

CCDC Homework #4

Resources

Remember to always use safe Internet practices. Link to ISOs if you didn't download during meeting:

1. **Windows 10 (Make sure to install Pro):**
 - a. [Windows 10](#)
2. **Windows 2022:**
 - a. [Windows Server 2022](#)
3. **Activation Keys can be found here:**
 - a. <https://docs.microsoft.com/en-us/windows-server/get-started/kms-client-activation-keys>

Questions

1. In a corporate environment, what do you think the execution policy for PowerShell scripts should be? Expand on your thoughts.
2. In your own words, explain what Active Directory is. What are the fundamental components of Active Directory and how do they make AD function?
3. Based on trends regarding cybersecurity in the workplace, how does Active Directory provide attackers with one of the largest attack surfaces?
4. Why are some companies still using IIS to host their websites when cool lightweight solutions like Apache and Nginx exist?

Lab (Part A)

1. *It is highly recommended to read through the entire document (especially the deliverables) prior to starting the Lab exercises. If you are not using the lab environment on `elsa.sdc.cpp`, you may skip Part A.*
2. Unjoin Blobby and Blogic from the domain "egg.plant".
3. Demote the domain controller, uninstall Active Directory Domain Services and DNS.

Lab (Part B)

1. Install Active Directory Domain Services on Windows Server 2022, then promote the server to a domain controller. Use the domain *windowsis.betterthanlinux*.
2. Use group policy management console to require CTRL + ALT + DEL at logon across the domain.
3. Use CIS Benchmarks to craft a Group Policy for your new domain. **Remember to backup the original Group Policy!** You never know when a Windows Workstation can become a brick.
4. Join a Windows 10 Workstation to the *windowsis.betterthanlinux* domain.
 - a. Ensure your new Group Policy from Task #3 is replicating to this workstation.
5. Create a PowerShell script to provision 10 domain user accounts. The script should use a CSV to get a unique username and password for each account.
6. Create a PowerShell script that enables Windows Firewall on all profiles, clears all inbound rules, then allows RDP inbound from the IP 192.168.1.67.
7. Get a list of all local users on your Windows 10 VM using a remote PowerShell session on your Windows Server 2022 VM.

Lab (Part C)

8. Install IIS on your Windows Server 2022 VM.
9. Setup a wordpress website on the IIS web server.
 - Incorporate this image of Darth Jar Jar holding a really long candle into the front page of your wordpress site:
 - You will probably encounter problems while setting the server up. That's ok! It is part of the problem solving process. Lab Part C is vague on purpose.



Deliverables

1. **Submit a PDF with all of the following:**
 - a. **answers to all the questions**
 - b. **a tutorial in the form of a write-up on how you accomplished the tasks in Lab #1, #2, #3, and #4**
 - i. **Additionally, for Lab #3, list 5 configurations from CIS benchmarks and explain why you selected them.**
 - c. **your scripts from Lab #5 and #6**
 - d. **a screenshot of the command you used and its output for Task #7**
 - e. **a screenshot of your WordPress site's front page from Task #9**
2. **Make sure all sections and images are readable and labeled.**
3. **Name the file with the following format: FirstLast_CCDCHomework4.pdf**

If you are trying out for the team, make sure you submit your PDF in Canvas.

Otherwise, please use this form if you want to be graded:

<https://forms.gle/b3utPA3TDuA8wuT79>.