

REMOTE ACCESS: USING ONE COMPUTER TO TAKE COMPLETE CONTROL OF ANOTHER COMPUTER

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SUMMARY

Using Microsoft's "Remote Desktop Protocol" or the "Virtual Network Computing" Protocol, you can use one computer on your Local Area Network to take control of another one.

This low or no-cost capability is especially handy when it is used to access the cameras and video security software that reside on another computer.

TOPICS

- Demonstration of Microsoft's "Remote Desktop Protocol"
- Demonstration of the "Virtual Network Computing" Protocol
- Combinations that Work (and Don't Work)

TWO WAYS TO DO REMOTE ACCESS

- Microsoft's "Remote Desktop" method
- The free "Virtual Network Computing" (VNC) method

Existing Router

Your Local Computer



Windows 10/11
Home or Pro

a remote
access
viewer

Remote Computer



Windows 10/11
Home or Pro

a
remote
access
server



TWO WAYS TO DO REMOTE ACCESS (continued)

- The connection for each computer to the router can be either a wired Ethernet connection or a wireless Wi-Fi connection

DEMONSTRATION OF MICROSOFT'S "REMOTE DESKTOP PROTOCOL"

- Using a "Windows 10/11 Home" computer to take control of a "Windows 10/11 Pro" computer

DEMONSTRATION OF "VIRTUAL NETWORK COMPUTING"

- Using a "Windows 10/11 Home" computer to take control of a "Windows 10/11 Pro" computer
- Using a "Windows 10/11 Home" computer to take control of a "macOS" computer

Existing Router

Your Local Computer



Windows 10/11
Home or Pro

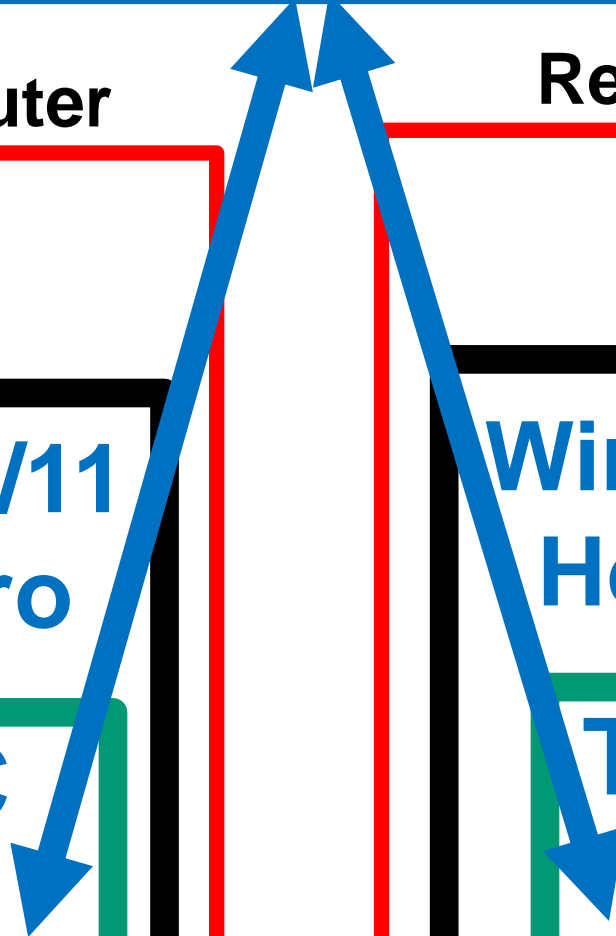
UltraVNC
Viewer
(free)

Remote Computer



Windows 10/11
Home or Pro

TightVNC
Server
(free)



Existing Router

Your Local Computer

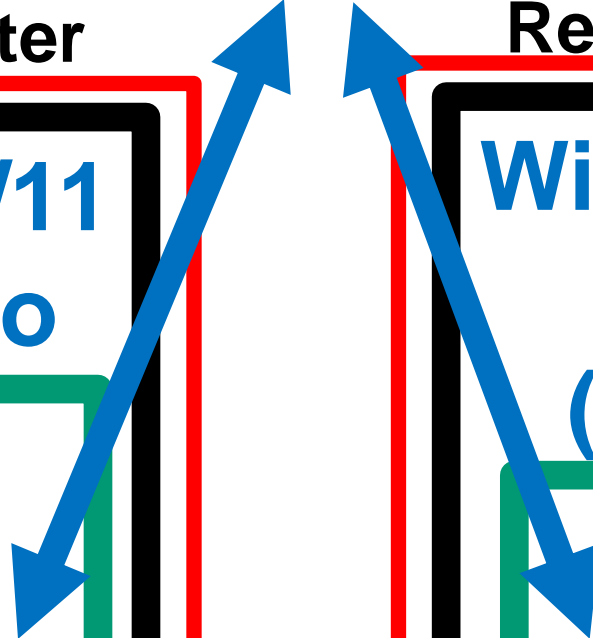
Windows 10/11
Home or Pro

"Remote
Desktop
Connection"
in "Windows
Accessories"

Remote Computer

Windows 10/11
Pro
(not Home)

Enable
"Remote
Desktop"
in
"Settings"



DETAILS OF "VNC" REMOTE CONTROL

- "VNC viewer" app and the "VNC server" app are both free for any version of "Windows 10" (so that users do not have to upgrade the remote end up to "Windows 10 Pro")

DETAILS OF "VNC" REMOTE CONTROL (continued)

- No remote camera microphone audio is transmitted to the user
- Remote login does not turn off local "desktop" of the target computer
- Multiple computer users can log into the same "VNC server"

DETAILS OF "VNC" REMOTE CONTROL (continued)

- At the remote end, "Windows.." computers do not indicate when you connect to them. However, at the remote end, "macOS" computers pop up a warning when a remote connection to made to them

DETAILS OF "REMOTE DESKTOP" REMOTE CONTROL

- "Remote Desktop Connection" viewer app is available in all versions of "Windows 10/11.."
- "Remote Desktop" (server) is only available in "Pro" and "Enterprise" versions of "Windows 10/11.."
- If you or Windows Update reboots the remote target computer, your connection to this computer will not be terminated

DETAILS OF "REMOTE DESKTOP" REMOTE CONTROL (continued)

- For the remote "Remote Desktop" (server) computer, an upgrade from "Windows 10/11 Home" to "Windows 10/11 Pro" is required for most computer owners (and this is an expensive upgrade relative to using "VNC" which does not require such an upgrade)

DETAILS OF "REMOTE DESKTOP" REMOTE CONTROL (continued)

- No remote camera microphone audio is transmitted to the user
- Remote login connection logs out the current local "desktop" of the remote target computer if someone is currently logged into the remote target computer

DETAILS OF "REMOTE DESKTOP"

REMOTE CONTROL (continued)

- Only one computer user can log into a single "RD" server with the monitor screen of the RD" server logged off when any "RDC" viewer logs into the "RD" server
- If you or Windows Update has to reboot the remote target computer, your connection to this computer will be terminated

RELATIVE CONNECTION SPEEDS

- Fastest: RDP via wired Ethernet
- Second fastest: RDP via Wi-Fi
- Slower: VNC via wired Ethernet
- Slowest: VNC via wireless Wi-Fi

In other words:

RDP is faster than VNC

and

wired Ethernet is faster than

wireless Wi-Fi

GENERIC STEPS FOR INSTALLING "REMOTE ACCESS"

- Install the "VNC server" app or activate the "RDC server" app in the remote computer
- Install the "VNC viewer" app or activate the "Remote Desktop Connection" app in the local computer