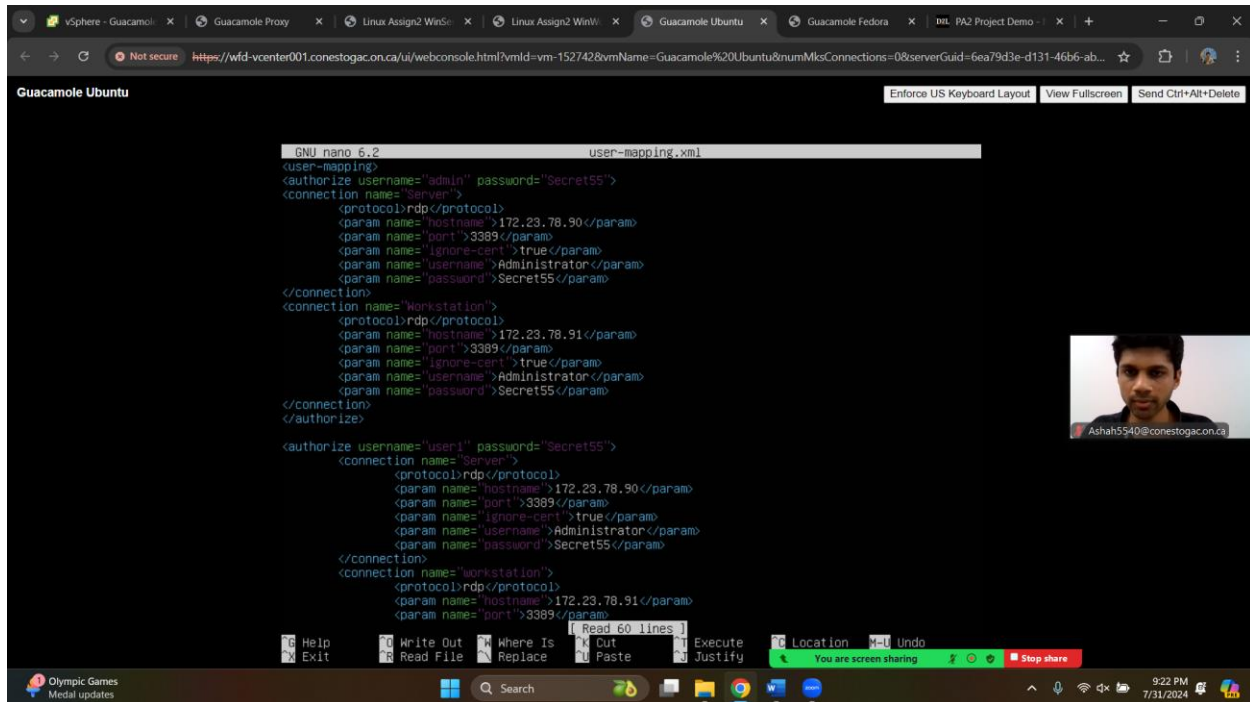


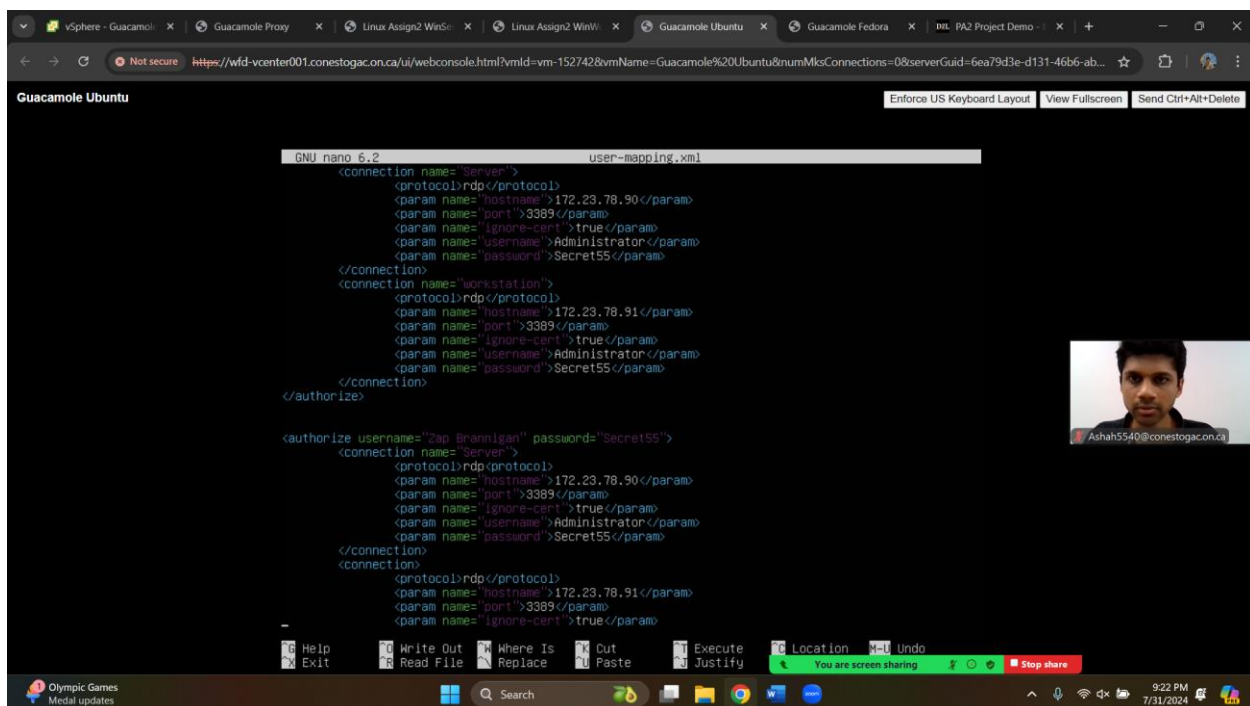
## Instructions:

1. Create two new Guacamole users: user1, Zap Brannigan



```
GNU nano 6.2 user-mapping.xml
<user-mapping>
<authorize username="admin" password="Secret55">
<connection name="Server">
  <protocol>rdp</protocol>
  <param name="hostname">172.23.78.90</param>
  <param name="port">3389</param>
  <param name="ignore-cert">true</param>
  <param name="username">Administrator</param>
  <param name="password">Secret55</param>
</connection>
<connection name="Workstation">
  <protocol>rdp</protocol>
  <param name="hostname">172.23.78.91</param>
  <param name="port">3389</param>
  <param name="ignore-cert">true</param>
  <param name="username">Administrator</param>
  <param name="password">Secret55</param>
</connection>
</authorize>

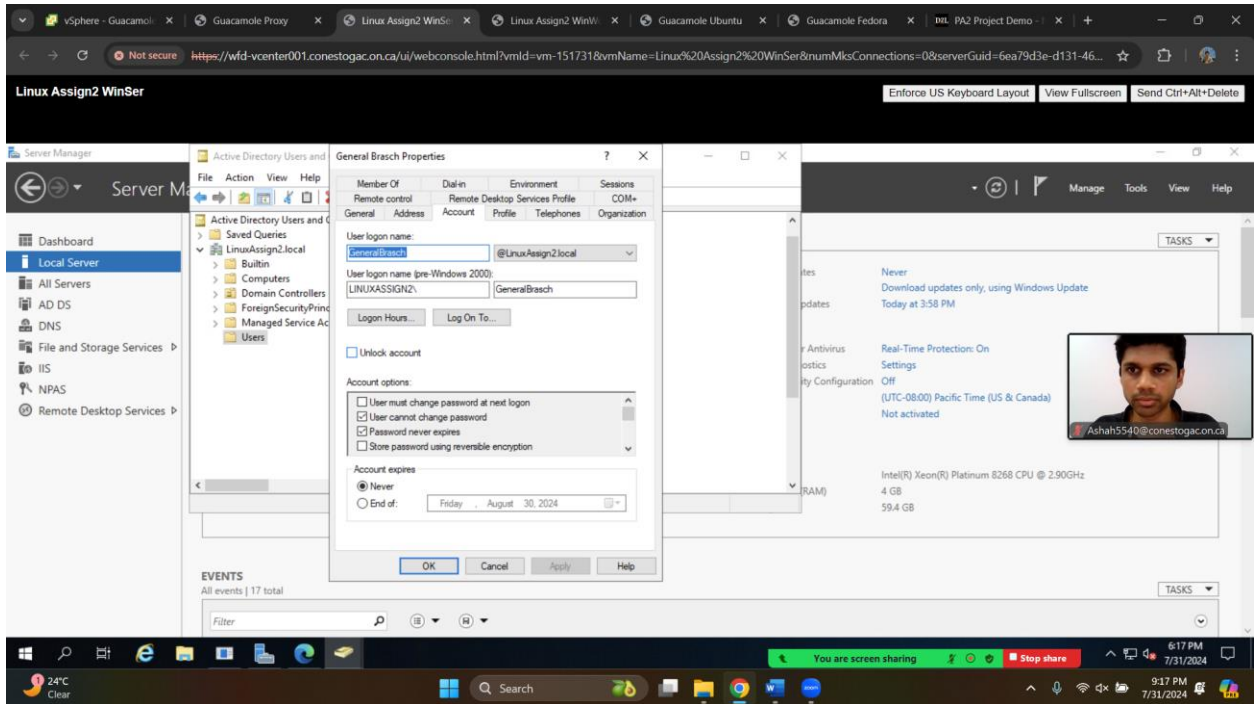
<authorize username="user1" password="Secret55">
  <connection name="Server">
    <protocol>rdp</protocol>
    <param name="hostname">172.23.78.90</param>
    <param name="port">3389</param>
    <param name="ignore-cert">true</param>
    <param name="username">Administrator</param>
    <param name="password">Secret55</param>
  </connection>
  <connection name="Workstation">
    <protocol>rdp</protocol>
    <param name="hostname">172.23.78.91</param>
    <param name="port">3389</param>
    <param name="ignore-cert">true</param>
  </connection>
</authorize>
```



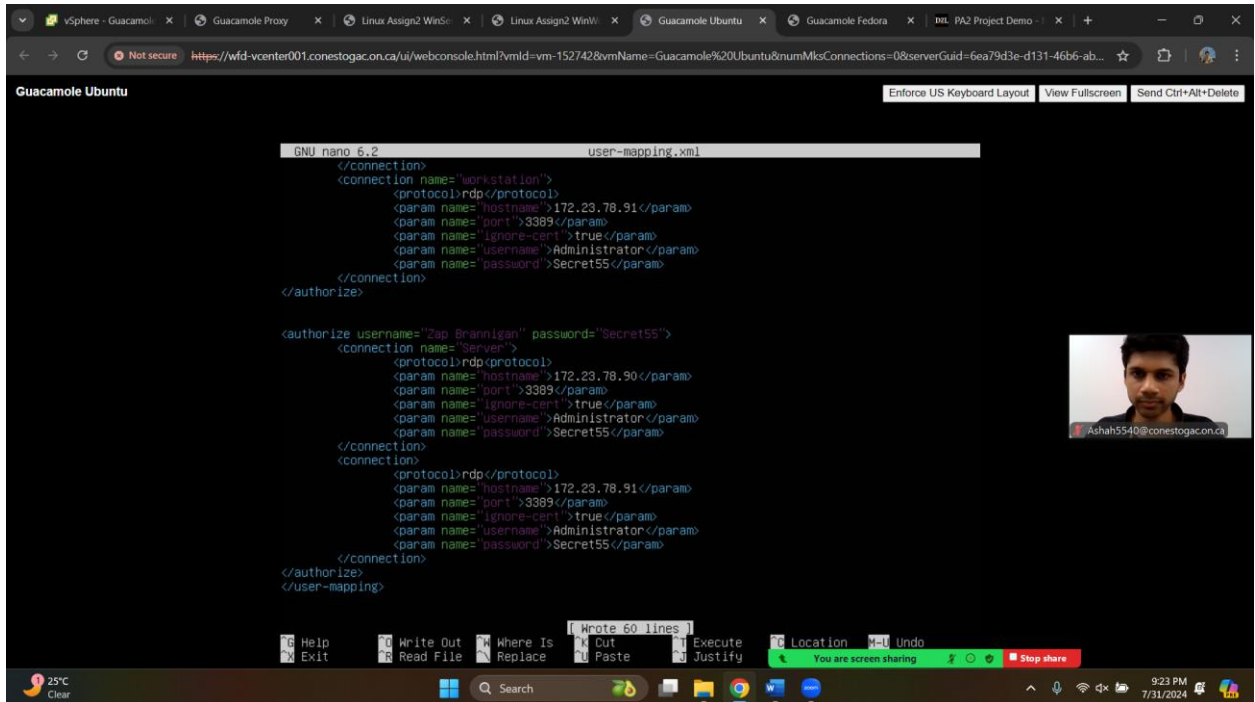
```
GNU nano 6.2 user-mapping.xml
<connection name="Server">
  <protocol>rdp</protocol>
  <param name="hostname">172.23.78.90</param>
  <param name="port">3389</param>
  <param name="ignore-cert">true</param>
  <param name="username">Administrator</param>
  <param name="password">Secret55</param>
</connection>
<connection name="Workstation">
  <protocol>rdp</protocol>
  <param name="hostname">172.23.78.91</param>
  <param name="port">3389</param>
  <param name="ignore-cert">true</param>
  <param name="username">Administrator</param>
  <param name="password">Secret55</param>
</connection>
</authorize>

<authorize username="Zap Brannigan" password="Secret55">
  <connection name="Server">
    <protocol>rdp</protocol>
    <param name="hostname">172.23.78.90</param>
    <param name="port">3389</param>
    <param name="ignore-cert">true</param>
    <param name="username">Administrator</param>
    <param name="password">Secret55</param>
  </connection>
  <connection>
    <protocol>rdp</protocol>
    <param name="hostname">172.23.78.91</param>
    <param name="port">3389</param>
    <param name="ignore-cert">true</param>
  </connection>
</authorize>
```

a. One in Active Directory Server for Fedora/Rocky called "General Brasch".



b. One in User Mapping for Ubuntu called "Zap Brannigan".



c. Both of these users should be able to authenticate and log into Guacamole.  
→ users created but unable to login into Guacamole.

2. Write down the IP addresses below for the following:

- Ubuntu Guacamole: 172.23.78.96
- Fedora/Rocky Guacamole: 172.23.78.97
- Reverse Proxy/Load Balancer: 172.23.78.98
- Active Directory Server: 172.23.78.90
- Windows Desktop #1: 172.23.78.91
- Windows Desktop #2: NA

3. Change the IP addresses on all of the following machines. Increment your IP block by 5 or 10 for the last octet, ensuring you have no IP conflicts. Write down the new IP addresses below for the following:

- Ubuntu Guacamole: 172.23.78.196
- Fedora/Rocky Guacamole: 172.23.78.197
- Reverse Proxy/Load Balancer: 172.23.78.198
- Windows Desktop #1: 172.23.78.199
- Windows Desktop #2: NA

4. Reconfigure Guacamole, DNS, and the Reverse Proxy server to work with the new IP addresses. Ensure that the system fully functions.

5. Demonstrate the following to the professor. After 30 minutes, you will be called in attendance order to demonstrate your system. If you are not ready, you can be skipped once, but you must be ready to demonstrate on the second time.

a. Connect to the Ubuntu Guacamole server by IP address and the new username. Then connect by RDP to at least one of the Windows machines.

→ was able to login previously after working on user-mapping, not able to login into guacamole

b. Connect to the Fedora/Rocky Guacamole Server by IP address and the new username. Then connect by RDP to at least one of the Windows machines.

➔ Able to open web page but unable to login

c. Connect via linuxtest.ca and prove the Load Balancer works either by refreshing, or turning off one of the Guacamole servers, and show that the Load Balancer fails over to the other Guacamole server. If you use Sticky Sessions you can also clear your browser cache to demonstrate connecting between the Guacamole servers.

➔ Configuration is done, but unable to perform.