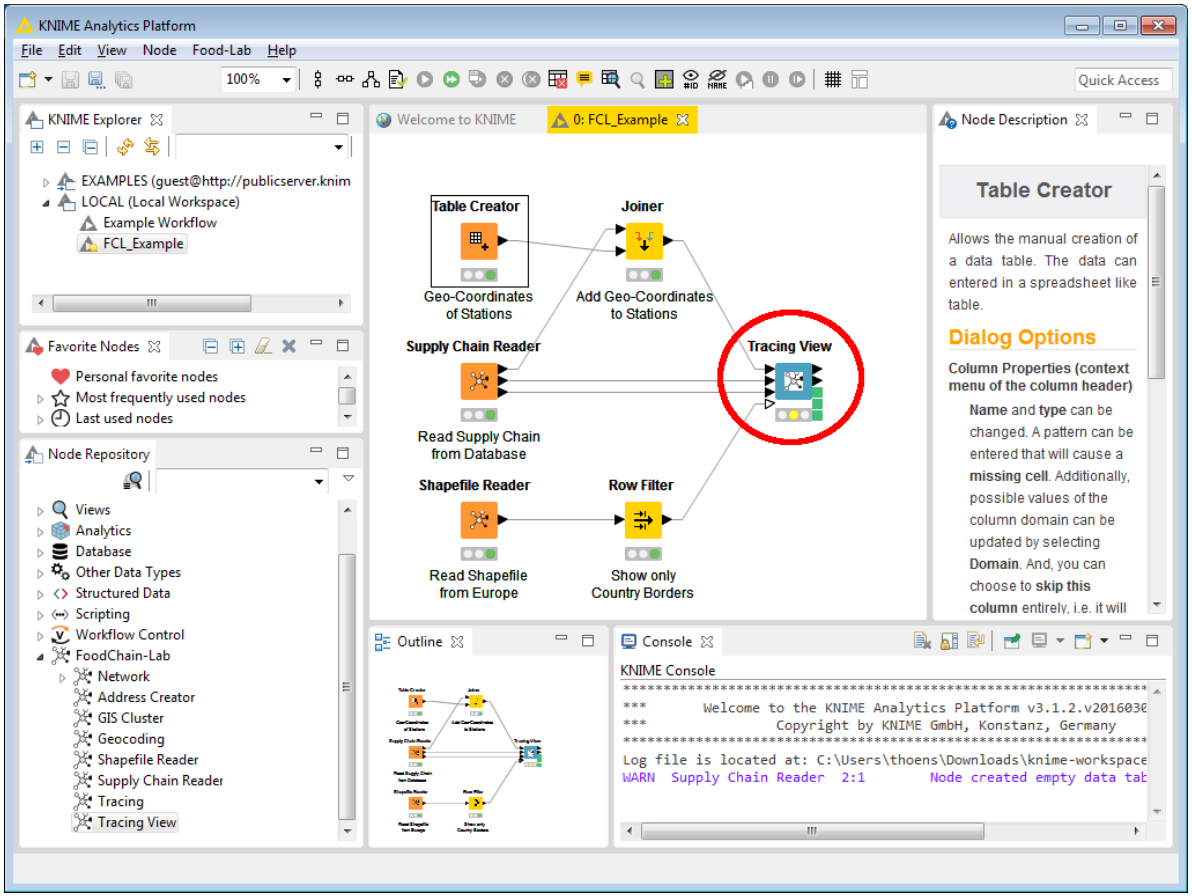
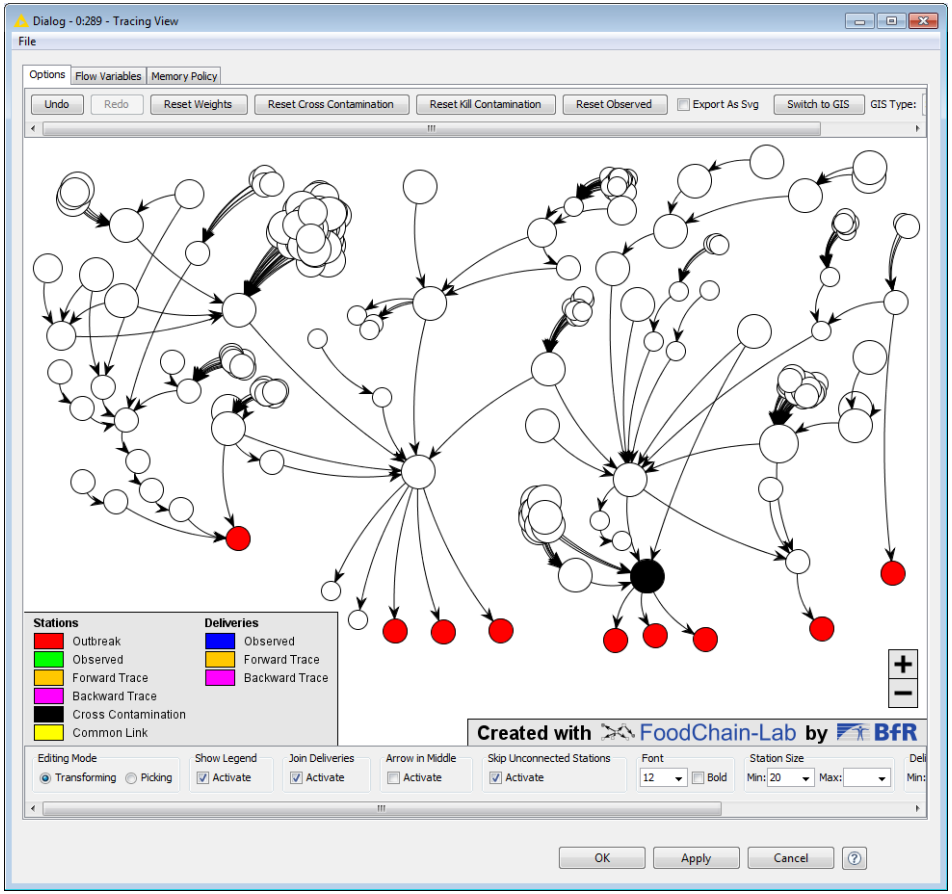
Clustering in FoodChain-Lab

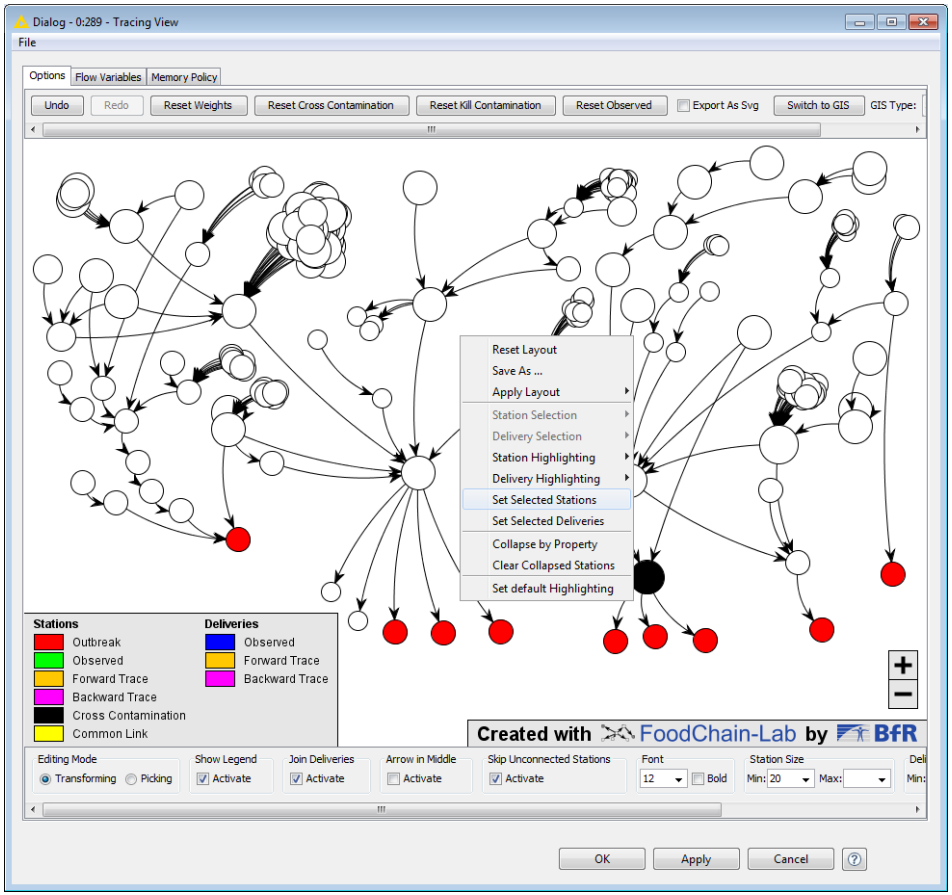
- Perform a clustering using the following workflow: `https://github.com/SiLeBAT/BfROpenLabResources/raw/master/GitHubPages/workflows/FCL_Example.zip`
- Cluster all French primary producers based on their city.
- That means all stations from the same city should be put into one meta-station.



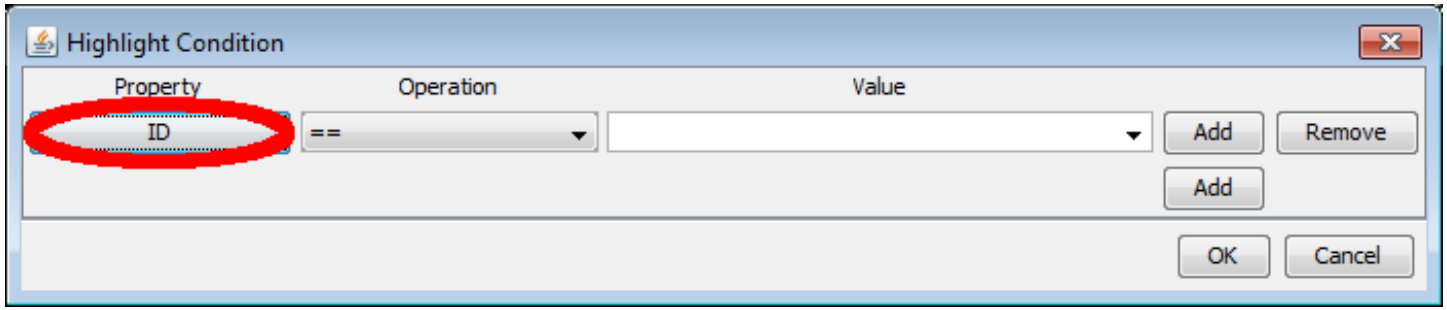
- Import the Example Workflow from `https://github.com/SiLeBAT/BfROpenLabResources/raw/master/GitHubPages/workflows/FCL_Example.zip`.
- Open the **Tracing View** by double-clicking on it.



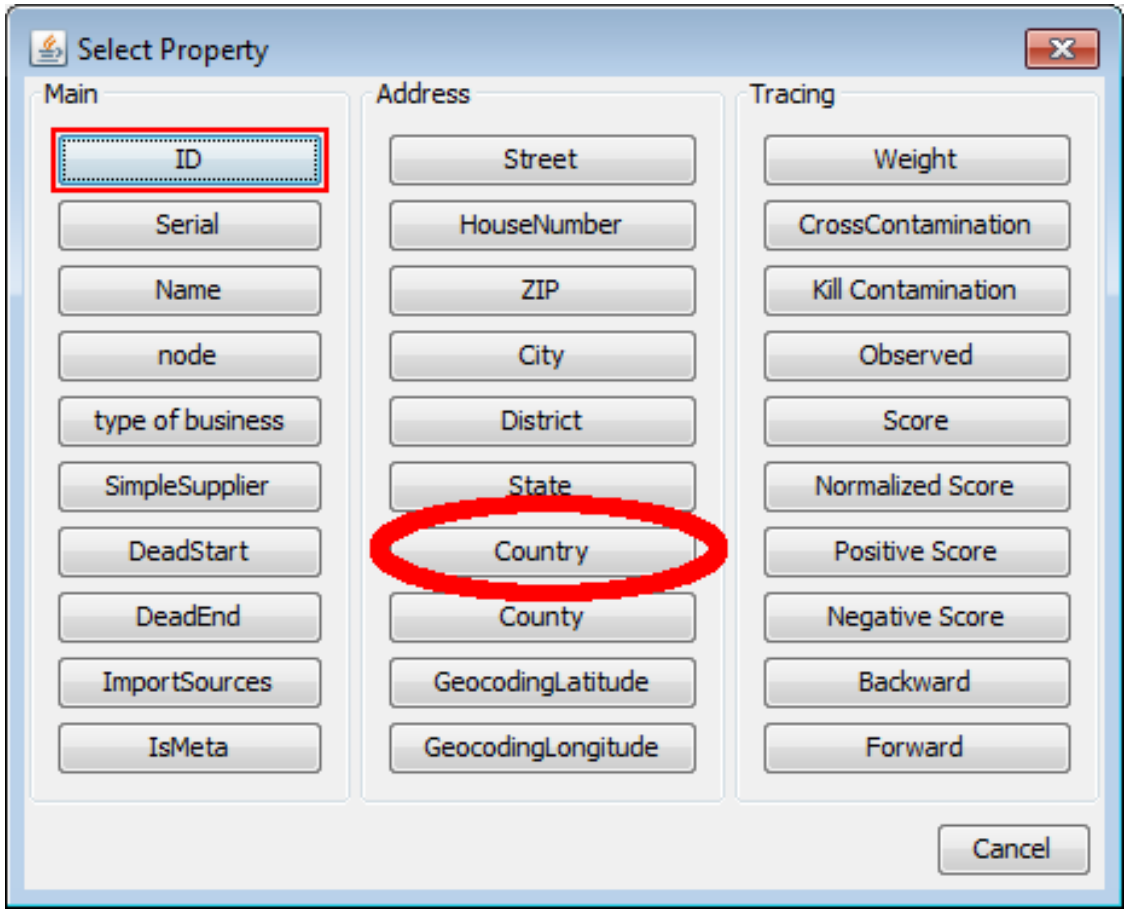
- A window showing the delivery network opens.



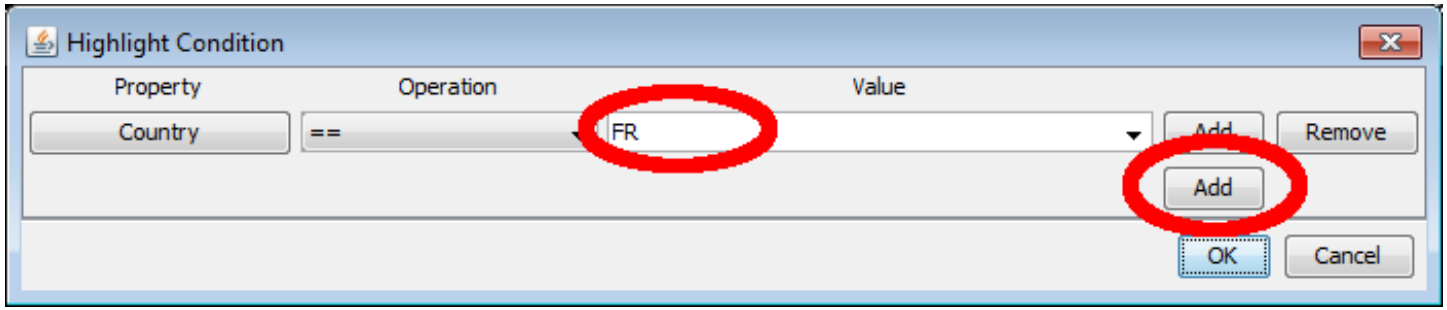
- Right click in the graph to open the context menu and select **Set Selected Stations**.



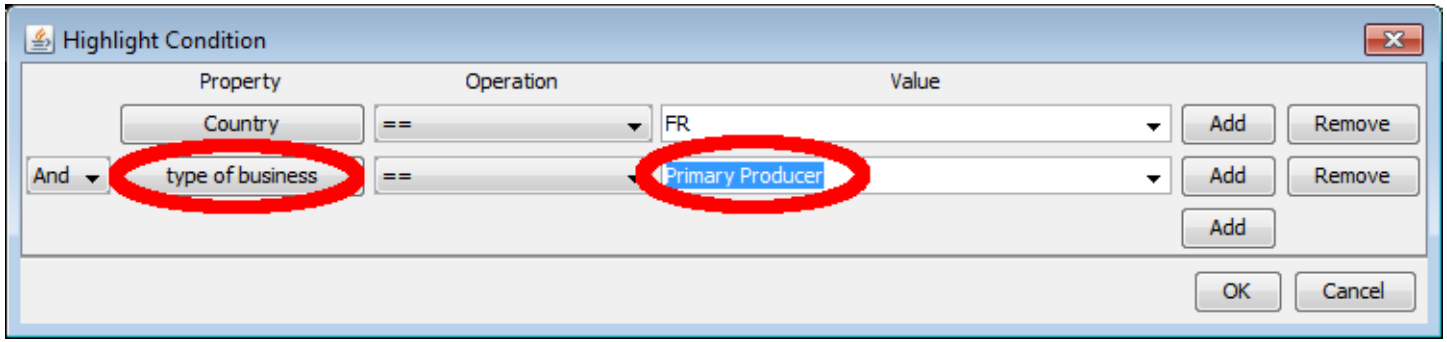
- You should see this dialog now.
- Press the button in the red circle to change the **Property** value.



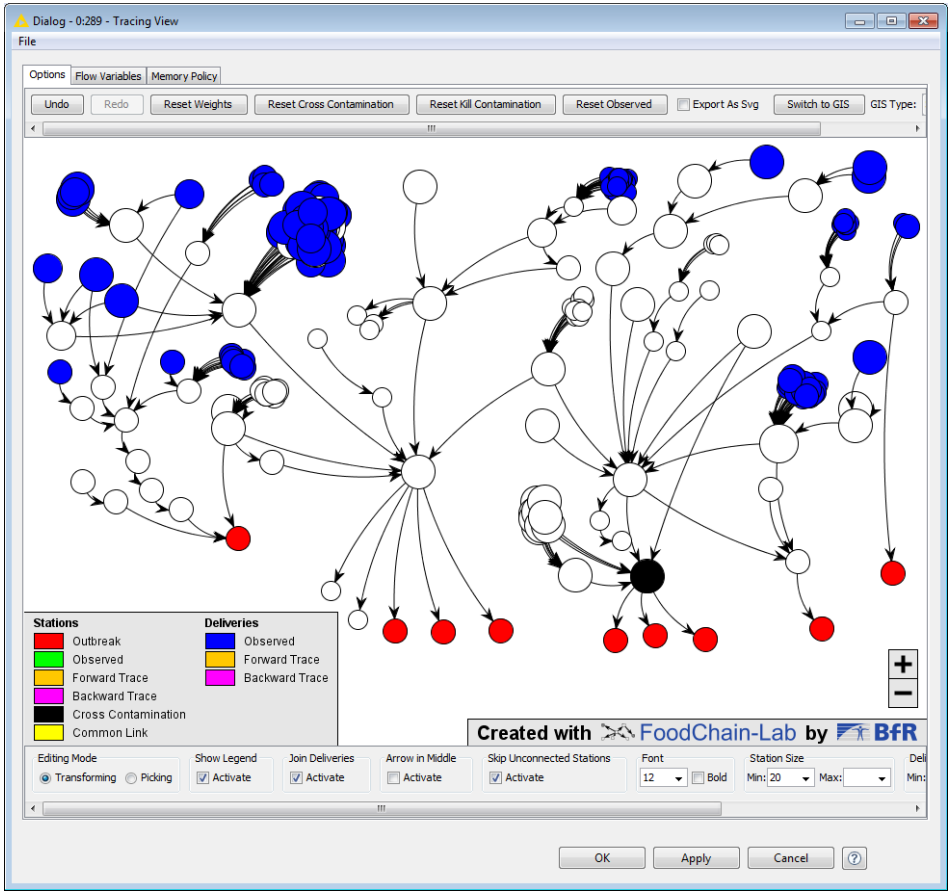
- Select "Country".



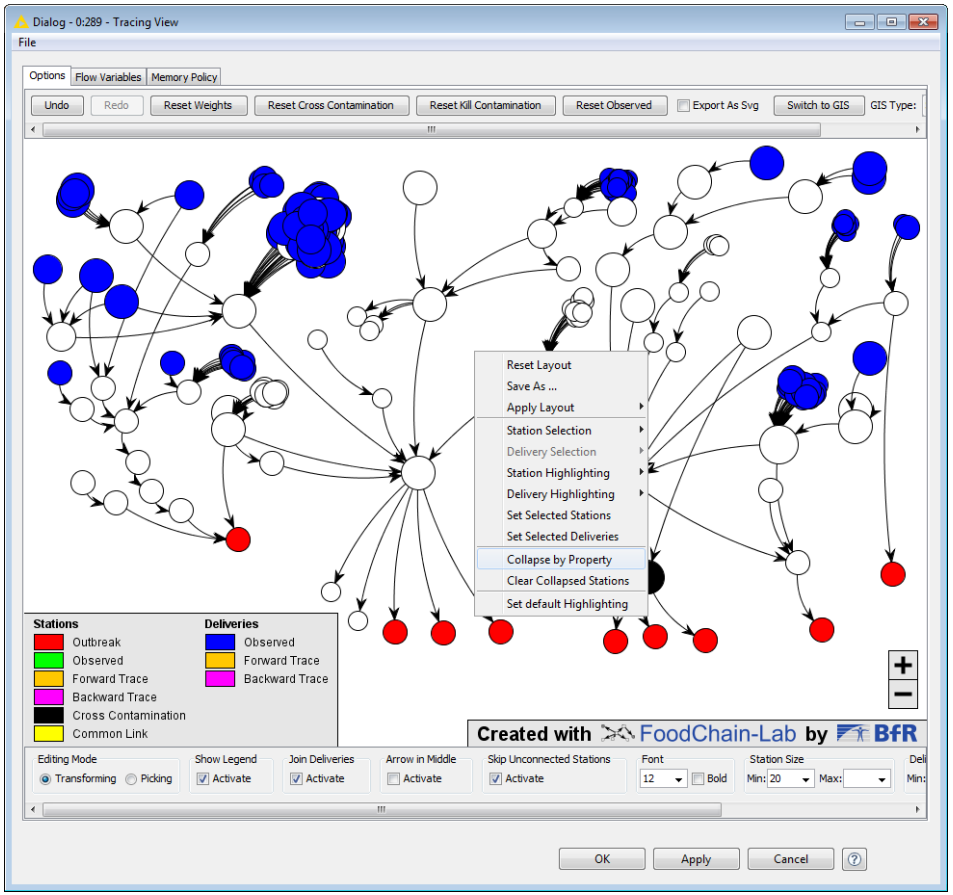
- Now select "FR" as **Value**, since we want to cluster stations in France.
- Afterwards press **Add** to add another condition.



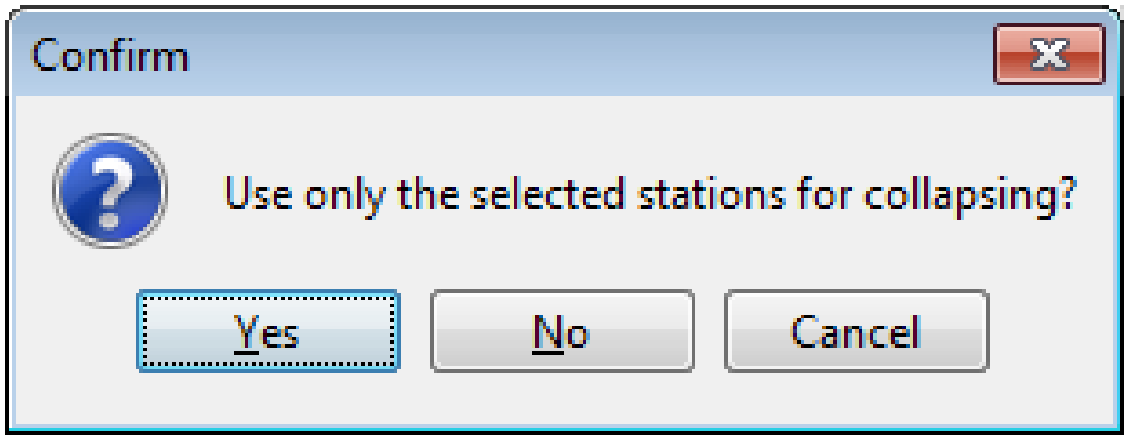
- For the new condition select "type of business" as **Property** and "Primary Producer" as **Value**, since we want to cluster primary producers only.
- Now press **OK**.



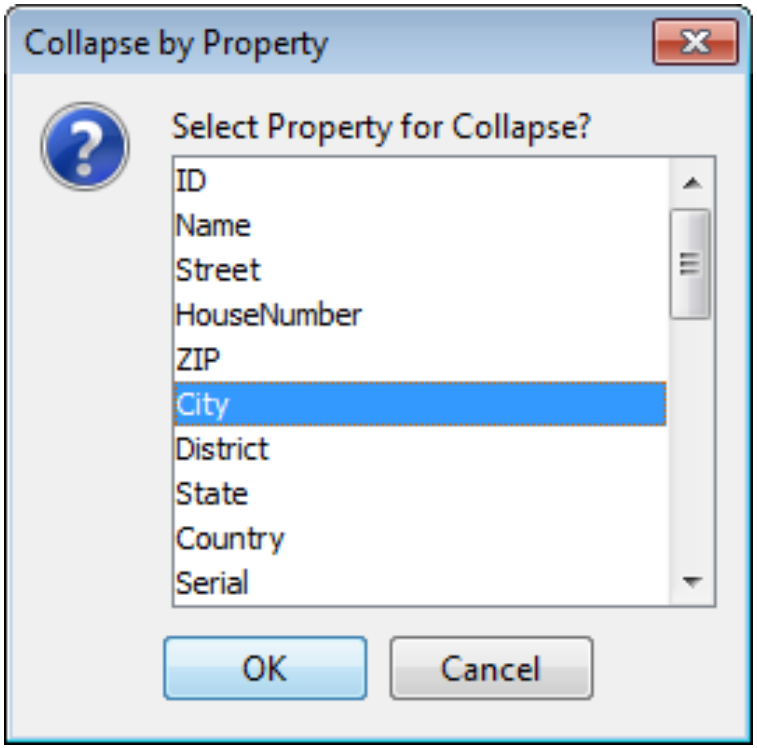
- All French primary producers are selected now, which is indicated by the blue color.



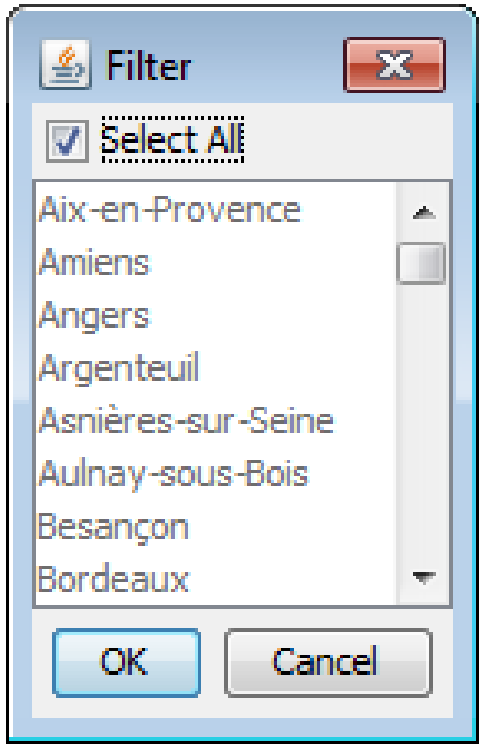
- Right click in the graph to open the context menu and select **Collapse by Property** to cluster the selected stations.



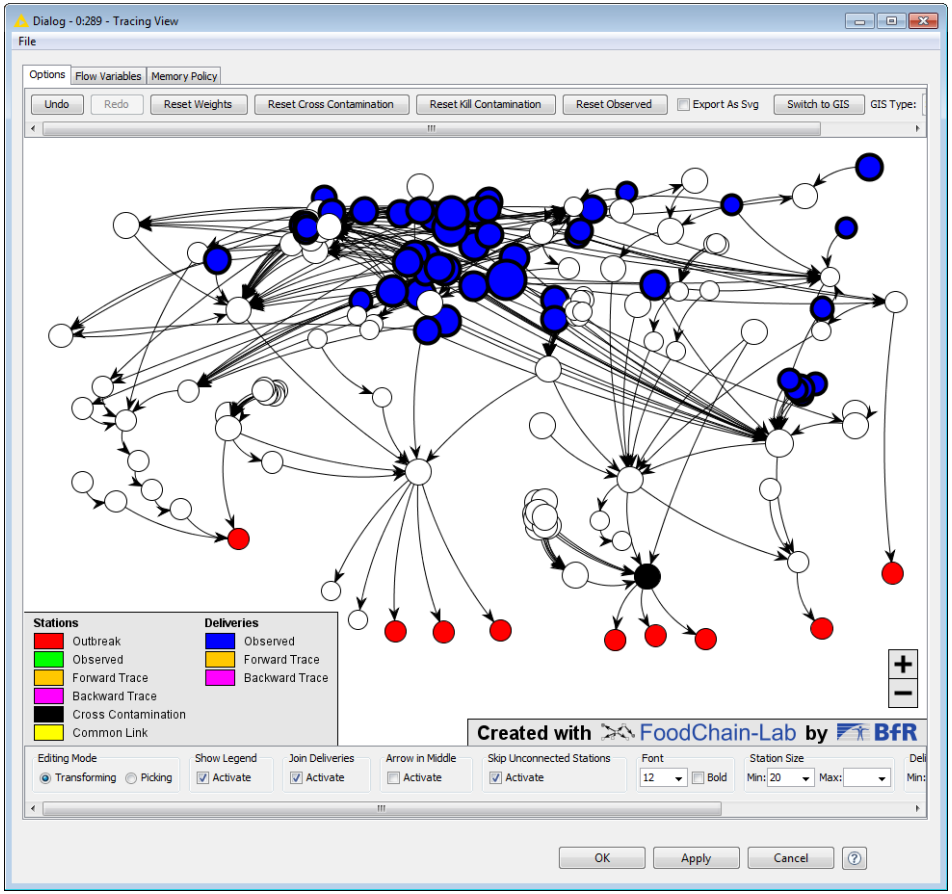
- Select **Yes** to only cluster selected stations.



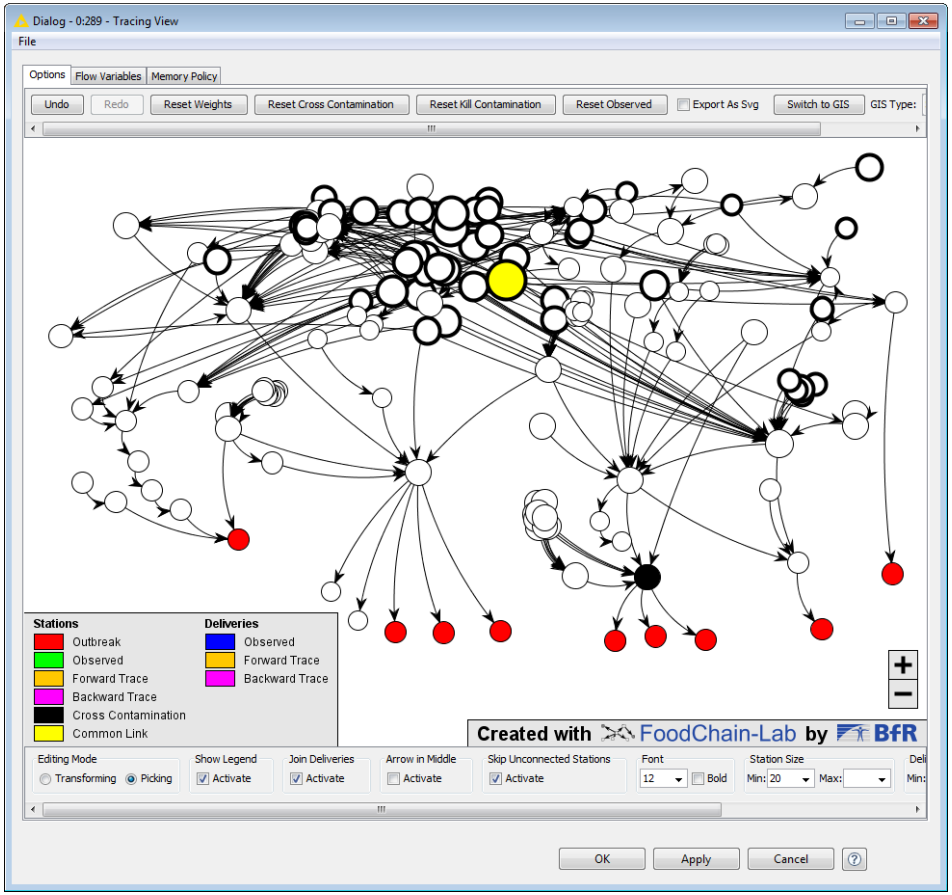
- We want to cluster on city level. That means all stations from the same city will be merged.
- Select **City** and press **OK**.



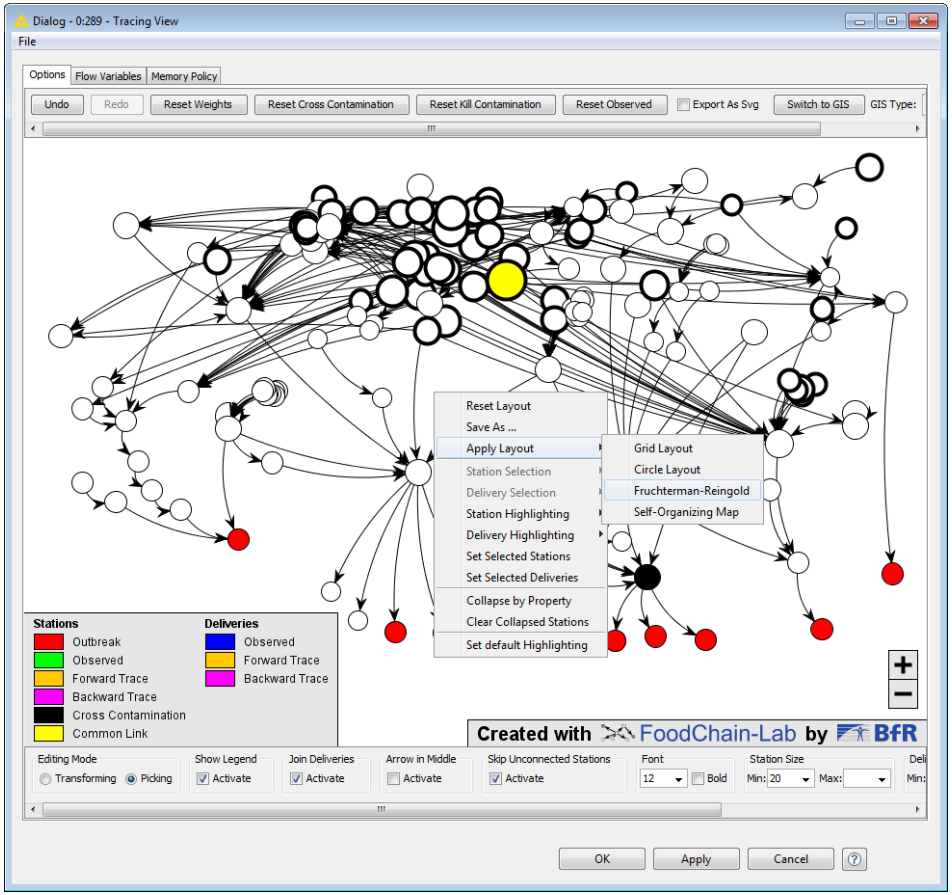
- Just press **OK**, since we do not want to exclude any cities.



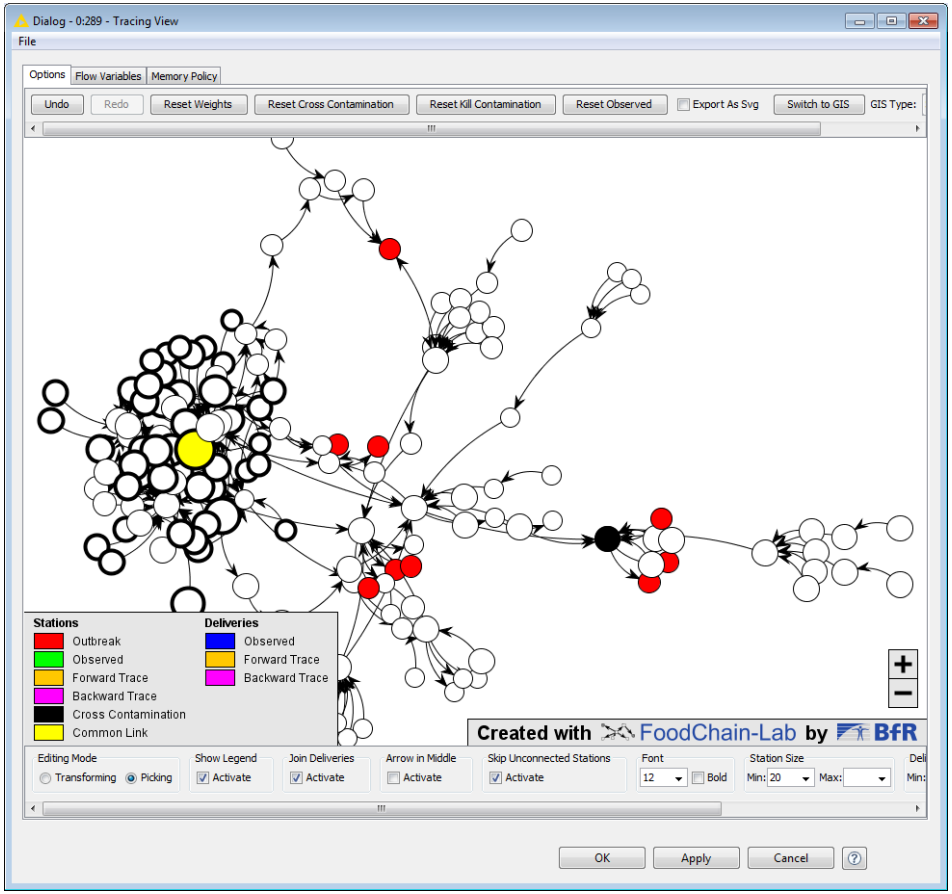
- All French primary producers have been clustered to cities.
- Each selected station (blue circle) is a French city.



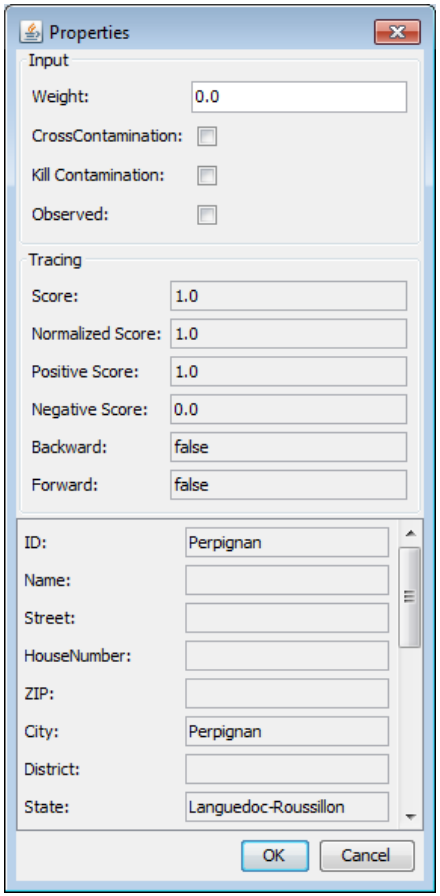
- Select "Picking" as **Editing Mode** and click in the graph to deselect all stations.
- You can now see, that one of the stations is yellow. That means, that this station (French city) is connected to all outbreak spots (red circles).



- 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 layout algorithm is not deterministic, therefore your result will look different from the screenshot.
- To see which city is connected to all outbreak spots double click on the yellow circle.



- As you can see in the dialog the city is "Perpignan".
- Press **Switch to GIS** to see the city and its relations on a map.