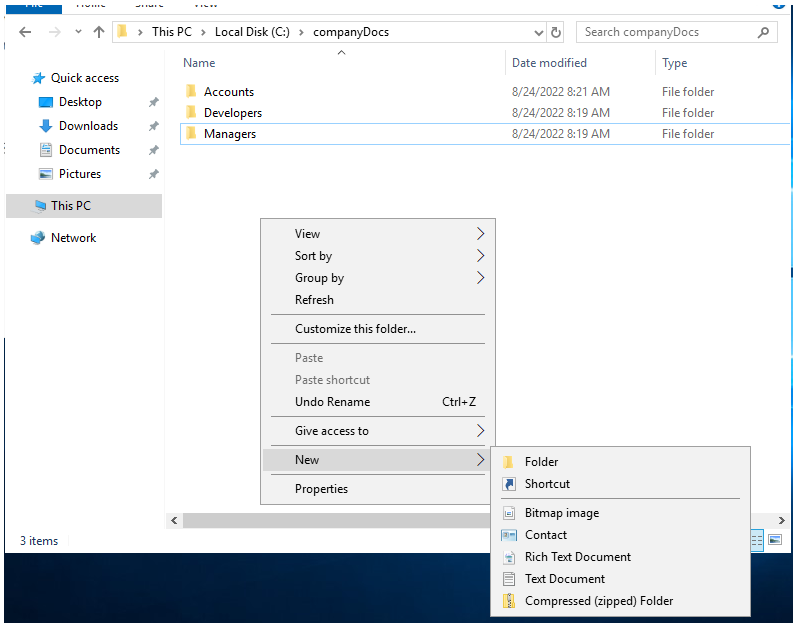
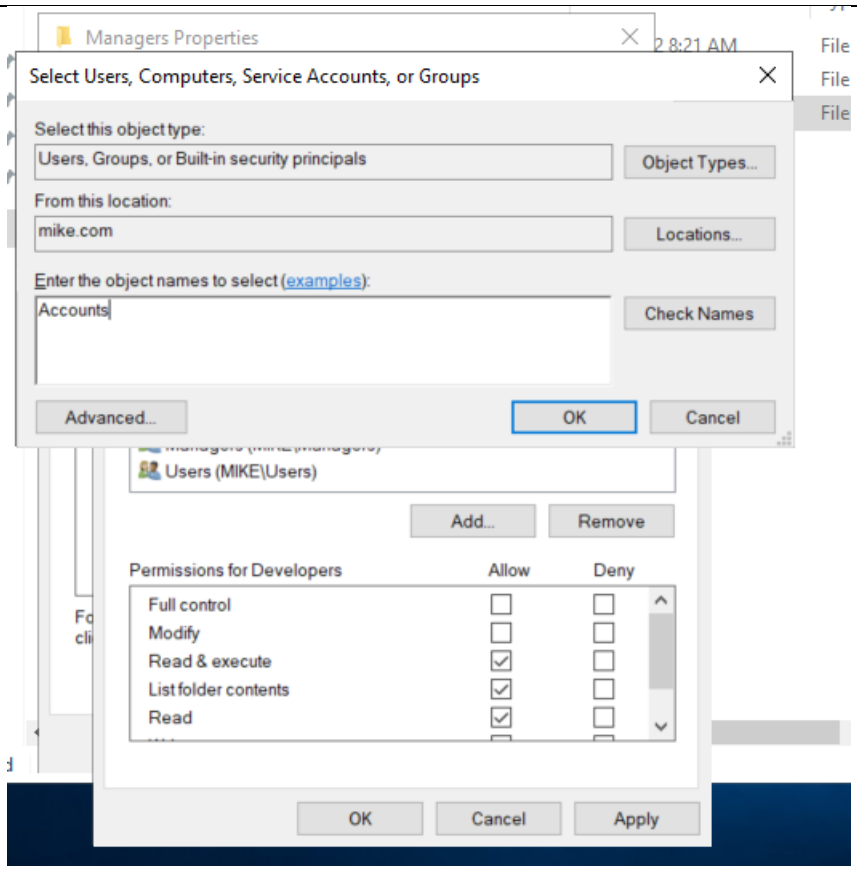
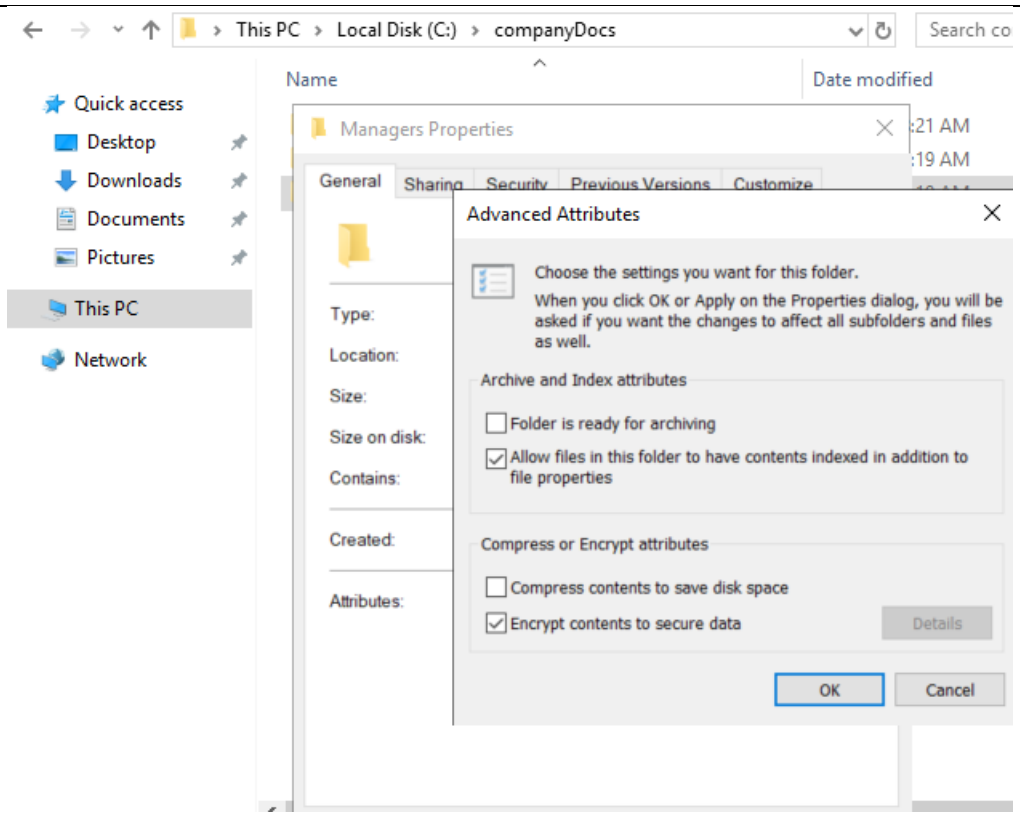
INFO603 Practical project documentation template (Engineering journal)

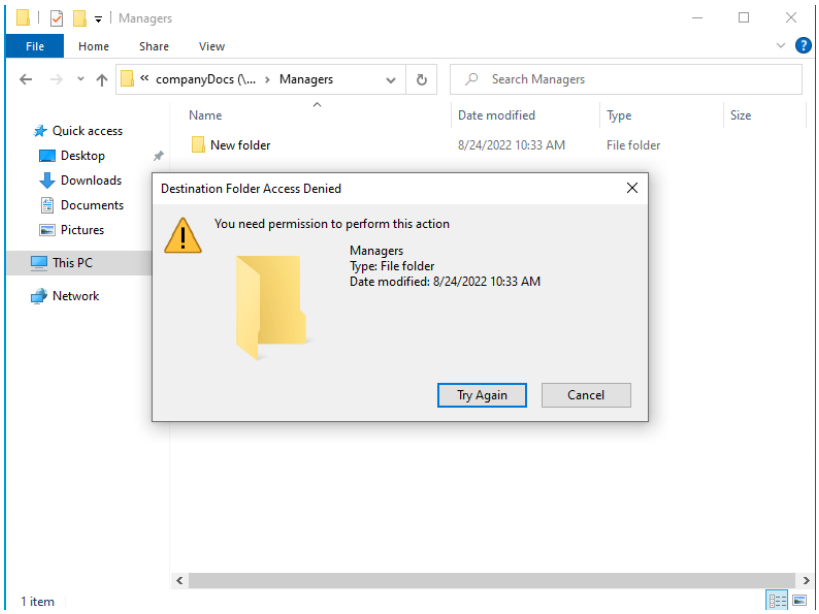
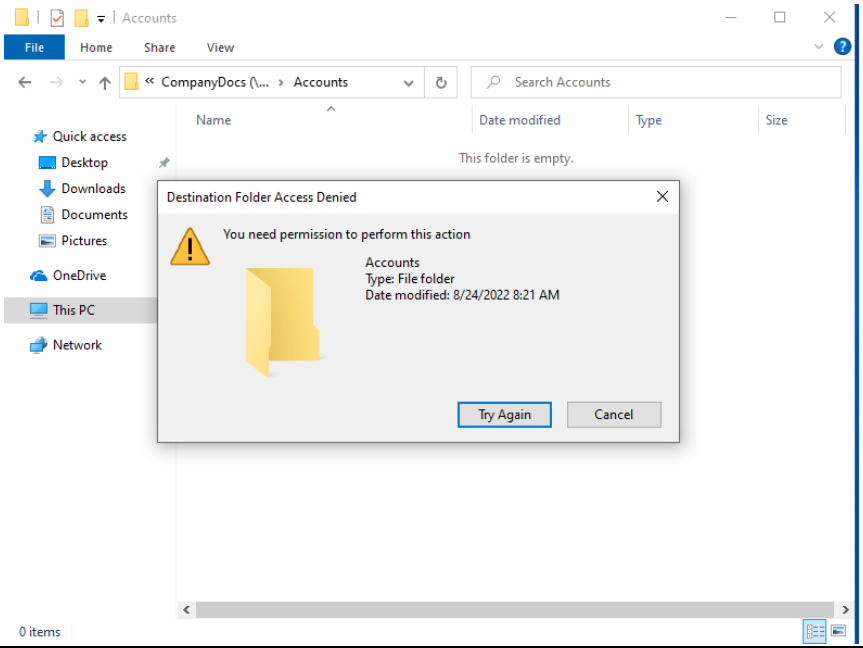
Section number: Four

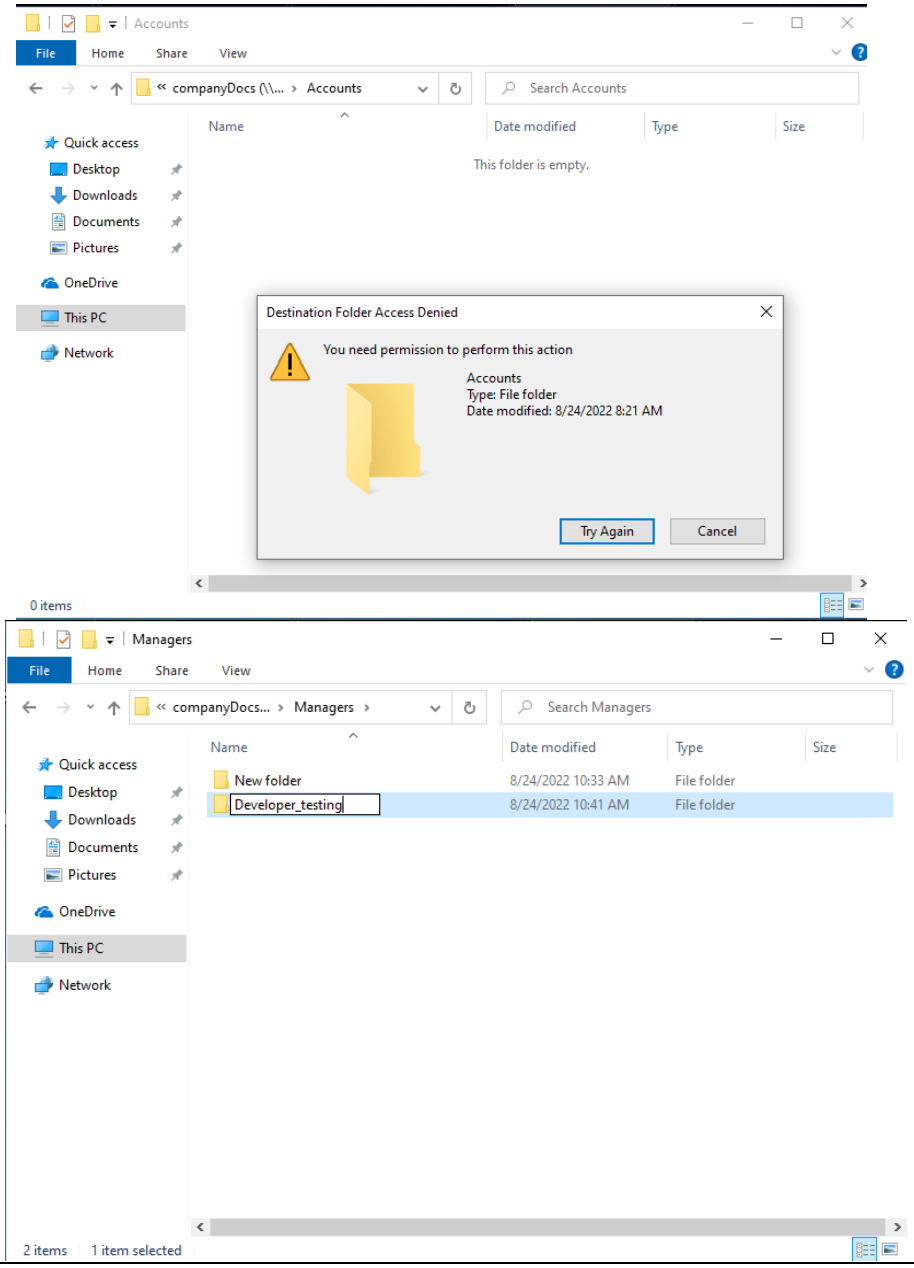
Student name: Dominic Nathan

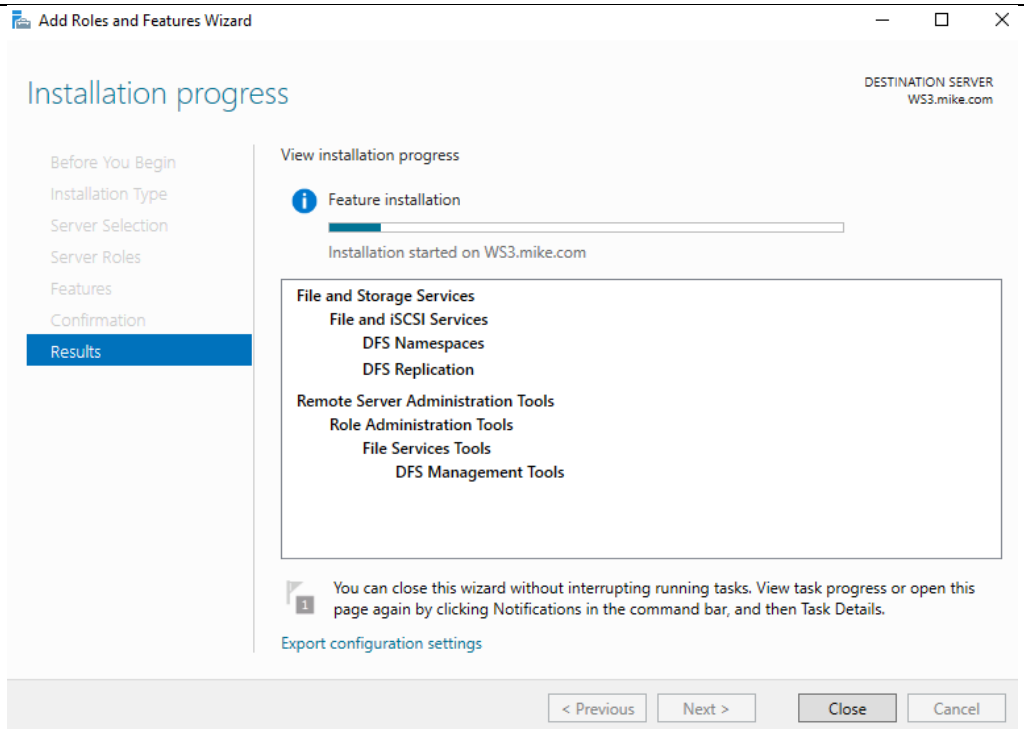
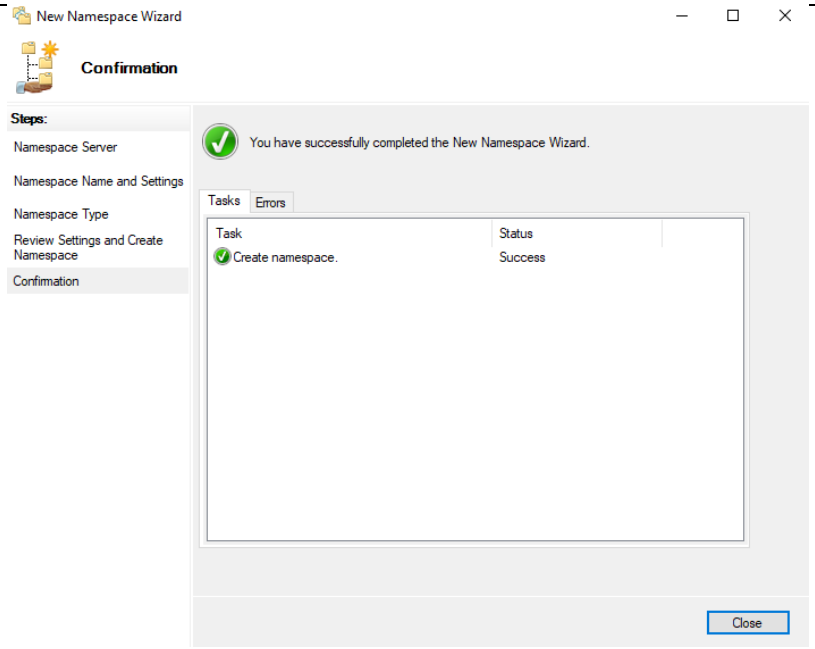
Section Summary	**Implementation details at each step** e.g. screenshots, written steps, value of settings, commands used, results, answers to questions etc where applicable.
Creating folders	Creating folders provides structure and security in an organization by limiting which users and groups have access to specific folders.  Open File explorer -> click PC -> select C: drive -> right click a blank space -> select new -> select folder -> enter folder name.

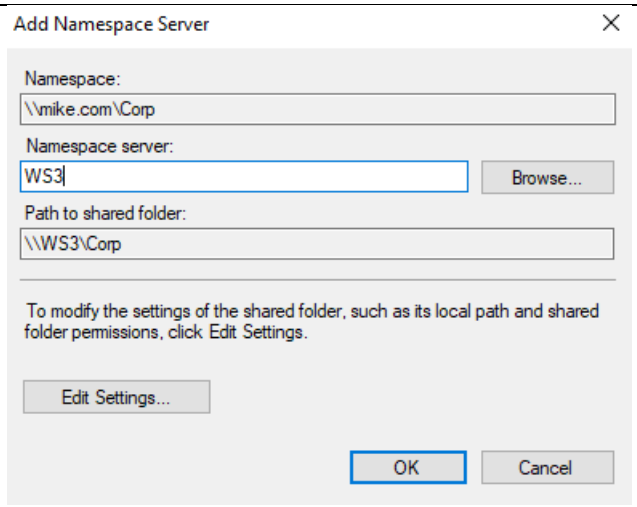
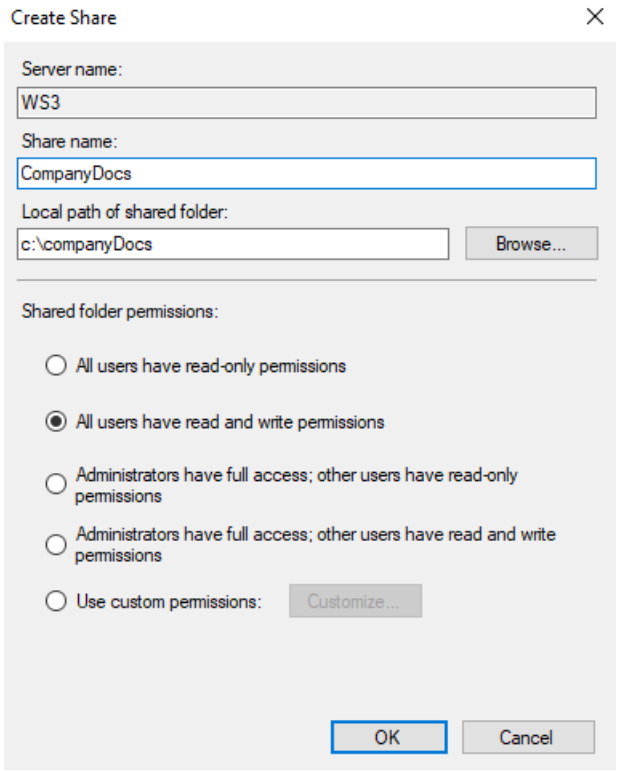
Group permissions	 Right click Managers folder -> select properties -> click security TAB -> click edit -> click add -> enter Group name -> click OK -> select the group you just added -> select what permissions you would like that group to have -> click apply -> click OK -> click OK.

Folder Encryption	 Open File Explorer -> click PC -> click companyDocs folder -> right-click on the managers -> select properties -> click General tab -> Advanced -> Encrypt contents to secure data -> click OK -> click Apply -> click OK.

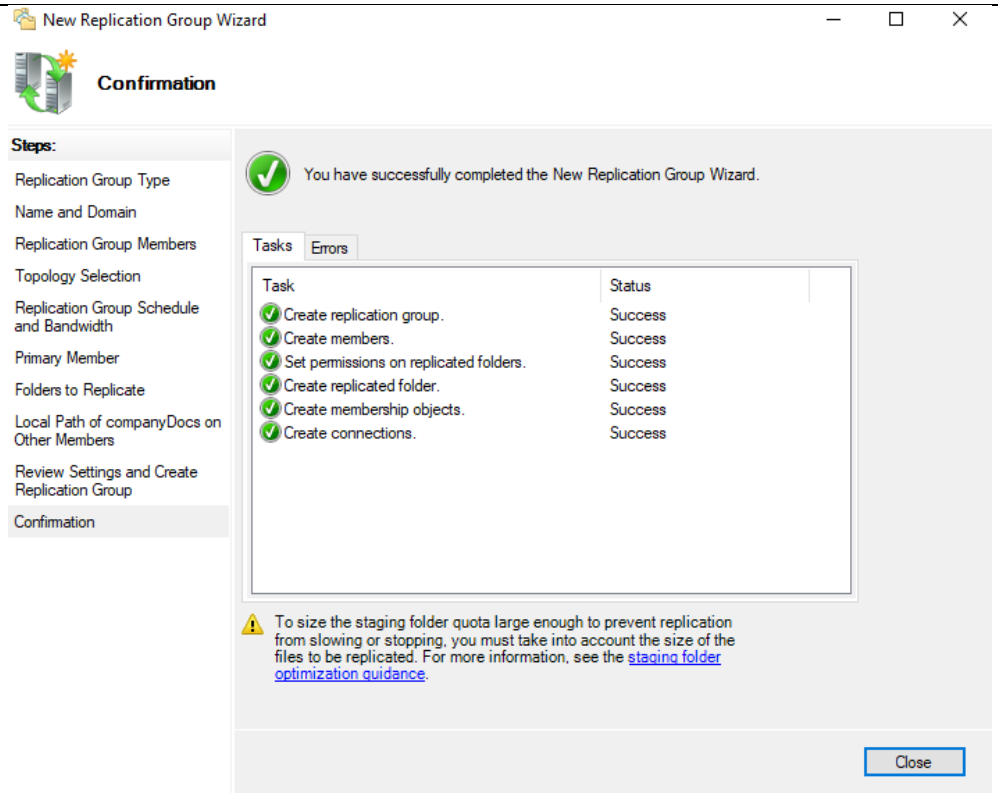
Logged in as Accountant	I'm logged in as the Accountant in this screenshot, and I'm attempting to add a new folder to the Managers folder but am denied access due to the permissions we set earlier. 
Logged in as Manager	I'm logged in as the Manager in this screenshot, and I'm attempting to add a new folder to the Accounts folder but am denied access due to the permissions we set earlier. 

Logged in as Developer	I'm logged in as the Developer in this screenshot, and I'm attempting to add a new folder to the Accounts folder but am denied access due to the permissions we set earlier. I am able to add a new folder to the managers folder as I have “Full control”. 

Installing DFS	 Open server manger -> select add roles & features -> click next -> click next -> click next -> navigate to File and Storage services -> click the down arrow -> click File & iSCI Services -> Select DFS namespaces & DFS replication -> click next -> click next -> click install.
Creating a namespace	 Open server manager -> select tools -> select DFS Management -> right click “Namespaces” -> select create a new Namespace -> Enter server name -> click next -> Name your Namespace -> click next -> select Domain-based Namespace -> click next -> click next -> click create.

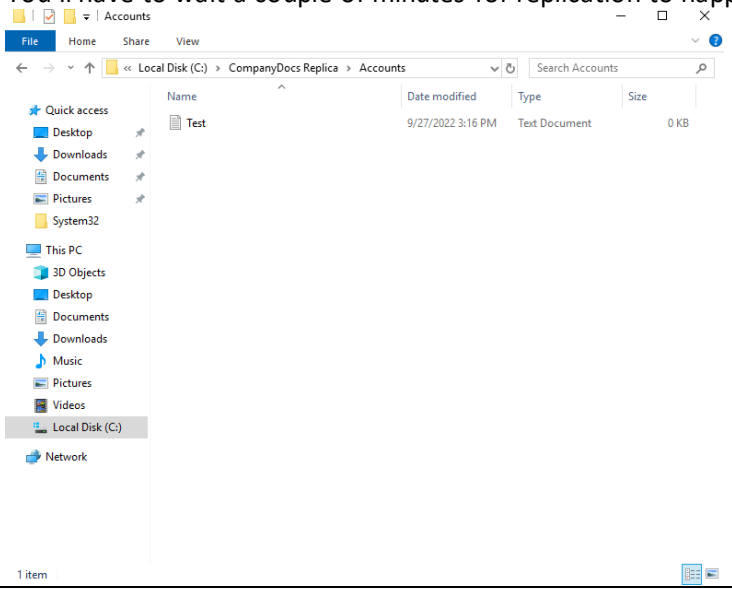
Adding server to a Namespace	 Select Namespaces -> click "Namespace Servers" tab -> click "add Namespace Server " on the righthand side -> enter the name of the server that you wish to add -> click OK
Add folders to Namespace	 Right click Namespace -> select new folder -> click Add -> click browse -> click new shared folder -> click browse and Navigate to your folder -> Enter Share Name -> choose your permissions -> click OK

Adding DFS replication

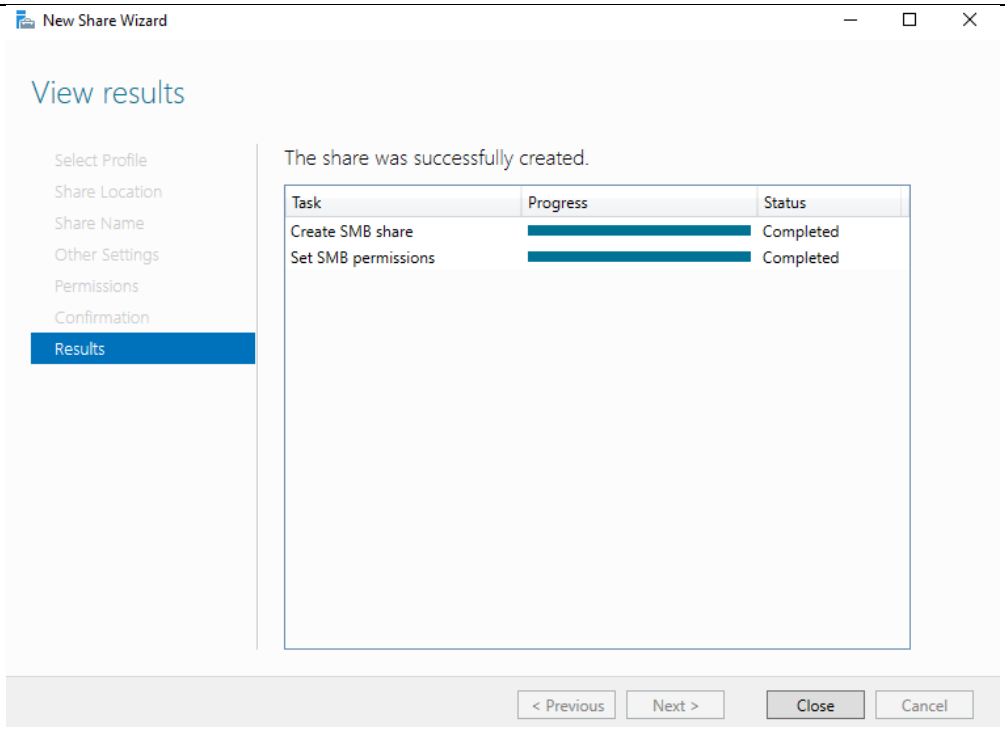


Right click Replication -> select new replication group ->select Multipurpose replication group -> click next -> enter group name -> enter domain name -> click next click add -> enter both of your server names -> click next -> select full mesh -> click next -> click next -> select the server that you wish to replicate -> click add -> select CompanyDocs folder -> click OK -> click next -> click edit -> click Enabled -> click Browse -> click C: drive -> click make new folder -> Enter folder name -> click OK -> click OK –> click next -> click create.

You'll have to wait a couple of minutes for replication to happen

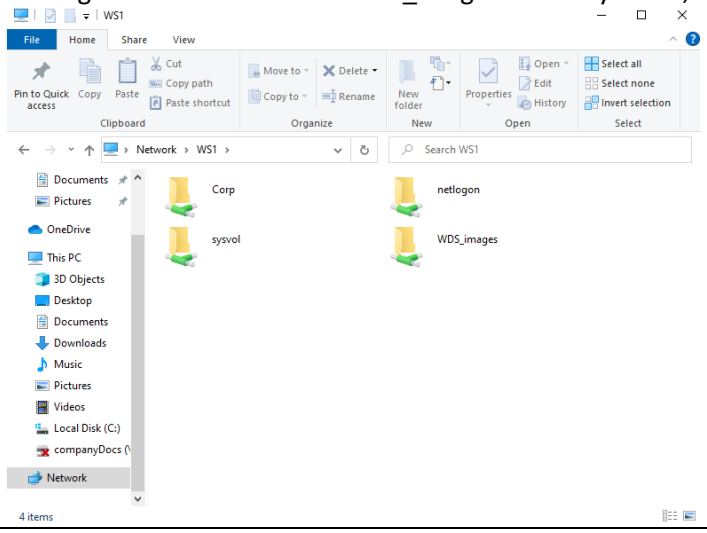


SMB folder sharing

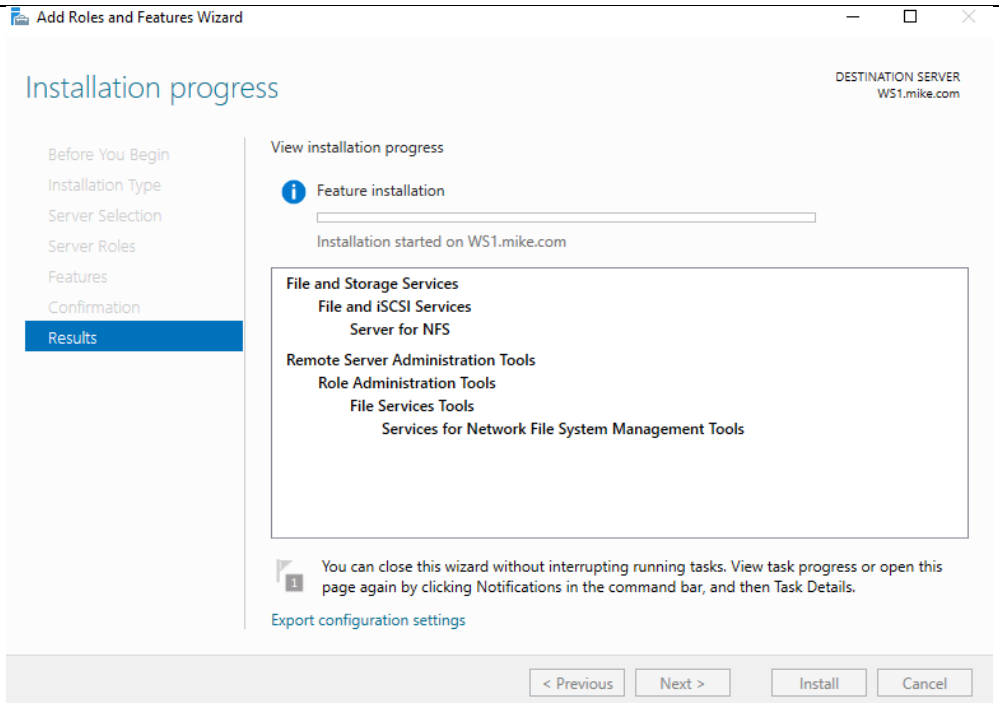


Open server manager -> click File & Storage services -> click tasks -> select new share -> select “SMB Share – Quick” -> click next -> select custom path -> click browse -> navigate to the folder that you wish to share -> select the folder -> click “select folder” -> click next -> click next -> click next -> click create.

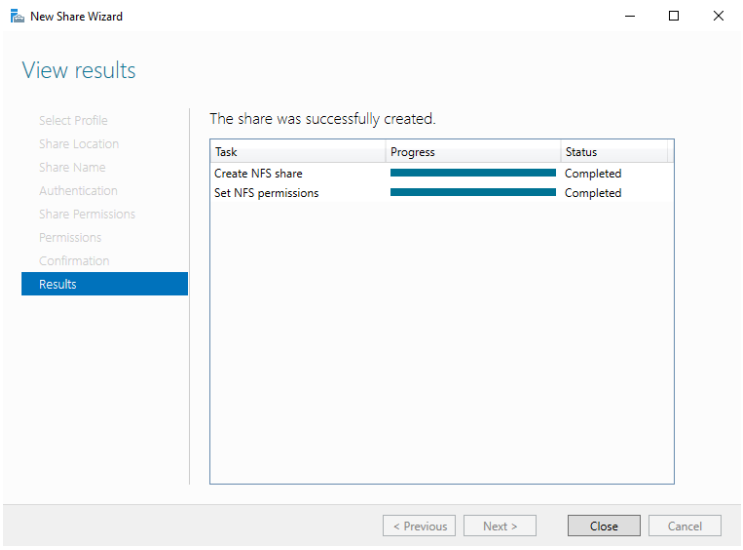
Testing to see if I can access WDS_images from my client, test was successful.



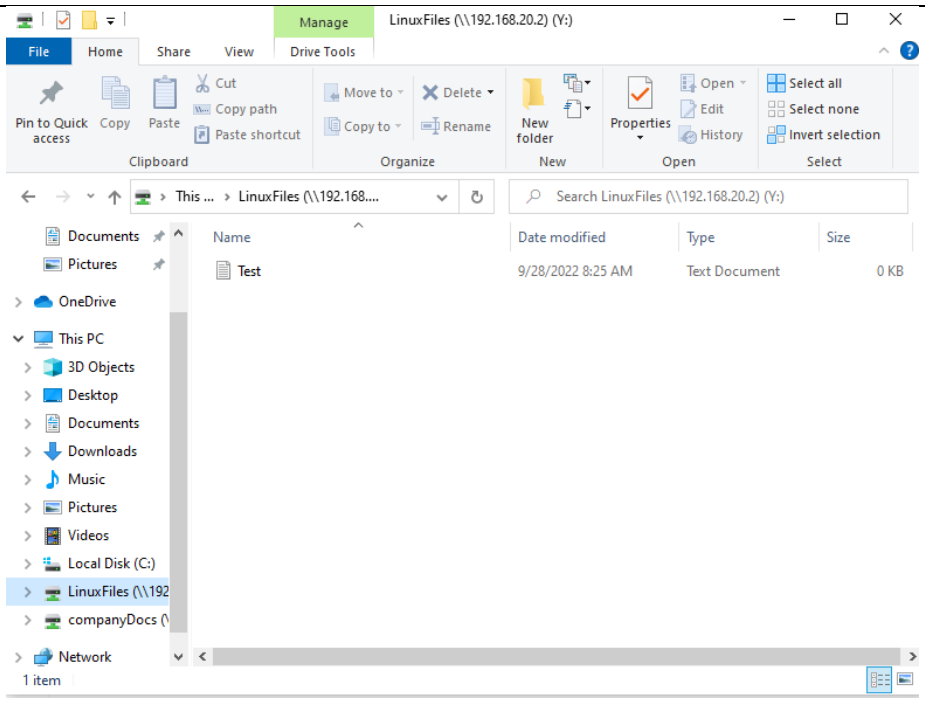
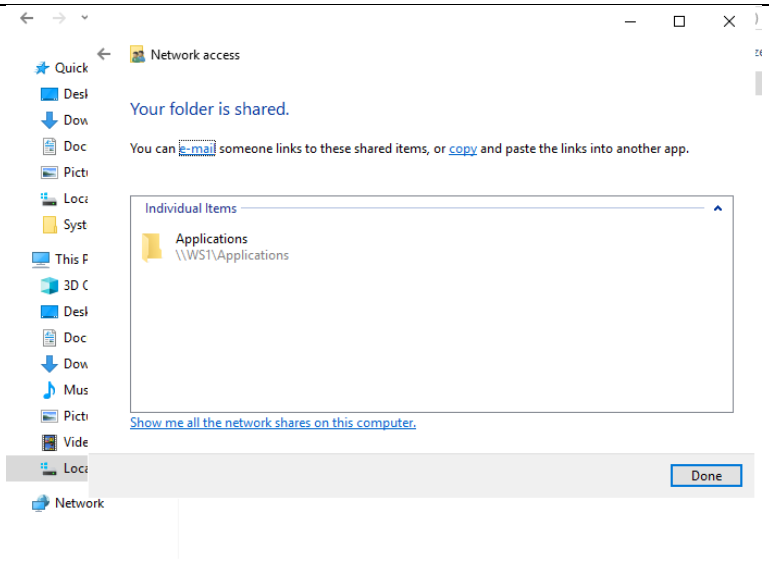
NFS folder sharing

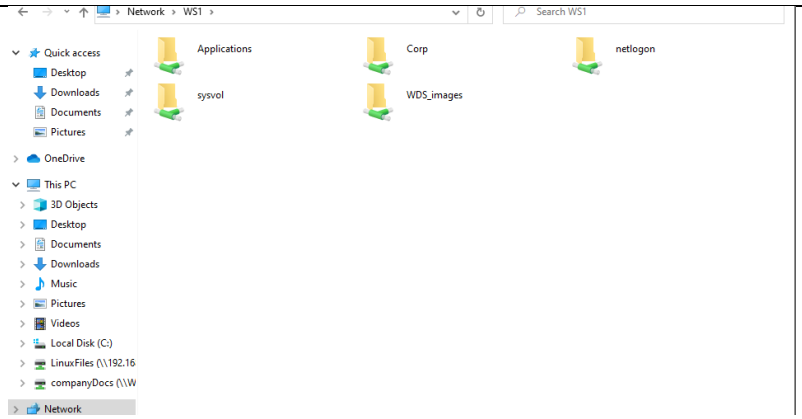


Open server manager -> click manage -> click add roles & features -> click next -> select role-based installation -> click next -> click next -> click File & Storage Services -> click File & iSCI Services -> select Server for NFS -> click next -> click install.

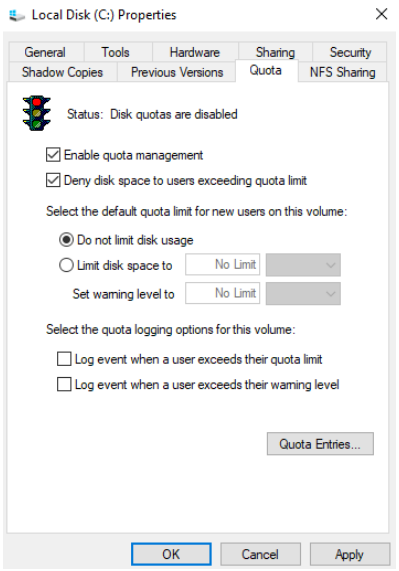
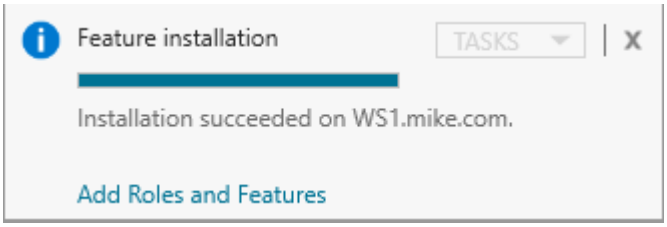
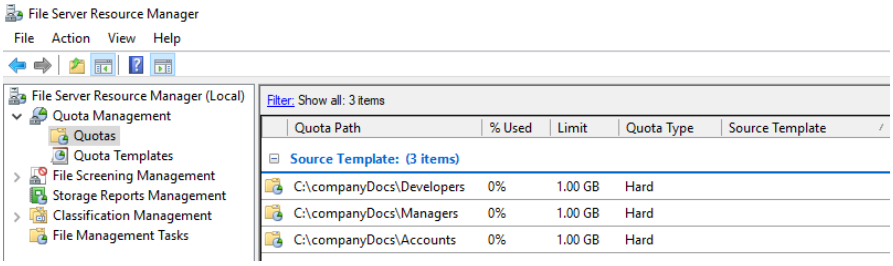


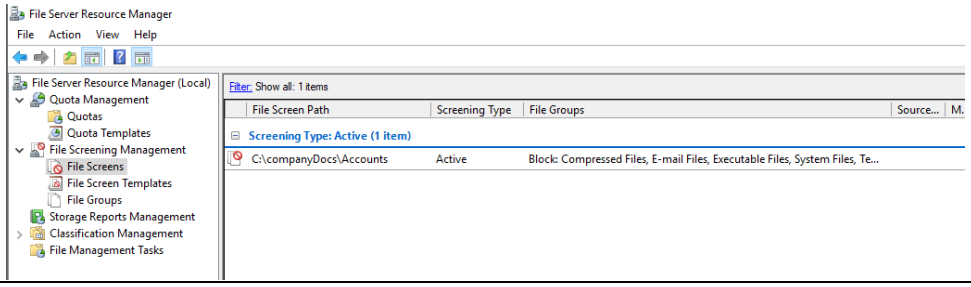
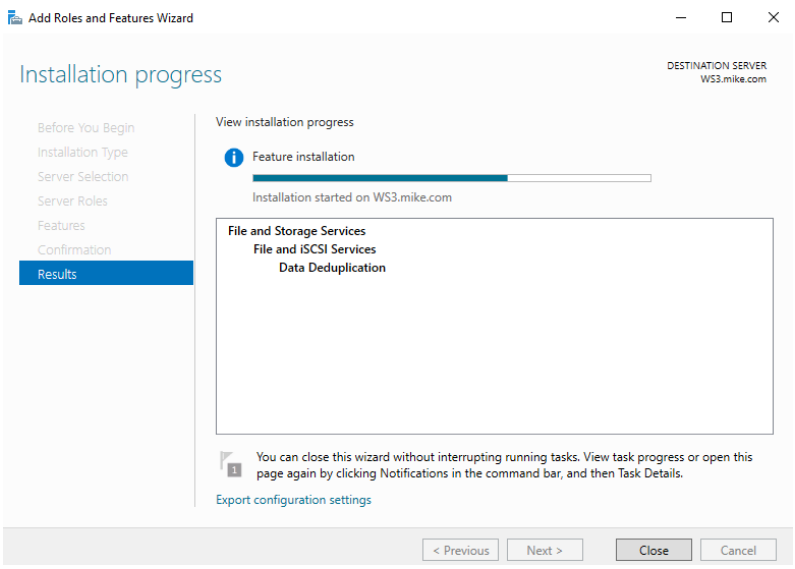
Click File & Storage Services -> click Shares -> click TASKS -> select “NFS Share - quick” -> click next -> select custom path -> select browse -> select your folder -> click “select” folder -> click next -> click next -> select “No server authentication” -> select “Enable unmapped user access” -> click next -> click add -> select host -> enter server name -> select read/write for permissions -> select “allow root access” -> click add -> click next -> click next -> click create.

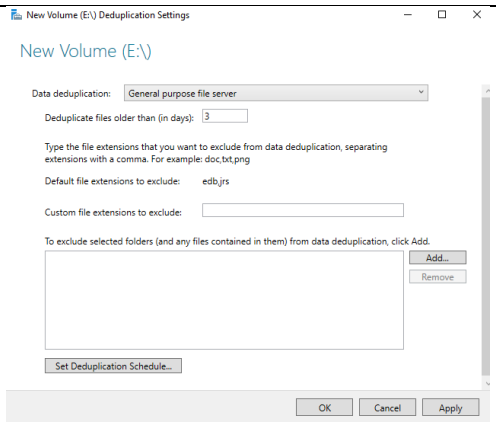
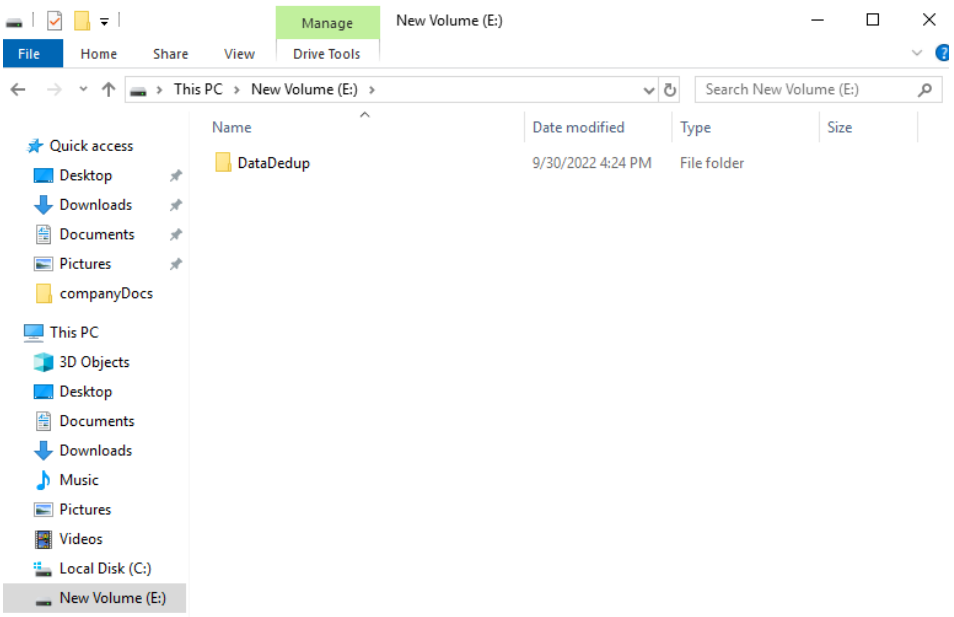
	 Testing connectivity to access “Linuxfiles” folder from client.
AD folder sharing	 Open file explorer -> right click the folder you wish to share -> select give access to specific people -> select everyone -> click add -> change permissions to read/write -> click share -> click Done.

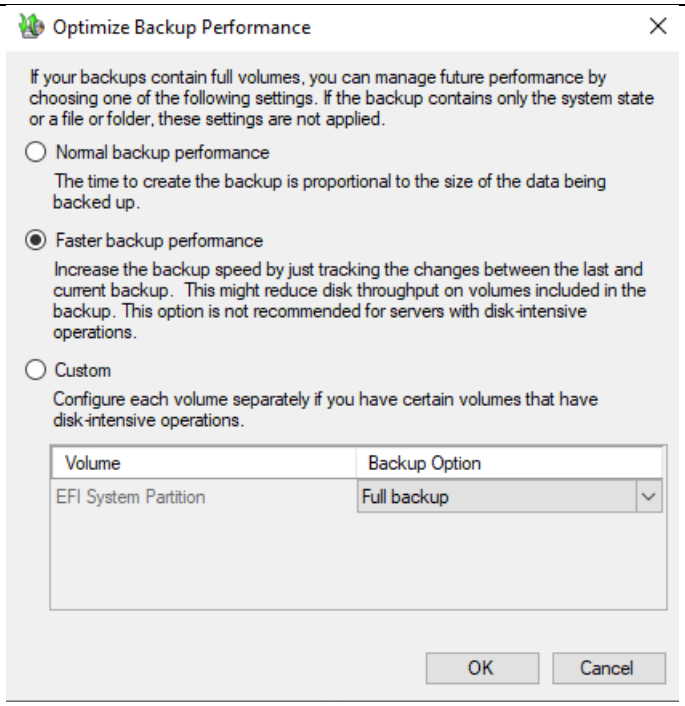


Connection to the Applications folder is successful.

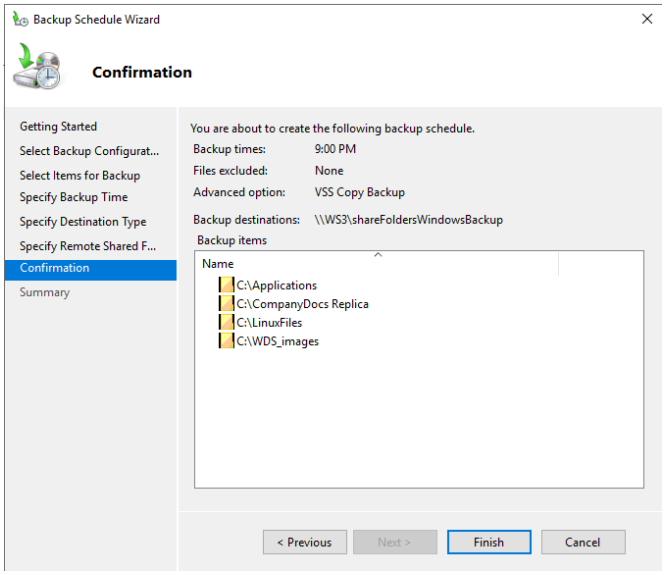
Folder Quota	Open file explorer -> click This PC -> navigate to the folder/folders that you want to enable quota's for -> right click your folder -> select properties -> click Quota Tab -> click enable -> click apply.  Open server manager -> click add roles & features -> click next -> click next -> click next -> click file and storage services -> click File & iSCI Services -> select File Server Resource Manager -> click next -> click next -> click install.  Open tools -> select File Server Resource Manager -> click Quotas -> right click a blank space -> select create new quota -> click browse -> navigate to your folder -> select your folder -> click OK -> select define custom quota properties -> click Custom properties -> set limit to 1GB -> click OK -> click Create -> click Save as template -> click OK 

Filescreen	This allows users to control what type of files can be upload and stored in specific folders. Open file server manager -> right click a blank space -> select create File Screen -> click browse -> select your folder -> select define custom file screen properties -> click Custom properties -> select which type of files you want to allow -> click OK -> click create -> click save as template -> click OK 
Data deduplication	Open server manager -> click add roles & features -> click next -> click next -> click next -> click file and storage services -> click File & iSCI Services -> select Data Deduplication -> click next -> click next -> click install.  Go to disks in server manager -> right click you inactive drive -> select create new volume -> click next five times -> click data deduplication -> select general purpose file server -> click apply.

	 
WS Backup	Open server manager -> click add roles and features -> navigate to features -> scroll down the list to windows backup -> select windows backup -> click next -> click install.



Once installed open tools -> select windows server backup -> click configure performance settings -> select Faster backup performance -> click OK -> click Backup Schedule -> click next -> select custom -> click add items -> select the files and folders that you want -> click next -> select once a day -> click next -> select backup to network shared folder -> click next -> enter pathway -> enter credentials -> click next -> click finish.



List At the three most useful Internet resources that you used (provided by the tutor)

https://www.youtube.com/watch?v=37Kx9oiJKTQ https://www.youtube.com/watch?v=gdmq5qOrVck
https://www.youtube.com/watch?v=yDvbOsJIFpE

List all (at least three) Internet resources that you found and used that were not provided by the tutor)

https://docs.vmware.com/en/VMware-Fusion/12/com.vmware.fusion.using.doc/GUID-4BE3F3B7-9579-4C30-B35E-5BC41267CDFD.html
https://support.microsoft.com/en-us/windows/map-a-network-drive-in-windows-29ce55d1-34e3-a7e2-4801-131475f9557d
https://docs.rackspace.com/support/how-to/troubleshooting-dfs-replication/

Reflect on at least two significant problems you came across during the implementation of this section and the solution you found. Use at least five sentence to describe each problem and five sentences to describe each solution. Demonstrate your critical thinking and problem-solving abilities.

Problem	Solution
I had an issue with DFS where it wasn't replicating. It was failing to replicate because of the permissions that were set.	I had to change the permissions for one of my user groups for it to work.
I had an issue where I couldn't see my NFS shared files as I hadn't mapped a network drive to it's location.	My solution was to map a network drive on WS3 to be able to see the folder, which worked allowing me complete access to the folder.