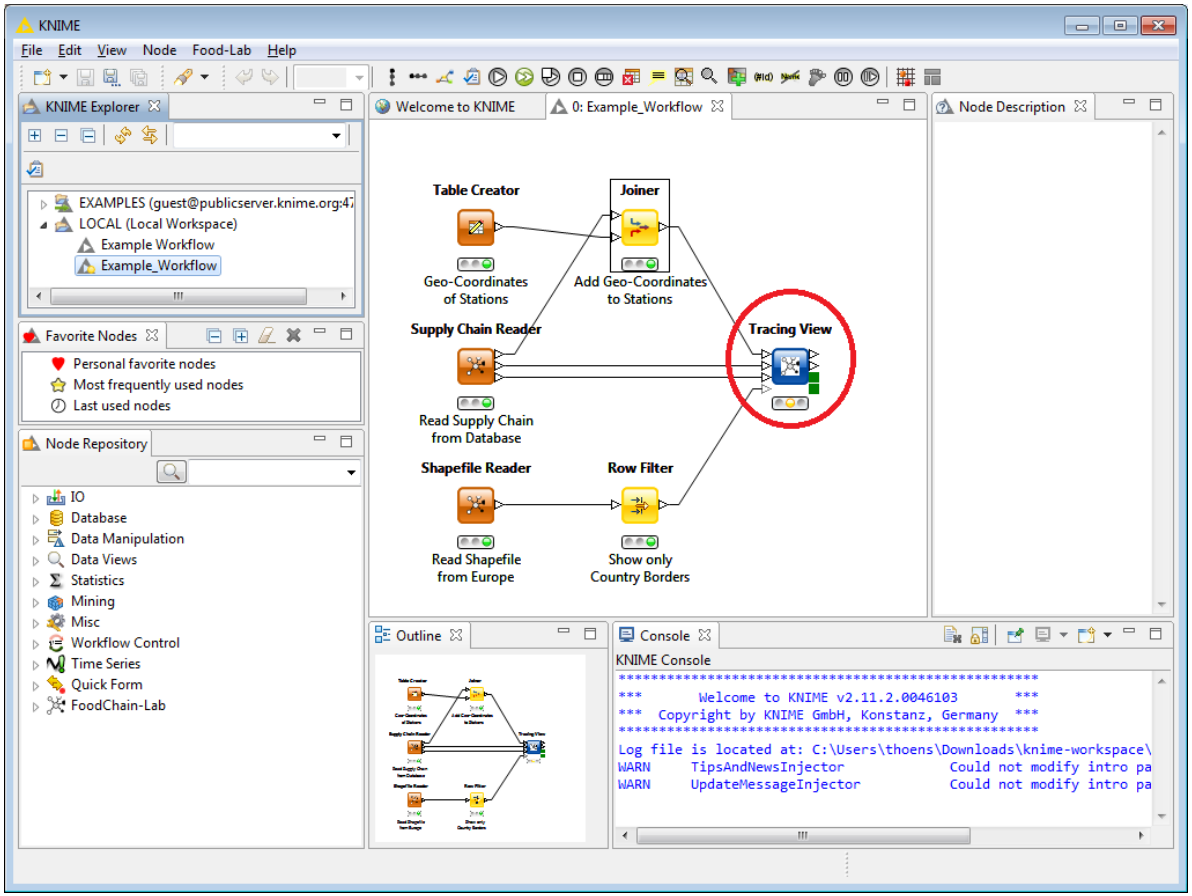
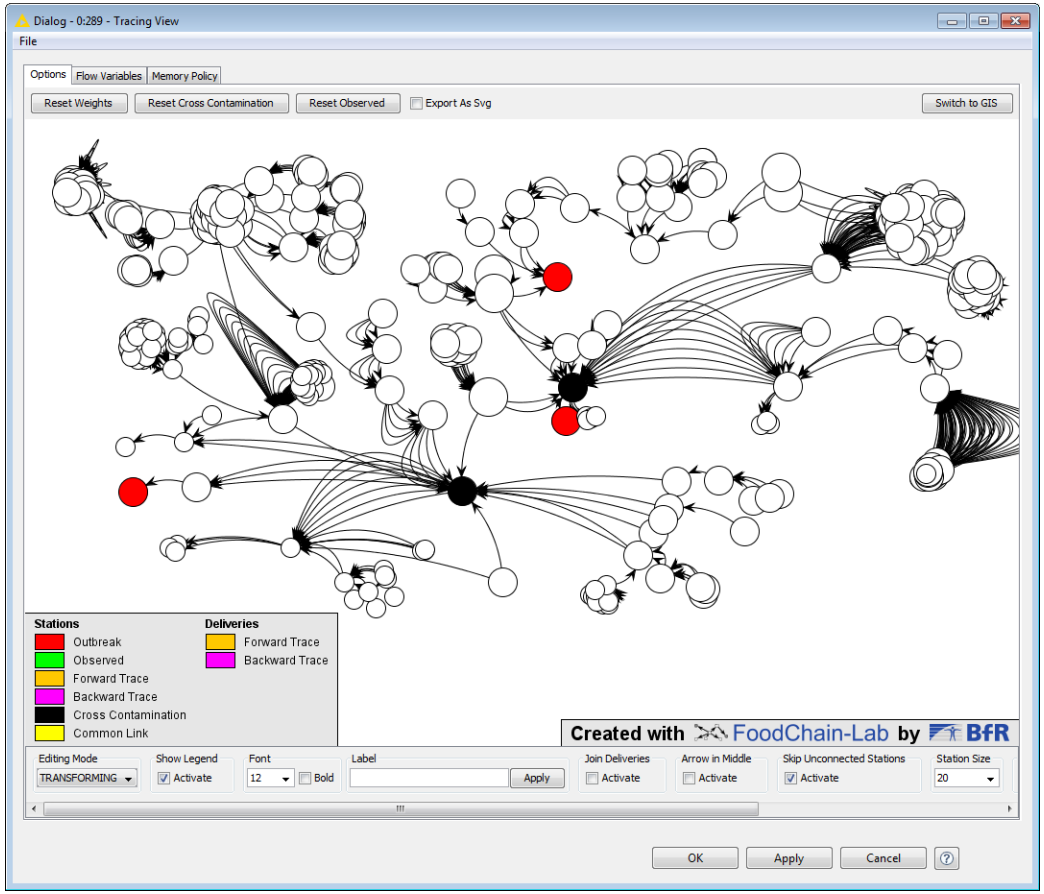
Clustering in FoodChain-Lab

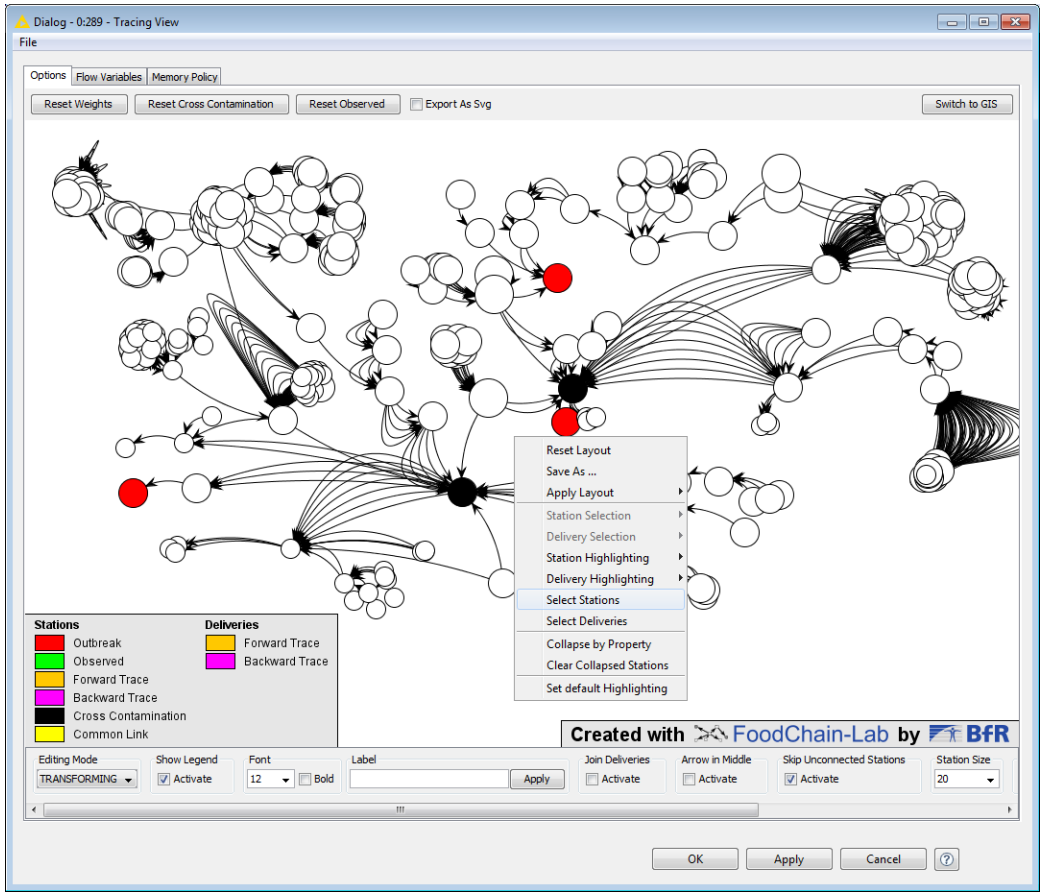
- Perform a clustering base the following workflow: `https://github.com/SiLeBAT/BfROpenLabResources/raw/master/GitHubPages/workflows/Example_Workflow.zip`
- Cluster all French stations based on its city.
- That means all stations from the same city should be put into one meta-station.



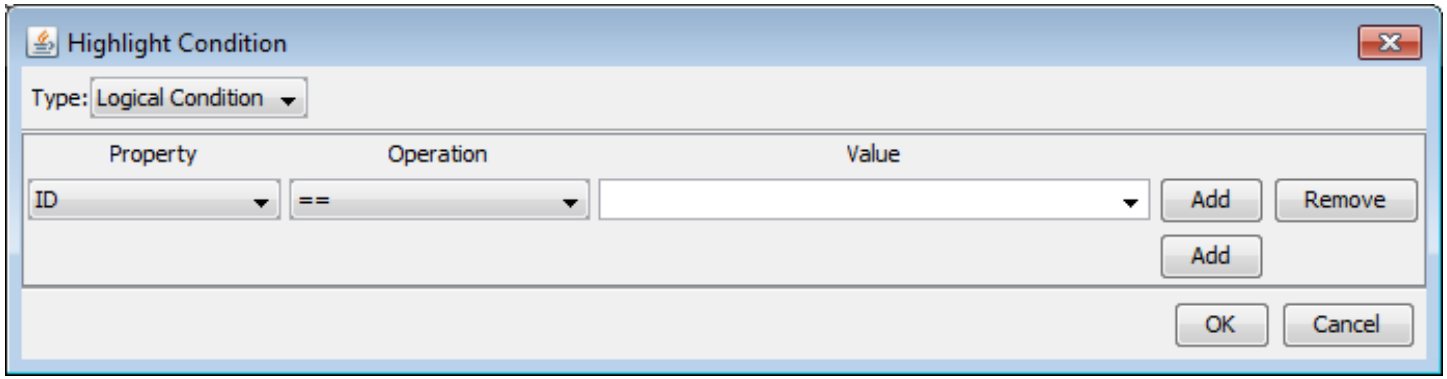
- Import the Example Workflow from `https://github.com/SiLeBAT/BfROpenLabResources/raw/master/GitHubPages/workflows/Example_Workflow.zip`.
- Open the **Tracing View** by double-clicking on it.



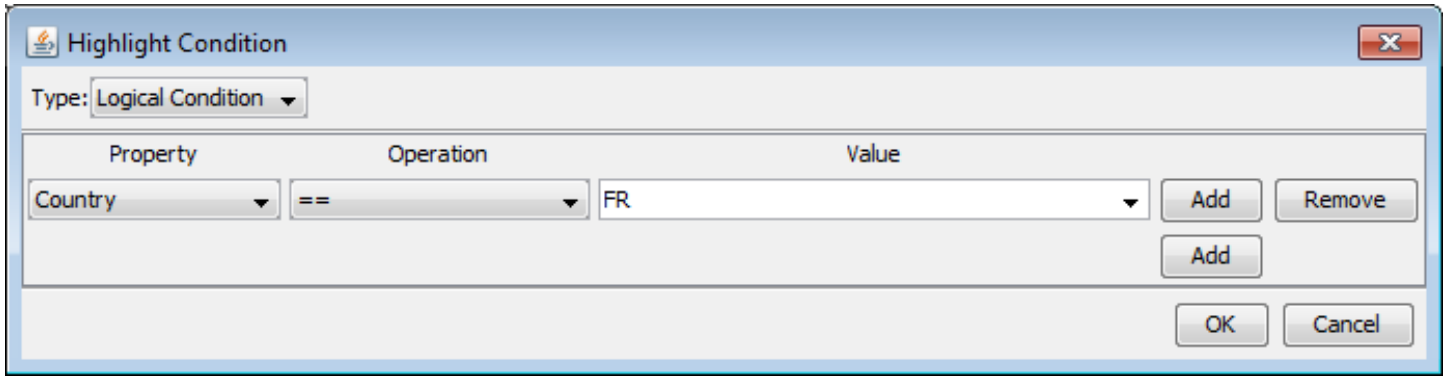
- A window showing the delivery network should open now.



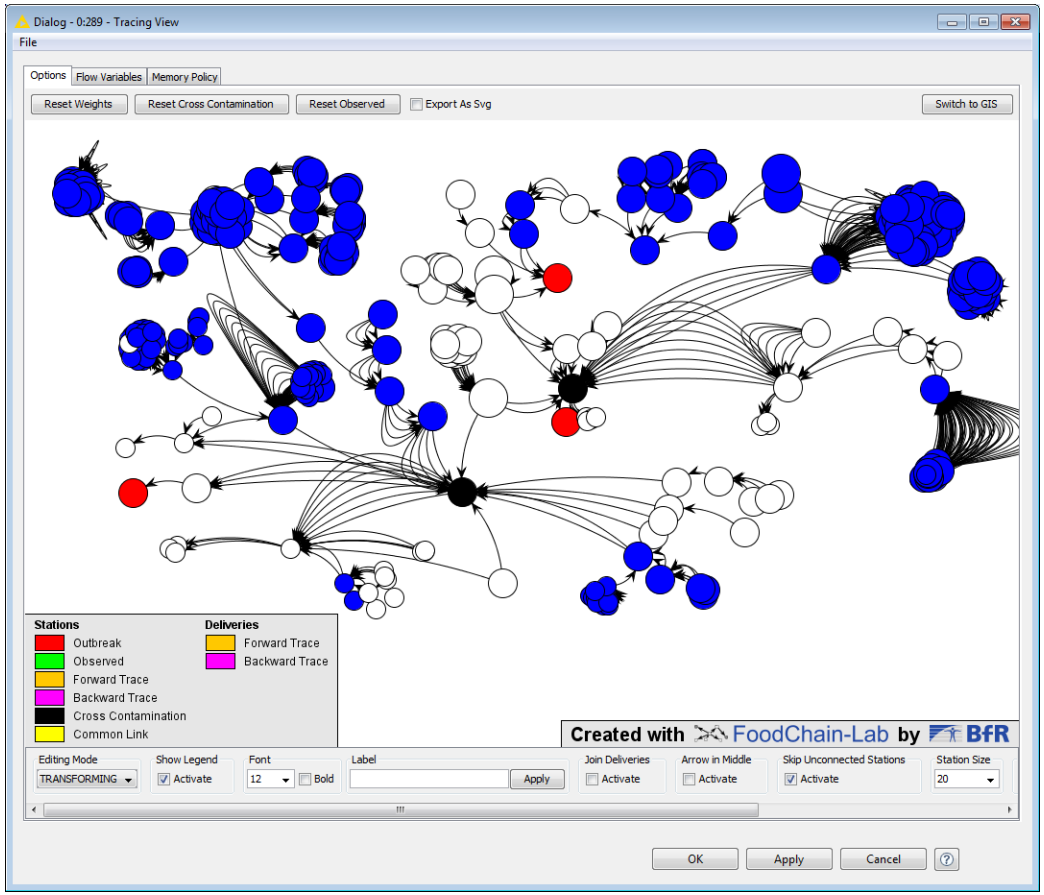
- Right click in the graph to open the context menu and select **Select Stations**.



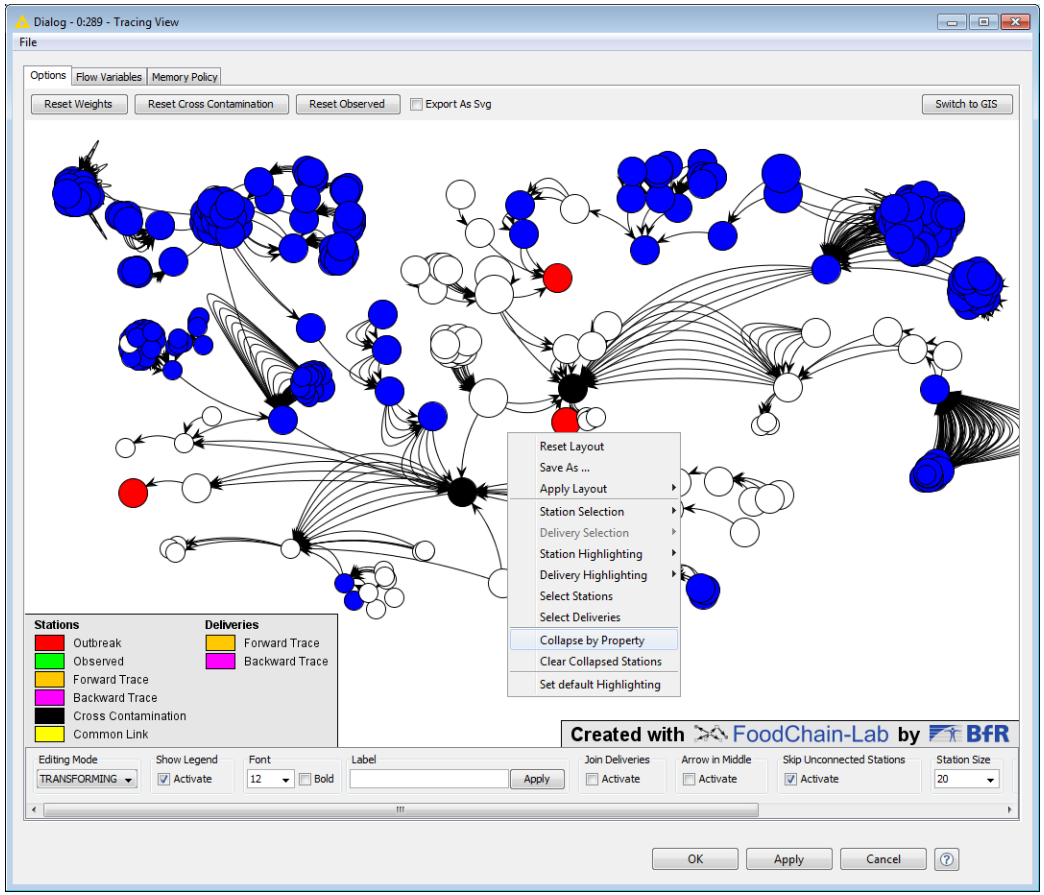
- You should see this dialog now.



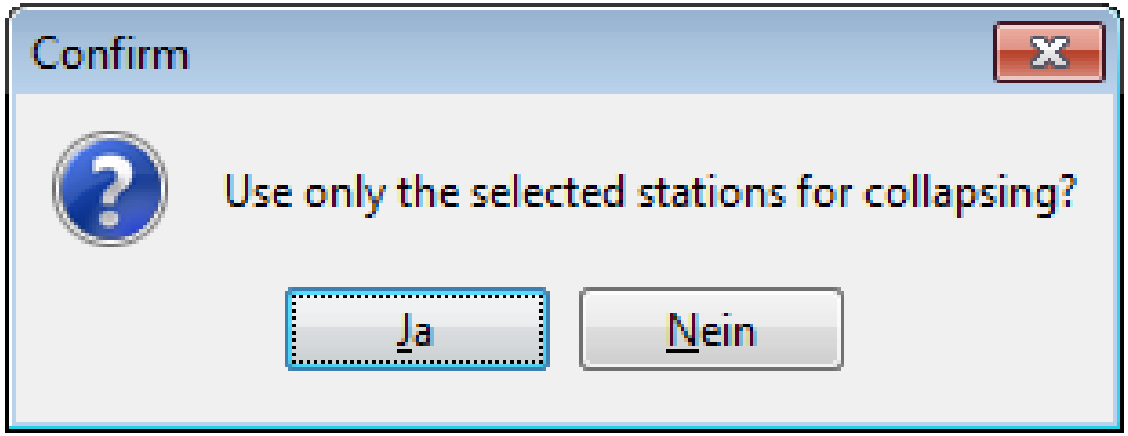
- For our clustering we only want to use the French stations, since most primary producers in this data set are French.
- Select "Country" as **Property** and "FR" as **Value** and press **OK**.



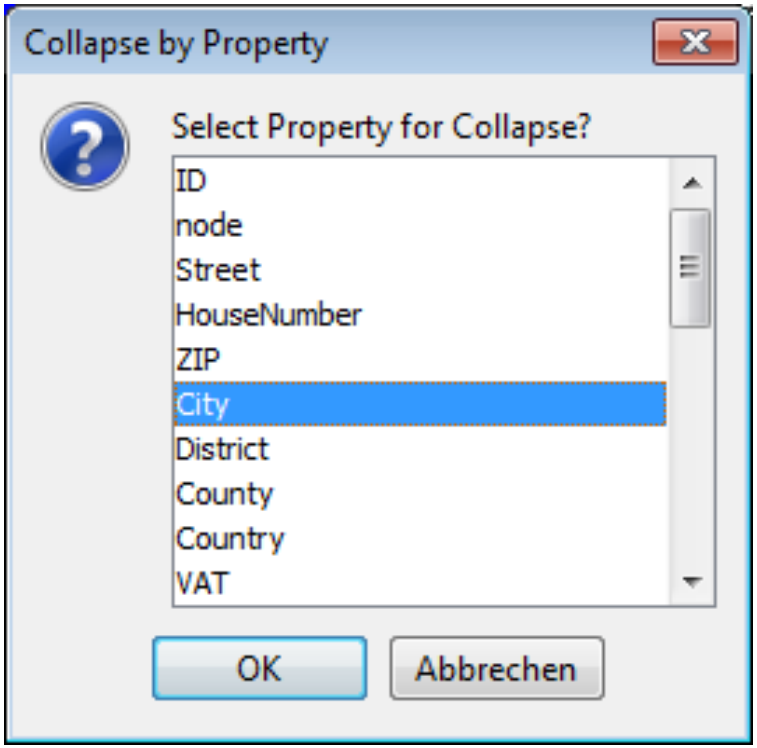
- All French stations are seleted now, which is indicated by the blue color.



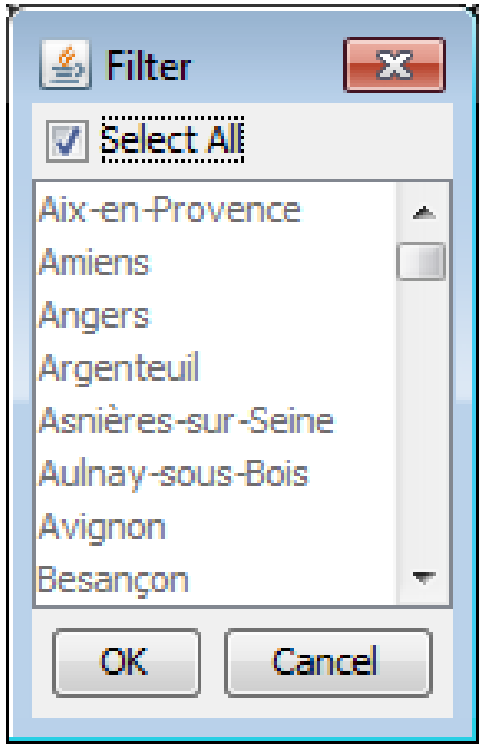
- Right click in the graph to open the context menu and select **Collapse by Property** to cluster the selected stations.



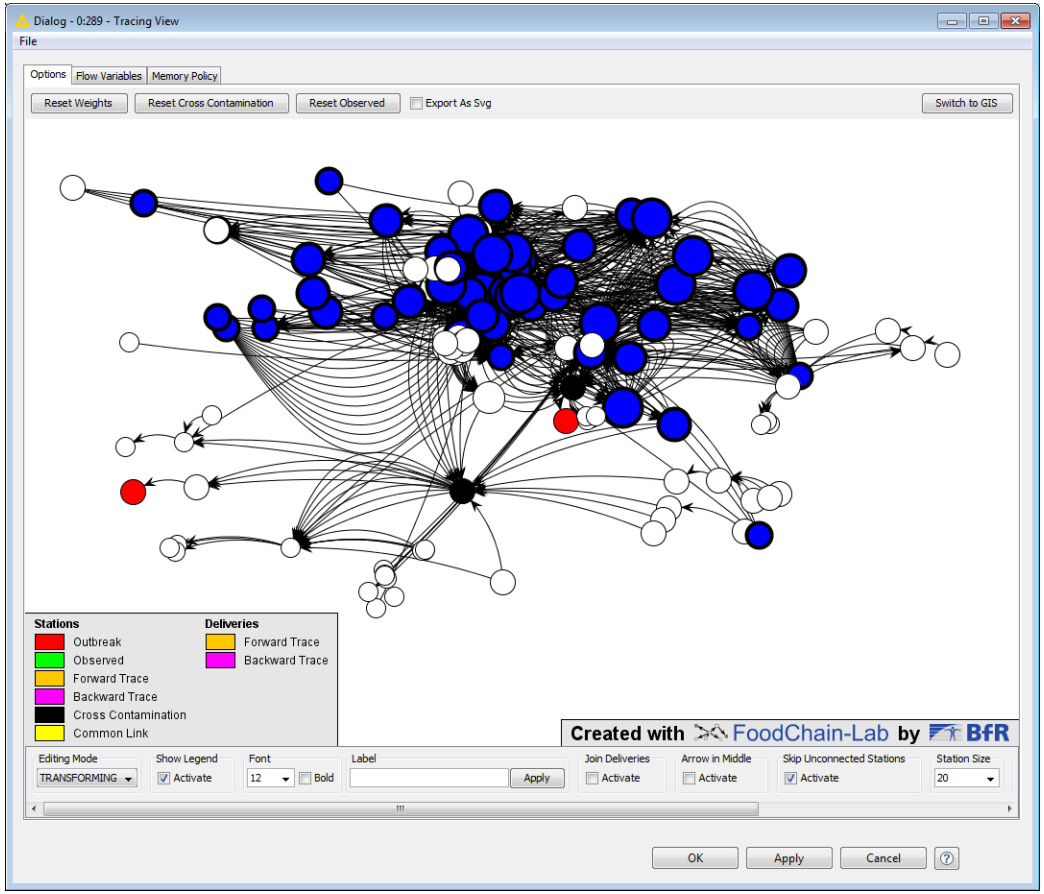
- Select **Yes** to only cluster selected stations.



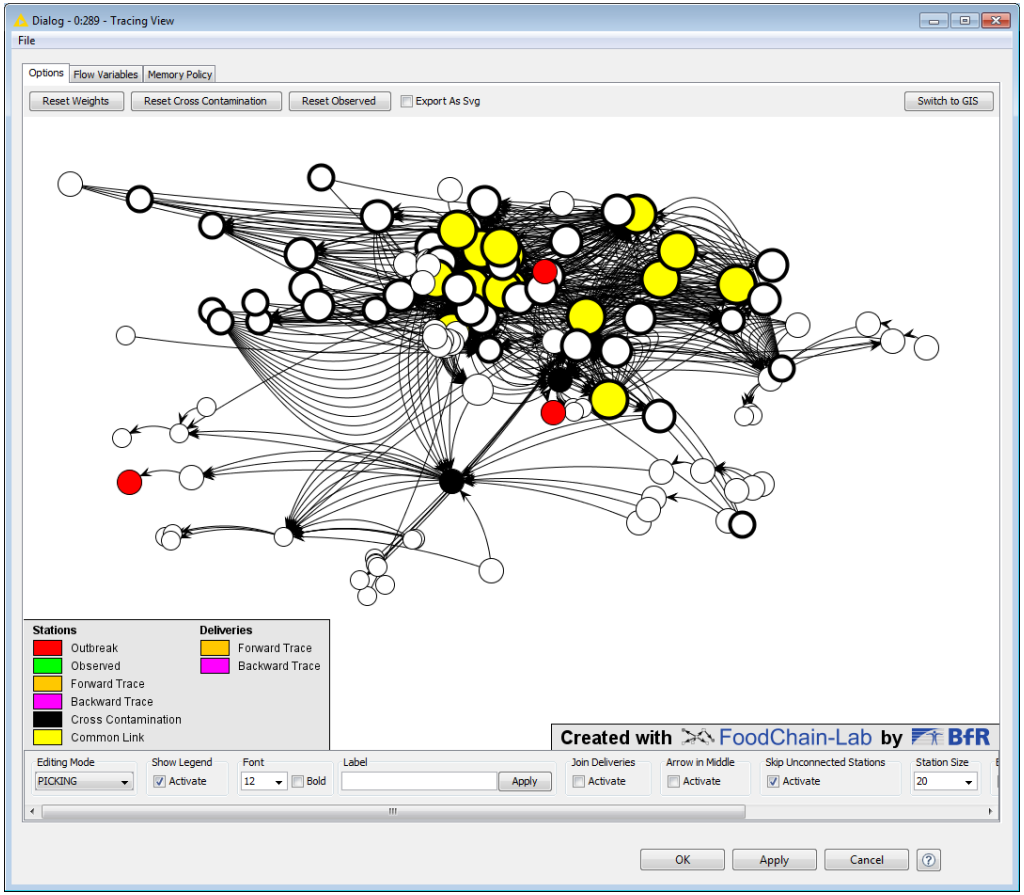
- The clustering will be done on city level. That means all stations from the same city will be merged.
- Select **City** and press **OK**.



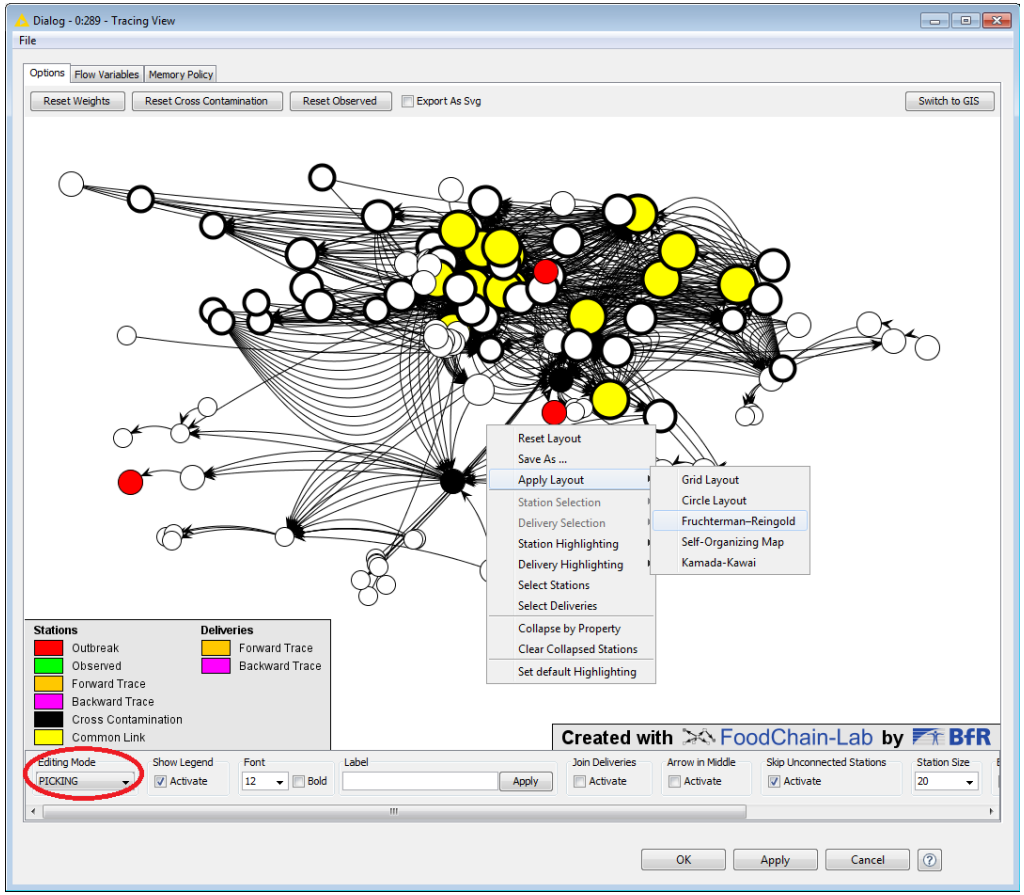
- Just press **OK**, since we do not want to exclude any cities.



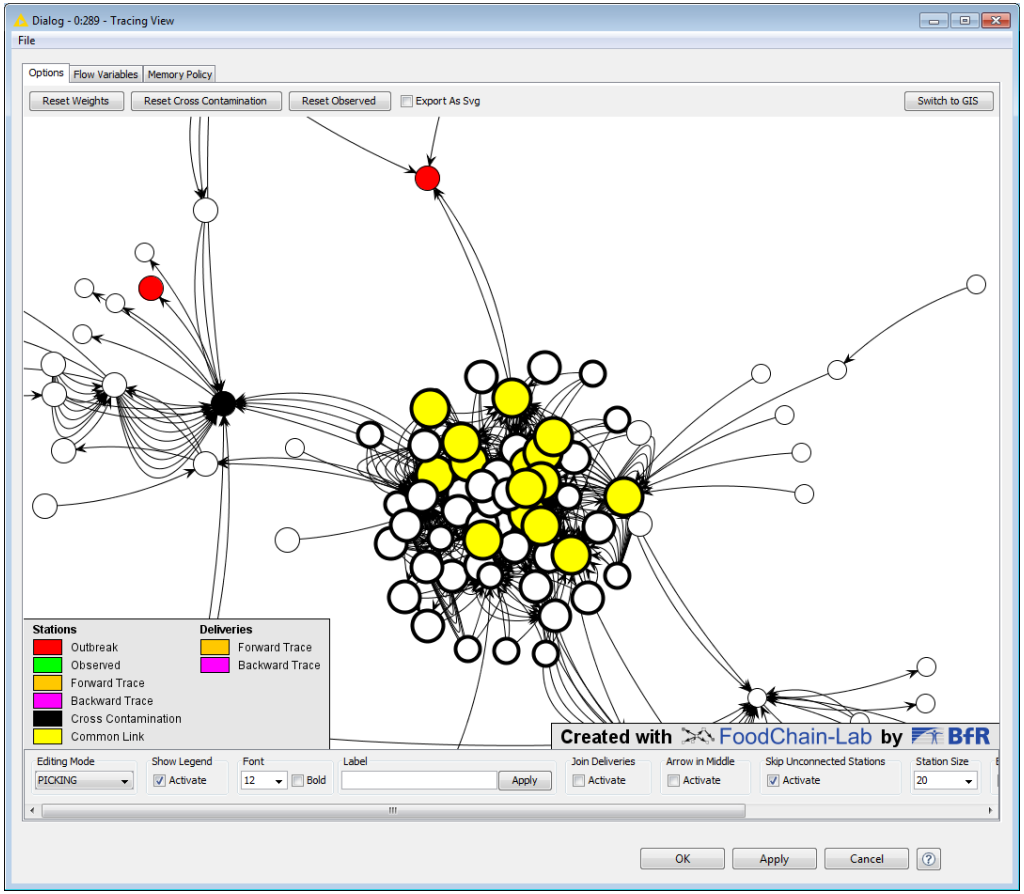
- All French stations have been clustered to cities.
- Each selected station (blue circle) is a French city.



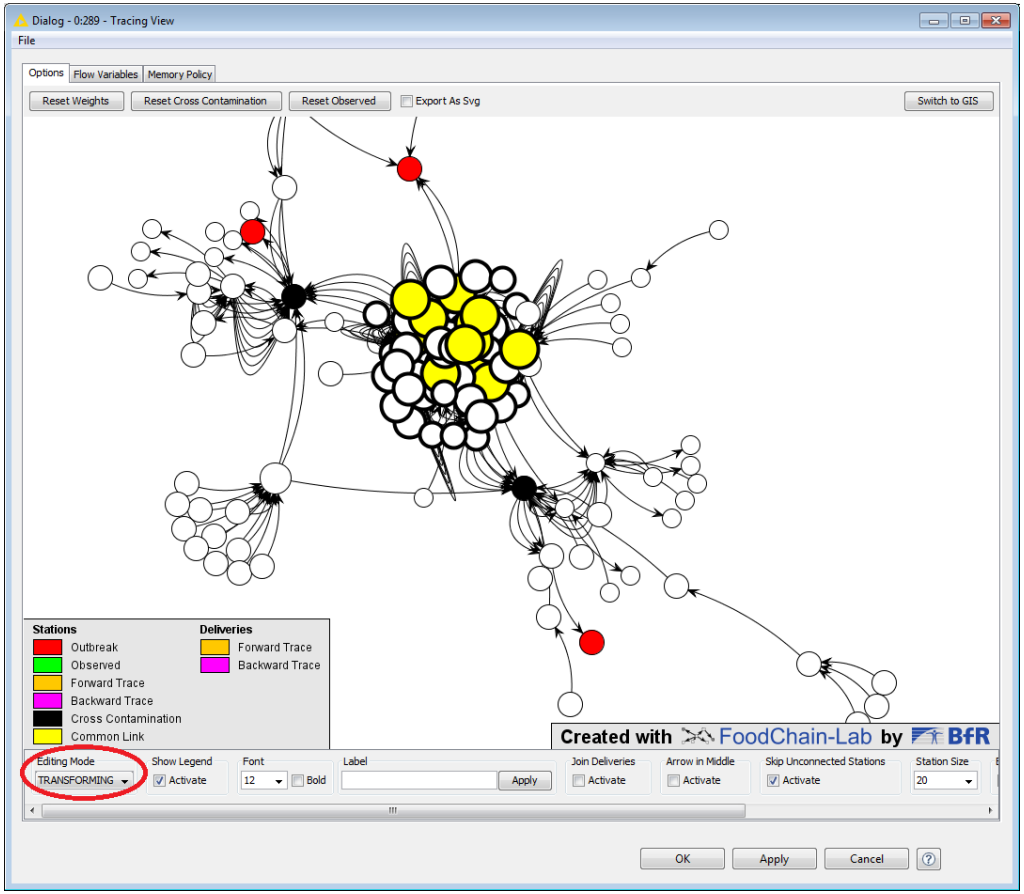
- Select "PICKING" as **Editing Mode** and click in the graph to unselect all stations.
- You can now see, that some of the stations are yellow. That means, that these stations (French cities) are connected to all outbreak spots (red circles).



- 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.



- 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).