive only creates a folder holding the KNIME installation

Download (543 MB)

KNIME Analytics Platform for Windows (zip archive)

Download (650 MB)

Linux

KNIME Analytics Platform for Linux

Download (659 MB)

Mac

KNIME Analytics Platform for macOS x86_64 (Intel)

Download (627 MB)

KNIME Analytics Platform for macOS arm64 (Apple silicon)

Download (613 MB)

Componentes

The screenshot displays the KNIME Analytics Platform interface. The top bar shows the title 'KNIME Analytics Platform' and several open project tabs: 'Home', 'Cancelacion_hotel', 'Beans', 'Faringitis', 'Calculo_peso', and 'KNIME_project'. Below the tabs is a toolbar with buttons for 'Execute all', 'Cancel all', and 'Reset all'. The left sidebar contains a 'Repository' pane with a search bar and a list of nodes categorized by function: IO, Manipulation, and Views. The main workspace is divided into two sections. The top section, labeled 'Ventana de Flujo' (Flow Window), contains a large dashed box with a downward arrow and the text 'Start building your workflow by dropping your data or nodes here.' The bottom section, labeled 'Ventaja de Salida (del Componente)' (Output View of the Component), contains a large dashed box with the text 'To show the node output, please select a configured or executed node.'

KNIME Analytics Platform

Home Cancelacion_hotel Beans Faringitis Calculo_peso KNIME_project

Execute all Cancel all Reset all

Repository

Search Nodes

IO

Excel Reader Excel Writer Microsoft Authenticator

Google Authenticator Google Sheets Reader Google Sheets Writer

CSV Reader CSV Writer Show all

Manipulation

Row Filter Column Filter Concatenate

Value Lookup Row Aggregator Table Splitter

Table Cropper Cell Extractor Show all

Views

Bar Chart Line Plot Pie Chart

Stacked Area Chart Scatter Plot Statistics

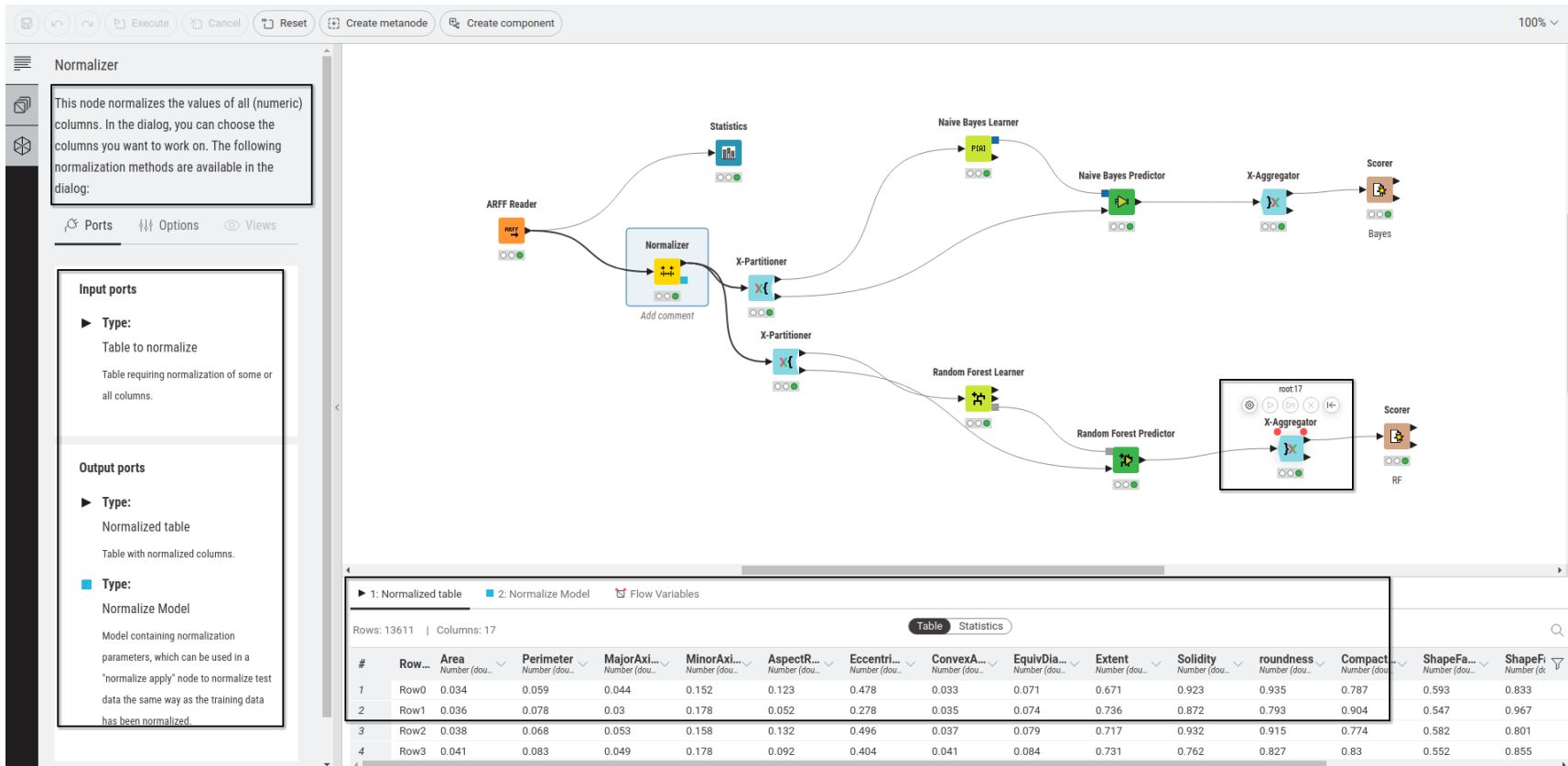
Ventana de Flujo

Start building your workflow by dropping your data or nodes here.

Ventaja de Salida (del Componente)

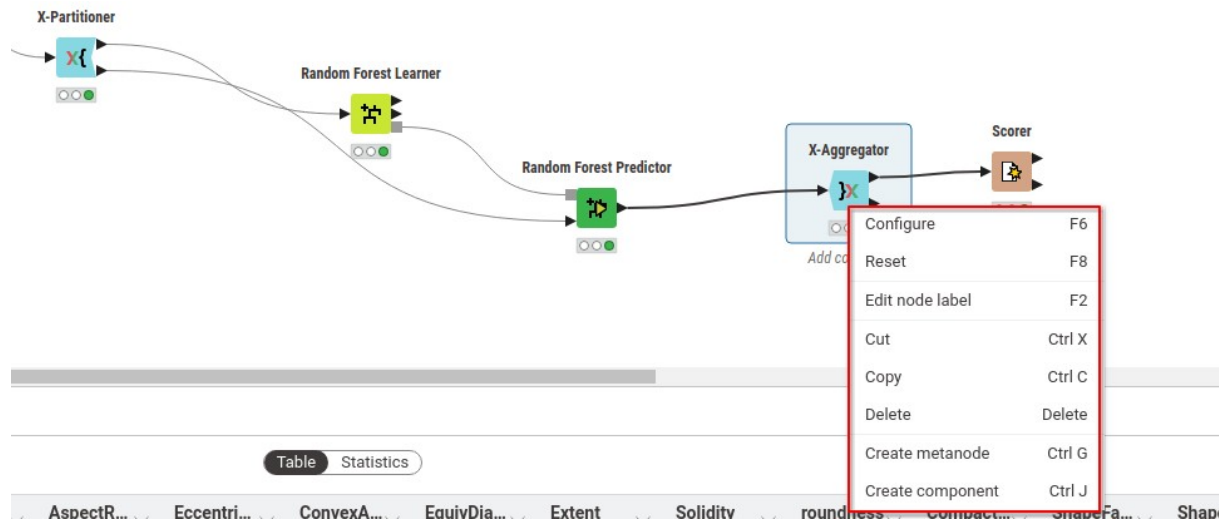
To show the node output, please select a configured or executed node.

Componentes en acción

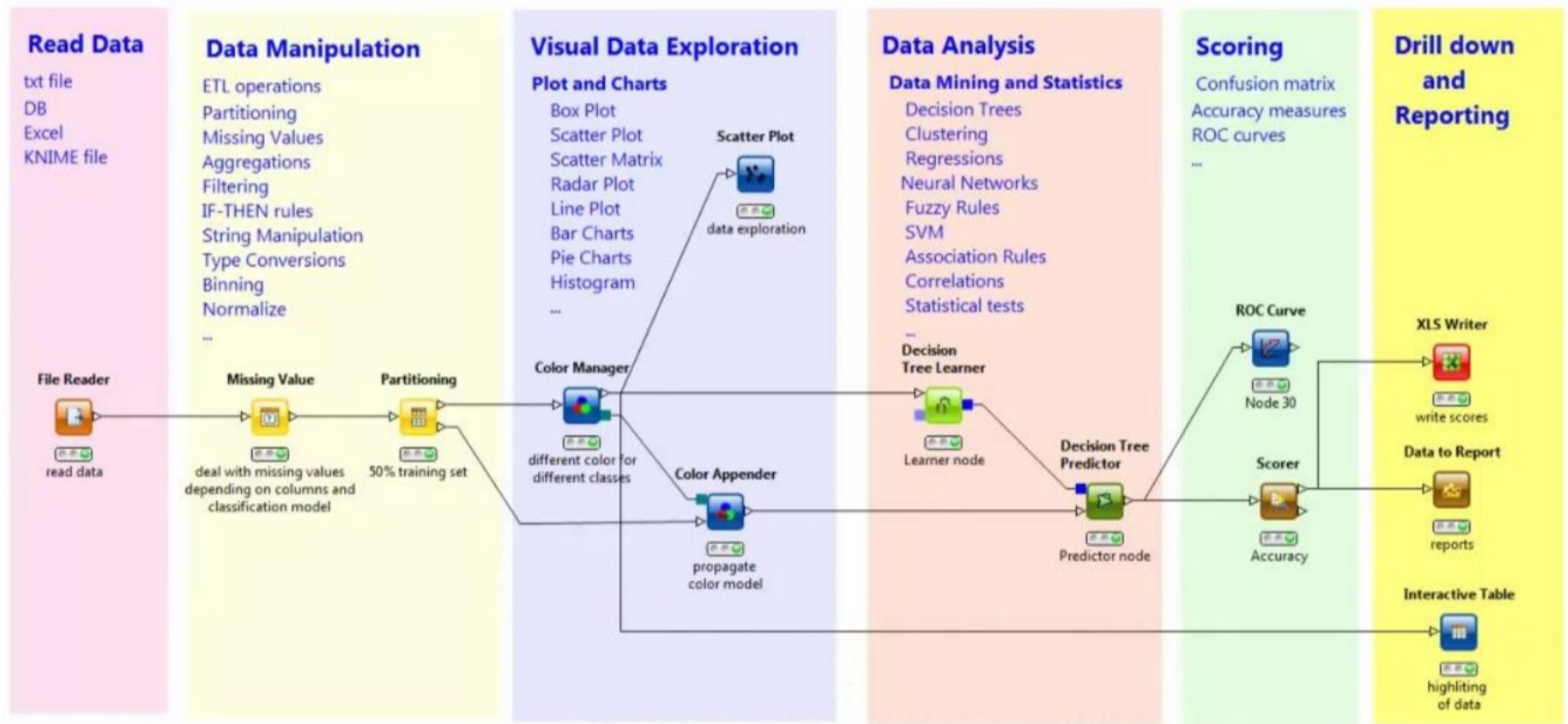


Flujo en KNIME (Workflow)

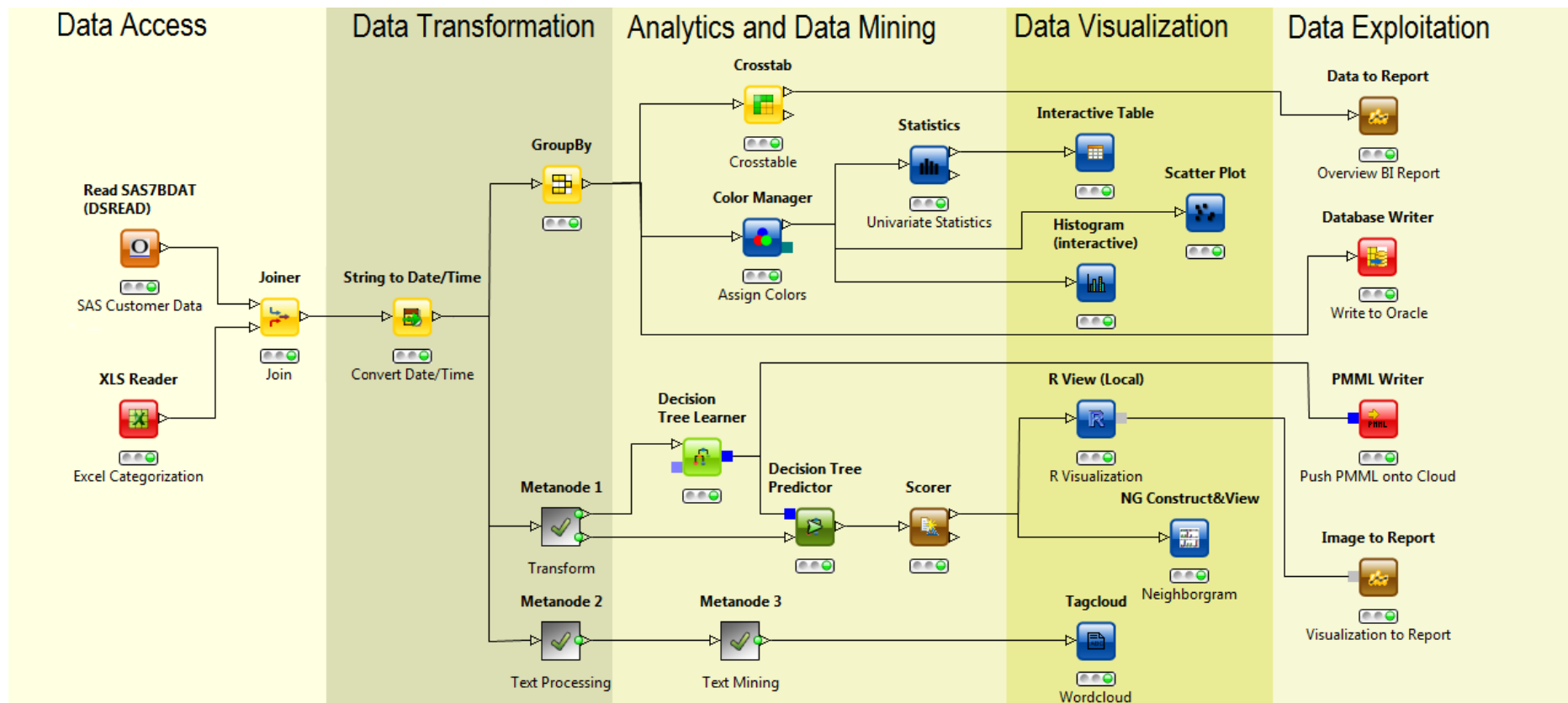
- El flujo de datos pasa de nodo a nodo mediante conexiones entre los puertos de los nodos
- Se construyen pichando en un puerto de salida y llevándolo a un puerto de entrada. Luego se configuran.



Ejemplo 1 de Flujo

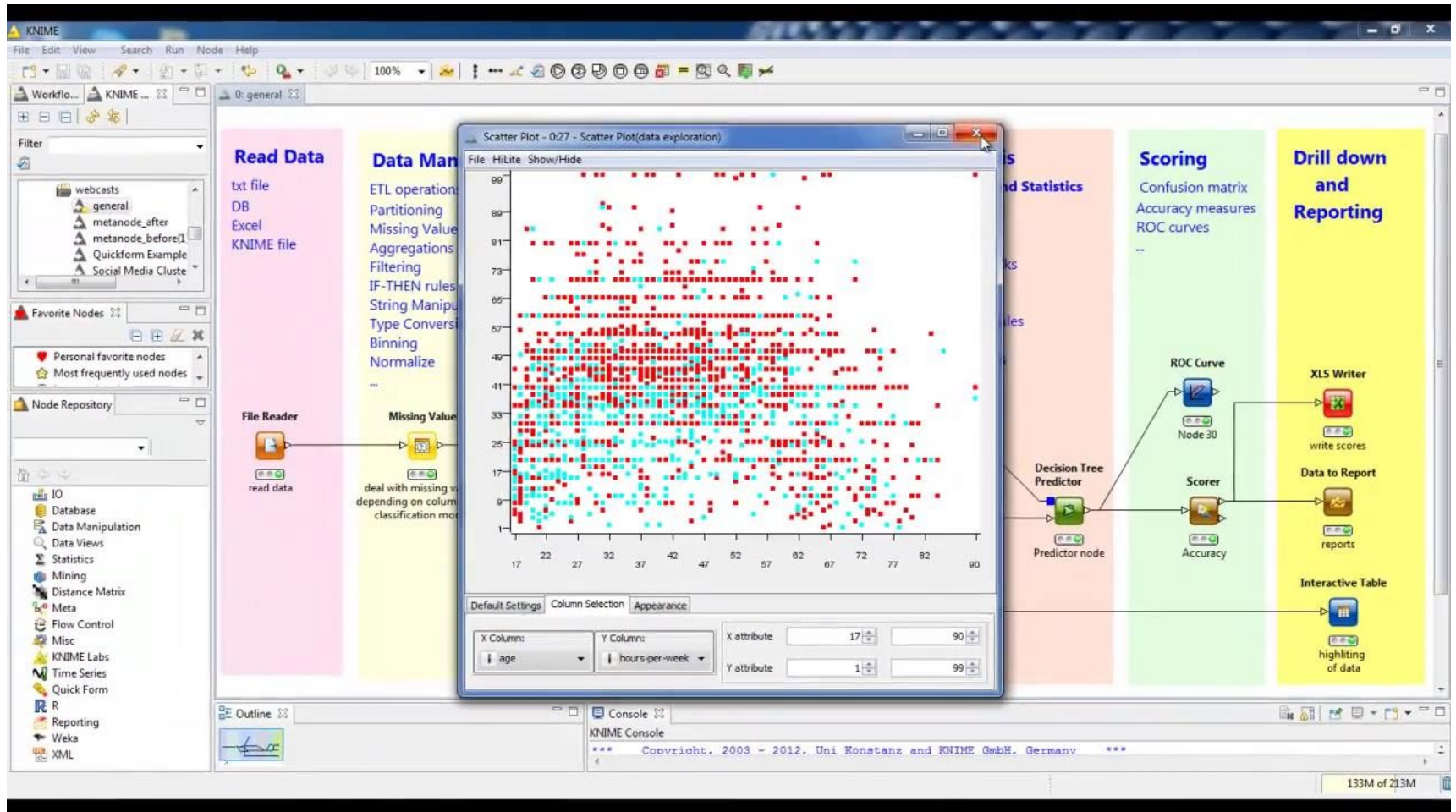


Ejemplo 2 de Flujo



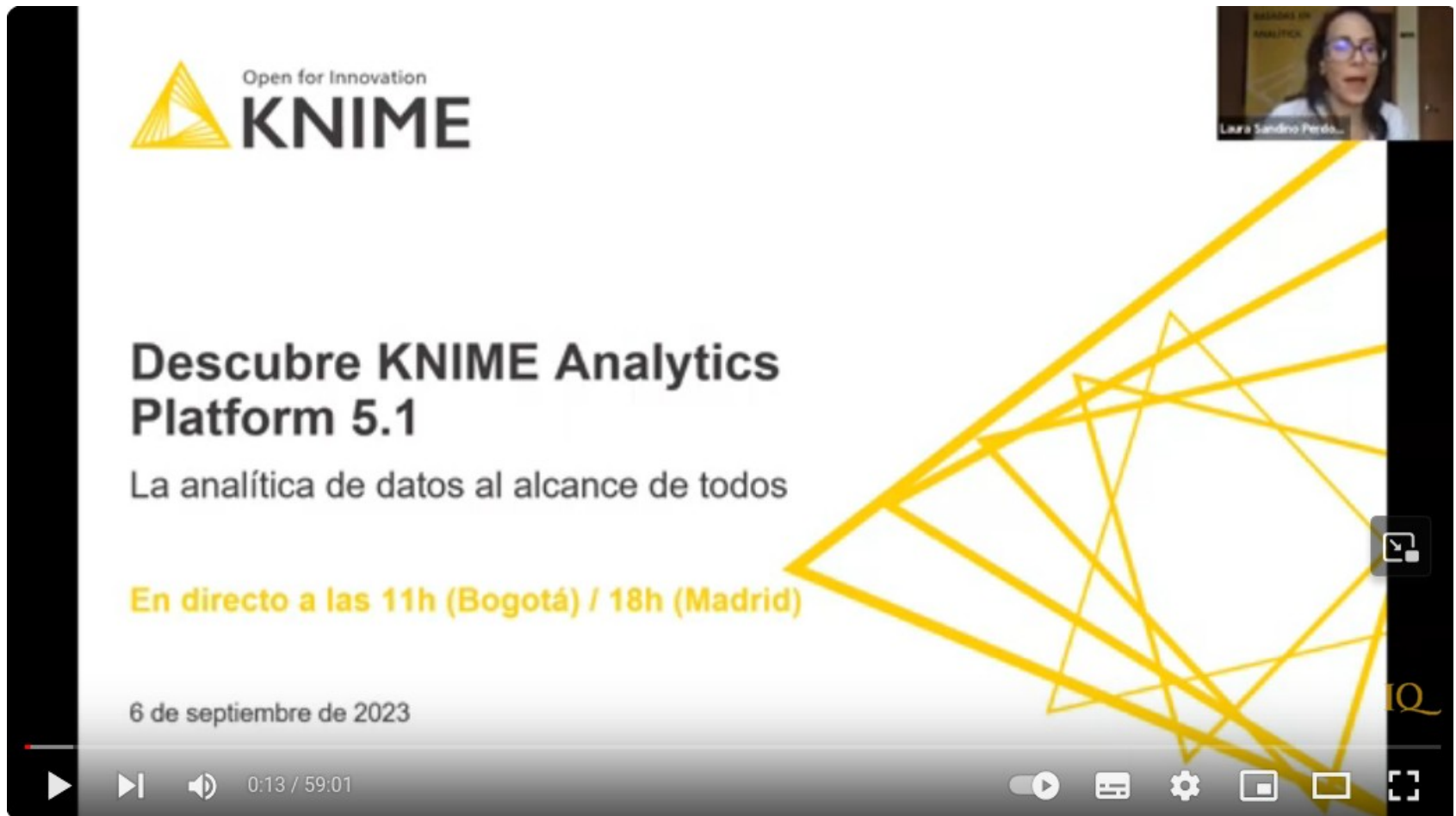
Ejemplo de KNIME (4)

<http://youtu.be/ft7Ksgss3Tc> (6'09'')



Curso Introducción de KNIME

<https://www.youtube.com/watch?v=RbcFDafiRaY> (59'01)



The image shows a YouTube video player interface. The video content is a promotional slide for KNIME Analytics Platform 5.1. The slide features the KNIME logo with the tagline "Open for Innovation" and the text "Descubre KNIME Analytics Platform 5.1". Below this, it says "La analítica de datos al alcance de todos". A yellow banner indicates the live stream times: "En directo a las 11h (Bogotá) / 18h (Madrid)". The date "6 de septiembre de 2023" is shown at the bottom left of the slide. The video player controls at the bottom show a play button, a progress bar at 0:13 / 59:01, and various settings icons. A small video inset in the top right corner shows a woman speaking, with the name "Laura Sandino Perdomo" visible below her. A large yellow geometric graphic is overlaid on the right side of the video frame.

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Descubre KNIME Analytics Platform 5.1

La analítica de datos al alcance de todos

En directo a las 11h (Bogotá) / 18h (Madrid)

6 de septiembre de 2023

0:13 / 59:01

Laura Sandino Perdomo

Material de Apoyo

- <https://ccia.ugr.es/~casillas/knime.html>
- <https://www.youtube.com/user/KNIMETV>
- <https://www.youtube.com/watch?v=RbcFDafiRaY>
- <http://www.knime.org/knimepress/beginners-luck>
- <https://www.slideshare.net/itapia/manual-bsico-knime>
- http://didawiki.cli.di.unipi.it/lib/exe/fetch.php/dm/knime_slides.pdf

Ejercicios

1. Instalación
2. Probar distintos ejemplos de uso del servidor.
3. Crear un flujo para un problema de clasificación:
 1. Obtener estadísticas de los datos de entrada.
 2. Explorar visualmente los datos.
 3. Obtener partición 30-70 y aprender un árbol de decisión.
 4. Visualizar el árbol de decisión.
 5. Aplicar distintas métricas.
 6. Obtener matriz de confusión.
 7. Aplicar un Cross Validation.