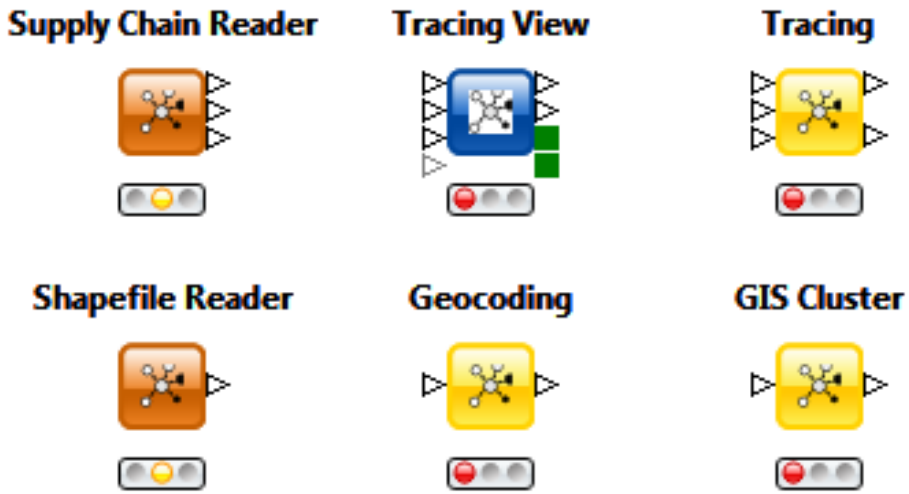
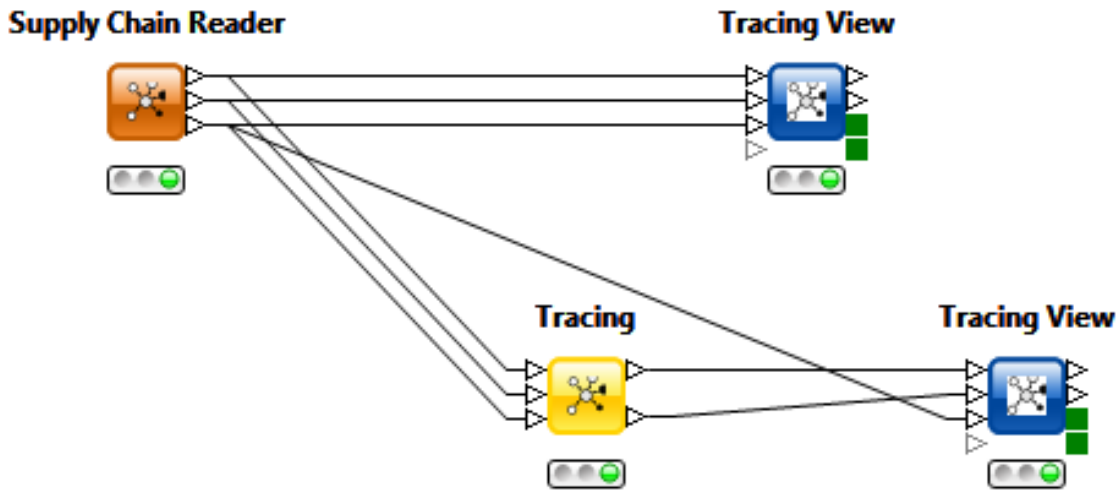
FoodChain-Lab Overview

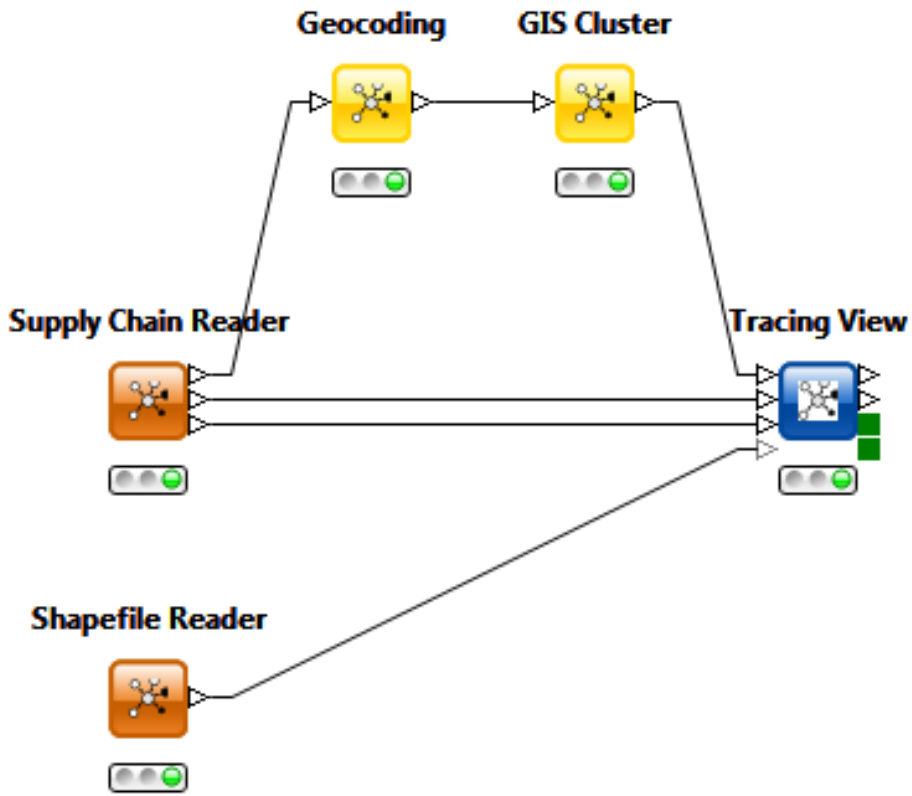
- KNIME is an open source data analytics platform, that allows users to assemble a data pipeline called "workflow".
- A workflow is built by dragging nodes from the **Node Repository** onto the **Workflow Editor** and connecting them (`https://tech.knime.org/workbench`).
- Nodes are processing units with input- and/or output ports.
- Data is transferred over a connection from an out-port to the in-port of another node.
- A comprehensive KNIME quickstart guide can be found at `https://tech.knime.org/files/KNIME_quickstart.pdf`.
- An introduction video is available at `https://www.youtube.com/watch?v=ft7Ksgss3Tc`.



- Detailed descriptions of all nodes are available in the **Node Description** view of the KNIME workbench (`https://tech.knime.org/workbench`).
- All inputs and outputs are either **data tables** (triangles) or **images** (green square). Therefore standard KNIME nodes (**Row Filter**, **Image Port Writer**, ...) can be used in FoodChain-Lab workflows.



- Supply chain data is read from the internal database via the **Supply Chain Reader**.
- This data can be visualized with the **Tracing View**. The **Tracing View** also allows to perform a tracing on the data.
- The **Tracing** node performs tracing without visualization. Its output can be used in the **Tracing View** (e.g. to perform some tracings as a preprocessing step)



- The **Geocoding** node allows to acquire latitude/longitude data from addresses.
- This data can be geographically clustered with the **GIS Cluster** node.
- The **Tracing View** allows geographical visualization, if GIS data is provided from the **Shapefile Reader**.