CNT 4603: System Administration Spring 2014

Project Three

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Project Three: Overview

- **Title:** "Project Three: Getting To Know Microsoft Server 2008 Server Manager and Configuring Tasks."

- **Points:** 35 points

- **Due Date: Friday March 7, 2014 by 11:59 pm (WebCourses time)**

- **Objectives:** To gain familiarity with the Server Manager tool in Windows Server 2008, to practice installing and removing server roles, and to practice configuration of tasks using this tool.

- **Deliverables:** Eleven screen shots as shown on pages: 9, 12, 16, 17, 20(2), 23, 28, 29, 30, and 31.

Project Three: Overview

- In this project you will become more familiar with both the virtual environment you're running and the Server Manager tool in Windows Server 2008.

- As we've covered in class, Windows Server 2008 can implement many different server roles (16 possibilities in the Standard R2 Edition). Some services associated with a server role allow the system admin to elect to install different portions or components of the service without installing all of the components.

- One of the first steps in managing server roles is to learn how to install and remove server roles using the Server Manager tool. This is the first objective of this project.

Project Three: Overview

- Two common roles for a Windows Server 2008 server are those of a file server and a print server, which are offered through the File Services and Print Services roles.   This is especially true in small to medium size organizations.

- The File Services role focuses on sharing files from the server or using the server to coordinate and simplify file sharing through Distributed File System (DFS).

- In the Print Services role, the Windows Server 2008 can be used to manage network printing services and it can offer one or more networked printers connected to the network through the server itself.

- We'll see more about DFS and network printing later in the semester.

Project Three: Overview

- Another reason it is important as a system admin to be able to install and remove server roles is that often the role of a server in an organization changes over time.

- For example, consider the scenario of a small organization that initially has one server housing file services, print services, DHCP (Dynamic Host Configuration Protocol), and DNS (Domain Name Service). As the organization grows, it decides to dedicate that server to only the file and print services roles and to add a new server to handle the DHCP and DNS roles.

- As the system admin, you will need to know how to remove and install the various server roles to be assigned to the various servers under your administration.

Project Three: Overview

- In this project you will install both the file services and print services roles using the Server Manager tool.

- After installing these services and verifying that they are installed, you will then uninstall both services, again using the Server Manager.

- This project is designed only to have you gain some familiarity with installing and uninstalling services, we'll look in more detail at configuring installed services in another project.

The pages that follow explain the details of the project, stepping you through the actions of a system administration installing and uninstalling server roles. 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.

Project Three: Overview

- The first step in this project is to create a virtual machine in the virtual environment that you've chosen to utilize for the course.

- I'll be illustrating this project using VMware Player.

- Create a virtual machine running Microsoft Server 2008 as the OS.

- As indicated in the box below, **be sure to name your server using the stated convention and also make sure that all screen shots clearly show the server's name as illustrated in the following slides.**

IMPORTANT !

Create the virtual machine with the following naming convention:

Your first name – Server 1
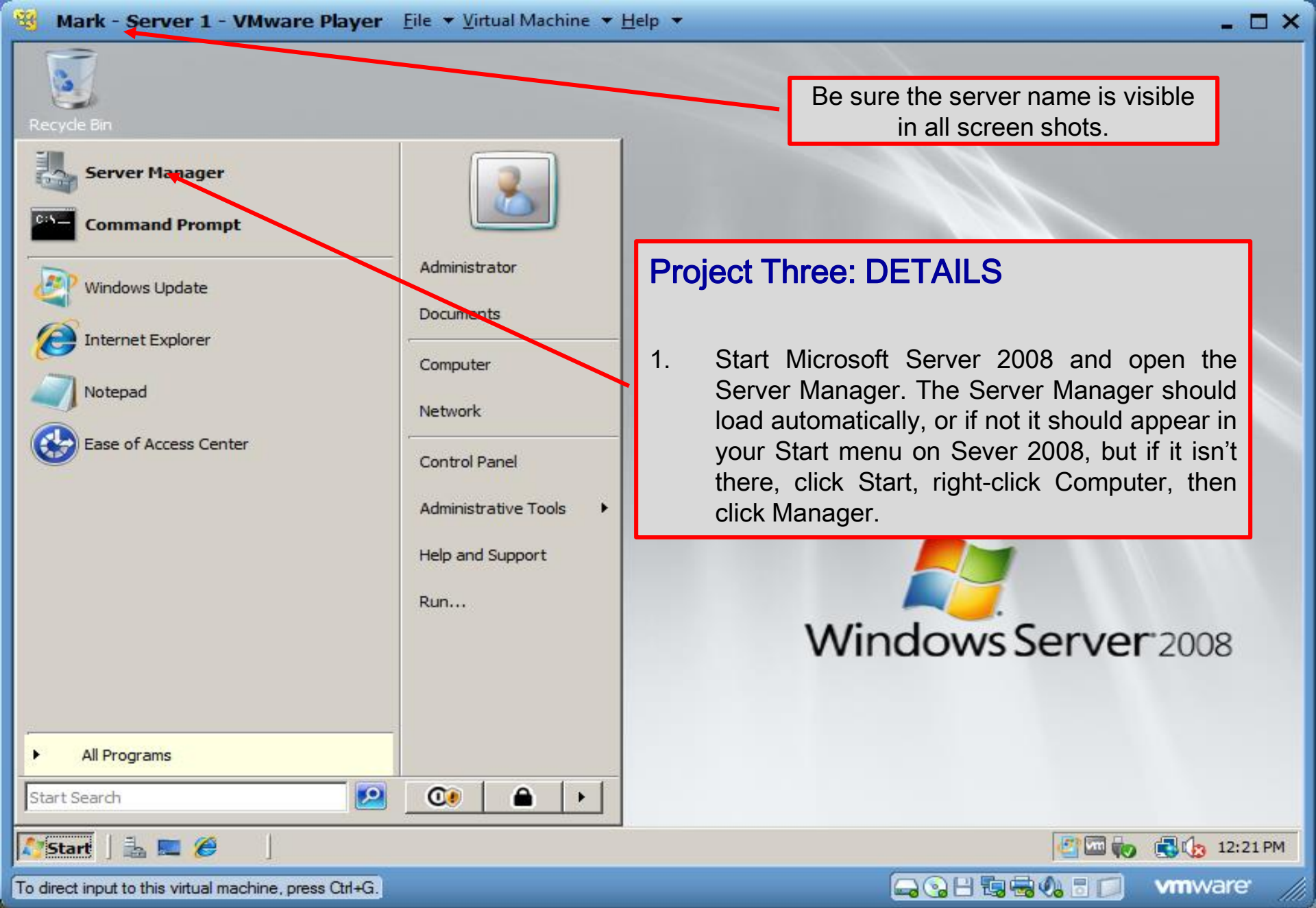
Be sure the server name is visible in all screen shots.

Project Three: DETAILS

1. Start Microsoft Server 2008 and open the Server Manager. The Server Manager should load automatically, or if not it should appear in your Start menu on Sever 2008, but if it isn't there, click Start, right-click Computer, then click Manager.
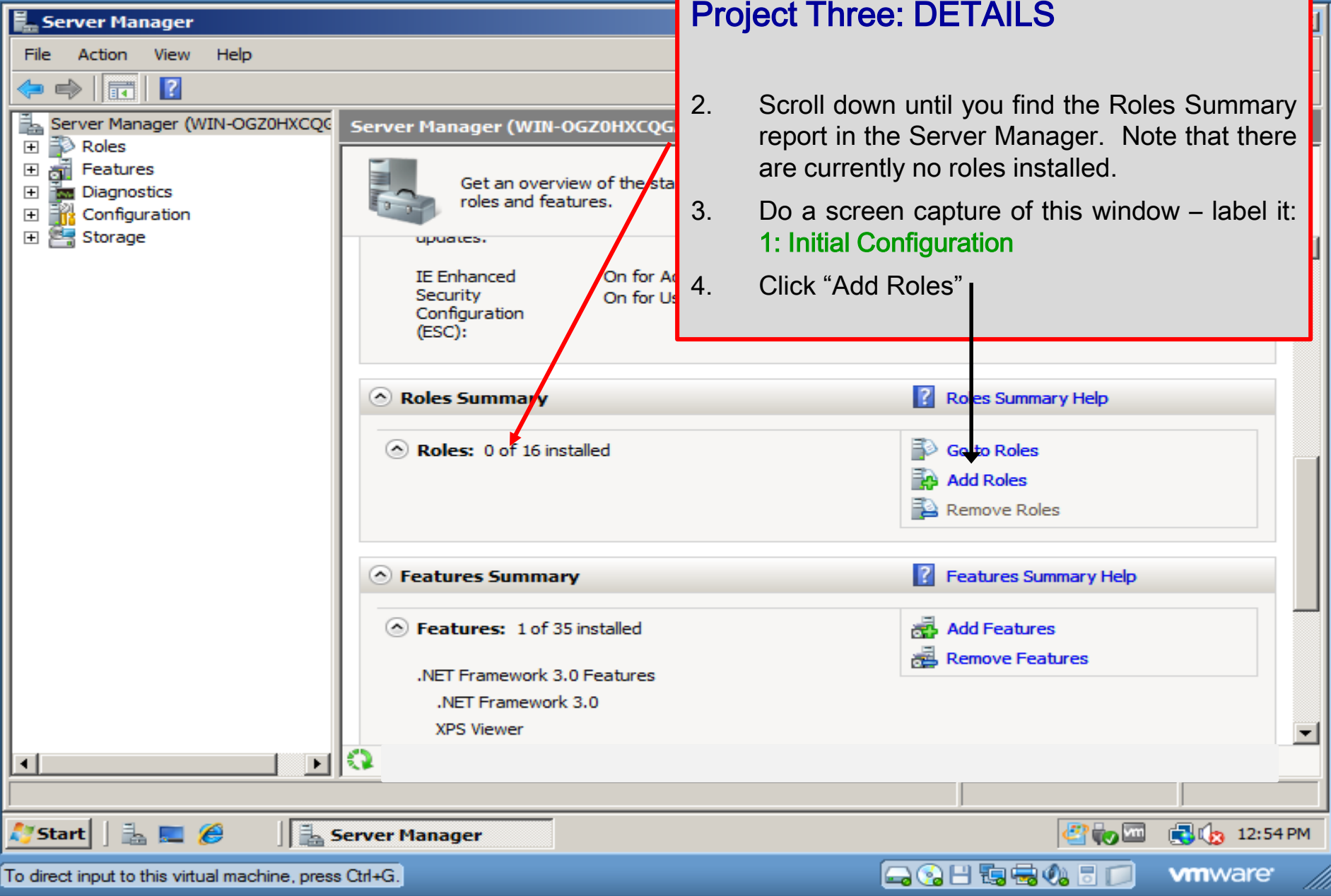
Project Three: DETAILS

2. Scroll down until you find the Roles Summary report in the Server Manager. Note that there are currently no roles installed.

3. Do a screen capture of this window – label it: 1: Initial Configuration

4. Click "Add Roles"

Add Roles Wizard

Before You Begin

Before You Begin
Server Roles
Confirmation
Progress
Results

This wizard helps you install roles on this server. You determine which roles to install based on the tasks you want this server to perform, such as sharing documents or hosting a Web site.

Before you continue, verify that:

• The Administrator account has a strong password
• Network settings, such as static IP addresses, are configured
• The latest security updates from Windows Update are installed

If you have to complete any of the preceding steps, cancel the wizard, complete the steps, and then run the wizard again.

To continue, click Next.

☐ Skip this page by default

Project Three: DETAILS

5.   If you see this "Before You Begin" window after clicking "Add Roles" simply click "Next".

< Previous   Next >   Install   Cancel

Start   Server Manager   12:55 PM

To direct input to this virtual machine, press Ctrl+G.   **vm**ware

Project Three: DETAILS

6. Check both the File Services and Print Services boxes. Then click "Next".

Add Roles Wizard — Print Services

Before You Begin
Server Roles
Print Services
　Role Services
File Services
　Role Services
Confirmation
Progress
Results

Introduction to Print Services

Print Services enables you to share printers on a
printer management tasks using the Print Manag
notifications when print queues stop processing
deploy printer connections using Group Policy.

Things to Note

To connect to a shared printer using Window
a member of the local Administrators group
already installed on the local computer, or a
this security prompt using Group Policy.

To support client computers running 64-bit a
either a printer driver that includes both 64-
the same printer driver (the version number

To increase the availability and performance of a print server by using a print cluster, install and configure
the Failover Clustering feature using the Add Features Wizard in Server Manager.

Additional Information

Overview of Print Services
Migrate Print Servers
Control Printer Driver Security
Update Printer Drivers
Resources for Print Management

< Previous   Next >   Install   Cancel

Start | Server Manager | 12:57 PM

To direct input to this virtual machine, press Ctrl+G.

Project Three: DETAILS

7. Be sure to read this page.

8. Look at Control Printer Driver Security under Additional Information and do the following:

9. Write a couple of sentences describing what the purpose of controlling printer driver security is all about. Label these sentences, 2: Purpose of Printer Driver Security.

10. Click Next.

Add Roles Wizard

Select Role Services

Before You Begin

Server Roles

Print Services

   Role Services

File Services

   Role Services

Confirmation

Progress

Results

Select the role services to install for Print Services:

Role services:

- ☑ Print Server
- ☐ LPD Service
- ☐ Internet Printing

More about role services

Project Three: DETAILS

11.   Leave Print Server checked at this point and click Next.

< Previous   Next >   Install   Cancel

Start   Server Manager   12:58 PM

To direct input to this virtual machine, press Ctrl+G.   **vm**ware

Add Roles Wizard

File Services

Before You Begin
Server Roles
Print Services
   Role Services
File Services
   Role Services
Confirmation
Progress
Results

Introduction to File Services

File Services provides technologies that help manage storage, enable file replication, manage shared folders, ensure fast file searching, and enable access for UNIX client computers. With File Services, organizations can store files in a central location and then share them with users across the company network. You can index these shared files to help users find files quickly. In addition, you can synchronize folders on multiple servers to provide fault-tolerant access to shared resources. File Services also enables you to provision storage on Fibre Channel and iSCSI disk storage subsystems.

Things to Note

(i) Windows Search Service and Indexing Service cannot be installed on the same computer.

Additional Information

File Services Overview
Share and Storage Management
Distributed File System Management

Project Three: DETAILS

12.   Read the Introduction To Files Services and the Things To Note sections. Click Next

< Previous   Next >   Install   Cancel

Start   Server Manager   12:59 PM

To direct input to this virtual machine, press Ctrl+G.

vmware

Mark - Server 1 - VMware Player   File ▾ Virtual Machine ▾ Help ▾

Add Roles Wizard   ✕

Select Role Services

Before You Begin
Server Roles
Print Services
   Role Services
File Services
   Role Services
Confirmation
Progress
Results

Select the role services to install for File Services:

Role services:

- ☑ File Server
- ☐ Distributed File System
  - ☐ DFS Namespaces
  - ☐ DFS Replication
- ☐ File Server Resource Manager
- ☐ Services for Network File System
- ☐ Windows Search Service
- ☐ Windows Server 2003 File Services
  - ☐ File Replication Service
  - ☐ Indexing Service

Description:

File Server manages shared folders and enables users to access files on this computer from the network.

Project Three: DETAILS

13. Leave File Server checked by default and click Next.

More about role services

< Previous   Next >   Install   Cancel

Start   Server Manager   12:59 PM

To direct input to this virtual machine, press Ctrl+G.

vmware

Mark - Server 1 - VMware Player   File ▾   Virtual Machine ▾   Help ▾

Add Roles Wizard

Confirm Installation Selections

Before You Begin
Server Roles
Print Services
   Role Services
File Services
   Role Services
Confirmation
Progress
Results

To install the following roles, role service

ℹ 1 informational message below

ℹ This server might need to be rest

⌃ **Print Services**
   Print Server
⌃ **File Services**
   File Server

Print, e-mail, or save this information

< Previous   Next >   Install   Cancel

Project Three: DETAILS

14.   Note the services that are now going to be installed and read any informational messages that might pertain, then click Install.

15.   Wait while the services are installed. This will take a few seconds.

16.   Do a screen capture of the Installation Results page. Label it: 3 – Installation Results. Indicate any warnings that were displayed on this page.

17.   Click Close to return to the Server Manager window.

Start   Server Manager   1:00 PM

To direct input to this virtual machine, press Ctrl+G.   **vm**ware

Mark - Server 1 - VMware Player   File ▼ Virtual Machine ▼ Help ▼

Server Manager

File   Action   View   Help

Server Manager (WIN-OGZ0HXCQG
- Roles
- Features
- Diagnostics
- Configuration
- Storage

Server Manager (WIN-OGZ0HXCQGAX)

Get an overview of the status of roles and features.

updates:

IE Enhanced
Security
Configuration
(ESC):

On for Adminis
On for Users

Roles Summary ⬅

Roles: 2 of 16 installed

ⓘ File Services
ⓘ Print Services

Features Summary

Features: 2 of 35 installed

.NET Framework 3.0 Features
.NET Framework 3.0

Project Three: DETAILS

18.   Do a screen capture of the server Manager window which shows the Roles Summary with the 2 new roles successfully installed. Label it: 4 – New Roles Summary.

19.   Congratulations!   You've successfully performed a system admin function of adding roles to a server environment.

20.   Now Click Remove Roles from this window. You'll probably again see the "Before You Begin" window, just click Next.

Start | Server Manager   1:04 PM

To direct input to this virtual machine, press Ctrl+G.   **vm**ware

Remove Roles Wizard

Remove Server Roles

Before You Begin

Server Roles

Print Services

Confirmation

Progress

Results

To remove one or more installed roles f

Roles:

- ☐ Active Directory Certificate Servic
- ☐ Active Directory Domain Services
- ☐ Active Directory Federation Servic
- ☐ Active Directory Lightweight Direct
- ☐ Active Directory Rights Manageme
- ☐ Application Server (Not Installed)
- ☐ DHCP Server (Not Installed)
- ☐ DNS Server (Not Installed)
- ☐ Fax Server (Not Installed)
- ☐ File Services
- ☐ Network Policy and Access Services (Not Installed)
- ☐ Print Services
- ☐ Terminal Services (Not Installed)
- ☐ UDDI Services (Not Installed)
- ☐ Web Server (IIS) (Not Installed)
- ☐ Windows Deployment Services (Not Installed)

Group Policy.

More about server roles

< Previous   Next >   Remove   Cancel

Project Three: DETAILS

21. Remove the checks from both File Services and Print Services, then click Next.

Start   Server Manager

To direct input to this virtual machine, press Ctrl+G.

1:05 PM

vmware

Remove Roles Wizard

Print Services

Before You Begin
Server Roles
Print Services
Confirmation
Progress
Results

Removing the Print Services role removes the Print Management snap-in, any installed role services, and optionally deletes all printers on the server.

⦿ Delete printers installed on the server

This option deletes all printers on this server, including shared printers, which prevents users from printing through this server. Deleting printers does not uninstall printer drivers.

○ Retain the printers installed on this server

This option retains all printers including shared printers. Users can still print through this server unless you manually stop sharing all printers after removing the role.

Project Three: DETAILS

22. Leave the delete printers installed on the server selected and click Next.

< Previous   Next >   Remove   Cancel

Start   Server Manager   1:06 PM

To direct input to this virtual machine, press Ctrl+G.

vmware

Remove Roles Wizard

Confirm Removal Selections

Before You Begin
Server Roles
Print Services
Confirmation
Progress
Results

To remove the following roles, role s

(i) 1 informational message belov

(i) This server might need to be

Print Services

Delete printers:
Print Server

File Services

File Server

Print, e-mail, or save this informatio

< Previous   Next >   Remove   Cancel

Project Three: DETAILS

23. Both Print Services and File Services will now be removed from the server. Click Remove.

24. Do a screen capture of the Removal Results window that appears next after the services have been removed. Label it: 5 – Removal Results.

25. Click Close after doing the screen capture.

26. Do a screen capture of the Server Manager window that shows the Roles Summary which should now have 0 of 16 installed roles showing. Label it: 6 – Final Role Status.

Mark - Server 1 - VMware Player   File   Virtual Machine   Help

Start   Server Manager   1:06 PM

To direct input to this virtual machine, press Ctrl+G.

vmware

Project Three: Task Scheduling Overview

- In this next part of the project you will become more familiar with the Task Manager tool in Windows Server 2008.

- As we've covered in class, the Task Manager has a fairly extensive capability for defining and scheduling tasks to run automatically on the server.

- In this part of the project you will define and configure a couple of scheduled tasks.

Project Three: Task Scheduling Overview

- Download and install Notepad++ in your virtual machine. You can download Notepad++ at:

    http://notepad-plus-plus.org/download/v6.5.4.html

- Install Notepad++ and add the shortcut to the desktop so that your next screen shot looks like the one on the next page.

Be sure the server name is visible in all screen shots.

Project Three: DETAILS

27.   Do a screen capture of this screen. Label it: 7. Initial desktop.

Project Three: DETAILS

28. Open the Task Scheduler (from either the Server Manager tool, or the list of tools from the Administrative Tools from the Start button).

29. From the Actions panel, select Create Task.

Actions

Task Scheduler Library
- Create Basic Task...
- Create Task...
- Import Task...
- Display All Running Tasks
- New Folder...
- View
- Refresh
- Help

Selected Item
- Run
- End
- Disable
- Export...
- Properties
- Delete
- Help

General | Triggers | Actions | Conditions | Settings | History

Name: email document

Author: WIN-9SI828E5LL3\Administrator

Description: this task emails a document

Security options

When running the task, use the following user account:

WIN-9SI828E5LL3\Administrator

Mark - Server 1 - VMware Player (Non-commercial use only)

Project Three: DETAILS

32. Set the trigger for the task to be the logon of the administrator only.

New Trigger

Begin the task: At log on

Settings

○ Any user

● Specific user or group: SAVN\Administrator   [Change User or Group...]

Advanced settings

☐ Delay task for: [15 minutes ▼]

☐ Repeat task every: [1 hour ▼]   for a duration of: [1 day ▼]

  ☐ Stop all running tasks at end of repetition duration

☐ Stop task if it runs longer than: [3 days ▼]

☐ Activate: [2/24/2014 ▼] [2:16:39 PM ▲▼]   ☐ Synchronize across time zones

☐ Expire: [2/24/2015 ▼] [2:16:39 PM ▲▼]   ☐ Synchronize across time zones

☑ Enabled

[OK]   [Cancel]

Start | Server Manager | Task Scheduler | Create Task   2:17 PM

Project Three: DETAILS

33. Define the Action of the task to be to start Notepad++ executing.

34. The executable for Notepad++ should be in C:\Program Files\Notepad++.

35. There are no conditions or settings that will need to be defined.

36. Save the task in the library.

Project Three: DETAILS

37. Do a screen capture of the Task Scheduler Library at this point. Label this capture: 8: Task Scheduler Library.

38. Close the task scheduler and return to the server manager.

Windows Task Manager

File Options View Help

| Applications | Processes | Services | Performance | Networking |

Image ... ▲	User Name	CPU	Memory (...	Descrip
explorer.exe	Administ...	00	10,548 K	Window
ismserv.exe	SYSTEM	00	1,372 K	Window
lsass.exe	SYSTEM	00	12,240 K	Local S
lsm.exe	SYSTEM	00	1,256 K	Local S
mmc.exe	Administ...	00	42,488 K	Microso
msdtc.exe	NETWO...	00	2,208 K	MS DTC
services.exe	SYSTEM	00	2,464 K	Service
SLsvc.exe	NETWO...	00	4,184 K	Microso
smss.exe	SYSTEM	00	204 K	Window
spoolsv.exe	SYSTEM	00	4,776 K	Spooler
svchost.exe	SYSTEM	00	1,956 K	Host Pr
svchost.exe	NETWO...	00	2,456 K	Host Proc...
svchost.exe	LOCAL ...	00	4,648 K	Host Proc...
svchost.exe	SYSTEM	00	2,260 K	Host Proc...
svchost.exe	SYSTEM	00	13,116 K	Host Proc...
svchost.exe	LOCAL ...	00	4,016 K	Host Proc...

☑ Show processes from all users   End Process

Processes: 43   CPU Usage: 2%   Physical Memory: 43%

Project Three: DETAILS

39.   Right click on any blank area of the tool bar and select the Task Manager.

40.   Do a screen capture of this screen showing the currently running processes on the server. Label this screen shot 9: Initial Processes.

41.   Next logoff/shutdown the server and log back in as the administrator.

Mark - Server 1 - VMware Player (Non-commercial use only)

Player

C:\Program Files\Notepad++\change.log - Notepad++ [Administrator]

File   Edit   Search   View   Encoding   Language   Settings   Macro   Run   Plugins   Window   ?   X

change.log

```
 1    Notepad++ v6.5.4 new features and bug fixes:
 2
 3    1.  Enhance Notepad++ to conform with DPI-aware application.
 4    2.  Make extension column optional in vertical file switcher.
 5    3.  Add 3rd option "function + word completion" in auto-completion feature.
 6    4.  Fix closing bug in doc switcher via the context menu (right clicking of an unselected item).
 7
 8
 9    Included plugins:
10
11    1.  DSpellCheck v1.2.12
12    2.  NppFTP 0.24.1
13    3.  NppExport v0.2.8
14    4.  Plugin Manager 1.0.8
15    5.  Converter 3.0
16    6.  Mime Tool 1.9
17
18
```

Project Three: DETAILS

42.   At initial start-up, Notepad++ will dump the change.log file onto the Notepad++ editor pane as shown.

43.   Take a screen shot of this page showing Notepad++ now running.   Label this screen shot 10: Notepad++ initial screen.

Normal text file   length : 505   lines : 18   Ln : 8   Col : 1   Sel : 0 | 0   Dos\Windows   ANSI as UTF-8   INS

Start   C:\Program Files\Not...   Server Manager   2:33 PM

Project Three: DETAILS

44. Do not close Notepad++.

45. Once again start the Task Manager.

46. Do a screen capture of the Task Manager that now illustrates Notepad++ as an executing process. Label it: 11 – Scheduled Task Executing.