Overview

• Load and import a dataset
• View and edit nodesets
• View and edit nodes
• View and edit networks
• View and edit links
Creating a meta-network

- Open the Data Import Wizard (File \ Data Import Wizard)

Creating a meta-network...

Step 1. a meta-network has a Name

Step 2: create one or more nodesets. Each one has a Class and a Name (must be unique across nodesets)

Step 3: associate a pair of nodesets to create a network
Creating a meta-network...

We will create a simple meta-network for a company.

First, we add a single employee nodeset of class Agent.

Next, we create a "works with" network that associates employees.

Next we added another nodeset of skill of class knowledge.

And another network that associates employee and skill.
Meta-Network Manager

Lists the meta-networks and the nodesets and networks of each.

Click on a particular nodeset or network to view its details in the right-hand panel.

Nodeset Editor

Click on a nodeset within the Meta-Network Manager
Nodeset Editor...

Lists each node and its attributes (our employees do not have any yet).

Here we have edited the node titles.

Note: Node Names must be unique to the nodeset. Titles are used in reports and visualizations.

Nodeset Editor: Node Actions

Select one or more nodes to the left of their Node Name.

Use the Nodes menu items:

**Delete** deletes the selected nodes.

**Merge** combines the nodes and their associated links.

**Move** nodes to a different nodeset.

**Clean** finds and merges nodes with similar node names.
Nodes can have attributes: Age, Gender, Experience, etc.

Attributes have a data type: Number, text, date

Use the Attributes \ Create new attribute menu item and choose Name = Age, Type = Number
Category.

Fill in the Attribute column.

Click on the Age column header to sort by attribute value.

Use the down arrow in the column header (circled in red) to filter nodes by age.
Click on the **Works With** network in the manager to load the Network Editor.

The Info tab shows high level information.

Use the Network Properties check boxes to make the network:

- Symmetric (undirected)
- Allow self-loops
- Have weighted or binary link values

These options can add or remove links when clicked.
Network Editor: Info Tab - Network Statistics

The network statistics section shows the key statistics of the network.

These are based on the current links in the network, and are therefore affected by the Network Properties selected.

Network Editor: Info Tab – When computing measures

The When computing measures section does not add or remove links to the network.

Rather, it temporarily transforms the network before computing measures.

The options are “temporary” versions of the network properties.
Network Editor: Editor tab

The editor tab shows the links.

We created an empty meta-network, without links.

Make Alan work with all colleagues → check mark his row.

Make everyone work with Alan → check mark his column.

Network Editor: Transformations

**Convert Links** has options to transform link values: e.g., adding one to links, taking the log of link values, etc.

**Trim** has options to remove (filter) nodes and links using various criteria.
Network Editor: Creating Links

Click on the employee x skill network as shown.

Create the links shown by clicking on the link’s check box; this makes a link of weight one.

To create weighted networks, use Display Options \ Numeric Link Values.