JERRY'S TECH SOLUTION

Computer

SYSTEMS SERVICING

NCII REVIEWER

- COC 1: Install and Configure Computer System
- COC 2: Setup Computer Network
- COC 3: Setup Computer Server
- COC 4: Maintain and Repair Computer System & Network

"COMPLETE GUIDE!"

COC 3: SETUP COMPUTER SERVER > Topic #2: Peer-to-Peer Network Configuration using Windows 10

➢ **Topic #1: Peer-to-Peer Network Configuration using Windows Server 2019** Note: Windows Server 2019 and Windows 10 have the same For *Windows Server 2019*, **things need to accomplish:** environment. Apply the same settings.

1. **Change IP Address** For *Windows 10*, things need to accomplish:

2. **Turn off Password Protected Sharing 1. Change IP Address**

3. **Change Computer Name and Workgroup 2. Turn off Password Protected Sharing**

4. **Shared Folder 3. Change Computer Name and Workgroup**

 4. Shared Folder
Task 1. To start Changing the IP Address>>>

➢ **Configuring Server PC** *(Windows Server 2019)* **Task 1. To start Changing the IP Address>>>**

> Open Control Panel
> Go to "Network and Internet"
> Look for "Network Sharing Center"
> Click "Change adapter Settings"
>Right click (on the Ethernet or Local Area Network)
>Select "Properties"
>Select Internet Protocol version 4(TCP/IPv4)
>Properties
 Select "use the following IP Address "
IP Address: 192.168.9.**2**   Class C IP Address
Subnet Mask: 255.255.255.0*(Select the box and it will be filled automatically)*
Click OK and Close the Properties window.
> Done Configuring the IP Address

Task 2. To Turn off Password Sharing>>>
> Open "Control Panel"
> Go to "Network and Internet"
> Look for "Network Sharing Center"
> Click on "Change Advanced Sharing Settings"
> Expand the "All Networks Profile"
> Locate and Turn-off Password protected Sharing"
>Save Changes
Task 3. To Change Computer Name of Client PC>>>>
>Click "Start"
> Open "Control Panel"
> System and Security
> Locate and open "System"

Changing IP Address ➢ **Configuring Client PC** *(Windows 10)*
> Open Control Panel Changing IP Address
 > Go to "Network and Internet"
 > Look for "Network Sharing Center"
 > Click "Change adapter Settings"
 >Right click (on the Ethernet or Local Area Network)
 >Select "Properties"
 >Select Internet Protocol version 4(TCP/IPv4)
 >Properties
 Select "use the following IP Address."

 IP Address: 192.168.9.**1** Class C IP Address
 Subnet Mask: 255.255.255.0 *(Select the box
 and it will be filled automatically)*   Click OK and
Close the Properties window.
> Done Configuring the IP Address

Task 2. To Turn off Password Sharing>>>
> Open "Control Panel"
> Go to "Network and Internet"

> Look for "Network Sharing Center"
> Click on "Change Advanced Sharing Settings"
> Expand the "All Networks Profile"
> Locate and Turn-off Password protected Sharing" >Save Changes

Task 3. To Change Computer Name of Server PC>>>>
>Click "Start"
> Open "Control Panel"
> System and Security
> Locate and open "System"
>Click "Change Settings"
>System Properties, Click "Change"
> Type the "Computer name: "**SERVERPC"** > Click "Ok" to save the changes.
>restart Computer or the computer will restart automatically.
Note: that the changes will not take effect until the PC restart

Task 4. Create a Shared Folder>>> >Right Click on the desktop.
>Select "New" then select "Folder"
> Type the name of your folder then press enter
(Example: Server Folder)
> Right Click on Folder then Select "Properties"
>Select "Sharing" Tab
> Click "Share"
>On the drop-down menu
>Select "Everyone" and Click "Add"
>Make sure that the permission level is "Read/Write"
>Click "Share" and
When pop-up network discovery and file sharing appear, choose Yes, turn on network discovery….. >Click
"Done"
> Go to "Advanced Sharing"
> Tick/check the box "Share this folder"
> Click on "permissions"
> Tick/check the box "Full Control" under "Allow" permission
> Click Apply then "Ok"; > Click Apply then "Ok", and
> Highlight and copy the "Network Path: **\\Server\Server Folder**"
>close the Folder properties (we are done creating a shared folder)

>Click "Advance System Settings"
>System Properties, Click "Change"
> Type the Computer name: "**CLIENTPC"** > Click "Ok" to save the changes.
>restart Computer or the computer will restart automatically.
Note: that the changes will not take effect until the PC restart

Task 4. Create a Shared Folder>>> >Right Click on the desktop.
>Select "New" then select "Folder"
> Type the name of your folder then press enter
(Example: Client Folder)
> Right Click on Folder then Select "Properties"
>Select "Sharing" Tab
> Click "Share"
>On the drop-down menu
>Select "Everyone" and Click "Add"
>Make sure that the permission level is "Read/Write"
>Click "Share" and
>Click "Done"
> Go to "Advanced Sharing"
> Tick/check the box "Share this folder"

 > Click on "permissions"
 > Tick/check the box "Full Control" under "Allow" permission
 > Click Apply then "Ok"
 > Click Apply then "Ok", and
 >close the Folder properties (we are done creating a shared folder)

Now, we are finished Configuring both Computers.
>Click "Change Settings"
>System Properties, Click "Change"
> Type the "Computer name: "**SERVERPC"** > Click "Ok" to save the changes.
>restart Computer or the computer will restart automatically.
Note: that the changes will not take effect until the PC restart

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>Select "New" then select "Folder"
> Type the name of your folder then press enter
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>On the drop-down menu
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When pop-up network discovery and file sharing appear, choose Yes, turn on network discovery…..   >Click "Done"
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> Tick/check the box "Full Control" under "Allow" permission
> Click Apply then "Ok"; > Click Apply then "Ok", and
> Highlight and copy the "Network Path: **\\Server\Server Folder**"
>close the Folder properties (we are done creating a shared folder)

>Click "Advance System Settings"
>System Properties, Click "Change"
> Type the Computer name: "**CLIENTPC**" > Click "Ok" to save the changes.
>restart Computer or the computer will restart automatically.
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Task 4. Create a Shared Folder>>> >Right Click on the desktop.
>Select "New" then select "Folder"
> Type the name of your folder then press enter
(Example: Client Folder)
> Right Click on Folder then Select "Properties"
>Select "Sharing" Tab
> Click "Share"
>On the drop-down menu
>Select "Everyone" and Click "Add"
>Make sure that the permission level is "Read/Write"
>Click "Share" and
>Click "Done"
 > Go to "Advanced Sharing"
> Tick/check the box "Share this folder"

> Click on "permissions"

> Tick/check the box "Full Control" under "Allow" permission

> Click Apply then "Ok"

> Click Apply then "Ok", and

>close the Folder properties (we are done creating a shared folder)

Now, we are finished Configuring both Computers.

Check the network connectivity using <u>*ping command prompt*</u>*.* 18

Task2

Open CMD

Type: "ipconfig" to get the IP address of both computers.

Type: "ping 192.168.9.1" for windows server 2019

Type: "ping 192.168.9.2" for Windows 10

Ping message….

Note: Reply message must indicate that there is successful connection between the two computers.

> **Create Organizational Unit and Users Account**

> Click Start

>Open "Server Manager"

>Click "Tools"

>Select "Active Directory Users and Computers"

>Expand your Domain (CSS.edu)

>right click on your Domain (CSS.edu)

>Select "New"

>Select "Organizational Unit"

>Type the name of your Organizational Unit

> Topic #3: Configuring Network Server "ICT12 Org" then Click "Ok"

Things need to accomplish: >Right Click on your Organizational Unit

1. **Installing DNS and ADDS** Select "New" then select "User"

2. **Create** Type the user information including

> **Organizational Unit** First &Last name, user Log-on name

> **User Account** (Jerry Rayel, log-on name: jerry16)

3. **Installing DHCP Server** *Note: don't forget your user logon name*

> **Scope Name** *you will use it on client PC/Computer.* >**Start and End IP** > Click Next

4. **Join client PC to Domain Network** Password (example: @dmin1234)

5. **Configuring File Server** Confirm Password (example: @dmin1234)

> **GPO** (Uncheck user must change password at next logon)

> **Folder Redirection** (Check: *password never expires)

Task 1 Next > Finish

>**Installing Domain Name System (DNS) and Active Directory** *Note: Number of user will depend on how many*

Domain Services (ADDS) Installation *client PC will connect to Server PC.*

> Click "Start"

> Open "Server Manager" on the start menu

Task 3

> Click on "Add roles and features." **> Installing Dynamic Host Control Protocol (DHCP) Server**

Click Next **To do this we need to configure first the preferred DNS Server.**

Installation type must ne role-based installation > Open Control Panel

Click Next (Leave the selection server as is) > Go to "Network and Internet"

>On Server Role list, select "DNS Server" and Add required features > Look for "Network Sharing

Center" Select "Active Directory Domain Services" then > Change adapter Settings

>Right click (on the Ethernet or Local Area Network)

Add Required Features

>Select "Properties"

Click Next (Leave the features as is) >Select Internet Protocol version 4(TCP/IPv4)

Click Next *(DNS Server)* >Properties

Click Next *(ADDS)* **Make Sure the preferred DNS Server address and**

Click "Install", when we reach the confirmation. **IP address is the same (192.168.9.1)**

(Wait until the installation finish) >Click Ok

>Click "Promote this server to a domain controller" **Disable/Enable network device.**

Add a new forest **Once Domain Name appears (CSS.edu) proceed to DHCP.**

Root domain name: **CSS.edu**

Click Next >Open "Server manager"

Type administrator password: Admin1234 > Click on "Add roles and features."

Type Confirm Password: Admin1234 Click Next

Click Next Installation type must be role-based installation

Click Next *(Leave DNS Options as is)* Click Next (Leave the selection server as is)

Click Next(After verifying NetBios domain name: CSS) Click Next

Note: Do not change the default location of the database. Select DHCP Server

Click Next (leave review options as is) Click Next and Add required features **The system will now be validating the prerequisites in**   Click Next

installing the directory. Click Next > Next

Click Install (After verifying install and wait to   Tick/check the box restart the destination server finish)   Automatically, then click Yes.

>Close **(It will automatically restart the** Click Install **(wait to finish)**

ServerPC when installation Click "Complete DHCP Configuration" **is done). We are done installing and** Click Next

promoting Active Directory. Use the following user's credentials

Click "Commit"

Click Close

>Click on "Tools"
>Select "DHCP"
>Expand the SERVERPC.CSS.edu
> Expand IPV4
> Right Click on IPV4
> Select "New Scope"
> Click Next
> Type the name of your Scope: (example: CSS Networking Scope)
> Click Next

(Let's assign 10 range of IP Addresses available for use)
> Start IP Address: 192.168.9.2
>End IP Address: 192.168.9.12

This IP Address will be given automatically to all client that will connect to the Server.

>Click Next, next…. until reach Finish.

Done installing and configuring DHCP Server.

Task 4

JOINING CLIENT PC TO DOMAIN

Configure **Windows 10** to connect with the Domain that we are created earlier. First obtain the IP Address:

> Open Control Panel

> Go to "Network and Internet"

> Look for "Network Sharing Center"

> Change adapter Settings

>Right click (on the Ethernet or Local Area Network)

>Select "Properties"

>Select Internet Protocol version 4(TCP/IPv4)

>Properties

>Select "Obtain IP Address Automatically"

>Click OK

>Click close

Do you want to allow PC to be discoverable…

>Click "Yes"

>Close the network

Change the workgroup into the domain by going into System properties

> Open "Control Panel"

> System and Security

> Locate and open "System"

>Click "Change Settings" then

>Click "Change"

> Select Member of "Domain"

> Type "CSS.edu"

> Click "Ok" to save the changes.

> Enter username of windows server: Administrator

> Enter Password of windows server: Admin1234

>Click Ok

> Welcome message will appear

" Welcome to CSS.edu domain"

>Click Ok

>restart Computer Now

Note: that the changes will not take effect until the PC restart

After restarting

> Click Other User

> type username: jerry16

> type password: @dmin1234

> then press Enter to log-in

Windows 10(Client PC jerry16) is now a member of a domain network.

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Task 5

CONFIGURE FILE SERVER / FOLDER REDIRECTION

Switch/Proceed to Windows Server 2019 to configure File or Folder

Redirection

> Copy first the network Path of the Shared Folder that we created earlier on peer-to-peer network.

\\ServerPC\Server Folder

> Create GPO, to do this,
>Open Server Manager
>Click Tools
>Select Group Policy Management
>Double Click the Forest
>Double Click the Domain
>Double Click on Domain Name (CSS.edu)
>Look for Organizational Unit (ICT12 Org)
> Right Click ICT12 Org, then
> Create a GPO on this Domain
> Type" CSS OU"
> Click Ok
> Expand ICT12 Org
> Right Click on new Created GPO "CSS OU"
> Click "Edit"
> On Group Policy Management Editor
>Under User Configuration
>Expand Policies
>Double Click Windows Settings
>Double Click Folder Redirection
(Select a Folder that we want to redirect)

>Right Click on **"Desktop"**
>Select Properties
>Select Basic- redirect Settings……
>Paste or enter the network Path
 \\ServerPC\Server Folder
>Go to "Settings" Tab
>Uncheck Grant the user…….
>Allow apply redirection policy…….
>Click Apply
Do this on the remaining Folder
>Click Ok

>Right Click on **"Documents"**
>Select Properties
>Select Basic- redirect Settings……
>Paste or enter the network Path
 \\ServerPC\Server Folder
>Go to "Settings" Tab
>Uncheck Grant the user…….
>Allow apply redirection policy…….
>Click Apply, Yes
Do this on the remaining Folder
>Click Ok
All we need to do is update using gpupdate command.
➢ On search bar type "gpupdate" Policy update successfully.
Done Configuring Folder Redirection
We need to Switch on Windows 10 and Log-in the user to check whether it is working or not.

>Create a sample Folder on Windows 10(Client PC) on Desktop,
Documents, Downloads, etc…
Restart both Computers (Client and Server)
>then Let's check on Windows Server (We should be able to see and access all the files we created earlier on windows 10
Client PC) >Open the Shared Folder (Desktop, Documents).

Topic #4 <u>REMOTE DESKTOP CONFIGURATION</u>
Things need to accomplish:

1. **Enable Remote Desktop**
2. **Identify the IP Address of windows server.**
3. **Control Windows Server using windows 10.**

Task 1

<u>**ENABLE REMOTE DESKTOP**</u>

On Windows Client PC, to enable desktop connection Go to system properties.

(To be done both Client and Server PC)

> Open "Control Panel"

> System and Security

> Locate and open "System"

>Click "Remote Settings"

>under "Remote" tab

>Select "Allow remote connection to this computer"

>Click "Select Users"

>Click "Add" then type administrator, client & domain users in the List (Administrator, jerry rayel
jerry16@css.edu ,Domain Users) >Click Ok, Apply then Click Ok..

(Server Configuration only)

>Click "Start"

>Click "Tools"

> Select "Local Security Policies" > "Local Policies"

> Click User Rights Assignment."

> Right click" Allow log-on through desktop services", Properties

> Click "Administrator" then click Remove

> Click Add User or Group >

> Type object name: admin then Check Names then

> Select "Administrator (Built in)

>Click Ok

> Click Add User or Group >

>Type object name: jerry then Check Names then

> Select "jerry rayel (jerry16@CSS.edu)

Click Ok

Note: Always remember the host name or root name of your Client PC because soon you're going to restore your client PC to default settings.

Task 2

<u>**IDENTIFY IP Address of Windows Server**</u>

Now, let's check the IP Address of Windows Server

>Open CMD or Command Prompt

>Type ipconfig then press Enter

IP address must appear/display that was set on Windows Server before. (192.168.9.1)

Task 3

<u>**Control Windows Server using win10 remotely.**</u>

Now, let's proceed to Windows 10

> Open "Remote Desktop Connection"

>Type the IP Address of Windows Server 192.168.9.1, then

> Connect

> Select "Use other account"

>Type username: administrator

>Type password: Admin1234

> Click Ok

The system will now connect to control the windows server. We are now successfully controlling the windows Server remotely.

Note: Always remember the host name or root name of Client PC by checking on the Command Prompt.

Topic #5 PRINTER DEPLOYMENT using PRINTER MANAGEMENT

Things need to accomplish:

1. **Install Print Document Services**

2. **Deploy Printer using Print Management**

3. **Check on Client Computer**

(Note: Install Printer driver first)

Task 1

INSTALL PRINT DOCUMENT SERVICES

> Click Start

>Open "Server Manager"

>Click Add roles and features

>Click Next

>Click Next

> Click Next

On Server role list

> Select "Print and Document Services."

>Click Add Features

>Click Next

>Click Next

> Click Next

> On role services, select "Printer Server"

> Click Next

> Click "Install" and wait to finish

>Click Close After installing….

Task 2

DEPLOY PRINTER using Print Management

>Click Start

>Open Server Manager

>Click Tools

>Select "Print Management"

On Print Management

>Expand "Print Servers"

>Expand Server(local) then

>Click on "Printers"

Right Click on Printer that you want to deploy

Example: Epson L3210

> Select Deploy Group Policy

> Click Browse then double click domain controllers to open (CSS.edu)

>Click "Default Domain Controllers Policy" then click Ok

>Check the 2 boxes the click add (per user and per machine)

>Again click "Browse"

>Click "Default Domain Policy" and click Ok

>Click again the 2 boxes to checked and click add then click Ok.

>Apply (Printer deployment succeeded)

> Click Ok

> Click Ok to Finish

>Click "Deployed Printers" it means that you have successfully deploy the printer to the users.

>Close Print Management.

Task 3

(Since you've already shared and deployed a printer. You can now connect to printer and print from your client PC)

Proceed to Windows 10

> Click Start

> Open "Devices and Printers

The printer you deployed is not yet on the list.

All we need to do is update using gpupdate command.

>on search bar, type "gpupdate"

Updating policy…….

Computer Policy update has completed successfully

> Now, we see the printer is on the list.

s

Restore Client PC to default settings and **demote or remove all roles** you installed in Windows Server.

Restore Client PC to default settings:

Task 1: Switch user account into a domain network

Switch or Restart Client PC then click "Other User"

Enter domain user name w/ admin account &password

>example: username: CSS\Administrator

Password: Admin 1234

Task 2: How to Leave a domain network?

(If a Client PC is a member of an Active Directory Domain, disconnect it from the domain server & make it part of a local work group)

> Open "Control Panel"

> System and Security

> Locate and open "System"

>Click "Change Settings" then

>Click "Change"

(Select Member of "Workgroup")

> Type "WORKGROUP"

> Click "Ok" to save the changes.

> Enter username of windows server: Administrator

> Enter Password of windows server: Admin1234

>Click Ok

(Welcome message will appear)

>" Welcome to WORKGROUP"

>Click Ok then close to restart

>Click restart Computer Now

Note: that the changes will not take effect until the PC restart __After restarting__

Task 3: Change Computer name into default settings

Example: "WIN-CSS2024"

> Open "Control Panel"

> System and Security

> Locate and open "System"

>Click "Change Settings" then

>Click "Change"

>Type "WIN-CSS2024"

>Click Ok

>Click Ok then close to restart

>restart Computer Now

Note: that the changes will not take effect until the PC restart

After restarting

Demote ADDS and remove all roles installed in **Server PC:**

Task 1: Demote Active Directory Domain Services - ADDS
>Click Start
>Open Server Manager
>Click Manage
> Select "Remove Roles and Features"
> Next > Next
> Uncheck the box for "Active Directory Domain Services"
>Click "Remove Features"
> Click "Demote this domain controller"
> Tick/check the box "Force the removal of this domain controller"
>Click Next
> Tick/check the box "Proceed with removal"
>Click Next
> Enter Admin Password and Confirm (example: Admin1234)
<Click Next
> Click Demote (the Server PC will restart automatically)

Task 2: Remove All Roles installed
>Click Start
>Open Server Manager
>Click Manage
> Select "Remove Roles and Features"
> Next > Next > > Uncheck the box for:
 "Active Directory Domain Services"

then Remove Features, 21

 "DHCP Server" then remove features,
"DNS Server" then remove features, "Print and Document Services" then remove features,
> Click Next > Next
> Tick/check the box "Restart the destination server automatically…"
>Click Yes then click Remove (Server PC will restart automatically.
Once Startup, Prompt to Removal succeeded on ServerPC…)
>Close window

Task 3: Obtain an IP Address Automatically
>Open Control Panel
> Click "Network and Internet"
>Click "Network and sharing center"
>Click "Change adapter settings"
>Right click (on the Ethernet or Local Area Network)
>Select "Properties"
>Select Internet Protocol version 4(TCP/IPv4)
>Click Properties
Select "Obtain an IP Address." and
Select "Obtain DNS Server address automatically"
>Click Ok then Close the properties window
>Close all tabs
(Done Obtaining the IP Address)

Task 4: Change Computer name into default settings
>Open Control Panel
>Click "System and Security"
>Click "System"
>Click "Change settings"
>Click "Change"
>Change Computer name to default: example: WIN-CSS2024

>Click more... then delete Primary DNS suffix then Click Ok

>Ok > Ok

> Then close to restart

> Click "Restart now"

(PC will restart automatically)

CONGRATULATIONS!

You have successfully configured Windows Server2019 and Windows 10.