KNIME Analytics Platform
An Intuitive, Open Source Platform for Data Science

Open for Innovation
KNIME

KNIME Analytics Platform is an open source software that allows users to access, blend, analyze, and visualize their data, without any coding. Its low-code, no-code interface makes analytics accessible to anyone, offering an easy introduction for beginners, and an advanced data science set of tools for experienced users.

Designed to address data science needs of any level of complexity — from automating spreadsheets, to ETL, to predictive modeling and machine learning — the software offers a complete range of analytic techniques. In addition, users can choose tools or scripting languages of their choice when building models, all within one platform.

KNIME's commitment to community-driven innovation means that it is always on the bleeding edge of data science — future-proof as the data tools landscape evolves.

Key Benefits

Build Visual Workflows in an Intuitive UI

KNIME Analytics Platform offers you thousands of nodes, each designed to perform a discrete action on data (like reading, joining, partitioning, visualizing, model training etc). Users can easily create an analytic workflow by joining a series of nodes together via an intuitive, drag and drop graphical interface, without any need for coding.

Accelerate Speed to Insight

Time-consuming, manual tasks like data prep and reporting can be automated by building a workflow once and using it repeatedly. Spreadsheet users too can work more efficiently. Where spreadsheets are error-prone and hard to debug, KNIME workflows let users see each step of the analysis clearly, minimizing the time to spot and fix errors, even for larger datasets.

Build Analytics of Any Complexity

Beginners can replace manual spreadsheet tasks with reusable workflows. Data experts can access KNIME's open ecosystem from ML libraries like TensorFlow, Keras, and H2O, to cutting-edge ML techniques. Users can code in their preferred language — R, Python, or more and encapsulate complex segments of a workflow into reusable components.

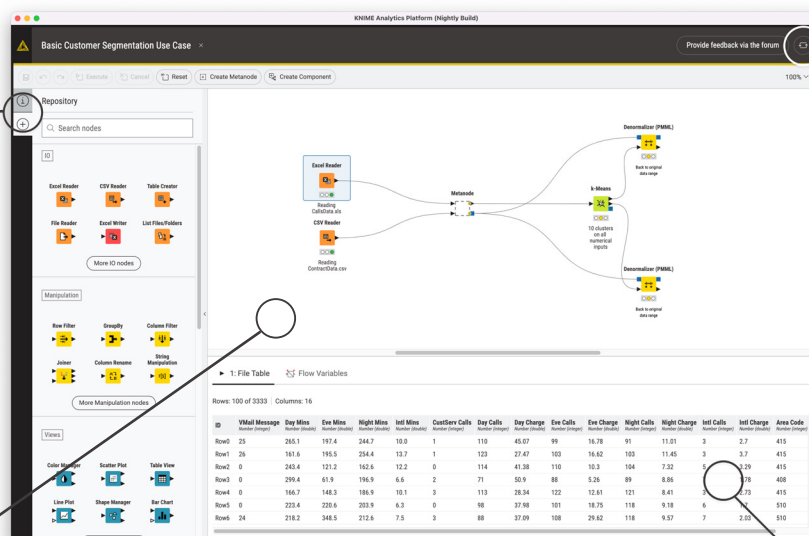**Side Panel Navigation**

Description
Description of the displayed workflow or component.

Node Repository
All available nodes in KNIME Analytics Platform to build your workflows.

Workflow Editor
Canvas for editing the currently active workflow.

Switch Perspective
Possibility to switch back to the current KNIME Analytics Platform user interface.

Node Monitor
Shows the output of the current selected node and also the flow variable values.

KNIME Analytics Platform Key Capabilities

Access & Blend

Access data from any source

With over 300 supported data sources, users can access data from anywhere, including on-prem and cloud-based sources, like Amazon, Azure, Snowflake, Google, etc. Easy integration to all major databases, (SQL Server, Postgres, MySQL, Snowflake, Redshift, BigQuery, and more) provides users with the ability to decide whether to move their data or opt for in-database processing, ensuring data is processed within their database, without ever being transferred to KNIME.

Blend and process all different types and volumes of data

Users across disciplines can integrate all different types of data – strings, integers, images, text, networks, audio, molecules, and more – with KNIME, saving time on data management. The platform also has no limitation on dataset size. Users can import and export HDFS data and perform SQL analytics within Hive and Impala, or create and run Apache Spark applications within KNIME, in the cloud, on Snowflake, Databricks or Amazon EMR, or on-premise clusters such as Cloudera.

Explore & Analyze

Choose from wide array of analytic techniques

Users can support their model building with KNIME's broad, deep, and project-relevant analytic capabilities. KNIME offers access to supervised algorithms (classification, time series analysis, regression and deep analysis techniques) and unsupervised algorithms (clustering and dimensionality reduction techniques) as well as ensemble learning (bagging, boosting, and custom ensemble modeling).

Visualize Your Data

Users can explore their data with interactive data views, choosing from dozens of graphs & charts including bar charts, lines, ROC curves, scatterplots, and more. Users can also extend visualization options with tools they're already using, such as Tableau, PowerBI, and others.

Take Advantage of AutoML

To save time, users can automatically train supervised ML models for binary and multiclass classification with the AutoML component, which automates the ML cycle with data preparation, parameter optimization with cross validation, scoring, evaluation and selection.

Execute & Share

Executing Workflows

Users can manually execute workflows in KNIME Analytics Platform as often as they require, with quick results. Automating and scheduling workflows can be done with a KNIME Business Hub license.

Share Results

Users can share their analyses as reports or visualizations with colleagues or stakeholders by manually executing workflows and then outputting in their required format. Further sharing options – such as sharing as data apps – requires a KNIME Business Hub license.

Collaborate & Scale with KNIME Hub

KNIME Analytics Platform is complemented by KNIME Hub, the commercial software for collaborating and scaling data science, offered online as KNIME Community Hub, or installed into a company's private infrastructure as KNIME Business Hub.

KNIME Community Hub enables users to browse and learn from thousands of working examples of data science solutions. Teams can also share and collaborate on solutions privately – with virtually no infrastructure overhead – while taking advantage of community contributions to upskill and dive deeper into the discipline of data science.

KNIME Business Hub provides the same capabilities for collaboration – but within a company's secure infrastructure. Teams can share knowledge within their organization or privately, just within their team. Additionally, KNIME Business Hub offers robust productionization capabilities. Users can deploy their workflows as data apps and services to any number of consumers, making data-driven decisioning pervasive across their organization.

Get Started Now

Download KNIME Analytics Platform for free today at **knime.com/download**

Contact us on how to scale data science with KNIME Hub at **sales@knime.com**

Learn with a KNIME data scientist at **knime.com/knime-courses**