

## FoodChain-Lab web application "hands-on" training

Please go to the FoodChain-Lab web application (<https://fcl-portal.bfr.berlin>) and log in using the following credentials

User name: [user1@fcl.de](mailto:user1@fcl.de)

Password: fclwebapp

Click on the „Tracing View“ button.

### **Scenario: Chemical contamination (Pyrrolizidine alkaloids (PAs) in baby tea)**

#### a) First phase → ingredients of Naturmädel baby tea

Left-click on the button "Upload Data" and upload *Scenario\_1\_Outbreak-Baby-Tea.json* from the provided material on the USB-Stick or the BfR data cloud.

You can see stations (squares, pentagons, octagons, ... ) that represent various types of food business operators. The lines are deliveries. The text in the middle of the lines is the ingredient which is delivered from one station to the other.

Apply the farm-to-fork layout by right-click into the empty space -> Apply Layout -> Farm-to-fork.

Show legend: Open the graph settings by clicking on the menu (three stripes) in the right upper corner, click on the "Graph Settings" tab and tick the box next to "Show Legend". In this tab you can also adjust node size or font size if needed.

Make some adjustments to the network by moving the stations via drag-and-drop. Align all primary producers (squares) on the left side.

In which country is Top Vera Foods located and to what type of business does it belong? Hint: Either check the legend or have a look at the properties of the station Top Vera Foods (right click on the station -> Show Properties).

What would happen, if a contamination would be detected in the company Top Vera Foods? To create hypotheses you can right-click on the station and select "Set Trace" and "Full trace". Check with the legend what the newly appeared colors mean.

Reset the trace: Right-click into the empty space and select "Clear Trace".

How much dried organic camomile is imported from Egypt? Hint: Right-click on the delivery to show its properties.

What are the ingredients of both lots of Naturmädel baby tea (both lots have the same ingredients)? Hint: Right-click on the delivery and set the backward trace.

You want to create a picture from the supply chain network for a Rapid Outbreak Assessment or other reports. Click on the "ROA Style" button in the upper right corner and click "Generate Report".

Nice to know: You can customize the variables and the standard text which should be used to create the ROA style in the ROA Report Configuration dialogue before clicking "Generate Report"

You can customise the graph, by e.g. adding additional text fields or arrows. Drag-and-drop a yellow box from menu on the left and write some additional information in it (e.g. that the baby tea was recalled).

Go to "File" -> "Print..." in the menu to save the "ROA style" as PDF.

Go to "File" -> "Save" to save the "ROA style" as XML. You can reload this file in the ROA module at any time to make further adaptations.

Click on the "Tracing View" button in the upper right corner and "OK" to get back to your graph view.

Nice to know: As the ROA style is only for reporting purposes, changes made in the ROA style do not feed back to the tracing view

b) Second phase → distribution of teas from La Source des Herbes

Please upload the file *Scenario\_2\_LaSource.json*.

Apply the farm-to-fork layout by right-click into the empty space.

The scenario becomes more and more complex. There are many deliveries from "La Source" to the distribution centres "ECO", "Le Bio" and "Natürlicher Leben".

To get a better overview on the full supply chain, open the graph settings (menu on the right, "Graph Settings" tab) and select "Merge Deliveries → All".

Nice to know: Now, there is only one connection between two stations. But it still contains all delivery information.

How many deliveries does the line between La Source des Herbes and Exclusive Foxon Trading represent? Right-click on the merged delivery and select "Show properties". You can also tick "Show merged Deliveries Counts" in the "Graph Settings" tab.

How many deliveries does La Source des Herbes deliver in January 2019?

- Click on the menu button in the right upper corner,
- Select the "Filter" tab and then select the "Deliveries sub-tab
- Type "La Source" in the filter field of the "Source" column in the table header
- Now click on the three dots on the left side of the table header to add the column for "Delivery Date" and click "OK"
- Type "2019-01" in the respective filter field
- Check the number of filtered deliveries in the table footer

Nice to know: There are more filter options available above the table. You can reset all filters by clicking the  button.

Follow the trace of contaminated camomile flowers from the station "Organic Herbs Egypt Inc.": Right-click on this station (or on the respective delivery), select "Set Trace" and then "Forward Trace". Which countries receive products containing the contaminated camomile from Egypt? Is it an ingredient of all investigated teas?

You can get an overview on the supply chain by having a look at the map. Select "GIS" in the blue menu bar on the top.

Save an image of the map and of the graph via the "Save Image" button in the blue menu bar on the top.

Save the analysis using the button "Download Data" from the blue menu bar. You could reload this JSON file in the Tracing View module at any time to make further adaptations. You could also load the JSON file into the FCL desktop application in KNIME.

### **Extra task: Foodborne outbreak scenario**

If you have some time left, you can test FCL Web in a simple outbreak example.

Please load the Example Data via the respective button in the blue menu bar on the top.

Right-click on the Cases and select "Mark as Outbreak" from the context menu.

Check the changes in the scores and sizes of the stations in the network. What is the common link between all the cases?