

Establishing a connection to MDH for Data Transfer

MDH currently supports the following data transport methods for Public Health Reporting.

- A. Web Services via HIE (CRISP) (*this is MDH's preferred method*)
For hospitals or providers already connected to CRISP, please note that the data you are currently submitting to CRISP may not be routed to MDH unless you notify both CRISP and MDH to have your data routed from CRISP to MDH. You can contact CRISP at 877-95-CRISP (27477).
- B. VPN via HIE (CRISP)
For hospitals or providers already connected to CRISP, please note that the data you are currently submitting to CRISP may not be routed to MDH unless you notify both CRISP and MDH to have your data routed from CRISP to MDH. You can contact CRISP at 877-95-CRISP (27477).
- C. HTTPS (*Cancer data submission only*)
MDH will connect you to the Maryland Cancer Registry's vendor to set this up (takes up to 8-10 days); questions can be directed to: (410)767-7213.
- D. Secure File Transfer Protocol (SFTP) (*only if none of the above methods works for you*)
Please follow the instructions below to connect to MDH using this transport method:
 - 1. You will need an SFTP client to transmit your data.
 - a. If you already have an SFTP client, please proceed to step 2.
 - b. If you do not have an SFTP client, we have attached instructions to download an SFTP client. You can either download a windows-based SFTP client (Attachment A) or command-based SFTP client (Attachment B). These are just two of the available SFTP clients; you can also use or download other SFTP client that you may be familiar with.
 - 2. The hostname to connect and establish a connection to MDH for Immunization data submission is: **immunet.health.maryland.gov**
 - 3. Request a username and password from MDH.

Submitting Your Data

Before you submit your data, please be sure you are registered in the [MDH Public Health Reporting portal](#) to provide required information.

Follow the [MDH/HL7 specifications](#) to create a HL7 message from your certified EHR system. The generated test file can then be sent to MDH using one of the above transport methods.

When you are ready to send your HL7 test file, please label your file with your practice/facility abbreviated name and NPI, for example, PracticeName_NPI2345678901.hl7 or ABCHospital_NPI2345678901.hl7. *Do not use any spaces in the file name.*

For multiple providers in a shared physical location using the same EHR system, use the group or practice NPI. Only a single test file needs to be sent to onboard as a group effort.

Submit your file using one of the above transport methods and please let MDH staff know that you completed submitting the file so MDH staff can let you know if your file has been successfully received.

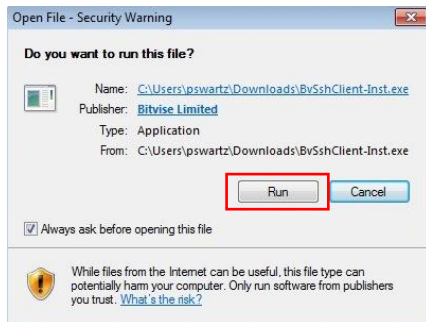
Contact for Help

If you need help connecting, have questions about your test file or HL7, please contact:
mdh.mu_ph@maryland.gov

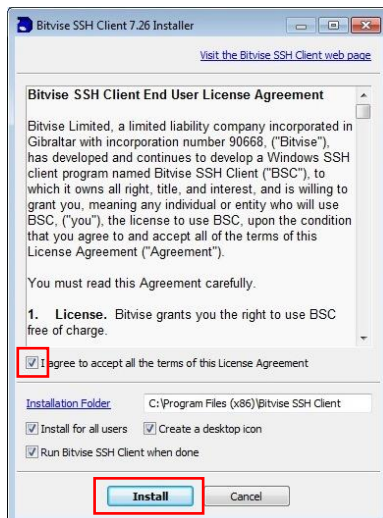
Attachment A – Download a **Windows-based** SFTP client

Please follow the steps below to download an SFTP client and create/establish a connection to MDH:

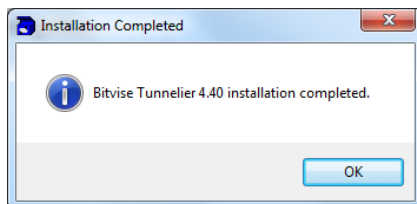
1. Download a free Bitvise SSH Client (Tunnelier) from the following URL:
<https://www.bitvise.com/ssh-client-download>
Select the Bitvise SSH Client installer link.
2. After selecting the download link, the following pop-up will appear. Click Run.



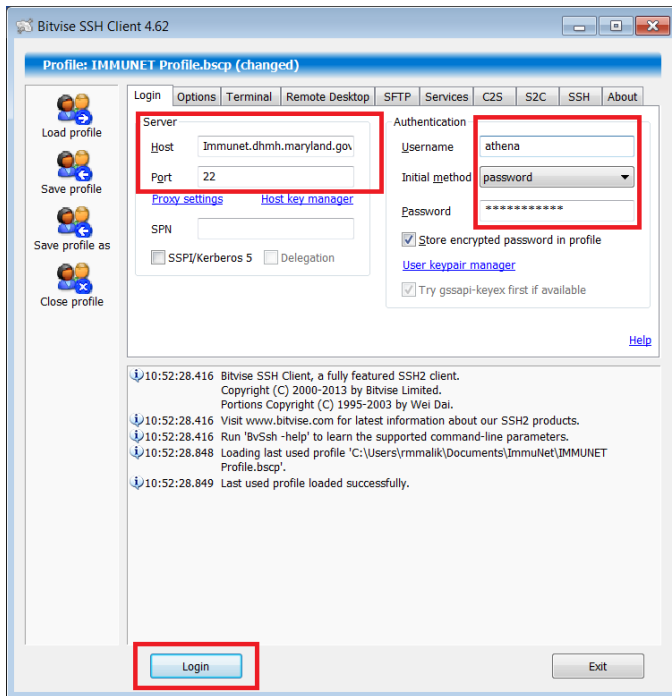
3. When the download is complete, the following window will pop up. Check the box to agree with the term and licensing conditions. Then click to Install.



4. When the installation is complete, click OK.

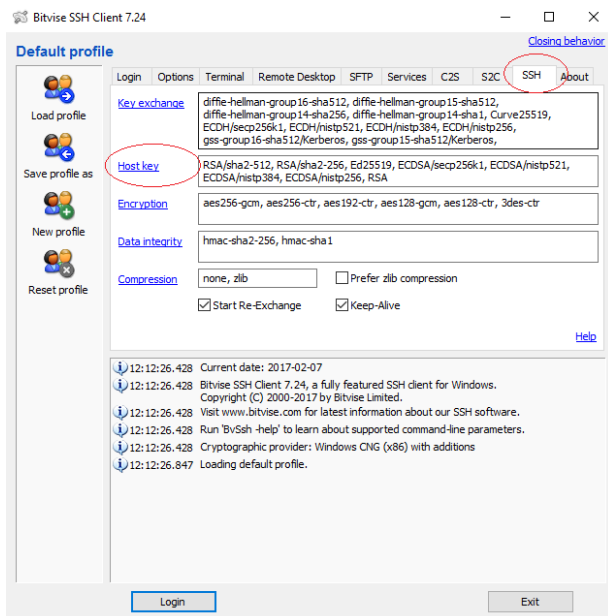


5. Enter the host name 'immunet.health.maryland.gov' to submit Immunization data. *You must request a username and password.* Under Initial method, select 'password' to enter the password.

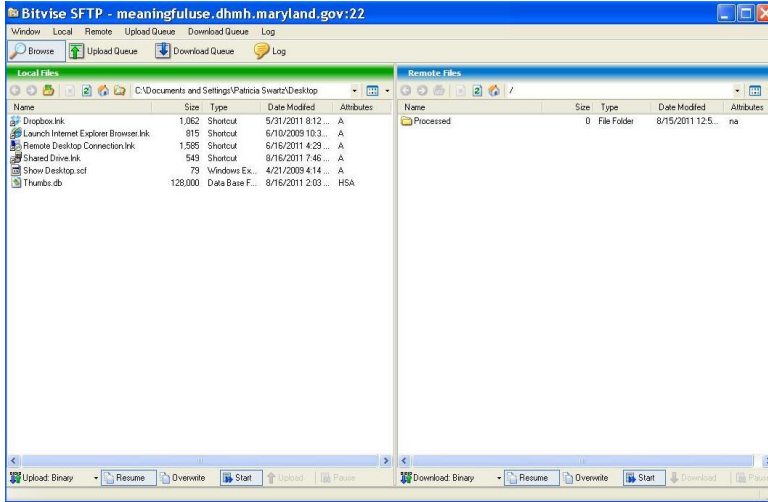


6. If asked about Host Key Verification, you can select either 'Accept or Save' (if you plan to sign in again) or 'Accept for This Session' if you only plan to sign in once.

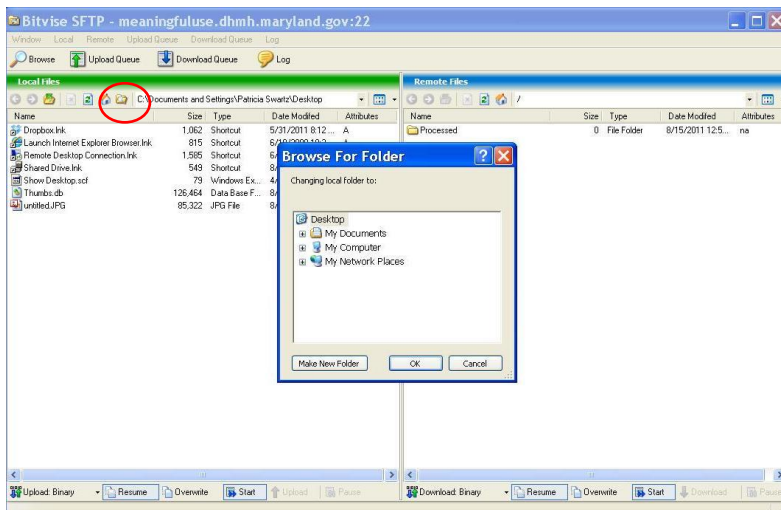
Note: For new versions of the client setup, click on the SSH tab and then click on Host Key. Make sure that all options are checked before attempting to Login.



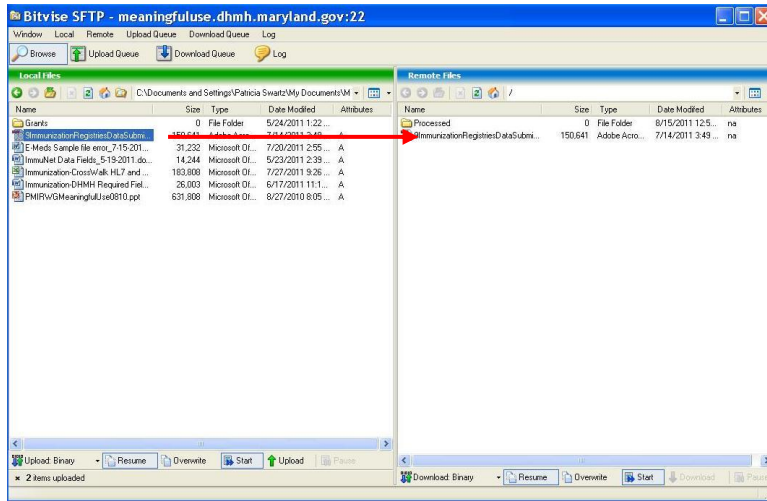
- When you are signed in, a new window will pop up showing two panels; the one on the left showing local files (from your computer desktop) and the other on the right showing remote files (MDH SFTP server). *Note: Each MDH SFTP account is tied to its own workspace and a client will be able to load files only to his/her allocated space.*



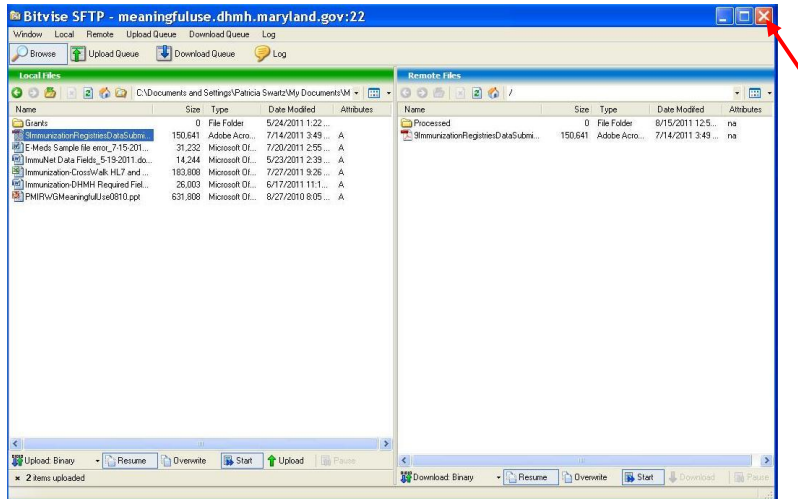
- In the left panel (your computer), if your data to be submitted is not on your desktop, you can select the 'Browse for Folder' to where you stored your data to be submitted.



- Click to highlight the data file(s), click upload (bottom of panel), or drag the file to the MDH SFTP server (right panel), and the file will be transferred (copied over).

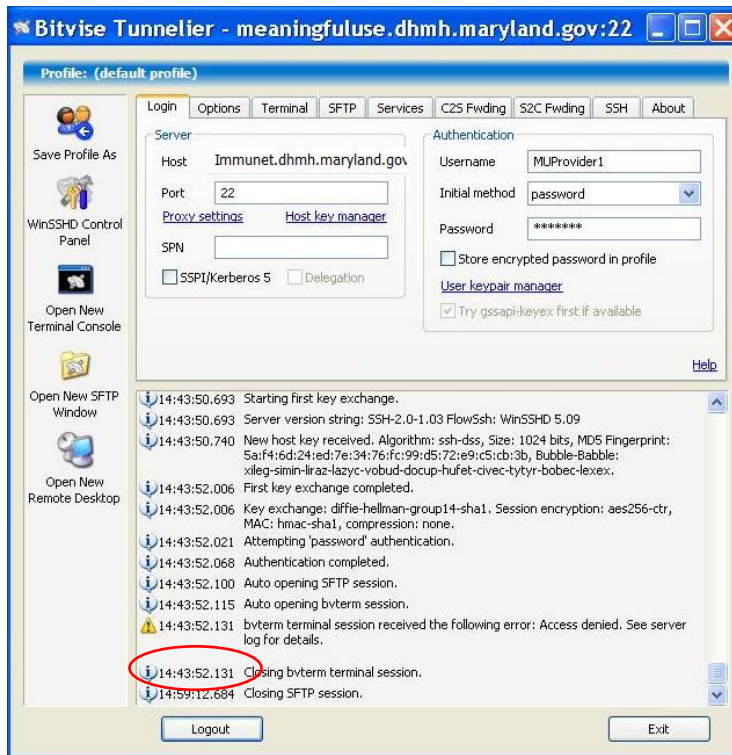


10. You may close the console when you are done.



11. Please remember to logout and exit.

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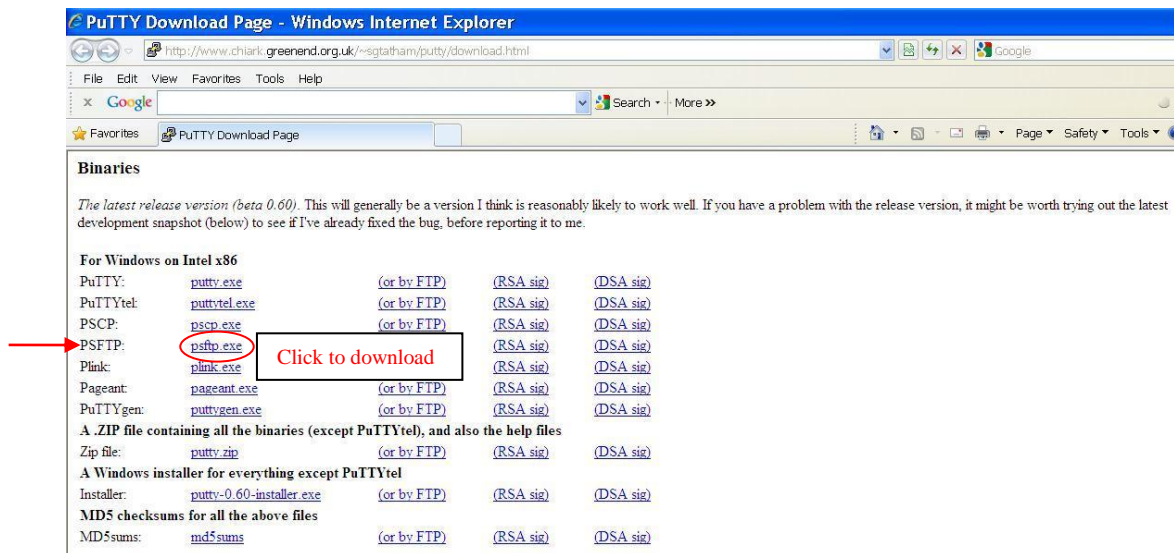


Note: Please let MDH staff know that you completed submitting the file so MDH staff can let you know if your file has been successfully received.

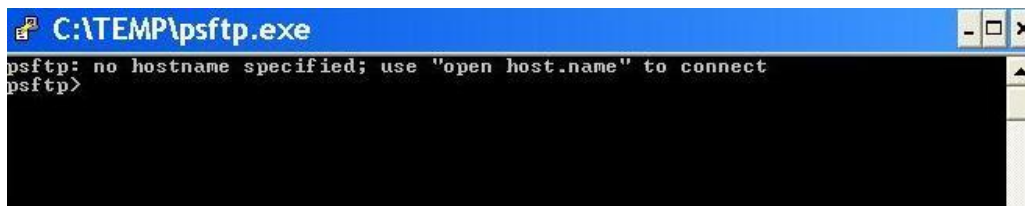
Attachment B – Download a Command-based SFTP client

Please follow the steps below to download an SFTP client and create/establish a connection to MDH:

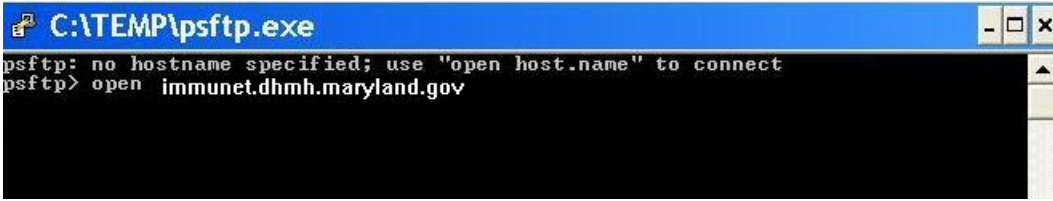
1. Download a free SFTP client from the open source product PuTTY at the following URL: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>
2. Under ‘Binaries, For Windows on Intel x86’, select the PSFTP psftp.exe from the first set of downloads (for 32-bit machines) or the second set of downloads (for 64-bit machines) as shown below. It will ask whether you want to Run or Save the file. Select Save.



3. After you have completed downloading the PSFTP, open or run the **psftp.exe** to sign in to our server. *You will need to open or run the psftp.exe each time you wish to connect to MDH for data transmission.*
4. A command window with PSFTP will open :




5. To connect to our server, please type the hostname that will be provided to you (for Immunization data, type in “**Open immunet.health.maryland.gov**”), and press the Enter key on your keyboard:



```
C:\TEMP\psftp.exe
psftp: no hostname specified; use "open host.name" to connect
psftp> open immunet.dhmm.maryland.gov
```

6. You will see the following screen as you connect the first time:



```
C:\TEMP\psftp.exe
psftp: no hostname specified; use "open host.name" to connect
psftp> open
The server's host key is not cached in the registry. You
have no guarantee that the server is the computer you
think it is. immunet.dhmm.maryland.gov
The server's ass key fingerprint is:
ssh-dss 1024 5a:f4:6d:24:ed:7e:34:76:fc:99:d5:72:e9:c5:cb:3b
If you trust this host, enter "y" to add the key to
PuTTY's cache and carry on connecting.
If you want to carry on connecting just once, without
adding the key to the cache, enter "n".
If you do not trust this host, press Return to abandon the
connection.
Store key in cache? (y/n) y
```

7. Type in 'y' as you have to accept and store the SFTP server credentials in your registry. Press Enter.
8. After you accept the credential key you will be asked to enter a username (login as) and password. *You must request a MDH username and password.*



```
C:\TEMP\psftp.exe
psftp: no hostname specified; use "open host.name" to connect
psftp> open immunet.dhmm.maryland.gov
login as: MUProvider1
MUProvider1@meaningfuluse.dhmm.maryland.gov's password: _
```

9. Once you are connected to our server, you can place your test file in our server by using the command 'put MyFileName'. For example, put c:\PracticeName_NPI56789.h17



```
C:\TEMP\psftp.exe
psftp: no hostname specified; use "open host.name" to connect
psftp> open meaningfuluse.dhmm.maryland.gov
login as: MUProvider1
MUProvider1@immunet.dhmm.maryland.gov password:
Remote working directory is /
psftp> put c:\PracticeName_NPI56789.h17
local:c:\PracticeName_NPI56789.h17 => remote:/PracticeName_NPI56789.h17
psftp> _
```

10. The last line (local:c:\MyFileName => remote:/MyFileName) indicates that your file has been placed in our server. You can now close out the psftp.exe window.

Note: *Please let MDH staff know that you completed submitting the file so MDH staff can let you know if your file has been successfully received.*