

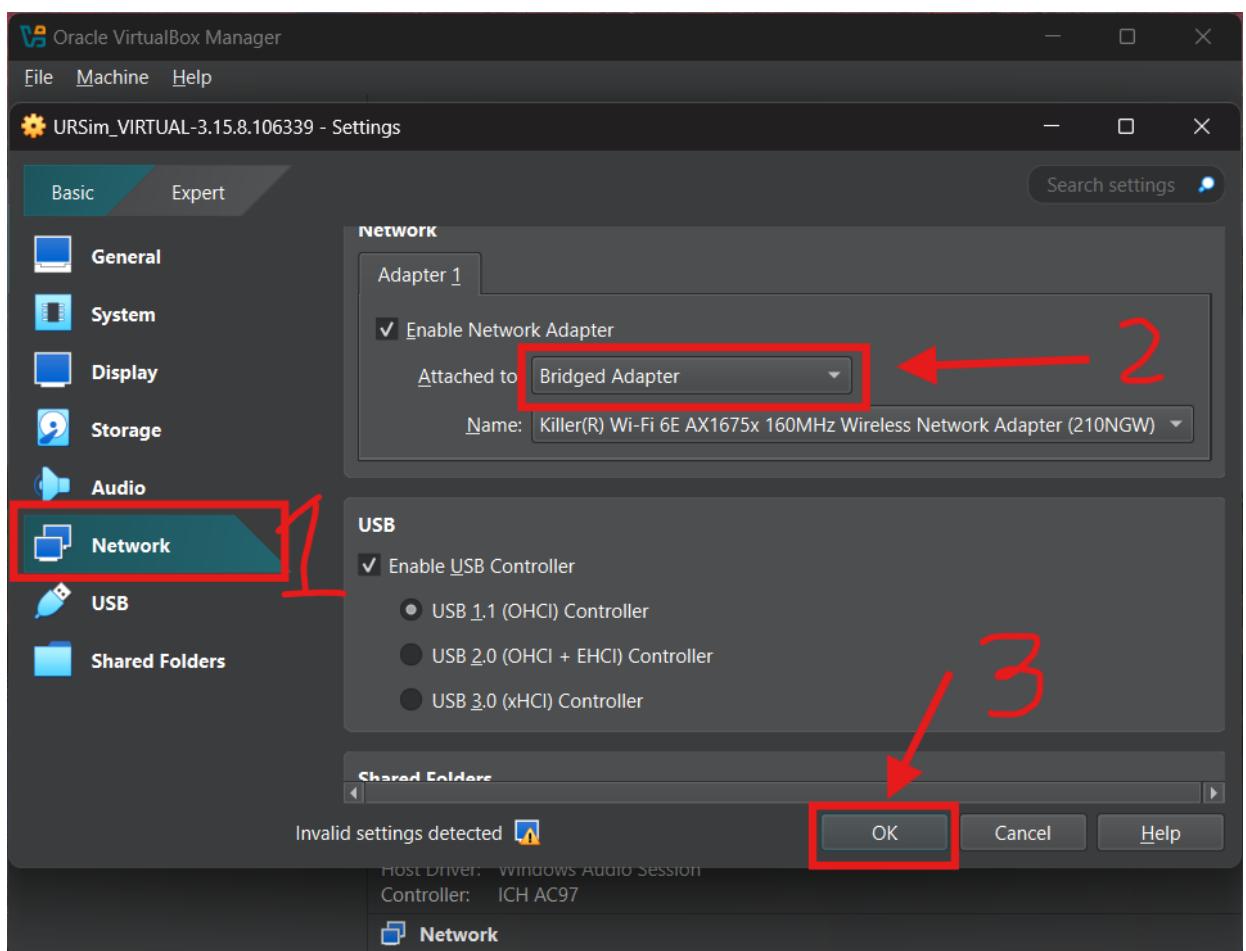
# Guide: Transferring Files between URSim on VirtualBox and Windows PC using SCP

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This guide explains how to transfer files between URSim running on VirtualBox and your Windows PC using SCP or WinSCP.

## 1. Ensure VirtualBox Network is Configured Correctly

1. Open VirtualBox, select your URSim virtual machine, and click on `Settings`.
2. Go to `Network` and set the adapter to **Bridged Adapter**.
  - o This setting places the virtual machine on the same network as your Windows PC, allowing them to communicate.



## 2. (optional) Install and Configure SSH on URSim

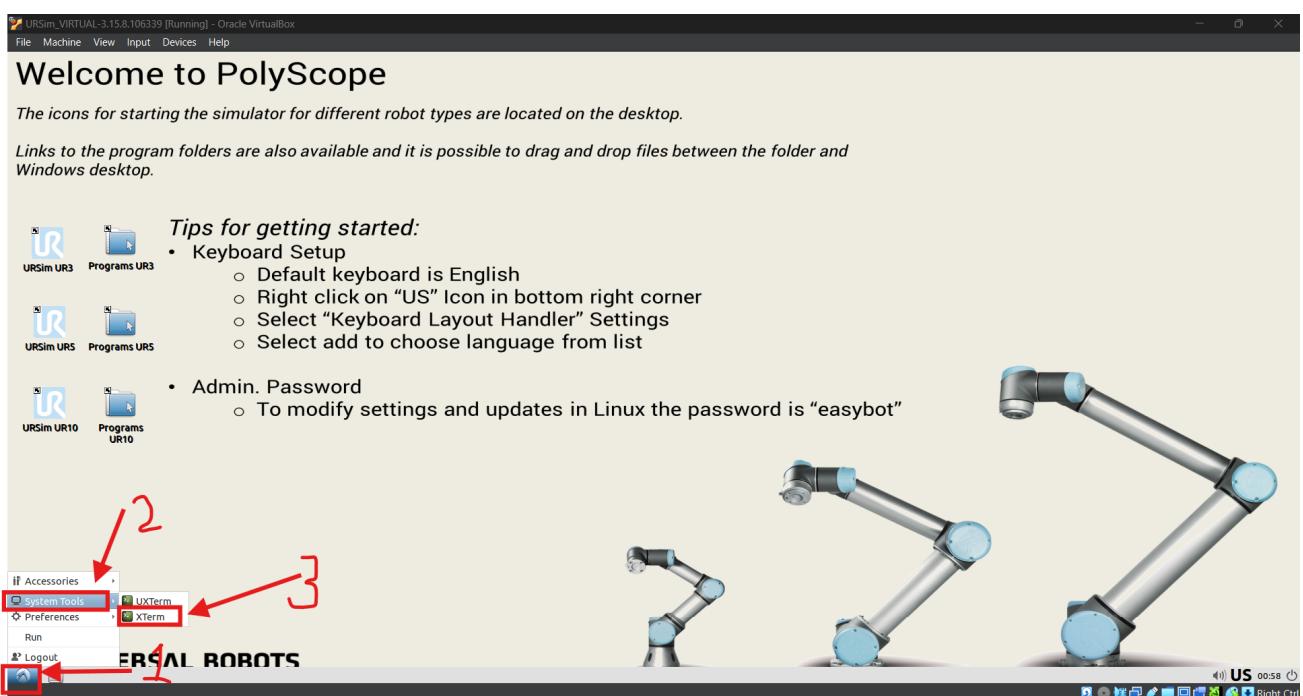
By default, ssh should be enabled and configured. Otherwise, you need the SSH service to be running on your URSim machine.

1. First, ensure SSH is installed and running:

```
sudo apt-get update  
sudo apt-get install openssh-server  
sudo systemctl start ssh  
sudo systemctl enable ssh
```

## 3. Find URSim's IP Address

1. On URSim in the VirtualBox, open the XTerm (*the other terminal works too*):

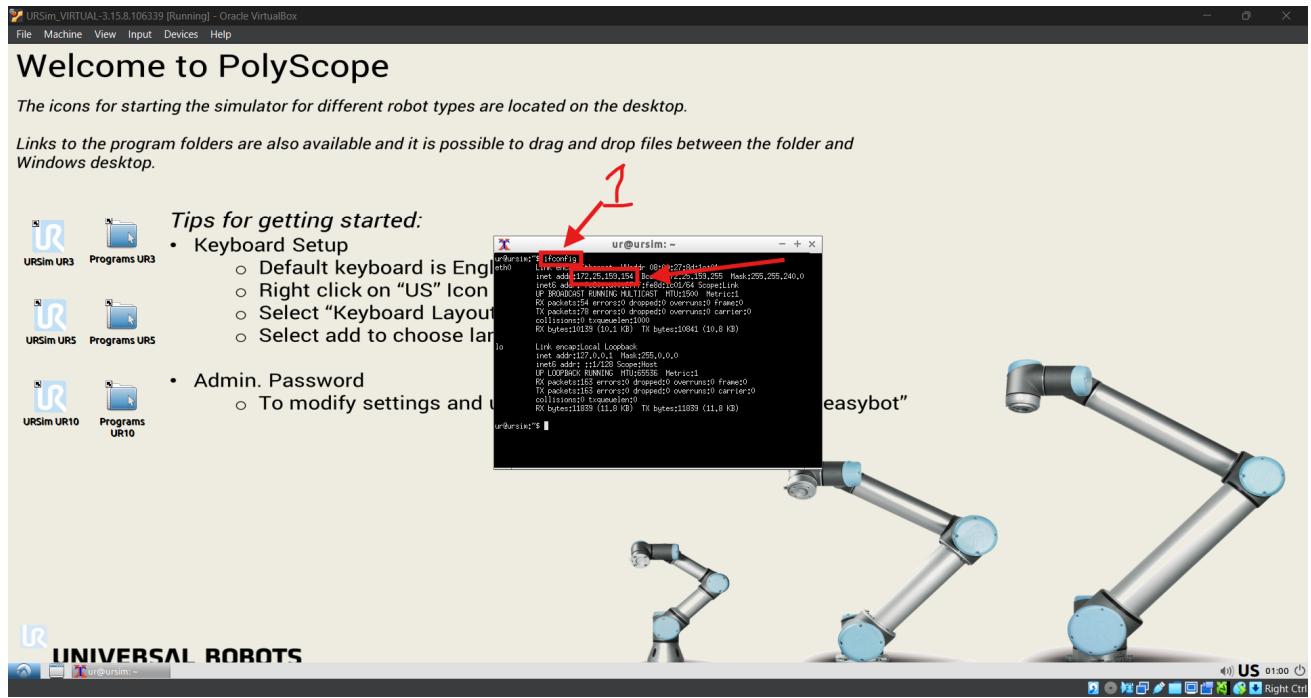


run the following command to get its IP address:

```
ifconfig
```

or

```
ip addr show
```



- Look for the IP address under `inet`, likely for interface `eth0` or `enp0s3`. The IP should be something like `192.168.x.x`. (Not necessary to start with 192)

## 4. (optional) Ensure SSH is Listening on Port 22

By default, ssh service is listening on port 22. Otherwise,

- Check if SSH is listening on the default port (22). In URSim, run:

```
sudo ss -tnlp | grep ssh
```

- If SSH is listening, you should see output like:

```
LISTEN 0 128 0.0.0.0:22
```

- If SSH is listening on another port, take note of it.

## 5. (optional) Allow SSH through Firewall

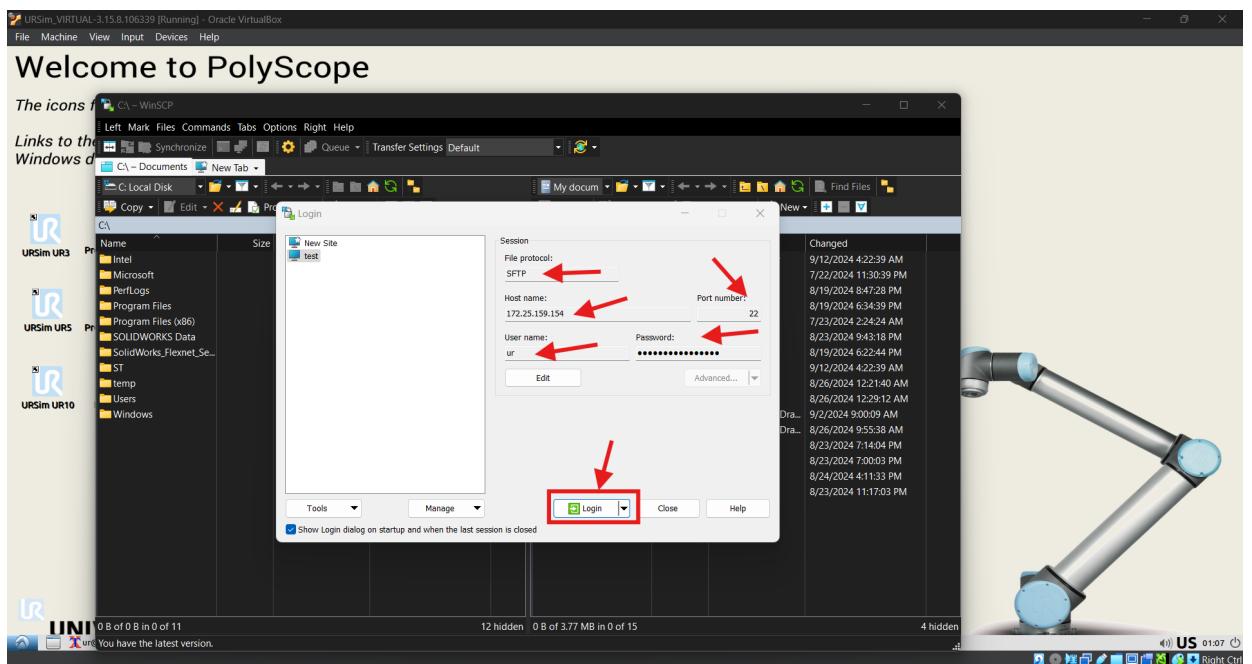
By default, firewall is disabled in this case.

- If your URSim machine has a firewall enabled (e.g., UFW), make sure it allows SSH:

```
sudo ufw allow ssh  
sudo ufw reload
```

## 6. Transfer Files via WinSCP

1. Download **WinSCP** (<https://winscp.net/eng/index.php>) and install it on your Windows PC.
2. Open **WinSCP** and set up a new session:
  - **Host Name:** The IP address of your URSim (obtained from step 3).
  - **Port:** 22 (or whichever port SSH is using if it's non-standard).
  - **User Name:** ur
  - **Password:** easybot
  - **Protocol:** (optional) Choose SCP or SFTP.



3. Click **Login**. Once connected, you can drag and drop files between URSim and your Windows PC.

This should allow you to successfully transfer files between URSim on VirtualBox and your Windows PC using SCP.

Let me know if you have any questions.