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Clustering in FoodChain-Lab

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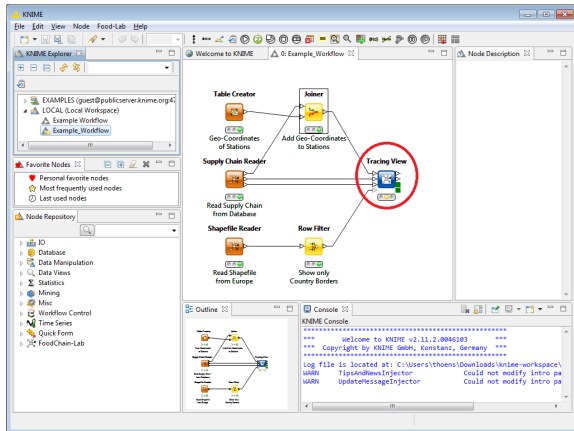
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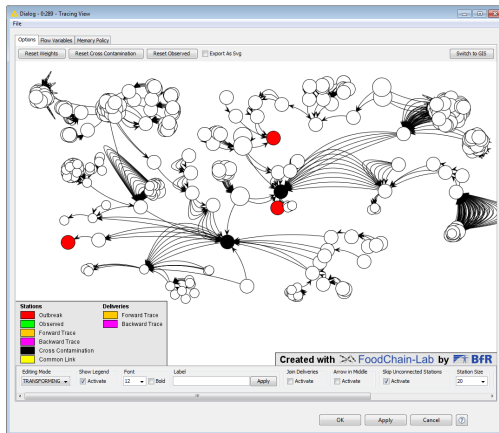
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- Perform a clustering base the following workflow:
[https://github.com/SiLeBAT/
BfROpenLabResources/raw/master/GitHubPages/
workflows/Example_Workflow.zip](https://github.com/SiLeBAT/BfROpenLabResources/raw/master/GitHubPages/workflows/Example_Workflow.zip)
- Cluster all French stations based on its city.
- That means all stations from the same city should be put into one meta-station.



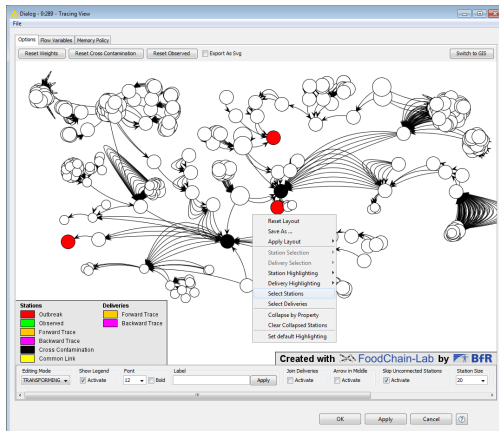
- Import the Example Workflow from https://github.com/SiLeBAT/BfROpenLabResources/raw/master/GitHubPages/workflows/Example_Workflow.zip.
- Open the **Tracing View** by double-clicking on it.

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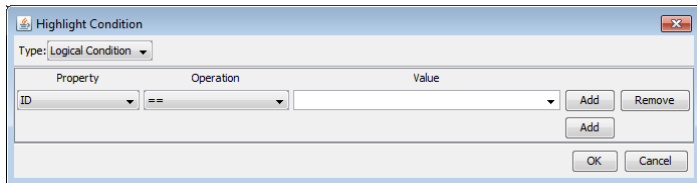


- A window showing the delivery network should open now.

Task



- Right click in the graph to open the context menu and select **Select Stations**.



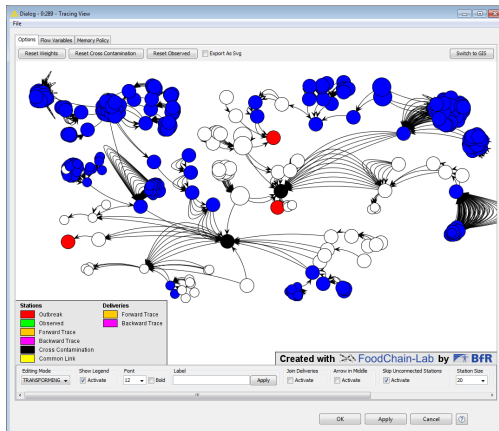
The dialog box is titled "Highlight Condition" and has a close button (X) in the top right corner. Below the title bar, there is a "Type:" label followed by a dropdown menu currently set to "Logical Condition". The main area of the dialog is a table with three columns: "Property", "Operation", and "Value". The first row contains "ID" in the "Property" column, "==" in the "Operation" column, and an empty dropdown in the "Value" column. To the right of the "Value" column are two buttons: "Add" and "Remove". Below the table, there is another "Add" button. At the bottom right of the dialog are "OK" and "Cancel" buttons.

Property	Operation	Value
ID	==	

- You should see this dialog now.

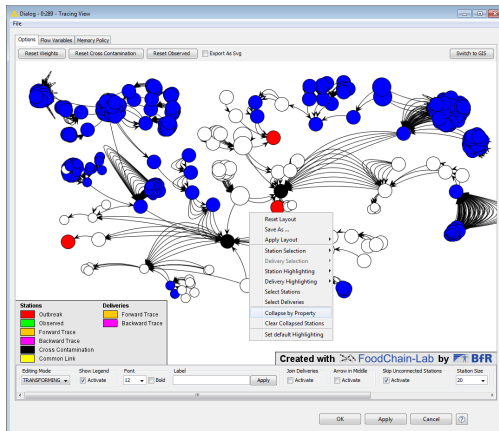
Property	Operation	Value
Country	=	FR

- For our clustering we only want to use the French stations, since most primary producers in this data set are French.
- Select "Country" as **Property** and "FR" as **Value** and press **OK**.

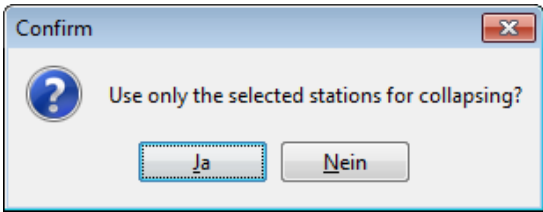


- All French stations are selected now, which is indicated by the blue color.

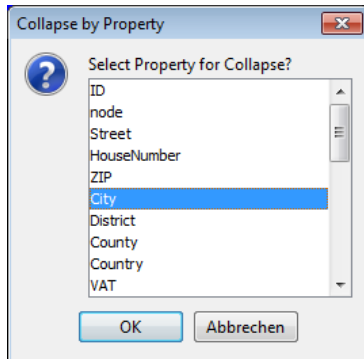
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- Right click in the graph to open the context menu and select **Collapse by Property** to cluster the selected stations.



- Select **Yes** to only cluster selected stations.



- The clustering will be done on city level. That means all stations from the same city will be merged.
- Select **City** and press **OK**.

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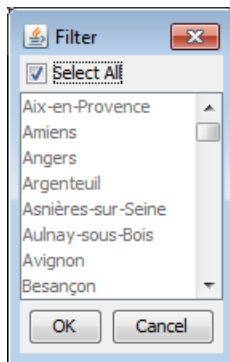
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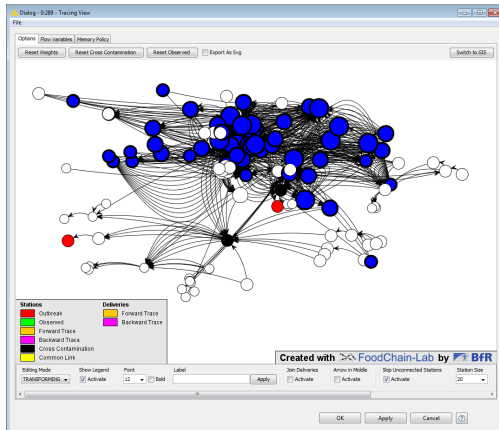
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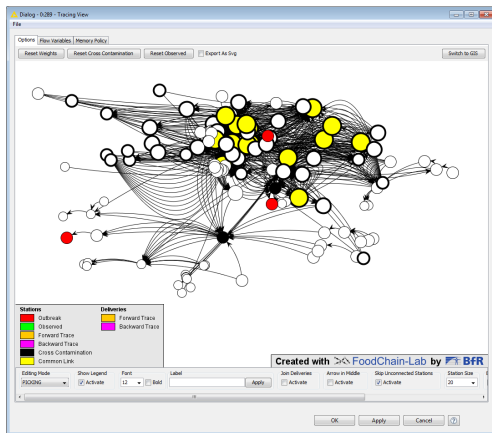
- Just press **OK**, since we do not want to exclude any cities.

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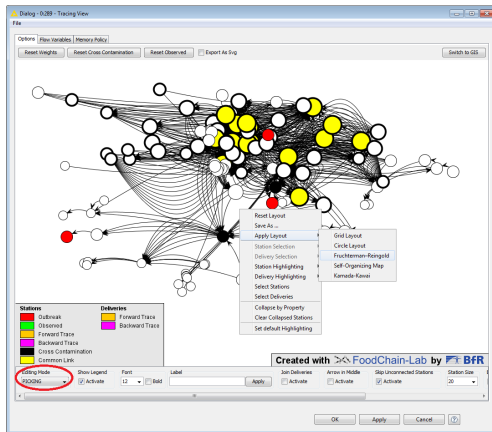
- All French stations have been clustered to cities.
- Each selected station (blue circle) is a French city.

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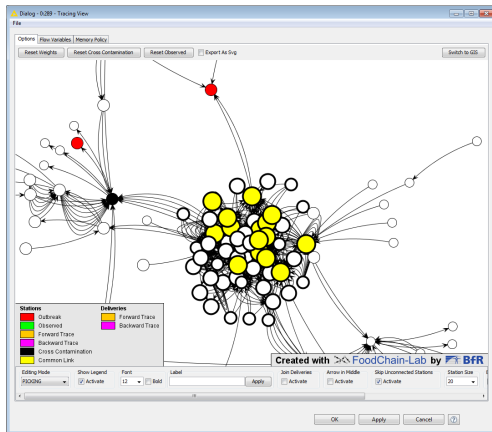


- Select "PICKING" as **Editing Mode** and click in the graph to unselect all stations.
- You can now see, that some of the stations are yellow. That means, that these stations (French cities) are connected to all outbreak spots (red circles).

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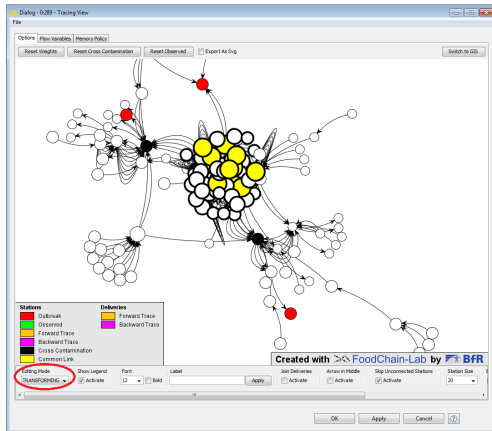


- Since the graph looks confusing now, we should reapply the layout algorithm.
- Right click in the graph and select **Apply Layout** > **Fruchterman–Reingold** in the context menu.



- The stations should be arranged in better way now.
- The algorithm is not deterministic, therefore your result will look different from the screenshot.

Task



- After applying the layout algorithm some stations might be outside the visible area.
- To see the whole graph select "TRANSFORMING" as **Editing Mode** and zoom/move the graph by using the mouse wheel and the left mouse button (works as in Google Maps).