Operating Systems

Virtual Windows Active Directory / Network Server Virtualization

Assessment Project

Programme:	Bachelor of Science in Computing and Information Technology
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Installing the network and setting up the network infrastructure

1. Servers correctly renamed as specified:

Rename the computer Web Server in Windows PowerShell.


```
Administrator: Windows PowerShell

Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Users\Administrator> hostname
WIN-53PQPFNG7T2
PS C:\Users\Administrator> Rename-Computer -NewName "Web2020303"
WARNING: The changes will take effect after you restart the computer WIN-53PQPFNG7T2.
PS C:\Users\Administrator> -Restart
```



```
Administrator: Windows PowerShell

Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Users\Administrator> hostname
Web2020303
PS C:\Users\Administrator> _
```

Rename the computer Domain Controller Server in Windows System Properties.

System

Processor:	Intel(R) Core(TM) i7 CPU Q 740 @ 1.73GHz 1.73 GHz
Installed memory (RAM):	1.00 GB
System type:	64-bit Operating System, x64-based processor
Pen and Touch:	No Pen or Touch Input is available for this Display

Computer name, domain, and workgroup settings

Computer name:	DC2020303
Full computer name:	DC2020303
Computer description:	
Workgroup:	WORKGROUP

Change settings

2. Setup static IP addresses as specified / check connectivity between the two computers:
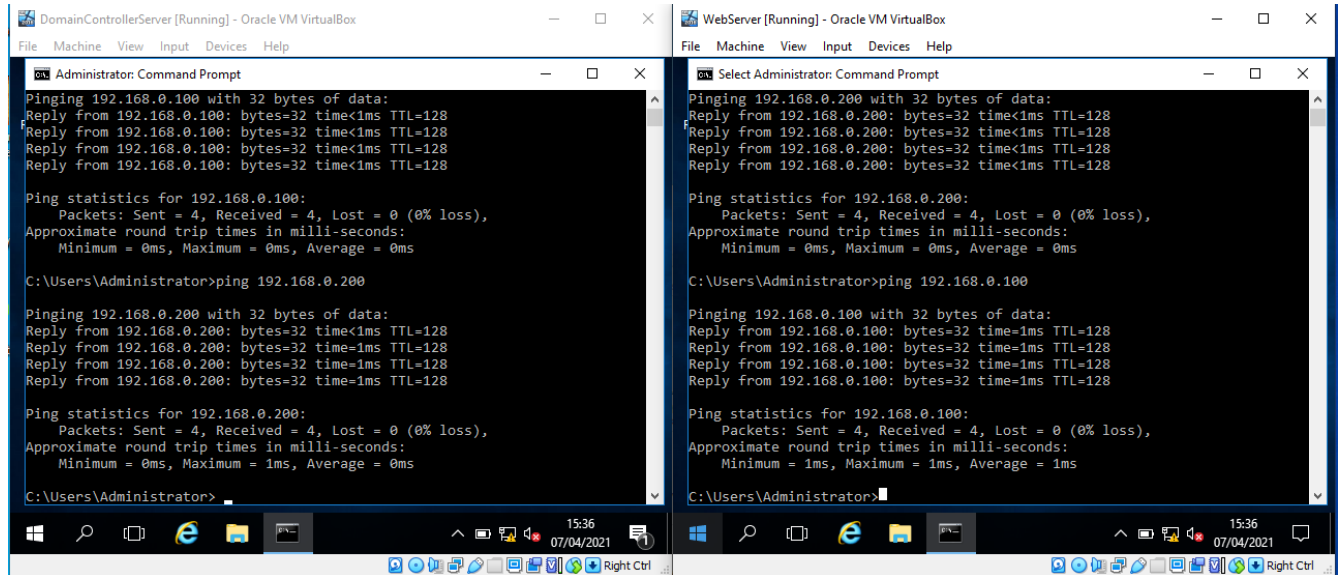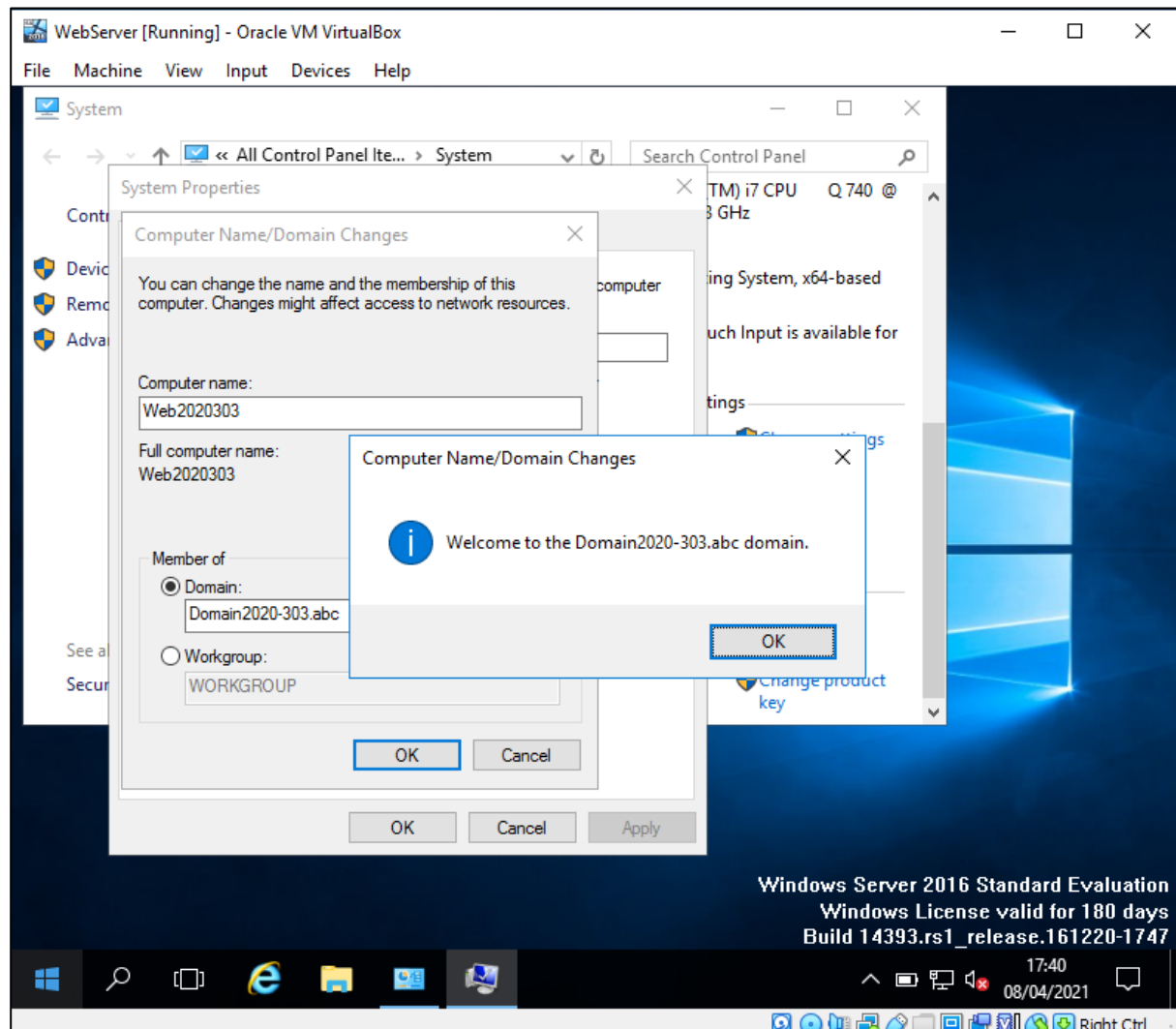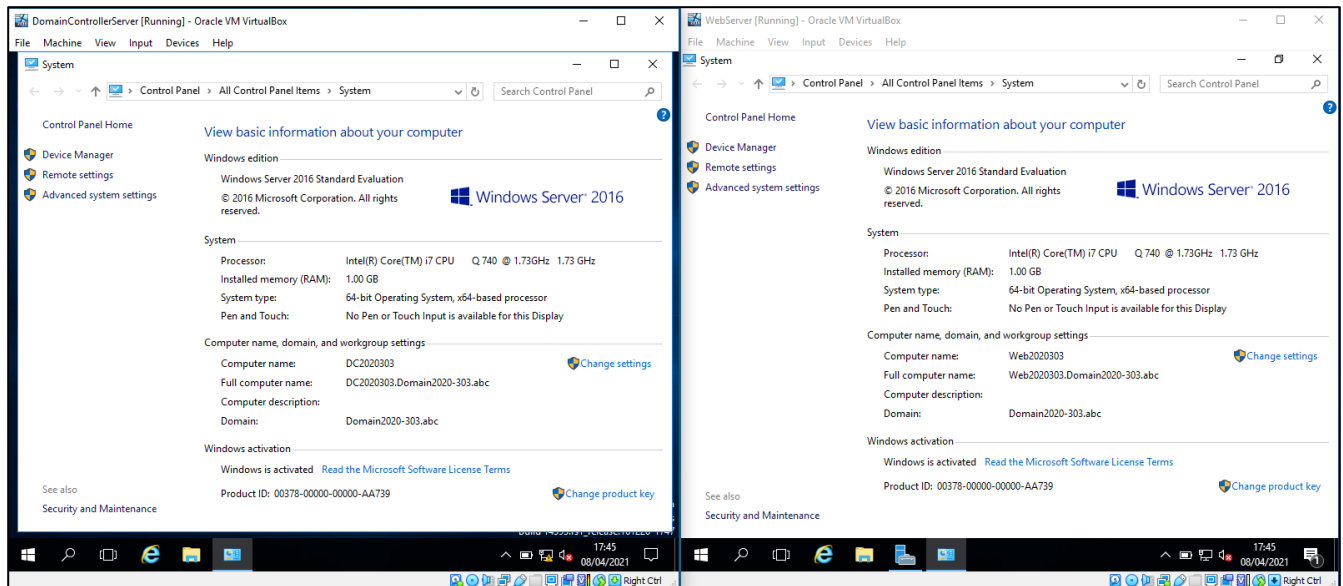

3. Convert server to Domain Controller as specified
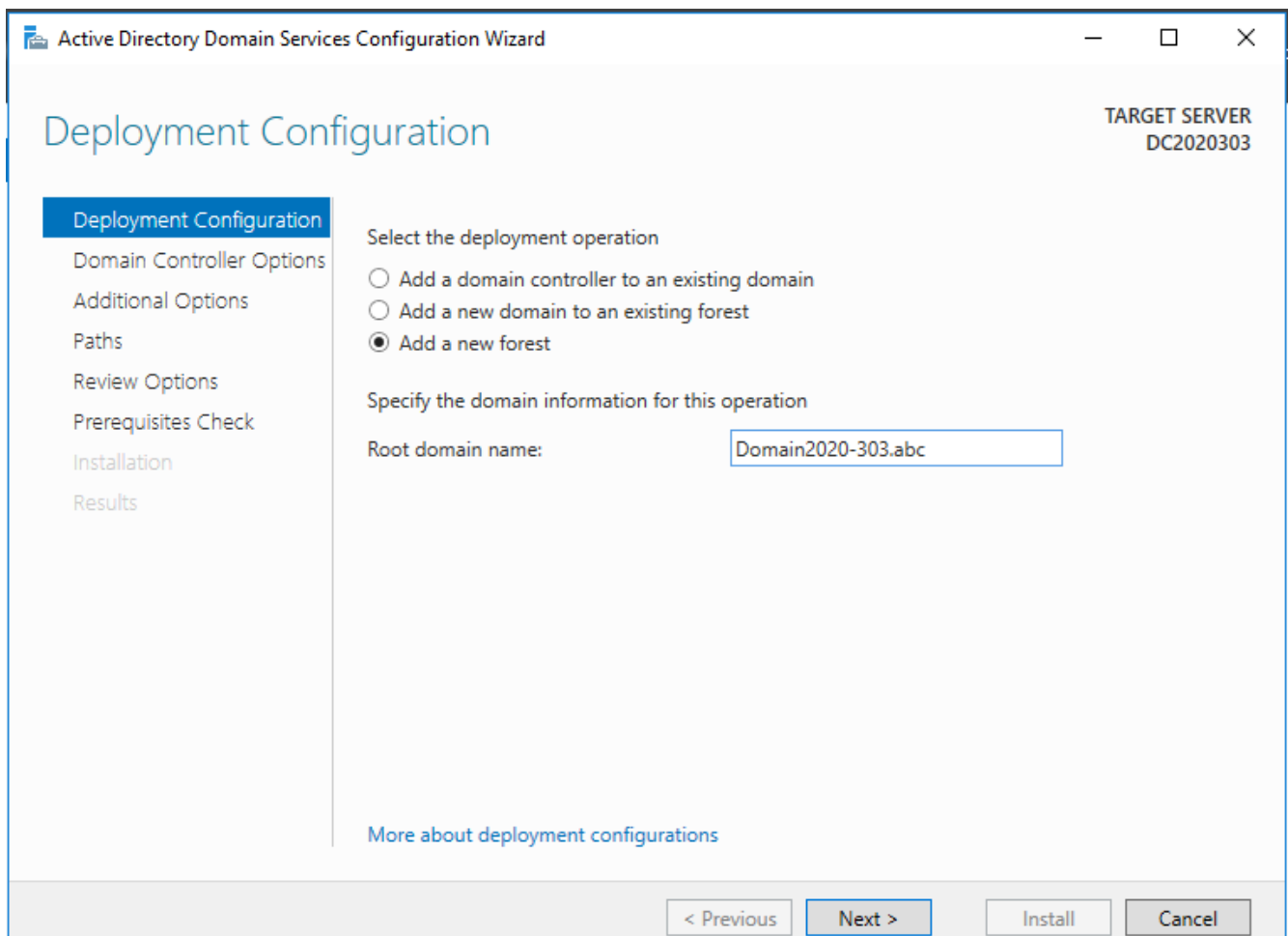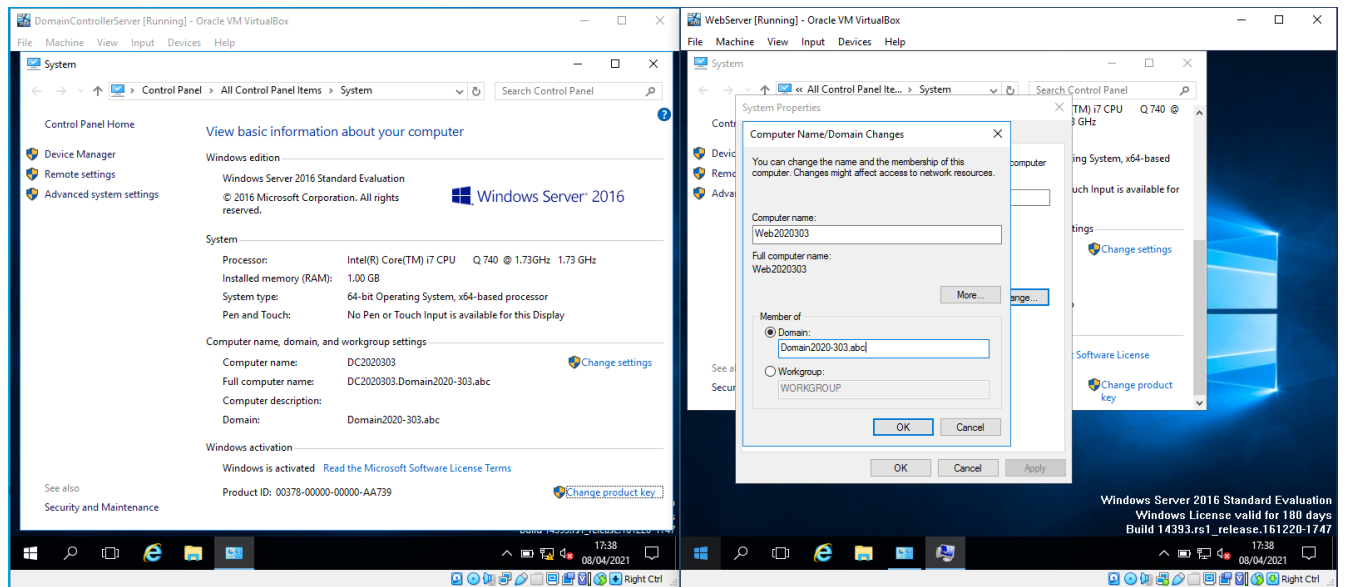
4. Join Web to Domain as specified:

Setting up the resources and network users

1. Create two departmental Organisational Units and groups:

2. Create the 10 user accounts and add the users to the groups as specified:

Accounting Properties   ?   ✕

General | Members | Member Of | Managed By

Members:

Name	Active Directory Domain Services Folder
👤 Barb Dwyer	Domain2020-303.abc/Accounting-Dublin
👤 Cherry Pies	Domain2020-303.abc/Accounting-Dublin
👤 Patrick J. Jones	Domain2020-303.abc/Accounting-Dublin
👤 Patrick L. Joh...	Domain2020-303.abc/Accounting-Dublin
👤 Patrick Richar...	Domain2020-303.abc/Accounting-Dublin

Add...   Remove

OK   Cancel   Apply

Sales Properties   ?   ✕

General | Members | Member Of | Managed By

Members:

Name	Active Directory Domain Services Folder
👤 Claire Galway	Domain2020-303.abc/Sales-Dublin
👤 Claire Morris	Domain2020-303.abc/Sales-Dublin
👤 David R. Doran	Domain2020-303.abc/Sales-Dublin
👤 Debra J. Doran	Domain2020-303.abc/Sales-Dublin
👤 Justin Case	Domain2020-303.abc/Sales-Dublin

Add...   Remove

OK   Cancel   Apply

3. Create two shared folders and apply permissions:

Accounting-Docs Properties   ✕

General | Sharing | Security | Previous Versions | Customize

Object name: C:\Users\Administrator\Desktop\Accounting-Docs

Group or user names:

- 👥 SYSTEM
- 👥 Accounting (DOMAIN2020-303\Accounting)
- 👤 Administrator
- 👥 Administrators (DOMAIN2020-303\Administrators)

To change permissions, click Edit.   Edit...

Permissions for Accounting	Allow	Deny
Full control	✓	
Modify	✓	
Read & execute	✓	
List folder contents	✓	
Read	✓	
Write	✓	

For special permissions or advanced settings, click Advanced.   Advanced

OK   Cancel   Apply

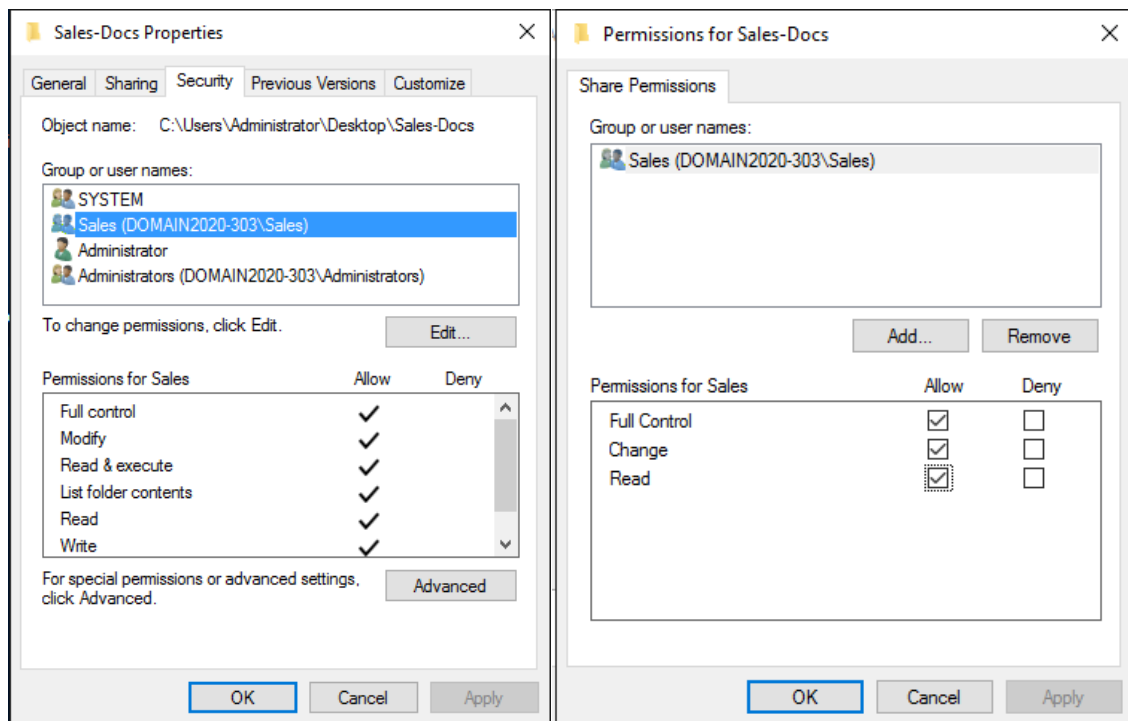**Permissions for Accounting-Docs**   ✕

Share Permissions

Group or user names:

- 👥 Accounting (DOMAIN2020-303\Accounting)

Add...   Remove

Permissions for Accounting	Allow	Deny
Full Control	☑	☐
Change	☑	☐
Read	☑	☐

OK   Cancel   Apply

4. Test permissions for both of the resources
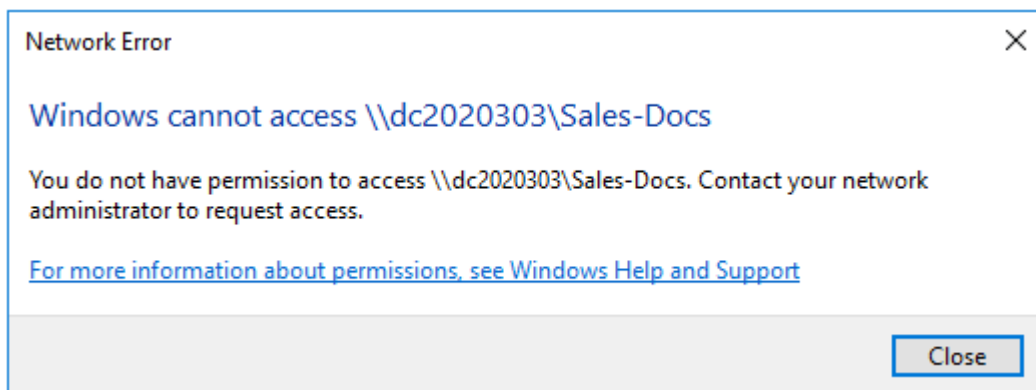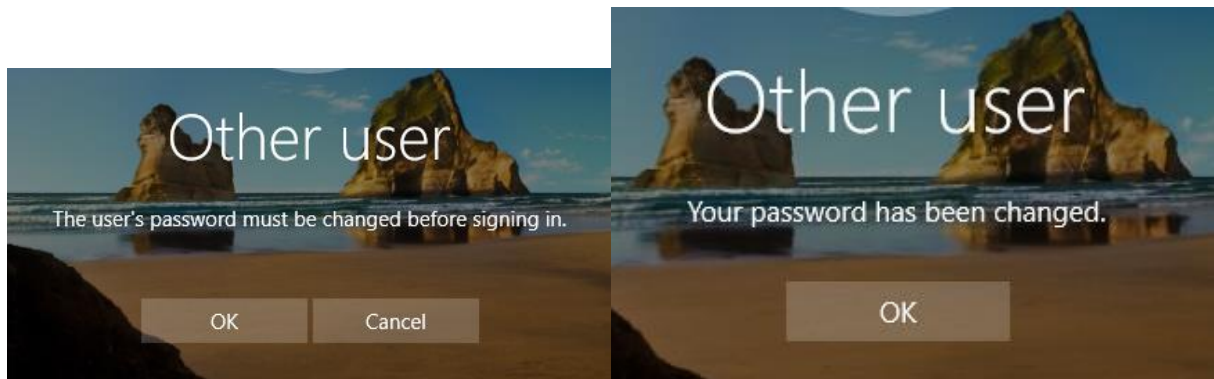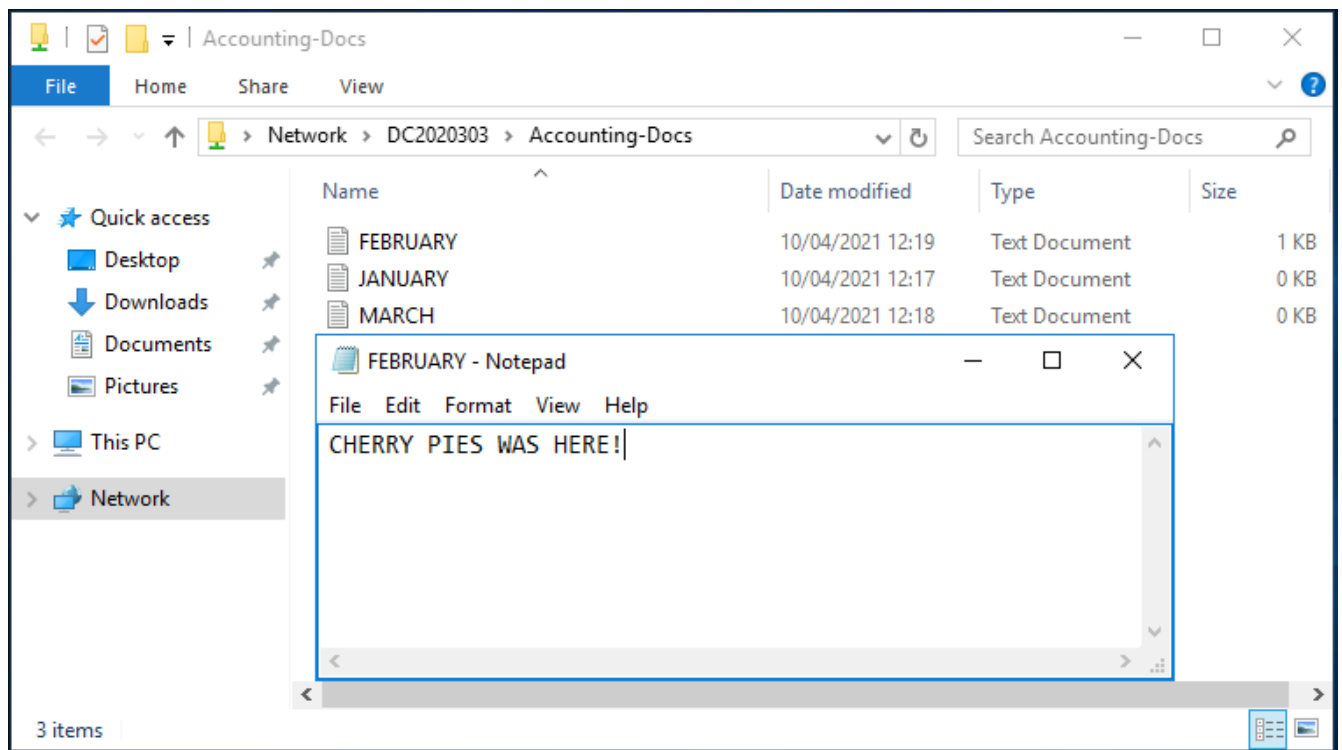
5. Apply the password policy as specified:
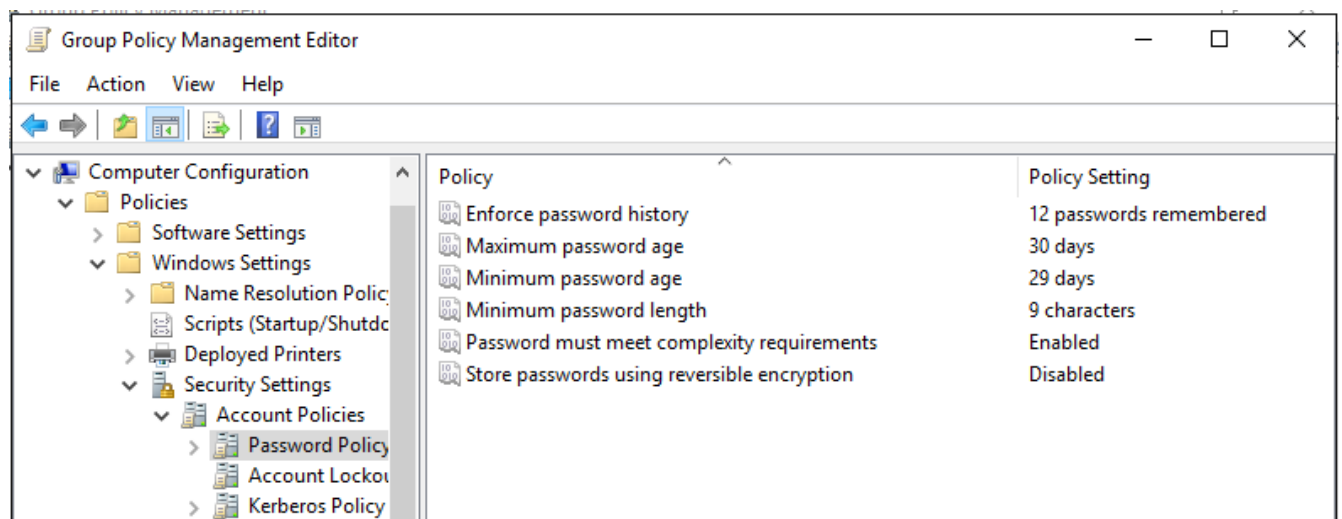
Group Policy Management Editor

File   Action   View   Help

Policy	Policy Setting
Account lockout duration	60 minutes
Account lockout threshold	4 invalid logon attempts
Reset account lockout counter after	60 minutes

Computer Configuration
- Policies
  - Software Settings
  - Windows Settings
    - Name Resolution Policy
    - Scripts (Startup/Shutdown)
    - Deployed Printers
    - Security Settings
      - Account Policies
        - Password Policy
        - Account Lockout
        - Kerberos Policy

Setting up and testing a simple web site

Setting Up a DHCP Server for the Domain

Correctly set up and assigned Notepad++ to Sales user

Permissions for Software (Share Permissions)

Share Permissions

Group or user names:

- Sales (DOMAIN2020-303\Sales)

[Add...] [Remove]

Permissions for Sales	Allow	Deny
Full Control	☑	☐
Change	☑	☐
Read	☑	☐

[OK] [Cancel] [Apply]

Permissions for Software (Security)

Security

Object name: C:\Users\Administrator\Desktop\Software

Group or user names:

- SYSTEM
- Sales (DOMAIN2020-303\Sales)
- Administrator
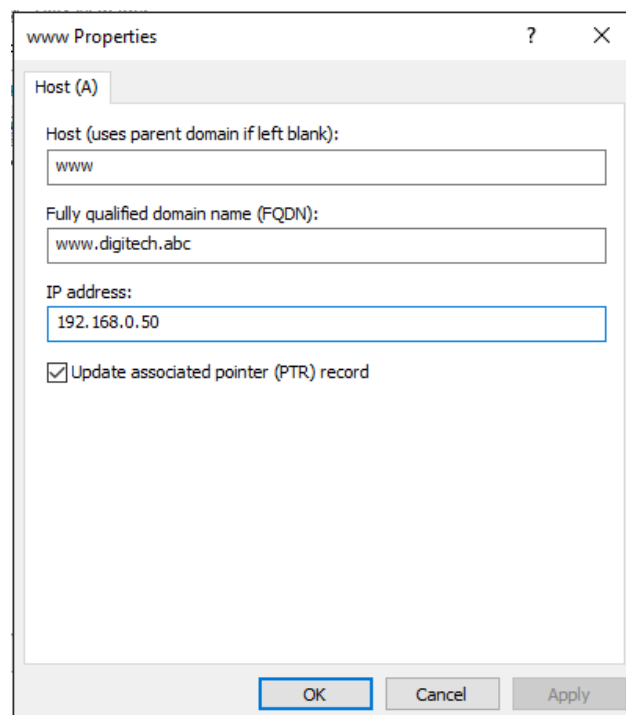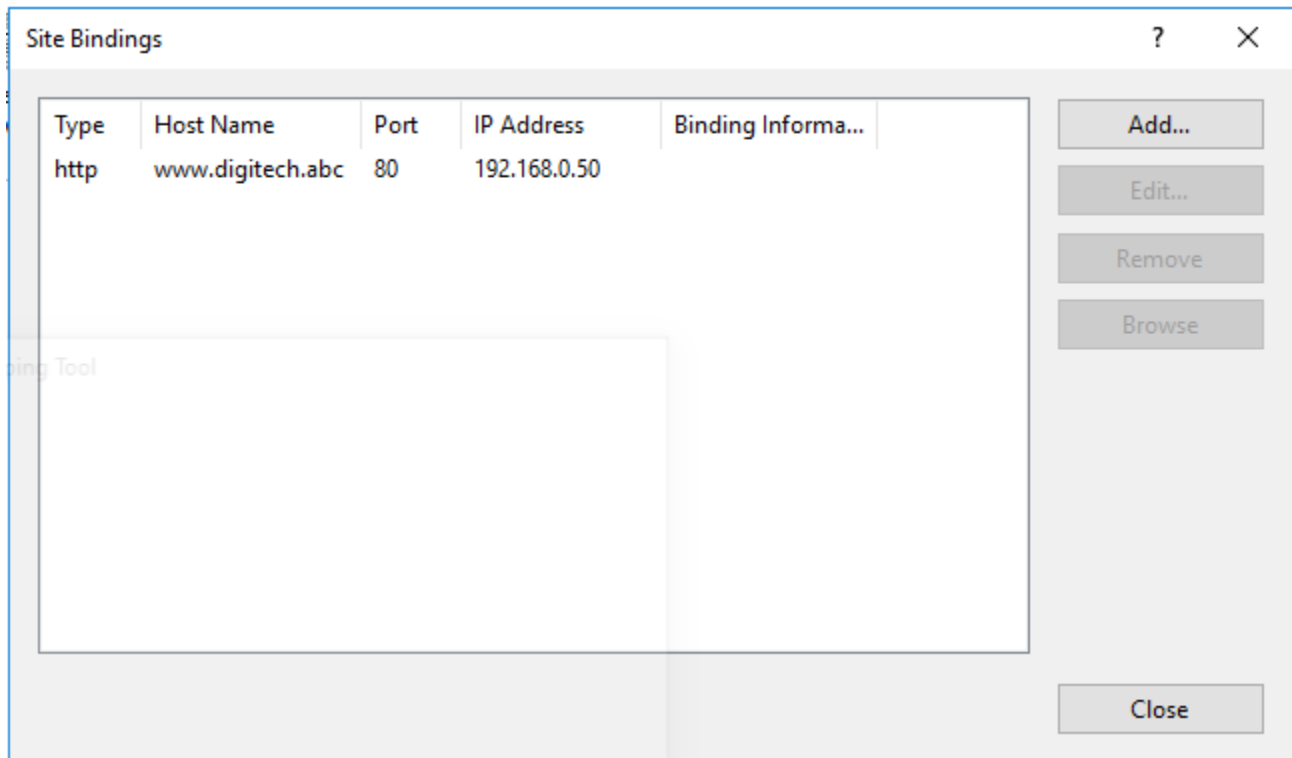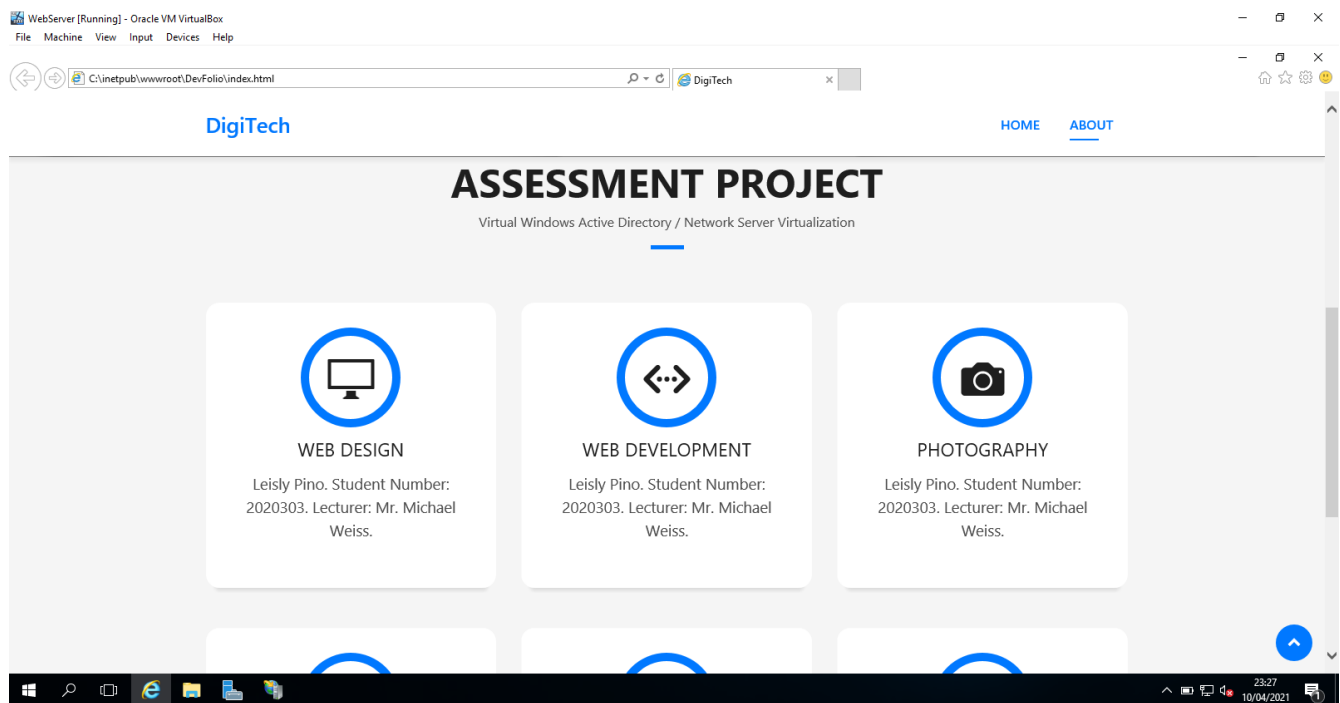- Administrators (DOMAIN2020-303\Administrators)

[Add...] [Remove]

Permissions for Sales	Allow	Deny
Full control	☑	☐
Modify	☑	☐
Read & execute	☑	☐
List folder contents	☑	☐
Read	☑	☐

[OK] [Cancel] [Apply]

Group Policy Management Editor

File   Action   View   Help

Software_Sales [DC2020303.DON

- Computer Configuration
  - Policies
    - Software Settings
      - Software installat
    - Windows Settings
    - Administrative Temp
  - Preferences
- User Configuration
  - Policies
    - Software Settings
    - Windows Settings
    - Administrative Temp
  - Preferences

Name	Version	Deployment st...	Source

There are no items to show in this

Deploy Software

Select deployment method:

- ○ Published
- ● Assigned
- ○ Advanced

Select this option to Assign the application without modifications.

[OK] [Cancel]

Notepad++ (64-bit x64) Properties

General | Deployment | Upgrades | Categories | Modifications | Security

Deployment type
- ○ Published
- ● Assigned

Deployment options
- ☑ Auto-install this application by file extension activation
- ☑ Uninstall this application when it falls out of the scope of management
- ☐ Do not display this package in the Add/Remove Programs control panel
- ☐ Install this application at logon

Installation user interface options
- ○ Basic
- ● Maximum

[Advanced...]

[OK] [Cancel] [Apply]

New GPO

Name:

Sofware_Sales

Source Starter GPO:

(none)

[OK] [Cancel]

Group Policy Management

File   Action   View   Window   Help

Group Policy Management
- Forest: Domain2020-303.abc
  - Domains
    - Domain2020-303.abc
      - Default Domain Policy
      - Software_Sales
      - Accounting-Dublin
      - Domain Controllers
      - Sales-Dublin
      - Group Policy Objects
      - WMI Filters
      - Starter GPOs
  - Sites
  - Group Policy Modeling
  - Group Policy Results

Software_Sales

Scope   Details   Settings   Delegation

Links

Display links in this location: Domain2020-303.abc

The following sites, domains, and OUs are linked to this GPO:

Location	Enforced	Link Enabled	Path
Domain2020-303.abc	No	Yes	Domain2020-303.abc

Security Filtering

The settings in this GPO can only apply to the following groups, users, and computers:

Name
Sales (DOMAIN2020-303\Sales)

Add...   Remove   Properties

WMI Filtering

This GPO is linked to the following WMI filter:

<none>   Open

Command Prompt

```
Microsoft Windows [Version 10.0.14393]
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C:\Users\jcase>gpupdate /force
Updating policy...

Computer Policy update has completed successfully.
User Policy update has completed successfully.


C:\Users\jcase>
```