Post-Lab 1: MySRLab Connectivity

Or: How can I do all my other Post-lab work?

What you will do:

1. Confirm that you can successfully activate Nokia's Aventail remote access VPN
2. Confirm that you can successfully establish telnet connections within the VPN
3. Get the answers required to correctly answer the post-lab questions on Blackboard

Things that you will need to know or learn:

1. Purely for **verification purposes**, Aventail credentials normally used for in-lab sessions
2. Purely for **verification purposes**, the IP addresses normally used for in-lab sessions
3. The understanding that the proof of a successful Telnet connection is simply the fact that you are **prompted** for login credentials (even if you **don't have the correct info** to login!)

What you need to submit and when:

1. Complete the “Lab 1 Post-lab” quiz on Blackboard, **before** Fri Jan 13 @ 8am.

Required Equipment:

- Internet access, and possibly several browsers in order to find the one that works best!
- A terminal program; (eg. for MS-Win, PuTTY or better yet, a variant called KiTTY)
- Some patience and possibly a willingness to experiment

Marks:

Each of the pre-lab, in-lab and post-lab portions for Lab 1 are weighted equally, even though they may have a different number of points assigned to them.

10% of your final mark is for labs done during the course of the semester.

References and Resources:

- URL for Nokia Aventail VPN: https://training-ottawa1.alcatel-lucent.com
- An in-lab account and password, obtained from the list posted on Blackboard (Hopefully no two people randomly choose the exact same one for testing at the exact same time! How about you use the exact same account you used in lab this week?)
- The exact version number for your OS, your browser, and potentially your version of Java
- IP addresses and topology diagram for EDU lab (from Lab1-Prelab and Lab1)

Task 1: Aventail Connection

The lab PC's in T108 are known to work with Nokia's implementation of the Aventail VPN, but it's most likely that your personal machine does *not* have an identical configuration. The purpose of this task is to find a suitable combination of browser, browser version, browser configuration, and possibly Java version which allows you to connect to Aventail.

Please note that it's entirely possible that you will need to try more than one browser to reliably get a successful connection.

Step 1. It's entirely possible your existing configuration will "just work". Start with whatever browser you normally use.

Step 2. Navigate to the Nokia VPN: https://training-ottawa1.alcatel-lucent.com

Step 3. **NOTE**: It's clear that you're not doing this exercise during the normal in-lab time period. Nonetheless, the credentials we use during that time are valid for testing the VPN connectivity at any time! Write down your credentials and make sure you know which characters are alphabetic and which are numeric (ie. "l" vs "1" and "O" vs "0").

Step 4. For the service, enter "student". On the next screen, enter your in-lab credentials.

Step 5. Depending on which browser you're using, you may be asked to install/run a module for the VPN client and/or whether to run a Java program and/or an ActiveX module, and/or whether to Allow access. In all cases you'll need to allow/agree/run the requested item for connectivity to succeed. You will likely see one or more small windows pop up (under I.E. it's called Aventail Access Manager). Again, the exact sequence depends on the specific browser.

Step 6. If all has gone well, you should ultimately get a window showing "Access: Full Network Access" at the top. If it just says "Access: Web" it won't work. If it doesn't go to a new window, or there's some other problem, you'll need to either try a different browser (start again at Step 1) or troubleshoot. On the T108 lab machines, it was necessary to run through the connection **three** times and then it was successful.

Step 7. Please note that many (most? all?) the extra steps required above are a **one-time** process for installing the required VPN components. Except for lab machines (where everything gets wiped out and re-initialized upon reboot), re-establishing the VPN should be quite smooth and easy.

Step 8. Once you are successful, take a screenshot of the browser window and save it. Click "Details" in the very top right corner. Take a second screenshot and save it.

General Tips

Configuring your browser for correct operation with Aventail is probably the most critical. Firefox and Chrome will both work, but only certain versions of java are compatible with the current version of Aventail.

Tips for IE

The following settings for IE were tested and confirmed to work on:

- Windows 7, 64 bit, SP1, fully patched as at 8/Jan/2016
- IE "About" window showing:
  Version 11.0.9600.18124; Update Version 11.0.26 (KB3104002)

On the Prof's laptop, the Aventail Access Manager window (with the progress meter) appeared to hang about 2/3 of the way through. Once I see that, I manually change the URL back to the original setting, and then the connection sequence completes successfully. (I only use IE for Aventail, so I've set the home page to the URL in step 1; I just click the Home icon to get back!)

Task 2: Telnet Connectivity Verification

This task requires you to have successfully connected over the VPN. It verifies that you have proper VPN redirection of the subnets for reaching the lab equipment via Telnet.

Step 1. Telnet to one of the routers in the EDU topology (either EDU1 or EDU2, according to the credentials you used for the Aventail connection!)

Step 2. If you get a "Login:" prompt, you know you have correct, full connectivity. If not, do some troubleshooting:
– double-check that you have correctly completed Task 1
– double-check that you used a suitable IP address and typed it correctly

Step 3. If you still don't get a login prompt, get some help from a classmate or see the Prof.

Task 3: Answer the Post-lab questions on Blackboard

Head over the Blackboard and answer the post-lab questions. You'll need the two screen captures you took in Task 1. If you've lost them, you should be able to repeat Task 1 successfully in ~60 secs or less and redo them!