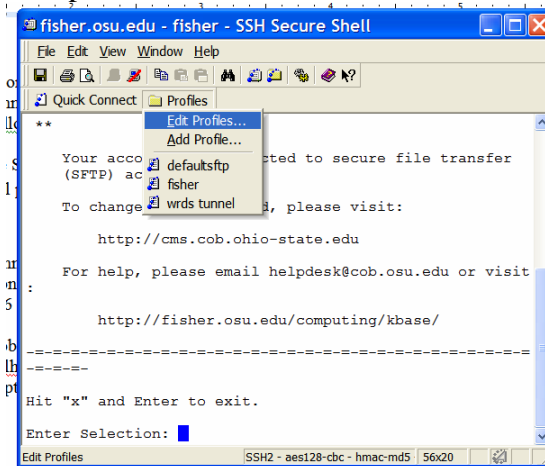


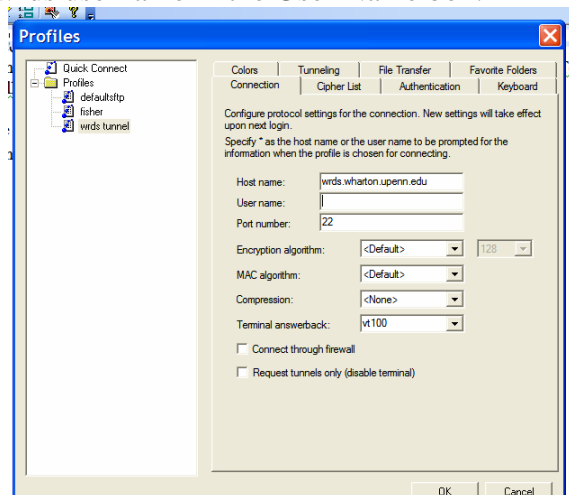
SAS PC Connect through a Tunnel Connection

Problem: When SAS PC Connect jobs are executed within the University, the University's firewall disconnects the WRDS connection after about 2 hours because the connection is assumed to be "idle". If you have a job that takes more than 2 hours to run, follow the below steps.

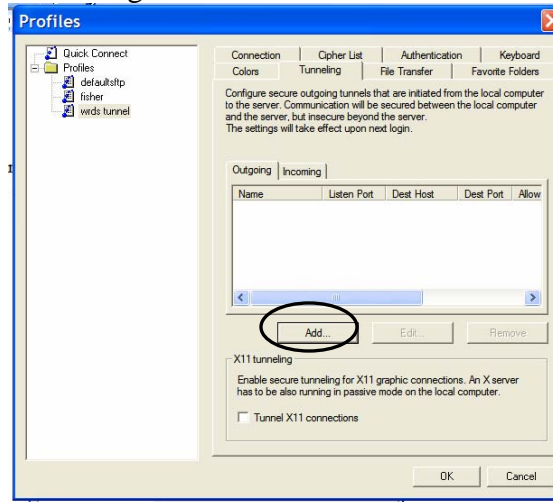
- 1) Open SSH Secure Shell. SSH is installed in every computer within Fisher. If you don't have it, download it from <http://osusls.osu.edu/upgrades/stg2wnx.html>
- 2) Add a new profile (name it "wrds tunnel").
- 3) Edit the wrds tunnel profile.



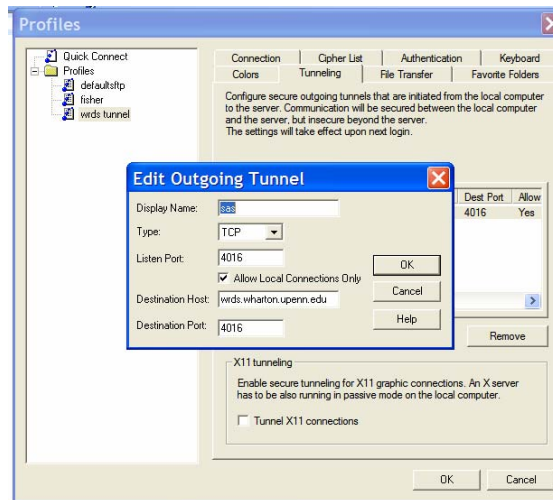
- 4) Click on the "connection" tab and enter the host name as wrds.wharton.upenn.edu. And enter your wrds username in the User Name box.



- 5) Click next on the “tunneling” tab



- 6) Then fill in the following:
- Display name = sas
 - Listen Port = 4016
 - Destination host = wrds.wharton.upenn.edu
 - Destination Port =4016



- 7) Connect to Wrds using this new “wrds tunnel” profile. Then run your job on SAS using this code:

```
%let wrds = localhost 4016;
options comamid=TCP remote=WRDS;
signon username=_prompt_;
rsubmit;

/*JOB CODE HERE*/
endrsubmit;
```

The only difference from the PC Connect code is that `wrds.wharton.upenn.edu` is replaced with `localhost`. This causes SAS to search the PC for open connections, and since there is already one open connection to WRDS through the SSH tunnel, the job is sent through that tunnel. This tunnel will be kept open as long as the SSH window is kept open—it doesn't matter if the auto-logout message appears at the SSH prompt.

The added benefit from using a tunnel connection rather than the usual “`wrds.wharton..`” connection is that the tunnel connection is encrypted.