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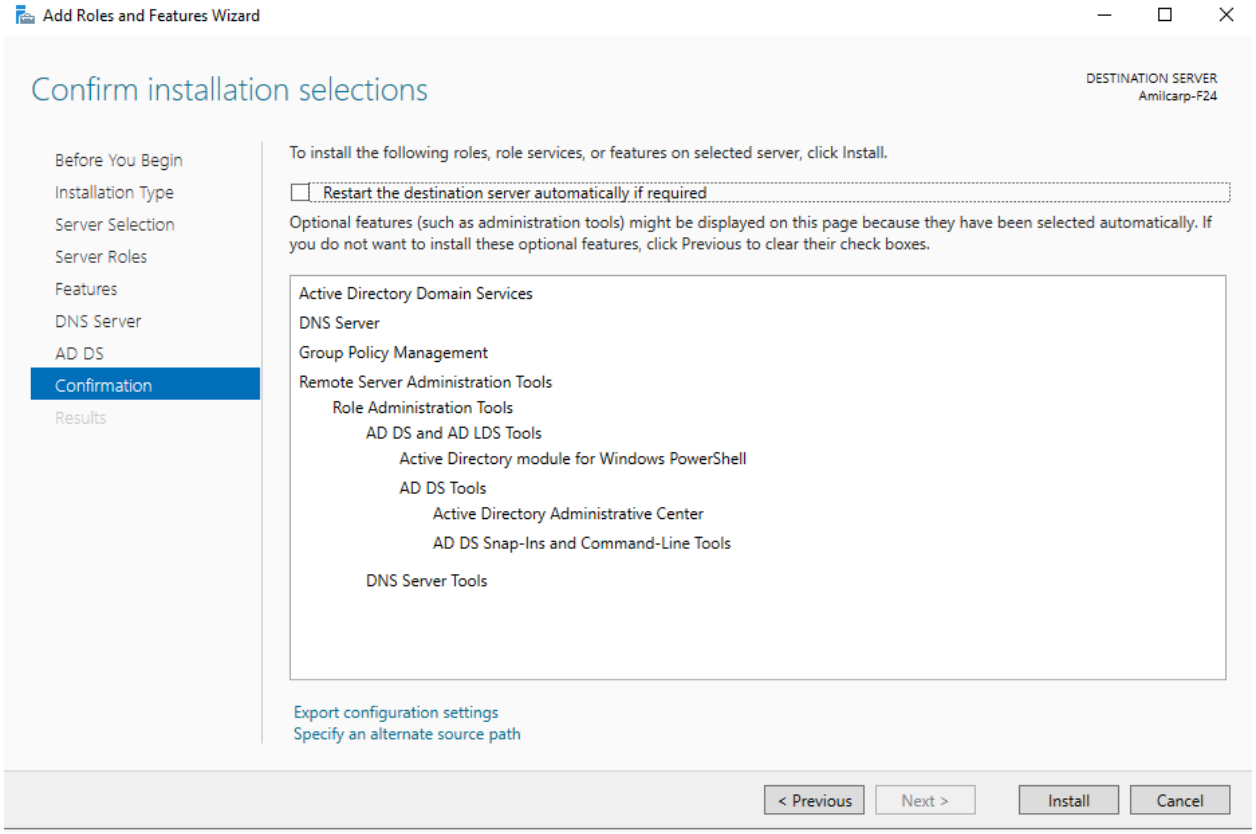
CIS 2650

Assignment 3

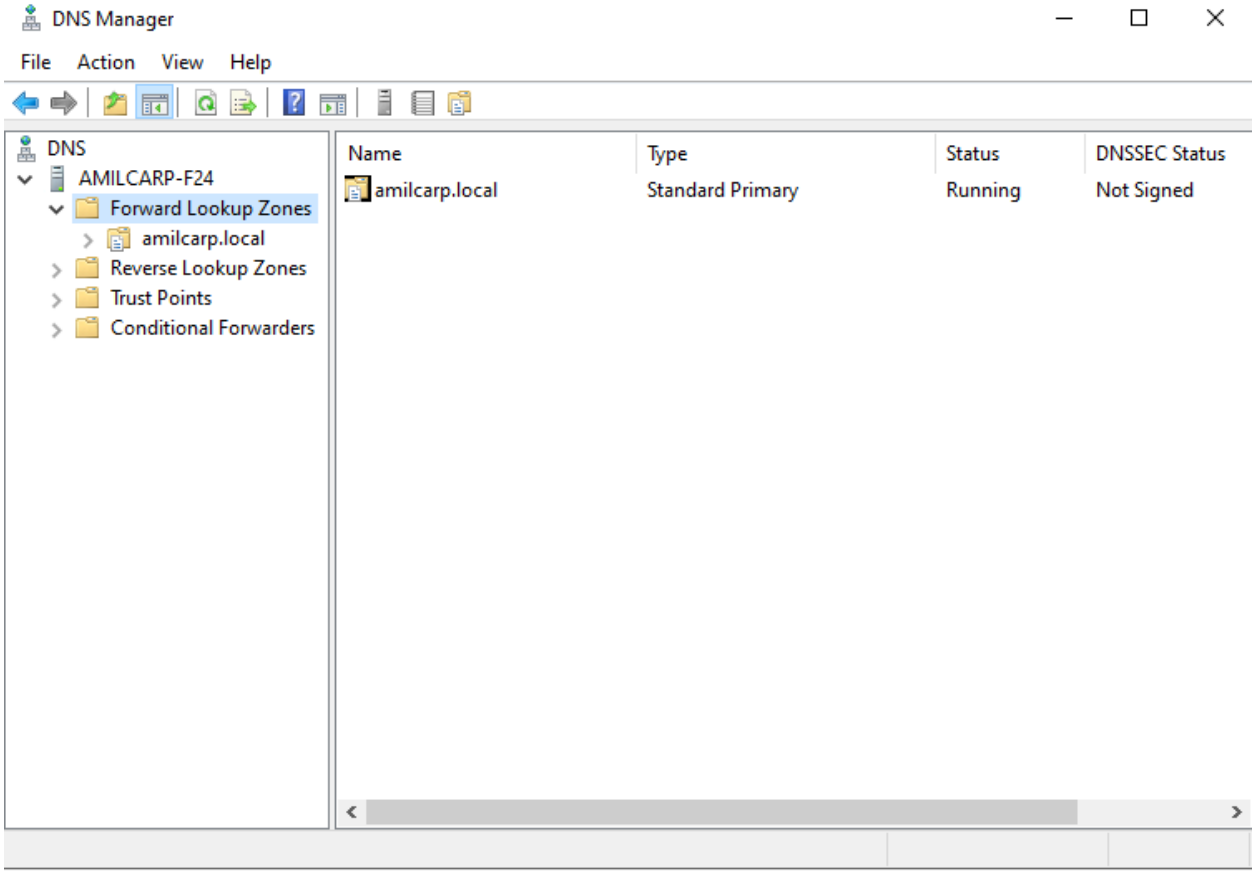
Installing DNS and Active Directory

Screenshot 1 – Showing the “Confirm installation selections” screen

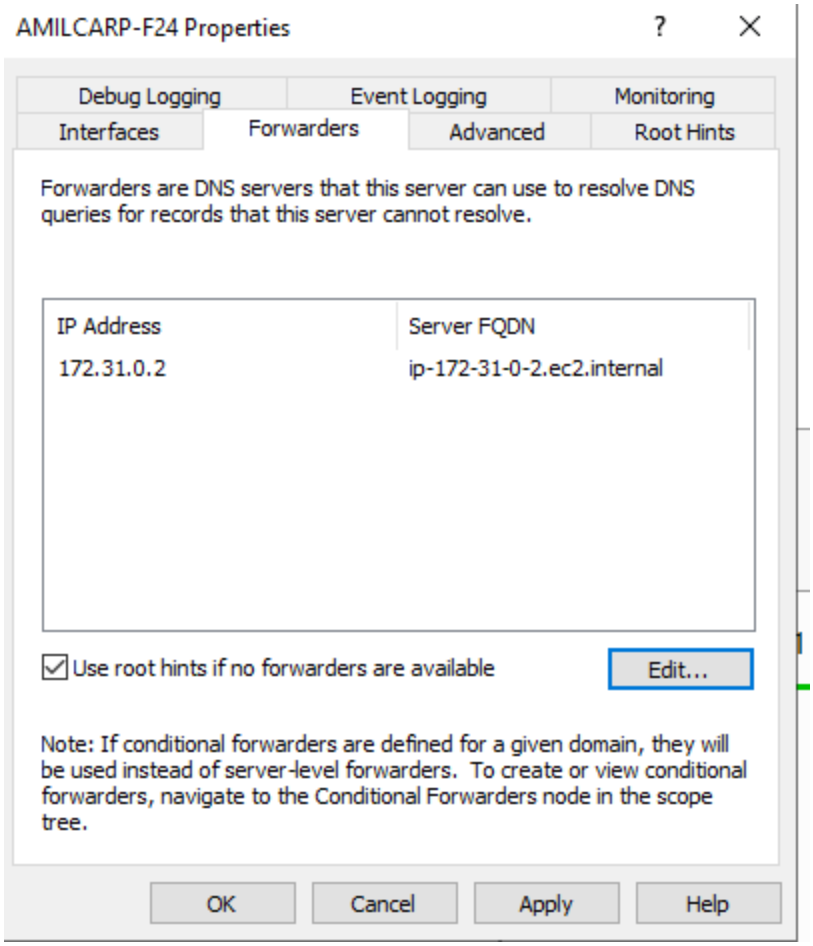


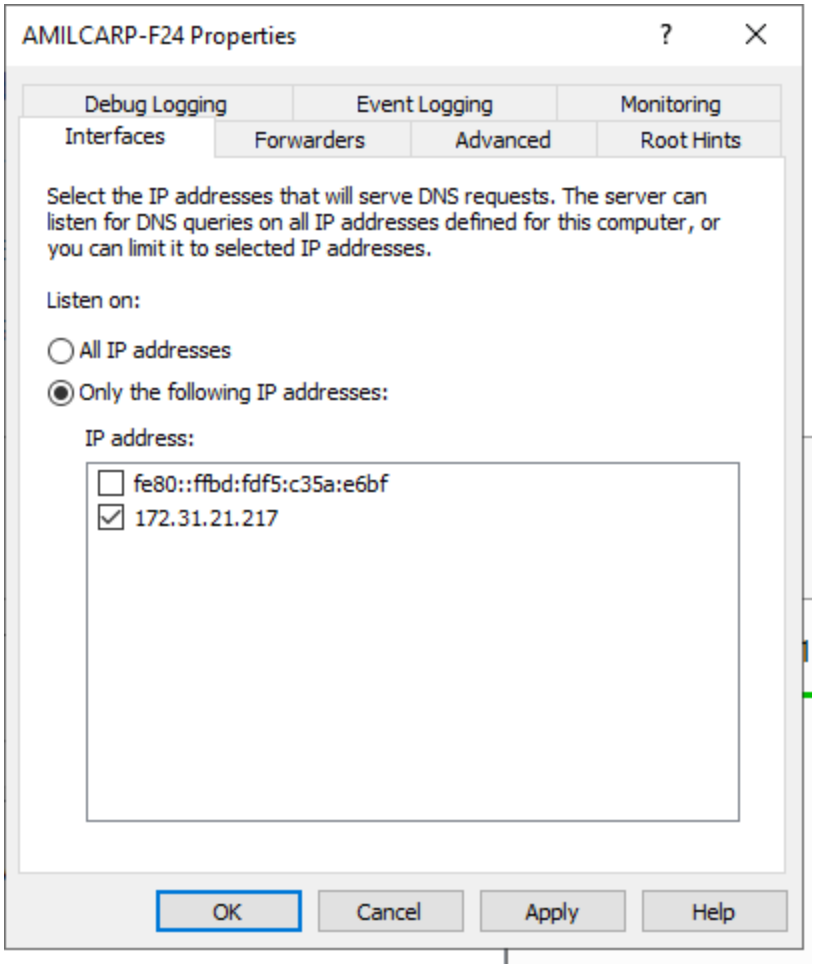
Preparing DNS for Active Directory

Screenshot 2 – Showing the DNS MMC window showing the new zone that you just created



Screenshot 3 – **Showing the “Interfaces” tab and “Forwarders” tabs**


AMILCARP-F24 Properties
Debug Logging
Event Logging
Monitoring
Interfaces
Forwarders
Advanced
Root Hints
Forwarders are DNS servers that this server can use to resolve DNS queries for records that this server cannot resolve.
IP Address
Server FQDN
172.31.0.2
ip-172-31-0-2.ec2.internal
Use root hints if no forwarders are available
Edit...
Note: If conditional forwarders are defined for a given domain, they will be used instead of server-level forwarders. To create or view conditional forwarders, navigate to the Conditional Forwarders node in the scope tree.
OK
Cancel
Apply
Help



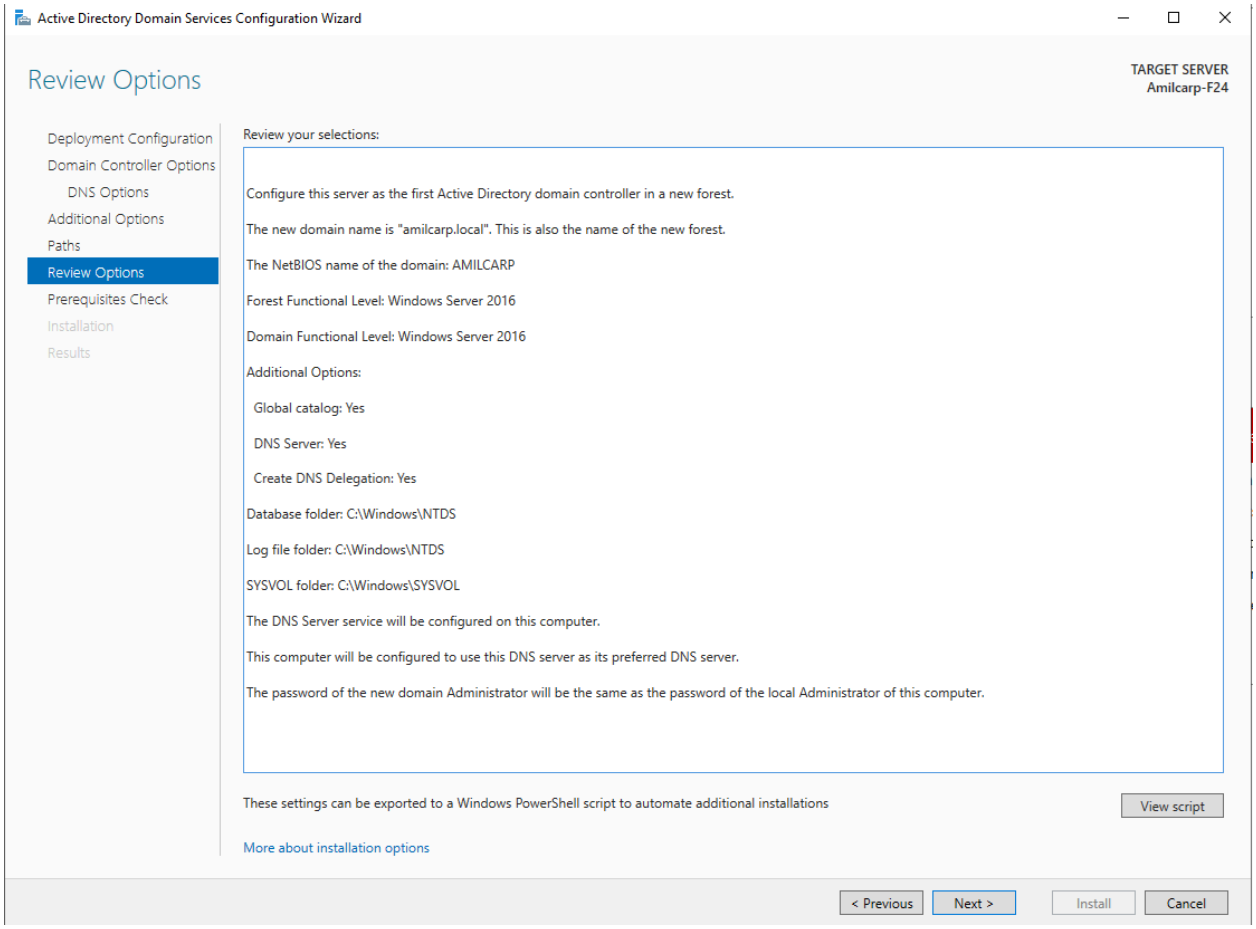
Question 1: In two to three paragraphs, describe the difference between the major DNS zone types (primary, secondary, forward, and reverse). Describe the process that DNS uses for zone transfers between primary and secondary zones.

A: DNS organizes domain names and ip addresses through zoning each having its own role to do for the DNS the primary zone is the authoritative source of DNS records for a domain. It has the original read write copy of the data that only lets admins make updates and changes directly. The secondary DNS zone is a read only copy of the primary zone and receives its data from the primary zone. It can help with redundancy and load balancing. Forward zones and reverse zones are other types as well with forward zone maps the domain names to ip addresses letting clients resolve names into numeric addresses. While reverse zone does the opposite it maps IP addresses to domain names and is often used in networking.

Zone transfers between primary and secondary DNS uses full zone transfers or incremental zone traders. full zones are entire zone field being transferred from the primary to the secondary server usually on initial set up or huge changes. While incremental only lets modified records to be transferred. It basically just shuts down and checks the primary and if any section of the primary was changed and or updated then it copies that part over to the secondary and then continues over in order to make sure everything is the same.

Configuring Active Directory

Screenshot 4 – Showing the “Review Options” screen



Question 2: In two to three paragraphs, describe what FSMO roles are. Detail each FSMO type and their purpose in Active Directory.

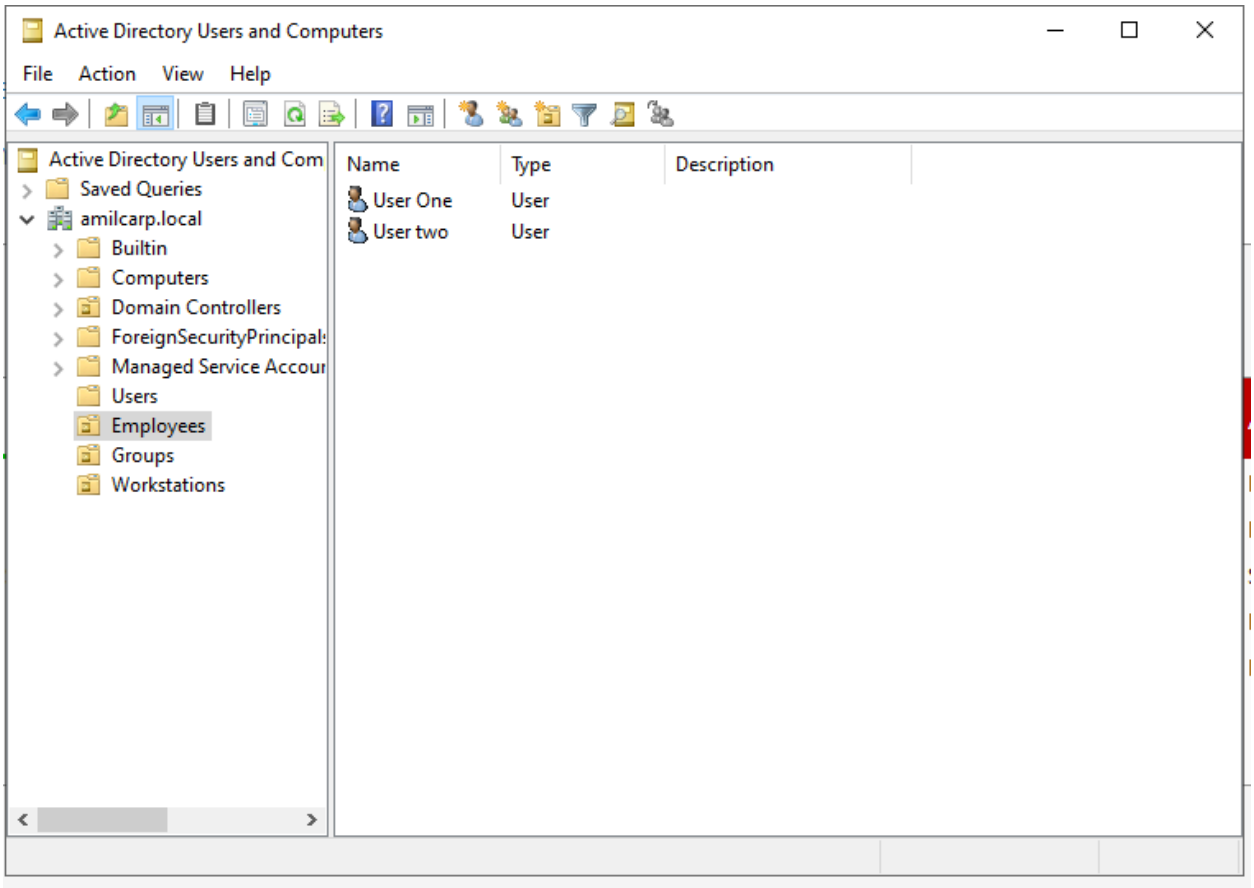
A: FSMO is a role that specialized in assigned to specific domain controllers with a active directory environment to ensure consistency and prevent conflicts in replciations. in AD multiple domain controllers can coexist and synchronize but some things may require a single authority to avoid adata conflicts. FSMO roles assign the authority needed helping manage critical functions. These are split in two types for multiple purposes.

Forest wide roles include schema master and domain naming master. Schema is responsible for making changes to the ad schema which defines object classes and attributes in the forest. The domain controller holding the schema role can modify the schema but only the domain controller that holds it can. The domain naming master handles domain and forest level name changing including the addition or removal of domains. This help any changes in the domain naming conventions and are applied uniformly across the forest to prevent naming conflicts like two with the same name While there is domain wide roles like RID that allocates relative identifiers to other domain controllers. then PDC thats handler for time synchronization password changes and legacy support for those with older

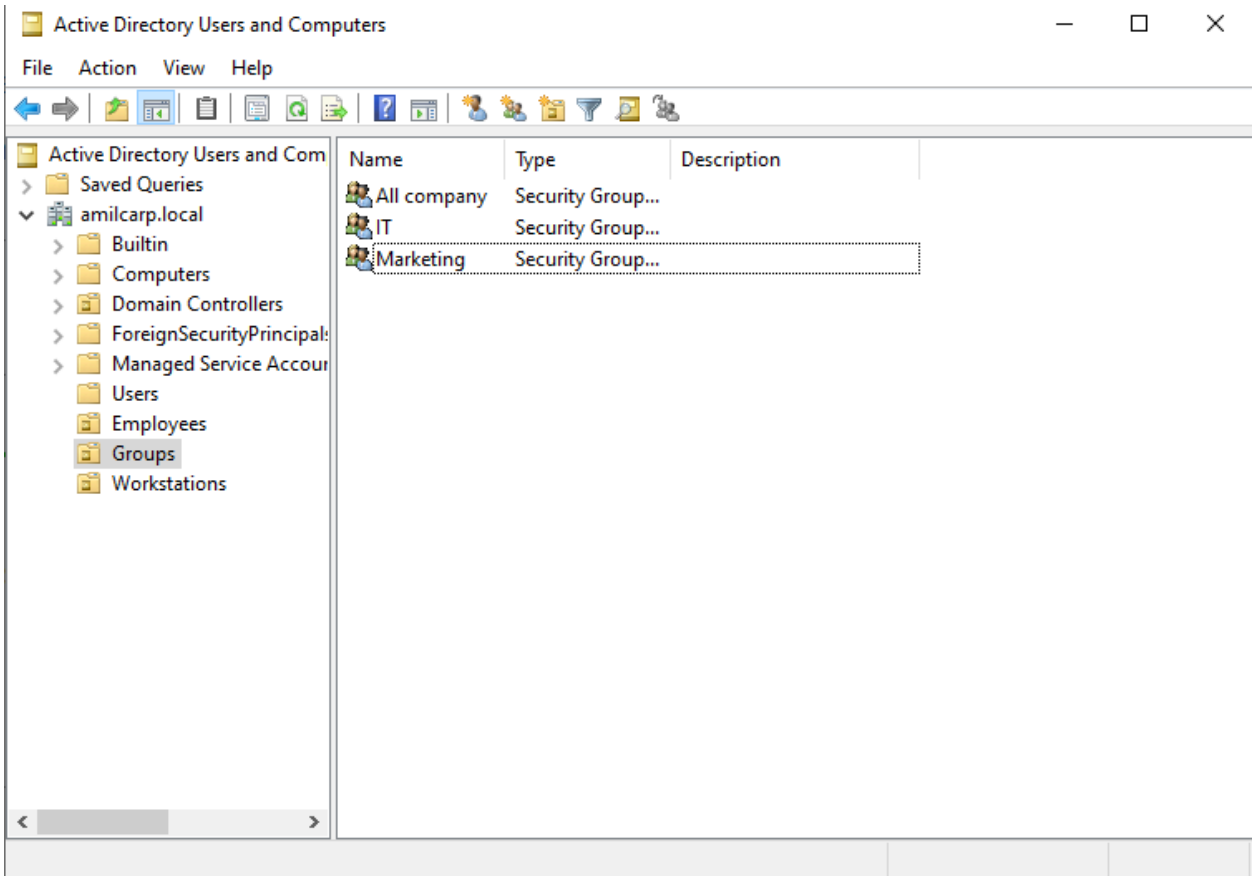
systems and apps. Then lastly is infrastructure master that updates reference to objects in other domains and ensures that the group and cross domain links are consistent

Adding Objects to Active Directory

Screenshot 5 – Showing the "Employees" OU with the two users in the OU

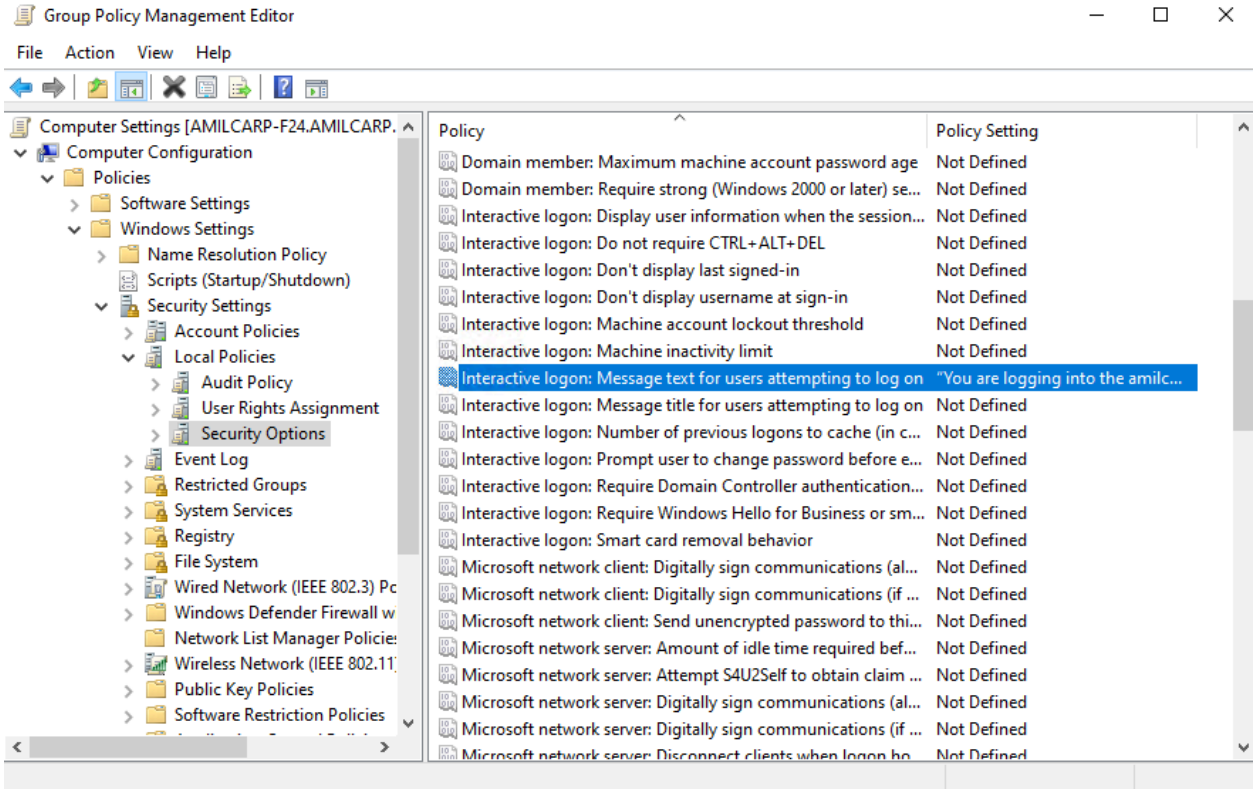


Screenshot 6 – Showing the “Groups” OU with the three groups you just created



Creating Group Policy Objects

Screenshot 7 – Showing the Group Policy settings in the Group Policy Management Window (expanded to show the settings you set above)



Question 3: Describe the differences between “User Settings” and “Computer Settings” in group policy.

A: User settings are only applied to user accounts regardless of the computer they are logged into. While computer settings apply to computer accounts which affect the machine itself rather that individual users. This is basically saying that computer settings say what configurations like software and network settings are applied on the computer no matter what no matter who logs in. While user setting would let them do stuff like background changes and other individual needs

Question 4: Assume you have a single OU with three users. You want to create a GPO that applies to only one of those users. In two paragraphs, describe the options you have to filter the GPO to apply to only a subset of users in that OU.

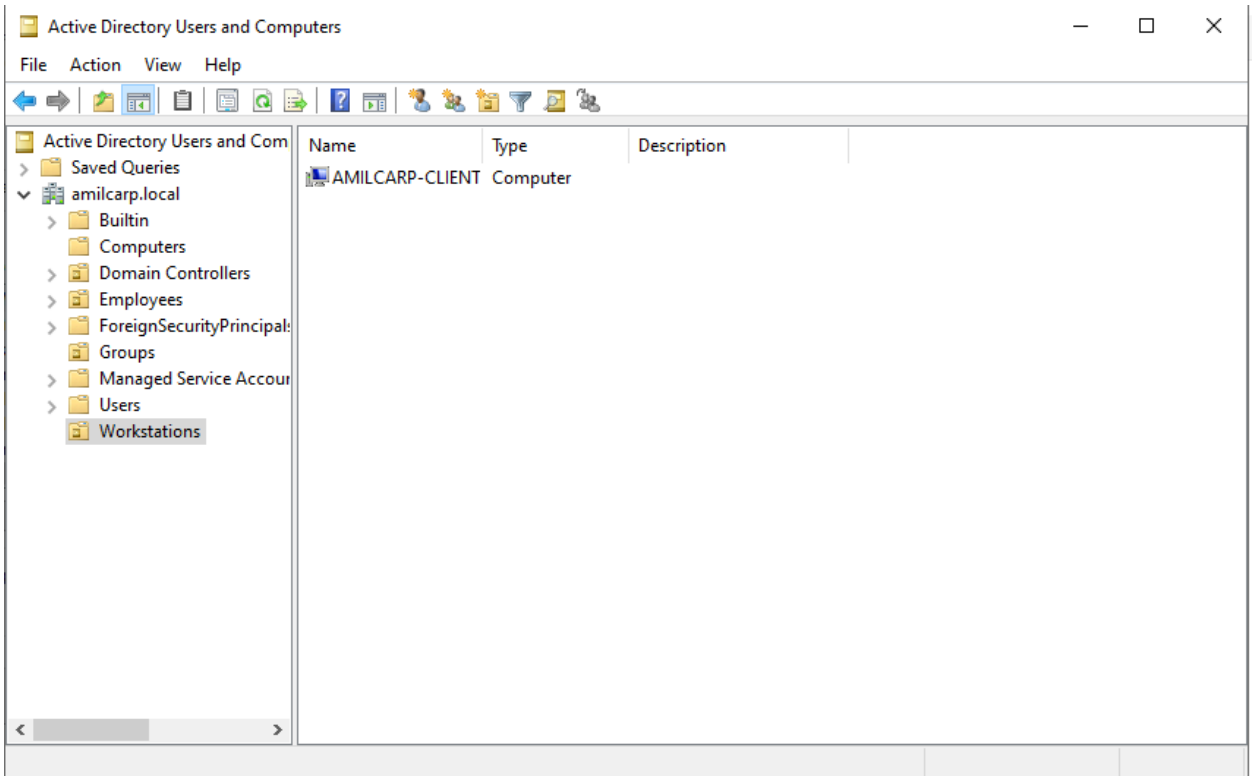
A: if we wish to make a GPO to only one user in the OU that has multiple people the best way is through security filtering in the GPOs settings we can say which users have apply group policy perms. normally it applies to all authenticated users in the OU but we can edit it by removing the authenticated users in the security filter and adding only one specific user in the group. This way only that person in the OU receives the policy setting.

Another is windows management instrumentation filtering basically lets us apply GPO attributes like OS versions or hardware specs. These filters are more custom based on the users properties as well.

This is more complex but it gives more flexibility if we wished for it. This also lets us enable the policies selectively without restructuring the OU itself.

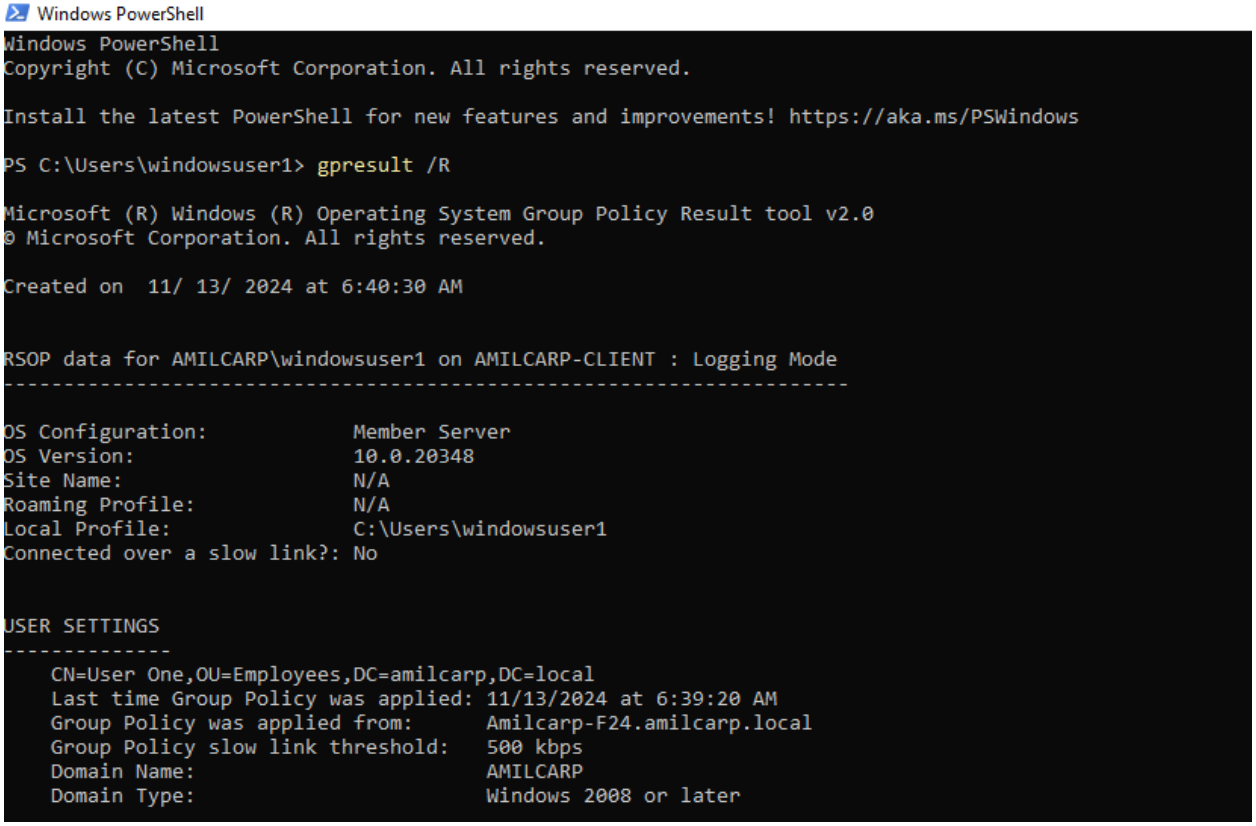
Adding a computer to the Domain

Screenshot 8 – Showing the new computer object in the “Workstations” OU



Giving Domain Users Administrator Rights on Windows Client Computer

Screenshot 9 – Showing the output of the gpresult command



*****The deliverable for Assignment 3 will be this document completed with the required screenshots and answers to the questions. You will submit this document in Canvas.**