Lab #009

JQ Adams: Magnum Opus?

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Learning Objective: The goal of the case study is to tie everything together in a way that makes sense for a company of 30 employees. Set up a domain with active directory and group policy.

**Equipment:** No new equipment is required.

Notes/Questions: We had a list of several questions we wanted to ask. Does the organization have any pre-existing naming conventions? Who are the "power" users? Is their organization on one site? How many devices do they have, and are they all connected straight to the internet? Should users be able to use more than one computer? Will they ever be working outside of the building? Our Active Directory structure took the 4 "divisions" of their team and used that as reference. We assumed that divisions with 2 teams (eg. finance and accounting) would need similar access. Each of the ou's within JQ Adams were given a security group (global), which we could later combine into domain local groups for filesystem access (This made ntfs permissions much easier, as we only had to give access to a domain local group instead of several global groups. Plus, with multiple domain controllers, there would be problems in the future using exclusively global groups). Naming convention for user accounts was first initial followed by last name (eg. jholland). To delegate control to the prod vp, we right clicked the ou's we wanted him to administrate, and clicked delegate control. We followed the setup wizard and gave access to user accounts. Setting disk quotas for users is important because a server only has so much space. We don't want people like Dr. Ackerman downloading presentation(7).ppt because she can't find her downloads folder (Much love to Dr. Ackerman) and cluttering the server with

useless files. DFS was a nightmare. We ended up needing to set it up on dc2 because it was asking for login credentials on dc1. Otherwise, all was well: we shared the folders, and set up a dfs share with the network locations of the files on both servers that needed to be shared. This way, each user only needs 1 network location for all of the files, and the files are updated in real-time. WE had gpos that audit bad login attempts, install chrome enterprise, disable control panel access, and redirect the user's "My Documents" folder to their home folder. Speaking of chrome, that was rough. We decided that all computers should have chrome, regardless of who was logging in. We set up the msi file in the shared "programs" folder, moved the winclient1 into JQ Adams, and set the install to happen on boot. All of these options are in adml/admx files that Google created to help administrate their product. Adding these templates, we could create a gpo that controls the whole installation process. Roaming profiles are helpful because their profile points to one network location regardless of where they log on at. They can keep all of their stuff in one place. All of the problems mentioned (and any I might have forgotten) all presented unique challenges. We had to reevaluate our structure several times, and some google searches were made. A few times, we had to call in our professor for some help with some issues that we hadn't had in previous labs (dfs, computer configuration settings).
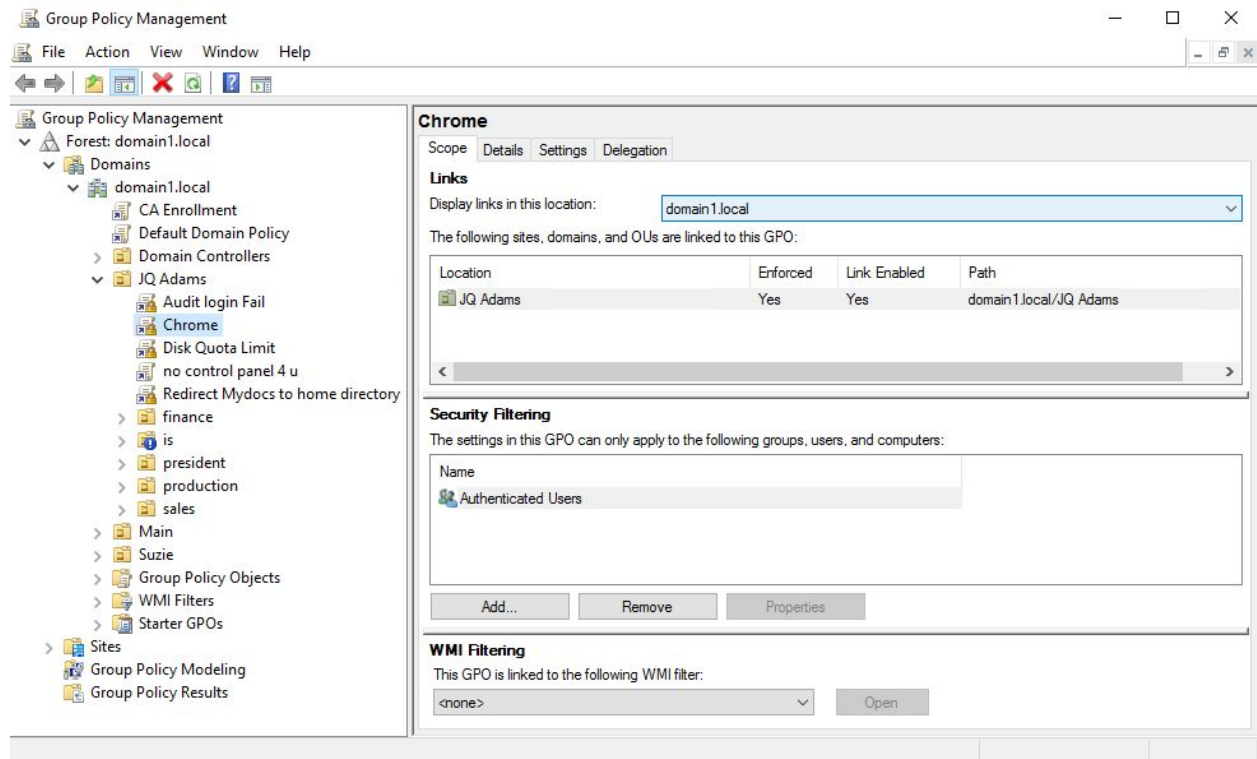
Diagrams:
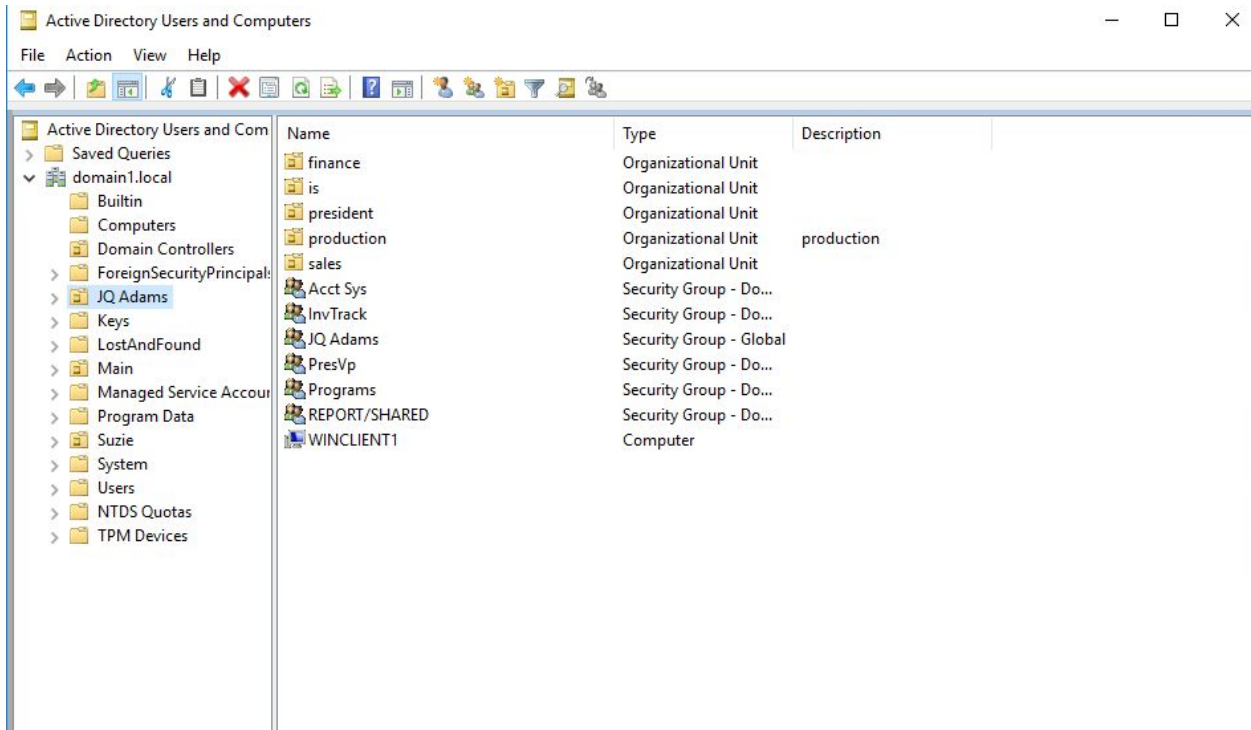
Active Directory Structure
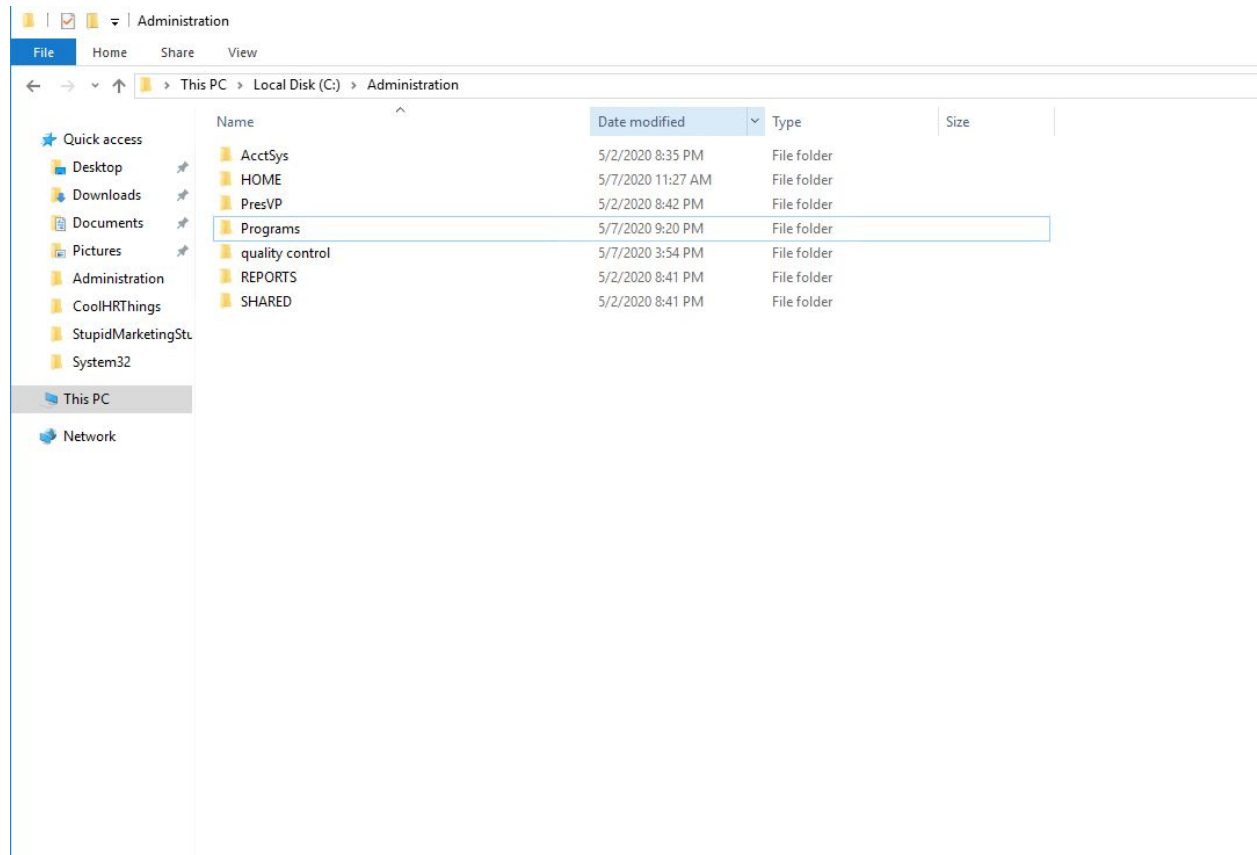
File Structure on administration server. Production server shared a single folder (not shown).

GPO View

```
RSOP data for DOMAIN1\dhulbert on WINCLIENT1 : Logging Mode
------------------------------------------------------------

OS Configuration:            Member Workstation
OS Version:                  10.0.18362
Site Name:                   N/A
Roaming Profile:             N/A
Local Profile:               C:\Users\dhulbert
Connected over a slow link?: No


USER SETTINGS
-------------
    CN=Donna DH. Hulbert,OU=president,OU=JQ Adams,DC=domain1,DC=local
    Last time Group Policy was applied: 5/7/2020 at 2:38:22 PM
    Group Policy was applied from:      winServer1.domain1.local
    Group Policy slow link threshold:   500 kbps
    Domain Name:                        DOMAIN1
    Domain Type:                        Windows 2008 or later

    Applied Group Policy Objects
    ----------------------------
        Redirect Mydocs to home directory
        no control panel 4 u
```

Early RSOP for dhulbert.

Conclusion: I hated this project. But it tested us on everything. Were I to do this again in the future, I would triple check that Active Directory is completely set up first (users AND computers). I personally would have gone into each gpo and blocked inheritance, instead of enforcing the ones I needed on everybody and not enforcing the ones I don't want on the IT people. This lab solidified the concept of dfs, as well as Active Directory. Each lab individually seemed really easy, but this lab combined them all, and put the pieces together on how we would go straight from one to another. Despite my hatred for it, this was a very well-crafted case study. Thanks Troy!!