WSL with desktop

```
Under Construction
```

Not sure this works on 2.0.14 - be warned

UPDATED/REFRESHED AS I HAVE TIME

Background

∕≞∖

Couple approaches to getting GUI apps

- 1. WSLg (works well for individual apps integrated on the Windows desktop)
- 2. RDP
- 3. X Windows
 - a. WSLG
 - b. X Server running laptop host
 - c. There are a couple of Windows store options which will accomplish this (limited testing)

While individual applications is the normal use case, the optimal outcome here is to present an entire linux desktop (KDE, GNOME, Xfce, etc) -I'm working RDP via xrdp running on the WSL instance. One advantage of RDP is multi-monitor support.

This testing is done using Ubuntu 22.04 LTS with systemd enabled (currently the default) on a Surface Laptop 4. I have heard some reports of issues on select DELL issues connecting to XRDP.

Desktop environment is a matter of choice although resource utilization should be considered (using a more lightweight DE may be a better choice). LXDE, LXQT, and Xfce are normally considered 'lightweight'. GNOME, KDE, etc. generally use more resources (but tend to be prettier/more modern).

All of these depend on using the wsl-vpnkit image for network connectivity on the VPN - please see the WSL install docs for reference

Steps Common to All DEs - RUN THESE FIRST

```
sudo apt-mark hold acpid acpi-support
sudo apt update && sudo apt upgrade -y
sudo apt -y install xrdp
sudo cp /etc/xrdp/xrdp.ini /etc/xrdp/xrdp.ini.bak
sudo sed -i 's/3389/3390/g' /etc/xrdp/xrdp.ini
sudo sed -i 's/max_bpp=32/#max_bpp=32\nmax_bpp=128/g' /etc/xrdp/xrdp.ini
sudo sed -i 's/xserverbpp=24/#xserverbpp=24\nxserverbpp=128/g' /etc/xrdp/xrdp.ini
```

Edit /etc/xrdp/startwm.sh

sudo nano /etc/xrdp/startwm.sh

Replace the last 2 lines with the lines below, and uncomment the correct desktop environment from the list

```
unset DBUS_SESSION_BUS_ADDRESS
unset XDG_RUNTIME_DIR
#test -x /etc/X11/Xsession && exec /etc/X11/Xsession
#exec /bin/sh /etc/X11/Xsession
#uncomment the correct DE below
#budgie-desktop
#cinnamon-session
#mate-session
#startxfce4
```

Save and continue

	Budgie
	sudo apt install -y ubuntu-budgie-desktop sudo systemctl restart xrdp



Cinnamon

sudo apt install -y cinnamon sudo systemctl restart xrdp



MATE

sudo apt install -y ubuntu-mate-desktop
sudo systemctl restart xrdp



Xfce

sudo apt install -y xfce4
sudo systemctl restart xrdp



sudo apt update sudo apt install enlightenment -y sudo systemctl restart xrdp



Create ~/.xsessionrc with the following contents:

export GNOME_SHELL_SESSION_MODE=ubuntu export XDG_CURRENT_DESKTOP=ubuntu:GNOME export XDG_DATA_DIRS=/usr/share/ubuntu:/usr/local/share:/usr/share:/var/lib/snapd/desktop export WAYLAND_DISPLAY= export XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg

Gnome

sudo apt install -y ubuntu-desktop-minimal # or ubuntu-desktop sudo systemctl restart xrdp



Note: it can be useful to install apps via snap: How to Search, Install, Remove Snap Apps in Command Line | UbuntuHandbook

Currently in my testing the GUI for 'Ubuntu Software' doesn't work Create ${\sim}/.xsession$ and paste the following:

```
startplasma-x11
export XDG_SESSION_DESKTOP=KDE
export XDG_DATA_DIRS=/usr/share/plasma:/usr/local/share:/usr/share:/var/lib/snapd/desktop
export XDG_CONFIG_DIRS=/etc/xdg/xdg-plasma:/etc/xdg:/usr/share/kubuntu-default-settings/kf5-settings
```

KDE

sudo apt install -y kde-standard sudo systemctl restart xrdp



LXDE

sudo apt install -y lxde
sudo systemctl start xrdp



LXQT

sudo apt install -y task-lxqt-desktop sudo systemctl restart xrdp



On the Windows laptop, launch the RDP client (mstsc.exe) and connect to localhost:3390

nemote	Desktop Connection	—		×
	Remote Desktop Connection			
Computer: Username: You will be as	localhost:3390 None specified sked for credentials when you co	nnect.	~	
Show O	ptions	Connect		Help

Then log in with your WSL credentials

Tips:

Nemote	Desktop Connection		—		×	
Remote Desktop Connection						
General D	isplay Local Resources Exp	erience	Advanced			
Display co	nfiguration					
Choose the size of your remote desktop. Drag the slider all the way to the right to use the full screen.						
	Small Large					
	Full Artean					
	Use all my monitors for the r	emote se	ession			
Colors	Colors Choose the color depth of the remote session. Highest Quality (32 bit) ~					
Display the connection bar when I use the full screen						
Alide Op	tions		Connect	He	łp	

Check 'Use all my monitors' if you want the WSL desktop to span multiple monitors.

😼 Remote I	Desktop Connection		-		\times
	Remote Desk Connectio	top n			
General Dis	splay Local Resources	Experience	Advanced		
Remote aux					
	Apply Windows key con Only when using the ful On this computer On the remote compute Only when using the ful	nbinations: I screen I screen	~	<	
-Local devic	Choose the devices and your remote session.	l resources tha	at you want t	o use in	
A Hide Opti	ons		Connect	He	lp

Set the Windows key combinations to 'On this computer' if you want to use the WSL desktop in full screen and still use Windows virtual desktops with keyboard shortcuts.

1

Suggestion

Use the Windows virtual desktop feature - CTRL-WIN-RIGHT or CTRL-WIN-LEFT to move between virtual desktops. Windows on one virtual desktop and Linux DE (via WSL) on another. Switch between with keystroke shortcuts.

How to Use Virtual Desktops in Windows 10 (howtogeek.com)

Additional Notes

If your background and task bar goes away in KDE, Press <ALT>F2, and a run command prompt called *krunner* will appear at the top of the screen. In the box, type **plasmashell**. which should restart the desktop.

TODO: Luxuries like sound, etc. (totally untested, listed here for reference):

https://www.linuxuprising.com/2021/03/how-to-get-sound-pulseaudio-to-work-on.html