

Computer Know How Series

Presented by Adam Lacey ([Applications Etc.](#)) 916-813-7819

Windows Networking (File and Print Sharing) – Thursday November 8th 2018 @ 2pm

<http://www.aehost.net/morpd> or <http://www.morpd.com>

1) Terminology Overview

- a. Computer/Device Name – Alpha-Numeric identifier for each device on a network.
- b. Workgroup – Alpha-Numeric identifier for a group of computers on a network.
- c. HomeGroup (eliminated in Win10 v1803) – Authentication Group to ease access between systems.
- d. Domain – Alpha-Numeric identifier for a business device group controlled by server(s).
- e. IP (Internet Protocol) Address – numeric identifier to address a communication on IP Network Address.
- f. Folder – Location for data storage in a computer or storage device.
- g. Share – A computer resource made available from one host to other hosts on a computer network.
- h. TCP/IP (Transmission Control Protocol/Internet Protocol) – Wide spread and most common network protocol for worldwide communication. The basis for Internet access.
- i. SMB (Server Message Block) v1&2 – Network file sharing protocol as implemented in Microsoft Windows.
- j. Firewall - A part of a computer system or network that is designed to block unauthorized access while permitting outward communication. Firewalls exist in both hardware and software.
- k. Master Browser – Network elected computer to manage the local network resources. Windows has a hierarchy to determine which computer becomes the Master Browser. Business Networks use a Domain Master Browser which is similar. (Neither should be confused with an Internet Browser.)
- l. UNC (Uniform Naming Convention) – A standard for identifying network devices, which originated in the Unix community. A UNC path uses double slashes or backslashes to precede the name of the computer.
- m. NAS (Network Attached Storage) – Network connected device to store content for multiple computers.

2) Gather/Adjust your System Information.

- a. Computer Name/Workgroup – Control Panel > System or Settings > System About
- b. IP Address – Network and Sharing Center > Adapter Status or IPCONFIG command
- c. Firewall Status (Public/Private) – Windows Firewall, Network & Sharing Center and Network Interface Settings

3) How to share a resource?

- a. Review and adjust (if needed) Computer Name, Workgroup to easily identify your devices on local network.
- b. Adjust Firewall settings, folder security/access permissions and individual/advanced share settings for each computer sharing resources.
- c. Folder share resource
 - i. Open File/Windows Explorer and browse to folder with resources to share.
 - ii. Open properties of folder and navigate to Sharing Tab. Use Sharing or Advanced Sharing buttons to share resource and assign share permissions. Also navigate to Properties Security Tab to assign required file/folder permissions.
- d. Printer share resource (Less common due to network printers which are directly connected to network.)
 - i. Open Printer Properties from Devices and Printers or Settings > Printer and Scanners.
 - ii. Navigate to Sharing Tab and enable Sharing and assign a name for the printer.
 - iii. If in a mixed OS (Operating System) network install additional drivers for other systems.

4) How to access a shared resource?

- a. Open File/Windows Explorer and browse to shared resource (Computer/Device name)
 - i. Access location via Address Bar using UNC name. (ex: [\\computername](#)).
 - ii. Browse to location via Network container and Workgroup listing(s).
- b. Enter network credentials if required by shared resource or configuration.
- c. After device is accessed, device shares are located and displayed.
- d. Connect to resource (right click)
 - i. Printer – Connect and install driver.
 - ii. Folder share – Map Network Drive for easy access via drive letter (recommend N-Z to avoid conflict).

5) Links/Resources

- a. The Basic Concepts in Network Sharing - <https://www.howtogeek.com/school/windows-network-sharing/lesson2/>
- b. Shared Resource - https://en.wikipedia.org/wiki/Shared_resource