

Linux 404 - Networks

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Ethernet. Set up the network through a router. Ethernet and WiFi are two different networks. They may or may not have the same password. In System Tray, click on network Icon. >Properties > Select Private. Set each computer to private network. Private allows others on the net to have access to files, etc. Public, ie coffeeshop, prohibits access.

Windows. Alternately go to >Control Panel >Network&Internet >Network&Sharing >Change advanced
Click Private >Turn on discovery >check automatic setup >Turn on file sharing >Save
Click Guest >Turn off discovery >Turn off file sharing >Save
Click All >Turn on public folders >Use 128-bit > Turn off pass so other users can access. Temporarily to test.
Share at least one folder. Right click on it. >Properties >Advanced >Check Share >Permissions >Select allowance
Check. See if Windows computers and network maps are visible, but see below for Linux. >This PC >Network

Windows v Nord. At least two conflicts arise with Nord and perhaps other VPNs. Obviously Windows does not want a hidden computer. These settings get changed on updates and restart.

If network is not working? Nord performs an isolation from the ISP, so ethernet does not appear connected in network sharing. Two fixes are available, turn off Nord or better, turn on WiFi so there is an alternate connection.

If email is not running? Turn off Nord Web Protection and File Protection.

NetBios. Windows no longer recognizes NetBios discovery, so Linux must send Web Service Directory Discovery (wsdd).

Kubuntu wsdd. KDE has its own implementation, “kdsoap-ws-discovery-client.” That lets KDE see windows, but not other way around. Installing wsdd-server on KDE breaks kdsoap-ws-discovery-client. Now you have the reverse problem: Win10 can see Kubuntu but not the other way around. Gnome, XFCE, Cinnamon, etc.. resolved this issue with a new gvfsd-wsdd backend. KDE has not. So, may want to use that file manager, Gnome Files (Nautilus), or others.

Samba. Since 1992, this provides secure, stable and fast file and print services for all clients using the SMB/CIFS protocol, such as all versions of DOS and Windows, OS/2, and Linux. Installed as part of KDE Kubuntu. It is your friend.

Samba is built on a cross platform system. As such, it has its own database for User and Pass. You can keep the normal User name or add a system user for network file sharing. This will be accessible to all network users including windows.

System settings >users >+new user >[name, username, standard, pass]

Select files for sharing. Select files or folder. Right click for Properties. Permissions give privileges to others. Share requires a password for this user account. Added Permissions requires giving access to other computers and who can change files. If samba is not installed, it asks to install. Restart Samba services after set-up. Restart.

Force Windows to ask access. Windows will try to connect with its own login and password. Make Windows 10 prompt the operator to enter the remote username and password, on each Linux machine. Comment out the line in smb.conf by adding semi-colon to beginning of line.

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sudo nano /etc/samba/smb.conf
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; map to guest = bad user
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Error, password not correct. Similarly sudo nano /etc/samba/smb.conf Then add line. ntlm auth = true
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References. <https://fitzcarraldoblog.wordpress.com/2016/10/17/a-correct-method-of-configuring-samba-for-browsing-smb-shares-in-a-home-network/> also, <https://fitzcarraldoblog.wordpress.com/2020/06/16/using-ws-discovery-to-enable-windows-10-to-browse-smb-shares-in-my-home-network-of-linux-computers/>

Windows can't see Linux. As noted above, but there is a usable fix in Windows. Open 'This PC.' On Computer Tab, click 'Add a Network Location.' <Next>. 'Choose a custom Network location.' In Internet box type, as example: '\\opti-plex-ubuntu.local\Documents'. Since this is communicating with Linux, everything is case sensitive. So most times, make everything lower case. When pop-up screen, Login with NETWORK password.

Firewall. Enable, allow default incoming and default outgoing. That's it!

Samba status. To see what is shared. System Settings >System Administration: About this >Show More Info >Network >Samba Status: User Created

Windows shares. For network browsing, set default user name and default password. System Settings >Network: Settings >Windows Shares.

SMB4k. Enhanced network for Windows. Add /Uninstall by Discover. Do not see any contribu

