RDP Session Management

We have modified your Ubuntu Xrdp Session Managers. The change will now enforce a single RDP session per VM. [TROUBLESHOOTING GUIDE HERE!]

What does this mean for you? First off we hope that this will eliminate a nasty bug that students have been experiencing where their sessions are ‘lost’ and VirtualBox either fails to load properly or becomes corrupted.

More specifically you may encounter a screen such as the one below:

We have created two “Modules.” The first module is “New-Session”. New session, as it sounds, creates an entirely new session. But what does this really mean? Well from your perspective it is like login for the first time after turning on the machine. You dont have any shared memory or information. This leads us to the second module, “Resume Session”, resume session is the module that allows you to maintain the state from the previous session. As you can see below it requires a port number instead of a password, the default port number to use is 5910.
The port 5910 represents the port of your previous session, the default previous session port number is 5910. This value however is not arbitrary and is subject to change depending on active sessions to your VM. For instance if you are running 3 SSH sessions prior to connecting using XRDP, your port for your previous session may be 5910 or it may be 5913. Our understanding of this matter is not 100%, but we do know that this port value increases in a sequential fashion, and it starts at 5910. Look at my Xrdp login transcript below (excuse the terrible resolution).

```
connecting to sesman ip 127.0.0.1 port 3350
sesman connect ok
sending login info to sesman
xrdp_mm_process_login_response: login successful for display
started connecting
connecting to 127.0.0.1 5911
```

The first highlighted section shows that we are connecting to sesman on the localhost of this machine on port 3350. Sesman is what is responsible for keeping track of our rdp session. The section session is our actual rdp session connection. Here we are connecting to localhost on port 5911, in my case my client automatically filled in the port for me so that I was not required to remember the port number to the previous session (my client is cord - see mac rdp clients).
Troubleshooting!

Okay, so with this new change you are no longer able to login to your new session, what are you to do!

Problem (xrdp_mm_process_login_response: login failed):

Select OK.

Solution:
The problem was either cause by (1) that you entered the incorrect password, or (2) you selected “New-session” when you already had a session running.

(1) Simple enough, try typing the correct password. If it still isnt working (and it is the correct password) then it is most likely (2)

(2) We need to select “Resume-Session”, and we need to select the correct port (note that if you choose the wrong port, you will get the same error as above, for the same reason as above, we are trying to connect to the wrong session, but we can only have one session active at a time. So you can try a few times guessing the right port (default 5910), by incrementing the default port by 1 a few times… (5910,5911,5912…, etc)

(2a) I cant guess the correct port! Now what?
We have 2 options, we can ask ourselves if there is any important information that we need from our previous session, if there isn't we can ssh into our VM and run netstat.

```
student@ce151vm55:~$ netstat -an | grep -i established
Active Internet connections (servers and established)
  tcp  0 0 127.0.0.1:57753 127.0.0.1:5911 ESTABLISHED
  tcp  0 0 127.0.0.1:5911 ESTABLISHED
  tcp6 0 0 127.0.0.1:57753 127.0.0.1:5911 ESTABLISHED
Active UNIX domain sockets (servers and established)
```

Here I ran `netstat -an | grep -i established`, `netstat -t` also worked and we want to look for which port in the 59XX region is currently established, in my case it is 5911. So this is the port I would now enter into my Resume-Session port.