Setup Exchange

Description

Your task is to configure Microsoft Exchange to deliver and receive email messages within our CSC 437 network.

What to do

Getting started you must first create a DNS zone for a domain of your choosing using the "domain registrar" we accessed in class. Make sure to create the proper records in order to relay email to your network. Remember, you can have any domain you want, as long as it ends in 'csc437.org. Also, to accomplish this, make sure you're using your public IP.

Now that you've made it thus far, test some things. Using nslookup, verify that you can resolve your MX records. Email is 110% dependent on DNS- if this doesn't work, stop and troubleshoot now. Don't continue on until this is working. Once it's working, run nslookup from your exchange server and verify you can resolve an mx record for <yourdomain>.csc437.org.

Once you have DNS happy, create a new Windows Server 2016 machine. Set it up, set a static IP of 10.1.1.15, and join it to active directory. Log in as a domain administrator and install Exchange. The ISO to install Exchange 2016 is located on the ISO datastore. Note that the exchange installer will give you a list of pre-reqs that you need to resolve.

Once Exchange is installed, you'll need to configure your firewall. Make sure to forward the ports needed for email delivery to your Exchange server. Additionally, you can send port 443 to your server; this will allow you to access your Exchange server's web interface remotely. Keep in mind, you may already have port 443 in use for Horizon, feel free to steal the port. ENSURE that your firewall does not block private addresses. This is a default rule that's preconfigured, you may need to edit your WAN interface to enable this.

Once the firewall is configured & Exchange is installed, you'll need to configure it. We cover this in class, but the major pieces you'll need are located in the Mail Flow section of the Exchange Admin Center (https://YourExchangeServer/ecp). Create a mailbox for both you and your partner.

Submissions

Submit screenshots showing that you can send an email from Exchange and receive the reply. Send the message to: kyle@goatmaster.csc437.org . Show the screenshot that displays my automatic reply to your message.

TLDR

1. Register your DNS zone with our CSC437 Domain Registrar
2. Setup a windows box, join it to the domain
3. Setup Exchange for your domain
4. Configure Exchange
5. Send an email to kyle@goatmaster.csc437.org and you'll receive an automatic response if everything is working.
6. Submit screenshots to D2L

Other Tips:

- You can send email to your server from external locations. For example, assuming all is well, you can send an email to yourself from your Gmail or DSU account. Note: replies to systems outside the CSC437 network will NOT deliver.
- The following TCP ports are open to your pFSense firewall's from the external world: 25, 80, 443, 465, 4172, 8080, 8443, & 22443. Feel free to use any of them if you'd like external access.
- If you can't get a reply back, open the Exchange Toolbox. It's installed as a program on your Exchange server. Inside of the toolbox, you'll find the Queue Viewer. This is a list of the messages that Exchange is working on processing with some basic logging/information.
- Logs are helpful. The primary SMTP log can be found at: c:\program files\Microsoft\Exchange Server\v15\TransportRoles\Logs\Hub\Connectivity. There's lots of other logs that may be helpful too.