Lab|Book

Manual for data exchange with WHONET

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Foreword

This manual presents the elements of LabBook that are accessible to a person with "advanced secretary", "technician", "advanced technician", "quality technician" and "biologist" rights. If you do not have access to any of the actions via your interface, please contact your administrator so that these rights can be assigned to you.
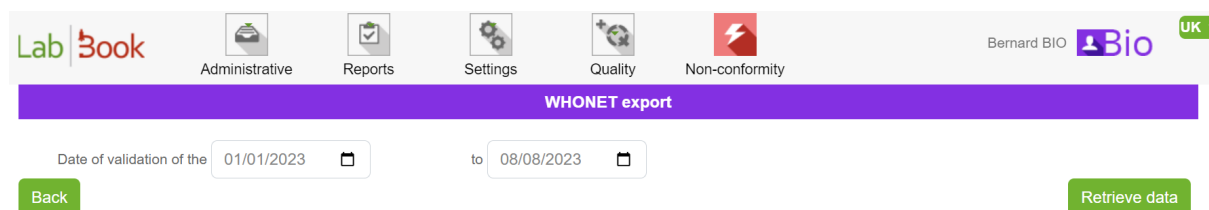
For a biologist's work to be finalized for LabBook, the analysis result must be validated biologically. Once this validation is done, a report appears to provide feedback to the patient.

Export Whonet

To access the Whonet data extraction page, go to the "Reports" menu and then "WHONET Export":
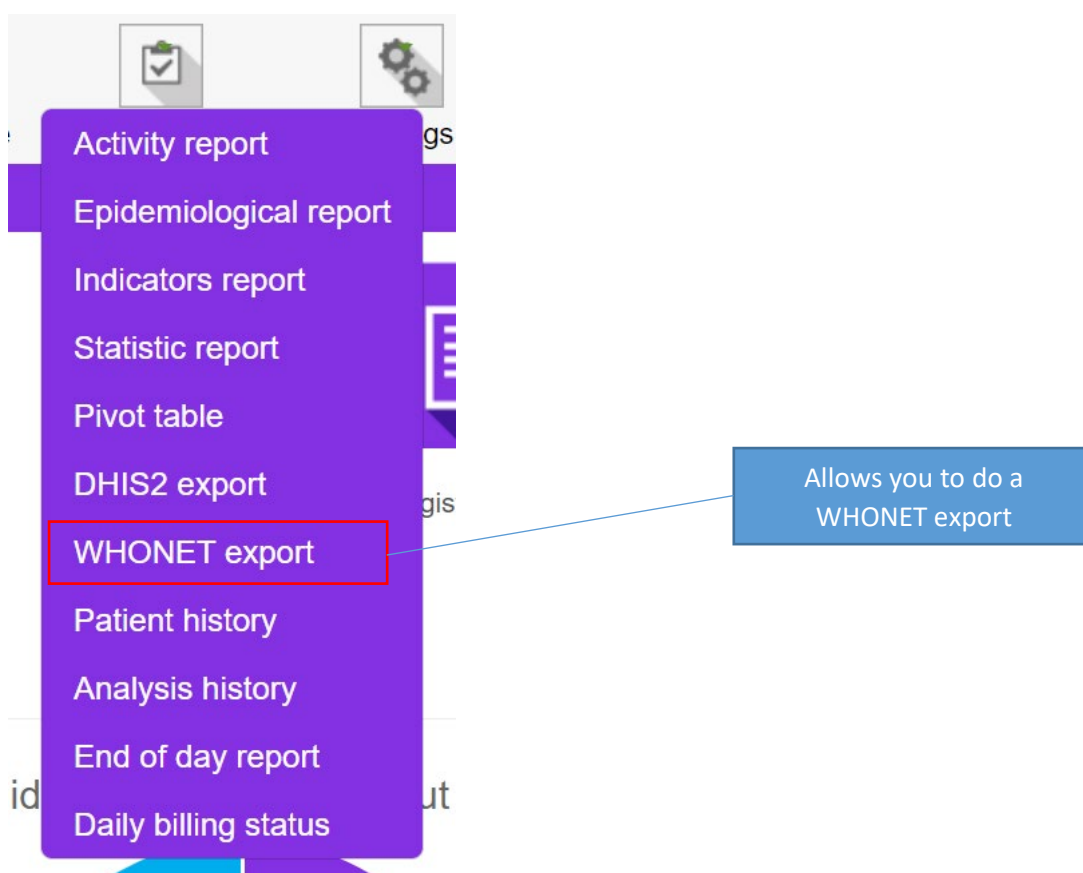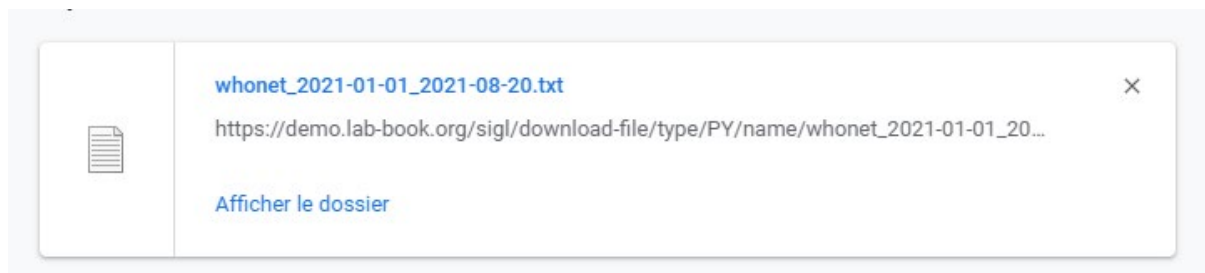

After clicking on this option, you will be taken to the following page:

Here you have the possibility to define a date interval. That is, specify the start and end date of the data you would like to output.

By clicking on the button "retrieve data" , you will get a file in txt format as follows:


This file will be processed with BacLink software for conversion to WHONET manipulatable data.

To do this, here are a few things to do on BacLink and you can get the complete documentation on the Whonet website: https://www.whonet.org/documentation.html

Convert LabBook export to Whonet with BacLink

BacLink is an integrated tool in the Whonet software and you can download it through the link: https://www.whonet.org/ and on the "Download" section.
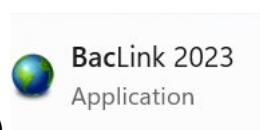
Once the application is installed, launch BacLink ( )

In the window that opens, the top part allows you to describe the file to be converted and the bottom part for the new data file.
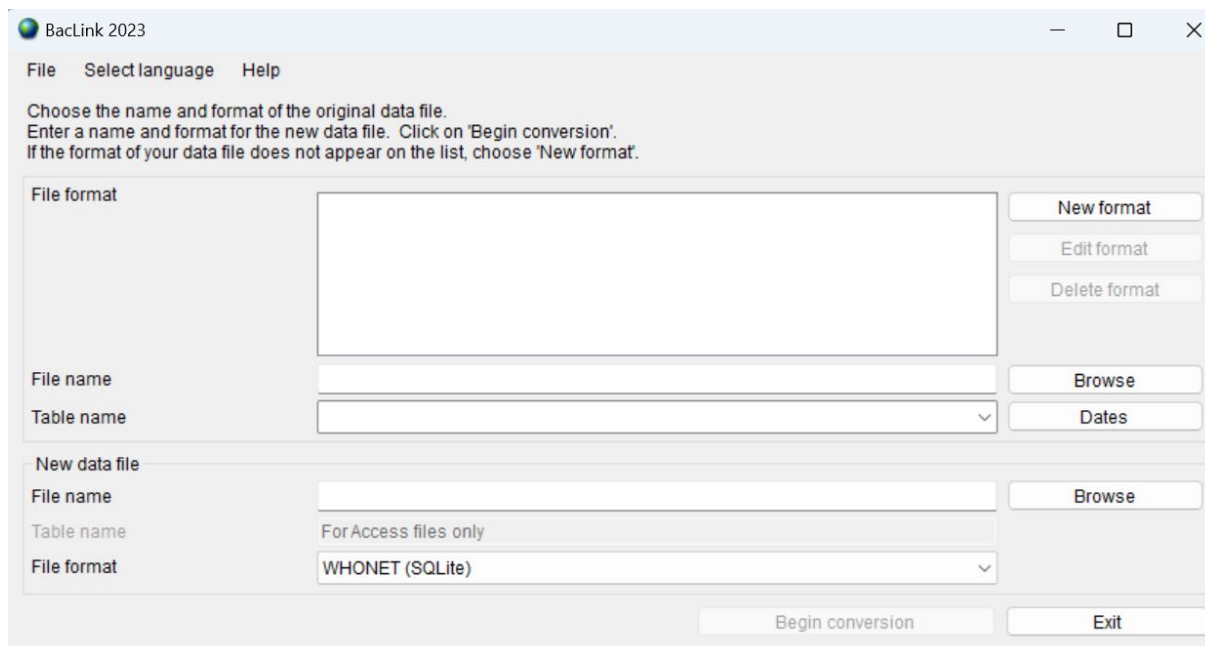
To set up the information for the lab, click on "New format".

Select the country from the drop-down list, fill in the name and code of the laboratory (this code will be used by BacLink and WHONET as the default file extension for your WHONET data files).

Then click on "File structure".

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File structure

File structure	Text (Delimited)
Field delimiter	Tab
File location	C:\WHONET\Data\20082021\
File name	whonet_2021-01-01_2021-08-20.txt

File origin	Windows (ANSI)
Character set	Western European (Windows)

Antibiotics — Enter information about the antibiotics in your data file

Guidelines	No answer
Number of rows of data for each isolate	No answer
Antibiotic sequence	No answer
Test methods	No answer
Number of test methods in one row of data	No answer

Does the first row of the data file have the names of the data fields?
● Yes   ○ No

Data fields — Define the relationship between your data fields and WHONET data fields.

OK

Indicate the location and the LabBook export text file by clicking on the "search" buttons.

Change the file origin to Unicode (with UTF-8 encoding).

Click on the "Antibiotics" button to configure the information on antibiotic results.

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Configure antibiotics

File format	TEXT (DELIMITED)	
Does your file include antibiotics results?	● Yes ○ No	

Guidelines — EUCAST

The antibiotics of one isolate require how many rows of data?
- ● One row
- ○ More than one row

In what sequence do the antibiotics appear?
- ● Fixed antibiotic sequence
- ○ Variable antibiotic sequence

The data file includes what test methods?
- Disk diffusion ☐
- MIC ☐
- Etest ☐

OK   Cancel

(If your data file contains more than one test method, BacLink will ask you a few additional questions to reliably distinguish the results tested by the different methods)

To finish this configuration, click on the "OK" button

Now, to define the relationship between the data fields in the LabBook export file and the corresponding data field in WHONET, click on the "Data Fields" button

You choose the LabBook file and then match the whonet fields on the left with the LabBook data fields on the right.

To match the two fields, click on a whonet field on the left, then on the corresponding LabBook field on the right. After doing so, click on the "=" sign in the middle.

Click on the " Ok " buttons to validate the configurations.

You must now save all the work you have done. Click on "Save". And give the new BacLink configuration a name. The file name must end with ".cfg". Then click "Exit" and the new configuration will appear on your BacLink file format list.

Enter the name of the new Whonet file and click on the "Start Conversion" button

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| File name | C:\WHONET\Data\20082021\whonet_2021-01-01_2021-08-20.txt | | Browse |
| Table name | | ⌄ | Dates |

New data file

File name	C:\WHONET\Data\20082021\Test01.sqlite		Browse
Table name	For Access files only		
File format	WHONET (SQLite)	⌄	

| | Begin conversion | Exit |

BacLink will display for you the results of the conversion of the first three isolates of the original data file. The purpose is to allow you to visually inspect the accuracy of the conversion. On the screen below, you will see the results of the first isolate. Focus on the middle column first to see if BacLink is reading the data values correctly, and check the final column to see if BacLink is converting the data values correctly.
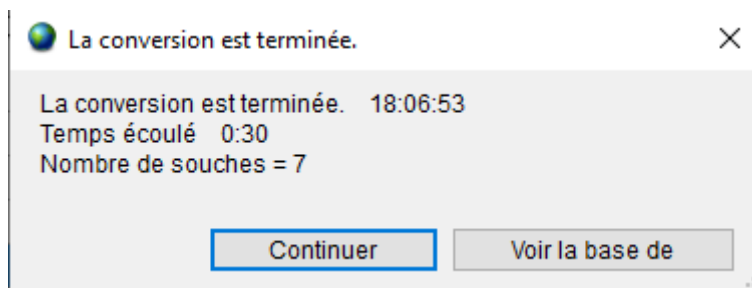
BacLink will indicate that the conversion is complete with the necessary information. Click on "Continue".
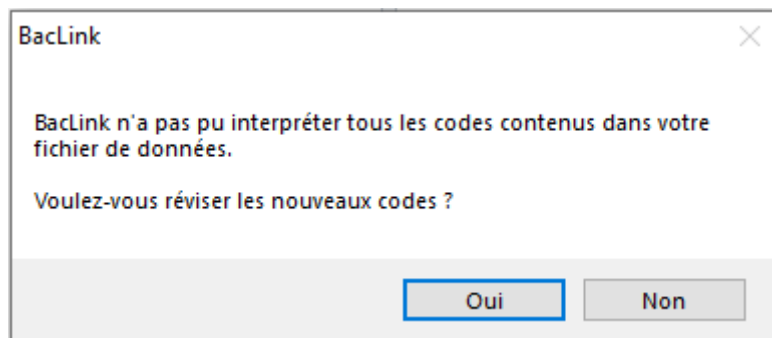
BacLink may warn you that it has encountered some code that it has not recognized. In this tutorial, you should see the message below. Click on "Yes".

And you can correct these codes by clicking on the "Set Code" button. Then click on "Continue" to get the Whonet output file.

Export Whonet configuration on LabBook

On LabBook, by logging in with the "root" user, you can configure the analyses and variables to be exported in the "Export Whonet". To do this, go to the "Settings" menu and then "Analysis Repository".

Action	Code	Designation	Abbreviation	Family	Status	Bio. product
ⓘ ▾	ABCL	Antibiogram 1st line of mycobacteria in a liquid medium	ATBBKML TUB	Bacteriology	Activated	
ⓘ ▾	B248	Urine analysis: microscopy, culture and sensitivity (fresh state, coloring cytology)		Bacteriology	Activated	PB3 : Urine sampling
ⓘ ▾	B249	Cytobacteriological examination of urine (uroculture)	ECBU	Bacteriology	Activated	PB3 : Urine sampling
ⓘ ▾	B250	Examination of vaginal/cervico-vaginal swab		Bacteriology	Activated	PB7 : Vaginal sampling
ⓘ ▾	B251	Cytobacteriological examination of vaginal/cervico-vaginal sampling		Bacteriology	Activated	PB7 : Vaginal sampling
ⓘ ▾	B252	Examination of urethral swab		Bacteriology	Activated	PB8 : Urethral sampling
ⓘ ▾	B253	Cytobacteriological examination of urethral sampling		Bacteriology	Activated	PB8 : Urethral sampling
ⓘ ▾	B254	Semen analysis		Bacteriology	Activated	PB22 : Sperm sampling
ⓘ ▾	B255	Direct review of the CSF		Bacteriology	Activated	PB5 : Sampling of puncture fluid
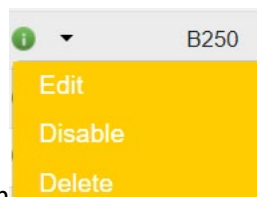
Once in the list of analyses, click on the action button and "Edit".

In the Analysis and Variables section, you have an option to add or not add this data to the whonet export.

N.B.: Only a "root" user has the right to modify this option.

List of analyses on export Whonet

There are some analyses that are already predefined to be in the Whonet export data. Here is the list of these analyses (24 analyses):

code	Designation	Abbreviation
B650	Meningococcal antibiogram [DISK].	ABG Meningococcus
B651	Staphylococcus aureus antibiogram [DISK].	ABG Staphylo. aureus
B652	Pneumococcal antibiogram [DISK].	ABG Pneumococcus
B653	Haemophilus influenzae antibiogram [DISK].	ABG H. influenzae
B654	Pseudomonas antibiogram [DISK].	ABG Pseudomonas
B655	Acinetobacter antibiogram [DISK].	ABG Acinetobacter
B656	Antibiogram Escherichia coli [DISK].	ABG Escherichia coli
B657	Antibiogram Salmonella spp [DISK].	ABG Salmonella spp
B658	Antibiogram Shigella spp [DISK].	ABG Shigella spp
B659	Klebsiella spp. antibiogram [DISK]	ABG Klebsiella
B660	Enterobacter spp. antibiogram [DISK]	ABG Enterobacter
B661	Vibrio cholerae spp. antibiogram [DISK].	ABG Vibrio cholerae
B670	Meningococcal antibiogram [MIC].	ABG Meningococcus

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B671	Staphylococcus aureus antibiogram [MIC].	ABG Staphylo. aureus
B672	Pneumococcal antibiogram [MIC].	ABG Pneumococcus
B673	Antibiogram Haemophilus influenzae [MIC].	ABG H. influenzae
B674	Pseudomonas antibiogram [MIC].	ABG Pseudomonas
B675	Acinetobacter antibiogram [MIC].	ABG Acinetobacter
B676	Antibiogram Escherichia coli [MIC]	ABG Escherichia coli
B677	Antibiogram Salmonella spp [MIC].	ABG Salmonella spp
B678	Antibiogram Shigella spp [MIC].	ABG Shigella spp
B679	Klebsiella spp. antibiogram [MIC].	ABG Klebsiella
B680	Enterobacter spp. antibiogram [MIC].	ABG Enterobacter
B681	Antibiogram Vibrio cholerae spp.	ABG Vibrio cholerae

N.B.: It is important to use these analysis codes (B650 to B681), if you want to output in the Whonet export.