WORKING WITH NETWORK TYPES

References

- Sybex Microsoft Windows Operating System Essentials
- https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.techjunkie.com%2Fdisable-homegroup%2F&psig=AOvVaw2ZjyqK2F6R44AIh_hU0287&ust=1599797741299000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCKCot5bd3esCFQAAAAAdAAAAABAD
- https://www.howtogeek.com/howto/9524/learning-windows-7-create-a-homegroup-join-a-new-computer-to-it/

Windows 7 computers can participate in three network types

WORKGROUP

HOMEGROUP

DOMAIN

Workgroup

- Definition : It is defined as a collection of peer-to-peer networking partners that share resources with each other.
- One the oldest network types, dating back to the days of Windows for Workgroups 3.11, which was a special version of Windows 3.*x* with enhanced networking capabilities.
- Workgroups are used for network communication when a central authentication server is not available.

Characteristics of a Workgroup

- Workgroups are not password-protected.
- Each computer has a set of user accounts. Only users with accounts on the target computer can access resources on that target computer through the workgroup.
- All computers are peers, indicating that no single computer has control over the others.
- All computers are typically on the same LAN subnet, such as 10.10.0.0 255.255.0.0 or 192.168.12.0 255.255.255.0.
- Though there is no limit to the number of computers that can participate in a workgroup, Microsoft recommends connecting no more than 20 computers.

Homegroup

- It is an enhanced workgroup with automatic sharing and security capabilities.
- Windows 7 and later machines can participate in a homegroup.
- The following characteristics define a homegroup:
- Homegroups are password-protected.
- Computers participating in the homegroup can easily share data with other people without a need for complex permissions screens.
- Homegroup computers must also be part of a workgroup if they are not joined to a domain.

Domains

- The term *domain-joined* simply refers to a Windows computer that is part of a Windows domain network.
- It is the most secure and manageable of the network types, but it requires at least one centralized authentication server, called a domain controller (DC).
- The DC must run Windows Server and not a Windows client OS. Versions from Windows 3. *x* all the way to the Windows 7 client can participate in a Windows domain

- The following characteristics define a domain:
- Domains require access to an administrative account to join to and participate in the network.
- They require a dedicated server for account management and authentication processes.
- Only those with a user account in the domain can log onto domain-joined computers.
- Domains can support thousands of computers.
- Domains allow computers to be on different LAN subnets.
- Domains provide centralized management and configuration options for the domain clients through the use of Group Policy and logon scripts.

Participating in a Workgroup

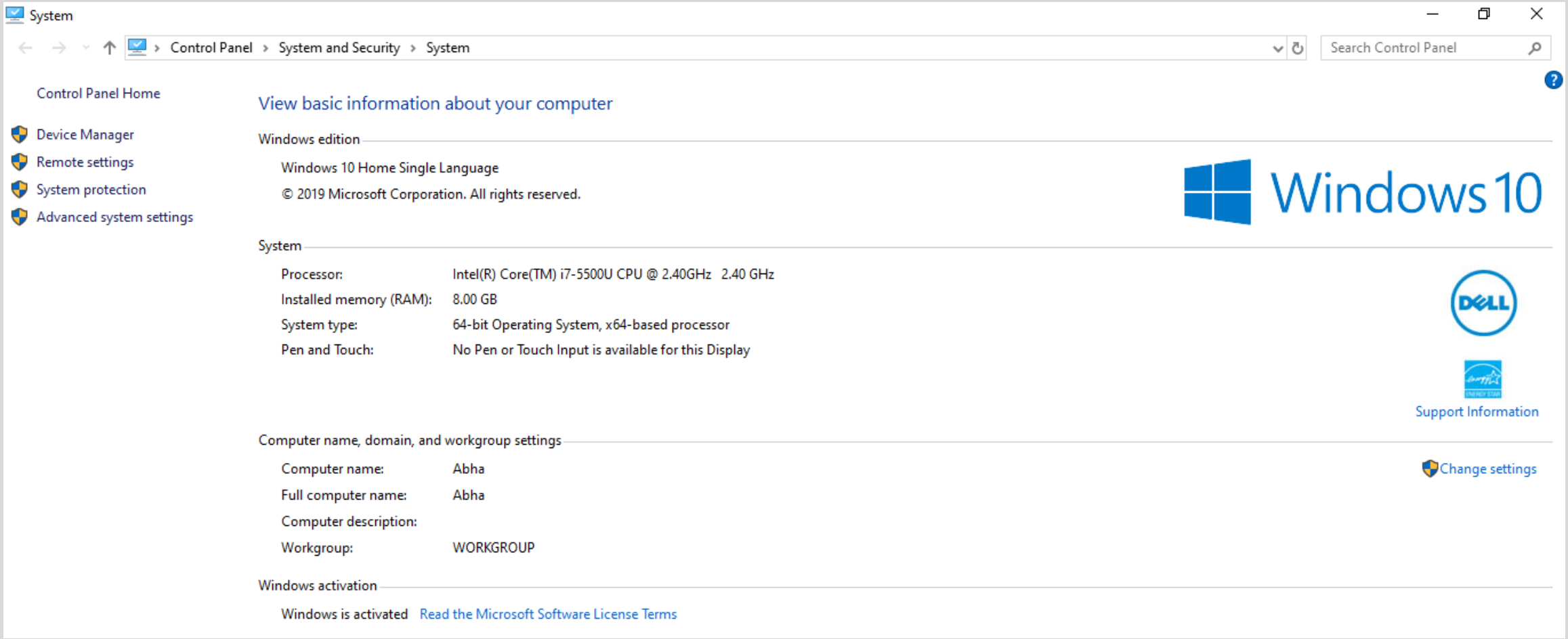
- To participate in a workgroup, a computer only needs to exist on the same network and have the same workgroup name.
- To configure the workgroup name on a Windows 7 computer, follow this procedure:
- **1.** Click Start, right-click Computer, and select Properties.
- **2.** In the System Control Panel page, scroll down if necessary and click Change Settings in the Computer Name, Domain, and Workgroup Settings section
- **3.** In the System Properties dialog, click the Change button.
- **4.** In the Computer Name/Domain Changes dialog, enter the desired workgroup name in the
- Workgroup field and click OK.

Set up and join a Workgroup in Windows 10

Windows 10 automatically sets up a default Workgroup when it installs so this step is already taken care of for you.

1. **Navigate to Control Panel, System and Security and System** to access your computer details.
2. **Find Workgroup and select Change settings.**
3. **Select Change next to 'To rename this computer or change its domain…'.**
4. **Type in the name of the Workgroup you want to join and click OK.**
5. Reboot your computer for the changes to take effect.
6. **Navigate to Control Panel, Network and Internet and View network computers and devices** to see other machines within that Workgroup.

If you typed the Workgroup name correctly, you should now be a member of that Workgroup. Depending on how you have it set up, you may or may not be prompted for a password. Enter the Workgroup password to access.


System
Control Panel › System and Security › System
Search Control Panel
Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
View basic information about your computer
Windows edition
Windows 10 Home Single Language
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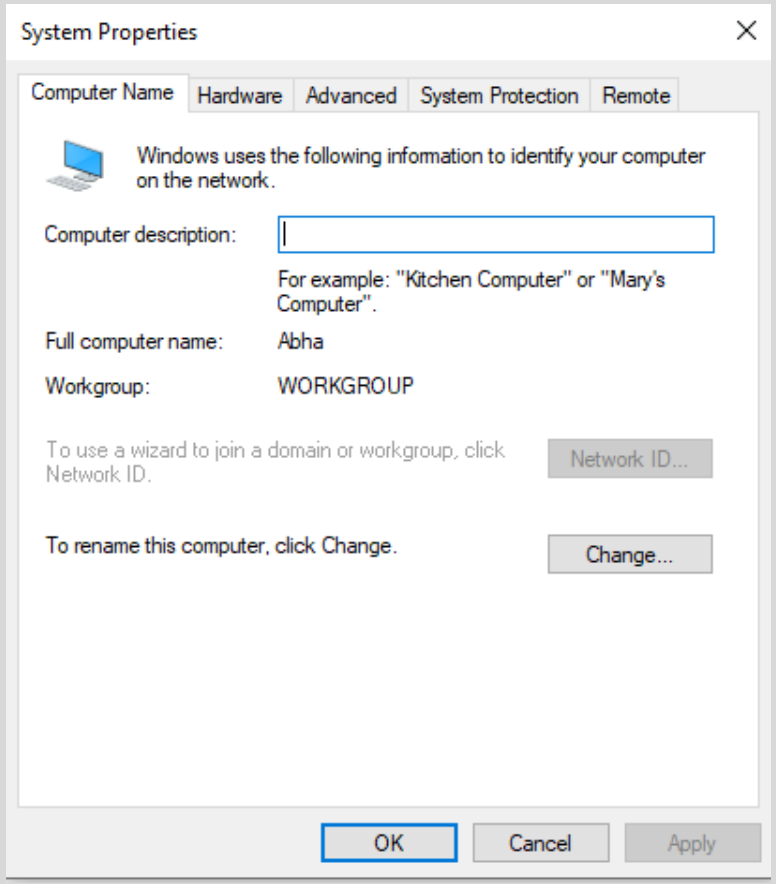
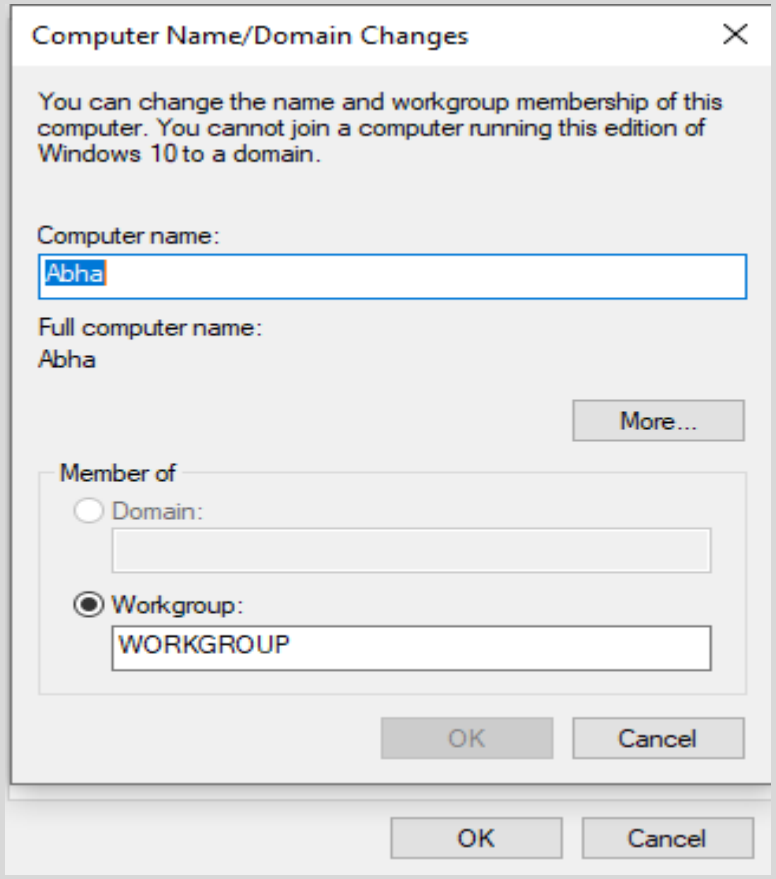
Windows 10
System
Processor: Intel(R) Core(TM) i7-5500U CPU @ 2.40GHz 2.40 GHz
Installed memory (RAM): 8.00 GB
System type: 64-bit Operating System, x64-based processor
Pen and Touch: No Pen or Touch Input is available for this Display
Support Information
Computer name, domain, and workgroup settings
Computer name: Abha
Full computer name: Abha
Computer description:
Workgroup: WORKGROUP
Change settings
Windows activation
Windows is activated Read the Microsoft Software License Terms

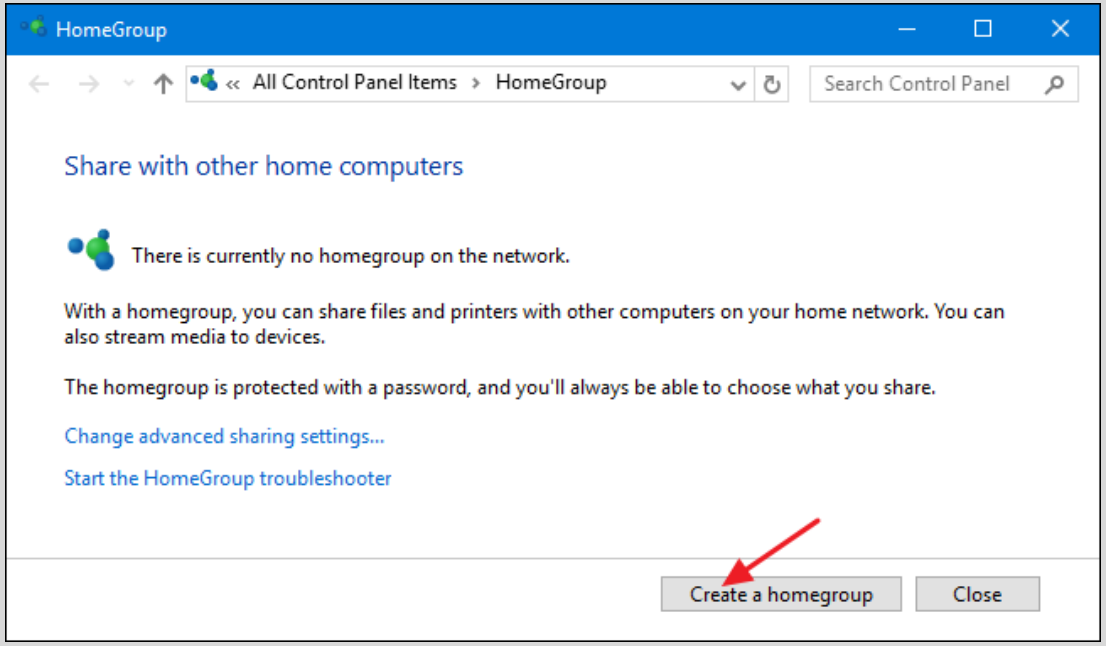

System Properties
Computer Name
Hardware
Advanced
System Protection
Remote
Windows uses the following information to identify your computer on the network.
Computer description:
For example: "Kitchen Computer" or "Mary's Computer".
Full computer name:
Abha
Workgroup:
WORKGROUP
To use a wizard to join a domain or workgroup, click Network ID.
Network ID...
To rename this computer, click Change.
Change...
OK
Cancel
Apply

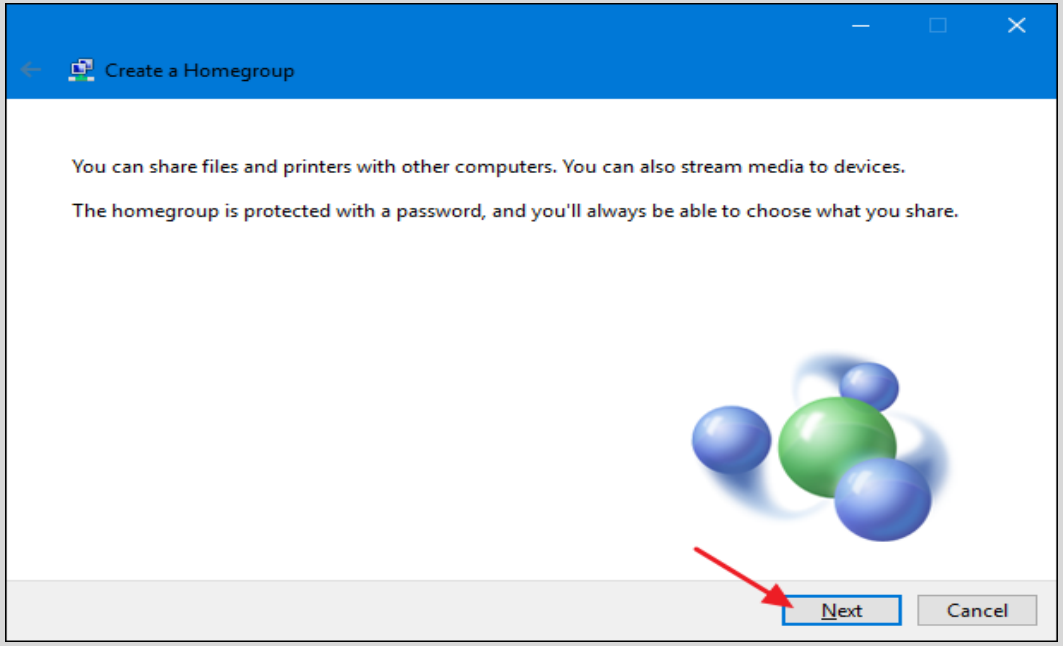

Computer Name/Domain Changes
You can change the name and workgroup membership of this computer. You cannot join a computer running this edition of Windows 10 to a domain.
Computer name:
Abha
Full computer name:
Abha
More...
Member of
Domain:
Workgroup:
WORKGROUP
OK
Cancel
OK
Cancel

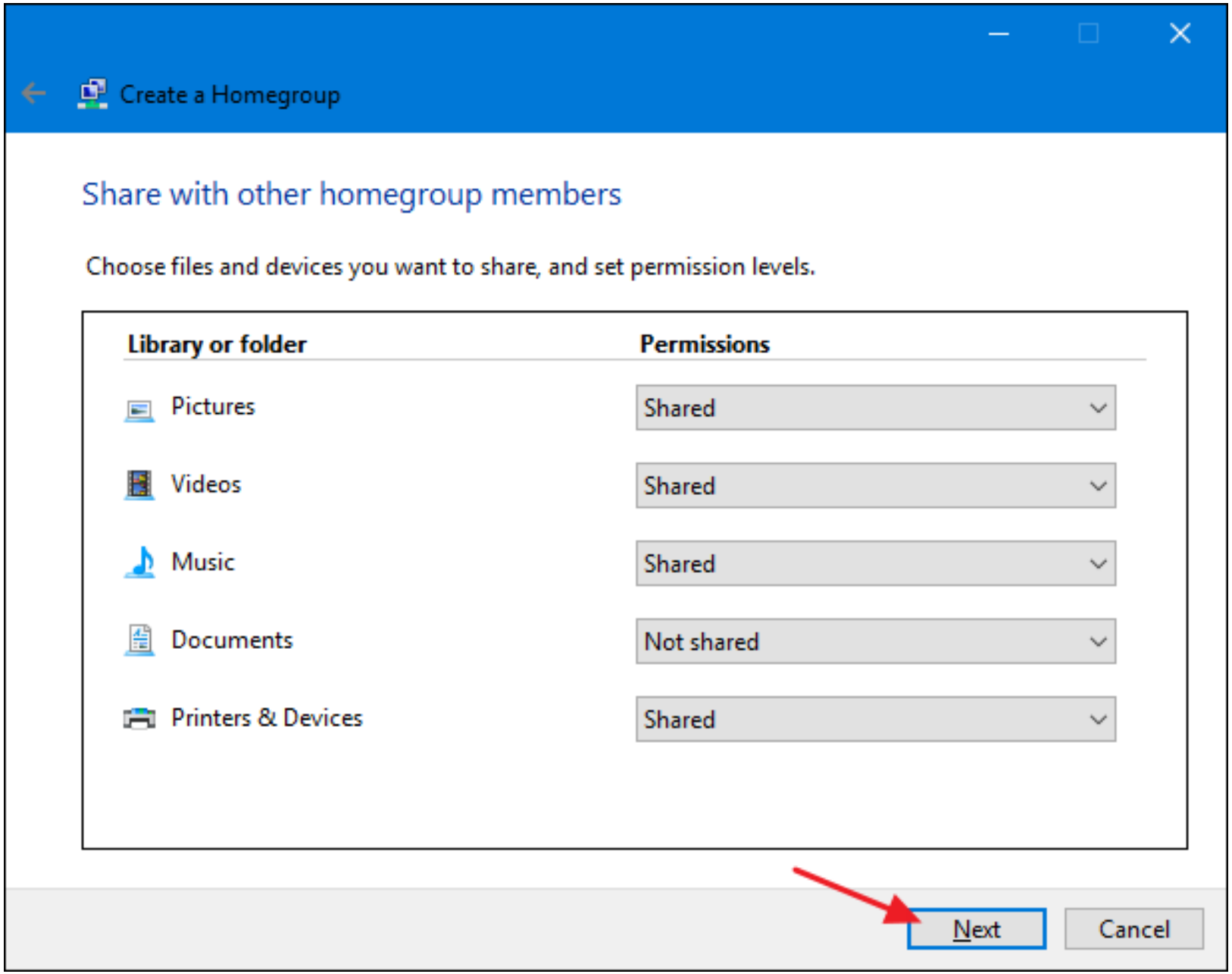
Creating a New Homegroup- Windows 7

- When Windows 7 is first installed and connects to a network, you will be asked about the network type to which you are connected.
- If you choose the Home Network option and a homegroup does not exist on your network, you will be prompted to create one.
- If you choose the Home Network option and a homegroup does exist, you be asked if you wish to join the existing homegroup or create a new one.

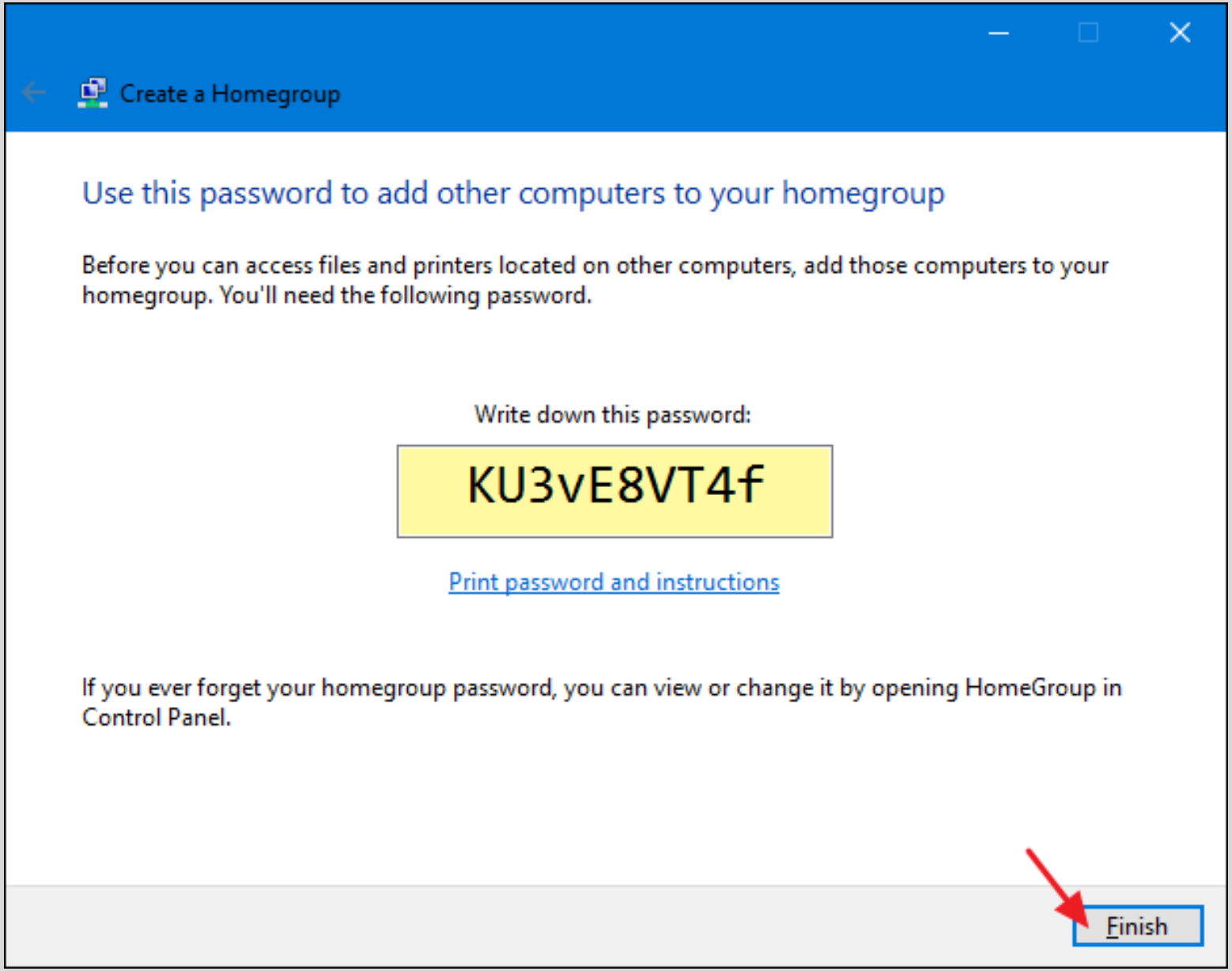
- Set Network Location dialog. You can select to share your Libraries (Documents, Pictures, Music, and Videos) and Printers.
- Note :**You can create or join a homegroup only if your computer's network location is set to the network type of Home.**



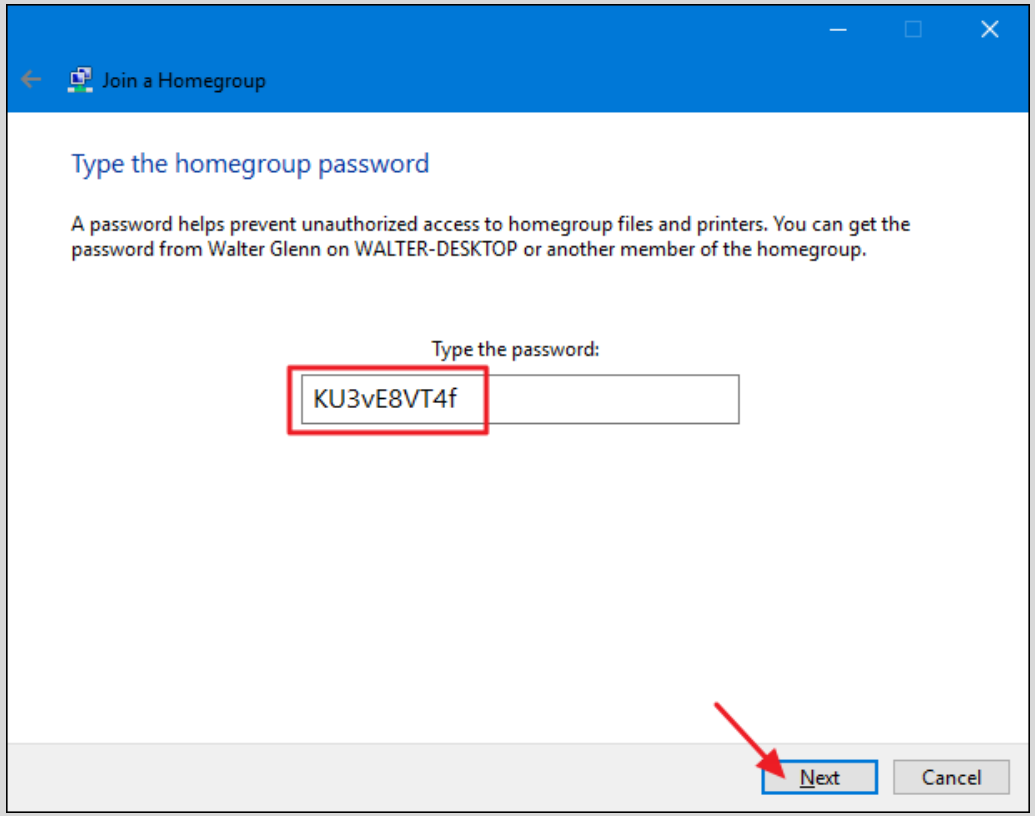


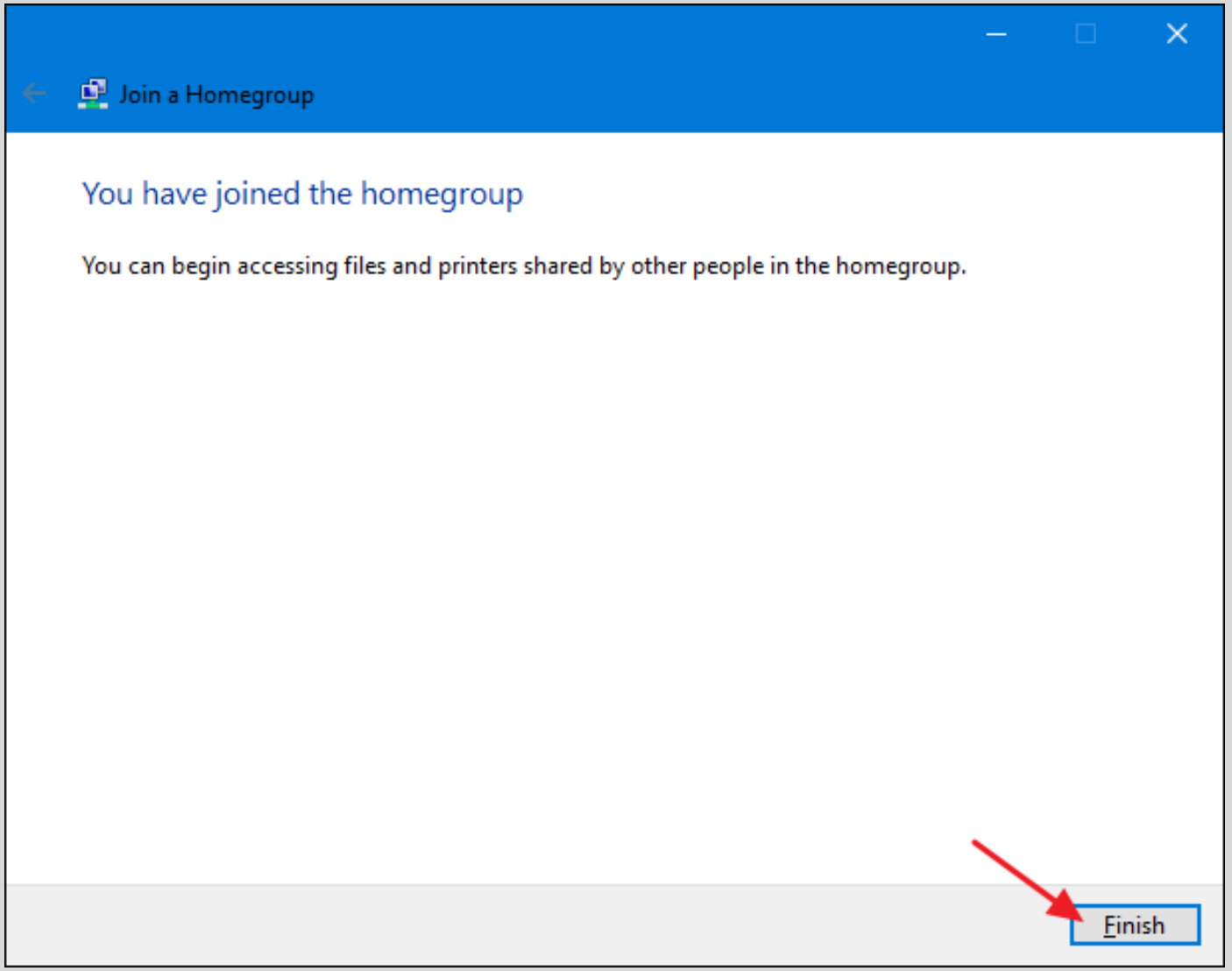


- We can see all the major folders—along with Printers & Devices—that HomeGroup allows you to share.
- For each item, you can use the "Permissions" drop-down menu to choose whether the item is shared or not.
- Share the items you want to share and then click "Next."

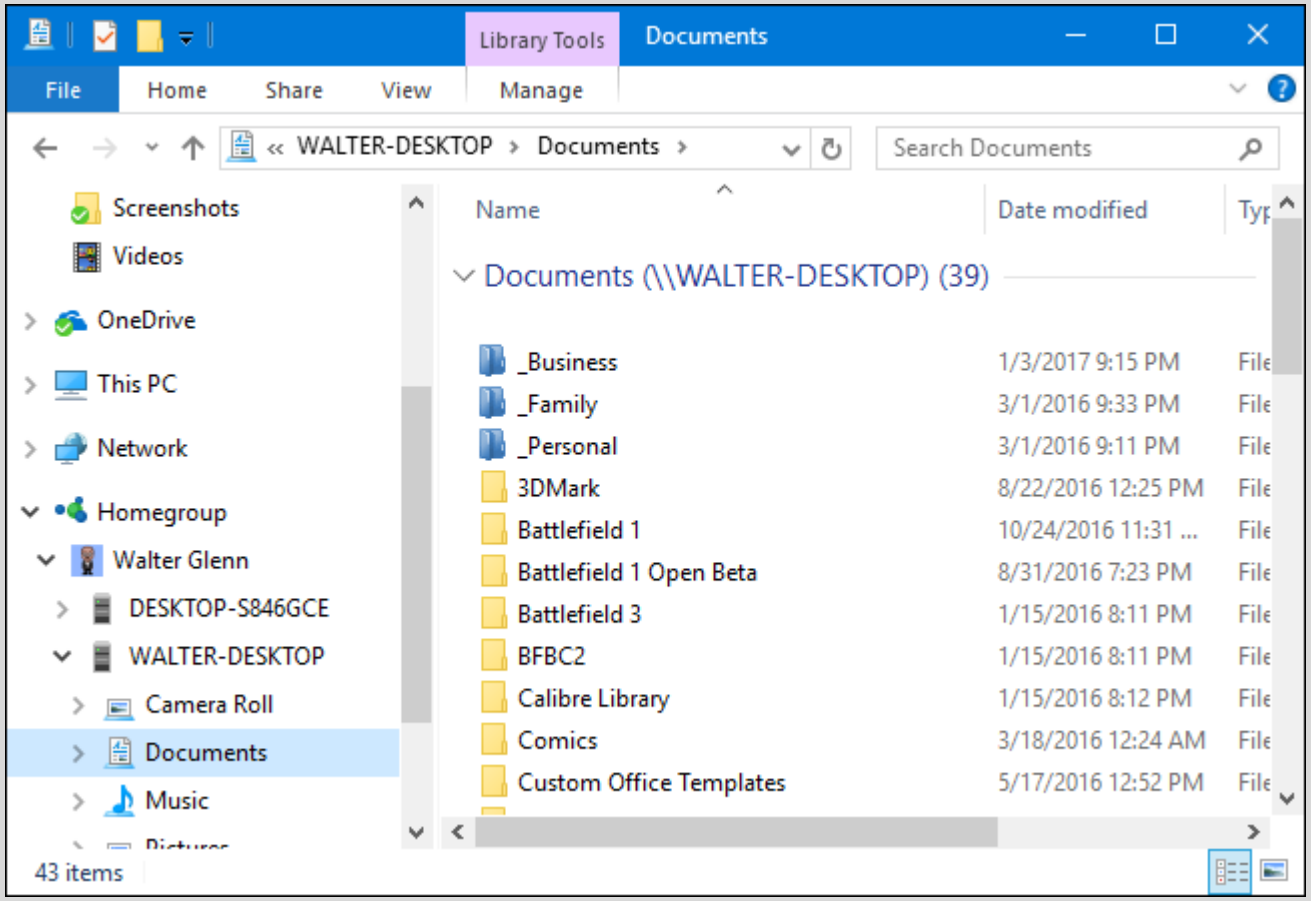

Create a Homegroup
Use this password to add other computers to your homegroup
Before you can access files and printers located on other computers, add those computers to your homegroup. You'll need the following password.
Write down this password:
KU3vE8VT4f
Print password and instructions
If you ever forget your homegroup password, you can view or change it by opening HomeGroup in Control Panel.
Finish

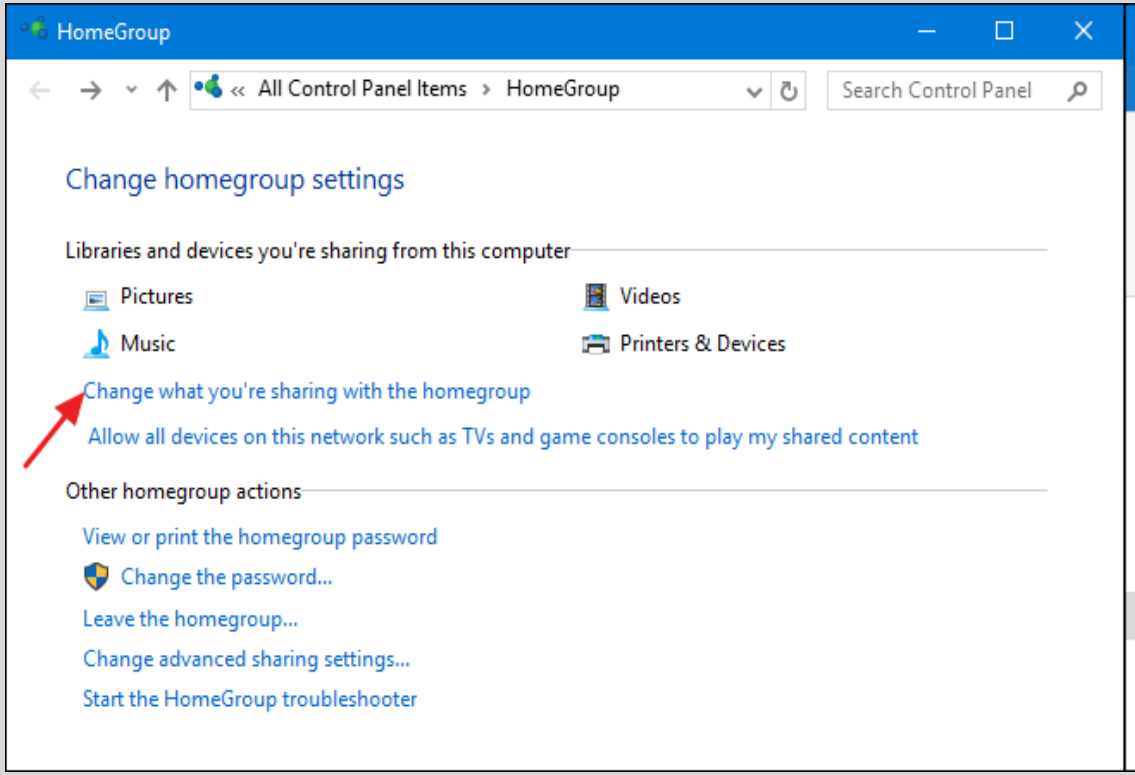
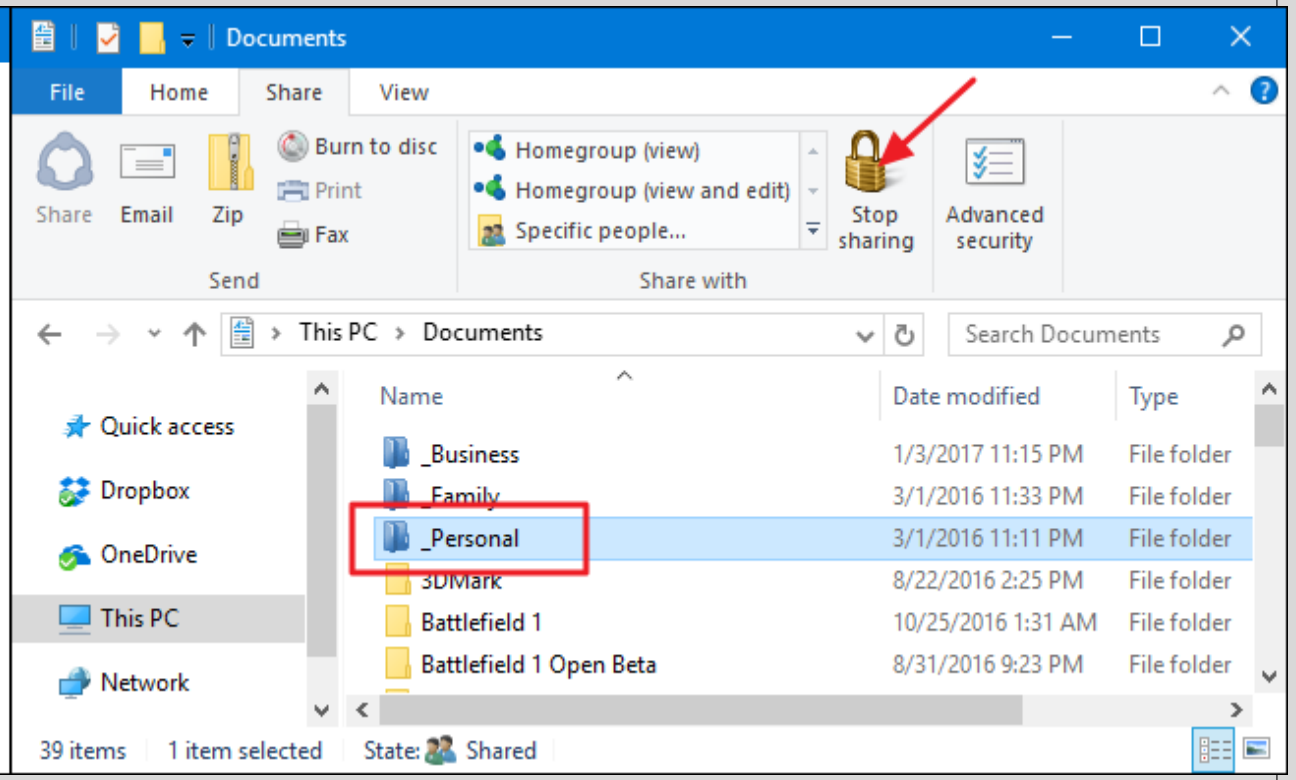
To Join a Homegroup




Join a Homegroup
You have joined the homegroup
You can begin accessing files and printers shared by other people in the homegroup.
Finish

Open File Explorer, click the Homegroup icon in the navigation pane, and browse anything that's being shared from other PCs in the HomeGroup.



How to Change What You're Sharing with a HomeGroup

When you create or join a HomeGroup, you also get to set what you want to share. If you want to change what you're sharing later on, you can openthe HomeGroup app again and choose "Change what you're sharing with the homegroup." That will get you to the same sharing screen you saw when you created or joined the HomeGroup.