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|  | 420-536 Windows Networking |  | Worth 3% |
| Winter 2017 |  |  |

## Assignment #4c: Creating and Managing Active Directory Users, Groups, Computers and Organizational Units.

## This Assignment Contains The Following Exercises And Activities:

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| Part #1 | Creating Computer Objects |
| Part #2 | Creating a Single User |
| Part #3 | Using Active Directory Administrative Center |
| Lab Challenge | Creating Users with Windows PowerShell |
| Lab Challenge | Creating Multiple Users with LDIFDE |
| Part #4 | Creating Organizational Units |
| Part #5 | Creating Domain Local Groups |
| Part #6 | Creating Global Groups |
| Lab Challenge #3 | Nesting Groups |
| Part #7 | Delegating Administration |

## Working with the Submission Worksheets

Each part of this assignment requires that you answer questions, create screen shots, and perform other activities that you will document in the workbook attached to the assignment. As you perform the exercises in each part, open the appropriate worksheet, fill in the required information, and save the file to your drive.

## After completing this lab, you will be able to**:**

* Create AD DS computer objects
* Create AD DS user objects
* Create objects using Windows PowerShell
* Create multiple objects using LDIFDE
* Create AD DS organizational unit objects
* Create AD DS group objects
* Nest groups
* Delegate authority over OUs

## Part #1: Creating Computer Objects

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| Overview | In this exercise, you use the Active Directory Users and Computers console on a newly installed domain controller to create a computer object. |
| Mindset | Is it always necessary to create computer objects manually? |

1. Log on to your domain controller. Open the Active Directory Users and Computers console.
2. Create a new domain computer object called **Wkstn1**.
3. Take a screen shot of the Computers container in the Active Directory Users and Computers console, showing the computer object, and then paste the resulting image into the worksheet file as screenshot #1.

End of part #1.

## Part #2: Creating a Single User

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| Overview | In this exercise, you use the Active Directory Users and Computers console on a newly installed domain controller to create a domain user account. |
| Mindset | How many other ways are there to create a user object? |

1. On your domain controller, in the Active Directory Users and Computers console, select the People organizational unit.
2. Create a new user using the following credentials:
   1. *First name*: **Lana**
   2. *Last name*: **Kane**
   3. *User logon name*: **lkane**
   4. Password: **Pa$$w0rd**.
   5. Clear the *User must change password at next logon* check box.
3. Take a screen shot of the People container in the Active Directory Users and Computers console, showing the user object the wizard created, and then paste the resulting image into the worksheet file as screenshot #2.

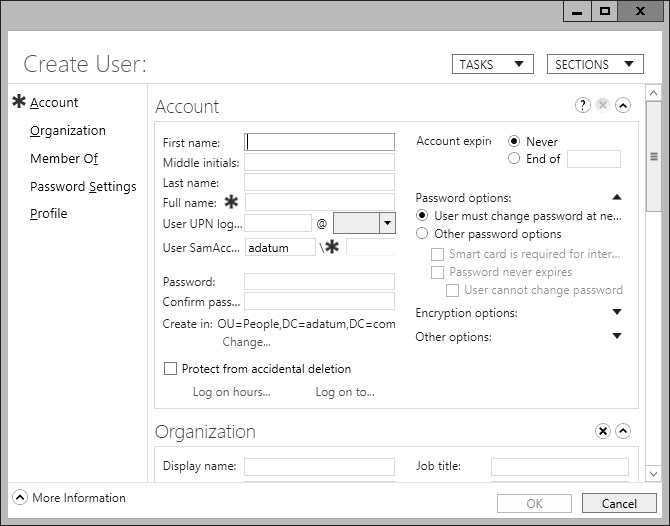
## Part #3: Using the AD Administrative Center

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| Overview | In this exercise, you use the Active Directory Administrative Center console to create user and computer objects. |
| Mindset | What can Active Directory Administrative Center do that other tools cannot? |

1. On your domain controller open the **Active Directory Administrative Center** console.
2. Create a new computer object named **Wkstn8**.
3. Add the computer to the **Domain Computers** group.
4. Take a screen shot of the Computers container, and then paste the resulting image into the worksheet file as screenshot #3.

***Question 1***: What is the purpose of adding computers to Active Directory?

1. Create a new user.



1. Use the following credentials:
   1. *First name*: **Pam**
   2. *Last name*: **Poovey**.
   3. *User SamAccountName Logon:* **ppoovey**.
   4. *Password*: **Pa$$w0rd**.
2. Add the user to the **Domain Users** group.
3. Take a screen shot of the People and then paste the resulting image into the worksheet file as screenshot #4.

## Lab Challenge #1: Creating Users with PowerShell

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| Overview | You can create Active Directory user objects on a domain controller using Windows PowerShell commands. |

To complete this challenge, you must use Windows PowerShell commands (and Windows PowerShell commands only) on your domain controller to create user objects in your domain, in the People container, for the following users:

* **Trinette McGoon**
* **Cheryl Tunt**
* **Algernop Krieger**

For each user, form the user logon name with the person’s first initial and surname. Disable the *User must change password at next logon* option and enable the *Password never expires* option.

Add the script to the worksheet that you will submit to Lea.

End of lab challenge.

## Lab Challenge #2: Creating Multiple Users Using LDIFDE

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| Overview | LDIFDE.exe can be used to add batches of users in on operation. |

To complete this challenge, create a correctly formatted LDIF input data file to create the following domain user accounts in the People OU of your domain. For each user, form the user logon name with the person’s first initial and surname. For the user principal name, use an e-mail address formed from the user logon name and the domain name.

* Ray Gillette
* Mallory Archer
* Cyril Figgis
* Seamus McGoon
* Lemuel Kane

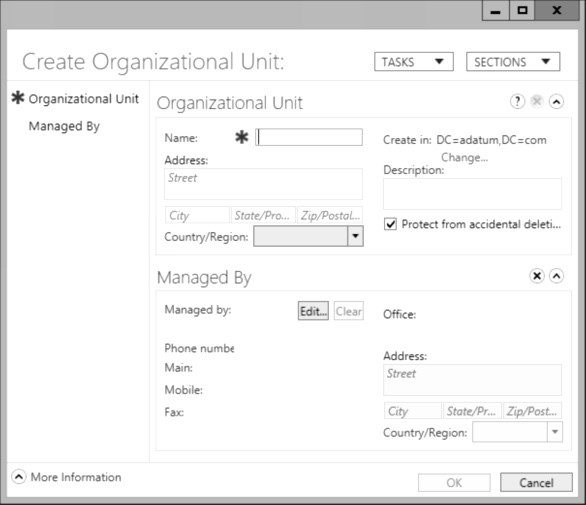
Add the LDIF file to the zip file that you will submit to Lea.

**NOTE**: Getting the input file format right is tricky. The format is different between old versions of Windows Server and Server 2012 – keep that in mind when researching how to do this.

## Part #4: Creating Organizational Units

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| Overview | In this exercise, you create new organizational units named for the cities in which your company has offices. |
| Mindset | Under what conditions is it necessary to create a new organizational unit? |

1. Log on to your domain controller as the domain admin and open the *Active Directory Users and Computers* console.
2. Add a new OU named “**Rome**”
3. Now you’re going to add another OU using the Active Directory Administrative Center console from Server Manager.



1. Name the OU **London**.
2. Using PowerShell, add a **Paris** OU

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| ***Question #2*** | What was the PowerShell syntax for adding the Paris OU? |
| ***Question #3*** | What is an OU? How does it differ from a domain? How do you add users and groups to the OUs you have just created? |

1. In the Active Directory Users and Computers console, press F5 to refresh the console until the Paris OU appears.
2. Take a screen shot of the domain in the Active Directory Users and Computers console, showing the OU objects you created and then paste the resulting image into the worksheet file as screenshot #5.

## Part #5: Creating Domain Local Groups

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| Overview In this exercise, you create domain local groups using the Active  Directory Users and Computers console. |
| Mindset What is the function of the domain local groups in a group nesting arrangement? |

1. On your domain controller, select the Rome OU you previously created in the *Active Directory Users and Computers* console.
2. Add a new group called **Rome Backup** to the OU. Set the *Group scope* to the *Domain local* option.

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| ***Question #4*** | What is the purpose of the domain local option? (hint: scope) |

1. Repeat the steps above to create a domain local group called **Rome Printing**.

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| ***Question #5*** | How can you allow members of the Rome Backup group to do backups on the local system? There is no pre-existing group with the required access. |

## Part #6: Creating Global Groups

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| Mindset | What is the function of the global groups in a group nesting arrangement? |

1. On the domain controller, in the *Active Directory Administrative Center* console, add a new group to the Rome OU you created previously:
2. Call the group **Backup Managers** and set the group scope to Global. The new group appears in the Rome OU.
3. Repeat to create two global groups called **Print Managers** and **Rome Managers** in the same OU.

## Lab Challenge #3: Nesting Groups

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| Overview | By nesting groups in AD DS, you can create a system of privileges that allows any number of personnel changes. |

To complete this challenge, you must nest the groups you created previously so that the members of the Print Managers group will receive the privileges assigned to the Rome Printing group, and the Backup Managers group will receive the privileges assigned to the Rome Backup group.

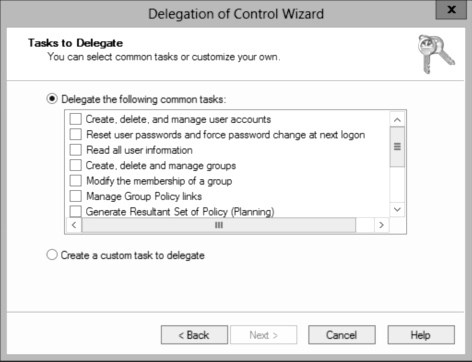
List the changes you must make to complete the challenge in the worksheet.

End of exercise. You can leave the windows open for the next exercise.

## Part #7: Delegating Administration

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| Overview | In this exercise, you use the Delegation of Control Wizard to grant Active Directory permissions to specific groups. |
| Mindset | How do you delegate administrative privileges to users without giving them full control? |

1. On your domain controller, in the *Active Directory Users and Computers* console, set the delegation to the **Rome Managers** group:



1. In the *Delegate the following common tasks* list, select the following check boxes:

* Create, delete, and manage user accounts
* Create, delete, and manage groups
* Modify the membership of a group

Please verify that the Jim user you created in assignment #1 can still log into your VM using the password you submitted with assignment #1.