

The RTSF Genomics Core FTP server now requires secure (FTPS) connections.

To protect the integrity and security of the MSU network and its systems, and to permit users from outside of the MSU network to once again access the RTSF Genomics Core file distribution server we will be enforcing secure (encrypted) connections only. This change ensures that usernames and password are no longer passed between the client and host in clear text.

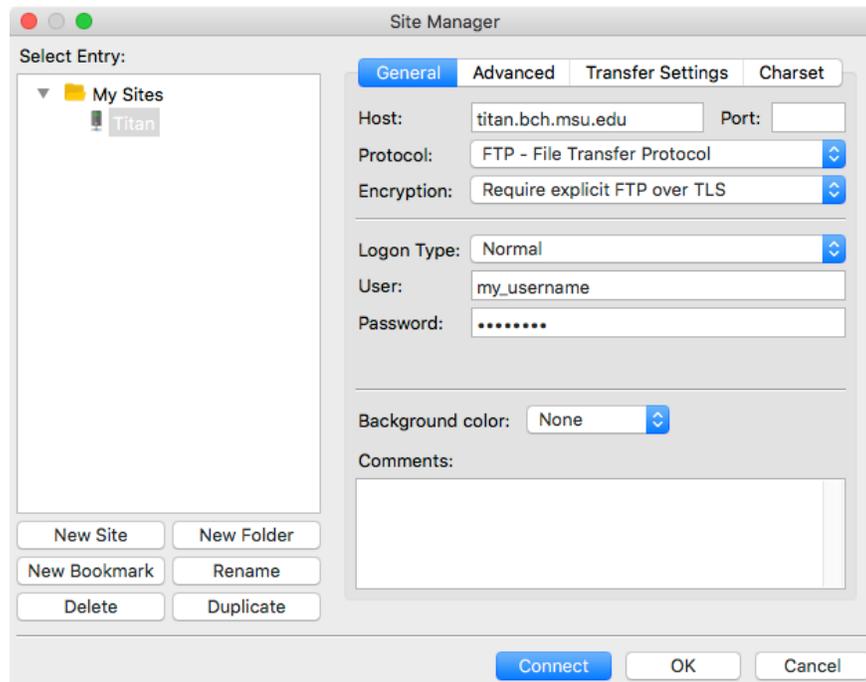
For you this will mean using an FTP client application capable of Secure FTP (FTPS) using TLS and configuring it to use an explicit TLS connection. Nearly every current FTP client software is capable of FTPS using TLS. When configuring your software for FTPS used **Explicit TLS** only, never **Implicit TLS**. We cannot provide configurations instructions for every FTP client software but below are examples for two popular ones.

FileZilla (Windows/Mac/Linux)

Open the Site Manager and create a New Site for your RTSF FTPS account.

Enter the host name	titan.bch.msu.edu
Select Protocol	FTP-File Transfer Protocol
Select Encryption	Require explicit FTP over TLS

Enter the username and password provided to you. The settings should look like:



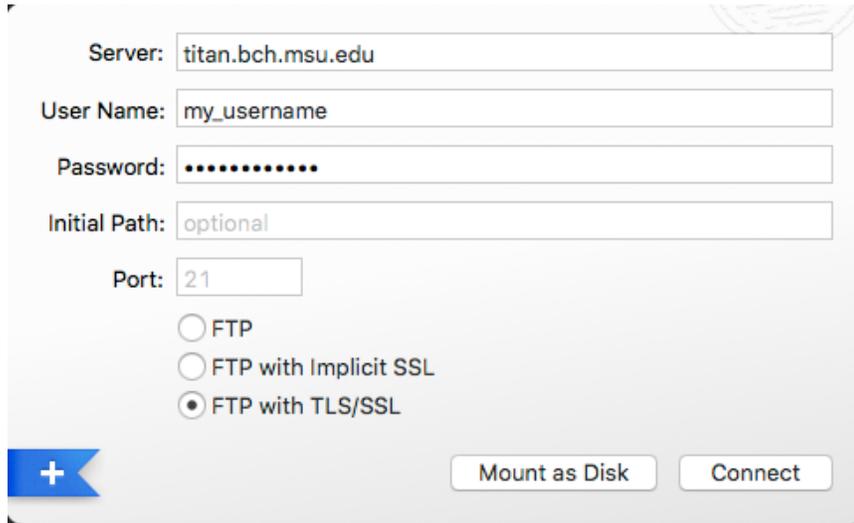
Transmit (Mac)

Click on the FTP tab in a new connection window to get the "Connect to FTP Server" dialog.

Enter the host name titan.bch.msu.edu

Select the radio button FTP with TLS/SSL

Enter the username and password provided to you. The settings should look like:



The screenshot shows a dialog box titled "Connect to FTP Server" with the following fields and options:

- Server: titan.bch.msu.edu
- User Name: my_username
- Password: ••••••••
- Initial Path: optional
- Port: 21
- Protocol selection:
 - FTP
 - FTP with Implicit SSL
 - FTP with TLS/SSL
- Buttons: + (add), Mount as Disk, Connect

After clicking Connect with whatever client software you are using you may be presented with a notice that it is unable to verify the server's certificate. This is normal and you may proceed by clicking OK or Connect, etc.

Command line options: It is possible to use command line FTP clients or tools (e.g. wget) provided they support FTPS using TLS. Currently none of the command line tools installed on the MSU HPCC currently support FTPS. To transfer your sequence from the RTSF FTP server to your HPCC account will require two steps: first download your data to an intermediate computer using an FTPS capable client as described above and then upload it from there to your HPCC account using either standard (insecure) FTP or SSH/SFTP.