

WHONET – InFARM Data Export



WHO Collaborating Centre for
Surveillance of Antimicrobial
Resistance

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Background

InFARM stands for the “International FAO Antimicrobial Resistance Monitoring System”. More information can be found at the following URL:

<https://www.fao.org/antimicrobial-resistance/resources/database/infarm/en/>

The InFARM protocol is subdivided into two categories: Model A (isolate-level data) and Model B (aggregate statistics). Countries can choose between submitting more granular data with Model A or aggregate statistics with Model B. Countries make these determinations using the InFARM web portal, and then use the corresponding settings in WHONET to generate the data files for upload to the portal.

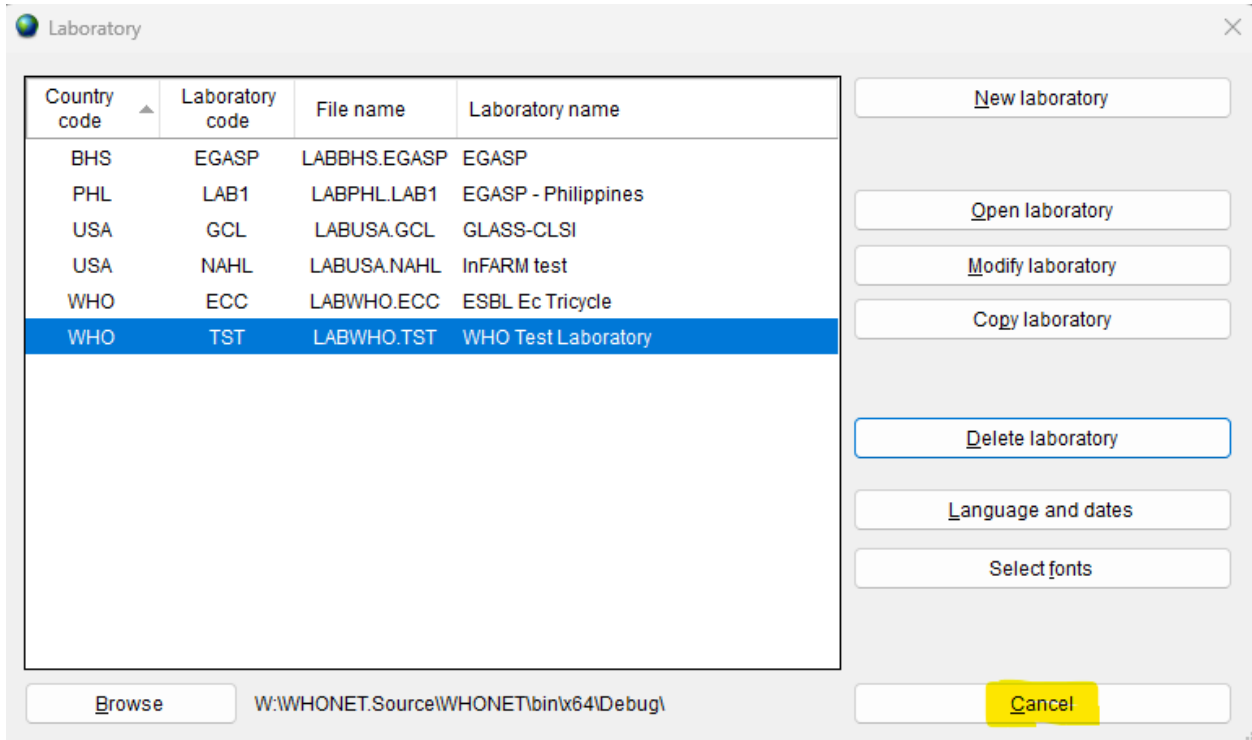
About this document

This document describes how to use WHONET for generating the InFARM Model A & B exports, as well as optional manual data entry when data feeds (processed via BacLink) are not available.

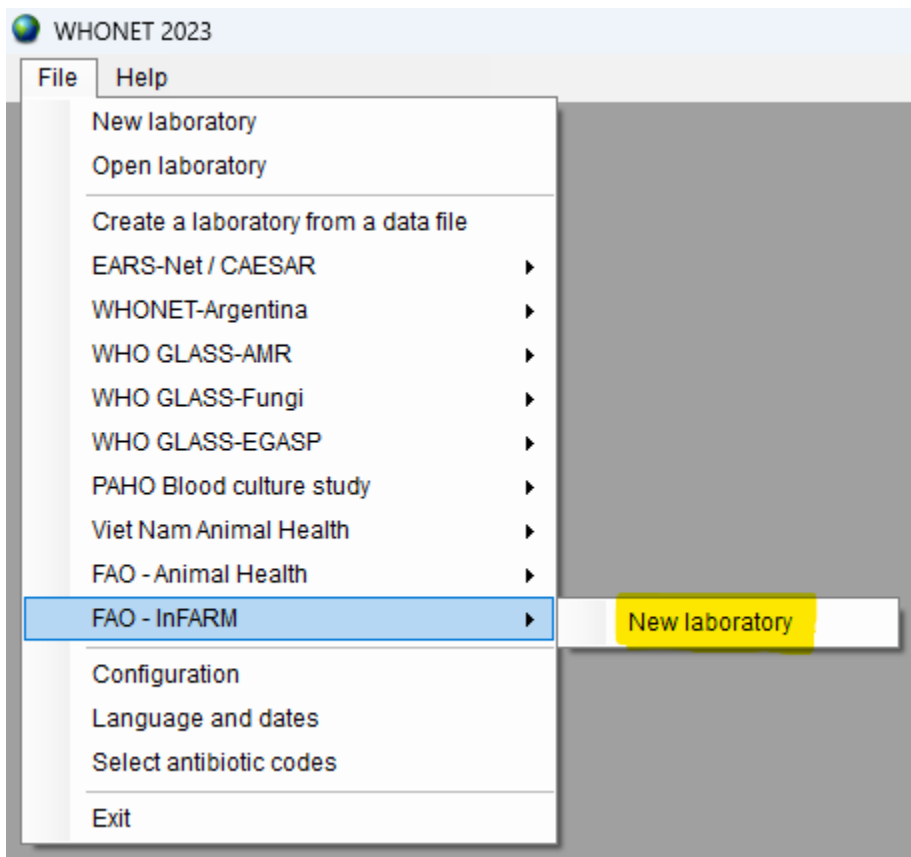
How to create a WHONET configuration for manual data entry

If you do not have data to process with BacLink, you can use WHONET for manual data entry. If you do have data feeds that have been processed with BacLink, you may skip this section and the following section regarding “Manual data entry”.

1. Open WHONET and choose “Cancel” on the laboratory configuration screen.



- Press “File” on the main menu, then select “FAO - InFARM” and finally “New laboratory” as shown below.



3. Fill in the details for your country, laboratory name and code.
 - a. Be sure to select “Human, Animal, Food, Environment” so that the relevant data fields will be added to your configuration.
 - b. Press “OK”.

Enter the name, code, and country of the new laboratory.

Country: Food and Agriculture Organization of the FAO

Laboratory name: InFARM Test Laboratory Name

Laboratory code: INF_TST Configuration file: labfao.

Maximum 10 letters

Human

Human, Animal, Food, Environment

OK Cancel

4. The next question will ask you whether you predominantly test using CLSI or EUCAST guidelines. Please choose the most appropriate answer here. Additional antibiotics can be added (from either guideline) after your default configuration has been generated with this process.
5. After confirming your guidelines above, your new configuration will be generated. You will be presented with the option of viewing the details on the next screen. If you need to make modifications, press “Yes”. If not, you may continue to the main WHONET screen by pressing “No”.

Manual data entry

When a data feed is not available, you may use the configuration generated above to enter data using WHONET’s interface.

1. Open the InFARM configuration by pressing “File”, “Open laboratory” and choosing the correct item.
 - a. The “Open laboratory” screen is shown automatically when you launch WHONET each time.
2. From the main menu, choose “Data entry”, “New data file”.
3. A data entry screen should appear with questions and code lists corresponding to the InFARM protocol. You may use this screen to enter your data and view the existing isolates.
4. For further information on general WHONET data entry, please see the documents found on your computer at C:\WHONET\Documentation or online at the following URL.

- a. https://whonet.org/WebDocs/WHONET_9.Data_entry_Isolate_entry.pdf

How to create a configuration associated with WHONET files generated with BacLink

When you have created data files with BacLink, there is no need to follow the procedure above for “How to create a WHONET configuration for manual data entry”. Instead, you can use the “Create a laboratory from a data file” feature. The advantage of this approach in this scenario is that the list of antibiotics will be tailored to match those tested, rather than providing you with a complete set of possibilities in the protocol.

1. From the main menu in WHONET, press “File”, “Create a laboratory from a data file”.
2. Fill in the details for your country, laboratory description and code.
3. Be sure to select “Human, Animal, Food, Environment” as shown below.
4. Choose one or more WHONET InFARM data files to scan by pressing the “Data files” button.

Create a laboratory from a data file

Enter the name, code, and country of the new laboratory.

Country: Food and Agriculture Organization of the FAO

Laboratory name: InFARM Test Lab (BacLink data)

Laboratory code: INF_BAC Configuration file: labfao.inf_bac

Maximum 10 letters

Human

Human, Animal, Food, Environment

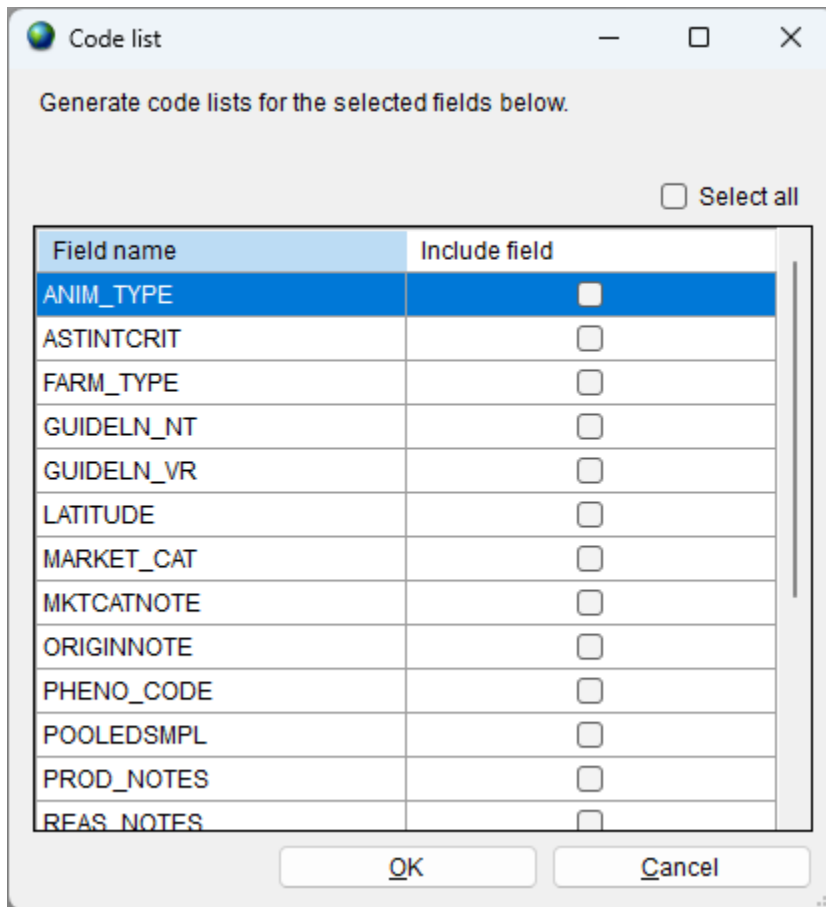
Data files

W:\WHONET.Source\WHONET\bin\x64\Debug\Data\USA-NAHL-InFarm.sqlite

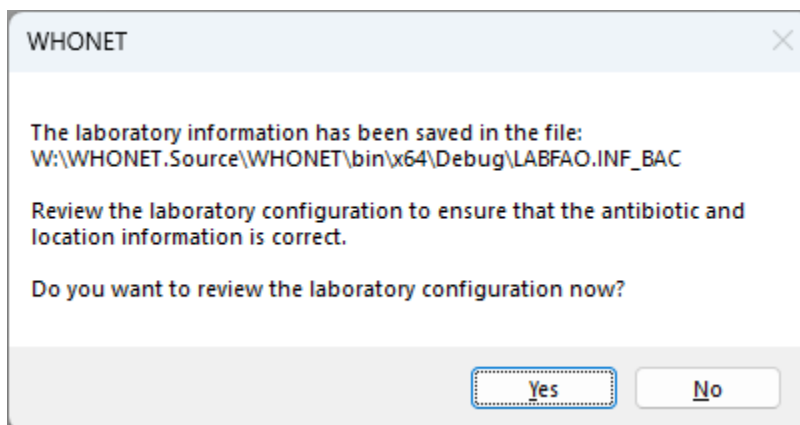
OK Cancel

5. On the following screen, a list of data fields will appear. You do not need to select any options here, as they are most relevant for manual data entry.

- a. Press “OK” to continue.



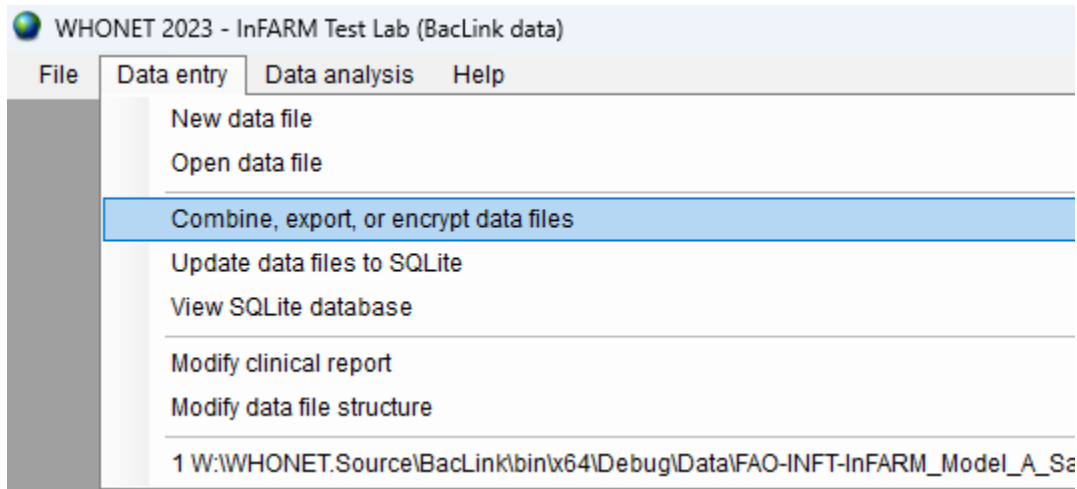
6. The system will run an analysis automatically to generate resistance profiles for your data. No user interaction is required for this step.
7. Once the step above completes, you will be presented with an opportunity to view the configuration on the following screen.
- a. You may review or make changes by pressing “Yes” or continue to the main WHONET screen by pressing “No”.



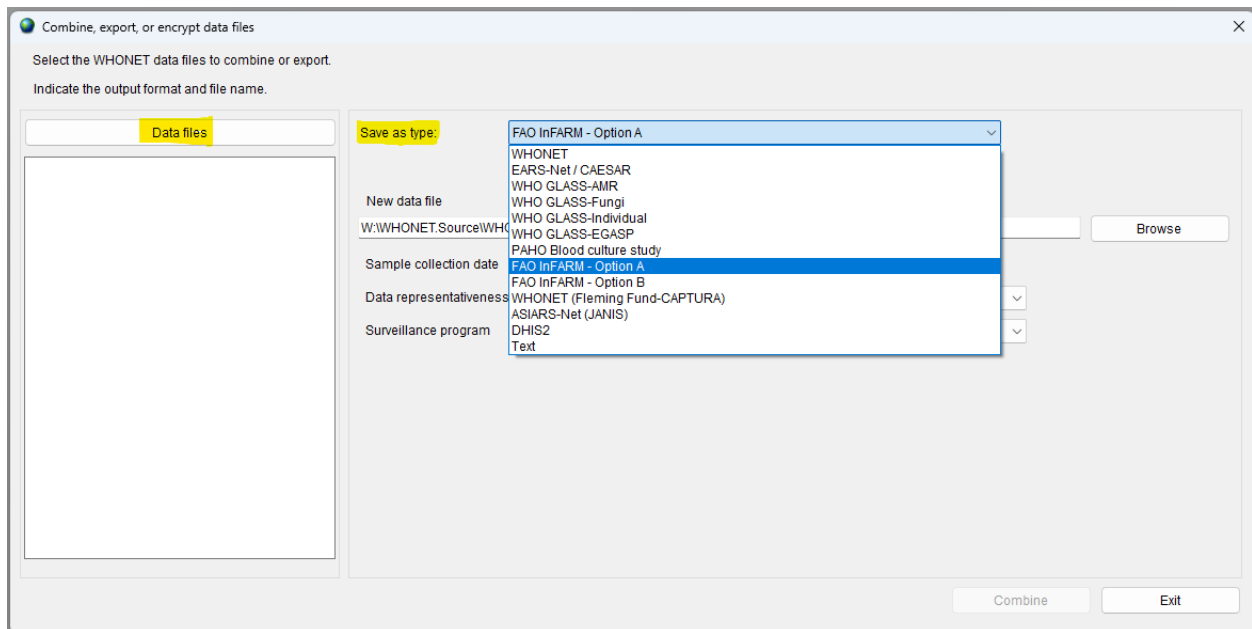
How to export data in the InFARM Model A and B format

There is only a single method for data export regardless of whether you have manually entered data or used BacLink to process your data feed.

1. Using “File”, “Open laboratory”, select the InFARM configuration generated with one of the methods described above.
2. From the main WHONET menu, press “Data entry”, “Combine, export, or encrypt data files”



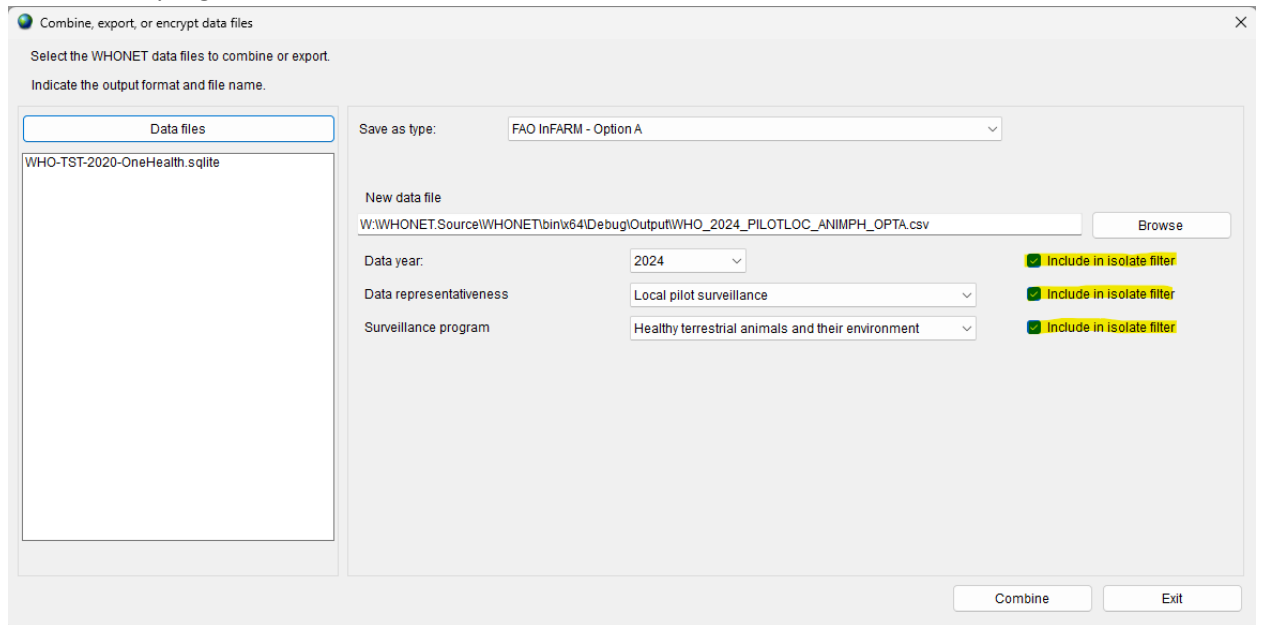
3. Press the “Data files” button and select one or more data files to include in the export.
4. From the “Save as type” menu, choose either “FAO InFARM – Model A” or “FAO InFARM – Model B”.



5. When you activate one of these exports, another set of options will appear below as shown. The responses should match the configurations you have previously set up on the InFARM web

portal. Note that the “New data file” name will change automatically to match the InFARM protocol’s rules whenever one of the options changes.

6. Note the checkboxes to highlighted in yellow below. When these are checked, the system will filter your selected data files according to the associated option to the left of the checkbox. If you uncheck them, the system will not apply the filter (allowing more isolates into the eventual output). You should only uncheck a checkbox if you are sure that all the isolates in your selected data files are for the corresponding combination of data year, data representativeness and surveillance program.



7. Press “Combine”. You should receive a message indicating that the conversion completed successfully.
8. The file will be in the “C:\WHONET\Output\” folder on your computer by default and will be named according to the entry in the “New data file” text box.
 - a. This file is ready to be uploaded to the FAO InFARM platform.
 - b. If you need to generate additional exports for other surveillance programs, etc., you may repeat steps 4 – 7 selecting the relevant options each time.