Assignment – Implementing Group Policy Objects - GPOs

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University of Advancing Technology

NTW:216 – Foundation of System Administration

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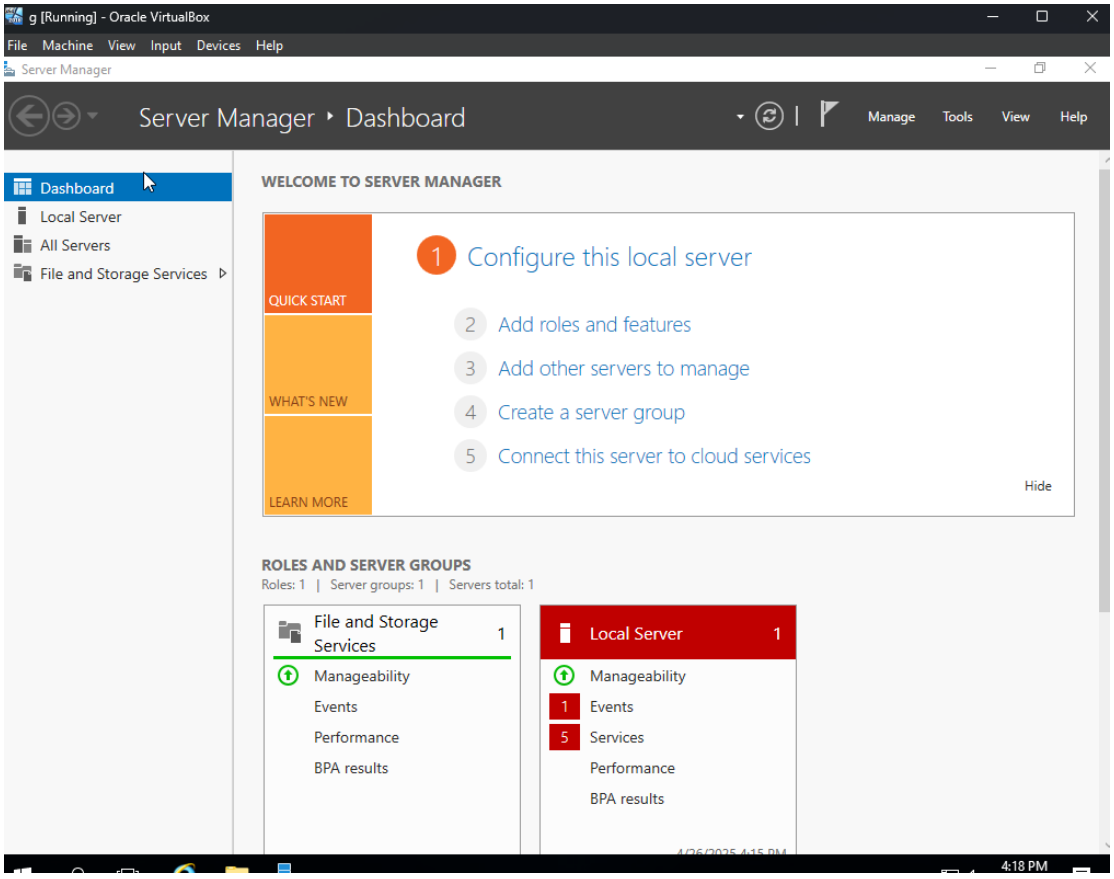
April 17, 2022

Assignment – Implementing Group Policy Objects - GPOs

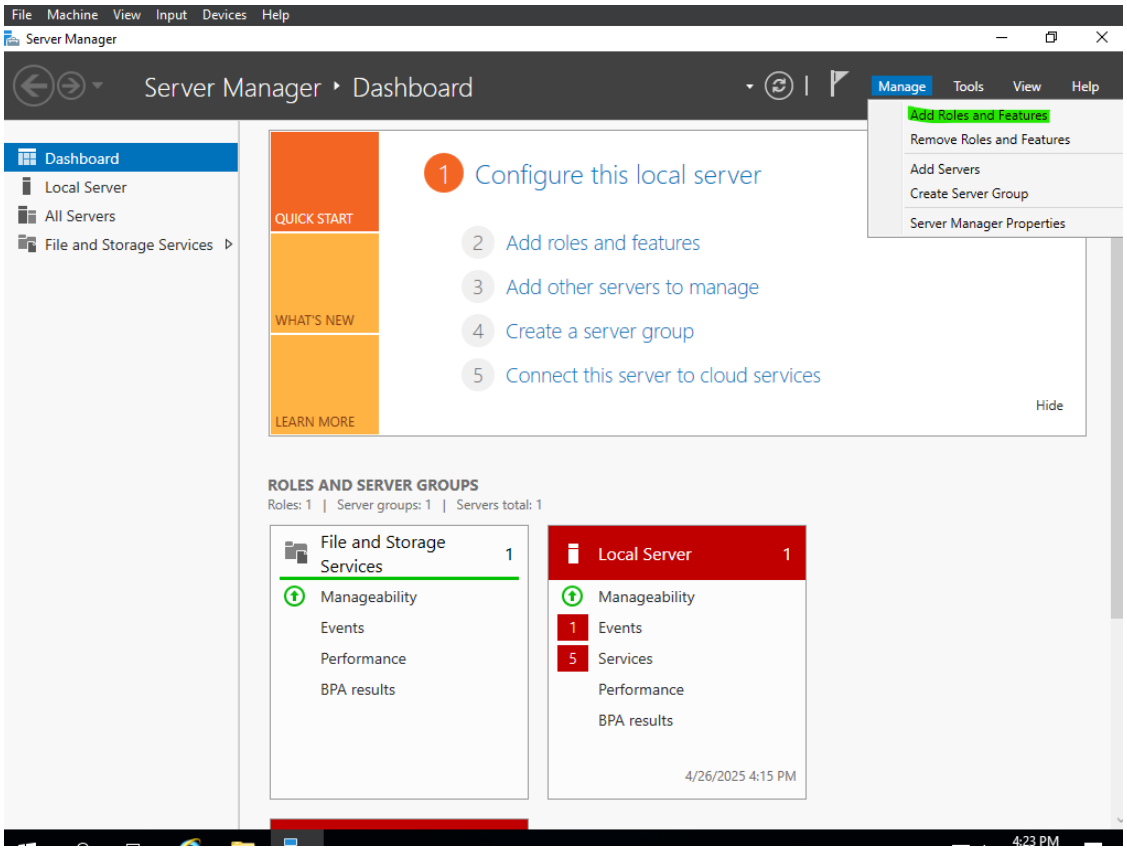
In this assignment we are to implement Group Policy Objects (GPO), in our environment. The plan with this assignment is to show you how to attached GPOs as they allow administrators to centrally manage user and computer settings across a domain environment. I will walk you through the process of creating, linking, and managing GPOs using Windows Server Manager 2016, let's get started.

1. Open Server Manager – This is normally open when you log in, if it does not you can easy search for it by pressing the windows key. I will include a screen shot of what the Server Manager should look like when you open it.

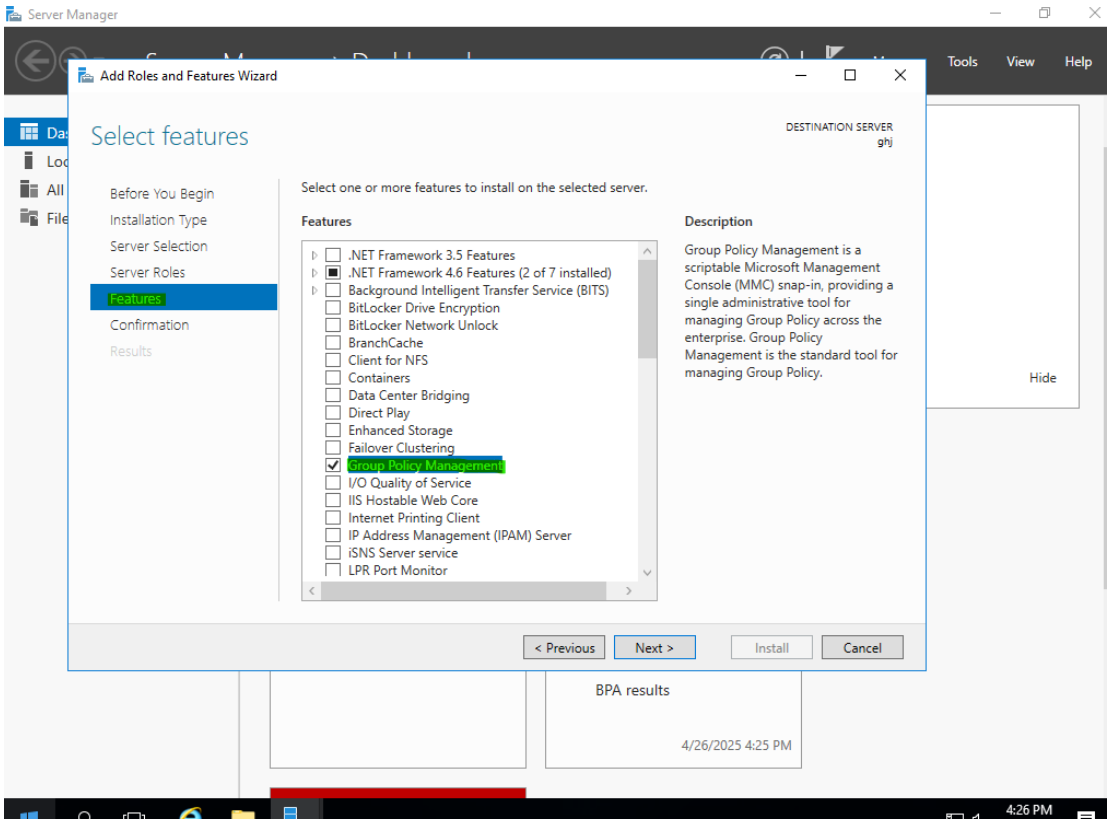
a. 

2. Open Group Policy Management – In the upper right corner you should see "Tools", if you pressed that you should find "Group Policy Management". If you do not see it no worries, you do not have it installed (It normally does not come in a fresh installation of Server Manager). To add it click on "Manage", we are going to pressed "Add Roles and

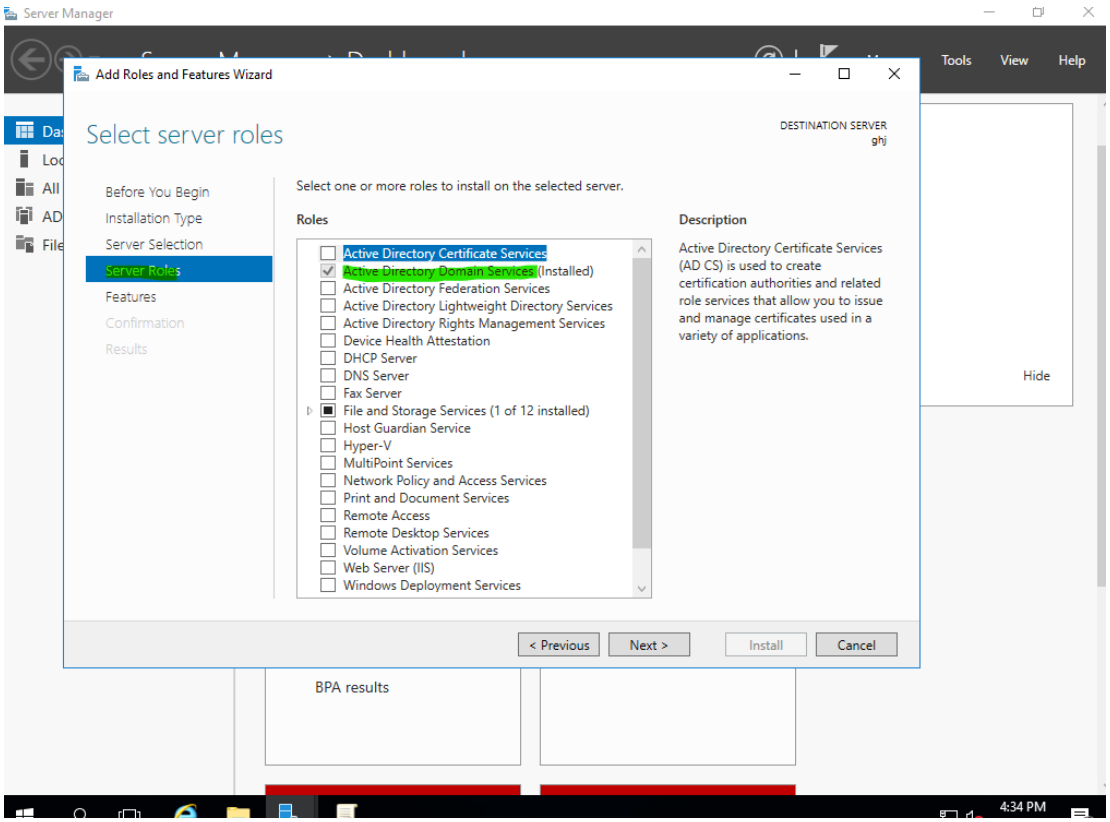
Features”. A new window will pop up, click next until you reach “Features”, there you will find Group Policy Management and click the box to check mark it. Also be sure that Active Directory Domain Services is installed as well in the Server Roles. See the images below to visual.

a. 

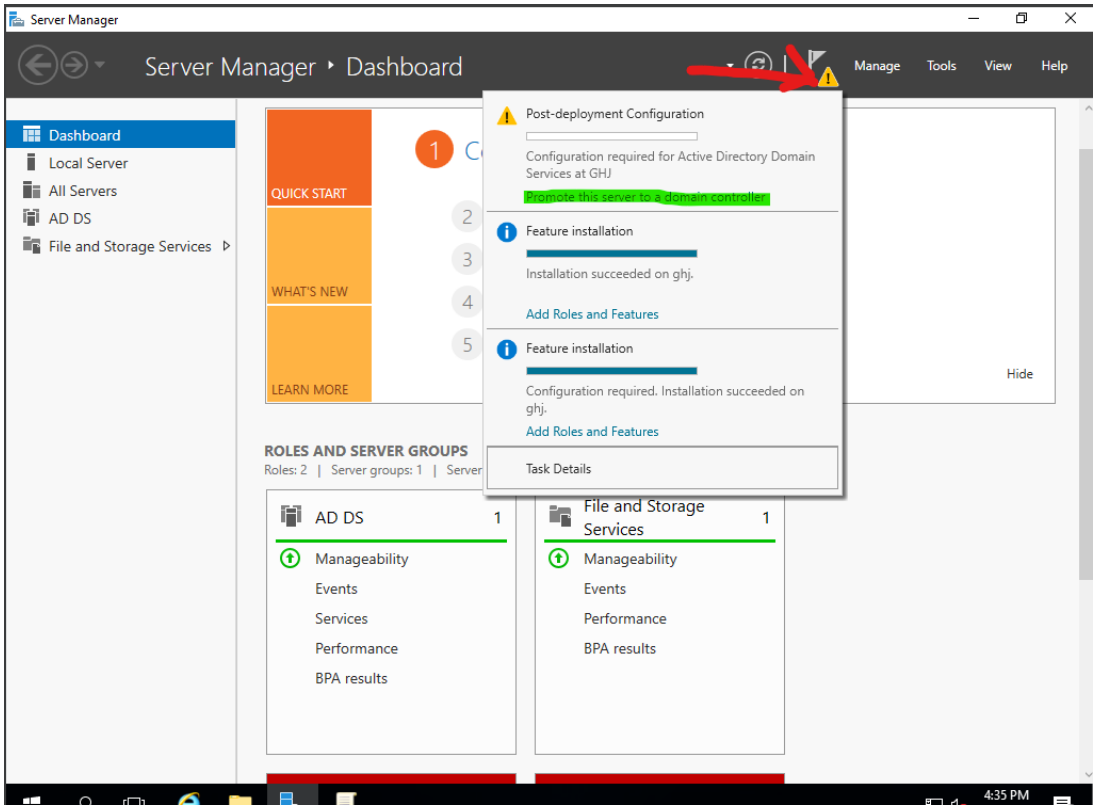
b.

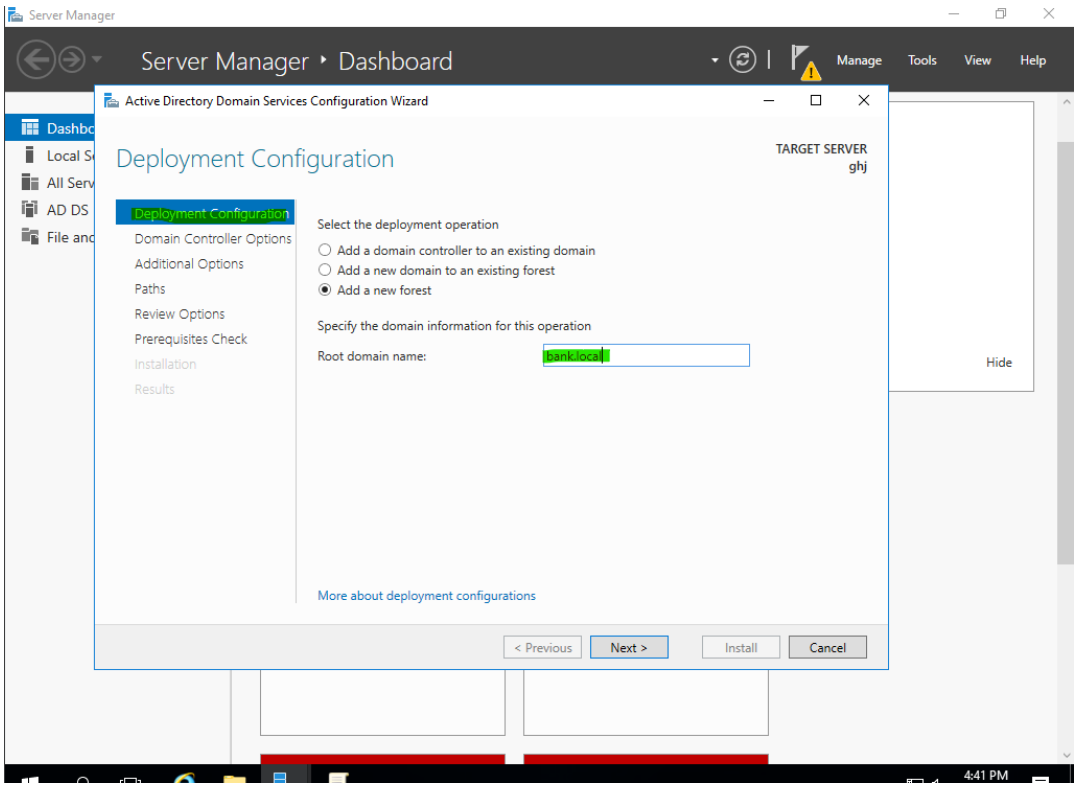

Server Manager
Add Roles and Features Wizard
Select features
DESTINATION SERVER
ghj
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features
.NET Framework 4.6 Features (2 of 7 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Containers
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management
I/O Quality of Service
IIS Hostable Web Core
Internet Printing Client
IP Address Management (IPAM) Server
iSNS Server service
LPR Port Monitor
Description
Group Policy Management is a scriptable Microsoft Management Console (MMC) snap-in, providing a single administrative tool for managing Group Policy across the enterprise. Group Policy Management is the standard tool for managing Group Policy.
< Previous
Next >
Install
Cancel
Tools
View
Help
Hide
BPA results
4/26/2025 4:25 PM
4:26 PM

c.

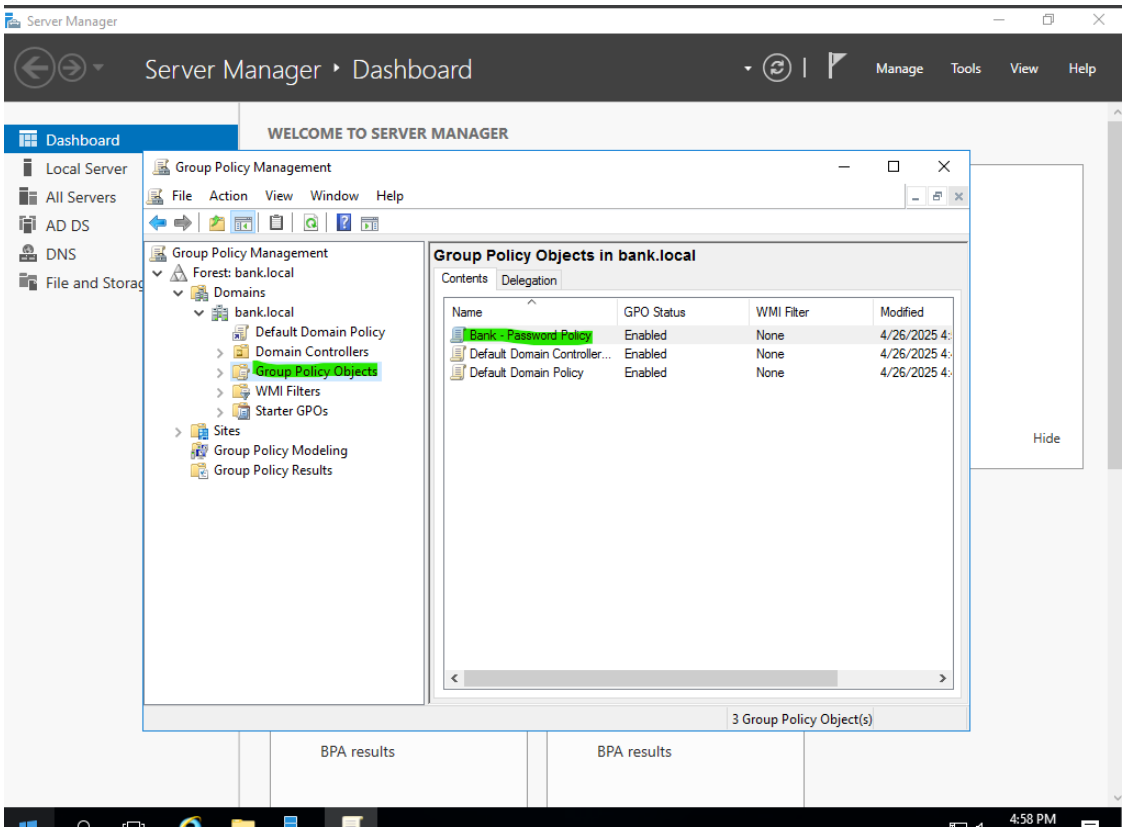

Server Manager
Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
ghj
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to install on the selected server.
Roles
Active Directory Certificate Services
Active Directory Domain Services (Installed)
Active Directory Federation Services
Active Directory Lightweight Directory Services
Active Directory Rights Management Services
Device Health Attestation
DHCP Server
DNS Server
Fax Server
File and Storage Services (1 of 12 installed)
Host Guardian Service
Hyper-V
MultiPoint Services
Network Policy and Access Services
Print and Document Services
Remote Access
Remote Desktop Services
Volume Activation Services
Web Server (IIS)
Windows Deployment Services
Description
Active Directory Certificate Services (AD CS) is used to create certification authorities and related role services that allow you to issue and manage certificates used in a variety of applications.
< Previous
Next >
Install
Cancel
Tools
View
Help
Hide
BPA results
4:34 PM

3. Active Directory Setup (0Skip if already set up) – Now that we have those installed we now need to setup our Active Directory to have a domain so we can apply GPO to OU. Next to the “Manage” you should see yellow indicator symbol. When you click on it, you should see something called “Promote this server to a domain controller”. Click on that and a new window will pop up that going through upgrade process. In the first section, select the “Adds a new forest” and then name your domain, I made mine called bank.local. After that click next as everything is default you also remember the password. You know everything is working when your computer reset and see AD DS in server and role groups. See images for visual.

a. 

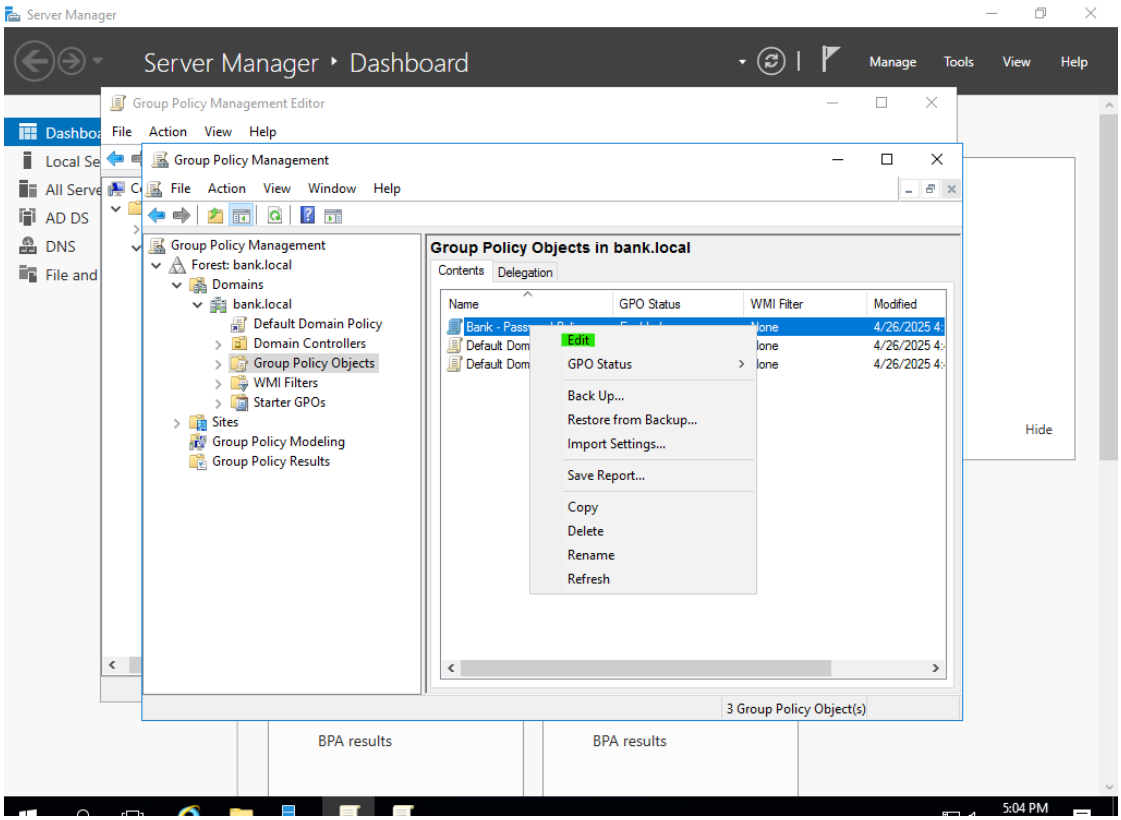
b. 

4. Creating a GPO – Now that you have restarted your Server Manager, we can no go to Tools and open Group Policy management. You should see your new domain that we made in the setup guide for Active Directory, if you already have that setup pick the Forest you wish to add a new GPO. The click on the Domain folder, after that click on your domain. You should be able to see Group Policy Objects, now I want you to right click on it and click on New. You are now created your GPO. I named my Bank – Password Policy. When you click done you should see the policy made. See the image below for a visual.

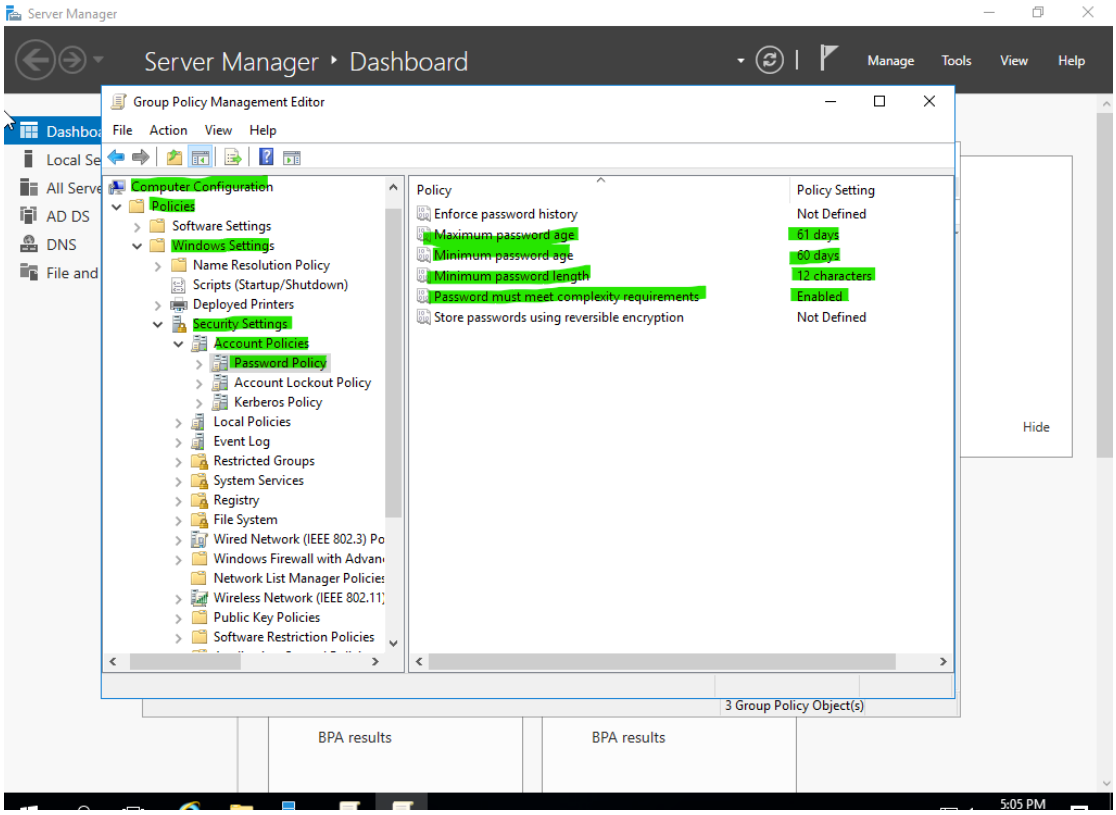
a. 

5. Creating a GPO Part 2 – Now that you made the policy, lets actually apply some polices to it. If right click on the policy you just created and press edit, we can start to look for some polices to apply to this GPO. Since I am making password policy you can follow me but take some time a look through these policies that you can apply to you domain as these will be applied to your users or OU. You are going to press on computer configurations, then polices, windows settings, security settings, account policies, and password policy. Now that you there you should see on the right where you see policy you can edit, start editing, for whatever you want. I did password needs to change every 60 days, minimum character limit is 12 characters and the password needs to be complex. With that we have finally creating a GPOs. To apply this GPO you would go to your OU and link existing GPO to the user. See the image below for a visual.

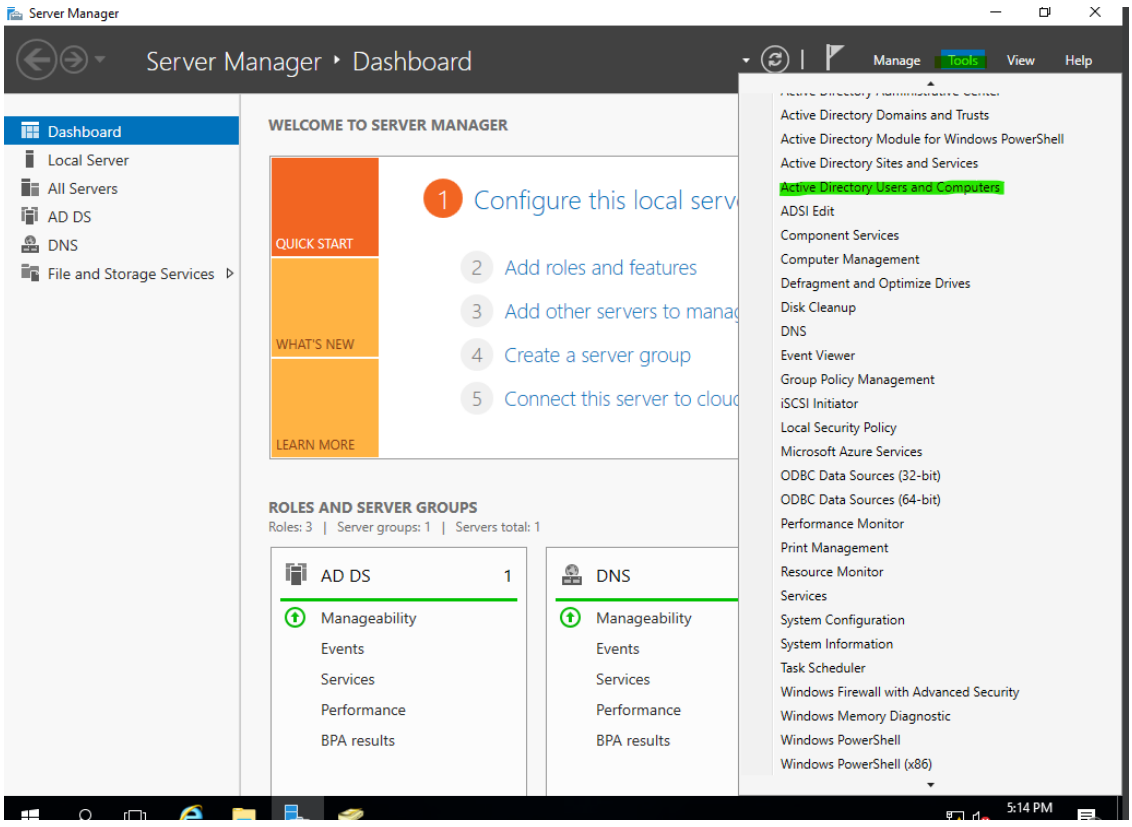
a.


Server Manager
Server Manager ‣ Dashboard
Manage
Tools
View
Help
Group Policy Management Editor
File Action View Help
Group Policy Management
File Action View Window Help
Group Policy Management
Forest: bank.local
Domains
bank.local
Default Domain Policy
Domain Controllers
Group Policy Objects
WMI Filters
Starter GPOs
Sites
Group Policy Modeling
Group Policy Results
Group Policy Objects in bank.local
Contents
Delegation
Name
GPO Status
WMI Filter
Modified
Edit
GPO Status
Back Up...
Restore from Backup...
Import Settings...
Save Report...
Copy
Delete
Rename
Refresh
3 Group Policy Object(s)
BPA results
BPA results
Hide
5:04 PM

b.


Server Manager
Server Manager ‣ Dashboard
Manage
Tools
View
Help
Group Policy Management Editor
File Action View Help
Computer Configuration
Policies
Software Settings
Windows Settings
Name Resolution Policy
Scripts (Startup/Shutdown)
Deployed Printers
Security Settings
Account Policies
Password Policy
Account Lockout Policy
Kerberos Policy
Local Policies
Event Log
Restricted Groups
System Services
Registry
File System
Wired Network (IEEE 802.3) Po
Windows Firewall with Advan
Network List Manager Policies
Wireless Network (IEEE 802.11
Public Key Policies
Software Restriction Policies
Policy
Policy Setting
Enforce password history
Not Defined
Maximum password age
61 days
Minimum password age
60 days
Minimum password length
12 characters
Password must meet complexity requirements
Enabled
Store passwords using reversible encryption
Not Defined
3 Group Policy Object(s)
BPA results
BPA results
Hide
5:05 PM

6. Creating an OU – This is show you why and how we would apply a GPO and if you do not know how to create a OU, go to Tools, and click on Active Directory Users and Computers. A new window should pop up, right click on your domain and click on New and press on the Organizational Unit. Give this a name, I named mine Phoniex_Staff, think of OU as the name of a folder for employees and computers. Now that we have created our OU. Lets attached our GPO to that OU, so go back to Group Policy Management, can find your new OU it is a folder. After you find it right click on it and press Link and Existing GPO. After that click on your new GPO and your done now all employees in that will have the password GPO policy attached. Congrants see the images below for a visual.

a. 

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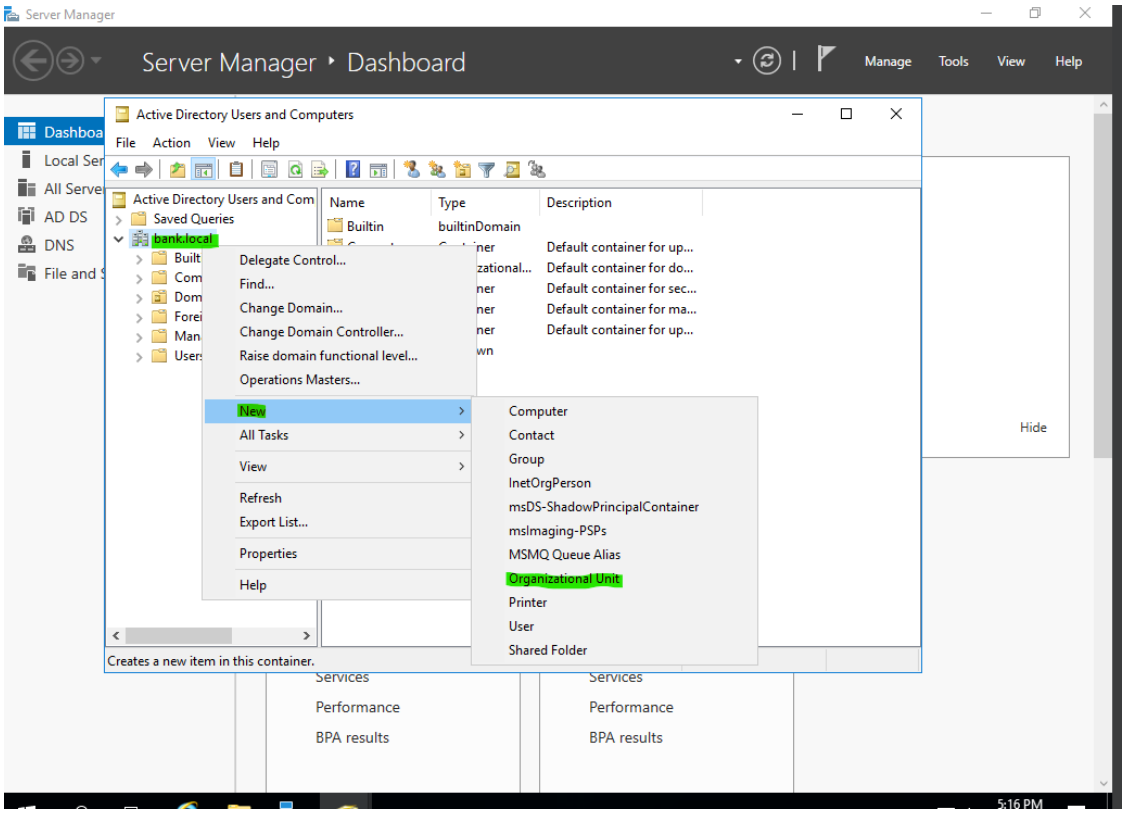
Server Manager
Server Manager ▸ Dashboard
Manage
Tools
View
Help
Active Directory Users and Computers
File Action View Help
Active Directory Users and Com
Saved Queries
bank.local
Name
Type
Description
Builtin
builtinDomain
Delegate Control...
Find...
Change Domain...
Change Domain Controller...
Raise domain functional level...
Operations Masters...
New
All Tasks
View
Refresh
Export List...
Properties
Help
Computer
Contact
Group
InetOrgPerson
msDS-ShadowPrincipalContainer
msImaging-PSPs
MSMQ Queue Alias
Organizational Unit
Printer
User
Shared Folder
Creates a new item in this container.
Hide
Services
Performance
BPA results
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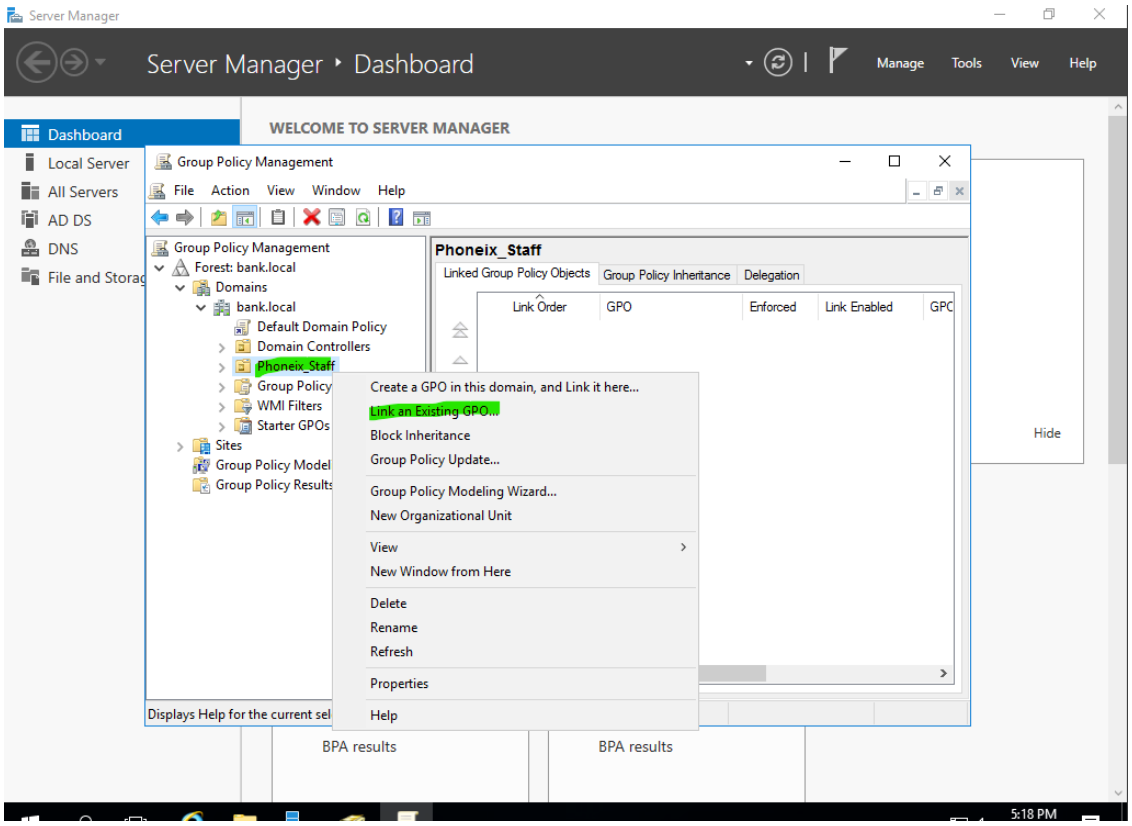
Server Manager
Server Manager ▸ Dashboard
Manage
Tools
View
Help
Dashboard
Local Server
All Servers
AD DS
DNS
File and Storag
WELCOME TO SERVER MANAGER
Group Policy Management
File Action View Window Help
Group Policy Management
Forest: bank.local
Domains
bank.local
Default Domain Policy
Domain Controllers
Phoneix_Staff
Group Policy
WMI Filters
Starter GPOs
Sites
Group Policy Model
Group Policy Results
Phoneix_Staff
Linked Group Policy Objects
Group Policy Inheritance
Delegation
Link Order
GPO
Enforced
Link Enabled
Create a GPO in this domain, and Link it here...
Link an Existing GPO...
Block Inheritance
Group Policy Update...
Group Policy Modeling Wizard...
New Organizational Unit
View
New Window from Here
Delete
Rename
Refresh
Properties
Help
Displays Help for the current sel
Hide
BPA results
5:18 PM

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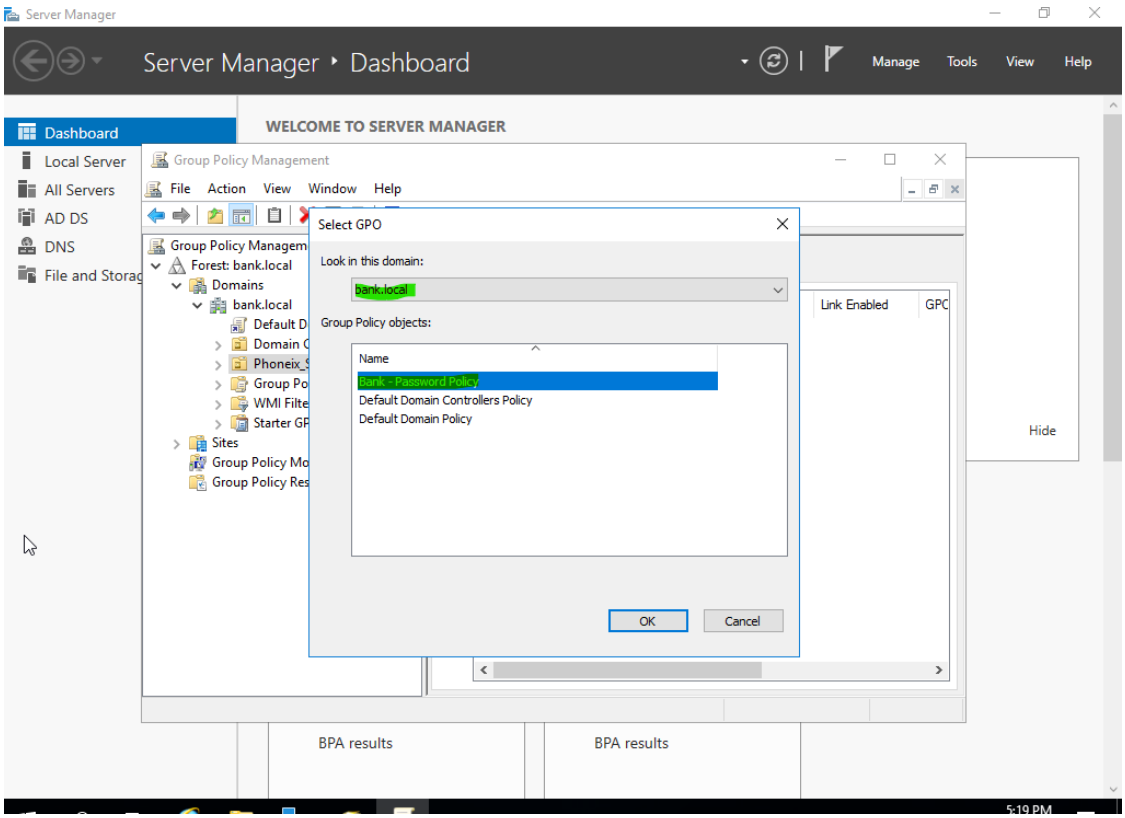
Server Manager
Server Manager ‣ Dashboard
Manage
Tools
View
Help
Dashboard
Local Server
All Servers
AD DS
DNS
File and Storag
WELCOME TO SERVER MANAGER
Group Policy Management
File Action View Window Help
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Select GPO
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bank.local
Group Policy objects:
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Default Domain Controllers Policy
Default Domain Policy
OK
Cancel
Link Enabled
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BPA results
BPA results
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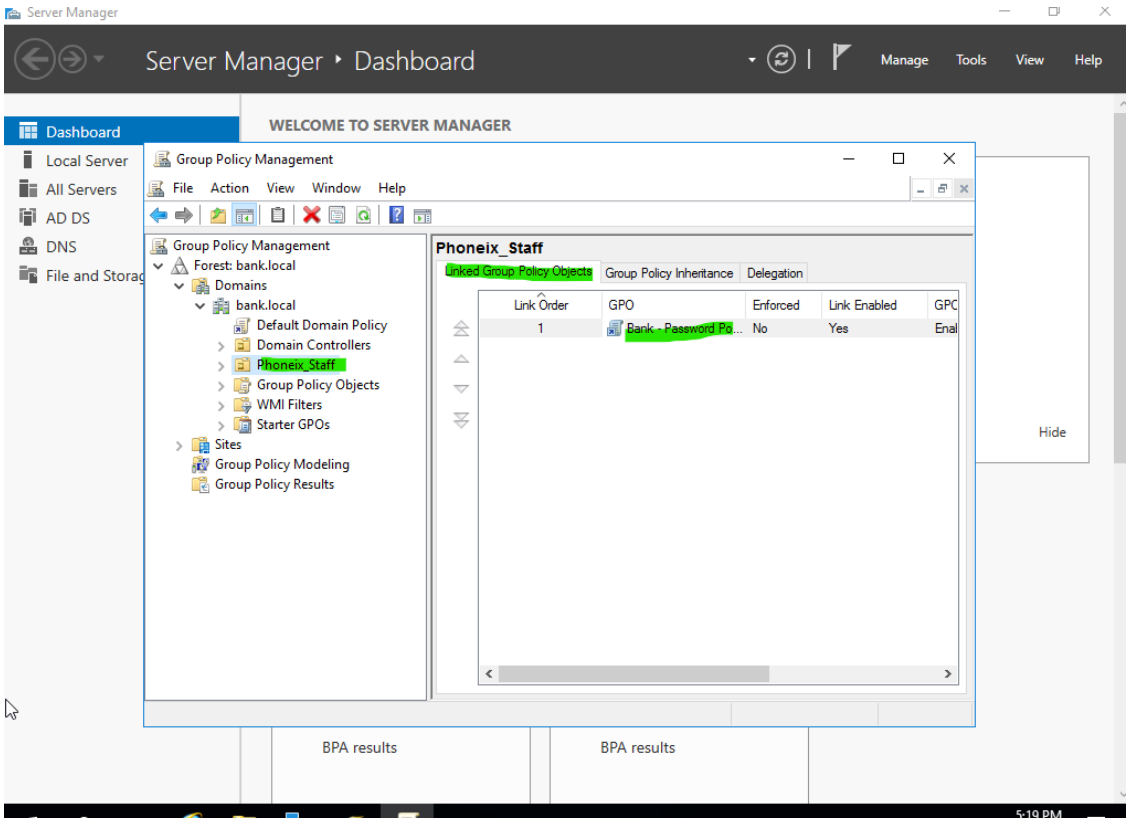
e.


Server Manager
Server Manager ‣ Dashboard
Manage
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Dashboard
Local Server
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WELCOME TO SERVER MANAGER
Group Policy Management
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Sites
Group Policy Modeling
Group Policy Results
Phoneix_Staff
Linked Group Policy Objects
Group Policy Inheritance
Delegation
Link Order
GPO
Enforced
Link Enabled
GPC
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Bank - Password Po...
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Yes
Enal
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BPA results
BPA results
5:19 PM

References

D. (2021, October 29). *Create a Group Policy Object (Windows) - Windows security*. Microsoft Docs. Retrieved April 17, 2022, from https://docs.microsoft.com/en-us/windows/security/threat-protection/windows-firewall/create-a-group-policy-object#:%7E:text=Create%20a%20Group%20Policy%20Object%201%20Open%20the,to%20%28none%29%2C%20and%20then%20click%20OK.%20See%20More.

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