

# FoodChain-Lab Web As Stand-Alone Software For Comprehensive Tracing Along Global Food Supply Chains During Foodborne Incidents

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## Key features of FCL Web

- Free & open source stand-alone web application
- Visualises food business operators and deliveries
- Analyses supply chain network automatically to identify potential common sources of pathogen/contamination and disease cases
- Traces food back and forward along complex supply chains to help solving foodborne incidents (biological/chemical contaminations)
- Allows interactive analyses and simulation of hypotheses
- Helps prioritizing next investigation steps

### 1 Load tracing data via Excel templates

Load your tracing data into FCL Web via the All-in-One Excel template. It contains three sheets:

- stations** (farms, manufacturers, supermarkets; represented by circles),
- deliveries** (ingredients, food products; represented by arrows)
- delivery relations** (connections between deliveries).

With FCL Web, your confidential data never leaves your device. The web browser is used solely for visualisation purposes.

Template available at <https://foodrisklabs.bfr.bund.de/template-for-data-collection/>

### 2 Mark known cases as outbreak

Disease cases and companies where the contamination was detected are marked as outbreak, shown in red.

### 3 Common links are highlighted in yellow automatically

Companies with supply chain connections to all known contaminations are shown in yellow.

### 4 Test hypotheses

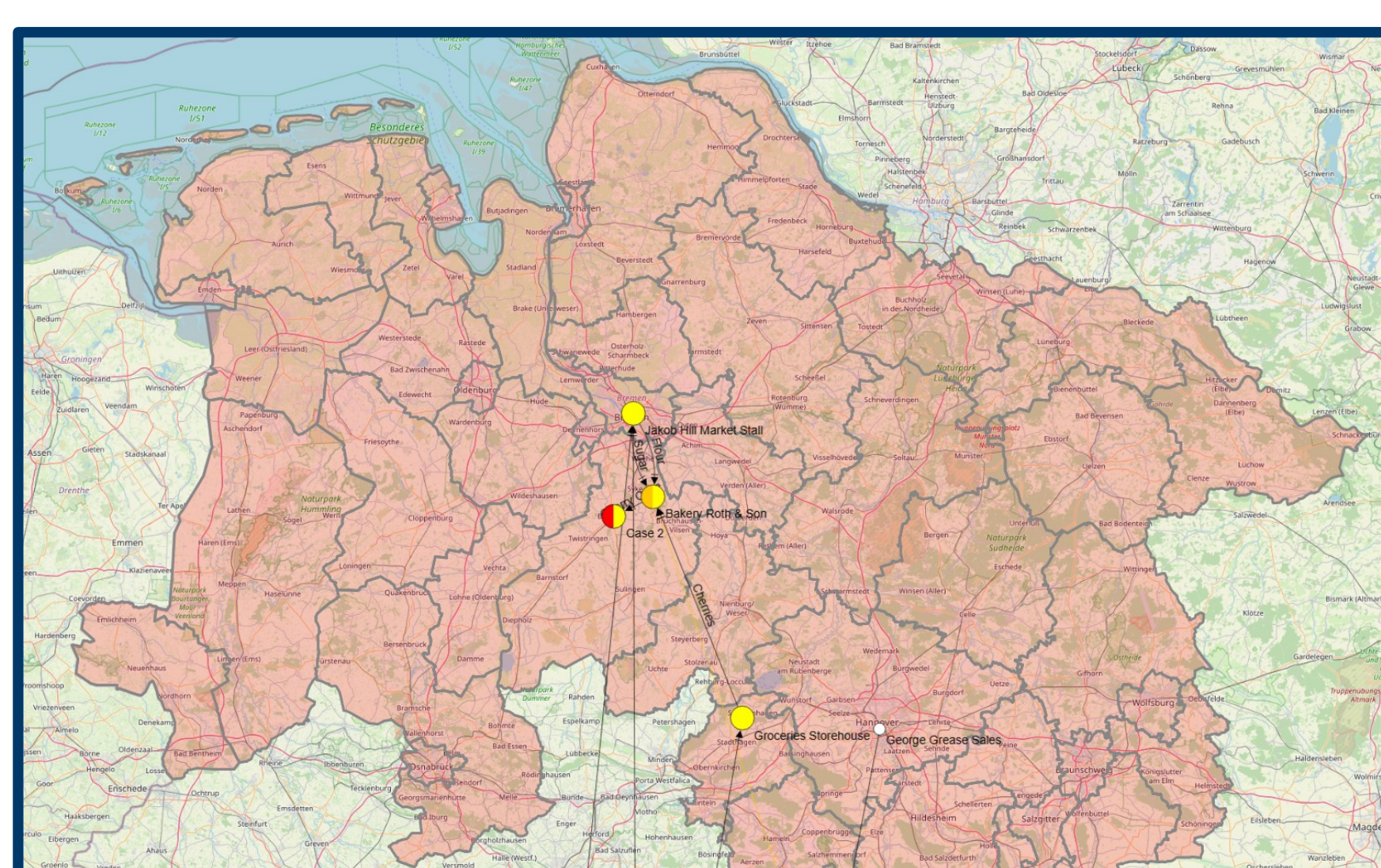
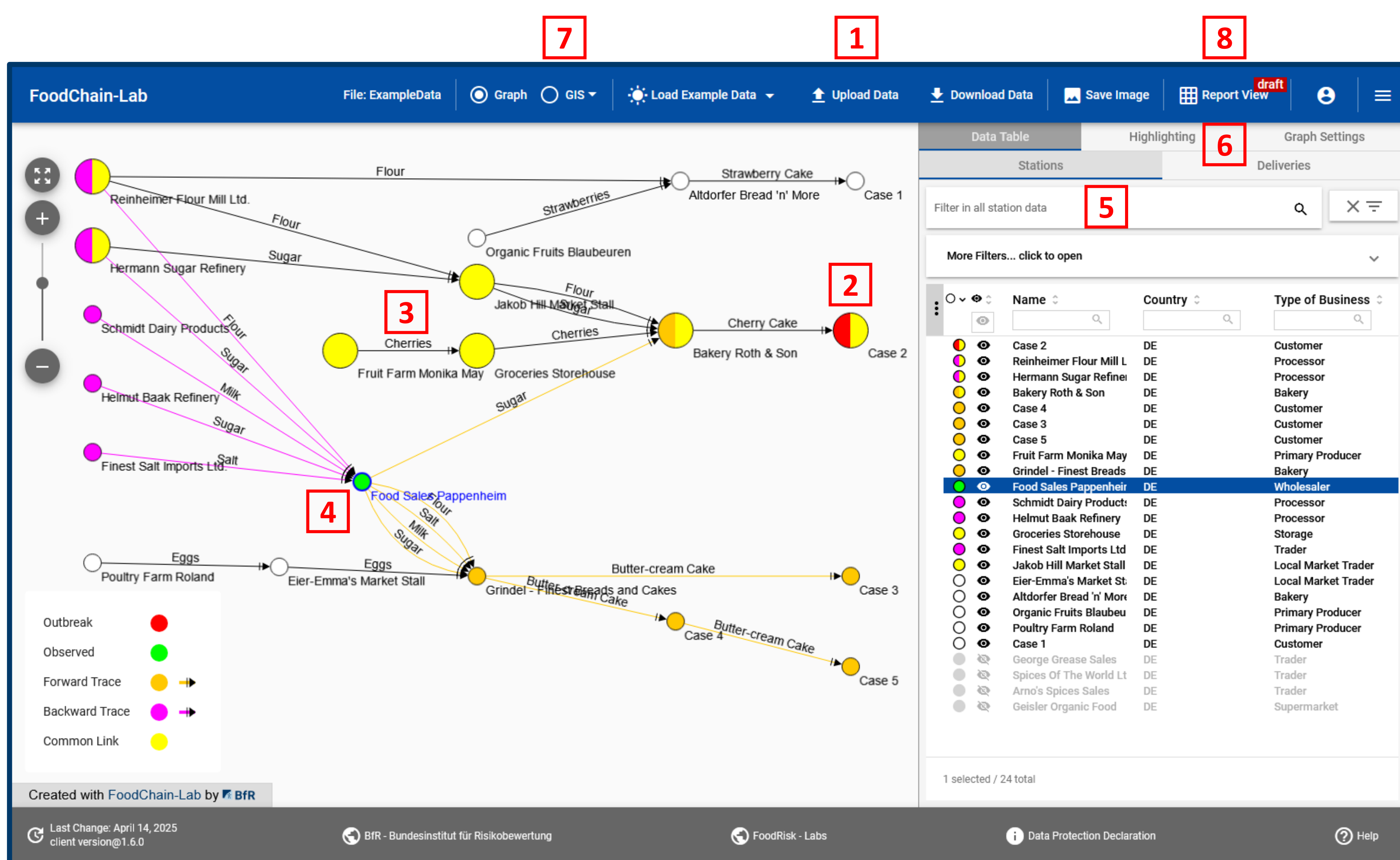
Activate the trace for a specific company (shown in green). Compare the picture of **backward** and **forward trace** with your expectations according to results from the outbreak investigation. This way, you can test different companies *in silico* and prioritize further investigations and sampling.

### 5 Browse and search data

In the data table you can search and filter for company and delivery properties, e.g. name, address and lot number. Focus on companies / products quickly by double-clicking on the respective data table row.

### 6 Highlighting, labelling, anonymisation

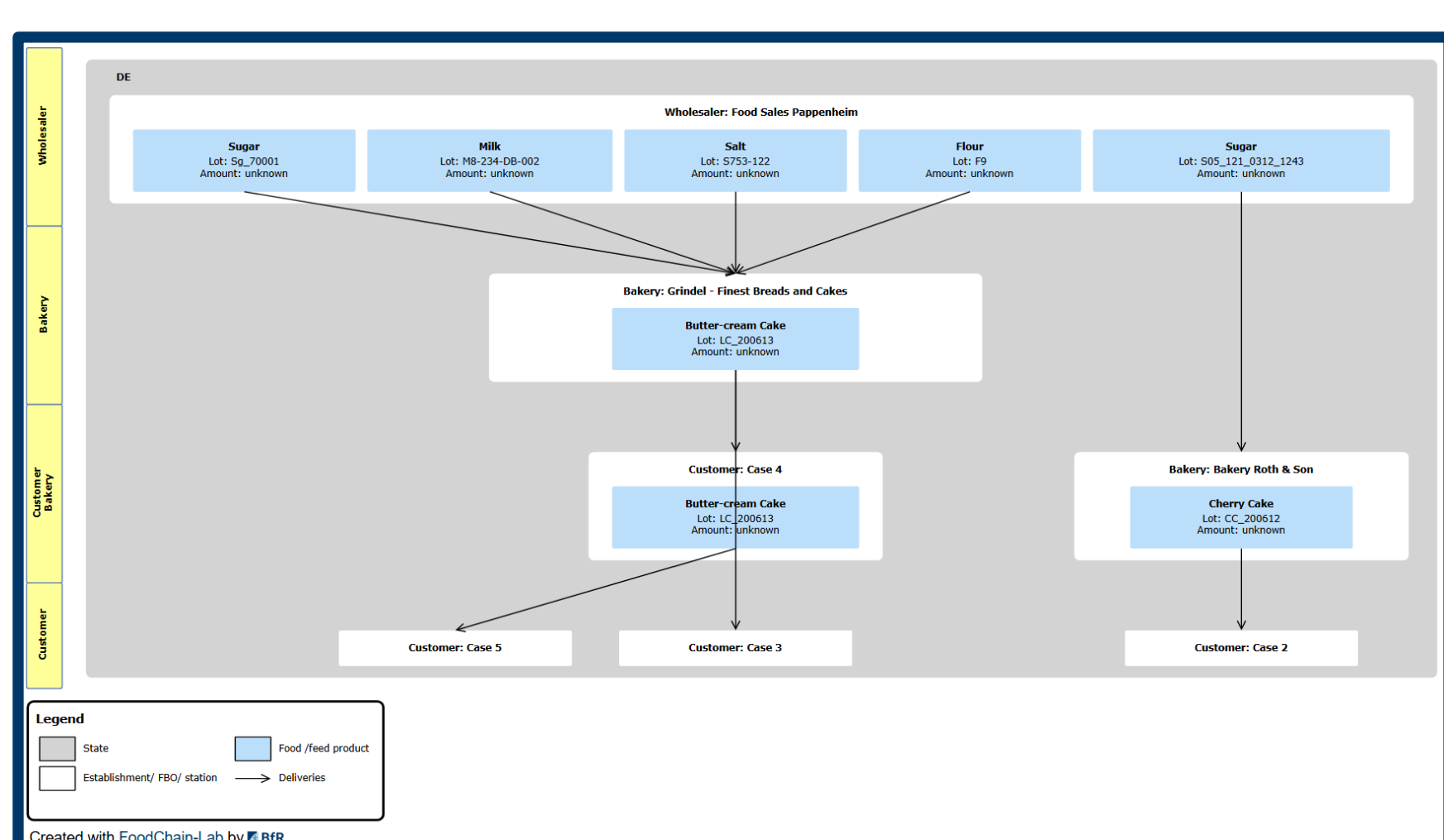
Companies and products can be highlighted using different colours (and shapes). Additional property-related labels can be set and quickly toggled on and off. To anonymise data on the go, e.g. to show the investigation status without showing confidential data, a default anonymisation is implemented and can be adjusted to the user's needs.



### 7 Show the supply chain on a map

Displaying supply chain data on a map and considering the actual distances between companies can indicate new connections or rule out contamination scenarios.

You can also upload **shapefiles** (e.g. country or county borders) or your own shapes (e.g. to highlight an area) and show them on top of the map.



### 8 Report View

With a click on the 'Report View' button a special graph suitable for publishing tracing results in outbreak reports is generated. All boxes, arrows, colours and texts are created automatically but are fully editable if needed. The report view can be saved and reloaded for continued analysis.

Visit <https://fcl-portal.bfr.berlin/> and to try out the FoodChain-Lab web application with our provided example datasets. Everybody can register and use FCL Web for free.  
If you have questions, please feel free to contact the FoodChain-Lab team via [foodrisklabs@bfr.bund.de](mailto:foodrisklabs@bfr.bund.de).

