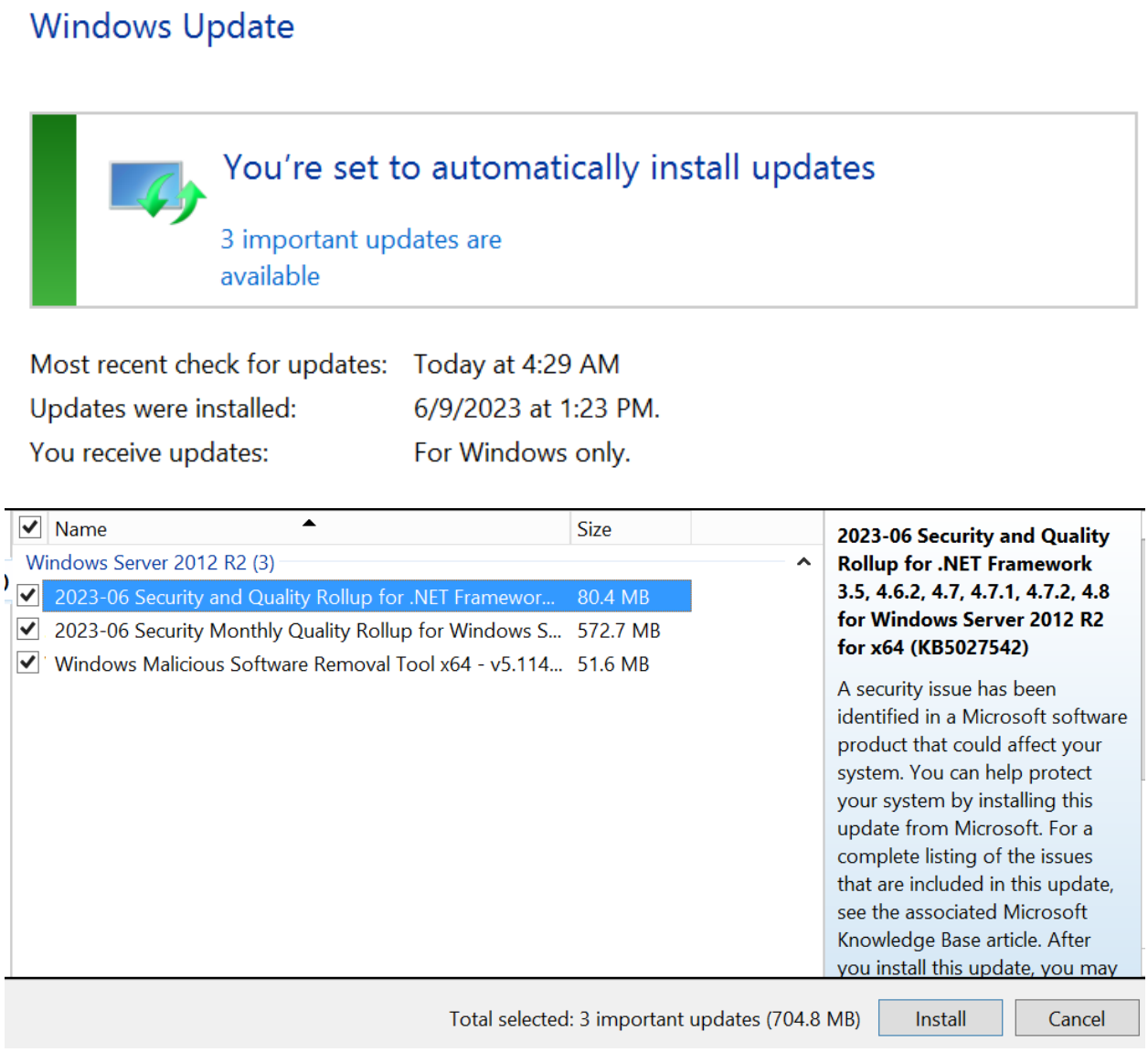
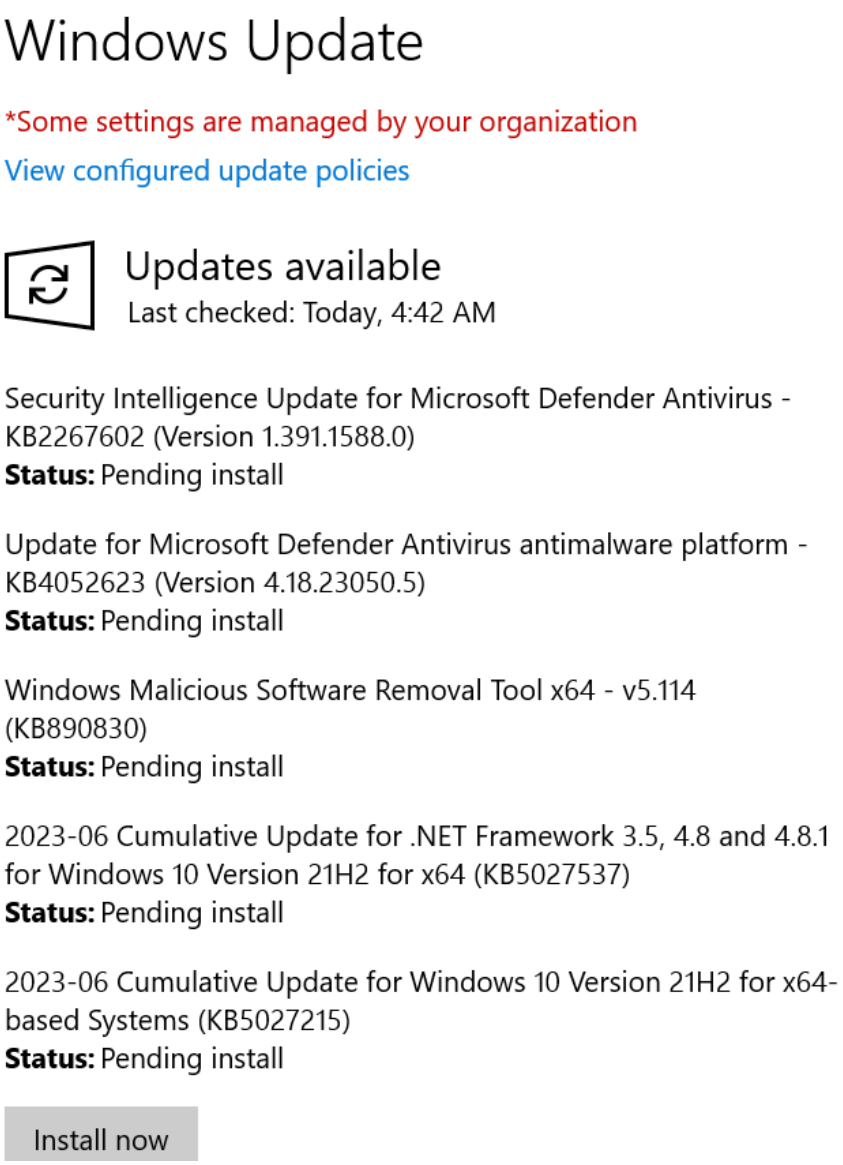
CNT4603 Assignment 4 - Fun With Active Directory

Ryan Rowe

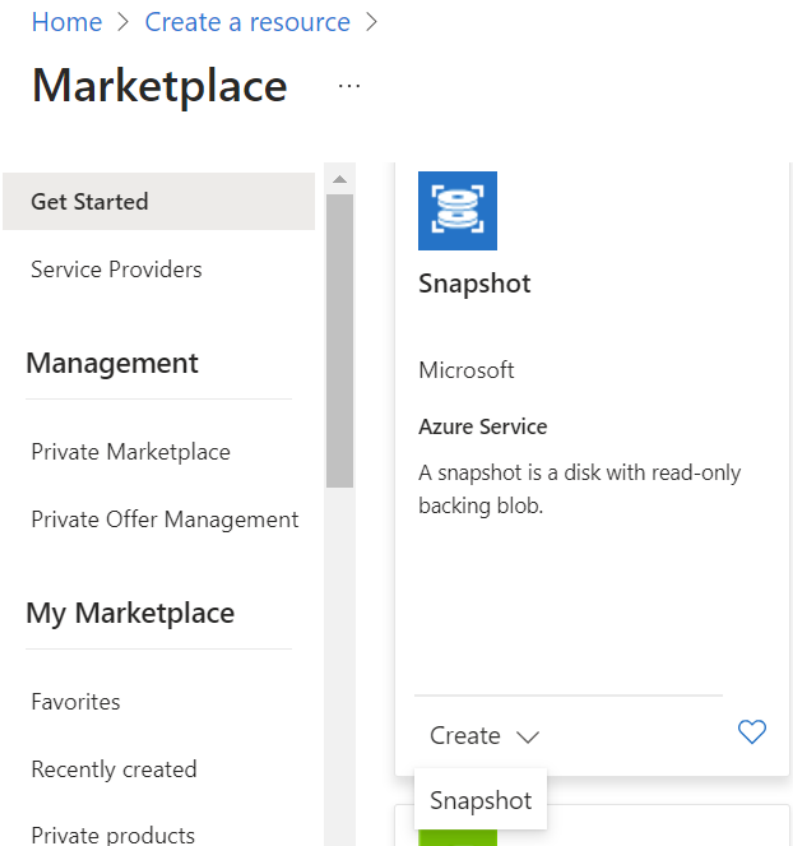
6/16/2023

1. Before getting into the meat of the assignment, I made sure to check that my windows systems were up to date. On the 2012 server, I clicked local server -> last checked for updates -> check for updates. 3 were available, so I installed them and restarted the machine. On the 2010 machine, I navigated settings -> Update & Security and I installed the updates available and restarted the machine.





2. To take a snapshot of the windows 2012 machine, I went to the Azure portal, selected “Create a resource,” selected snapshot, and filled out the rest of the information, a lot of which is default settings. The name of the snapshot is “Windows2012_snapshot.”



Create snapshot

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * : Azure for Students

Resource group * : Summer2023

Create new

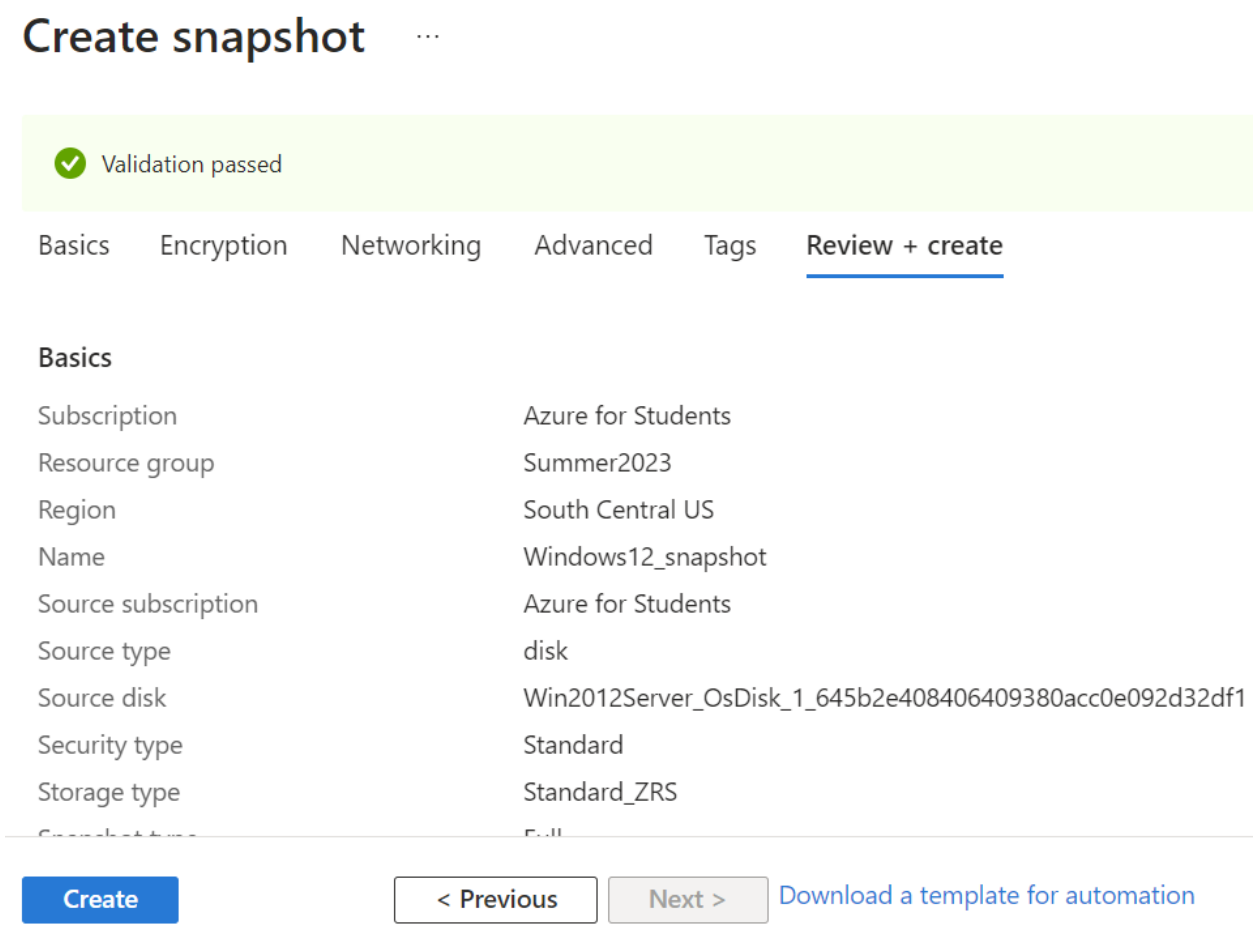
Instance details

Name * : Windows12_snapshot

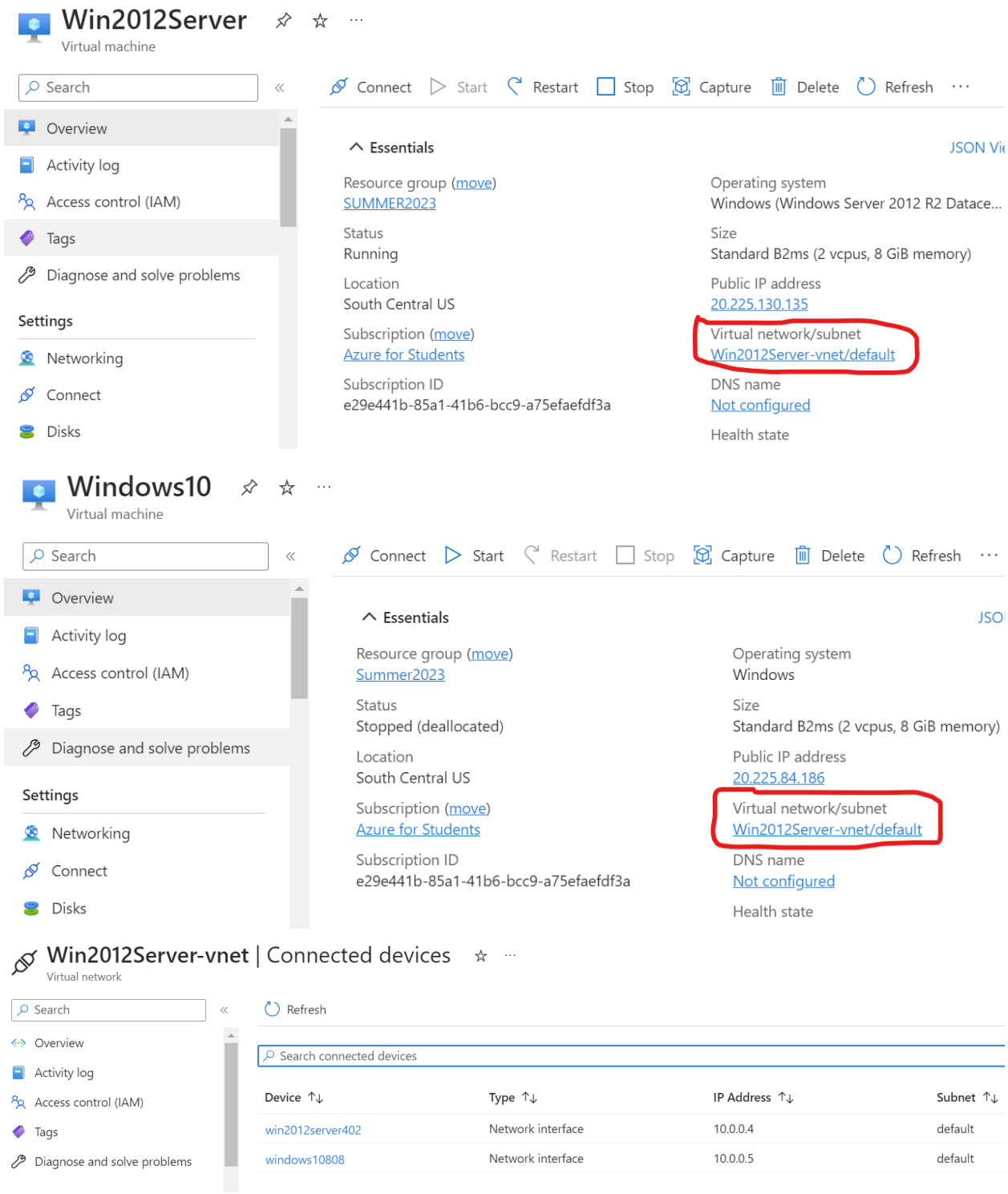
Region * : (US) South Central US

Snapshot type * :

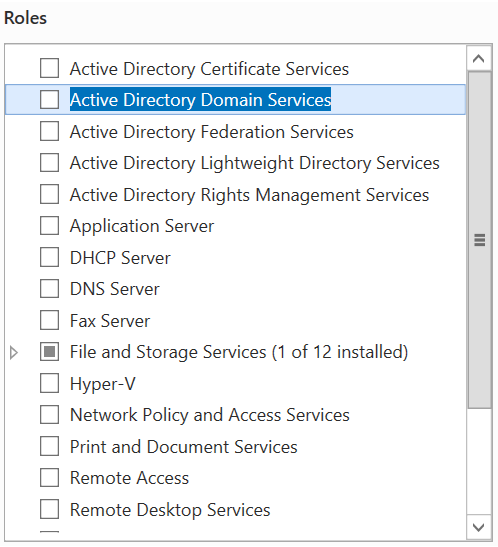
- (●) Full - make a complete read-only copy of the selected disk.
- ( ) Incremental - save on storage costs by making a partial copy of the disk based on the difference between the last snapshot.

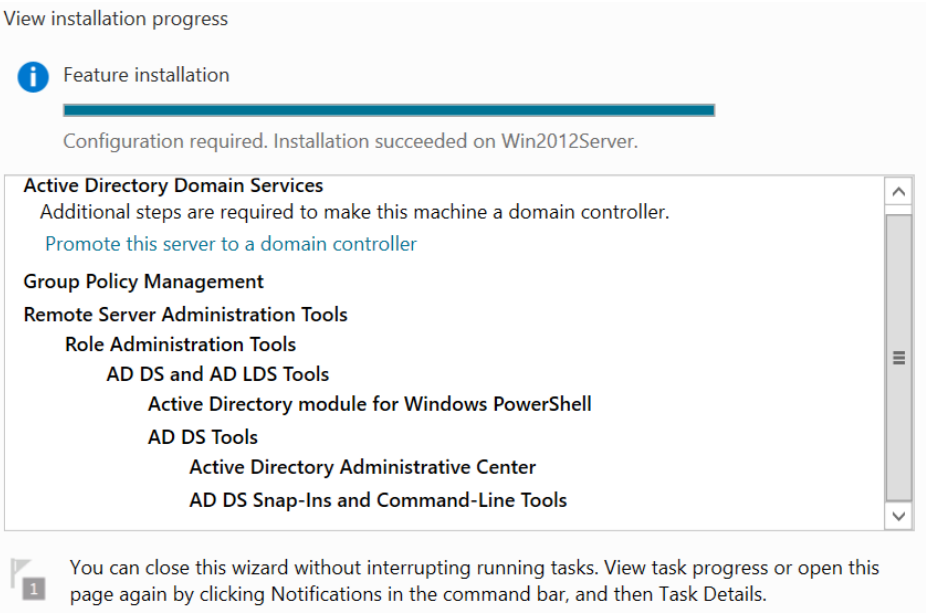


3. To make sure both machines were on the same local area network (LAN), I checked the virtual network/subnet of both. They both are on the “Win2012Server-vnet/default” subnet, so I know the machines are on the same LAN. In addition, when I clicked on the subnet and looked at the connected devices, both machines were listed.

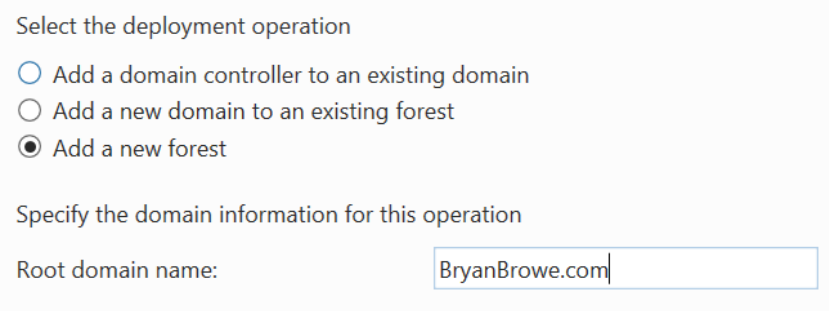


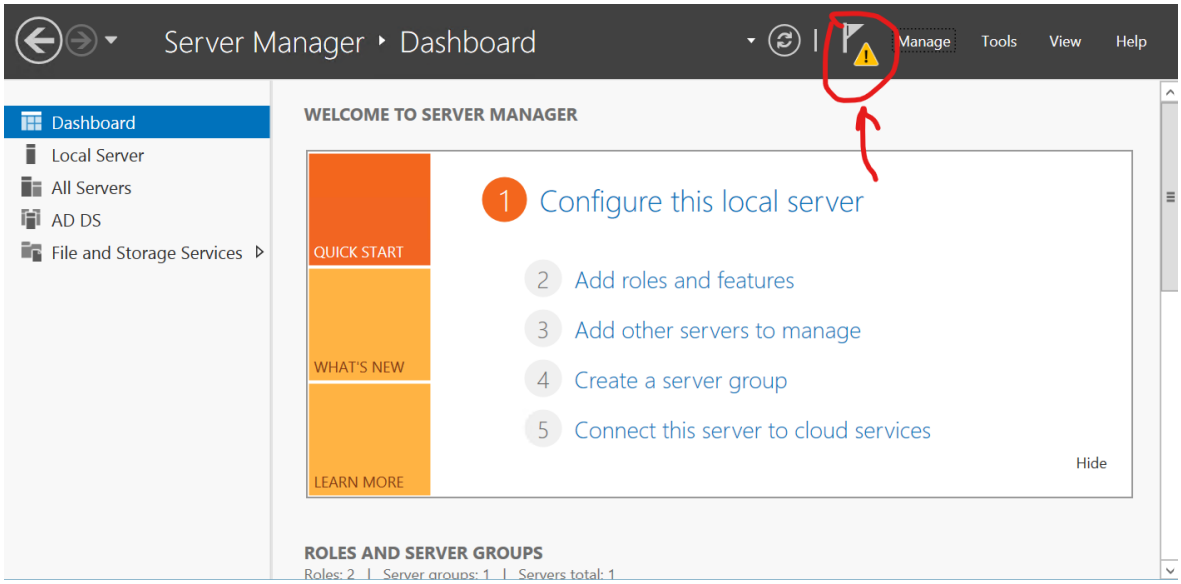
4. Add domain services- In the server manager on the Windows 12 machine, I clicked Manage -> Add Roles and Features, and then I clicked through, leaving defaults, and selected “Active Directory Domain Services” under Server Roles and installed them.

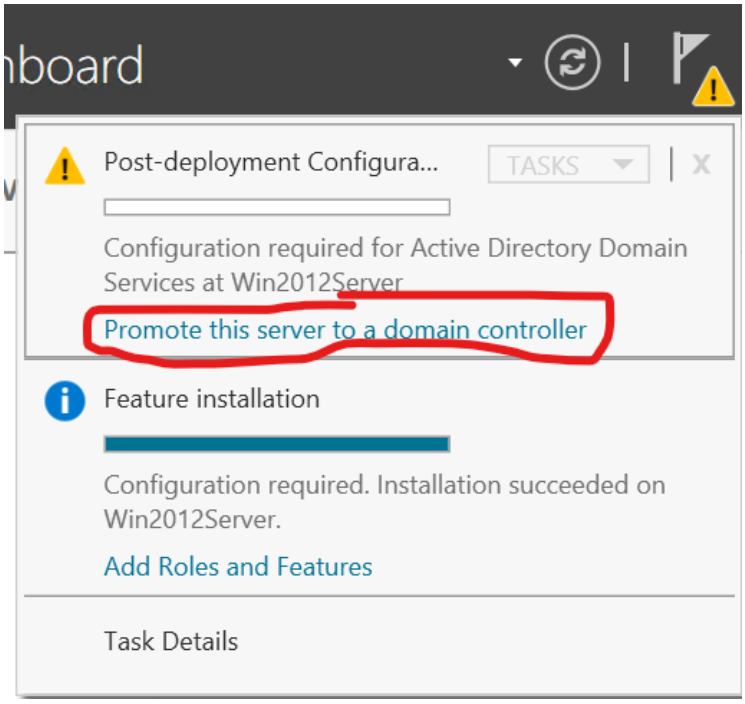


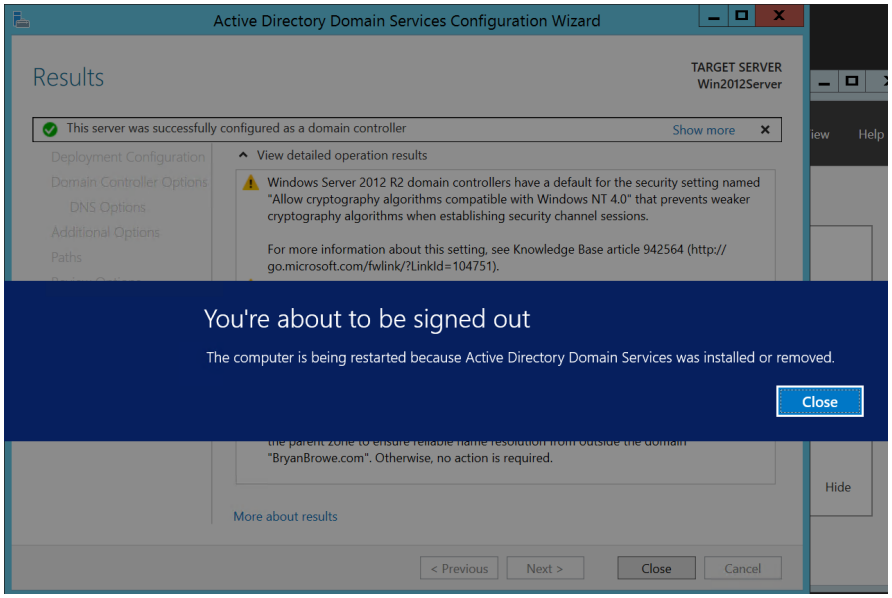


5. Promote your windows server to a domain controller- In server manager, I clicked the flag & warning symbol -> Promote this server to a domain controller -> add a new forest. I made the root domain name BryanBrowe.com and set up Directory Services Restore Mode (DSRM). I then clicked through the rest of the steps, accepting all defaults, and clicked install and the machine restarted.

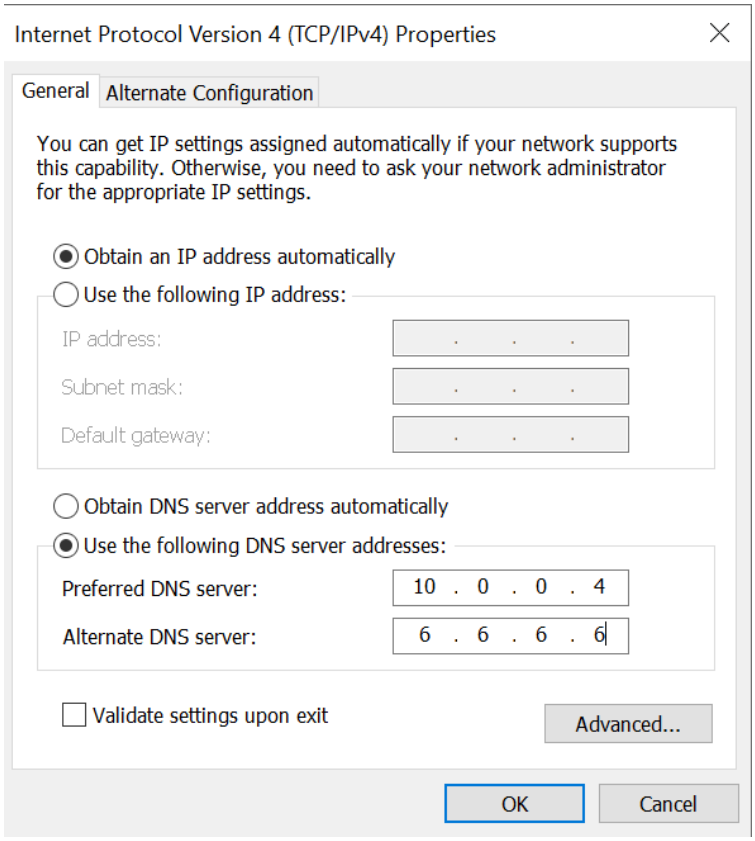



Server Manager ▸ Dashboard
Manage
Tools
View
Help
Dashboard
Local Server
All Servers
AD DS
File and Storage Services
WELCOME TO SERVER MANAGER
QUICK START
WHAT'S NEW
LEARN MORE
1 Configure this local server
2 Add roles and features
3 Add other servers to manage
4 Create a server group
5 Connect this server to cloud services
Hide
ROLES AND SERVER GROUPS

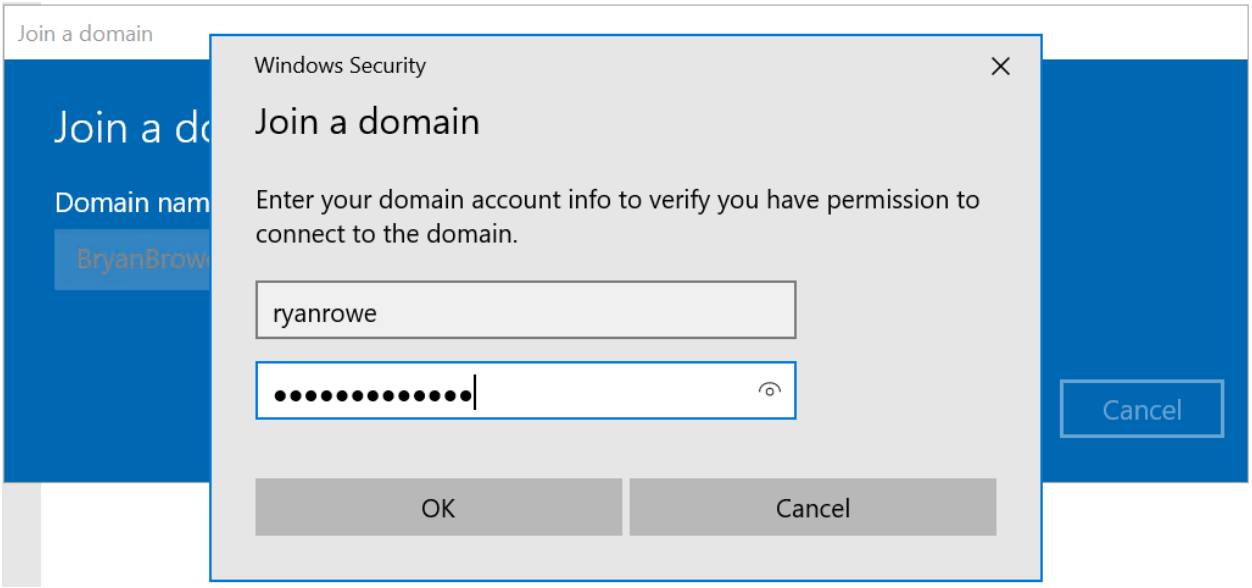

Post-deployment Configura...
TASKS
Configuration required for Active Directory Domain Services at Win2012Server
Promote this server to a domain controller
Feature installation
Configuration required. Installation succeeded on Win2012Server.
Add Roles and Features
Task Details



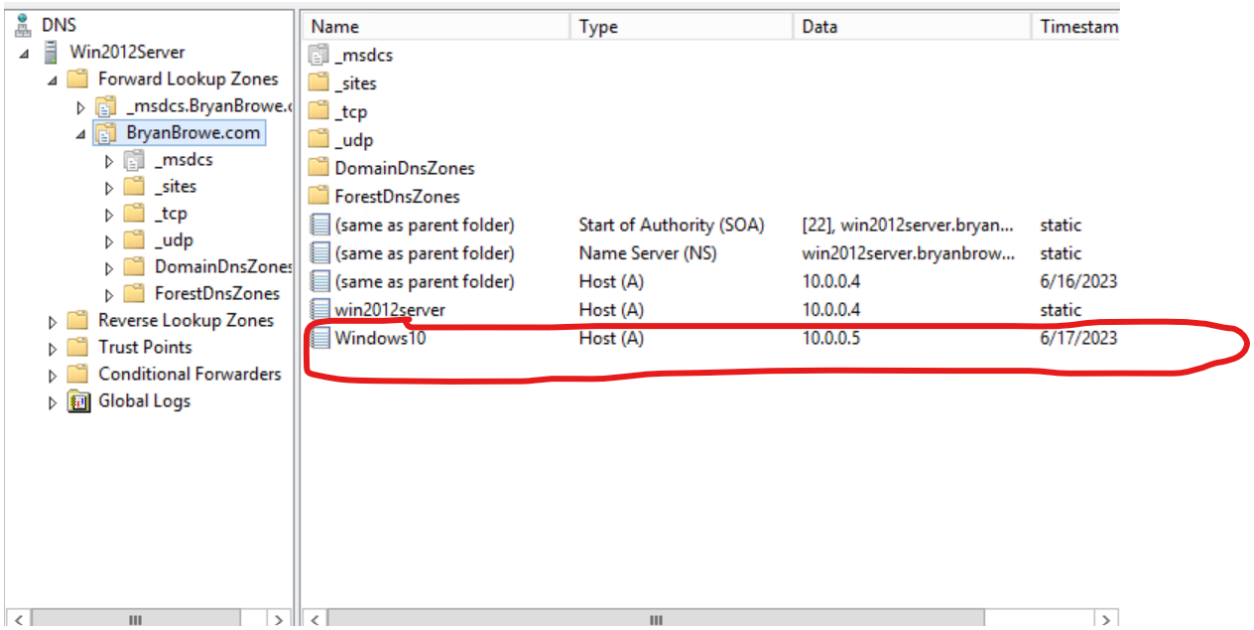
6. Join your Windows 10 computer to your new domain- To start, I changed the DNS server on the Windows 10 machine. To do this, I opened up the control panel, navigated through Network and Internet -> Network and Sharing Center -> Change adapter settings -> right-click Ethernet and select Properties -> IPv4 Properties. I then entered the IP of the windows 2012 machine as the preferred DNS server and made up an alternate.



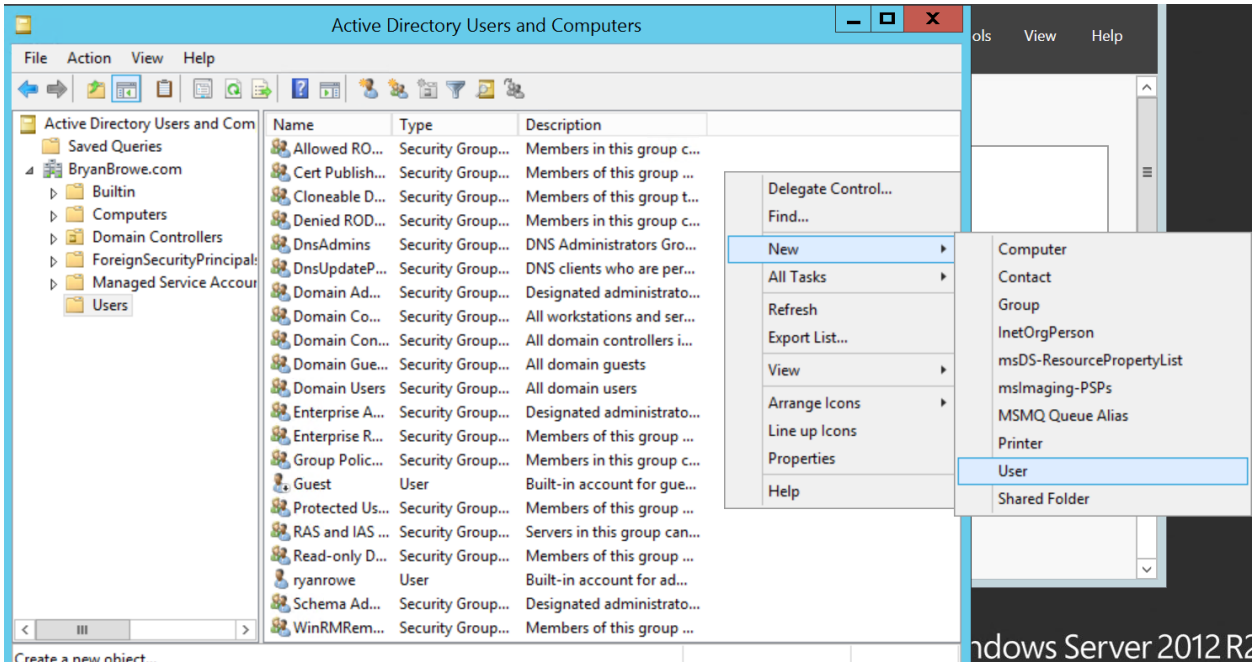
After the machine restarted, I went back into settings -> Access work or school -> connect -> Join this device to a local Active Directory domain. I then typed in my domain name (BryanBrowe.com), logged into my user account, and restarted.

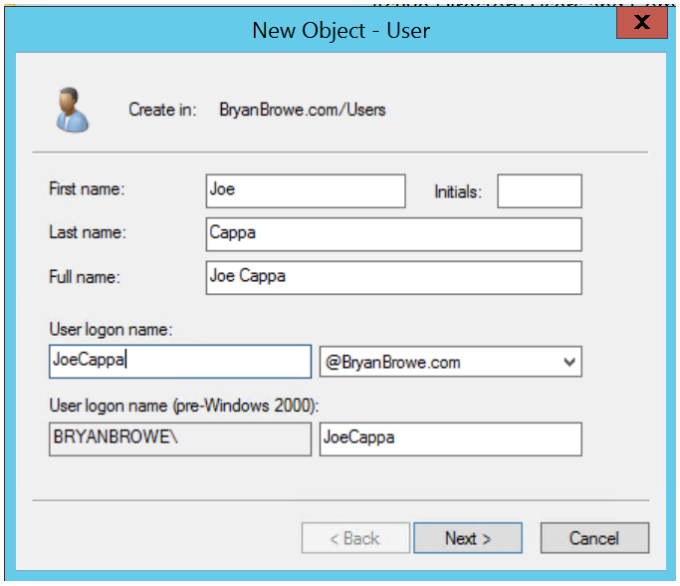


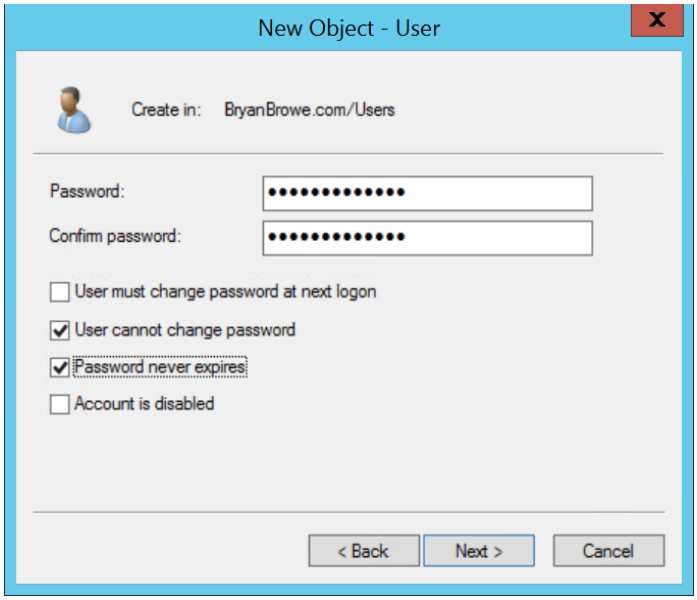
In the DNS section of the server manager on the Windows 2012 machine, I can now find the Windows 10 machine, so it is connected to my new domain.

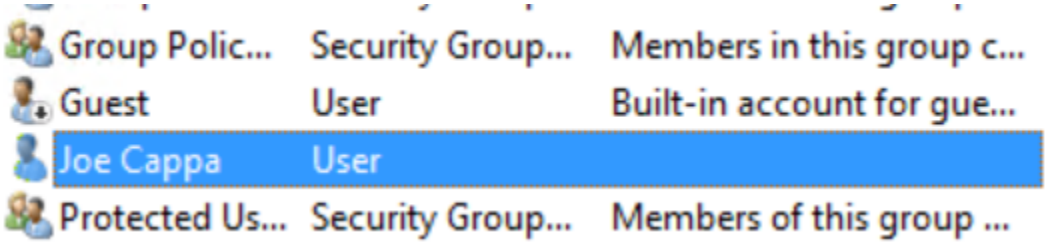


7. Create a non-administrator Domain user on your Windows Server- In the Windows 2012 machine, click the tools dropdown and select Active Directory Users and Computers -> users -> right click, New -> User. I then filled out the information.

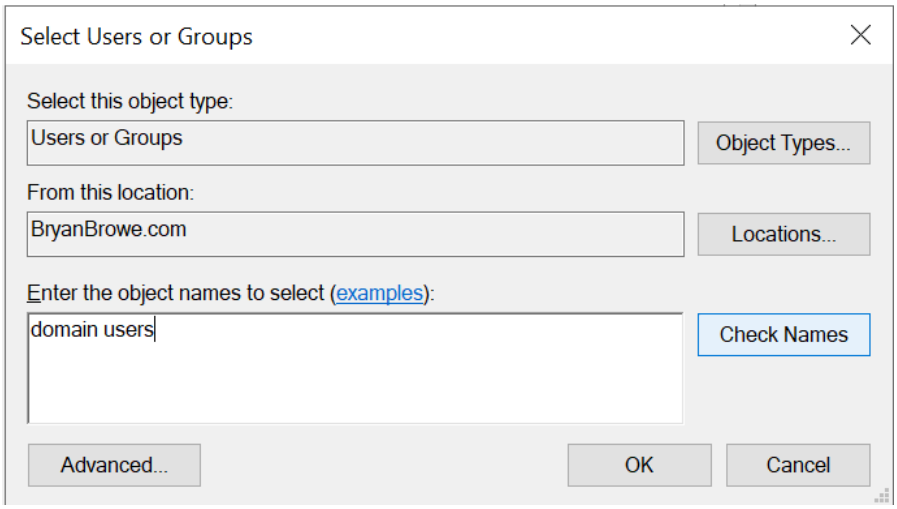

Active Directory Users and Computers
File Action View Help
Active Directory Users and Com
Saved Queries
BryanBrowe.com
Builtin
Computers
Domain Controllers
ForeignSecurityPrincipals
Managed Service Accour
Users
Name Type Description
Allowed RO... Security Group... Members in this group c...
Cert Publish... Security Group... Members of this group ...
Cloneable D... Security Group... Members of this group t...
Denied ROD... Security Group... Members in this group c...
DnsAdmins Security Group... DNS Administrators Gro...
DnsUpdateP... Security Group... DNS clients who are per...
Domain Ad... Security Group... Designated administrato...
Domain Co... Security Group... All workstations and ser...
Domain Con... Security Group... All domain controllers i...
Domain Gue... Security Group... All domain guests
Domain Users Security Group... All domain users
Enterprise A... Security Group... Designated administrato...
Enterprise R... Security Group... Members of this group ...
Group Polic... Security Group... Members in this group c...
Guest User Built-in account for gue...
Protected Us... Security Group... Members of this group ...
RAS and IAS ... Security Group... Servers in this group can...
Read-only D... Security Group... Members of this group ...
ryanrowe User Built-in account for ad...
Schema Ad... Security Group... Designated administrato...
WinRMRem... Security Group... Members of this group ...
Delegate Control...
Find...
New
All Tasks
Refresh
Export List...
View
Arrange Icons
Line up Icons
Properties
Help
Computer
Contact
Group
InetOrgPerson
msDS-ResourcePropertyList
mslmaging-PSPs
MSMQ Queue Alias
Printer
User
Shared Folder
ols View Help
ndows Server 2012 R2


New Object - User
Create in: BryanBrowe.com/Users
First name: Joe
Initials:
Last name: Cappa
Full name: Joe Cappa
User logon name:
JoeCappa
@BryanBrowe.com
User logon name (pre-Windows 2000):
BRYANBROWE\
JoeCappa
< Back
Next >
Cancel





8. Login with the new account- In the Windows 10 machine, open settings, I looked up remote and selected Allow remote connections with this computer -> click Show settings next to “Change settings to allow remote connections to this computer” -> under Remote, click Select Users… -> Add -> type “Domain Users” -> Check Names -> OK.



For developers

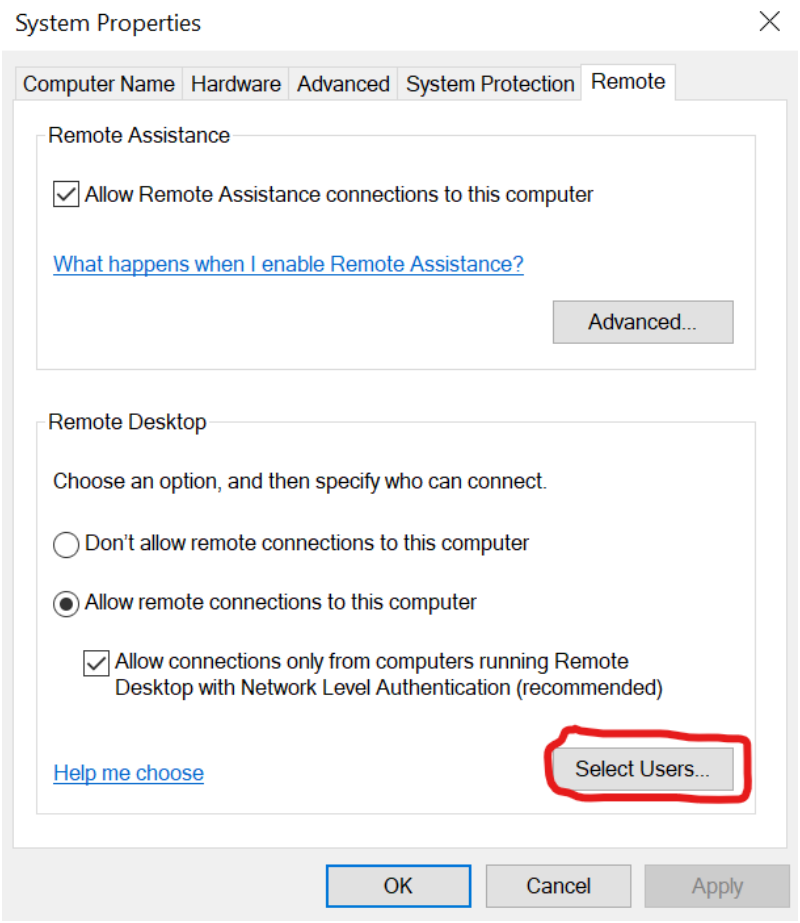
Remote Desktop

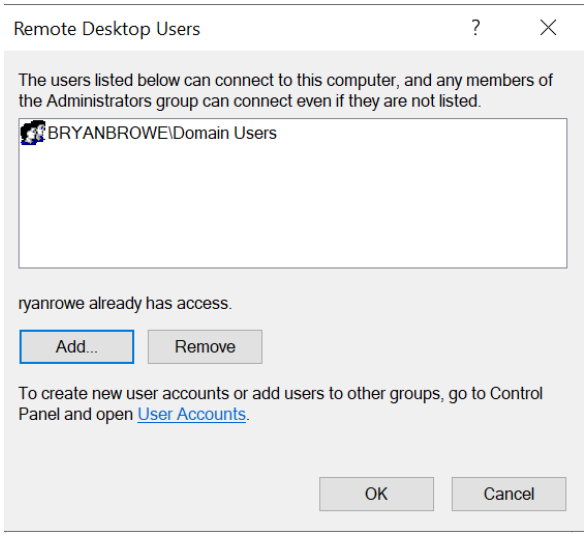
Apply the following settings to enable Remote Desktop and ensure machine availability.

Change settings to allow remote connections to this computer — Show settings

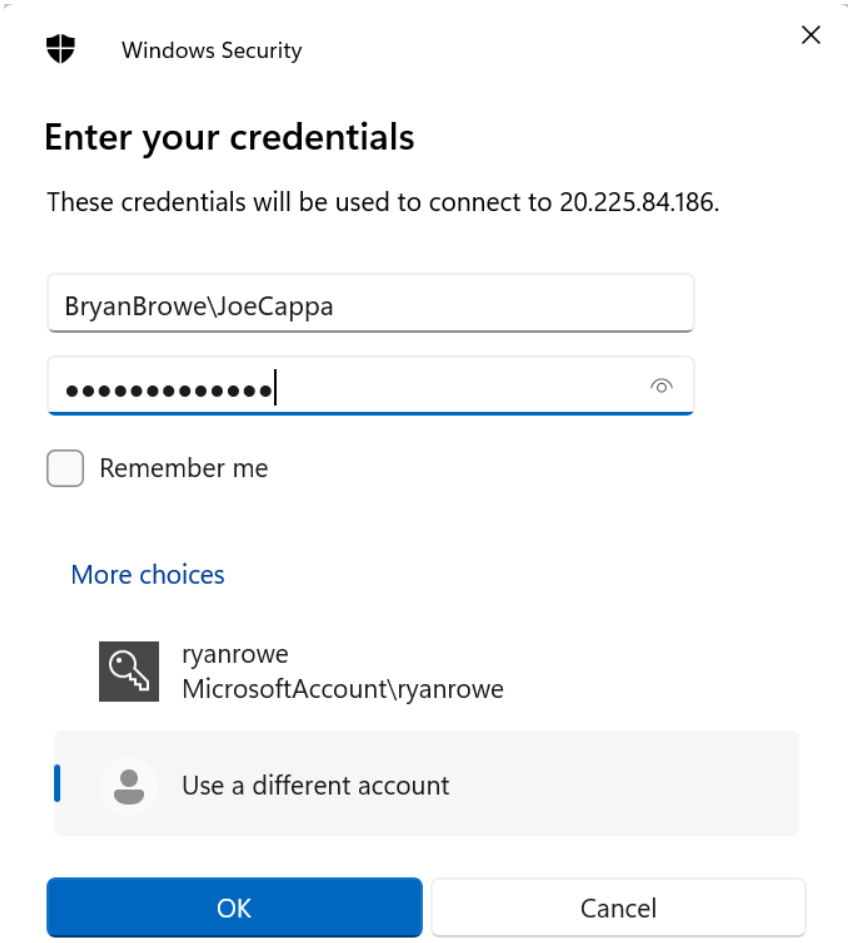
Change settings to allow connections only from computers running Remote Desktop with Network Level Authentication — Show settings

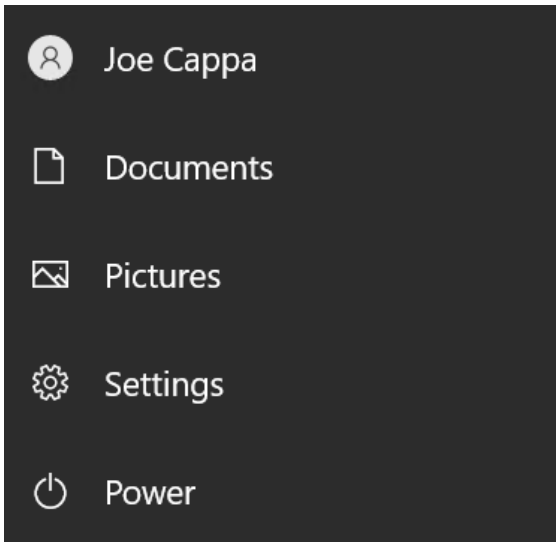
Apply





Finally, I logged out of the admin account and logged in with the new account. Format: domain name\username.





After shutting down the machines, I deleted the snapshot.