CNT 4603: System Administration Spring 2022

Project Five - Managing The savn.local Domain

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Office Hours Zoom Details: Meeting ID: 924 3809 7405

Passcode: 983064

Q&A Sessions via Zoom: Meeting ID: 981 8349 4221

Passcode: 509807

Department of Computer Science University of Central Florida



Project Five

- Title: "Project Five: Managing The savn.local Domain"
- **Points:** 100 points
- **Due Date: Sunday April 17, 2022** by 11:59 pm WebCourses time.
- **Objectives:** The completion of Project Four left you with a completely configured savn.local network. With this project we now begin some basic system administration activities on the network. This project will focus on MJL-SP22-S22-1 and MJL-SP22-S22-2.
- **Deliverables:** Seven screen shots as shown on pages 8, 22, 29, 33, 36, 38, and 41.



Project Five – Background

- You may recall from our earlier discussions of domains/trees/forests that an organizational unit (OU) offers a way to achieve more flexibility in managing the resources associated with a business unit, department, or division than is possible through domain administration alone.
- An OU is a grouping of related objects within a domain, similar to the idea of having sub-directories within a directory.
- OUs are typically used to reflect the structure of the organization without having to completely restructure the domains with the that structure changes.
- OUs allow the grouping of objects so that they can be administered using the same group policies, such as security.



Project Five – Background

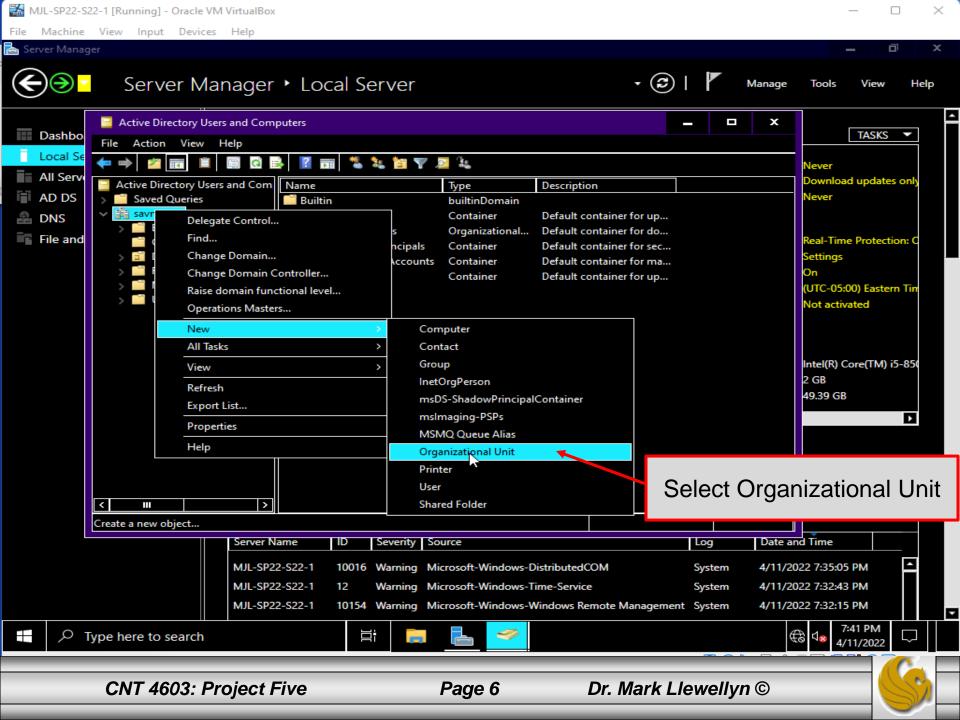
- The first step in Project Five will be to create some basic OUs for our savn.local domain.
- We'll consider our organization to be made up of three basic units: administration, research, and sales.
- The next couple of pages step you through setting up these three OUs.

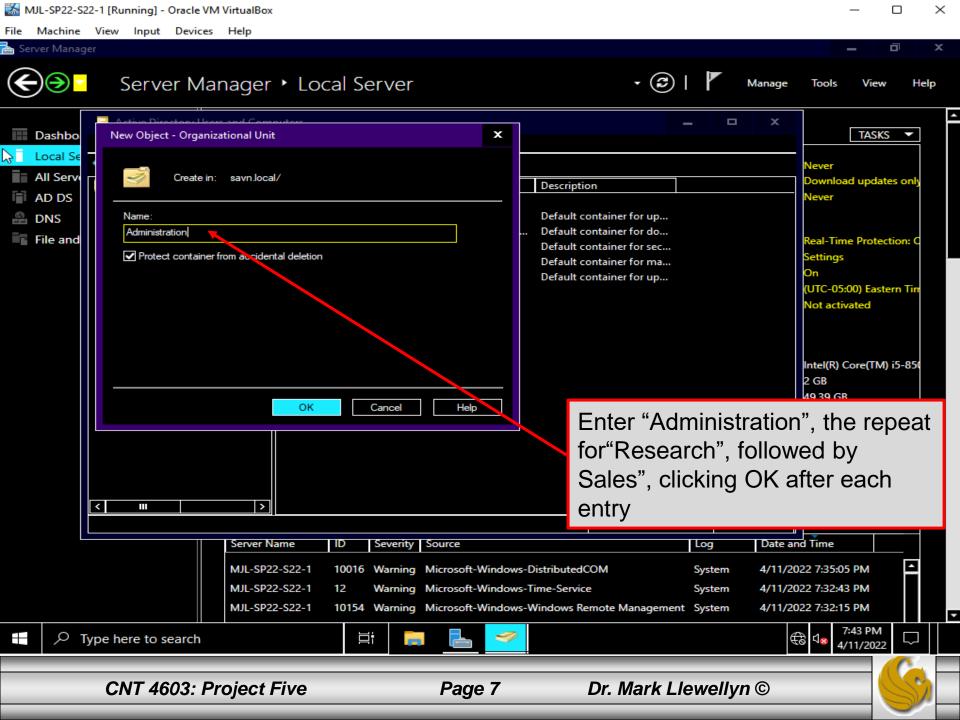
The pages that follow explain the details of the project, stepping you through the actions. In the various callouts, the items that appear in **bold green** text require you to do screen captures and/or answer questions. These screen captures and answers will constitute your submission for this project. **Be** sure that the name of the VM is clearly visible in each screen shot.

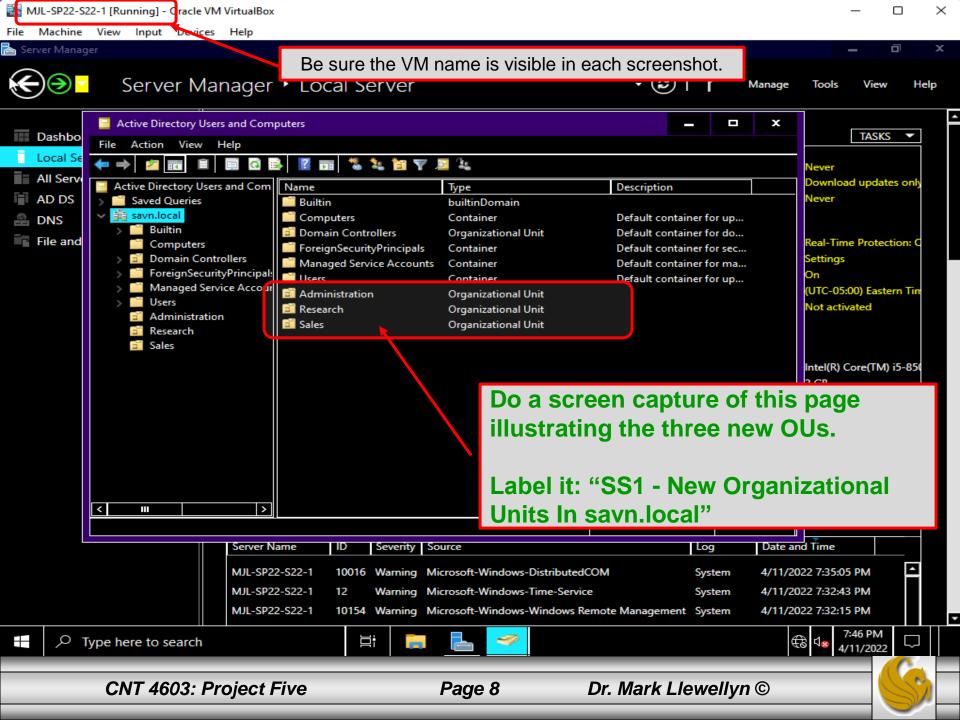


Project Five – Creating OUs

- Start MJL-SP22-S22-1 (the domain controller for savn.local) domain.
- Click on Tools in the top right side of the Server Manager window.
- Select Active Director Users and Computers.
- Right-click the savn.local link in the left pane.
- Point to New and select Organizational Unit. (see page 6)
- When the new window appears, enter the name: Administration. (see page 7)
- Repeat these steps for: Research and Sales.
- After completing this task, get a screen shot of the Active Directory Users and Computers window showing the three new OUs, like page 8.







Project Five – User Account Management

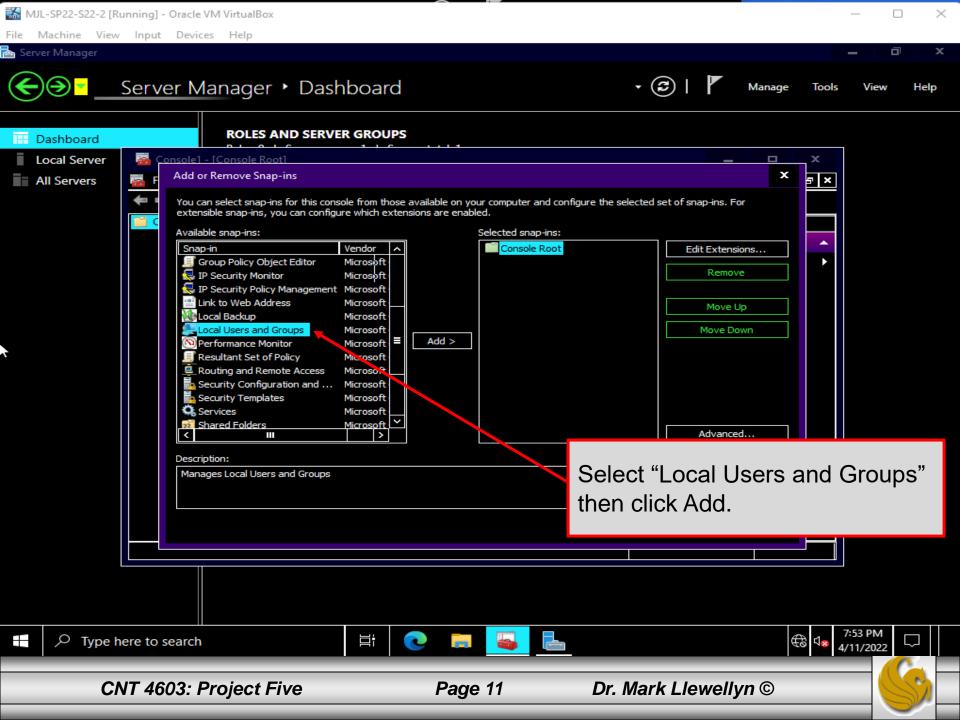
- We'll use the OUs you just created a bit later (and also in subsequent projects), but the next thing that I want to give you some experience handling is the creation and manipulation of user accounts on the servers.
- While MJL-SP22-S22-2 is a member of the savn.local domain it is also a stand-alone server (in that it is not a domain controller). Hence, on MJL-SP22-S22-2 we can create a local, non-domain-oriented account. We'll do this first, before we create any domain-oriented accounts from inside AD on MJL-SP22-S22-1.

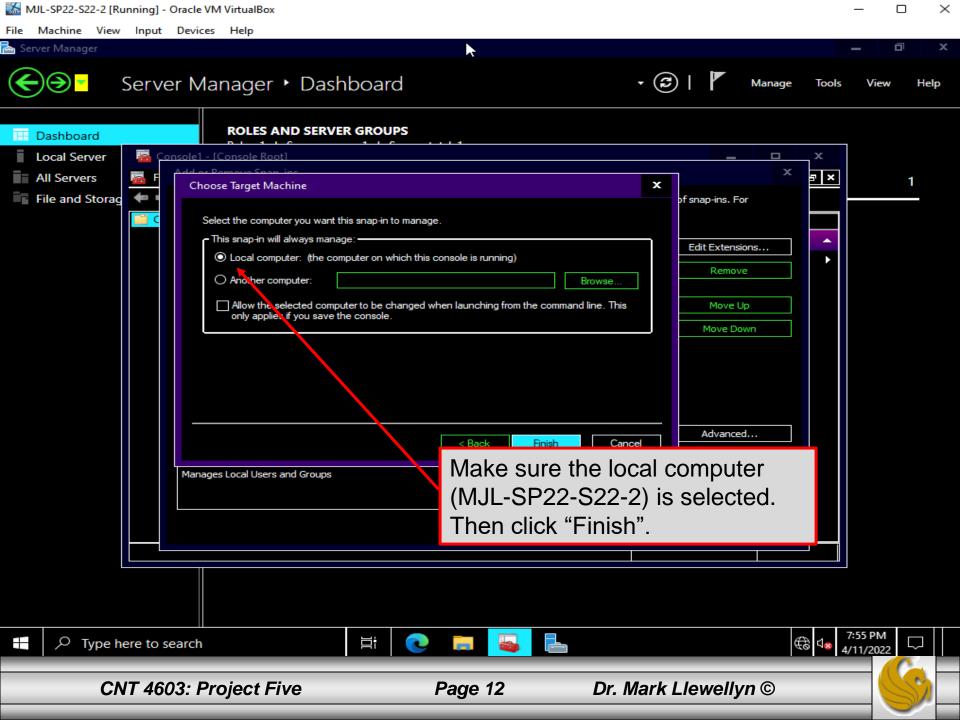


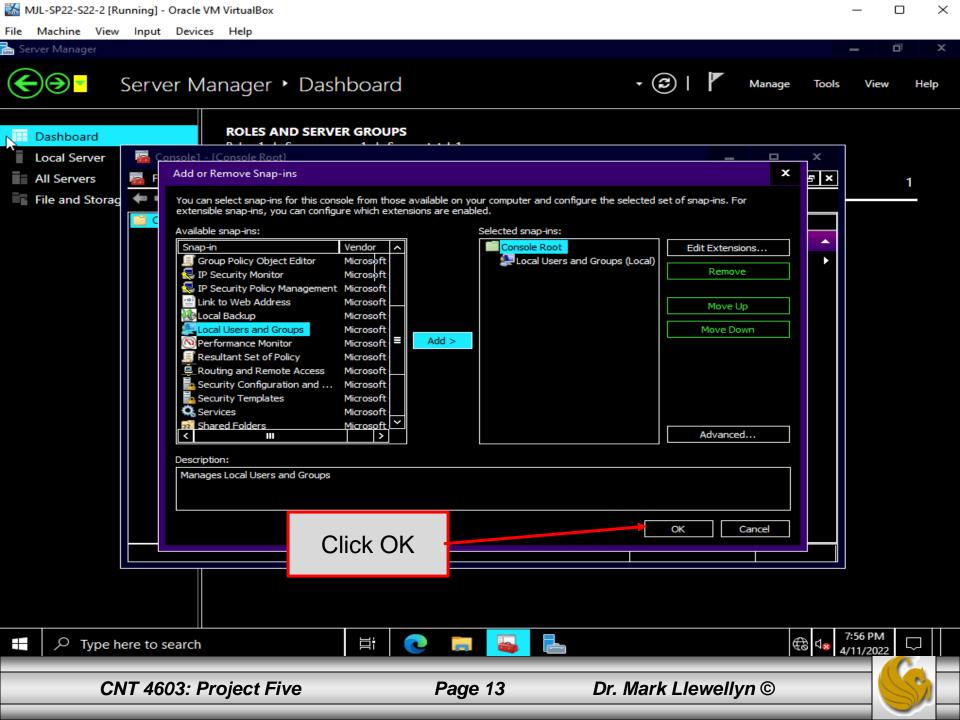
Generating a Local User Account on MJL-SP22-S22-2

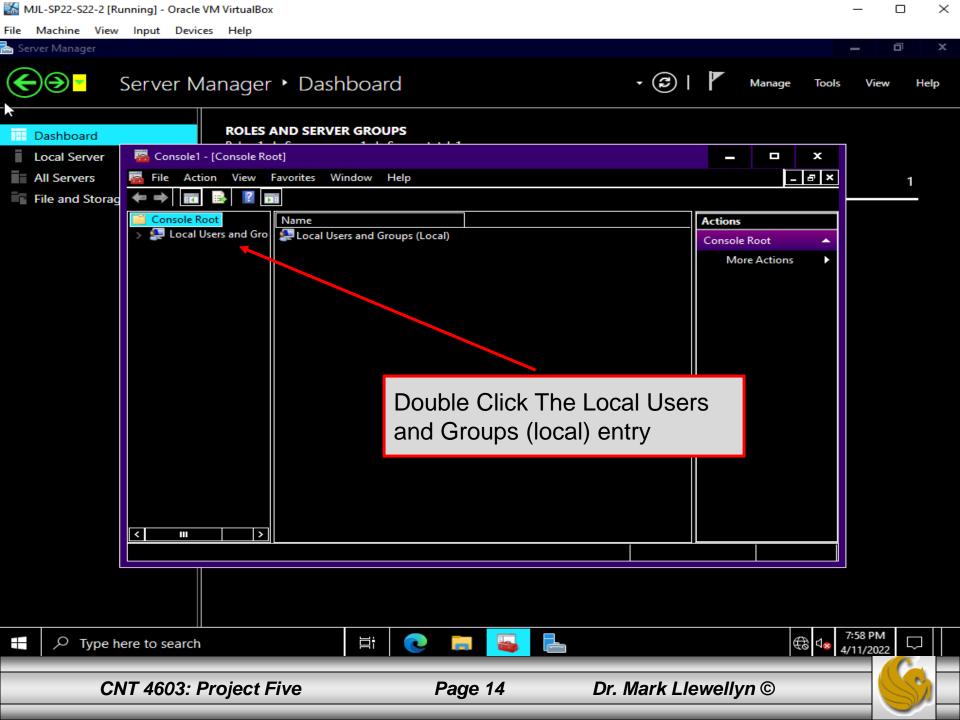
- On a server where AD is not installed, new user accounts are created by first installing the Local Users and Groups MMC (Microsoft Management Console) snap-in for standalone servers.
- The steps for doing this are:
 - Start MJL-SP22-S22-2 running.
 - Right click the Windows icon in the lower left of the window. Select Run, enter mmc at the prompt, and click OK.
 - Click the File menu option, and click Add/Remove Snap
 - Under Available snap-ins, find and click Local Users and Groups. See next page for a screen shot of this.

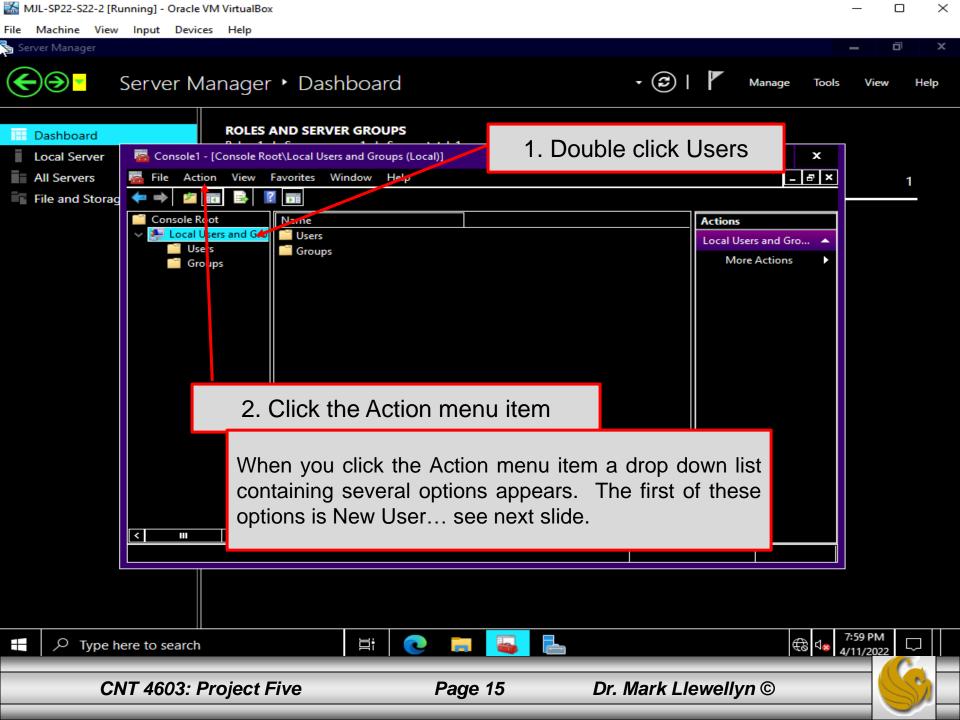


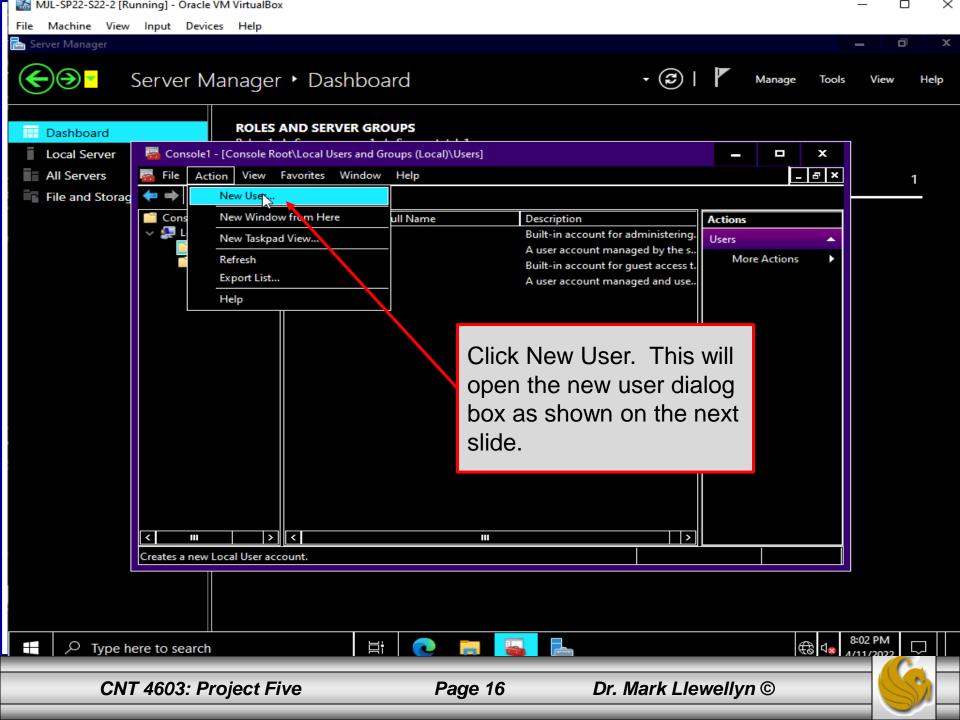


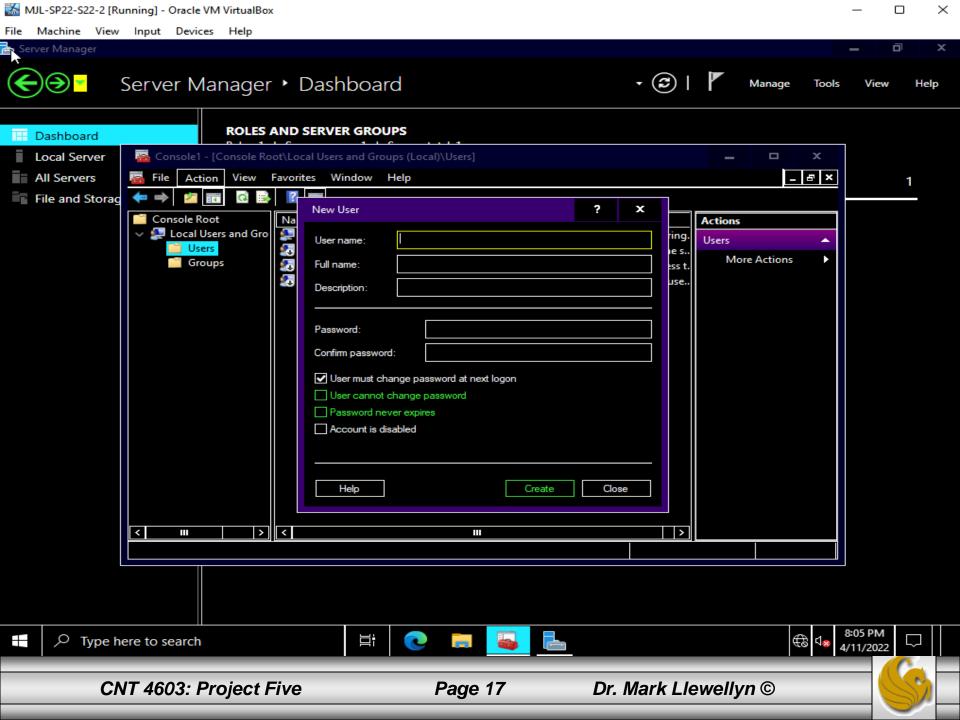


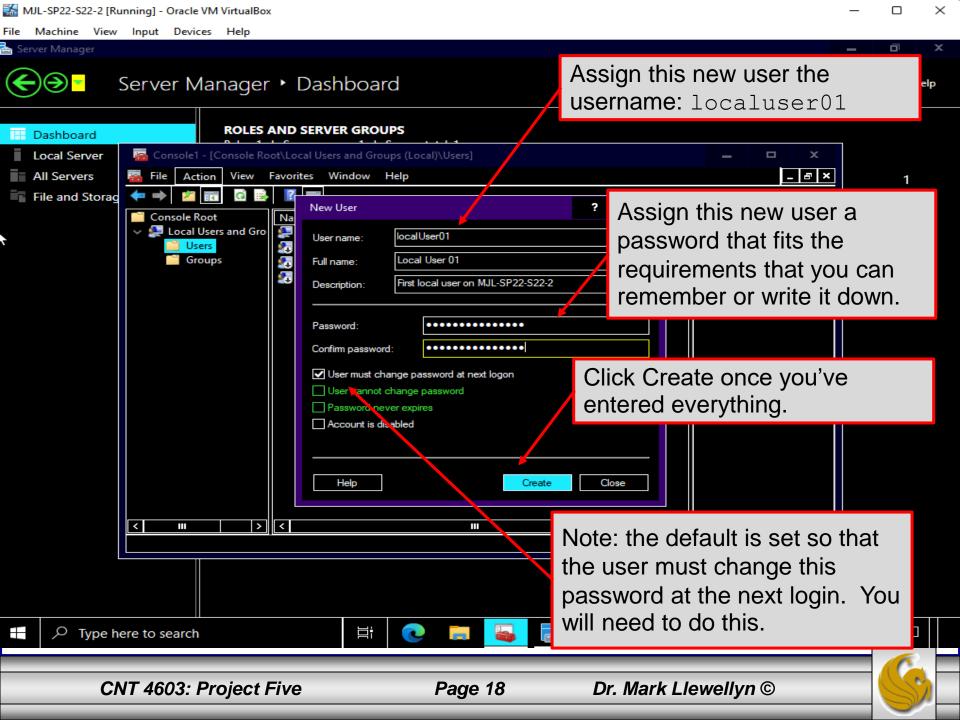








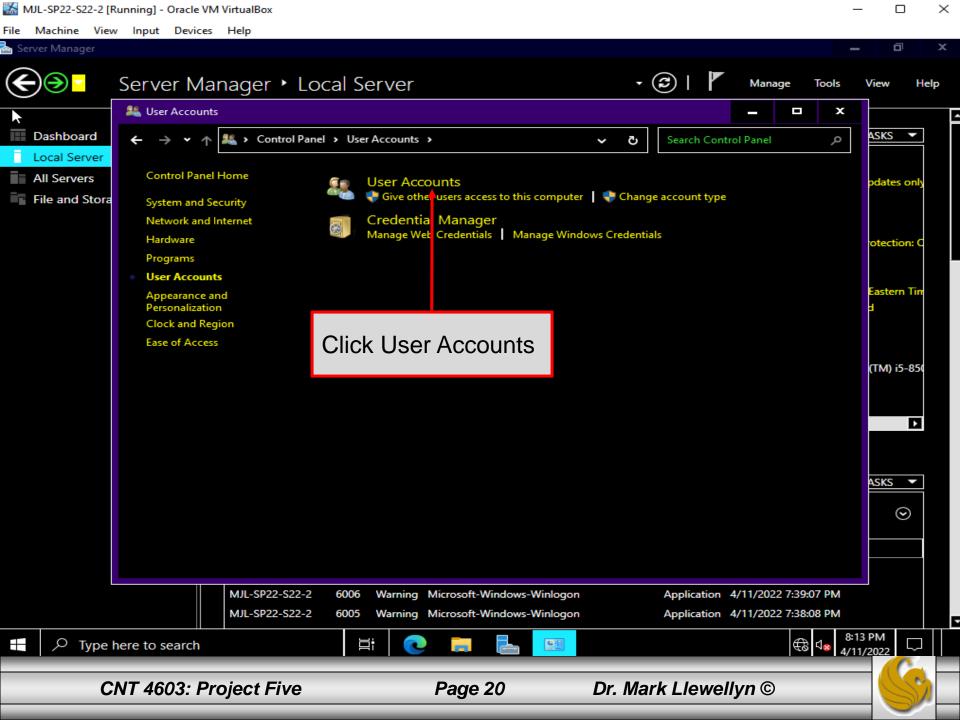


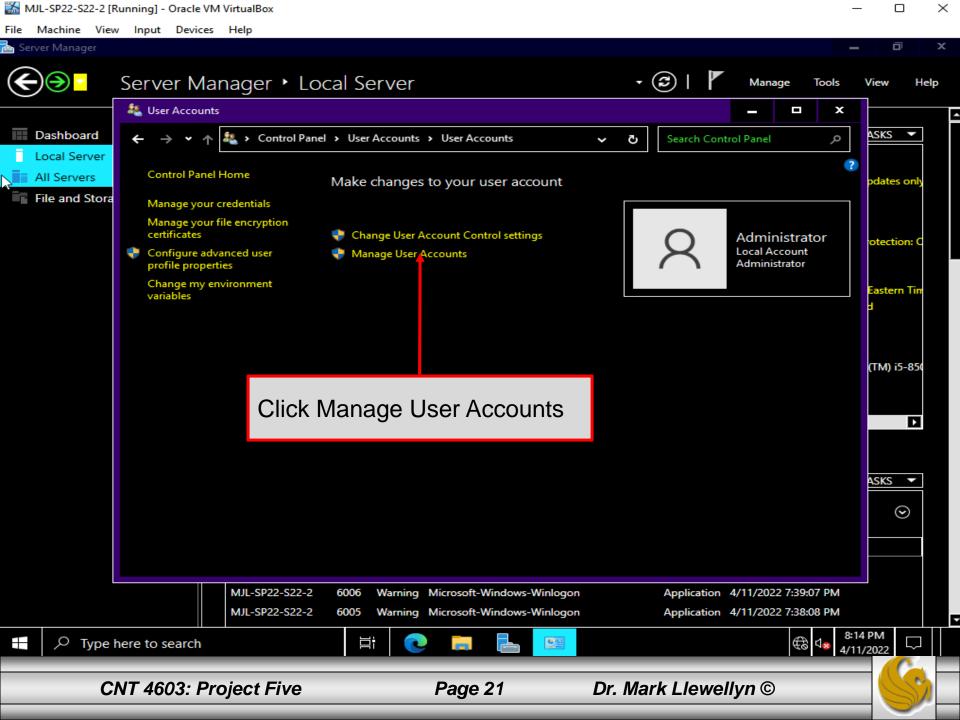


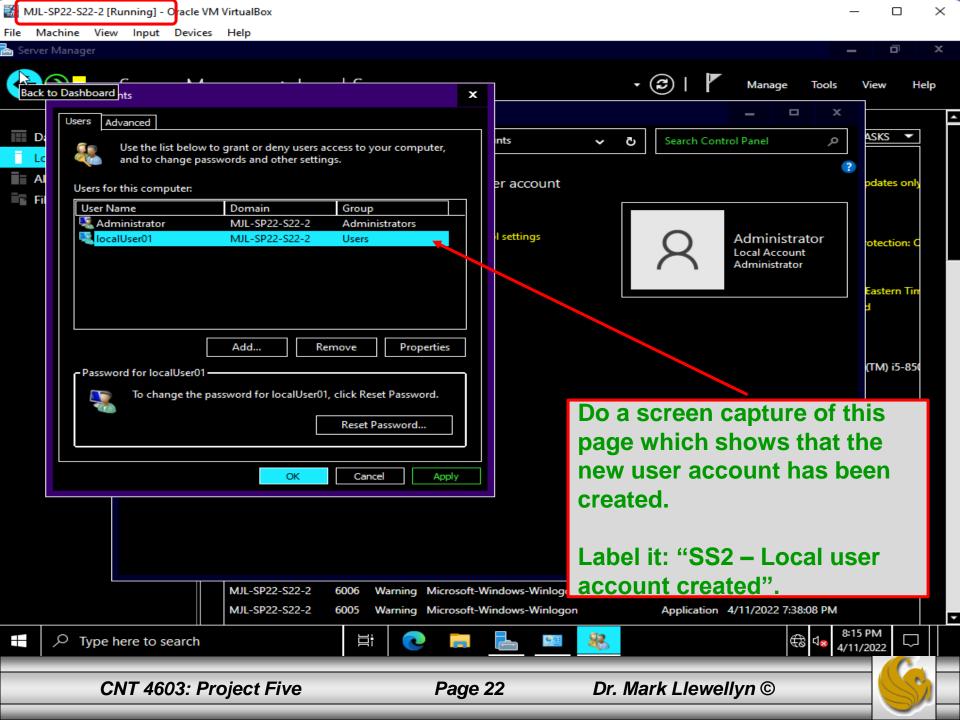
Generating a Local User Account on MJL-SP22-S22-2

- When you complete this task, save the changes when prompted and you will have successfully created a local user account on MJL-SP22-S22-2.
- Note that localuser01 is not a domain user and is known only locally to MJL-SP22-S22-2.
- From the Control Panel in MJL-SP22-S22-2, select the User Accounts option as shown on the next page.





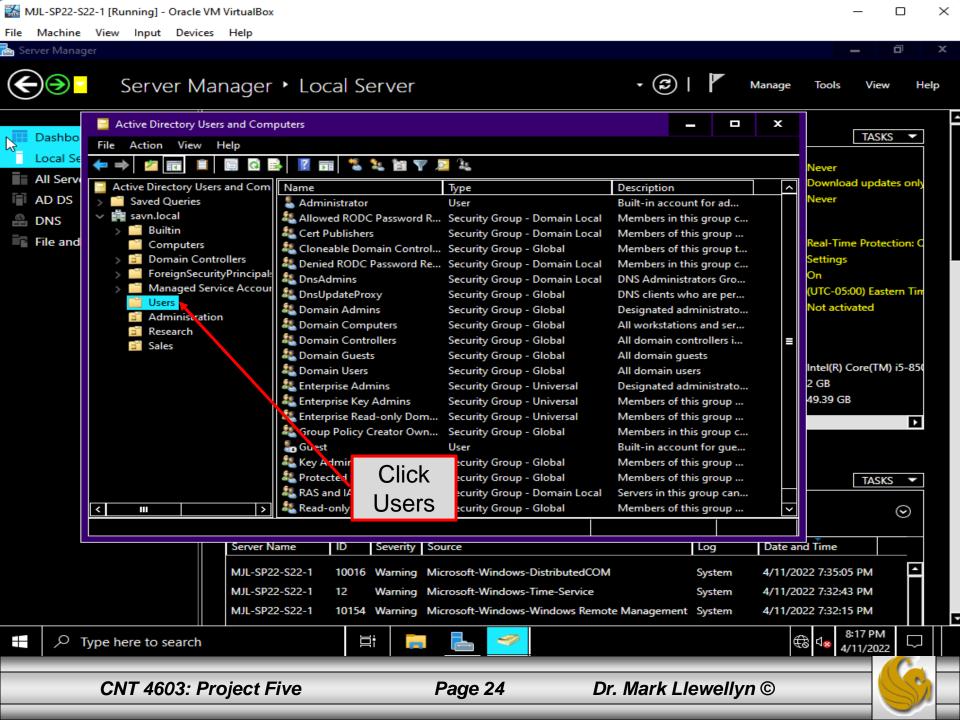


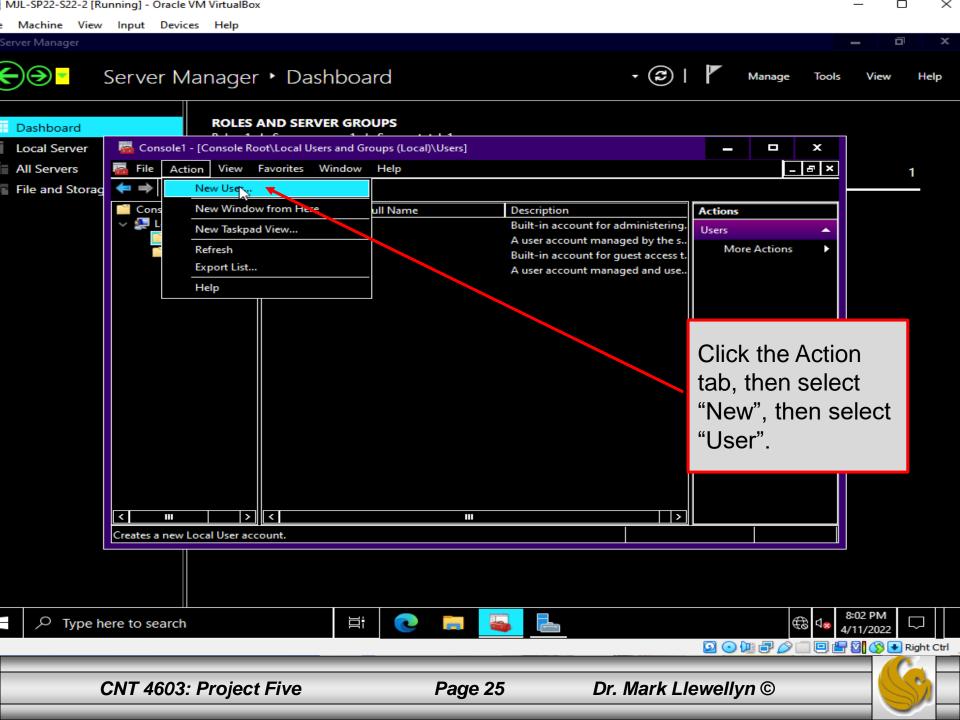


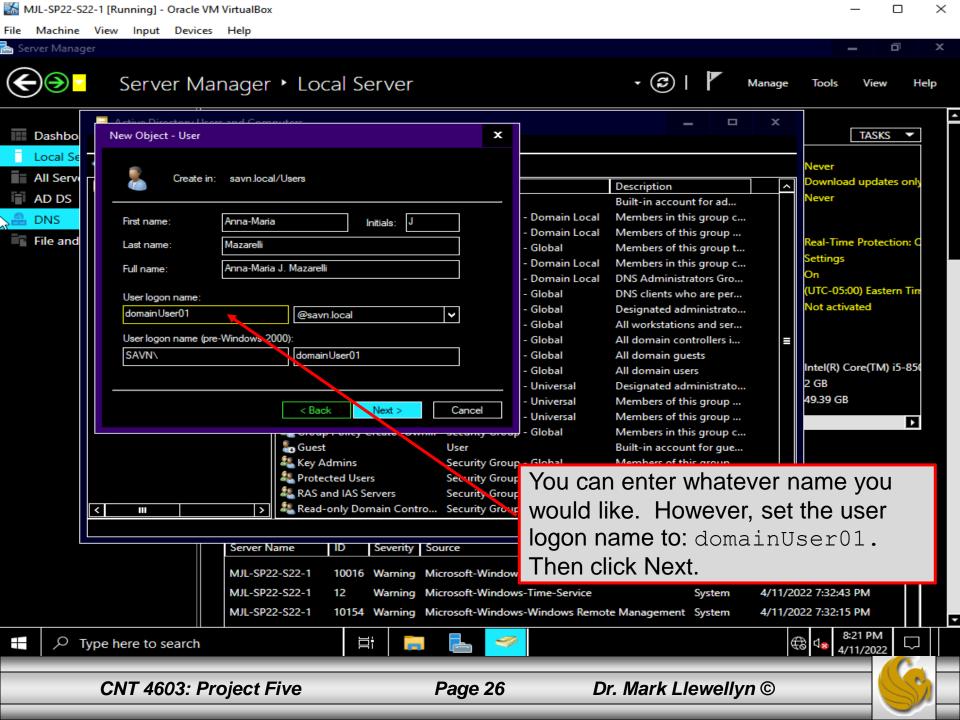
Generating a Domain User Account on MJL-SP22-S22-

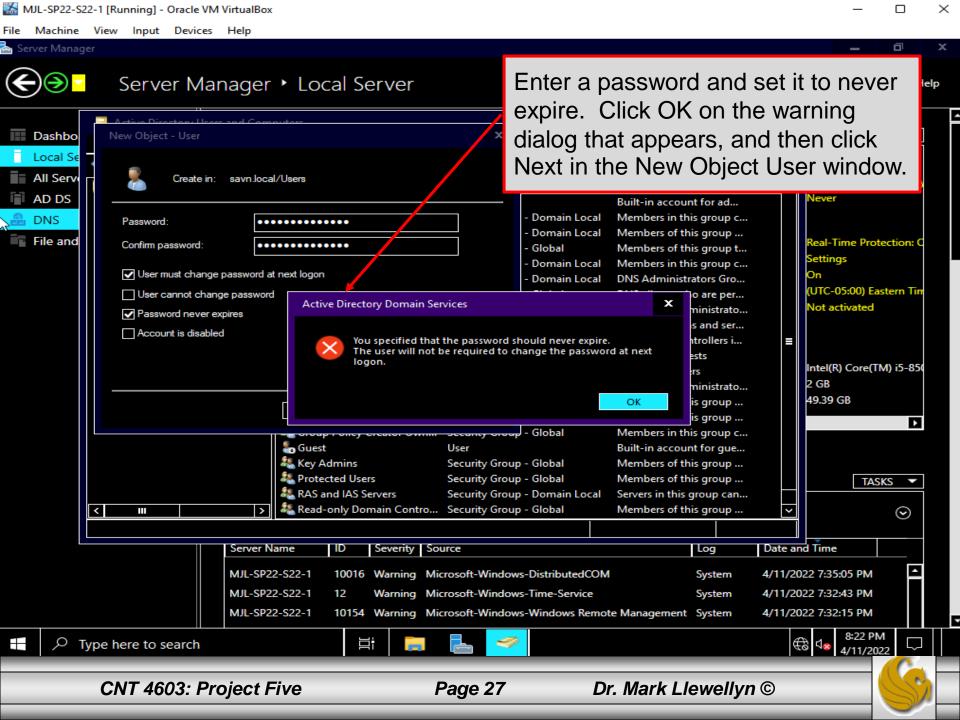
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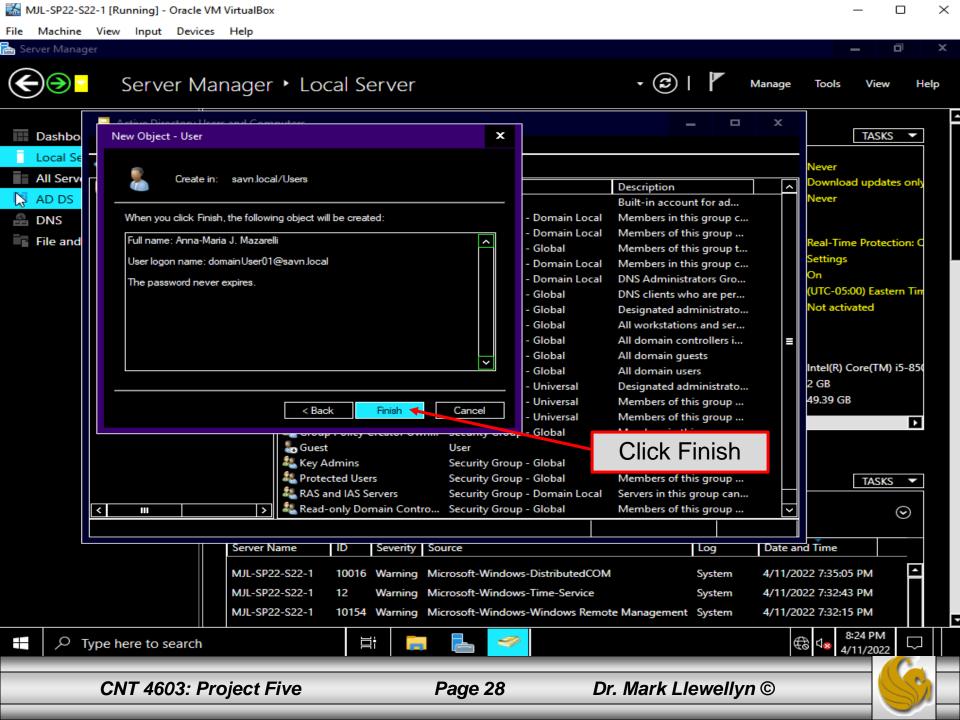
- Management and access to resources through Active Directory begins through user accounts. On a server where AD is installed, new user accounts are created via the Active Directory Users and Computers tool, which became accessible on MJL-SP22-S22-1 when it became the domain controller for the savn.local domain. It is accessible from Administrative Tools.
- To create a user in the savn.local domain the steps are:
 - Start MJL-SP22-S22-1 running.
 - Click Administrative Tools, Select Active Directory Users and Computers from the list.
 - In the left pane, click the plus sign in front of the savn.local domain entry (it may already be expanded depending on what you've done here previously).

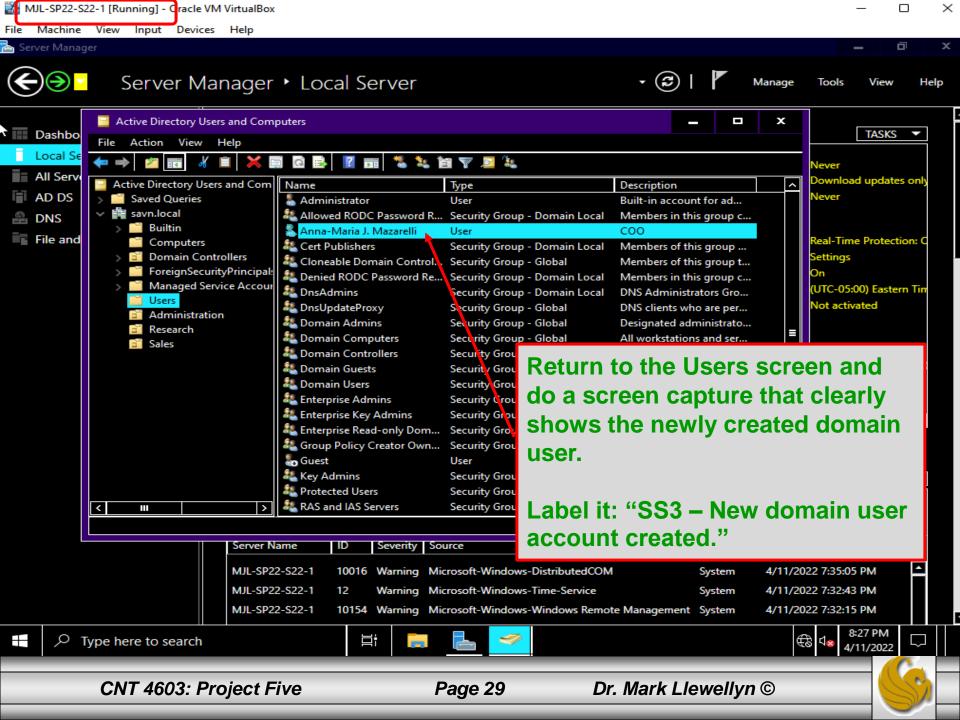








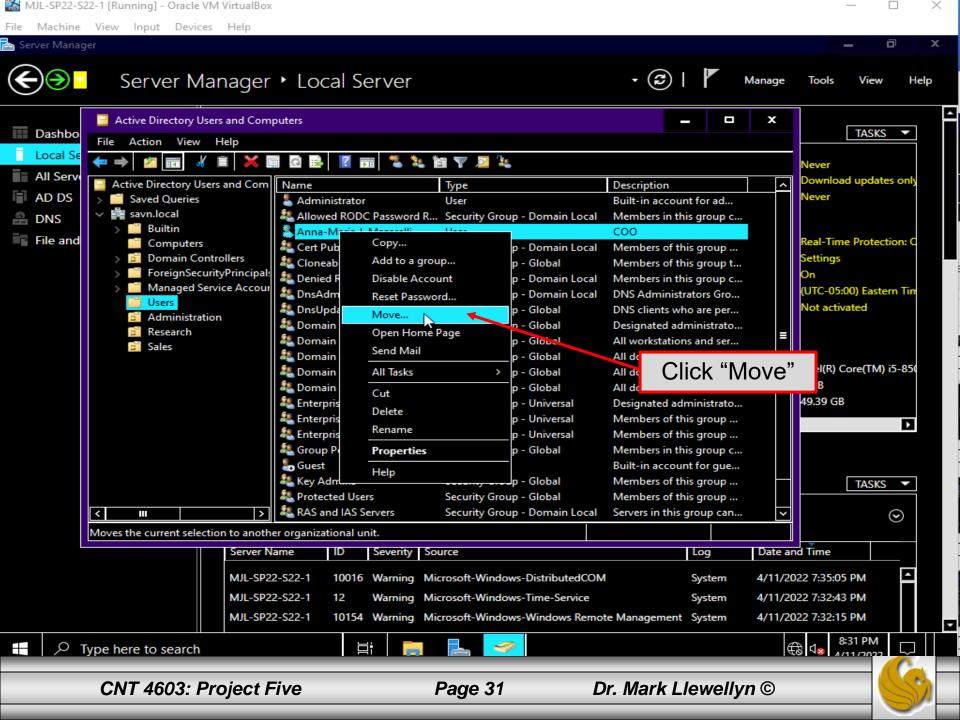


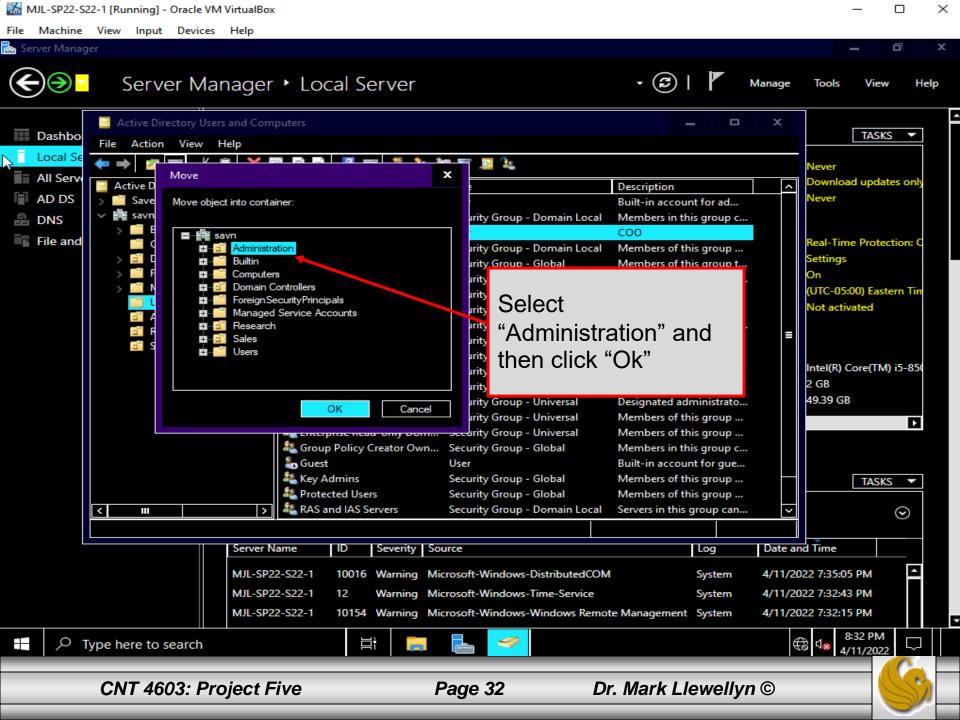


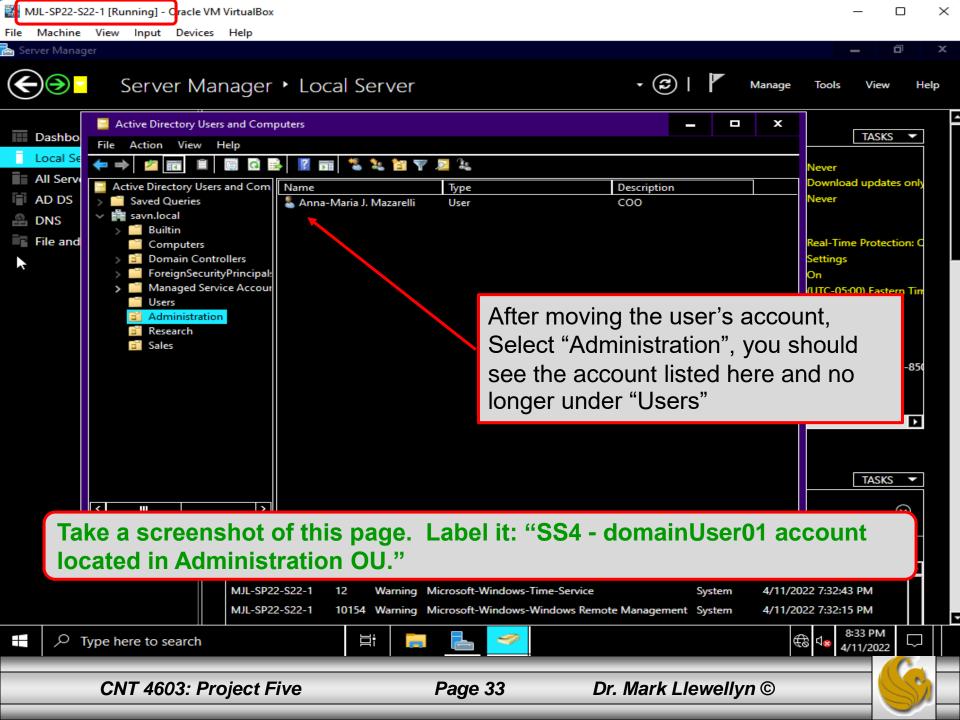
Moving a User Account to an OU

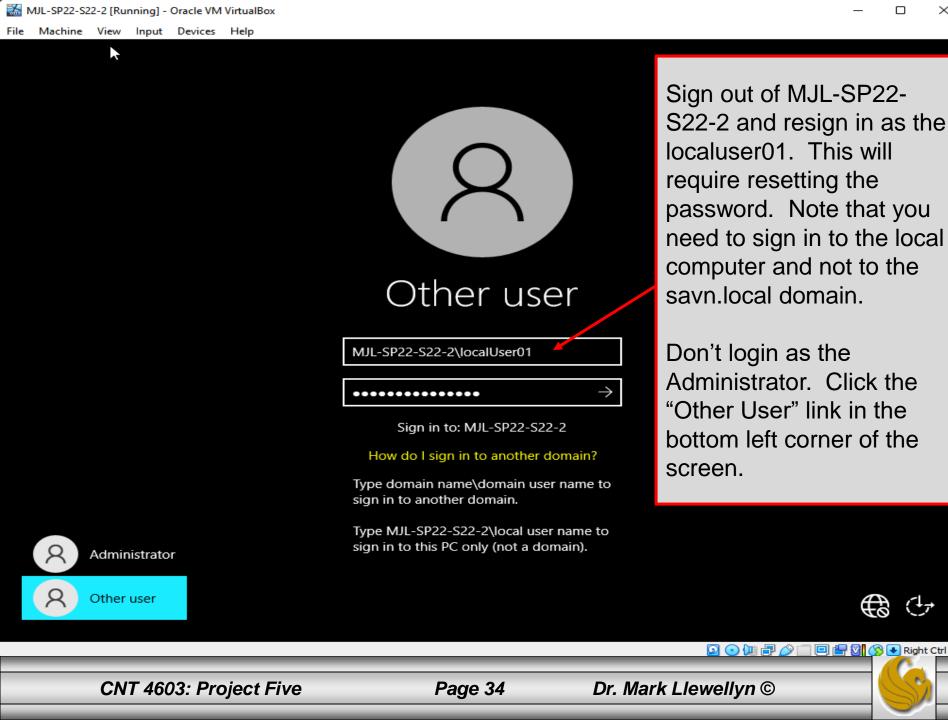
- Next, move the domain user account you just created (domainUser01) into the Administration OU that you created earlier.
- To do this, return to the screen shown on the previous slide.
 Highlight the new user account by selecting it and then right clicking the account.
- Select "Move" from the available options, as shown on the next slide:







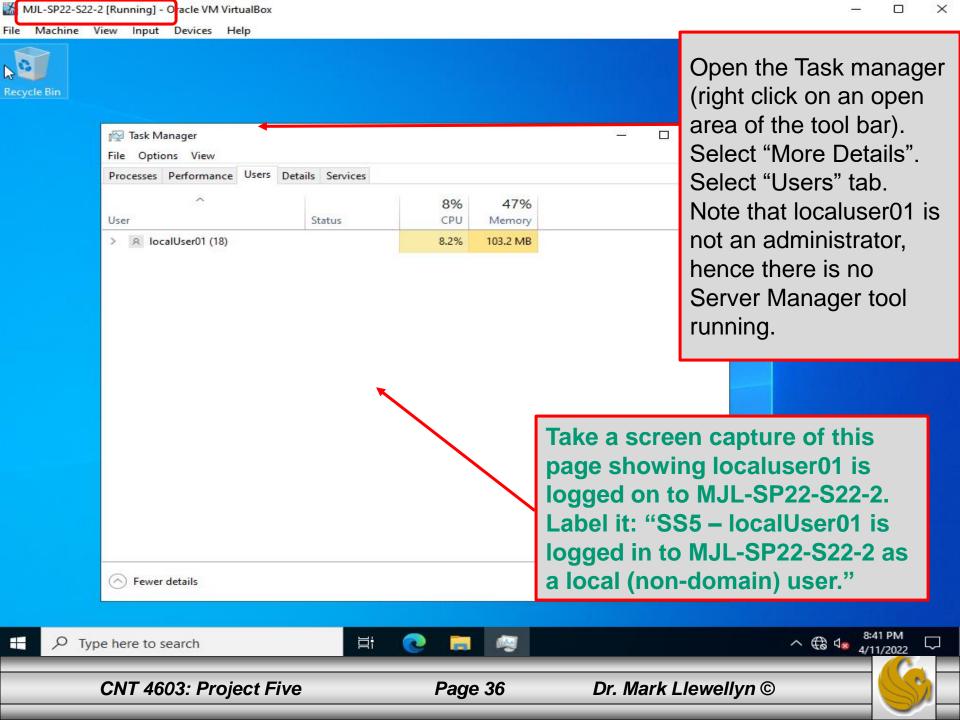


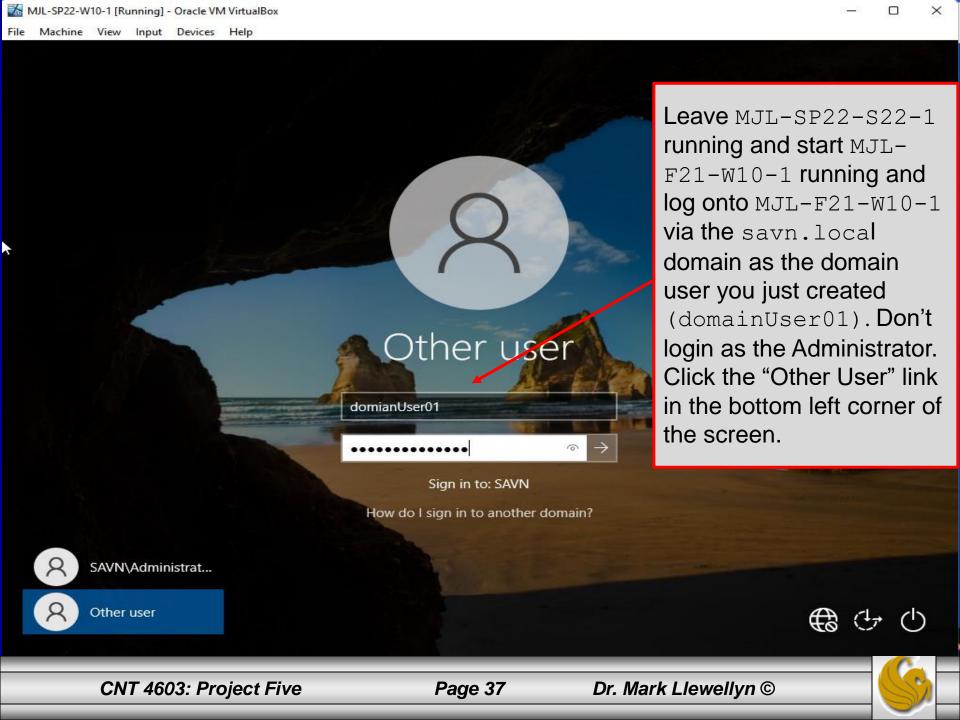


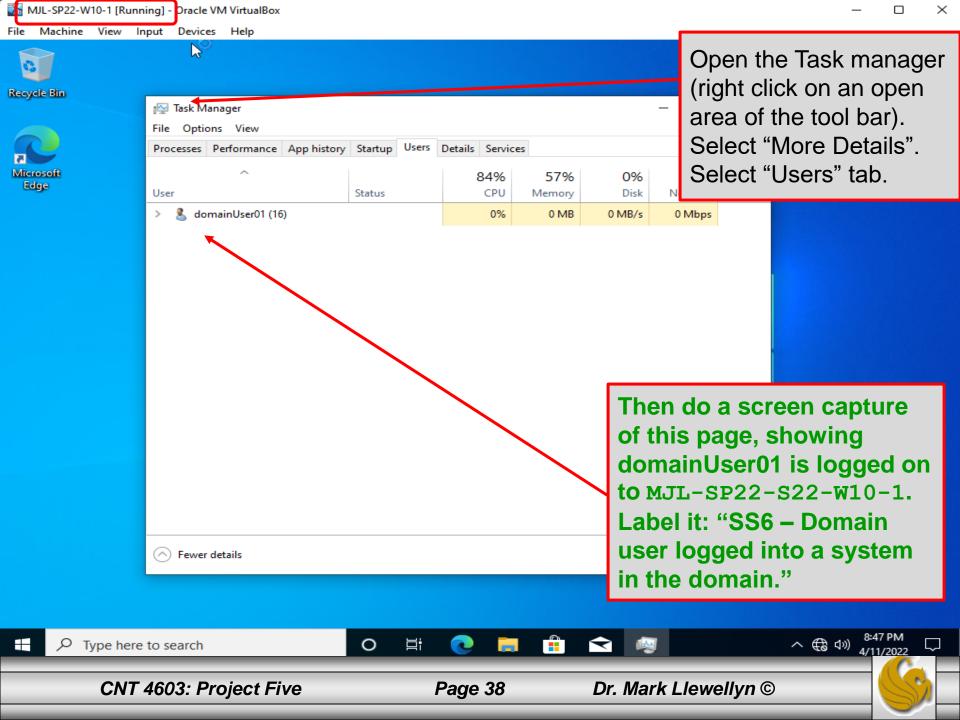


The user's password must be changed before signing in.



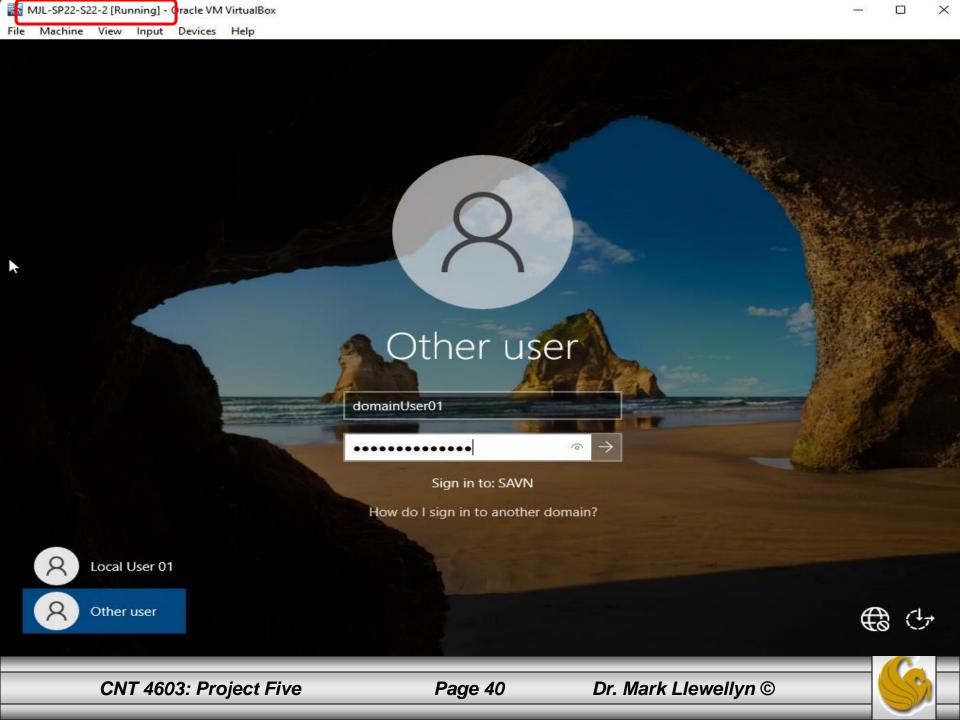


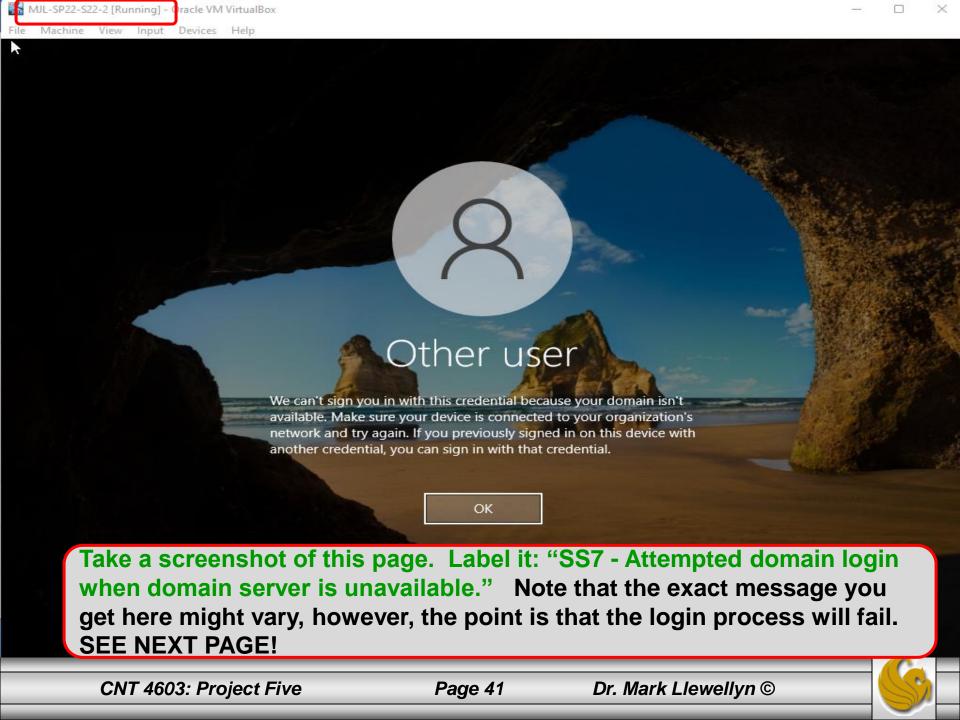




Domain User Logon Attempt With No Domain Controller Available

- For the next step in this project, shutdown all VMs in the savn.local domain that are currently running.
- Note that only an administrator has the permissions to power off a server. Thus, if you are currently logged to any system in the savn.local domain as either domainUser01 or localuser01 you cannot do this, you will have to log back in as the administrator)
- Start MJL-SP22-S22-2 running and attempt to log into the savn.local domain as domainUser01.
- The attempt to log in to MJL-SP22-S22-2 as domainUser01 will fail since the domain controller MJL-SP22-S22-1 is off-line. You should see a screen similar to the one shown on page 41.





IMPORTANT!!!

- After failing to log on with the domain controller offline, do not force stop MJL-SP22-S22-2.
- Instead, restart MJL-SP22-S22-1 (the domain controller) and once it has restarted, do a proper login on MJL-SP22-S22-2 (as an Administrator) and go through the normal proper shutdown procedures for each VM.
- DO NOT FORCE STOP MJL-SP22-S22-2!

