

Intelie Challenge

Solution proposed by Luciano Pereira

In order to solve this task i would use SSH Tunnel by its simplicity since it is for casual use. This solution have possible security issues but its the simple way to do it. We will make a tunnel from ClientA to ServerA on a port that not been used then make another tunnel from ServerA to ServerB at port 8000.

Starting on ClientA machine, perform the steps below. We will need to edit ssh config file to allow the port fowarding. Then will have to restart the service to changes take efect.

Type this command:

```
sudo vi /etc/ssh/sshd_config
```

Then enter the user password for ClientA

Press “i” for insert mode and delete the “#” from line:

```
#AllowTcpFowarding yes
```

Press “esc” to exit insert mode and then type:

```
:/wq
```

This will save the configuration file. Now just restart the service on ClientA machine to changes take effect.

Type this command:

```
sudo service sshd restart
```

or

```
sudo systemctl restart sshd
```

Now we need to connect to ServerA machine and foward the choosen port from ClientA to ServerA.

Type this command:

```
ssh user@ServerA -L 8000:ServeA:8888
```

Then enter the user password for ServerA

Now the traffic over port 8000 from ClientA will be fowarded to port 8888 of ServerA.

Now we also need to configure the ServerA and edit ssh config file to allow the port forwarding.

Type this command:

```
sudo vi /etc/ssh/sshd_config
```

Then enter the user password for ServerA

Press “i” for insert mode and delete the “#” from line:

```
#AllowTcpForwarding yes
```

Press “esc” to exit insert mode and then type:

```
:/wq
```

This will save the configuration file. Now restart the service on ServerA machine to changes take effect.

Type this command:

```
sudo service sshd restart
```

or

```
sudo systemctl restart sshd
```

Now we need to connect to ServerB machine and forward the traffic from port 8888 to ServerB at port 8000.

Type this command:

```
ssh user@ServerB -L 8888:ServerB:8000
```

Then enter the user password for ServerB.

Now the traffic over port 8000 from ClientA will be forwarded to port 8888 of ServerA and then redirected to port 8000 of ServerB.

Tunnel or port forwarding will be better to by-pass the problem of Server A already using port 8000. We can chose another port for ServerA and ClientA and ServerB will be enable to comunicate. A proxy configuration maybe be the most safety and better for a long term solution.

I would like to thank you for this opportunity. Best Regards, Luciano Pereira.