

# **Backup Domain Controllers**

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Creating a backup involves an additional redundant virtual machine, so the first course of action is to enter the azure portal and navigate to the same “Create a virtual machine” screen that we interfaced with in the first assignment. What we title the new VM doesn’t impact our experience that much, but I named it “ToddBackup01” for the sake of being organized. Since my main machine had such poor specifications, I only gave the new machine 1 VCPU and 1GB of RAM for economic purposes. For the disk, I changed to a standard HDD because a premium SSD is overkill for backups. I have enough faith in my patience that I doubt this will be an issue. I left the network configurations on the default settings and set it to auto-shutdown at 12:00 AM just in case.

Now, from the VM hub I established an RDP connection with the backup machine and logged in. Once it finished loading the desktop, I clicked on the network icon on the right of the taskbar and selected “Network & Internet settings”. From the settings window, I selected the adapter options. This displayed another window containing all my network devices, which was only Ethernet since this is a VM, which I right clicked and selected properties. Inside the properties window was a list of all the relevant items being utilized by the device. The relevant choice for my purposes was Internet Protocol Version 4. In the DNS server address field, I put the IP address for the original VM, 10.0.0.4. For the alternative server, I simply used cloudflare. Before I confirm these changes, I check “Validate settings on exit”. This is all for the purpose of creating a link between the backup machine and the original machine.

Now from the server manager window, I select “add roles and features” and select “Active Directory Domain Services”. It also required some dependencies, so I installed those as well. Once the installation completed, I returned to the server manager with intent to configure ADDS. This can be

done through the flag icon on the top right and selecting “promote server” from the drop down. It required me to specify the domain, which needs to share the same name as the previous domain. I named it “zevin.com” for consistency with the first VM. It also requires credentials to operate. Since my user’s name is Todd, and my domain name is Zevin, I put zevin\Todd as the user credentials. The Additional Options screen allowed me to specify which controller I wanted to select. The default paths that windows generated for the database were serviceable, so I continued without making any changes. From there, a simple restart registered my changes and I was finished.

