WHONET Training Course

Module 1 - Getting Started

Exercises

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Surveillance of Antimicrobial Resistance

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**WHONET – Getting Started - Exercises**

1. **WHONET Website**
	1. Go to the WHONET Home page at [www.whonet.org](http://www.whonet.org)
* On this page, you will see links for downloading WHONET and links for the resources for the WHONET user including for the Training Center and Discussion Forum.
* You can also sign up for the WHONET mailing list where you will receive periodic updates on WHONET-related announcements, activities, and software updates.
* If you have previous experience with WHONET, you can click on the link for the WHONET User Survey.
* You will see a menu at the top of the screen with options for “Software”, “Training center”, “Webinars”, “Discussion forum”, “About”, and “Contact.
	1. From the top menu, click on “Software”
* On this page, you will see links for downloading several softwares. The most important of these is the first one for WHONET. The software version is updated annually, so the name of the software may be WHONET 2024, WHONET 2025, etc. depending on the year.
* BacLink is included in the WHONET installation package, so there is no need to install BacLink separately.
* “WHONET Automation Tool”. This is a tool which is useful for automating and scheduling tasks such as BacLink conversions, WHONET analyses and report generation, and relevant email alerts to data managers, laboratory, pharmacy, infection control, and epidemiology staff.
* “AMR Interpretation Engine”. This is the set of WHONET organism, antibiotic, breakpoint, quality control, and expert rule tables used by WHONET for interpreting disk diffusion and MIC results into “RIS” test interpretations and quality control, public health, and test quality alerts..
* “WHONET Beta version”. This is purely for testing and development purposes by some of our key WHONET testers. For most individuals, we do not recommend that you install the beta version.
* “WHONET 5.6”. This is the old version of WHONET. Development of WHONET 5.6 stopped in 2018, but the WHONET Team does keep the breakpoint tables up-to-date for individuals that continue to use this old software. However, in most cases, we would recommend that you upgrade to the most recent version of WHONET for best compatibility with modern computers and for all of the new features that have been introduced into WHONET since 2018.
	1. From the top menu, click on “Training Center”
* In the first block, you will see the videos, slides, exercises, and tutorials for the WHONET Training Course. During the course, your focus will be: 1) listening to the videos; 2) doing the exercises for each module (not graded); and 3) taking the exams for each module (graded). For your future reference, we also provide the PowerPoint slides and Manuals corresponding to each module, but you do not need to go through these during the course.
* Below the training course, you will see additional materials that you may find useful, for example using BacLink to import existing data files into WHONET, automating tasks with the WHONET Automation Tool, and exporting data to international surveillance collaborations such as WHO GLASS, EARS-Net, and CAESAR.
	1. From the top menu, click on “Webinars”
* Since September 2023, the WHONET Team organizes approximately two webinars on special topics per quarter.
* On this page, you can see descriptions of each webinar, watch the video, and download the slides and related materials.
	1. From the top menu, click on “Discussion forum”.
* This is a public forum to facilitate discussions, announcements, and collaborations among WHONET users.
* It is possible to create “public” and “private” chat groups, post questions, and review replies.
* If you wish, you can click on “Sign up” to join the Discussion forum. (This is not a part of the standard WHONET Training Course, and is not required.)
	1. From the top menu, click on “About”
* You will see some background information about the WHONET software and a brief video.
	1. From the top menu, click on “Contact”.
* On this page, you can sign up for the WHONET Mailing list.
* You can also see the email help@whonet.org that you can use for requesting technical support.
1. **Download and install WHONET**
	1. Return to the WHONET Home Page. Select either the 32-bit version or WHONET or the 64-bit version of WHONET. Most WHONET users have modern 64-bit computers and modern 64-bit versions of Microsoft Office. If this is true for you, download the 64-bit version of WHONET. If you have a modern 64-bit computer, but an older 32-bit version of Microsoft Office, download the 32-bit version of WHONET instead.
* If you choose the incorrect version of WHONET, this is not a big problem. The WHONET software itself should work correctly. But there can be compatibility issues if you try to import Excel files with BacLink or export to Excel or Word files with WHONET. Then you can uninstall the incorrect version and install the correct version for full compatibility with your version of Microsoft Office.
* WHONET was designed for Microsoft Windows. If you have a MacOS computer, you can find guidance on how to prepare your computer for Windows applications at this link: [whonet.org/InstallationIssues.html](https://whonet.org/InstallationIssues.html).
	1. After your computer has downloaded the WHONET installation package, you can begin the installation. The exact steps for starting the installation depends on your version of Microsoft Windows, but usually you can click on the downloaded file, and the installation process will start. Or you may need to click on “Run” or “Open”. If you do not see the file that was downloaded, you should be able to find it in your “Downloads” folder.
	2. The installation of the WHONET software is similar to the installation of any other Windows software. You will need to “Accept” the license agreement, and then “Next”, “Next”, “Next”…… ‘Finish” and “Close”.
* By default, the installation package will install WHONET to the local hard drive at C:\WHONET. However, in one of the installation steps, you can choose a different location, such as a common network drive to facilitate the sharing of files among WHONET users on a network.
* If you have trouble with the installation process, we suggest contacting your IT team. In some organizations, you need permission from the IT department to install new softwares to your computer. If you continue to have problems, then contact the WHONET Team at help@whonet.org
	1. If the installation process was successful, then you should now see two new icons on your computer desktop for “WHONET” and “BacLink”. Double-click on WHONET, and the software should open. If it does, congratulations, you have successfully installed WHONET!
	2. WHONET is the primary software, and it is utilized for the entry, analysis, and sharing of microbiology laboratory data. It can be utilized for creating local and national reports, such as facility-specific or national antibiograms and epidemiological trends of organism frequencies, of value for outbreak detection. Data can be export to international surveillance collaborations such as the WHO GLASS initiative (WHO Global Antimicrobial Resistance and use Surveillance system) and FAO InFARM (International FAO Antimicrobial Resistance Monitoring).
* With WHONET, you can enter identification results for the following types of organisms:
	+ Bacteria: aerobic bacteria, anaerobic bacteria, micobacteria
	+ Fungi: yeasts, molds, dimorphic species
	+ Parasites: protozoa, helminths, etc.
	+ Viruses: Hepatitis A virus, Influenza B virus, Measles virus.
	+ “Negative results”: No growth, Normal flora, Contaminated specimen
* With WHONET, you enter antimicrobial susceptibility test results for the following types of organisms.
	+ Bacteria: aerobic bacteria, anaerobic bacteria, micobacteria
	+ Fungi: yeasts, molds, dimorphic species
	1. BacLink is a software which is of value for laboratories that already have a computer system, such as:
* Simple desktop applications: Microsoft Excel, Microsoft Access, etc.
* Laboratory instruments: Vitek, Microscan, Phoenix EpiCenter, Sensititre, etc.
* Laboratory information systems (LIS): SEDRI-LIMS, SENAITE, Disa\*Lab, OpenLDR, SILAB, etc.
1. **WHONET Main Menu**
	1. Language selection
* After you have opened WHONET, you will see an option on the right for “Language and dates”. Click on this option.
* Choose any language besides English, and then click on “OK”. This will return you to the previous screen, and all messages should appear in the language that you selected.
* If you prefer to continue the exercise in English, then repeat the above steps, but choose “English”. Or you can continue to use the exercises using the language that you have selected.
* Many of the language translations were accomplished with Amazon Web Services and Google Translate. Both are excellent resources, but they are not perfect, and you may notice incorrect translations or suboptimal translations. Feel free to contact the WHONET Team at help@whonet.org to suggest corrections or improvements in the translations.
	1. Click on “Open laboratory” to proceed to the WHONET Main Menu.
* You will see menu options for “File”, “Data entry”, “Data analysis”, and “Help”.
* From the “Help” menu, click on “About”, and you will see contact information for the WHONET team, as well as the date and time of the version of WHONET that you have installed. Click “OK” to close this screen.
* From the “Help” menu, click on “Documentation”, and you will see all of the standard WHONET tutorial documents in the WHONET “Documents” folder. Close that window to return to WHONET.

3.3 To leave WHONET, you can click on “File”, “Exit” or you can click on the “X” in the upper right-hand corner of the software.