



Outcome of the KNIME User Training Sessions

KNIME Introduction

At the end of this session you will be able to install KNIME on your PC, start KNIME, configure KNIME, connect to the KNIME update site and download additional KNIME extensions. You will understand the layout and the use of the KNIME workbench. You will also have an overview of the KNIME nodes and the node categories in the node repository. You will know how you can find information on the use of the nodes from the node description and you will be able to create basic workflows. You will understand the concepts of node status, ports, the memory policy within KNIME and you will know how to inspect node results. You will also have a basic understanding of the KNIME visualization that includes interactive KNIME Views and you will also have knowledge on the highlighting capabilities (interactive brushing) of KNIME.

Data Preprocessing

This session focuses on the use of Data Manipulation nodes in KNIME, including nodes for row- and column-wise transformations, manipulations, filtering, covert and replace, split and combine operations. You will have an understanding of KNIME's preprocessing nodes to perform basic data manipulations and preprocessing operations.

Ports and Database Nodes

After this session you will have an understanding of the different port types that are available in KNIME. You will know the difference between data, database, PMML, and other KNIME Ports. You will have learned how to use the database nodes to connect to a database and how to extract data with an initial query, and subsequently refine this query in a comprehensible way.

Data Analysis with KNIME

After this session you will have a basic overview on data mining techniques available in KNIME. You will have a basic understanding of the concepts on how to look at data, describe data, find patterns, models and predictors; including clustering, decision trees, linear regression, etc.

Scripting Nodes

After completing this session you will be able to extend the KNIME functionality by using java snippets or math expressions.

Time Series Package

This session covers and explains nodes from the Time Series Package that can be used to work with date/time-valued data. You will learn how to use those nodes to convert date/time data, compute time differences and moving averages, extract date and/or time fields.



Weka & R

At the end of this session you have an overview on the KNIME R-Integration. You will understand what the purpose of R is and how R is integrated into KNIME. You will know how to use the KNIME R connector nodes and will have run some examples on using R in KNIME.

You will also have an understanding on the KNIME Weka-Integration with an overview on the basics of Weka; how to use the Weka plug-in and the Weka nodes.

Loops & Flow Variables

After this session you will understand the concept of flow variables and you will know how to enable the expert mode in KNIME to use them. You will also understand the workflow loop concept and you will have created example workflows that use variables and loops.

Batch Execution

This session will teach you how you can export workflows from KNIME. You will understand how KNIME can be started in batch mode to run a workflow without running the KNIME workbench.