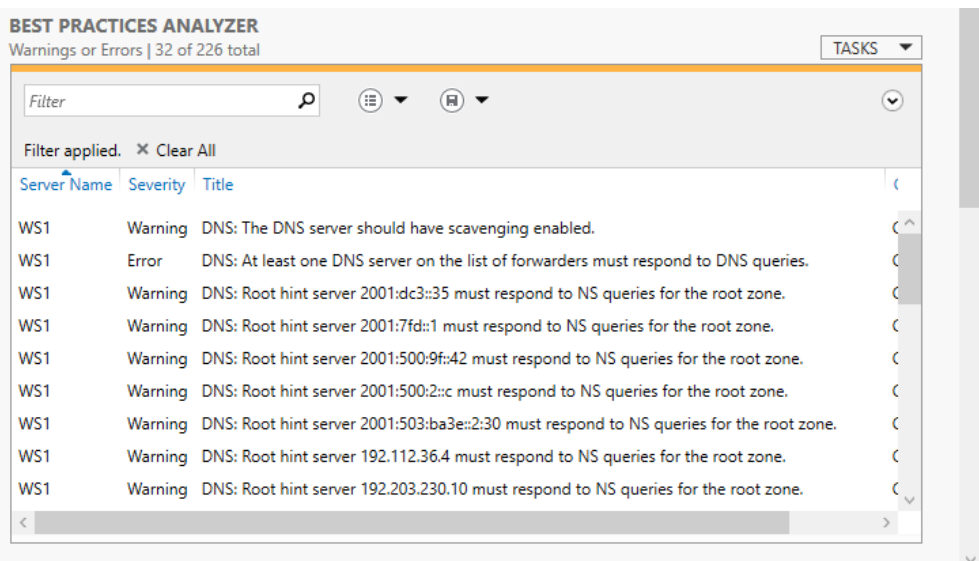


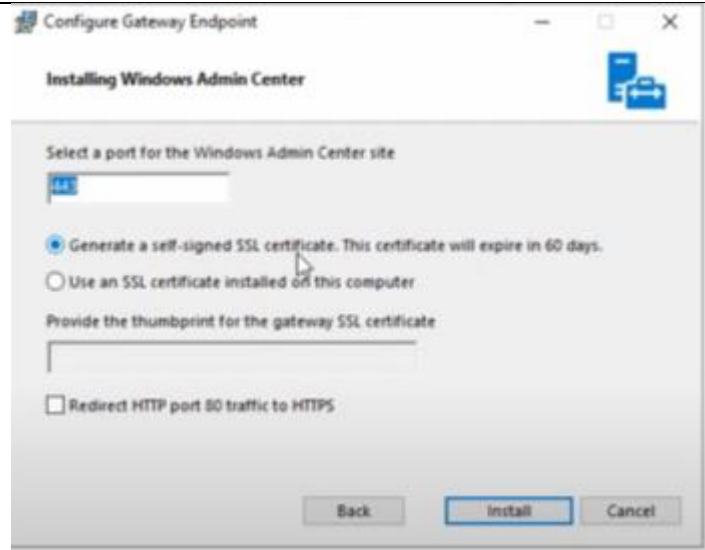
INFO603 Practical project documentation template (Engineering journal)

Section number: Three

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.
Performing a BPA scan	<p>A BPA scan displays any warnings or errors related to the server, including the server's name, severity of the warning/error, and a title/short description.</p>  <p>Open Server manager -> Select a role or group -> double click the role or group -> Scroll down till you see BPA (Best Practices Analyzer) -> click tasks in the right-hand corner -> select start BPA scan -> click start BPA scan -> wait a couple of minutes for the information to be displayed.</p>

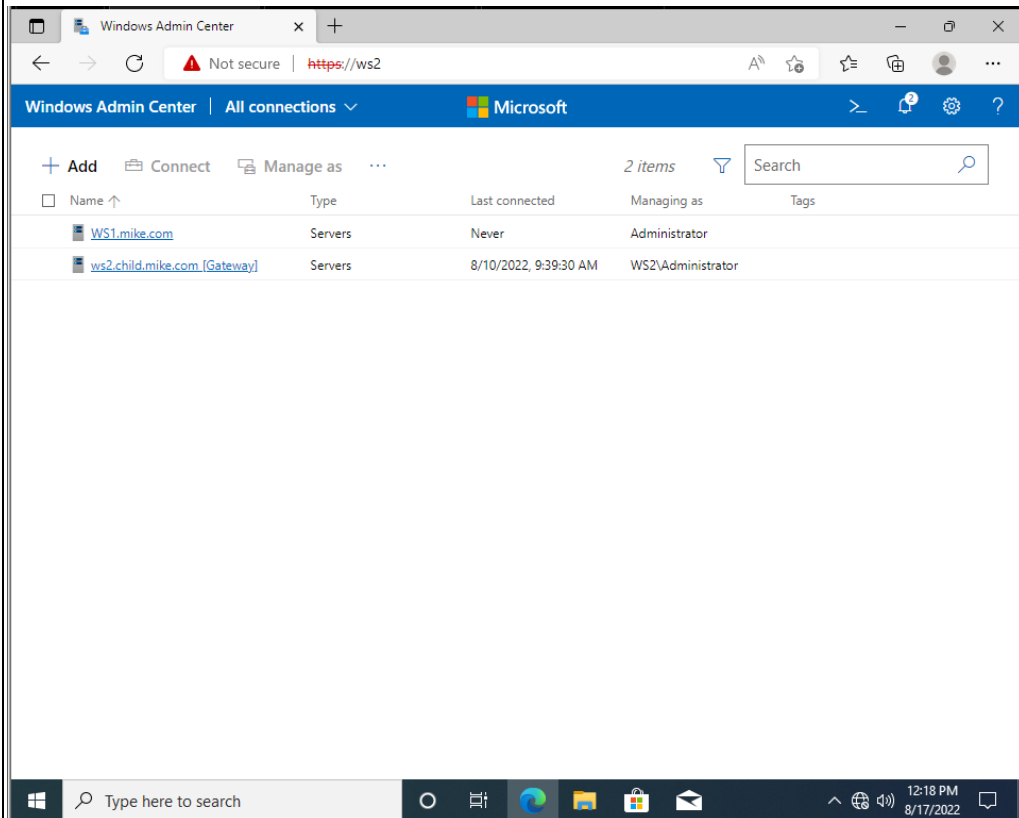
Windows
Admin center



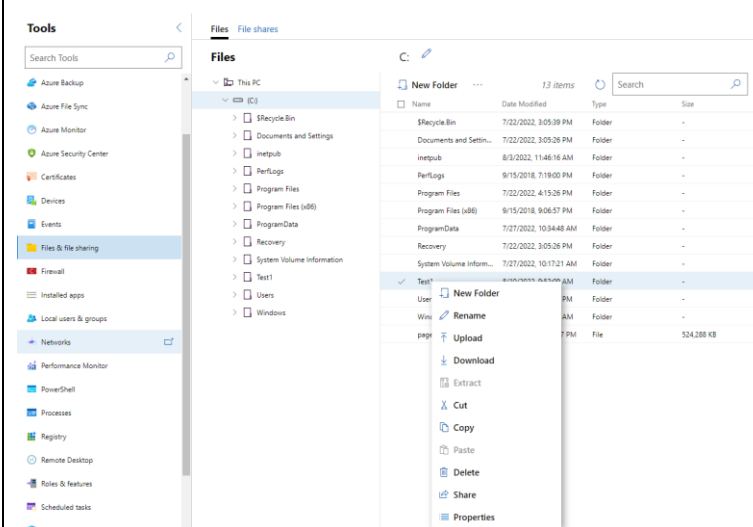
Open google chrome -> type windows admin center -> click "Windows Admin center | Microsoft Docs" -> Click "Get it here" -> navigate to file explorer -> double click "Windows Admin Center Setup" a setup wizard will open -> accept terms & conditions -> click next -> select "Use Microsoft updates when I check for updates" -> click next -> click next again -> click next again -> click install -> it will generate a URL save this for later -> click Finish

Adding WS1 to WAC

W Windows admin center allows users to customize and control multiple servers/PCs via a web browser GUI. Some features include managing firewalls, downloading/editing files, and managing/editing groups and roles.



Click add -> click add server -> enter server name -> select use another account for this connection -> enter credentials -> click add with credentials -> click add.



Click WS1 -> select files & sharing -> click (C:) drive -> navigate to the file you wish to download -> right click -> select download.

Removing
deleting WS1
from WAC

<

Remove Connection(s)

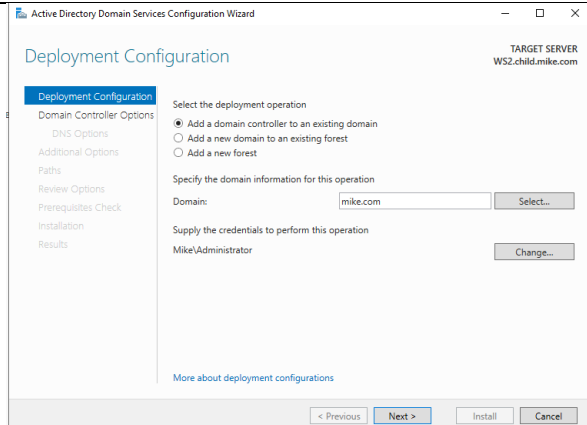
Are you sure you want to remove ws1 from the connections list?

Yes

No

Click the check box next to WS1 -> select remove -> then click Yes.

Making WS2 a Domain controller



Active Directory Domain Services Configuration Wizard

Deployment Configuration

TARGET SERVER
WS2.child.mike.com

Select the deployment operation

- ☒ Add a domain controller to an existing domain
- ☐ Add a new domain to an existing forest
- ☐ Add a new forest

Specify the domain information for this operation

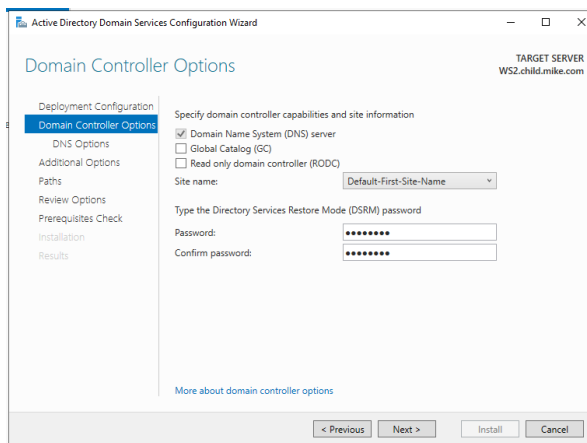
Domain:

Supply the credentials to perform this operation

Mike/Administrator

[More about deployment configurations](#)

Click add roles & features -> role-based -> click next -> for sever selection select WS2 -> click Active directory domain services -> navigate to the end and install AD DS -> once installed select notifications -> click promote this server to a domain controller -> select add existing domain -> enter domain name -> enter credentials ->



Active Directory Domain Services Configuration Wizard

Domain Controller Options

TARGET SERVER
WS2.child.mike.com

Specify domain controller capabilities and site information

- ☒ Domain Name System (DNS) server
- ☐ Global Catalog (GC)
- ☐ Read only domain controller (RODC)

Site name:

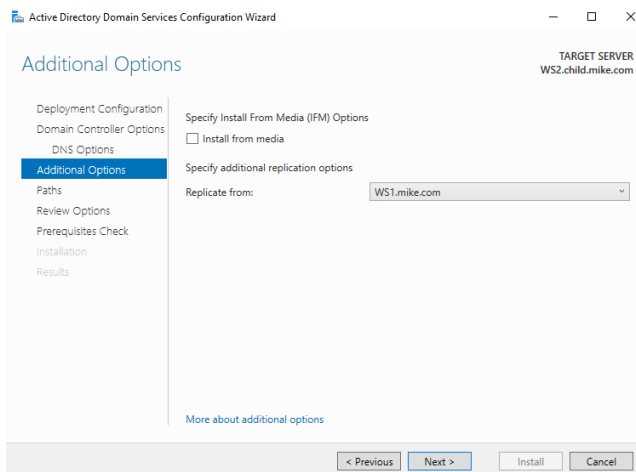
Type the Directory Services Restore Mode (DSRM) password

Password:

Confirm password:

[More about domain controller options](#)

Click next -> uncheck "Global Catalog" -> Enter DRSM password -> click next -> click next ->



Active Directory Domain Services Configuration Wizard

Additional Options

TARGET SERVER
WS2.child.mike.com

Specify Install From Media (IFM) Options

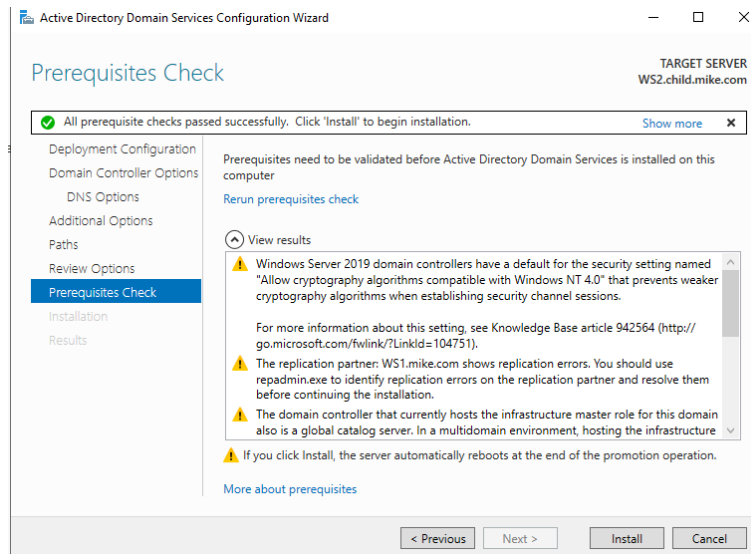
- ☐ Install from media

Specify additional replication options

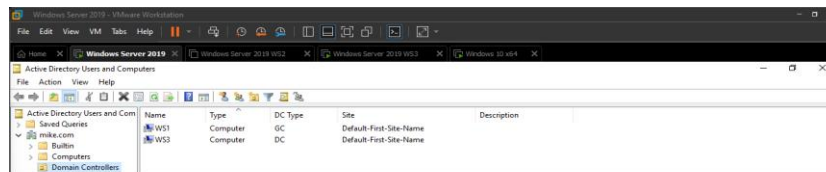
Replicate from:

[More about additional options](#)

Select replicate from WS1.mike.com -> click next -> click next -> click next -> click install.

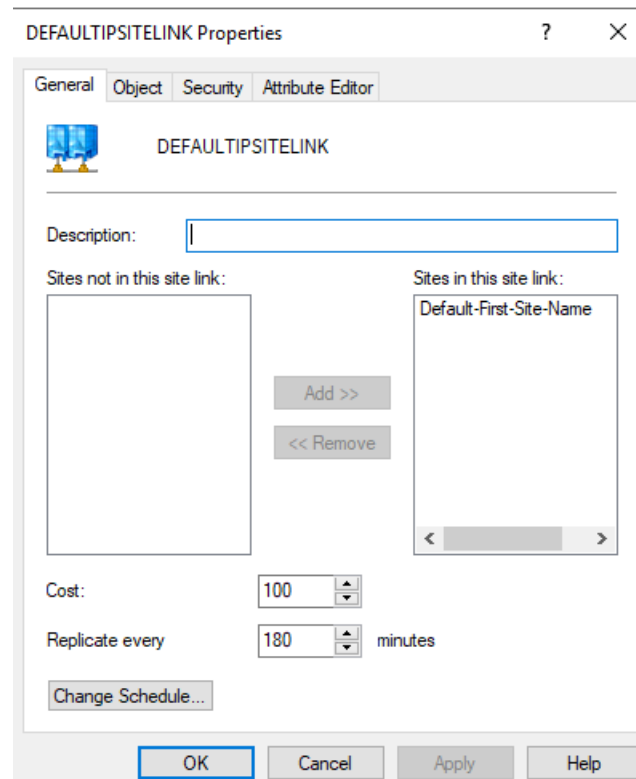


Open AD Users & Computers -> click domain controllers. You should now be able to WS2 located under the same domain as WS1. Both servers are now acting as domain controllers for mike.com.



Replication

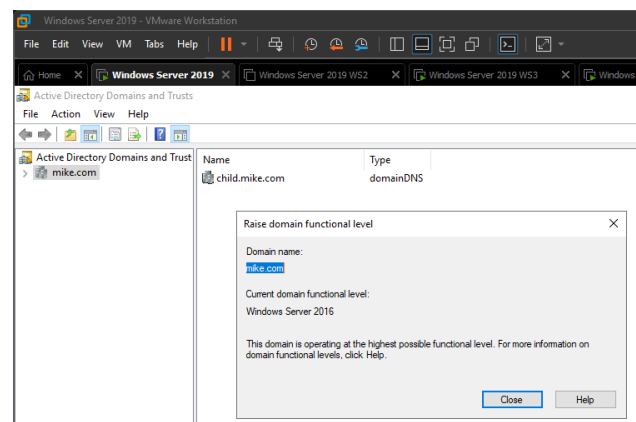
Replication ensures that the AD database is copied from one site to another every 180 minutes.



Open tools -> click AD sites & services -> click sites -> click inter-site transport -> click IP -> Right click DEFAULTIPSITELINK -> select properties -> select “replicate every” -> set to 180 minutes -> click apply -> click OK

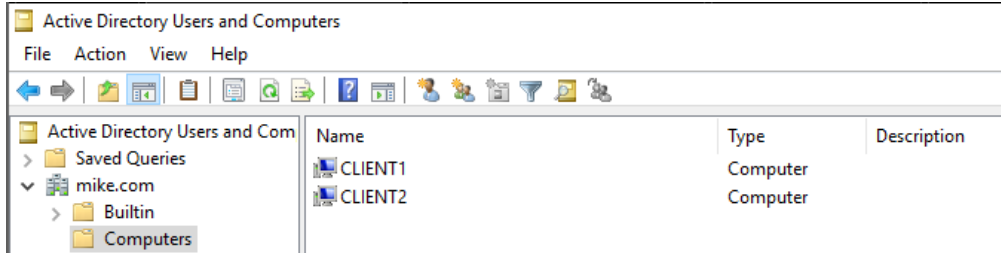
Domain levels

Open AD Domains & Trusts -> right click domain name -> select “Raise domain functional level”.



Clients

Open AD Users & Computers -> click computers. You should now see both CLIENT1 and CLIENT2 located under the mike.com domain.



Name	Type	Description
CLIENT1	Computer	
CLIENT2	Computer	

Adding OU

Open AD Users & Computers -> right click domain -> select new -> select organization unit -> enter name -> click OK

The screenshot shows the 'Developers Properties' dialog box with the 'General' tab selected. The 'Group name (pre-Windows 2000):' field contains 'Developers'. The 'Description' and 'E-mail' fields are empty. Under 'Group scope', the 'Universal' radio button is selected. Under 'Group type', the 'Security' radio button is selected. The 'Notes' field is empty. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

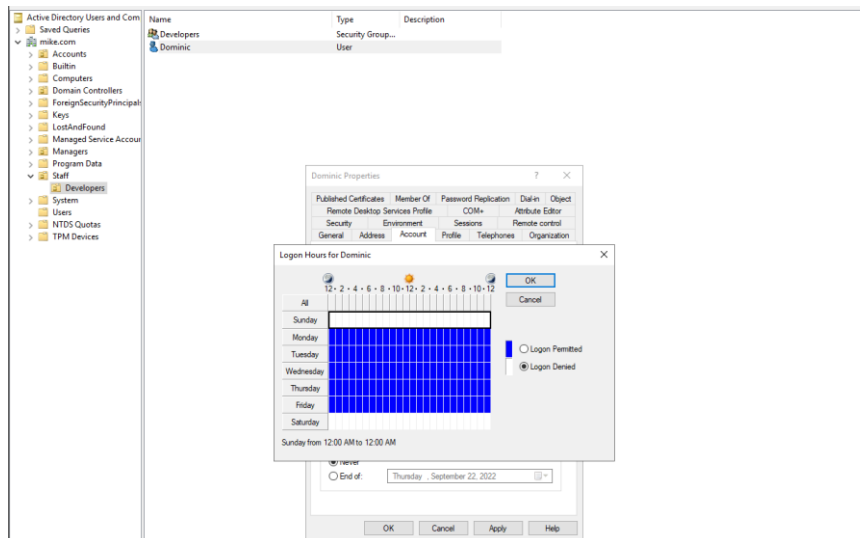
Right click folder -> select new -> select organization unit -> enter name -> click OK -> click add group -> enter group name -> set scope to universal -> click members tab -> click add -> enter users name -> click check names -> click OK.

The screenshot shows the 'Developers Properties' dialog box with the 'Members' tab selected. The 'Members' list contains one entry: 'Dominic' with the path 'mike.com/Staff/Developers'. Below the list are 'Add...' and 'Remove' buttons. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

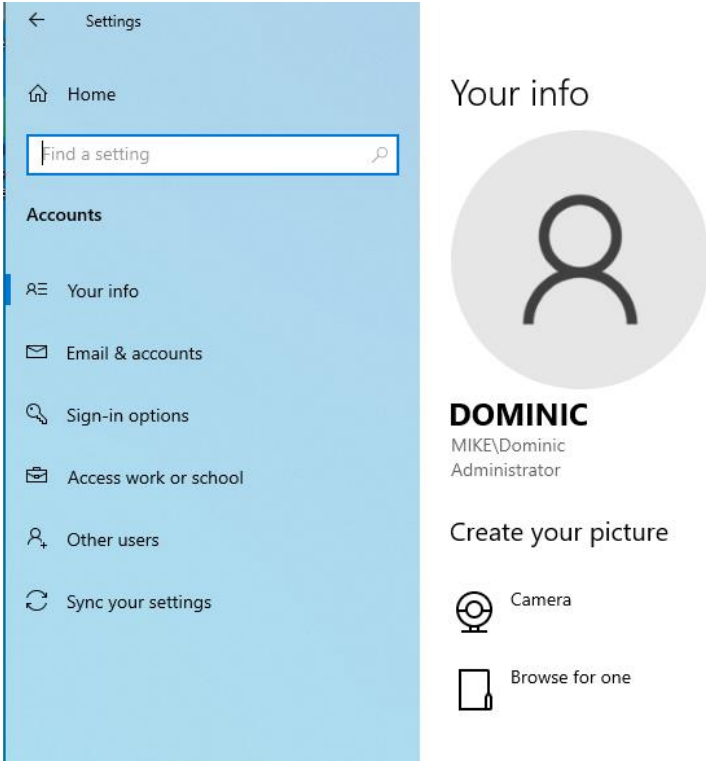
The screenshot shows the 'Domain Controllers Properties' dialog box with the 'Members' tab selected. The 'Members' list contains three entries: 'Dominic' (mike.com/Staff/Developers), 'WS1' (mike.com/Domain Controllers), and 'WS3' (mike.com/Domain Controllers). The 'Dominic' entry is highlighted. Below the list are 'Add...' and 'Remove' buttons. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

Developer Restrictions

This enables administrators to control/restrict the hours and days that users have access to systems and resources. Limiting the hours that developers can work can help to mitigate the damage done when an account is compromised.



Open tools in server manager -> select Active Directory users and computers -> expand the domain -> select staff -> developers -> select the user -> right click the user -> select properties -> select the account tab -> click logon Hours -> select the days/ hours you want to restrict -> click disable -> click OK -> click Apply -> click OK

User Login	<p>You can now see that the client VM has been logged in under the user “Dominic”, this user is part of the staff -> developers’ group.</p>  <p>Open settings -> click accounts -> select Your info.</p>
------------	--

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

https://www.rebeladmin.com/2015/07/how-to-enable-universal-group-membership-caching-ugmc/
https://www.youtube.com/watch?v=E39_MzvCFXA
https://www.youtube.com/watch?v=cETbT22TWEE

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

https://www.youtube.com/watch?v=pVWg_Mwz5aY&ab_channel=MSFTWebCast
https://www.youtube.com/watch?v=umwxMaDwVk8&ab_channel=ROHITTECH
https://community.spiceworks.com/topic/2108288-error-joining-domain-spn-value-provided-for-addition-modification-is-not-unique

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 ran into an error whilst trying to join the two domains together. "Error joining domain -SPN value provided for addition/modification is not unique".	<p>I spent several hours reading articles and watching YouTube videos with no success because there was little documentation. Only a few websites provided a solution. The solution I tried also did not work.</p> <p>I devised my own solution and set up a new server with DHCP and DNS, then linked the two servers together with no problems.</p>
I struggled to add restrictions to my developer group, when restricting what days they could work.	My solution was to watch a couple of YouTube videos demonstrating how to navigate to the logon hours. Which allowed me to change when the developers could access their system & resources.