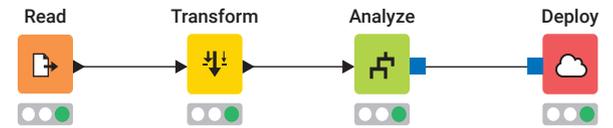


KNIME Analytics Platform

Creating Data Science

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.

With more than 2,500 nodes, hundreds of ready to run example workflows, a comprehensive range of integrated tools, and the widest choice of advanced algorithms available, KNIME Analytics Platform is the perfect software platform for data science teams to create data science. Our steady position on unrestricted open source provides access to a global community of expertise and their active contributions.



End to end data science with KNIME Software.

Build End to End Data Science

Build visual workflows:
Create workflows using the intuitive, drag and drop style, graphical interface - without the need for coding.

Blend data from any source:
Open and combine simple text formats (CSV, PDF, XLS, JSON, XML, etc.), unstructured data types (images, documents, networks, molecules, etc.), or time series data.

Choose from over 2,500 nodes:
Build your workflow, model each step of your analysis, control the flow of data, and ensure your work is always current.

Get up and running quickly:
Select one of the hundreds of publicly available example workflows (available on the KNIME Hub), or use the integrated workflow coach to guide you through building your own workflow.

Blend Data and Tools

Blend data:
Combine simple text files, databases, documents, images, networks, even data based on Apache Hadoop within the same visual workflow.

Integrate R and Python:
Include R and Python code in your KNIME workflows, reusing expertise, which is graphically documented and shared among data scientists.

Blend different tools:
Blend state of the art tools easily with KNIME. Integrate Apache Hadoop, Spark, and MLlib using the KNIME Big Data Integrations. Additional integrations include deep learning frameworks and other machine learning libraries (H2O, Weka, and more).

Document visually:
Coding is optional and work is documented visually with the easy to learn graphical interface.

Leverage Machine Learning and AI

Build machine learning models:
For classification, regression, dimension reduction, or clustering, using advanced algorithms including deep learning, tree-based methods, and logistic regression.

Portable and durable:
Optimize model performance with hyperparameter optimization, boosting, bagging, stacking, or building complex ensembles.

Validate models:
Apply performance metrics including Accuracy, R², AUC, and ROC. Perform cross validation to guarantee model stability.

Make predictions:
Use validated models directly, or with industry leading PMML, including on Apache Spark.

2,500 Nodes and Growing

- Connectors for all major file formats and databases.
- Native and in-database data blending and transformation.
- Support for a wealth of data types such as XML, JSON, images, documents, networks, time series, and more.
- Advanced predictive and machine learning algorithms.
- Integrations with state of the art machine learning libraries: H2O, Keras for Deep Learning, Scikit-Learn, etc.
- Interactive data views and reporting using web-based methods.



Model Training for Classification

This workflow demonstrates how a classifier is built and applied to new data. It also illustrates the use of KNIME's hitting capabilities, which allow interactive views to be connected within the same workflow.

Task Predict the income group from demographic attributes of the adult data set (census data).

Find more information on KNIME's Learning Hub at <http://www.knime.org/learning-hub> (tutorials, videos, white papers, many more workflows)

The workflow includes nodes: File Reader, Color Manager, Partitioning, Random Forest Learner (Node 17), Random Forest Predictor (Node 18), Interactive Table, Scorer, Data Cleaning, and JavaScript Bar Chart.

KNIME Analytics Platform workbench.

Extensions for KNIME Analytics Platform

There is a large variety of KNIME extensions providing access to complex data types (images, texts, documents, time series and sequences, audio, and more), plus advanced machine learning algorithms. There are also integrations with other open source projects.

KNIME Integrations for Big Data provide access to Apache Hadoop data from within KNIME Analytics Platform and KNIME Server, enabling access to Hadoop data storage such as Apache Hive and Impala.

KNIME Integrations for Apache Spark enable you to model and run Apache Spark jobs from within KNIME Analytics Platform or KNIME Server, bringing the power of scalable analytics to your KNIME environment.

KNIME Integrations for R and Python enable you to use pieces of R or Python code as an integral part of your KNIME workflow. Build a predictive model, apply that model to new data, or simply create other types of visualizations.

Deep Learning nodes allow you to read, create, edit, train, and execute deep neural networks within KNIME Analytics Platform. Keras provides access to state of the art deep learning frameworks such as TensorFlow, CNTK, and others.

The KNIME Integration for H2O enables you to reach out to this high performance machine learning library via KNIME nodes.

Community and Partner Extensions

Access a large ecosystem of community and partner extensions.

KNIME Community Extensions are open source contributions from other KNIME users which are accessible from within KNIME Analytics Platform. These extensions cover an additional range of functionality such as image analysis, churn prediction, and bio and chem informatics.

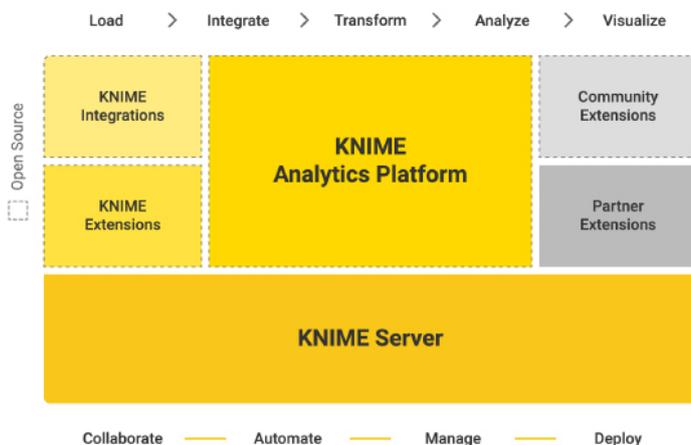
KNIME Partner Extensions offer a commercial set of capabilities, ranging from industry specific applications to sophisticated, scientific software integrations - all created and maintained by KNIME trusted partners.

Package your own code into KNIME by using the KNIME SDK environment. While you're at it, consider contributing it to the KNIME Community.

KNIME Server: Collaboration, Automation, Management, and Deployment

The unrestricted, open source, and free KNIME Analytics Platform is the perfect environment for giving data science teams all they need to create data science. KNIME Server extends the power of KNIME Analytics Platform to everyone in the company. It enables collaboration, automation, management, and deployment of data science workflows as analytical applications and services.

- KNIME Server Small is designed for small teams, enabling them to exchange workflows and execute them remotely.
- KNIME Server Medium adds Guided Analytics by letting non-data-experts interact with parts of a workflow via the KNIME WebPortal, and includes REST API for company-wide deployment.
- KNIME Server Large allows multiple installations as well as unlimited KNIME WebPortal consumers, and is intended for large organizations collaborating across business units or across the globe.



About KNIME

At KNIME, we build software for fast, easy and intuitive access to advanced data science, helping organizations drive innovation.

For over a decade, a thriving community of data scientists in over 60 countries has been working with our platform on every kind of data: from numbers to images, molecules to humans, signals to complex networks, and simple statistics to big data analytics.

Our headquarters are based in Zurich, with additional offices in Konstanz, Berlin, and Austin. We're open for innovation®, so visit us at KNIME.com.