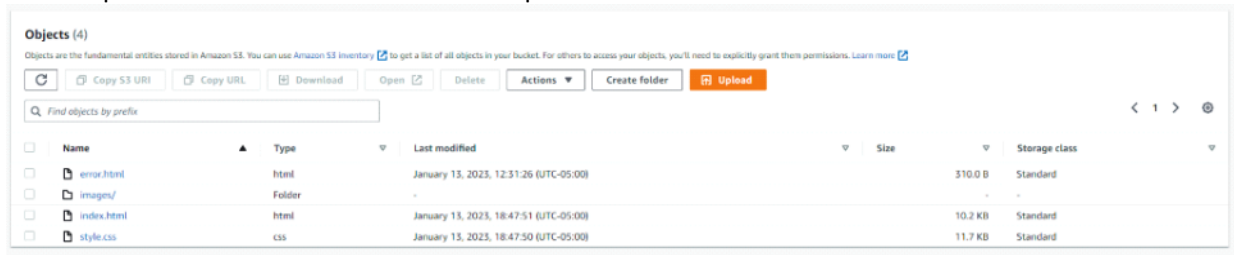# KEY

Monday, February 20, 2023   8:39 PM

<u>Important Headings are Underlined and Bold:</u>

- A bullet point indicates a note and NOT a step

- Bullet points may have images along with them to help visually
  - Bullet points may also have sub-bullet points for a more in-depth explanation

<u>Headings in Bold Also Indicate Important Steps:</u>

1. Steps are numbered, every new page starts with Step 1 and so on
   a. Steps may have sub-steps to add more information

2. Steps may also have images to help visually

3. **Bold** word in steps indicate a button

4. *Italicized* words in steps indicate input fields or options

5. `Keyboard Input` in Courier New Font

6. <u>Underlined</u> words indicate files

7. Menu navigation is indicated by the pipe symbol and italic words: *Start | Programs | MS Word*

8. Numbers referencing other steps will be in red(1…2…3)

9. Code will be in a textbox in `COURIER NEW` font

```
#include <stdio.h>

int main(void)
{
printf("Hello World in C:)");
return 0;
}
```

Installing and Configuring a Samba File Server on Windows Server

Thursday, February 23, 2023   8:21 PM

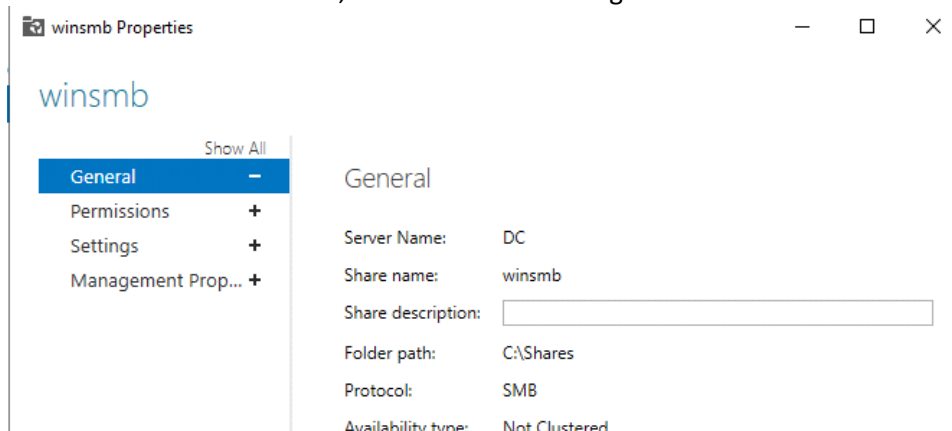**Installed Samba on Windows Server:**

1. Opened Server Manager and clicked *Manage* and then *Add Roles and Features* in the top right corner

2. In the *Features* window of the Wizard, selected *SMB 1.0/CIFS File Sharing Support* feature and clicked on **Next**

3. In the next window, confirmed selections and clicked on **Finish**
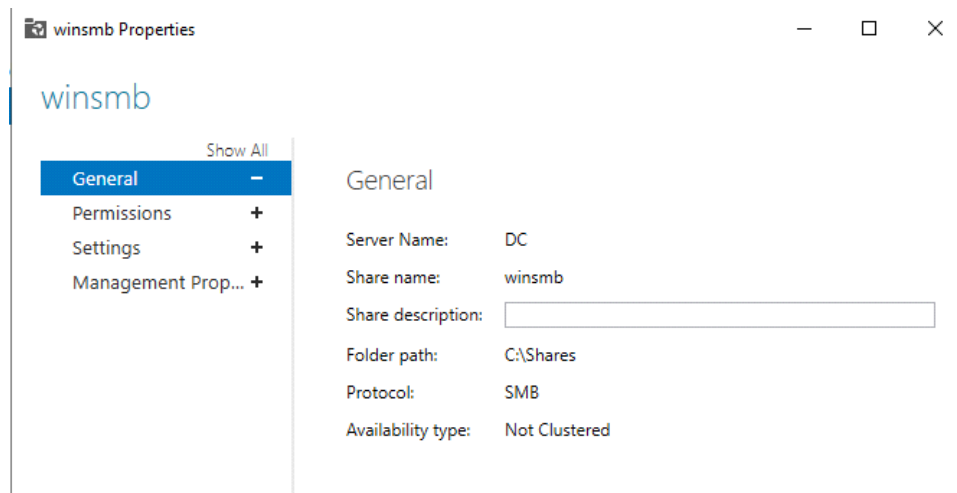
Configured Samba on Windows Server:

1. On Windows desktop, searched for Powershell in the Windows search icon

2. Right Clicked Powershell and ran as administrator

3. Typed `Install-WindowsFeature FS-SMB1` to install the FS-SMB1 feature

4. Typed `Set-SMbServerConfiguration -EnableSMB1Protocol $True -Force` to enable SMBv1 support on the server

Created Samba Shares on Windows Server:

1. On Windows desktop, searched for Server Manager using the Windows search icon

2. Opened Server Manager and clicked on the *File and Storage Options*

3. In the next window, clicked on *Shares* option located on the left panel

4. In Shares, clicked on *Tasks* and then *New Share*

5. In the new share wizard, clicked on *SMB Share – Quick* and clicked on **Next**

6. In share location typed `C:\Shares` as the custom path and clicked on **Next**

7. In share name, named the share as `winsmb` and clicked on **Next**

8. In the next couple of windows, left the settings on default settings clicked on **Next**

9. In the confirmation window, verified correct settings and clicked on **Create**

winsmb Properties

winsmb

Show All

General −
Permissions +
Settings +
Management Prop... +

General

Server Name:	DC
Share name:	winsmb
Share description:	
Folder path:	C:\Shares
Protocol:	SMB
Availability type:	Not Clustered

How to Mount Samba Shares on Ubuntu

Thursday, February 23, 2023   9:25 PM

- These steps work the same way for most Debian-based distros
- This will be done on a Kali machine which is based on Debian

<u>Mounted Samba Shares on Kali:</u>
1. Logged into Kali with an admin account and opened a terminal

2. Entered `sudo apt update` to update packages

3. If packages weren't up to date, used `sudo apt upgrade` to install the updates

4. Installed cifs-utils package by executing `sudo apt install cifs-utils`

```
┌──(admin@maindomain.com Ⓢ kali)-[/mnt]
└─$ sudo apt install cifs-utils
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
cifs-utils is already the newest version (2:7.0-2).
```

5. Created a directory where shares will be mounted
   a. Created a directory using the `sudo mkdir /mnt/.smb_clientshareserver`

6. Once directory was created, created a hidden credentials file by executing `sudo vi /root/.smbcredentials`
   a. Used .(dot) to hide the file

```
┌──(admin@maindomain.com Ⓢ kali)-[/mnt]
└─$ sudo vi /root/.smbcredentials
```

7. In the file, entered the following lines:
   a. Pressed ESC key and typed `:wq!` to force overwrite and quit

```
username=admin@maindomain.com
password=***************
```

8. Made the credentials file read only and only accessible to the root account by executing `sudo chmod 400 /root/.smbcredentials`

9. Finally, executed the mount command to mount the Samba shares onto this machine

10. Command used:
    a. `sudo mount -t cifs -o rw,vers=1.0,credentials=/root/.smbcredentials //172.16.0.1/winsmb /mnt/smb_clientshareserver`

```
┌──(admin@maindomain.com Ⓢ kali)-[/mnt]
└─$ sudo mount -t cifs -o rw,vers=1.0,credentials=/root/.smbcredentials //172.16.0.1/winsmb /mnt/smb_clientshareserver
```

```
┌──(admin@maindomain.com Ⓢ kali)-[/mnt/smb_clientshareserver]
└─$ ls
'Important Docs'    shareserver    winsmb
```

11. Shares were successfully mounted and accessible

Enabled Automount of Shares in Kali:

1. Shares mounted on Linux machines will not be present after reboot, these steps fixed such problem

2. Opened the <u>fstab</u> file by executing `sudo vi /etc/fstab`

3. Added the following line to the <u>fstab</u> file:
   a. `//172.16.0.1/winsmb /mnt/smb_clientshareserver cifs vers= 1.0,credentials=/root/.smbcredentials`
   b. Saved the file by hitting the ESC key and typing `wq!`

   ```
   //172.16.0.1/winsmb /mnt/smb_clientshareserver cifs vers=1.0,credentials=/root/.smbcredentials
   ```

4. Rebooted the system by executing `sudo reboot` and verified shares were auto mounted by navigating to `/mnt/smd_clientshareserver`

   ```
   ┌──(admin@maindomain.com💀kali)-[/mnt/smb_clientshareserver]
   └─$ ls
   4k.jpg  'Important Docs'   shareserver   winsmb
   ```

How to Map a Network Drive on a Windows 10 Client

Thursday, February 23, 2023   9:10 PM

1. Obtained location of Samba share by navigating to the share in Windows Server File Explorer
    a. Copied the path to the folder
   b. Made sure the share is the network path and not the local path
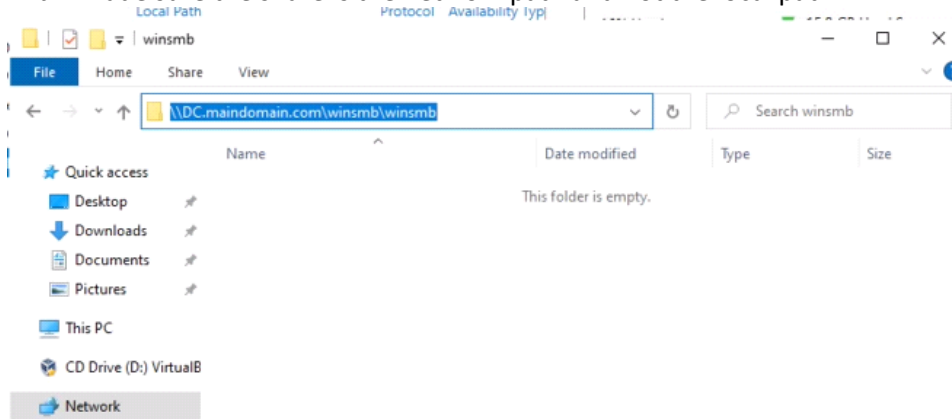
2. On a Windows 10 client, used *Windows key and S* to search for the *Run* program
    a. Pasted the path to the share in the field and clicked **OK**
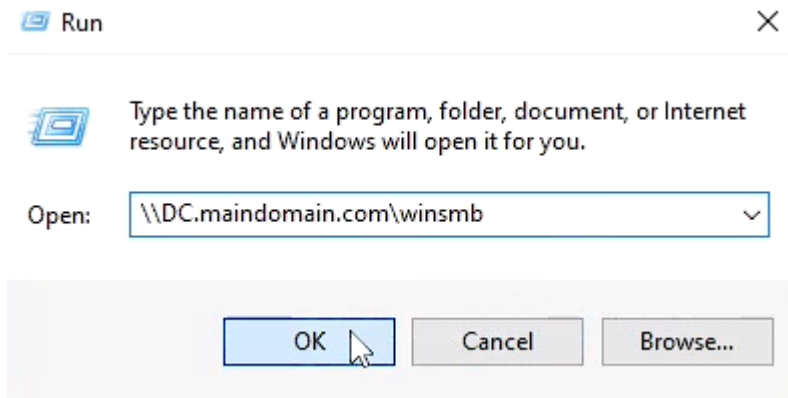
3. Once share is opened and can be used, right clicked *Map network drive*
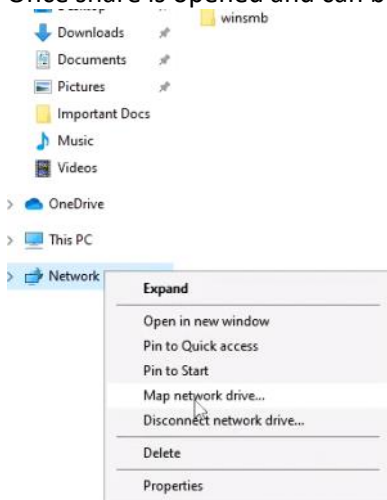
4. In Map Network Drive window, selected drive letter and pasted path to share
   a. Proceeded to click on **Finish**
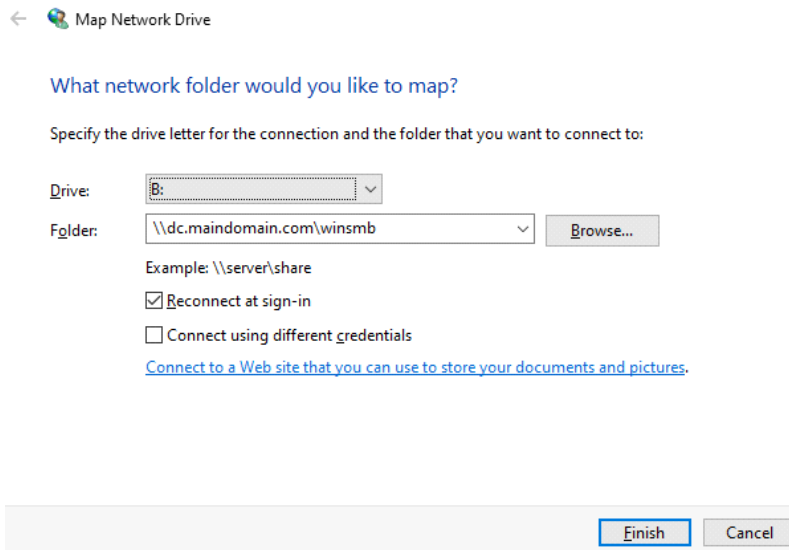
5. Navigated to *This PC | Network Location* to verify that the drive was mapped to this client