NerdLK
WEB SOLUTIONS

CNET214SL

Network and System Administration

CONTENTS

NerdLK

WEB DESIGN , DEVELOPMENT & NETWORK SOLUTIONS

NerdLK is a young and dynamic web development group that interested in new web technologies. We are new comers to the web development sector and we anticipate to get a experience from this project. Furthermore, we have active and well motivated members who willing to contribute.

1) Introduction

1.1). Overview of Current Infrastructure

Wisdom University is a leading private University in Sri Lanka. They operate ten regional campuses in major cities of Sri Lanka. They are located in Anuradhapura, Galle, Gampaha, Jaffna, Kandy, Kurunegala, Puththalam, Vavniya, Mathara and Headquarter is located in Colombo. Each campus is offering different study programs designed by the academic board of the University. There is a lecturer pool in head quarter. There are requiring the lecturers for any branch, then lecturers are filled it out by lecturer pool. There are users' category in this infrastructure called HQ-Management, Staff, Lecturers, Examination and Students. Students, Staff and Examination Organizational Units have 10 branches. Each branch has 2 faculties called management and computer and each faculty has two batches 15.1 and 16.1.

1.2). Problem Definition

There is no fully connected computer network system that can connect all the campuses to a single network. Each campus is equipped with a Computer lab comprising 20 computers connected via a LAN. Apart from the lab, there are 4 computers at each campus for administrative work.

The features of the current set up is as follows.

- Operating System (OS) architecture: Peer-to-peer setup with individual resource control. De-centralized OS and there is not centralized Directory Database. Multiple client OS versions run in PCs.

- Network architecture: Flat Local Area Network in each campus with few low-cost switches. Static IP address assignment in each location. There are frequent LAN, IP and connectivity issues.

- Security/Authentication: No standard authentication policy and procedure and it is de-centralized

- Applications: Office applications (Open Office and Microsoft Office), Accounting Packages, IDEs

- A Server room is built and equipped with mid-range servers of latest specifications to facilitate the proposed new network system.

2) . Proposed Infrastructure

System is used Windows sever 2012 R2 for the server configurations.

According to the our structural design the Operating System for the user desktops in the company is Windows 7.

Windows Server 2012 (Operating System OS Architecture)

- **User Credentials**

We have deployed password authentication methods in the company. It will be connected through Ethernet ports. Since we have deployed individual logins to every user, to connect to the company's network and they would connect to entire the resources according to their user levels..

After the users logged out from the network the credentials will be discarded for the security reasons.

- **Active Directory**

This is specific purpose database, it is not a reregistration substitutions. The registry is contemplated to handle a diffusive number of read, little number of changes with redesign and inquiry operations. Active directory information is extensible, reproduce, progressive. Since it is followed, we do prefer not to save active information. The Active Directory database contains items and characteristics. Deprecates and characteristics are put away in the Active Directory composition.

Active Directory has three partitions. They are domain, schema and configuration.

- **New Features in Active Directory in Windows Server**

IT administrators in the company are giving the chance to connect devices to companies' Active Directory and they can use this union as consistent second factor authentication.

Employees in the company will be given the chance to use single sign-on (SSO) from the devices which are connected to company networks' Active Directory.

Since we have deployed this feature it will connect the applications and services from anywhere using Web Application Proxy.

Importantly Multi-factor Access Control and Multi-Factor Authentication (MFA) feature will manage risk of users working from anywhere and will give access to protected data from their devices.

- **New features in Active Directory Domain Services (AD DS)**

Windows server 2012 is supporting the capabilities of private and public clouds through virtualization-safe technologies.

The upgrade and preparation processes (dcpromo and adprep) have been replaced with new streamlined domain controller promotion wizard. And it simplifies deployment and upgrade prep process.

This feature also simplifies the management.

By updating the AD DS platform, we have improved allocation and scale of RIDs (relative identifiers), deferred index creation, various Kerberos enhancements and support for Kerberos claims (see Dynamic Access Control) in AD FS.

DNS Server

Domain Name System is a standard modernization for observe public names of web sites and other internet domains. DNS modernization permits us to sort names into web program like abc.com and our PC to find that address on the internet. A constraint of the DNS is an overall accumulation of DNS servers.

A DNS server is any PC recruited to join the Domain Name System.

A DNS server executes uncommon reason organization programing, highlights an open IP address, and contains a database of system names and addresses for another internet has.

- **Modern feature in DNS Server**

The one feature of DNS Server is DNS Security Extensions (DNSSEC) and it is extended to include signing and automated key management.

There are improvements of DNSSEC,

- It promotes Active Directory-integrates DNS scenarios including DNS dynamic updates in DNSSECA SIGNED ZONES.
- There are many updated DNSSEC standards, including NSEC3 and RSA/SHA-2 and this supports those.
- There is automated trust anchor distribution through Active Directory.
- There is another automated trust anchor rollover support per RFC 5011.
- User interface has been updated with deployment and management wizards.

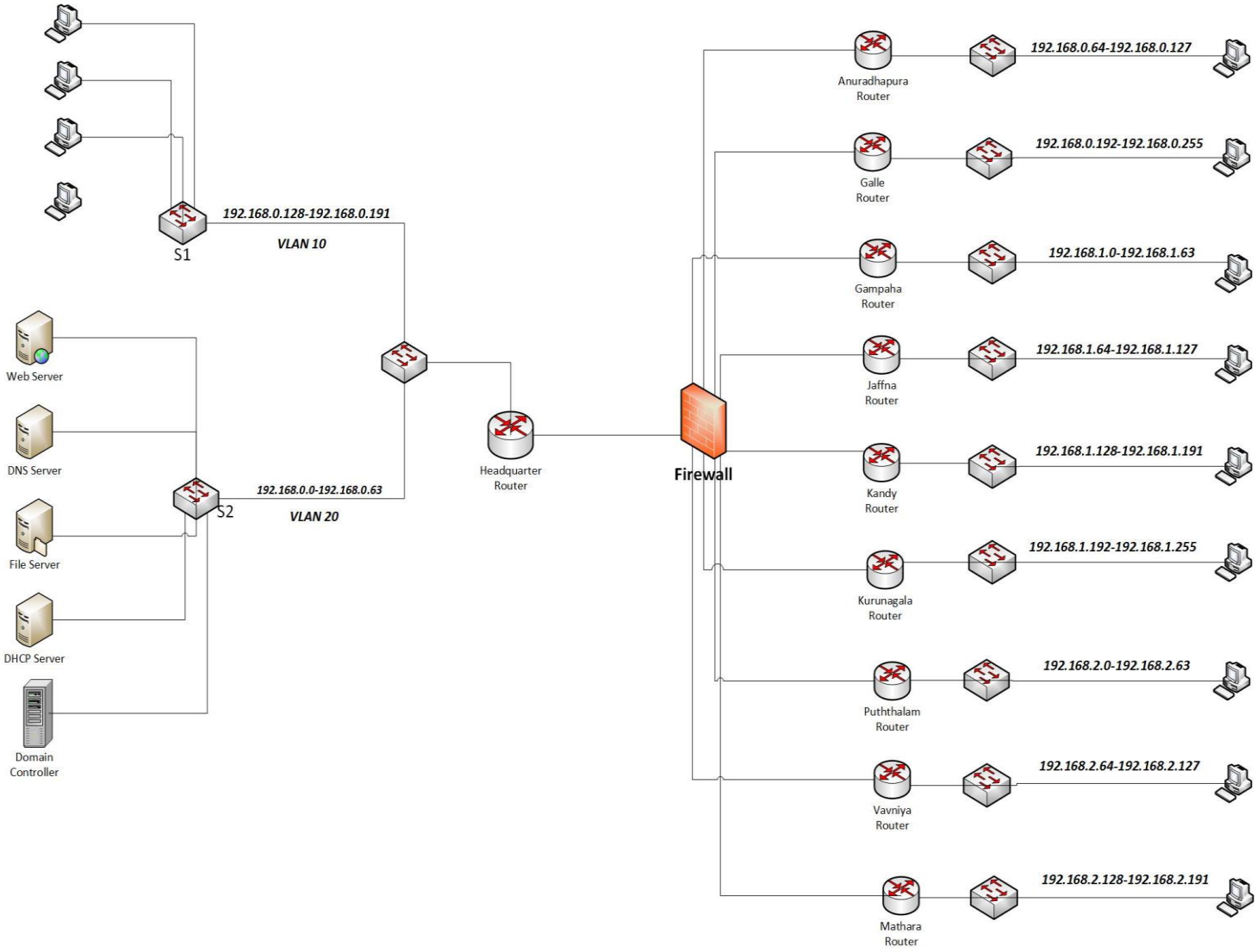
DNS configuration and management is improved with Windows PowerShell.

3). Network Design Architecture

3.1). Subnetting

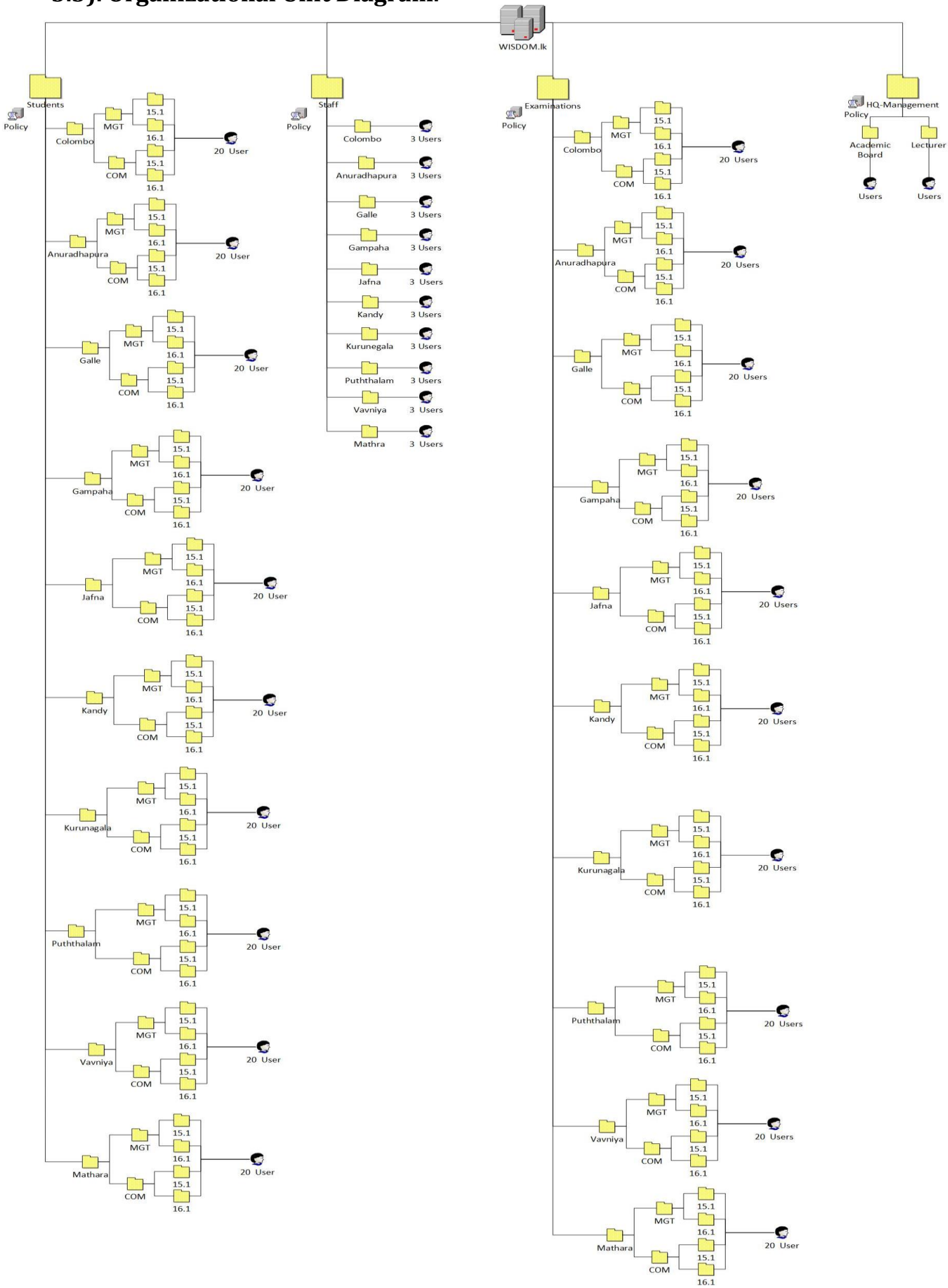
In the scenario, it is specified that there are 20 lab pcs and 4 management pcs in each branch. For each branch, since there are 24 computers, we have come up with a subnet mask 255.255.255.192 for network because now there is one lab for a branch, it is shared by both computing and management students because of that the campus may build a new lab then it will require more ip addresses than initial ip addresses.

3.2). Network Diagram



According to our network diagram, initially we divided ip address to the devices. There is 5 server PC is used therefore We come up with 192.168.0.0 to 192.168.0.63 ip range for main servers. 192.168.0.64-192.168.2.192 ip addresses are used to 24 computers of each branch. In the headquarter, we created two VLANs, VLAN 10 was assigned to the switch 1 which is connected computers of headquarter and VLAN 20 was assigned to the severs which are connected to the switch 2.

3.3). Organizational Unit Diagram.



According to our Organizational Units Diagram, we created main four Units called Students, Staff, Examinations and HQ-Management with policies. Inside the Students Organizational Unit, we created 10 branches because one particular student is assigned to a branch and we created MGT, COM units because each student must have a faculty necessarily. Each faculty have 2 batches such as 15.1 and 16.1. We have created Staff organizational unit for all branches. Examinations Unit structure is same as Students Organizational Units. Under the HQ-Management we created Academic board, Exam-Unit and Lecturer Organizational units.

3.4). Proposed Solution Specification

Students' Accounts

- Students has common batch share folder

  Students can share particular data commonly and the relevant students of the related batch have full access to use this folder.

- All students have individual home folder
  Only that particular students have fully access and controls to this folder.

- Assignment Folder
  Examination unit has full access to this folder. Students of relevant batch, Managers and lecturers has read only access. This folder is used only for sharing assignment related scenario and relevant materials

- Common Student Share Folder
  All university students have full access to this folder.

- Lecture Material Share Folder
  Students who are in a particular batch and lecturers have read only access of using this folder and HQ-Academic board has full access for this folder.

Lecturer Accounts

- **Individual Home Folders**
  Each lecturer has full access to this folder.

- **Lecturer Common share folder**
  All lecturers have full access controls. Managers, Non-academic staff members have individual home folders.
  Managers and Staff have particular common share folders.

  Each Examination academic board member has a home folders and HQ management has a common share folder.

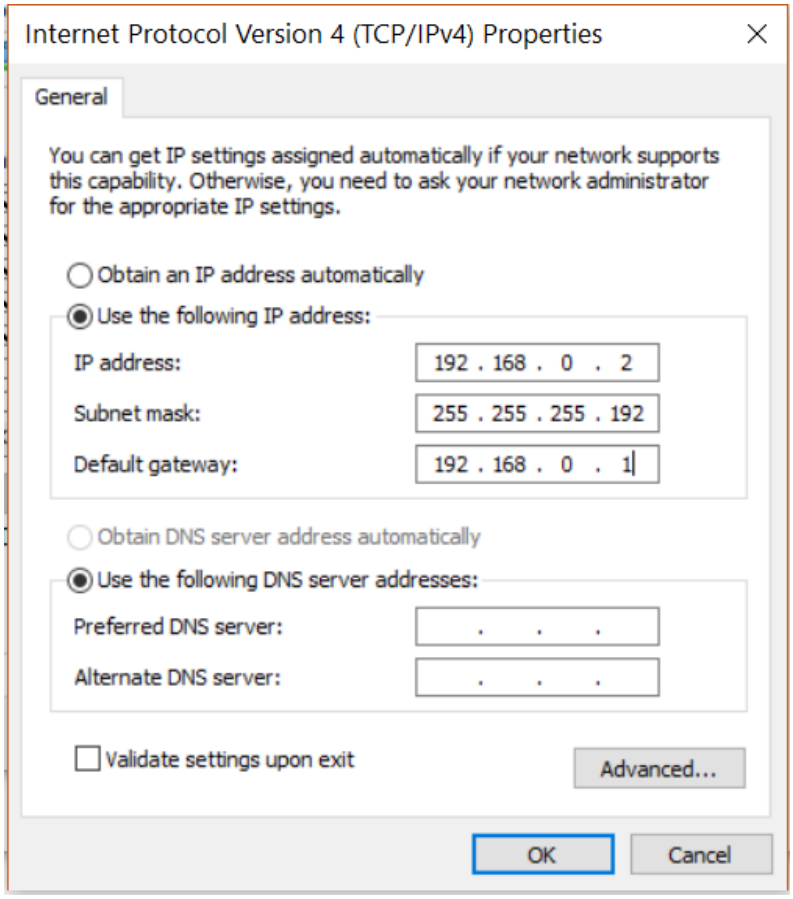
Examination Accounts

- Every student has an individual examination account.
- The home folder is given for all students.
- Examination Unit has full access for all the examination related home folders.
- Papers folder is used to share Exam papers, there for students only have read access and Exam unit has full access of this folder.

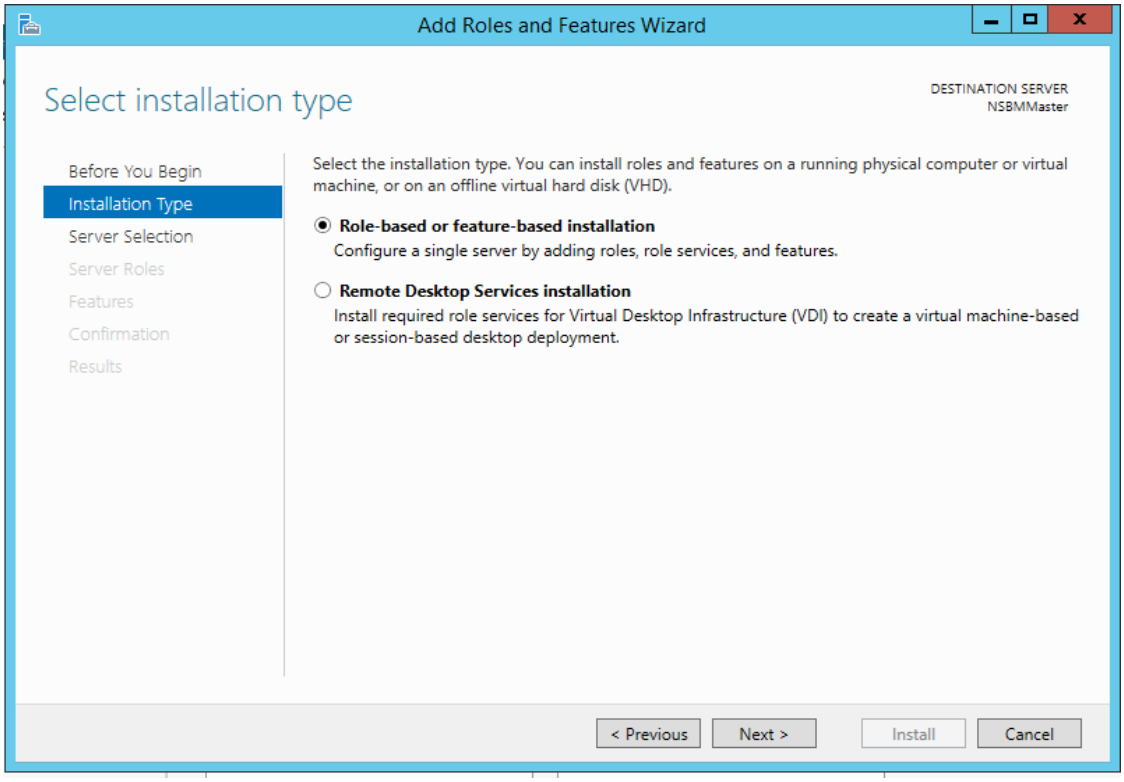
4). Installing & Configuring Services

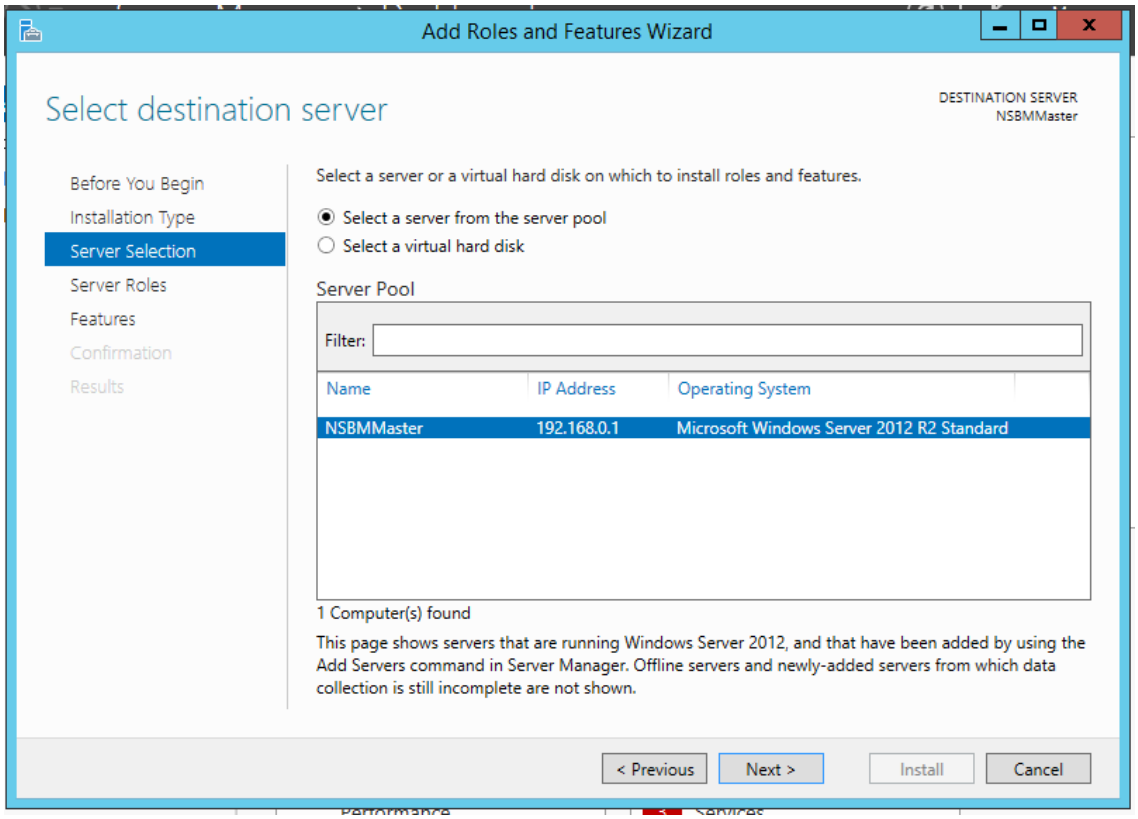
We successfully installed and configured required services to provide better security and management.

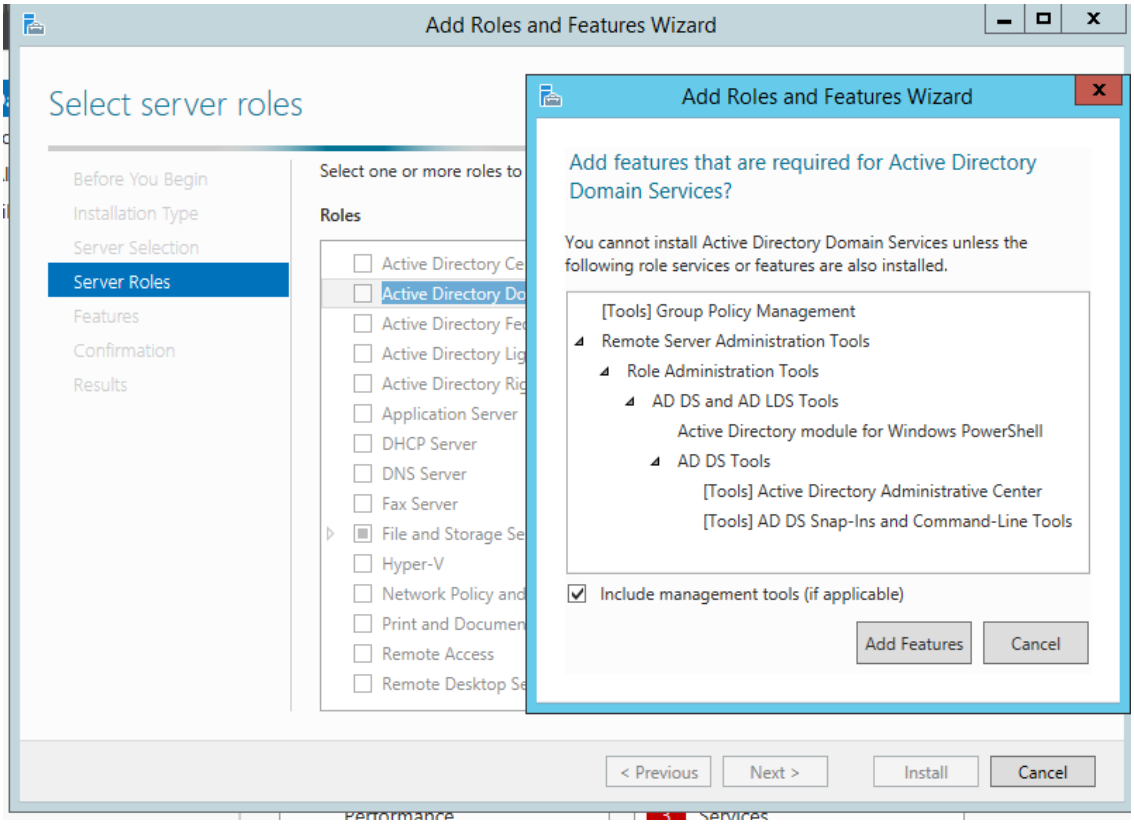
4.1). Configuring the Server PC'S IP address manually.

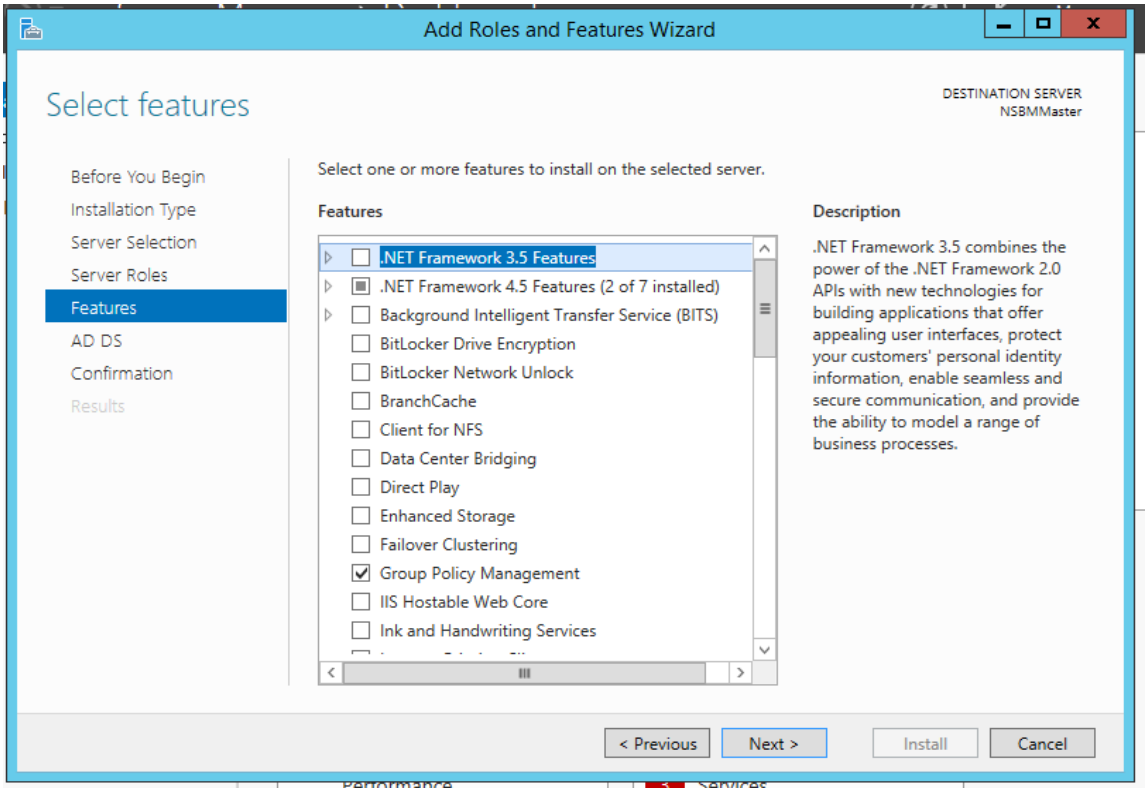


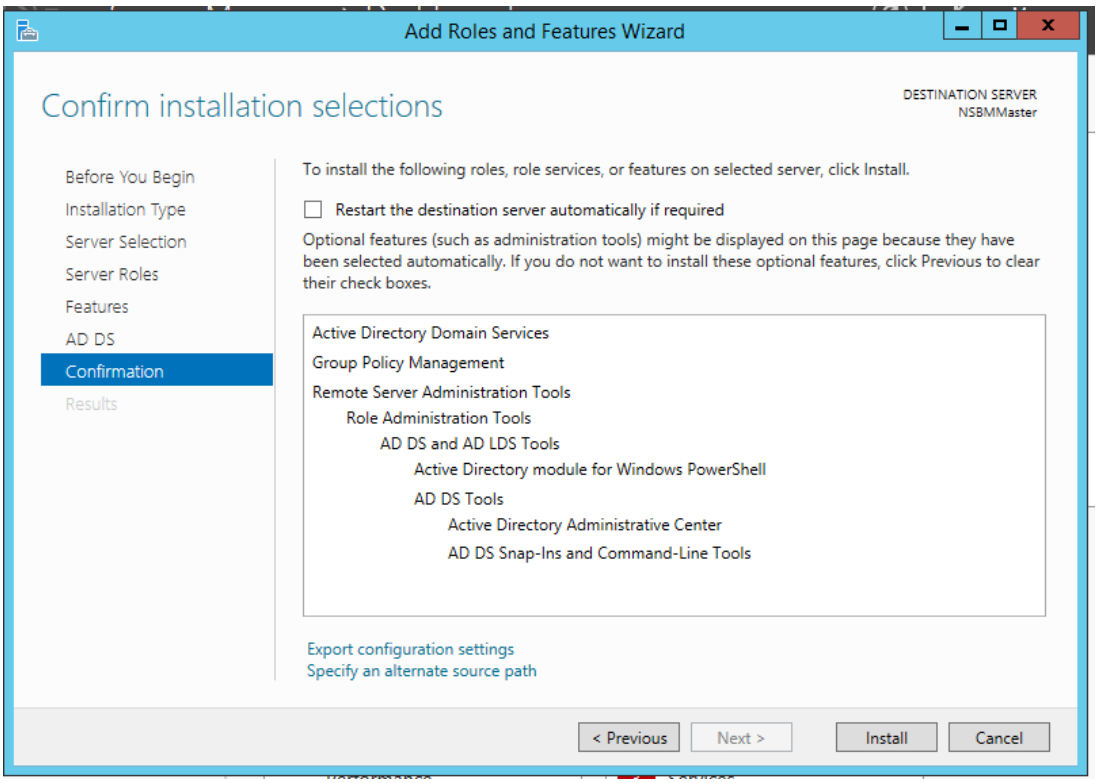
4.2). Installing Active Directory Domain Services

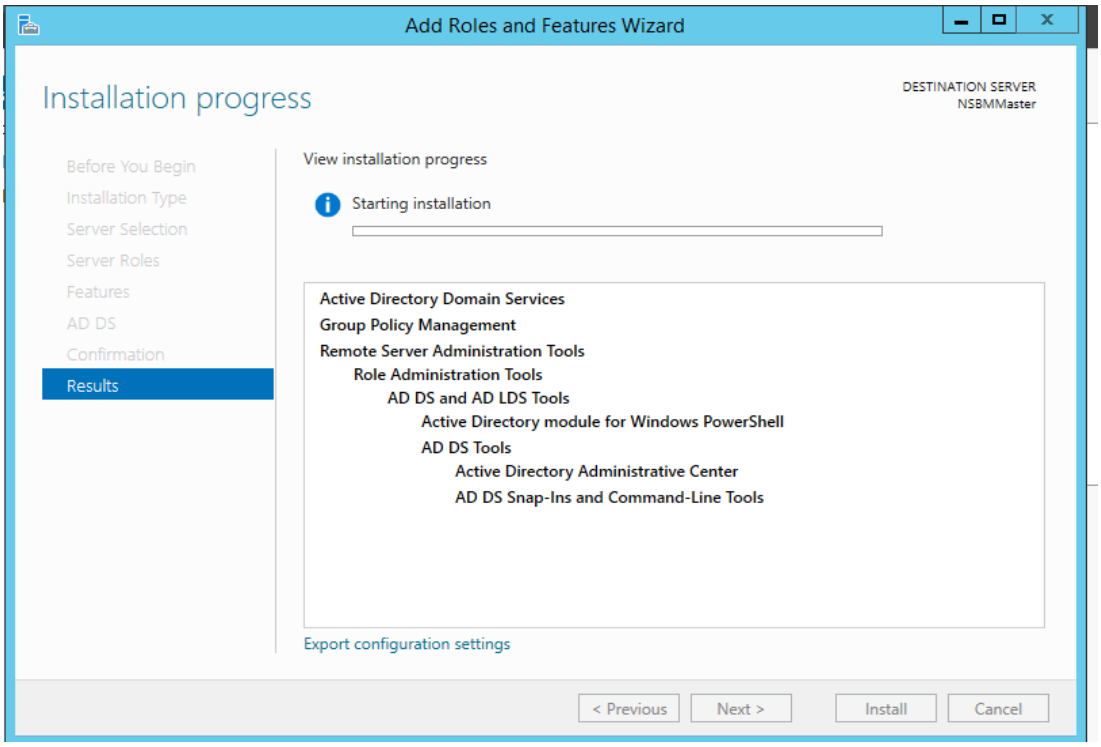


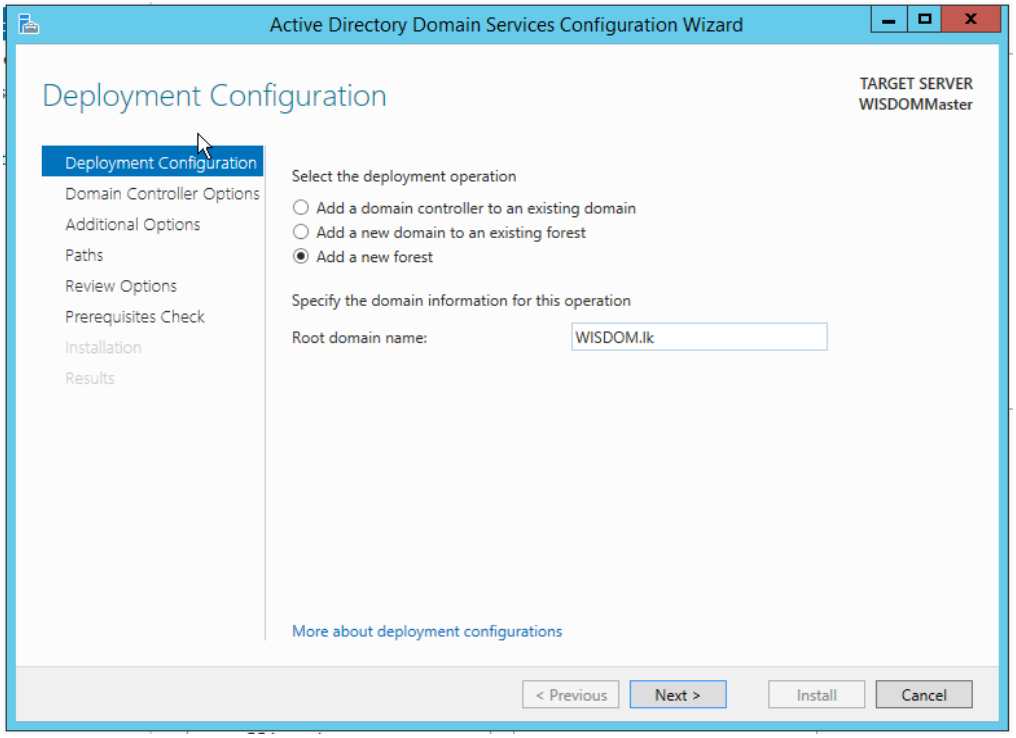


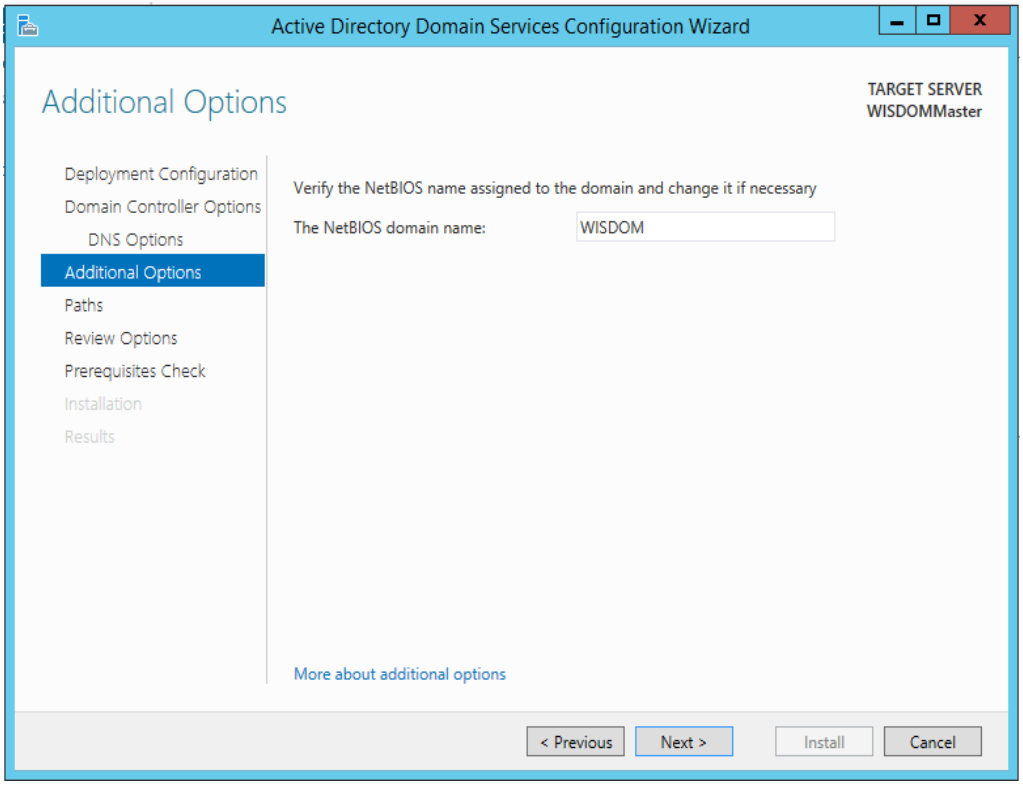

Add Roles and Features Wizard
Select server roles
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to
Roles
Active Directory Ce
Active Directory Do
Active Directory Fe
Active Directory Lig
Active Directory Rig
Application Server
DHCP Server
DNS Server
Fax Server
File and Storage Se
Hyper-V
Network Policy and
Print and Documen
Remote Access
Remote Desktop Se
Add Roles and Features Wizard
Add features that are required for Active Directory Domain Services?
You cannot install Active Directory Domain Services unless the following role services or features are also installed.
[Tools] Group Policy Management
Remote Server Administration Tools
Role Administration Tools
AD DS and AD LDS Tools
Active Directory module for Windows PowerShell
AD DS Tools
[Tools] Active Directory Administrative Center
[Tools] AD DS Snap-Ins and Command-Line Tools
Include management tools (if applicable)
Add Features
Cancel
< Previous
Next >
Install
Cancel


Add Roles and Features Wizard
Select features
DESTINATION SERVER
NSBMMaster
Before You Begin
Installation Type
Server Selection
Server Roles
Features
AD DS
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features
.NET Framework 4.5 Features (2 of 7 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management
IIS Hostable Web Core
Ink and Handwriting Services
Description
.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.
< Previous
Next >
Install
Cancel

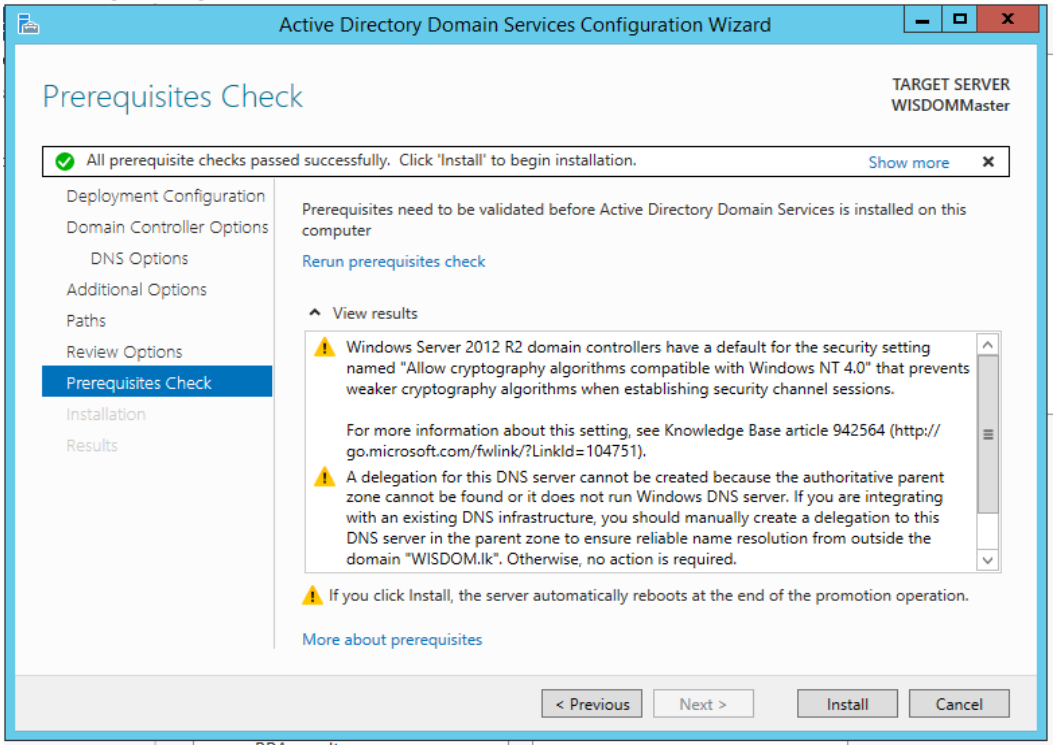

Add Roles and Features Wizard
Confirm installation selections
DESTINATION SERVER
NSBMMaster
Before You Begin
Installation Type
Server Selection
Server Roles
Features
AD DS
Confirmation
Results
To install the following roles, role services, or features on selected server, click Install.
Restart the destination server automatically if required
Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.
Active Directory Domain Services
Group Policy Management
Remote Server Administration Tools
Role Administration Tools
AD DS and AD LDS Tools
Active Directory module for Windows PowerShell
AD DS Tools
Active Directory Administrative Center
AD DS Snap-Ins and Command-Line Tools
Export configuration settings
Specify an alternate source path
< Previous
Next >
Install
Cancel


Add Roles and Features Wizard
Installation progress
DESTINATION SERVER
NSBMMaster
Before You Begin
Installation Type
Server Selection
Server Roles
Features
AD DS
Confirmation
Results
View installation progress
Starting installation
Active Directory Domain Services
Group Policy Management
Remote Server Administration Tools
Role Administration Tools
AD DS and AD LDS Tools
Active Directory module for Windows PowerShell
AD DS Tools
Active Directory Administrative Center
AD DS Snap-Ins and Command-Line Tools
Export configuration settings
< Previous
Next >
Install
Cancel

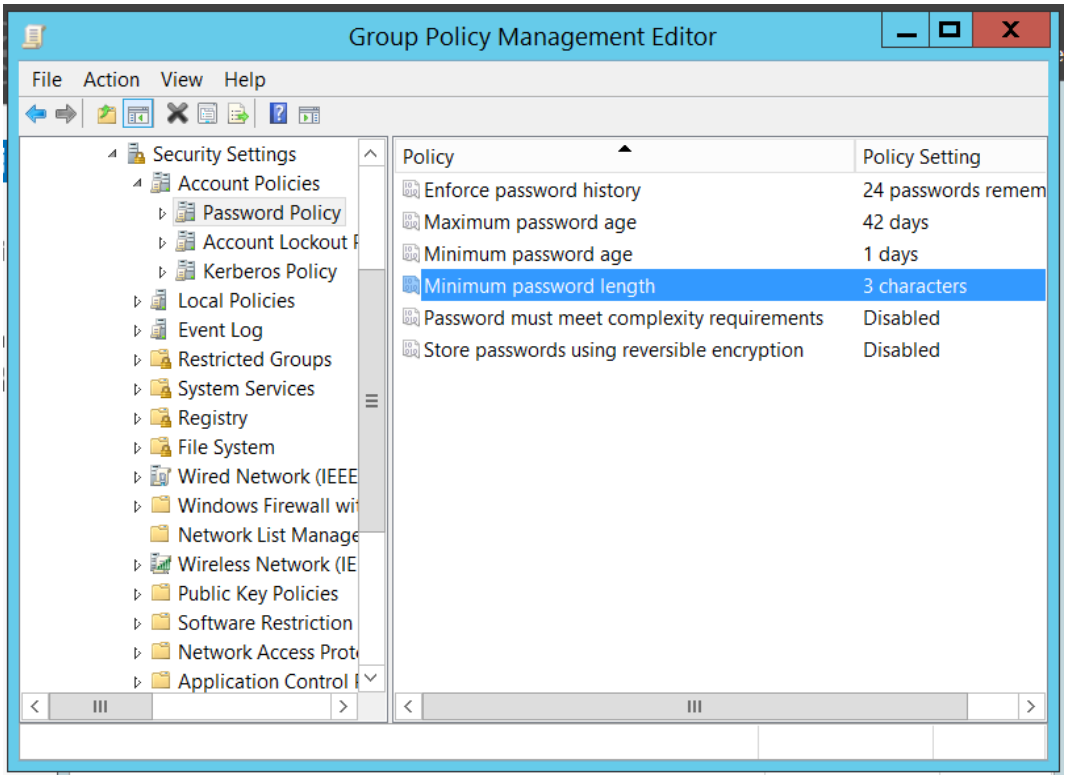

Active Directory Domain Services Configuration Wizard
Deployment Configuration
TARGET SERVER
WISDOMMaster
Deployment Configuration
Domain Controller Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
Select the deployment operation
Add a domain controller to an existing domain
Add a new domain to an existing forest
Add a new forest
Specify the domain information for this operation
Root domain name:
WISDOM.lk
More about deployment configurations
< Previous
Next >
Install
Cancel


Active Directory Domain Services Configuration Wizard
Additional Options
TARGET SERVER
WISDOMMaster
Deployment Configuration
Domain Controller Options
DNS Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
Verify the NetBIOS name assigned to the domain and change it if necessary
The NetBIOS domain name:
WISDOM
More about additional options
< Previous
Next >
Install
Cancel

4.3). Configuring AD DS

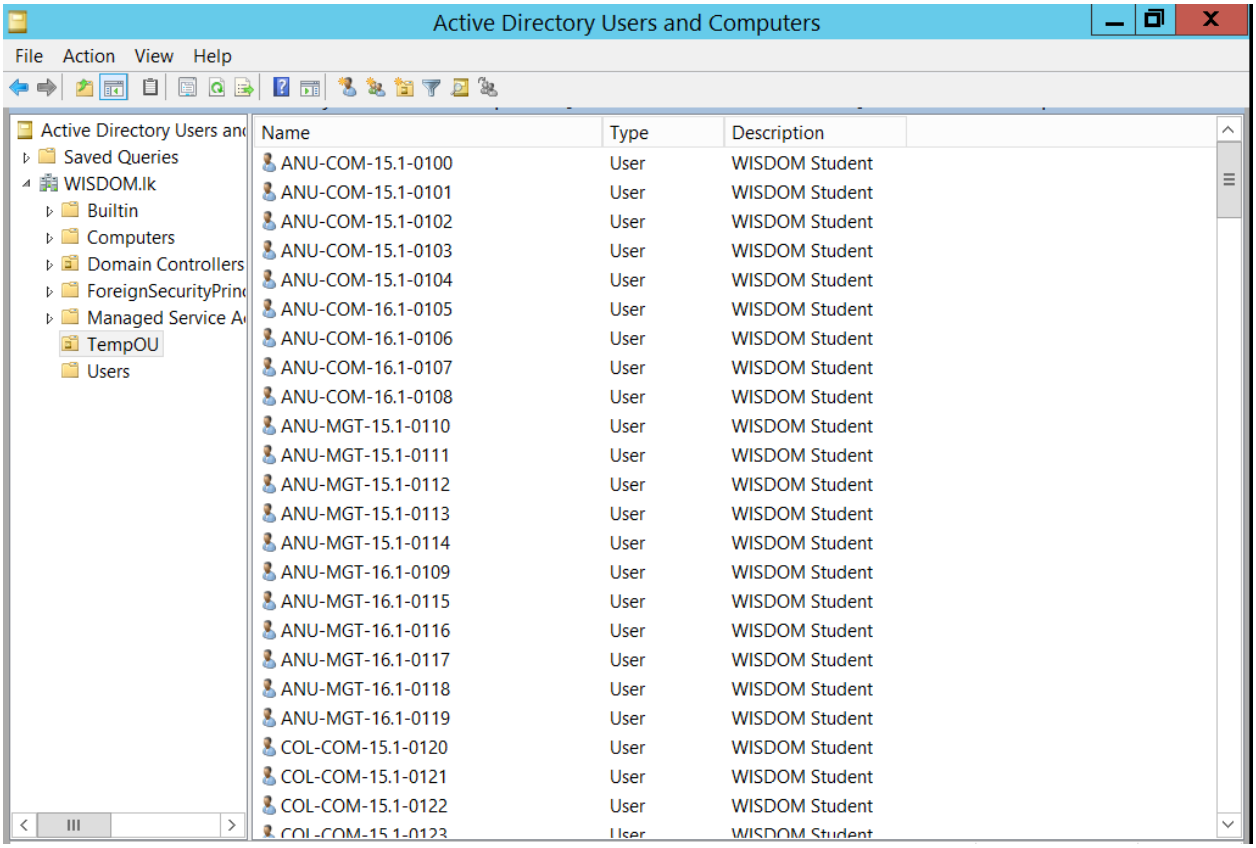


4.4). Group Policy Management Editor

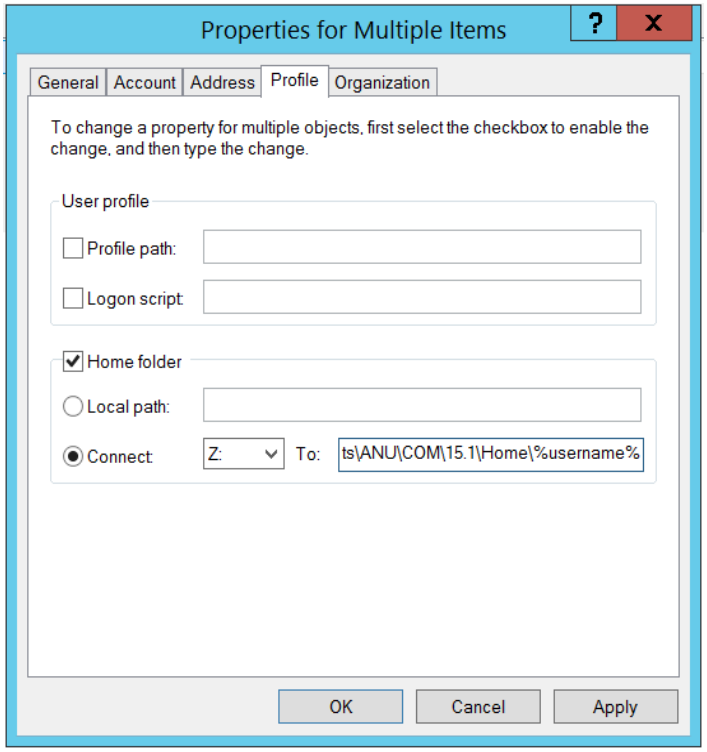


We used minimum password length for a user as 3 charactors.

4.5). Active Directory Users and Computers



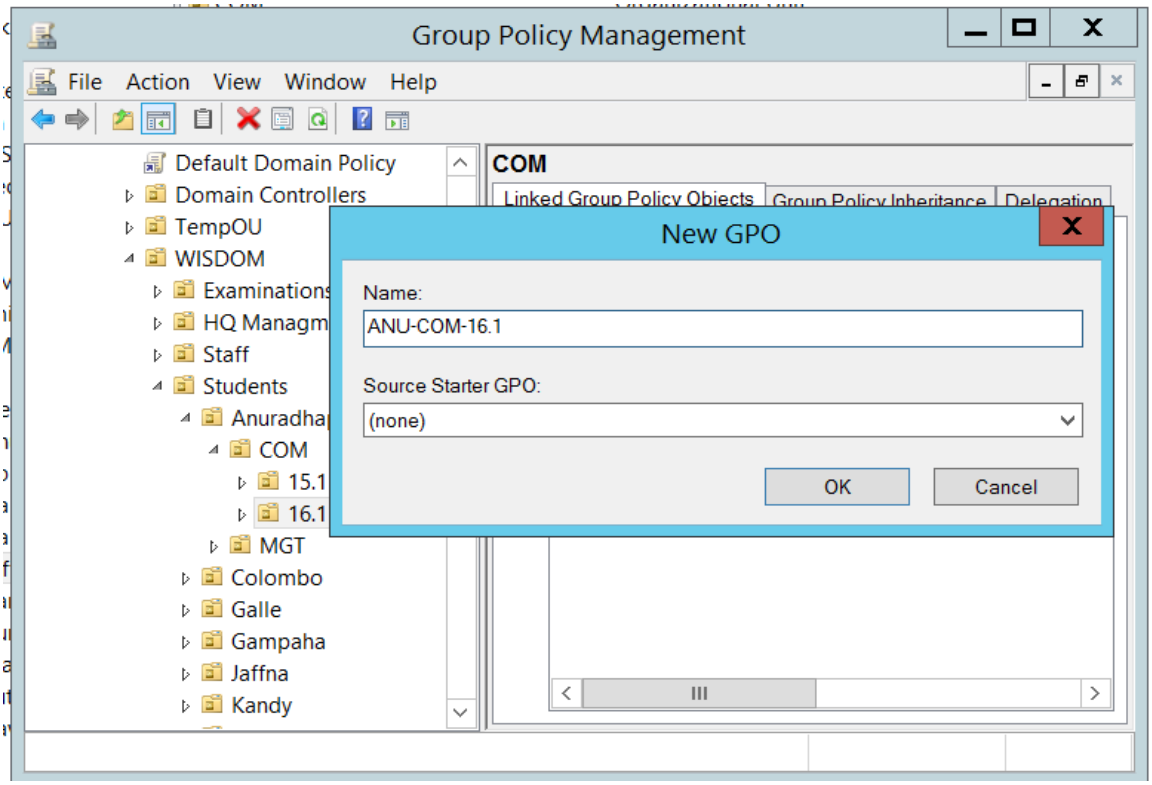
Every Students can be uniquely identified by User Id. Structure of Student id is same as below
BRANCH-FACULTY-BATCH-ID

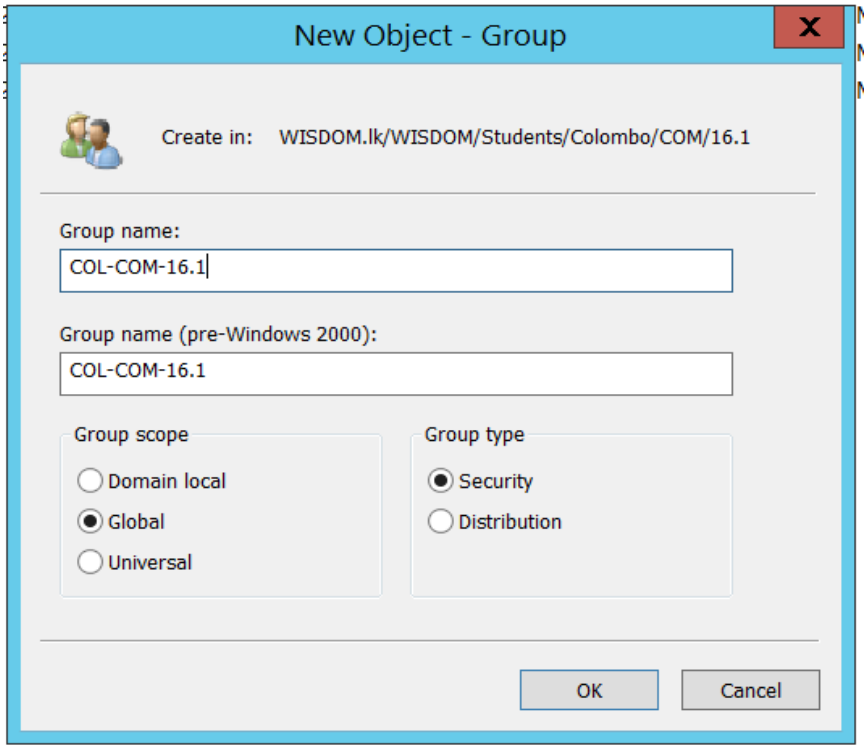


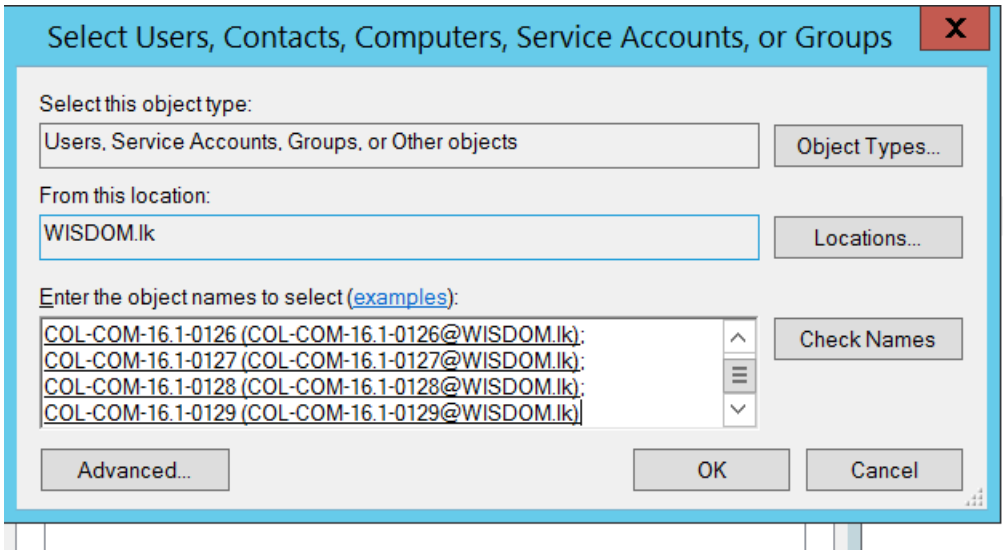
Home Folder Mapping

4.6). Group Policy Management

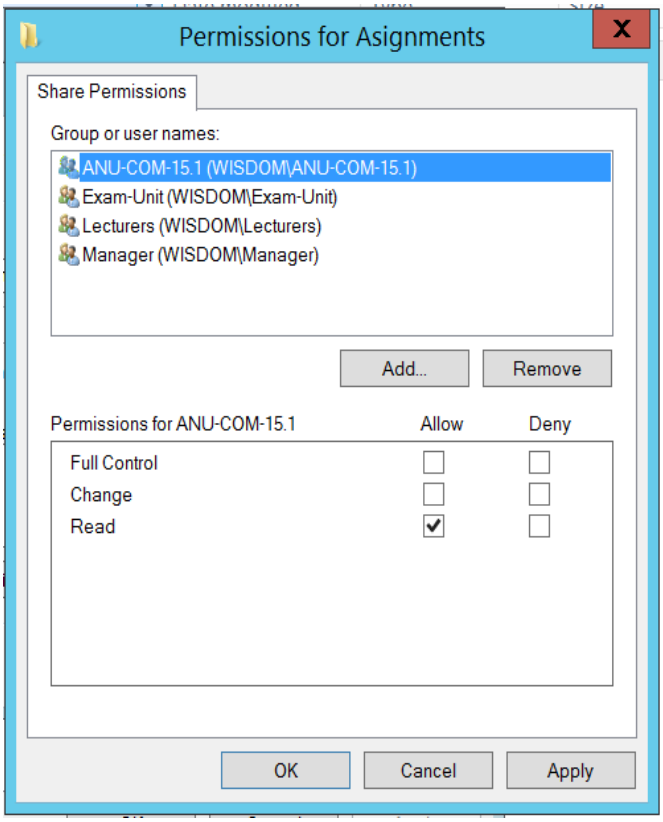
Adding Students to groups

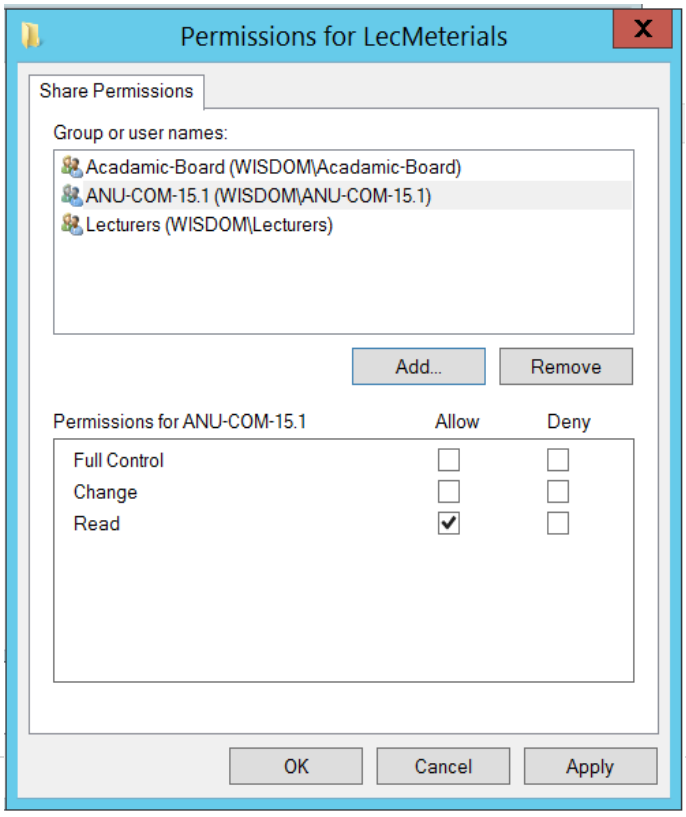




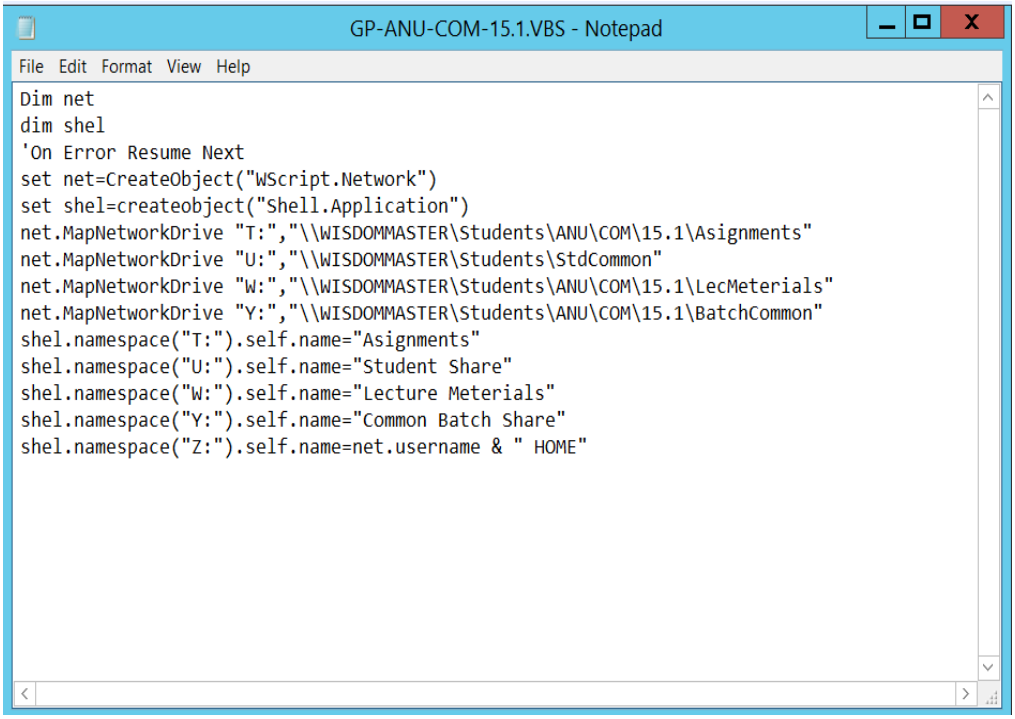

Select Users, Contacts, Computers, Service Accounts, or Groups
Select this object type:
Users, Service Accounts, Groups, or Other objects
Object Types...
From this location:
WISDOM.lk
Locations...
Enter the object names to select (examples):
COL-COM-16.1-0126 (COL-COM-16.1-0126@WISDOM.lk);
COL-COM-16.1-0127 (COL-COM-16.1-0127@WISDOM.lk);
COL-COM-16.1-0128 (COL-COM-16.1-0128@WISDOM.lk);
COL-COM-16.1-0129 (COL-COM-16.1-0129@WISDOM.lk)
Check Names
Advanced...
OK
Cancel

4.7).Giving permissions to folders

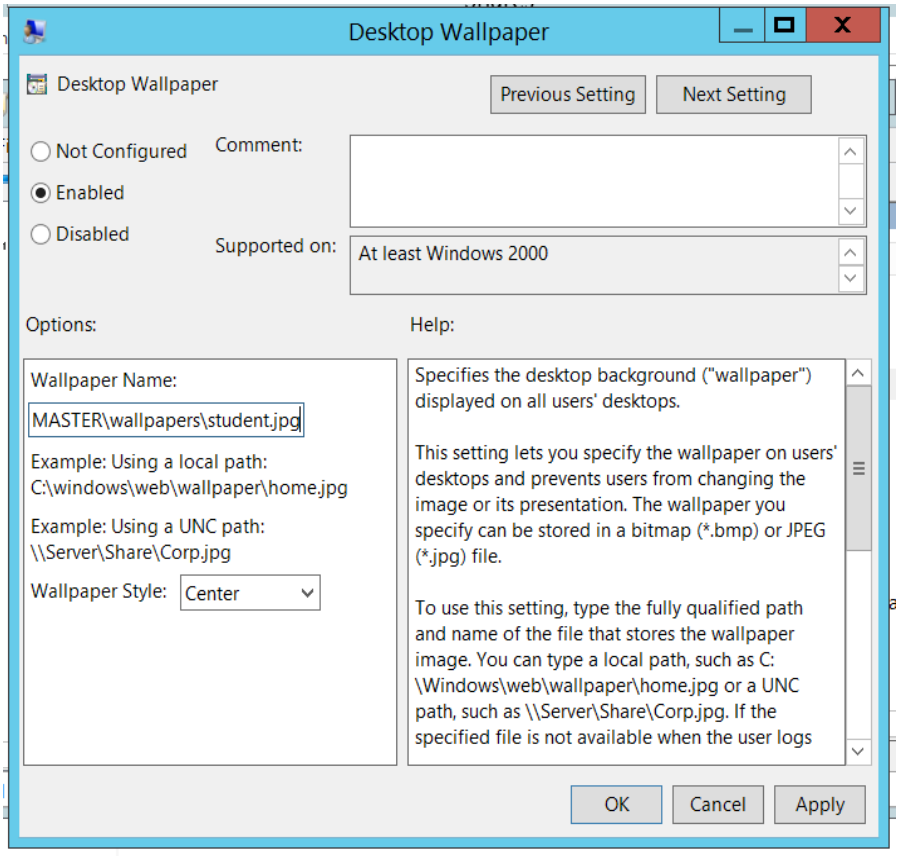


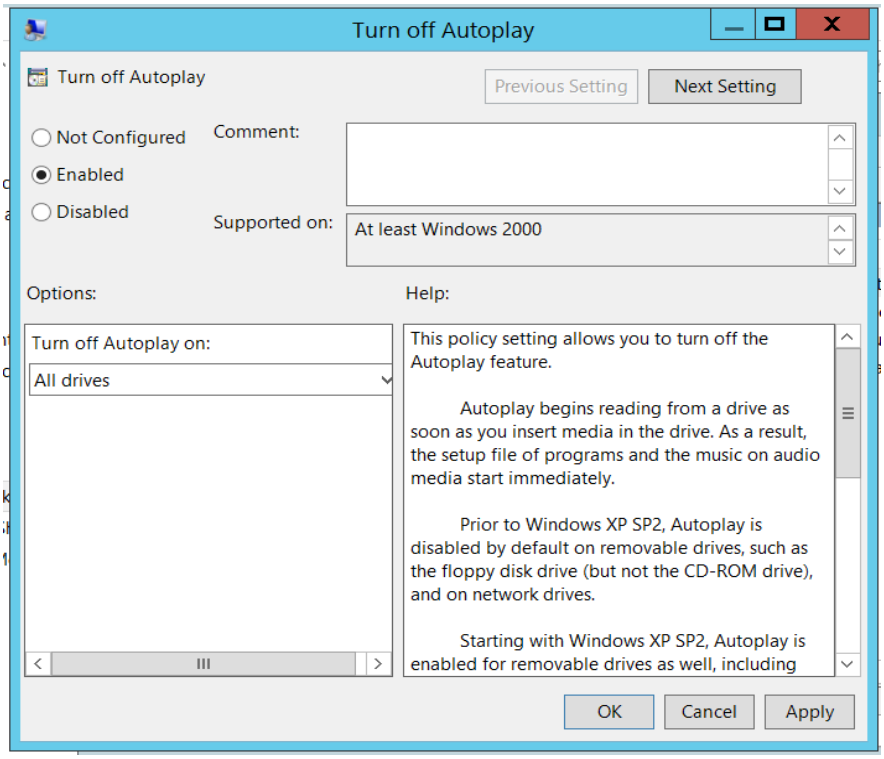


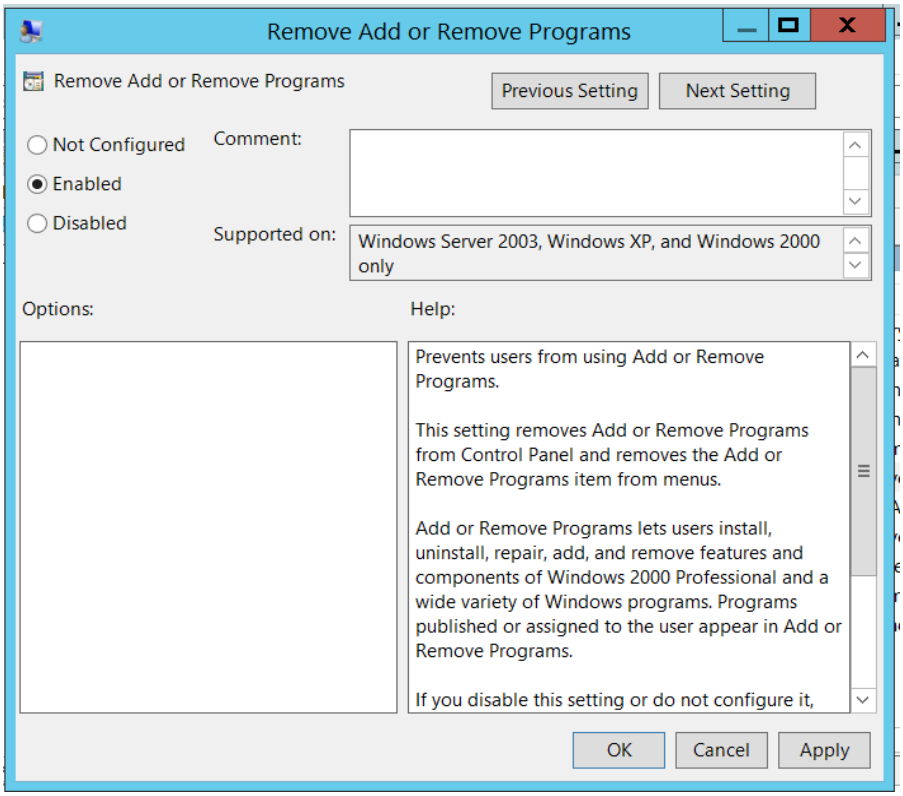
Mapping shared folders for students

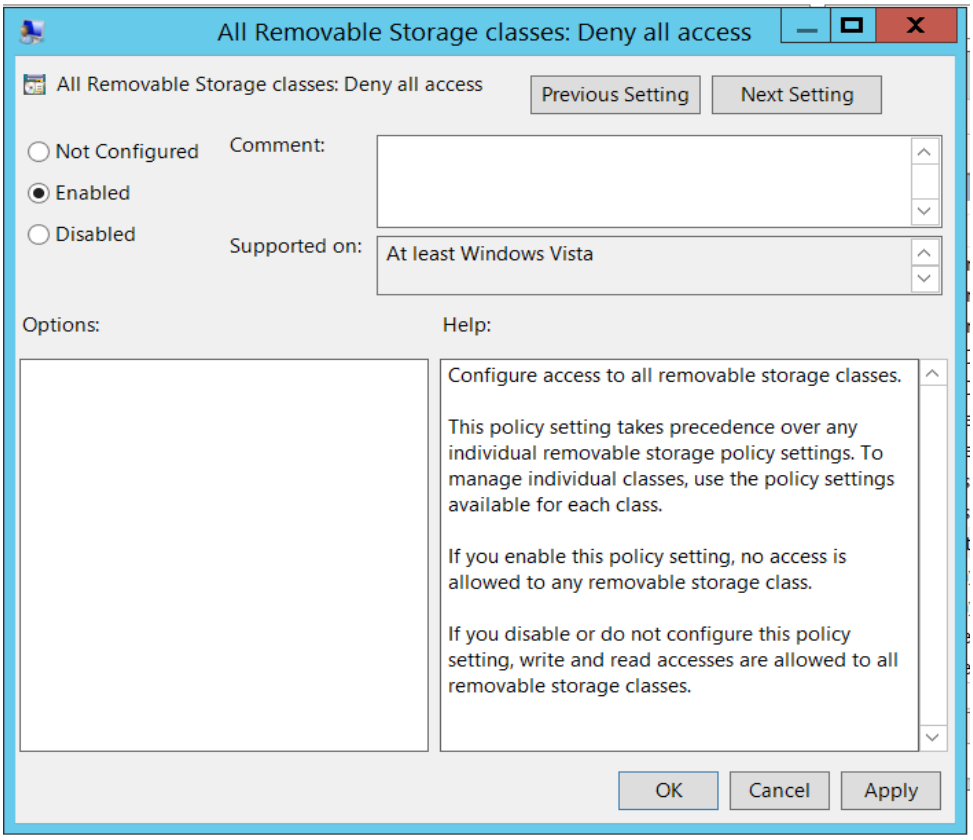


Group policy for students

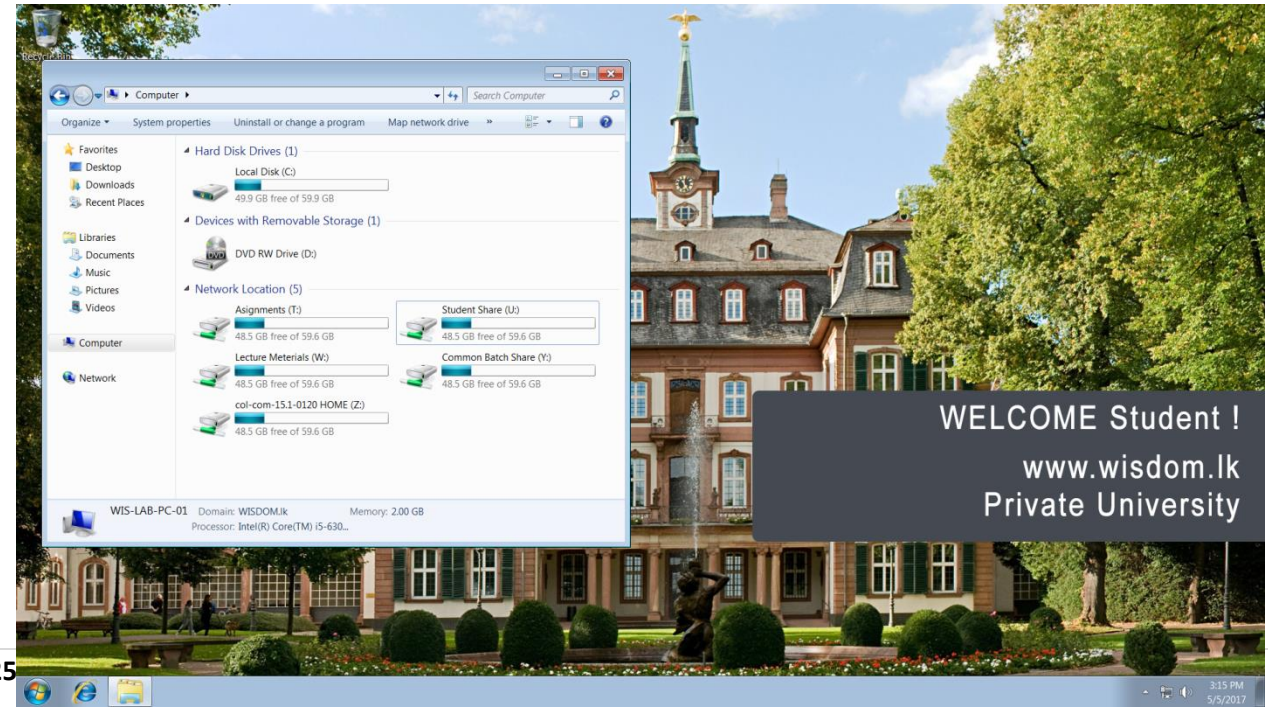



Turn off Autoplay
Turn off Autoplay
Previous Setting
Next Setting
Not Configured
Enabled
Disabled
Comment:
Supported on:
At least Windows 2000
Options:
Help:
Turn off Autoplay on:
All drives
This policy setting allows you to turn off the Autoplay feature.
Autoplay begins reading from a drive as soon as you insert media in the drive. As a result, the setup file of programs and the music on audio media start immediately.
Prior to Windows XP SP2, Autoplay is disabled by default on removable drives, such as the floppy disk drive (but not the CD-ROM drive), and on network drives.
Starting with Windows XP SP2, Autoplay is enabled for removable drives as well, including
OK
Cancel
Apply

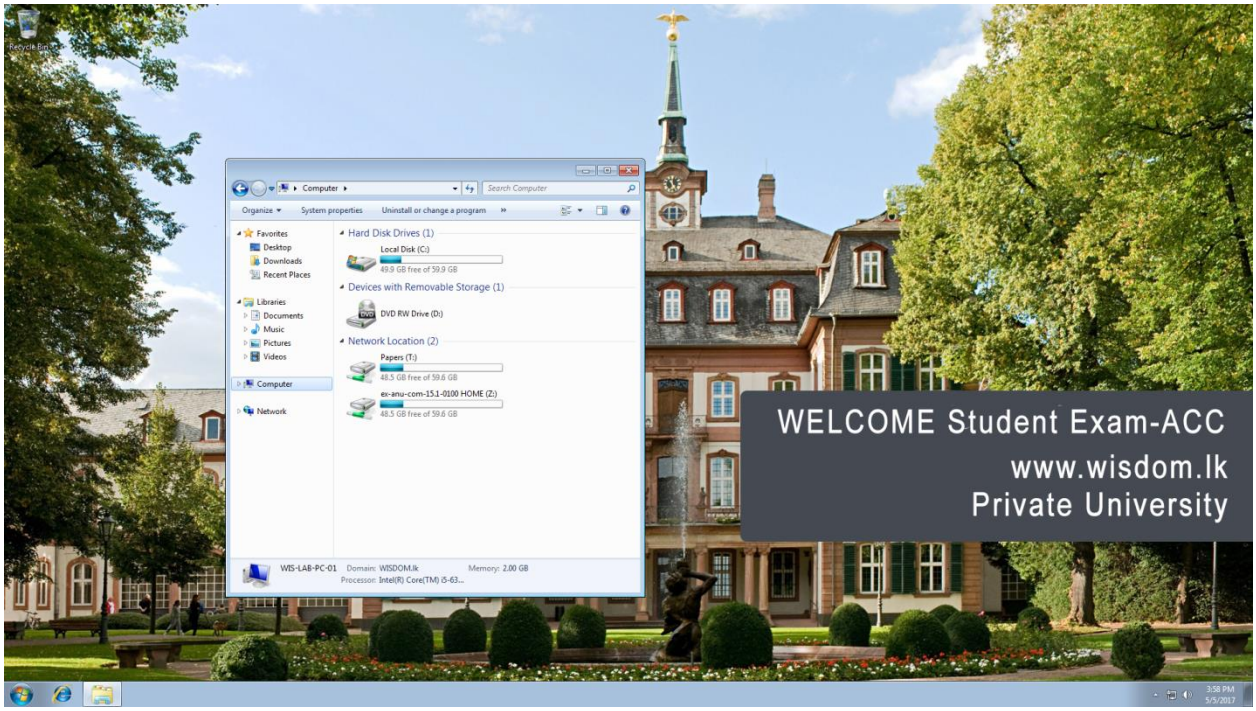

Remove Add or Remove Programs
Remove Add or Remove Programs
Previous Setting
Next Setting
Not Configured
Enabled
Disabled
Comment:
Supported on:
Windows Server 2003, Windows XP, and Windows 2000 only
Options:
Help:
Prevents users from using Add or Remove Programs.
This setting removes Add or Remove Programs from Control Panel and removes the Add or Remove Programs item from menus.
Add or Remove Programs lets users install, uninstall, repair, add, and remove features and components of Windows 2000 Professional and a wide variety of Windows programs. Programs published or assigned to the user appear in Add or Remove Programs.
If you disable this setting or do not configure it,
OK
Cancel
Apply



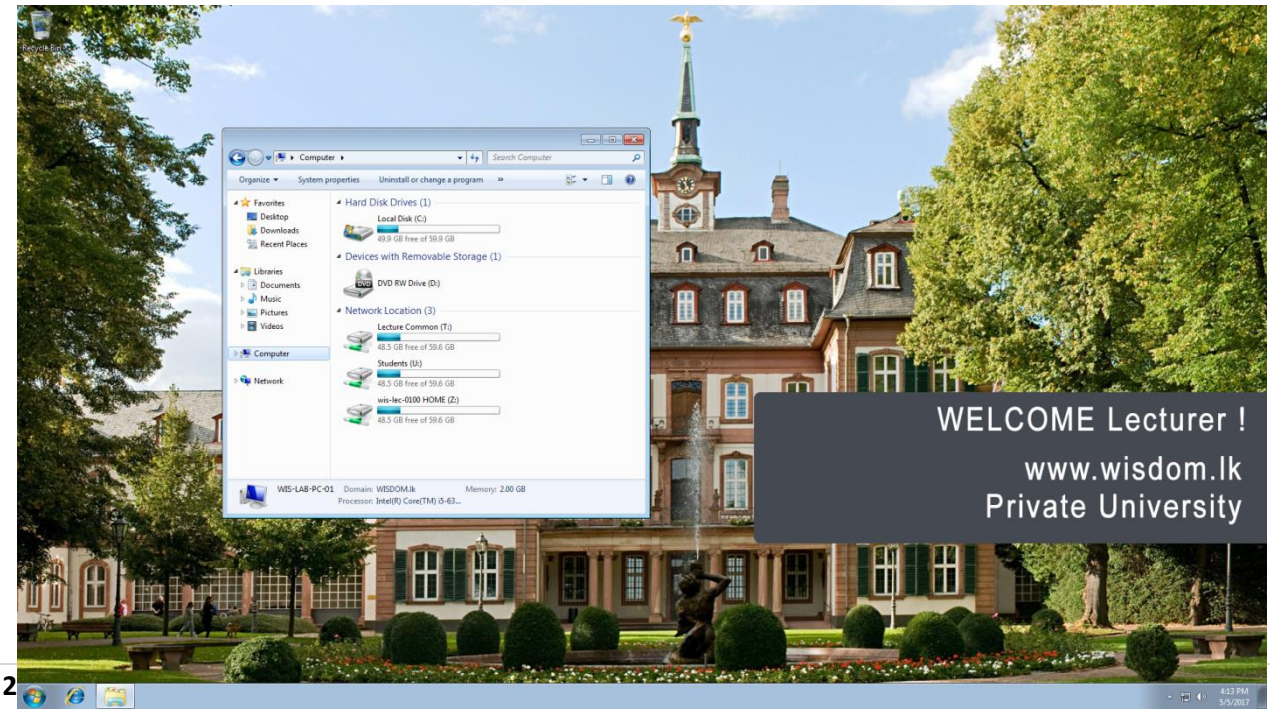
4.8). Students' PC Desktop



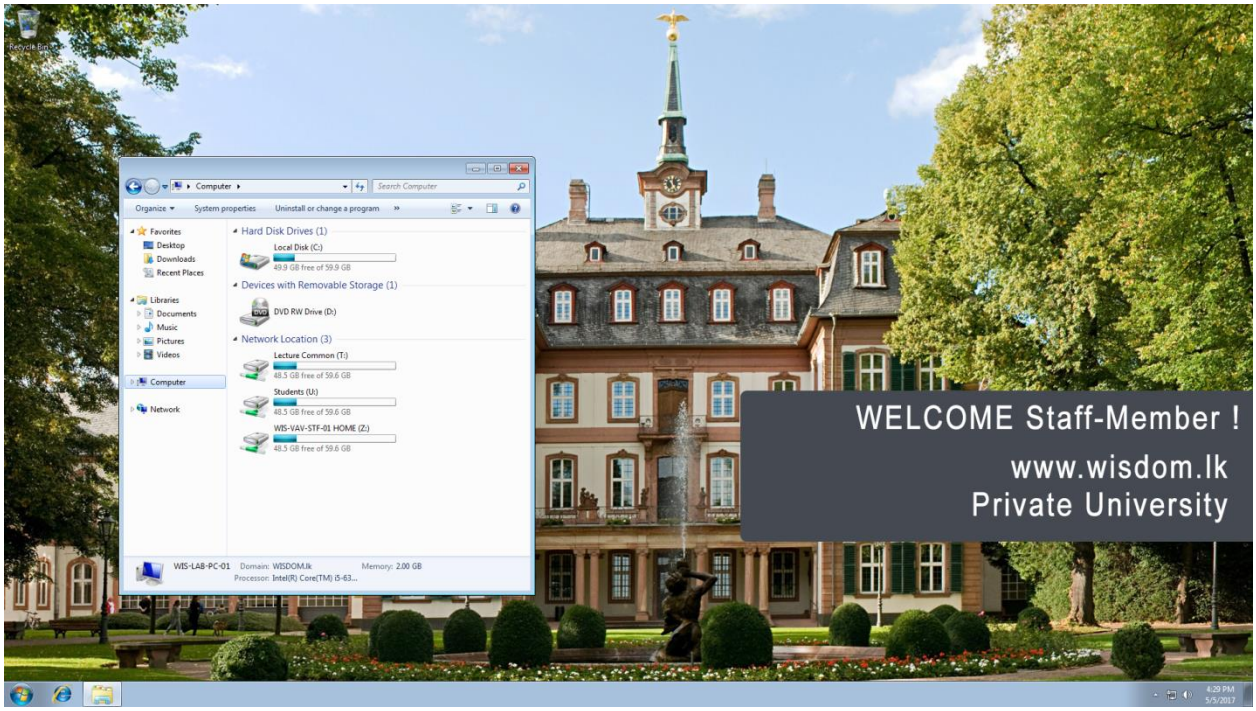
4.9). Student Exam Account PC Desktop



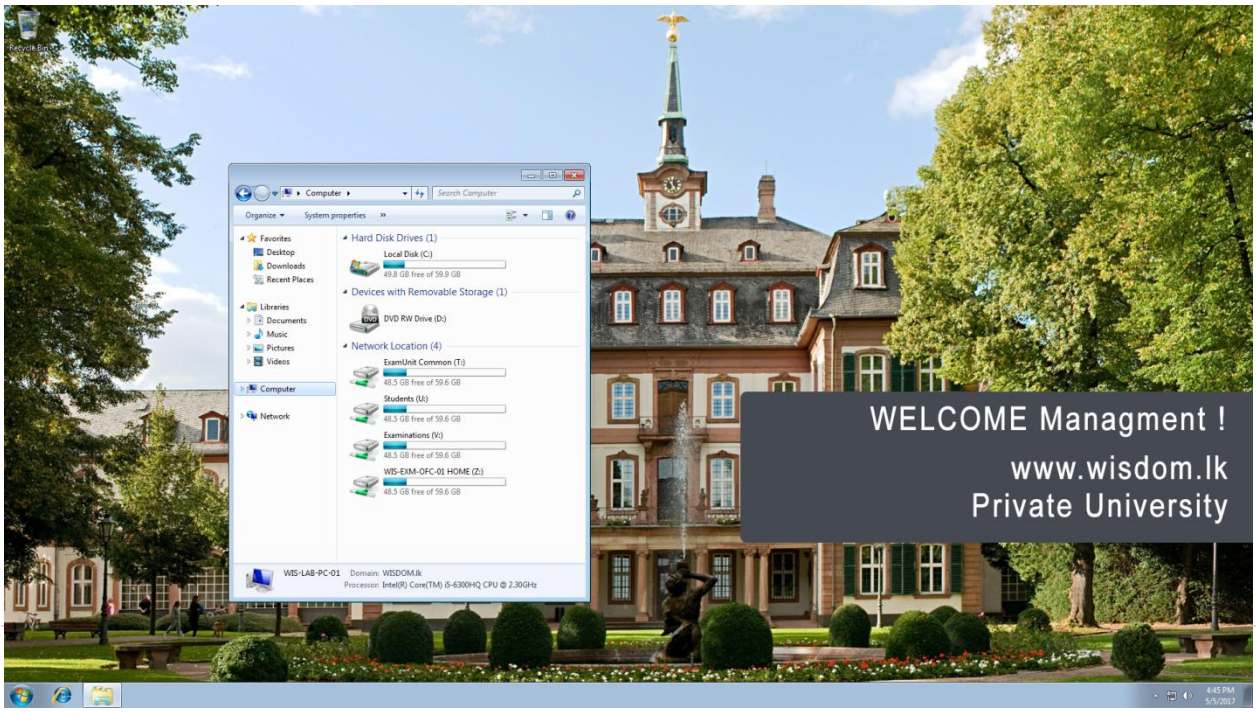
4.10). Lecturer's Desktop



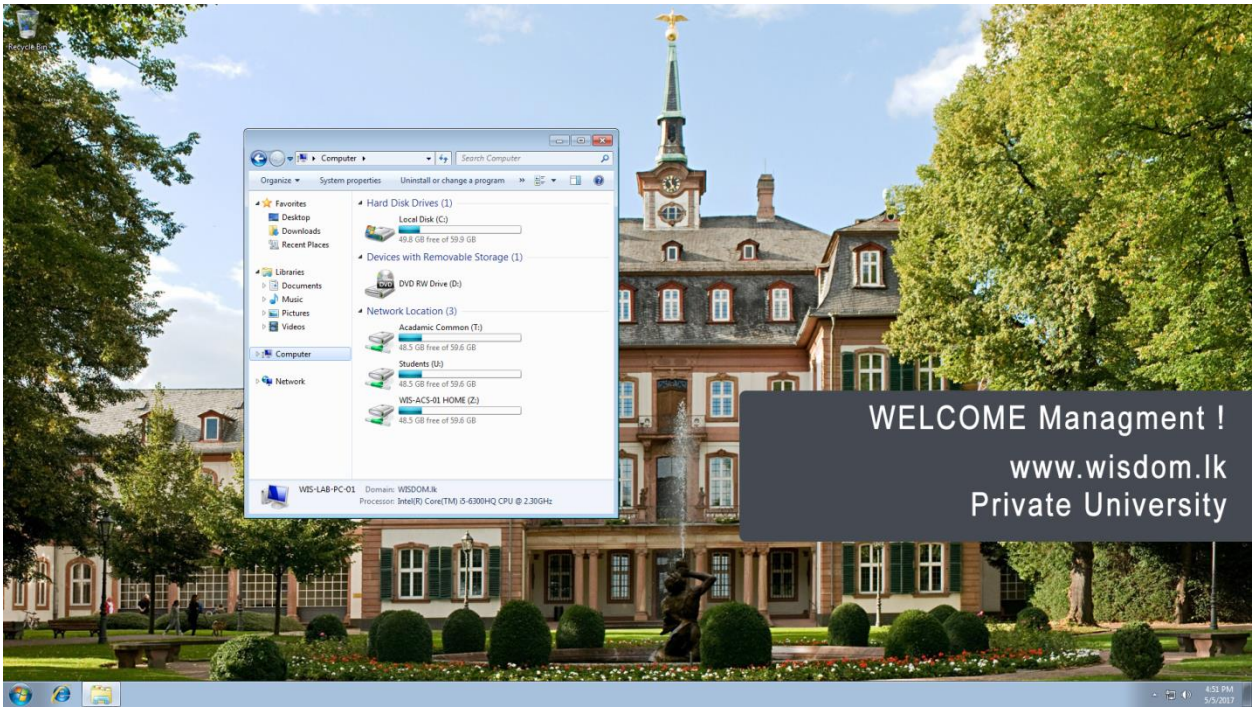
4.11). Staff Member's Desktop



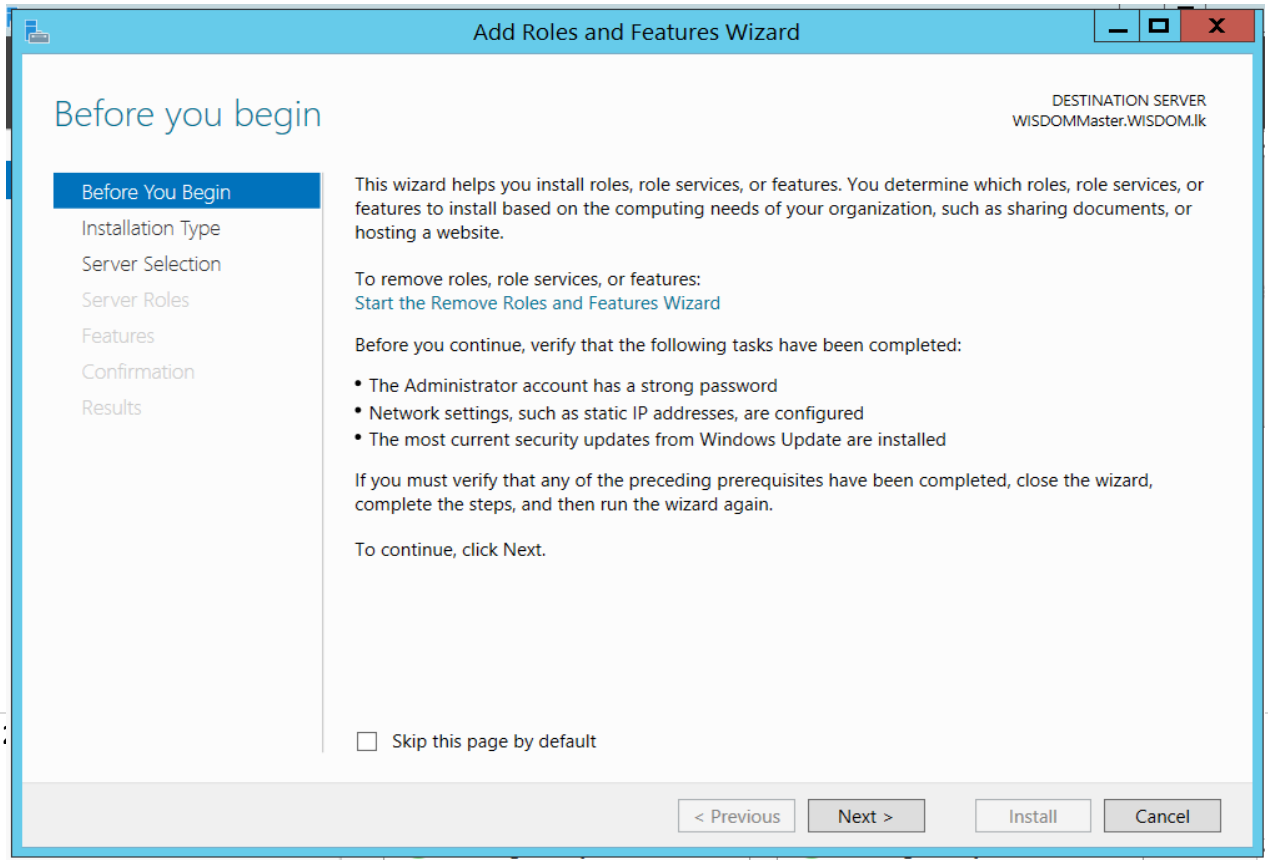
4.12). Management/Exam officer's Desktop

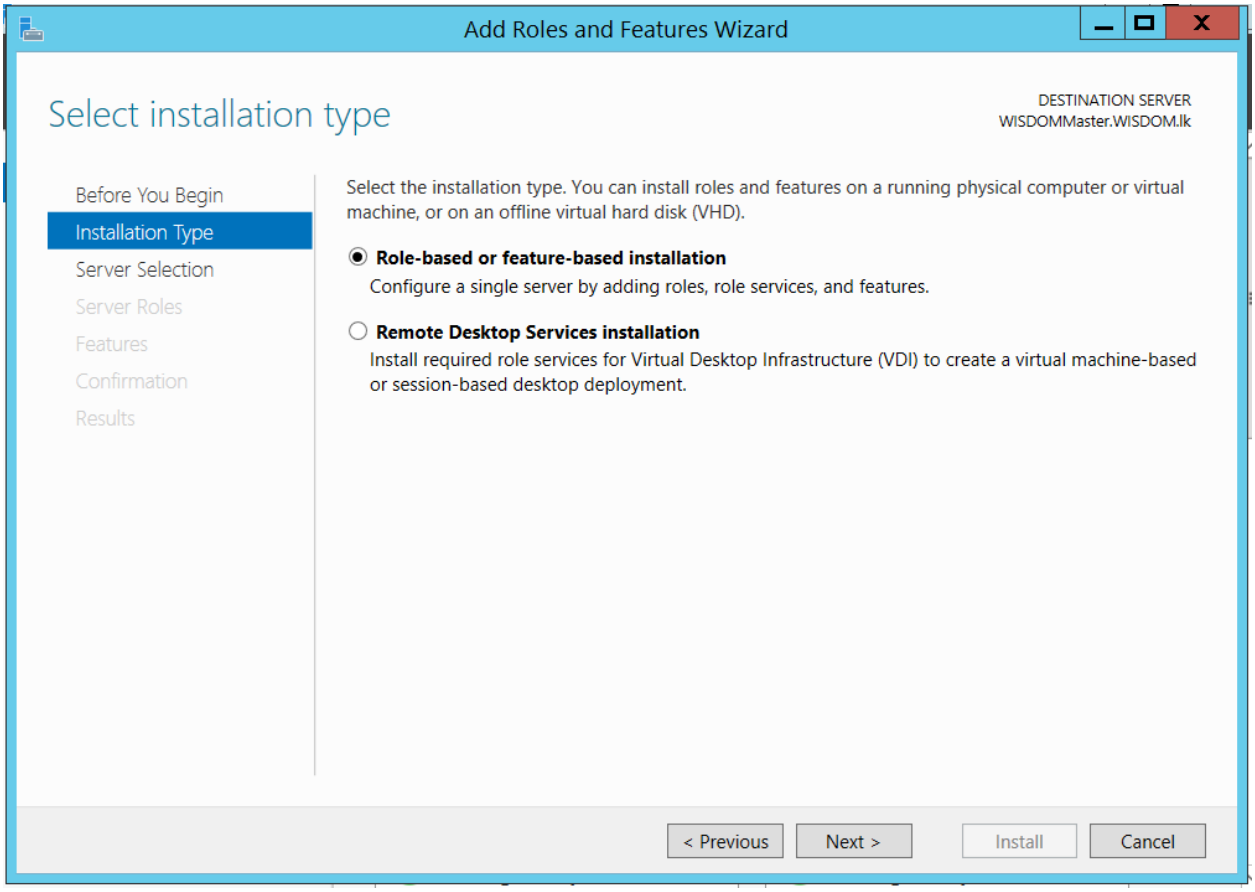


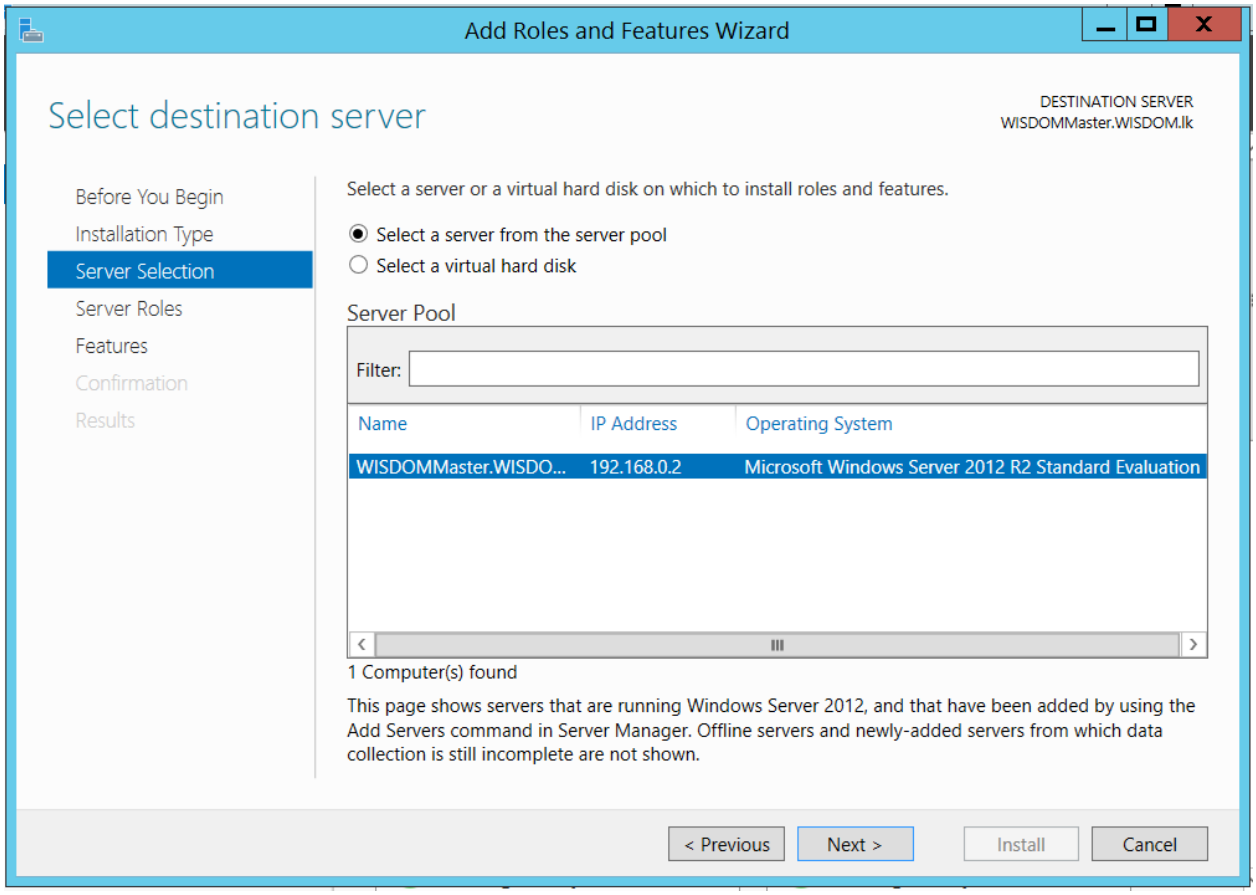
4.13). Academic Board Desktop

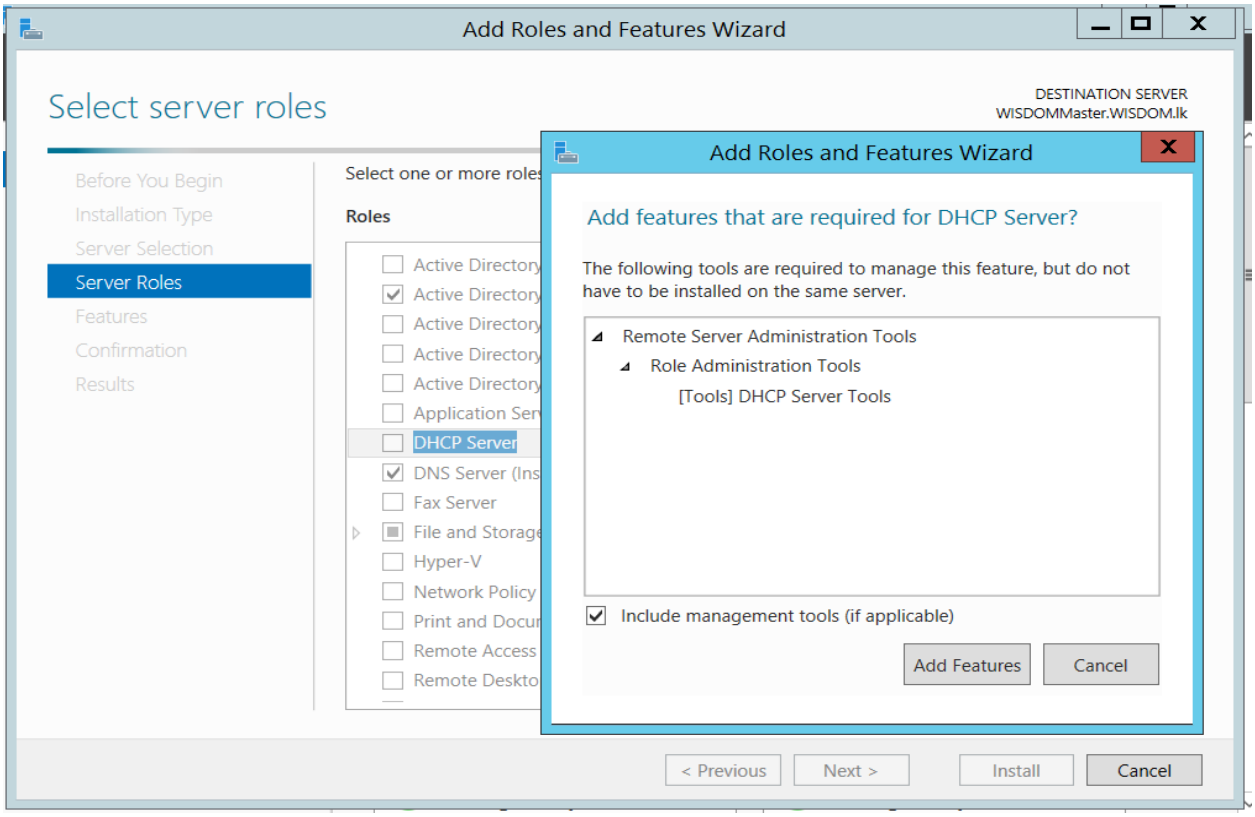


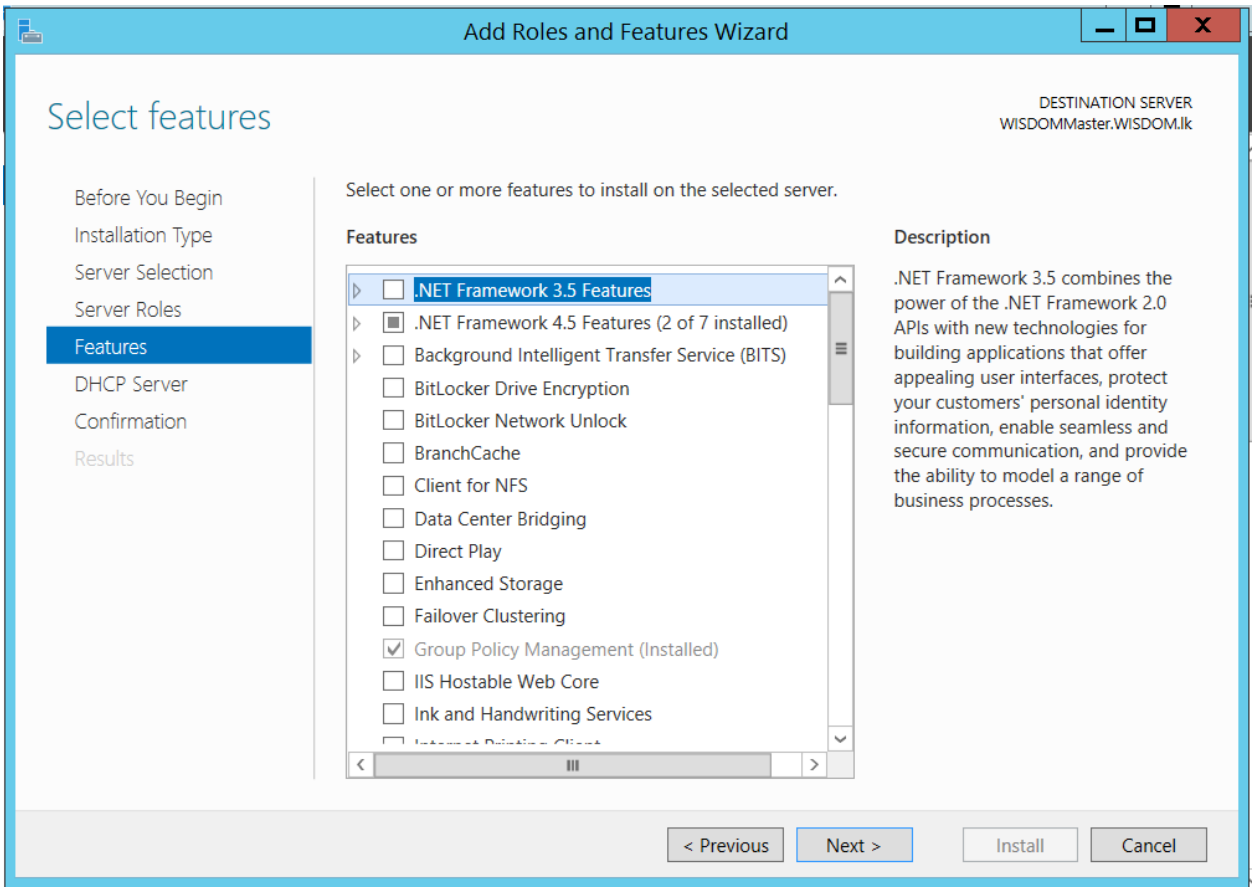
4.14). DHCP Sever Installing

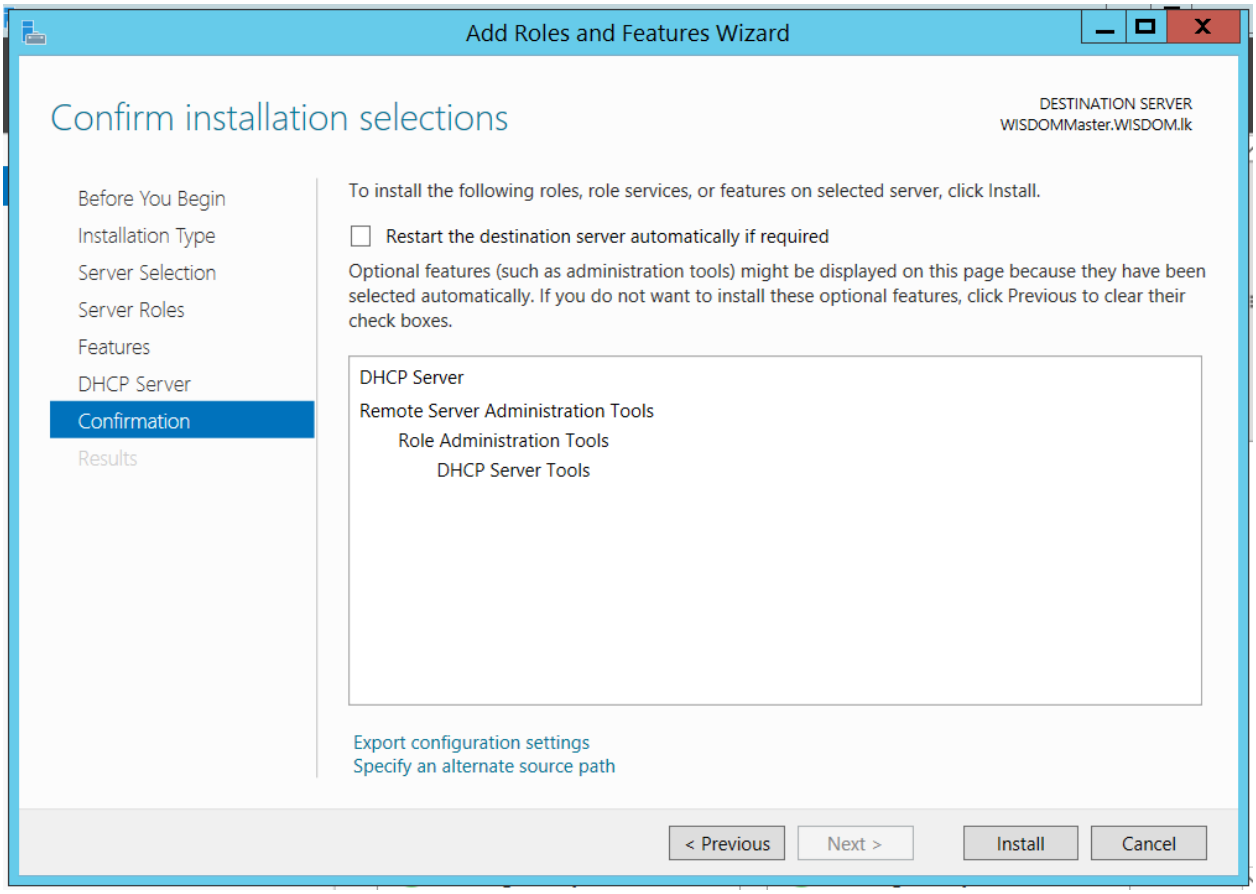


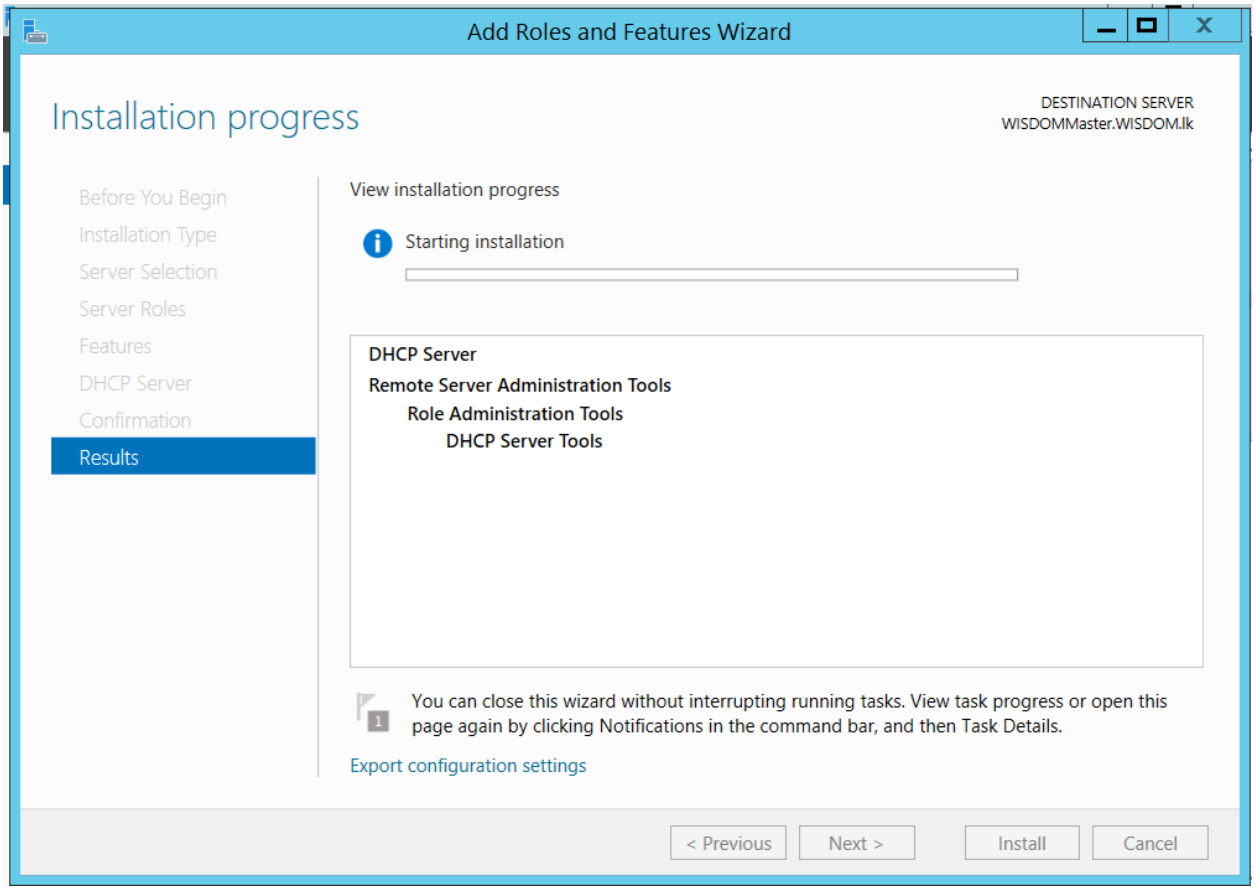

Add Roles and Features Wizard
Select installation type
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).
Role-based or feature-based installation
Configure a single server by adding roles, role services, and features.
Remote Desktop Services installation
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.
< Previous
Next >
Install
Cancel

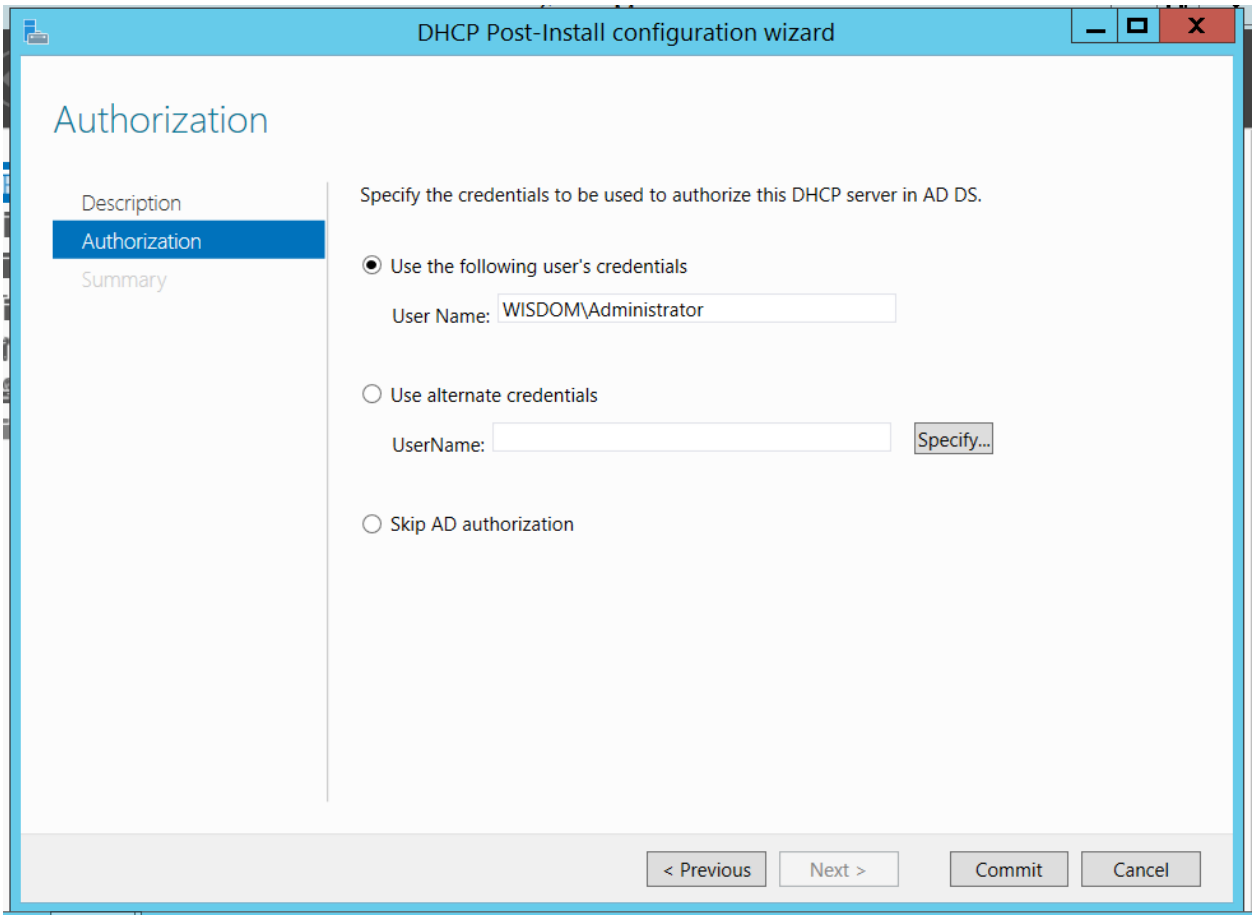

Add Roles and Features Wizard
Select destination server
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select a server or a virtual hard disk on which to install roles and features.
Select a server from the server pool
Select a virtual hard disk
Server Pool
Filter:
Name
IP Address
Operating System
WISDOMMaster.WISDO...
192.168.0.2
Microsoft Windows Server 2012 R2 Standard Evaluation
1 Computer(s) found
This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.
< Previous
Next >
Install
Cancel

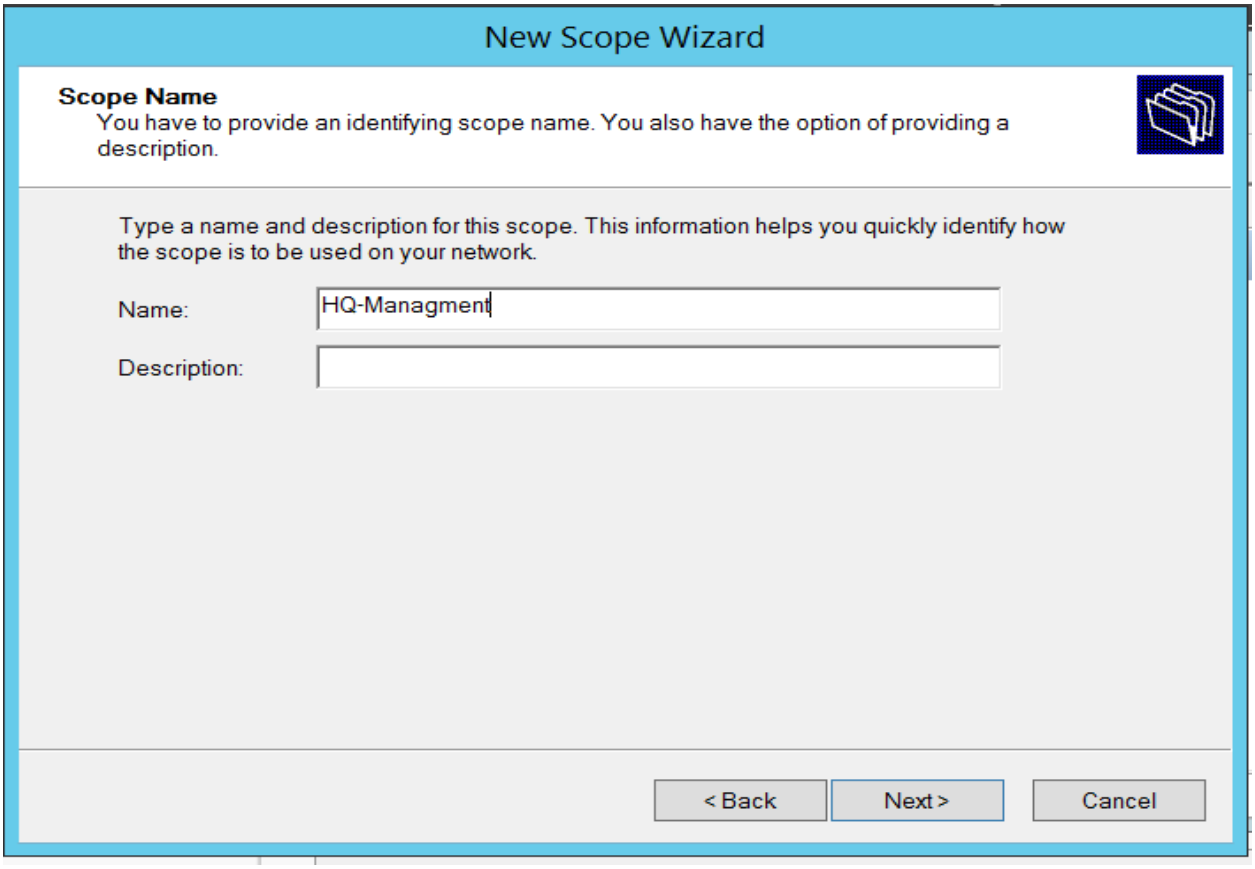

Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles
Roles
Active Directory
Active Directory
Active Directory
Active Directory
Active Directory
Application Ser
DHCP Server
DNS Server (Ins
Fax Server
File and Storage
Hyper-V
Network Policy
Print and Docu
Remote Access
Remote Deskto
Add Roles and Features Wizard
Add features that are required for DHCP Server?
The following tools are required to manage this feature, but do not have to be installed on the same server.
Remote Server Administration Tools
Role Administration Tools
[Tools] DHCP Server Tools
Include management tools (if applicable)
Add Features
Cancel
< Previous
Next >
Install
Cancel

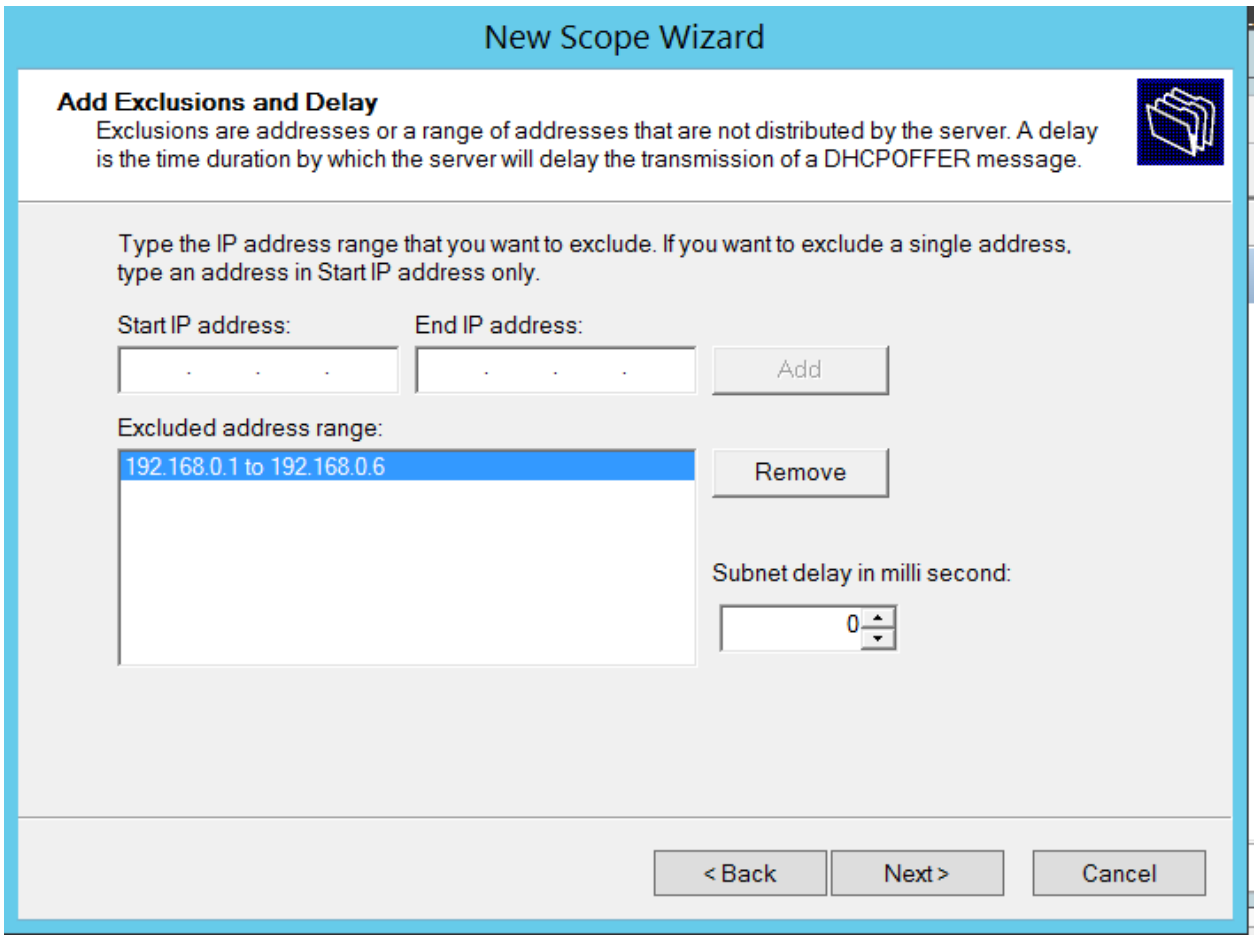

Add Roles and Features Wizard
Select features
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
DHCP Server
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features
.NET Framework 4.5 Features (2 of 7 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management (Installed)
IIS Hostable Web Core
Ink and Handwriting Services
Description
.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.
< Previous
Next >
Install
Cancel

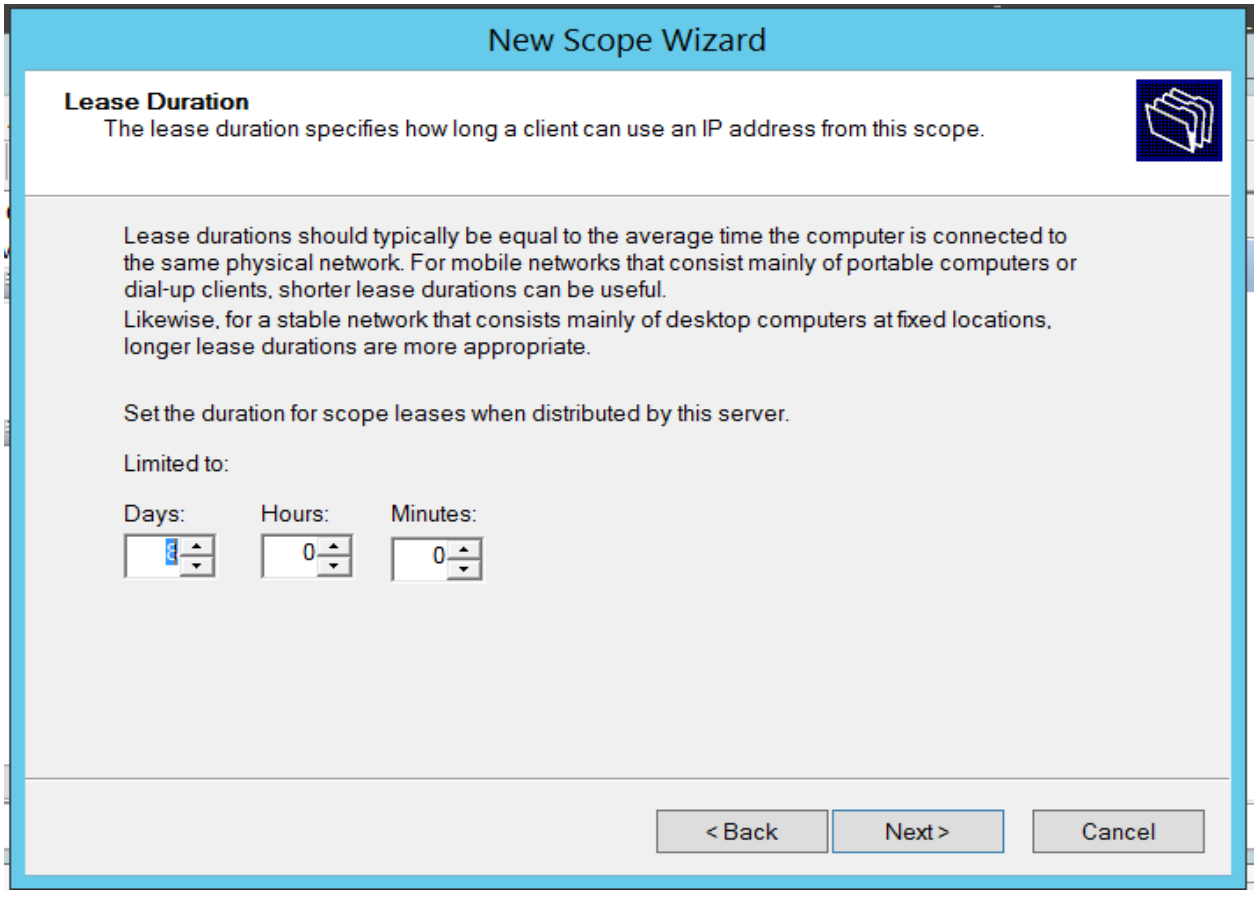

Add Roles and Features Wizard
Confirm installation selections
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
DHCP Server
Confirmation
Results
To install the following roles, role services, or features on selected server, click Install.
Restart the destination server automatically if required
Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.
DHCP Server
Remote Server Administration Tools
Role Administration Tools
DHCP Server Tools
Export configuration settings
Specify an alternate source path
< Previous
Next >
Install
Cancel

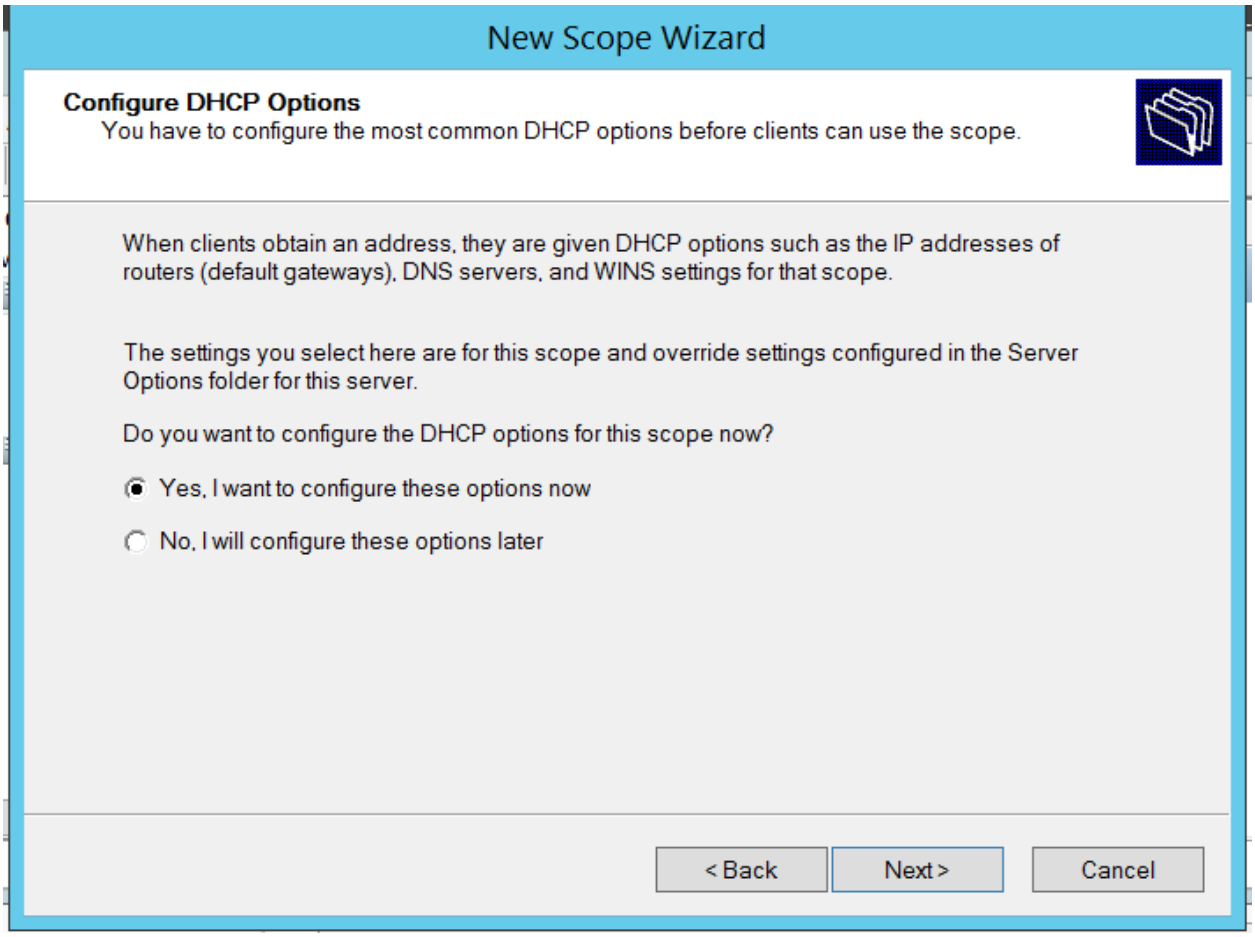

Add Roles and Features Wizard
Installation progress
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
DHCP Server
Confirmation
Results
View installation progress
Starting installation
DHCP Server
Remote Server Administration Tools
Role Administration Tools
DHCP Server Tools
You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.
Export configuration settings
< Previous
Next >
Install
Cancel

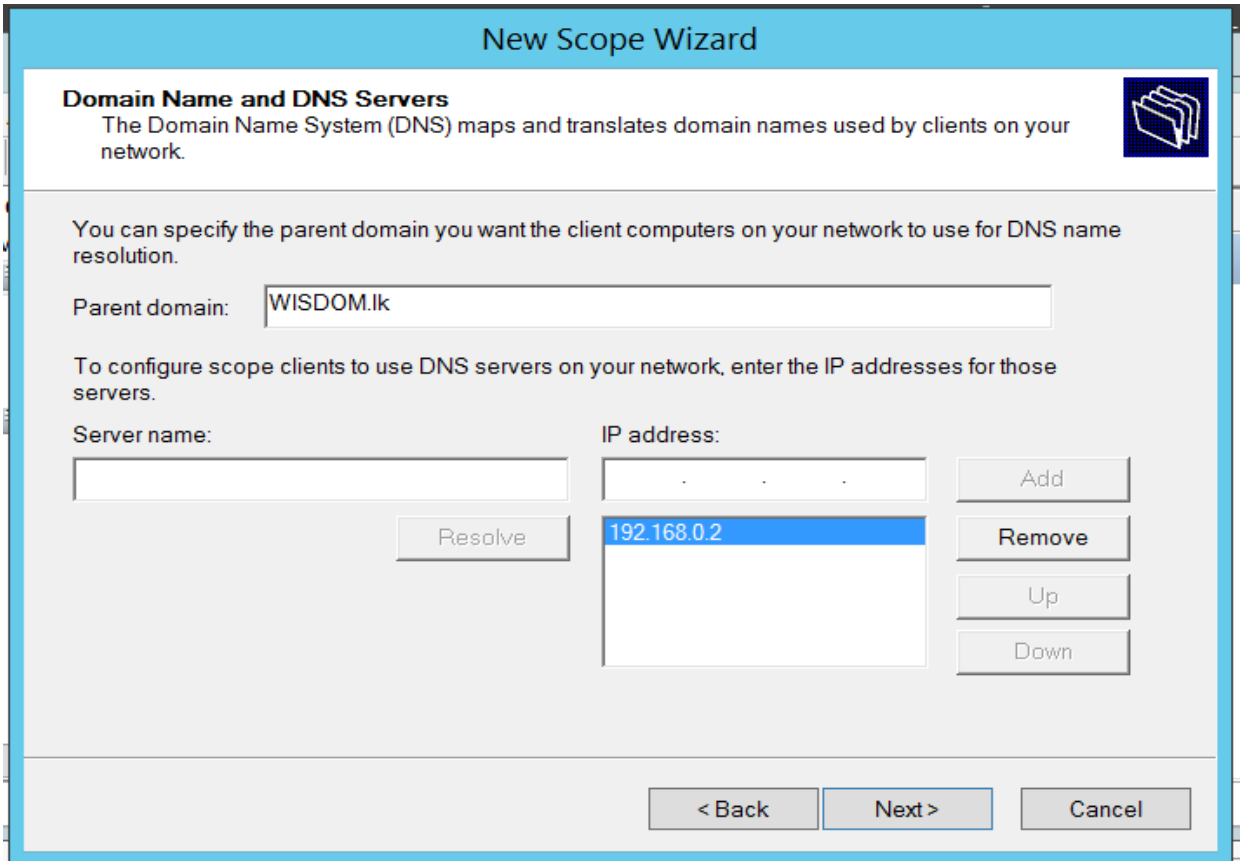

DHCP Post-Install configuration wizard
Authorization
Description
Authorization
Summary
Specify the credentials to be used to authorize this DHCP server in AD DS.
Use the following user's credentials
User Name: WISDOM\Administrator
Use alternate credentials
UserName:
Specify...
Skip AD authorization
< Previous
Next >
Commit
Cancel

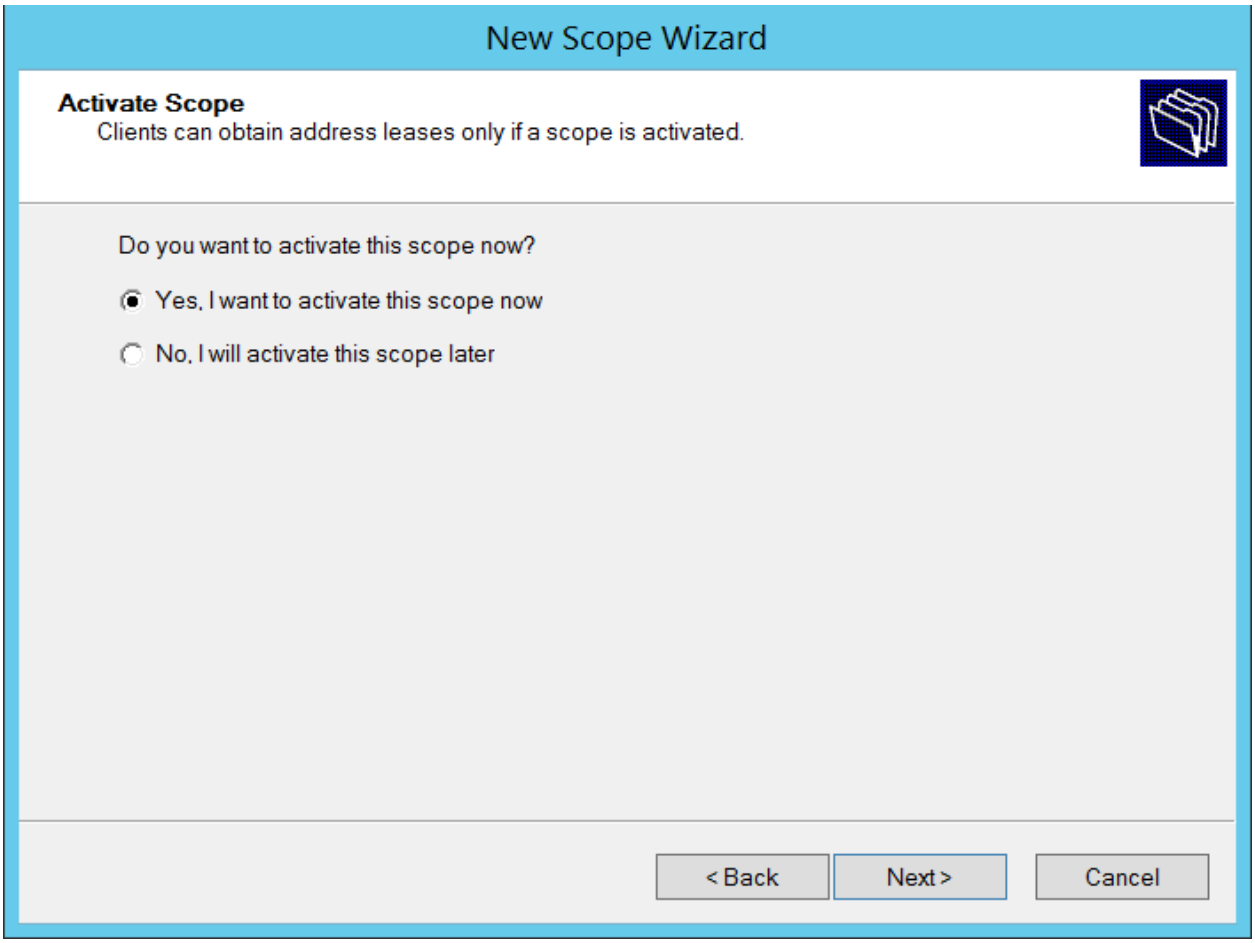

New Scope Wizard
Scope Name
You have to provide an identifying scope name. You also have the option of providing a description.
Type a name and description for this scope. This information helps you quickly identify how the scope is to be used on your network.
Name:
HQ-Managment
Description:
< Back
Next >
Cancel

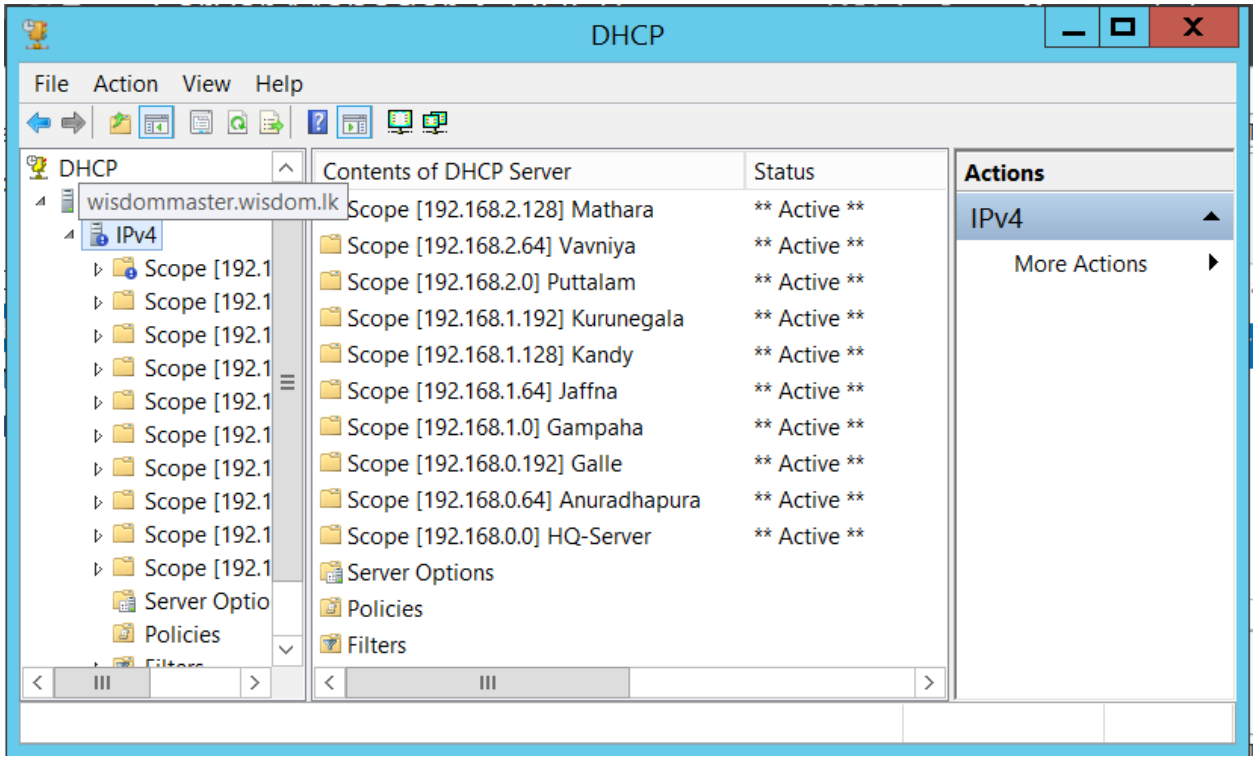

New Scope Wizard
Add Exclusions and Delay
Exclusions are addresses or a range of addresses that are not distributed by the server. A delay is the time duration by which the server will delay the transmission of a DHCPOFFER message.
Type the IP address range that you want to exclude. If you want to exclude a single address, type an address in Start IP address only.
Start IP address:
End IP address:
Add
Excluded address range:
192.168.0.1 to 192.168.0.6
Remove
Subnet delay in milli second:
0
< Back
Next >
Cancel


New Scope Wizard
Lease Duration
The lease duration specifies how long a client can use an IP address from this scope.
Lease durations should typically be equal to the average time the computer is connected to the same physical network. For mobile networks that consist mainly of portable computers or dial-up clients, shorter lease durations can be useful.
Likewise, for a stable network that consists mainly of desktop computers at fixed locations, longer lease durations are more appropriate.
Set the duration for scope leases when distributed by this server.
Limited to:
Days:
Hours:
Minutes:
0
0
< Back
Next >
Cancel

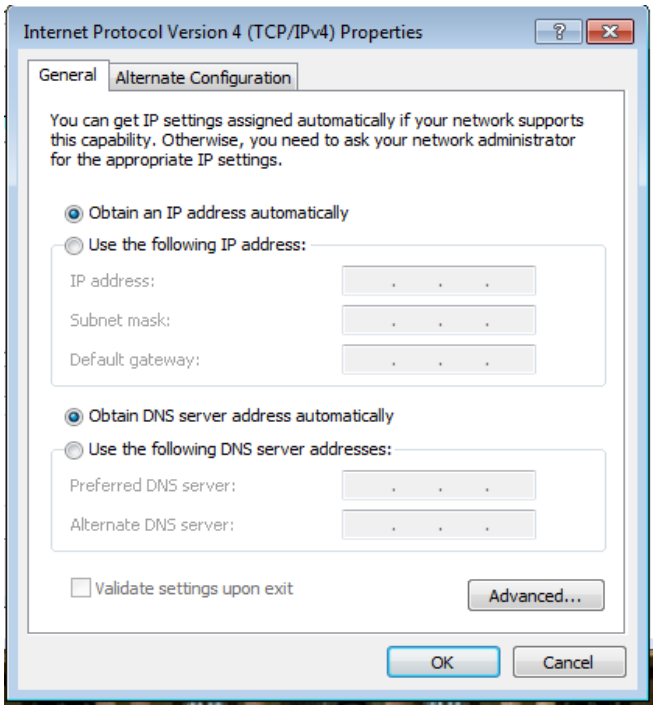

New Scope Wizard
Configure DHCP Options
You have to configure the most common DHCP options before clients can use the scope.
When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.
The settings you select here are for this scope and override settings configured in the Server Options folder for this server.
Do you want to configure the DHCP options for this scope now?
Yes, I want to configure these options now
No, I will configure these options later
< Back
Next >
Cancel

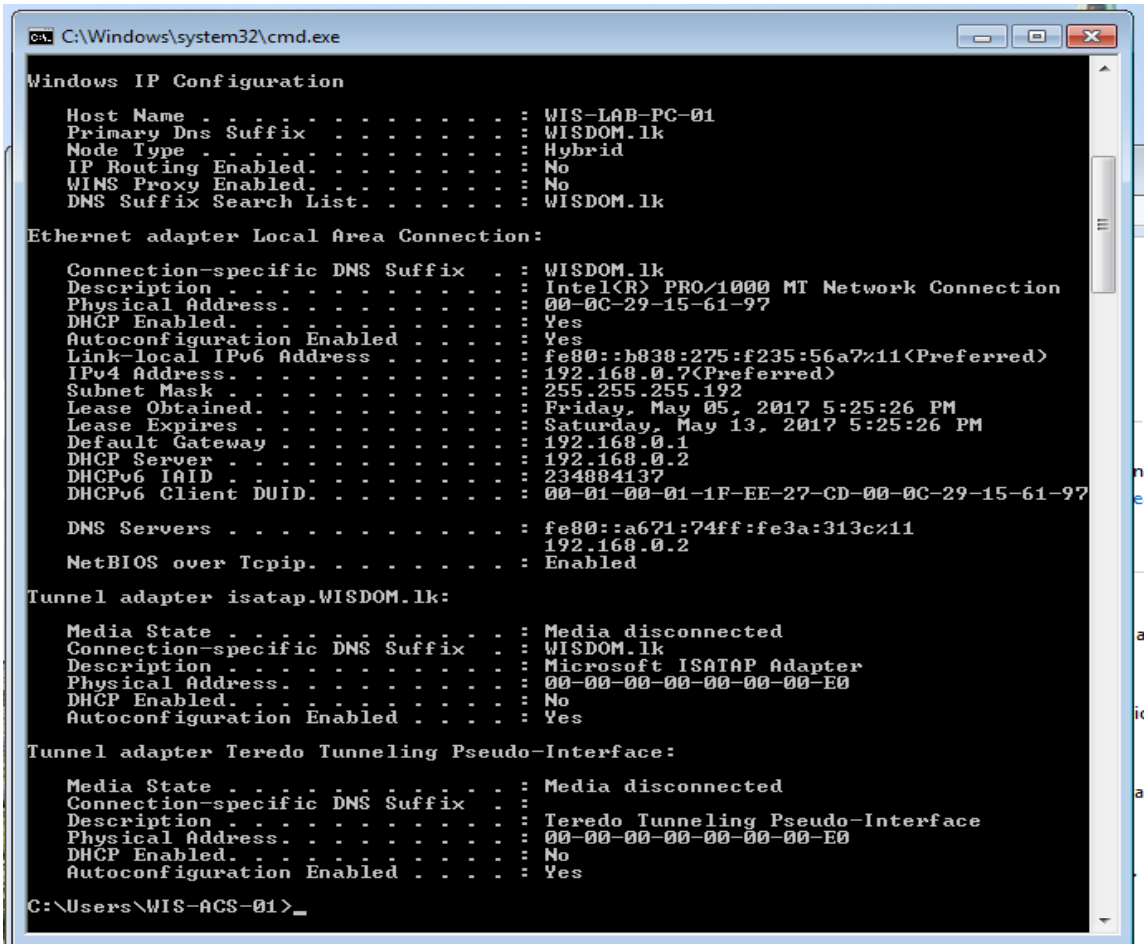

New Scope Wizard
Domain Name and DNS Servers
The Domain Name System (DNS) maps and translates domain names used by clients on your network.
You can specify the parent domain you want the client computers on your network to use for DNS name resolution.
Parent domain:
WISDOM.lk
To configure scope clients to use DNS servers on your network, enter the IP addresses for those servers.
Server name:
IP address:
Add
Resolve
192.168.0.2
Remove
Up
Down
< Back
Next >
Cancel


New Scope Wizard
Activate Scope
Clients can obtain address leases only if a scope is activated.
Do you want to activate this scope now?
Yes, I want to activate this scope now
No, I will activate this scope later
< Back
Next >
Cancel

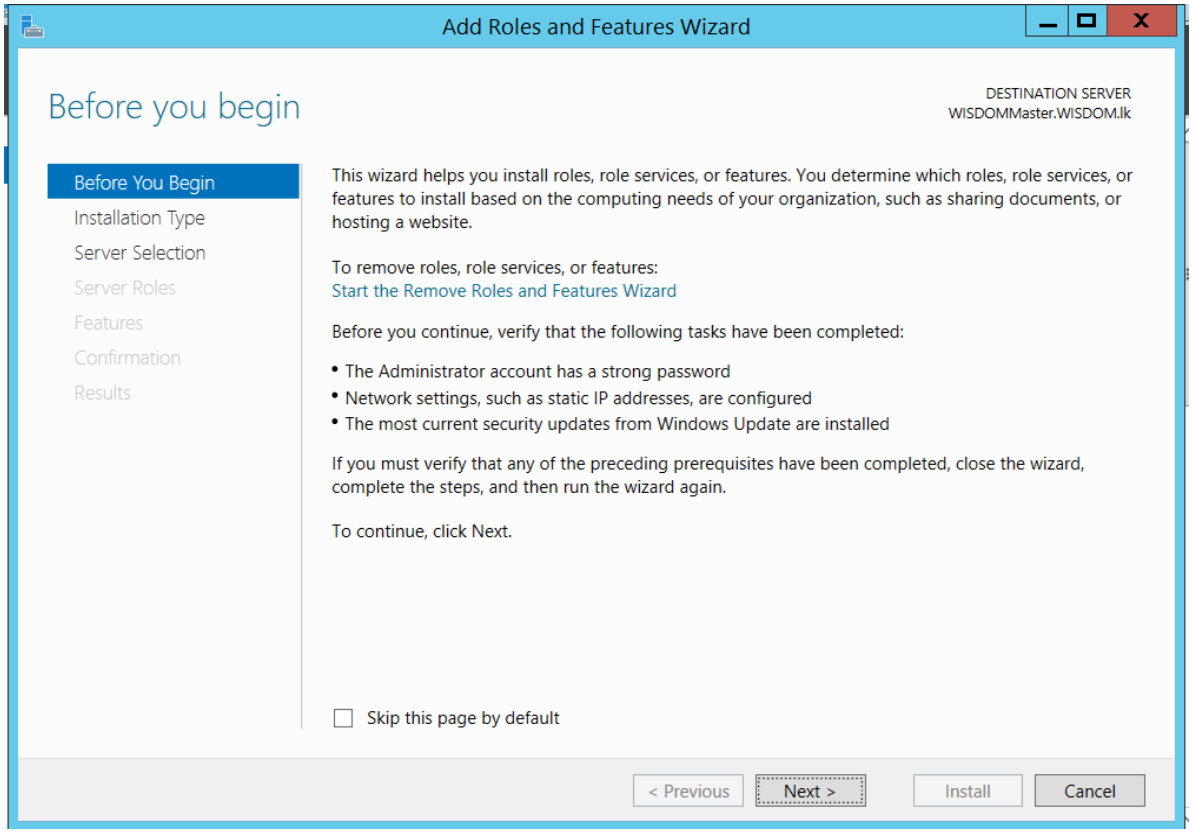

DHCP
File Action View Help
DHCP
wisdommaster.wisdom.lk
IPv4
Scope [192.1
Server Optio
Policies
Contents of DHCP Server
Status
Scope [192.168.2.128] Mathara ** Active **
Scope [192.168.2.64] Vavniya ** Active **
Scope [192.168.2.0] Puttalam ** Active **
Scope [192.168.1.192] Kurunegala ** Active **
Scope [192.168.1.128] Kandy ** Active **
Scope [192.168.1.64] Jaffna ** Active **
Scope [192.168.1.0] Gampaha ** Active **
Scope [192.168.0.192] Galle ** Active **
Scope [192.168.0.64] Anuradhapura ** Active **
Scope [192.168.0.0] HQ-Server ** Active **
Server Options
Policies
Filters
Actions
IPv4
More Actions

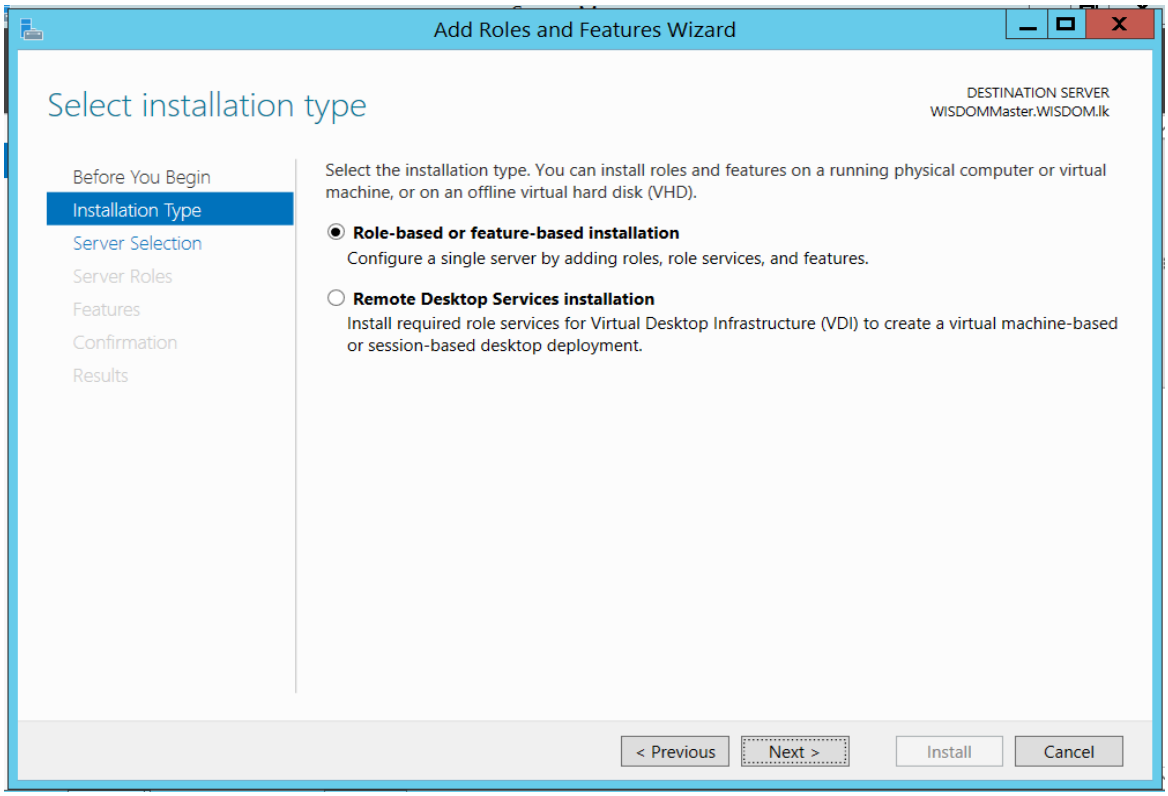
After configuring DHCP client pc can obtain IP address and DNS server automatically

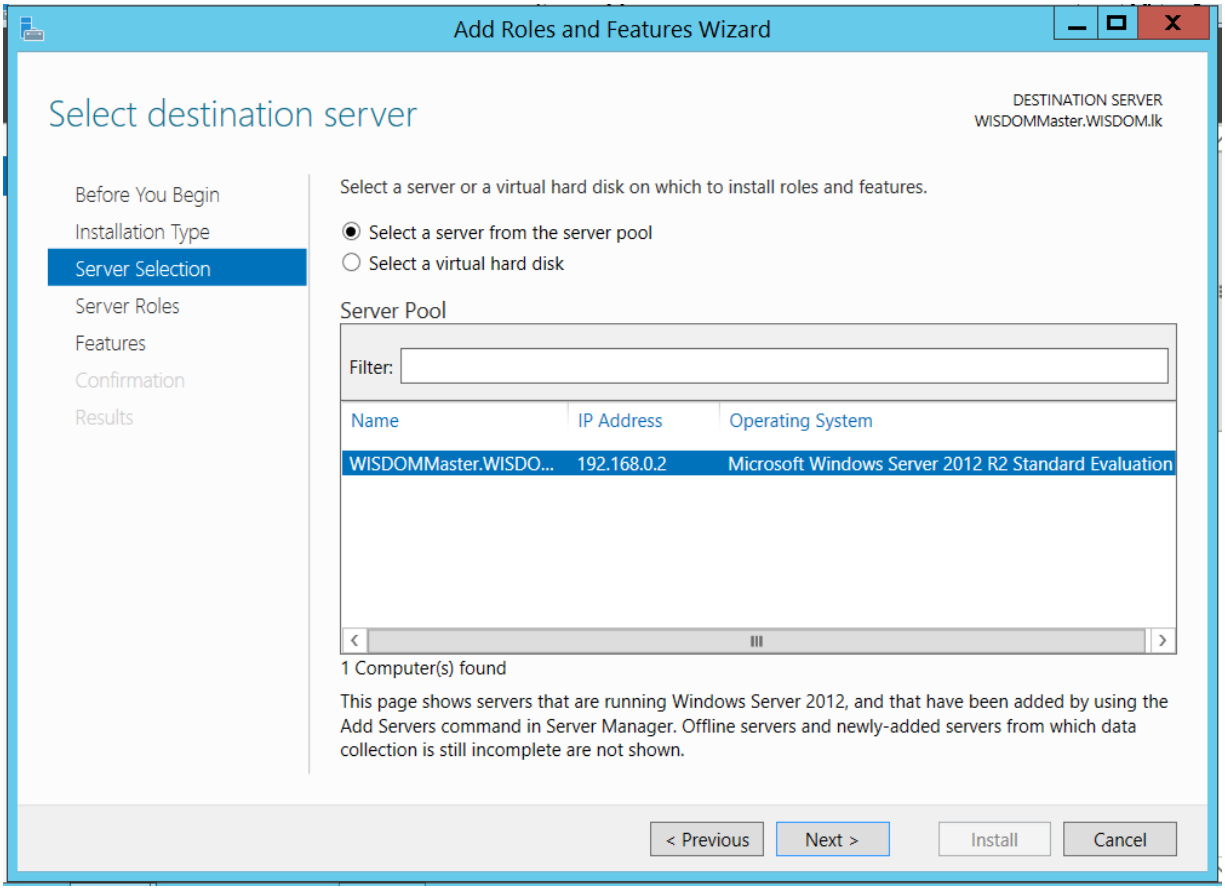


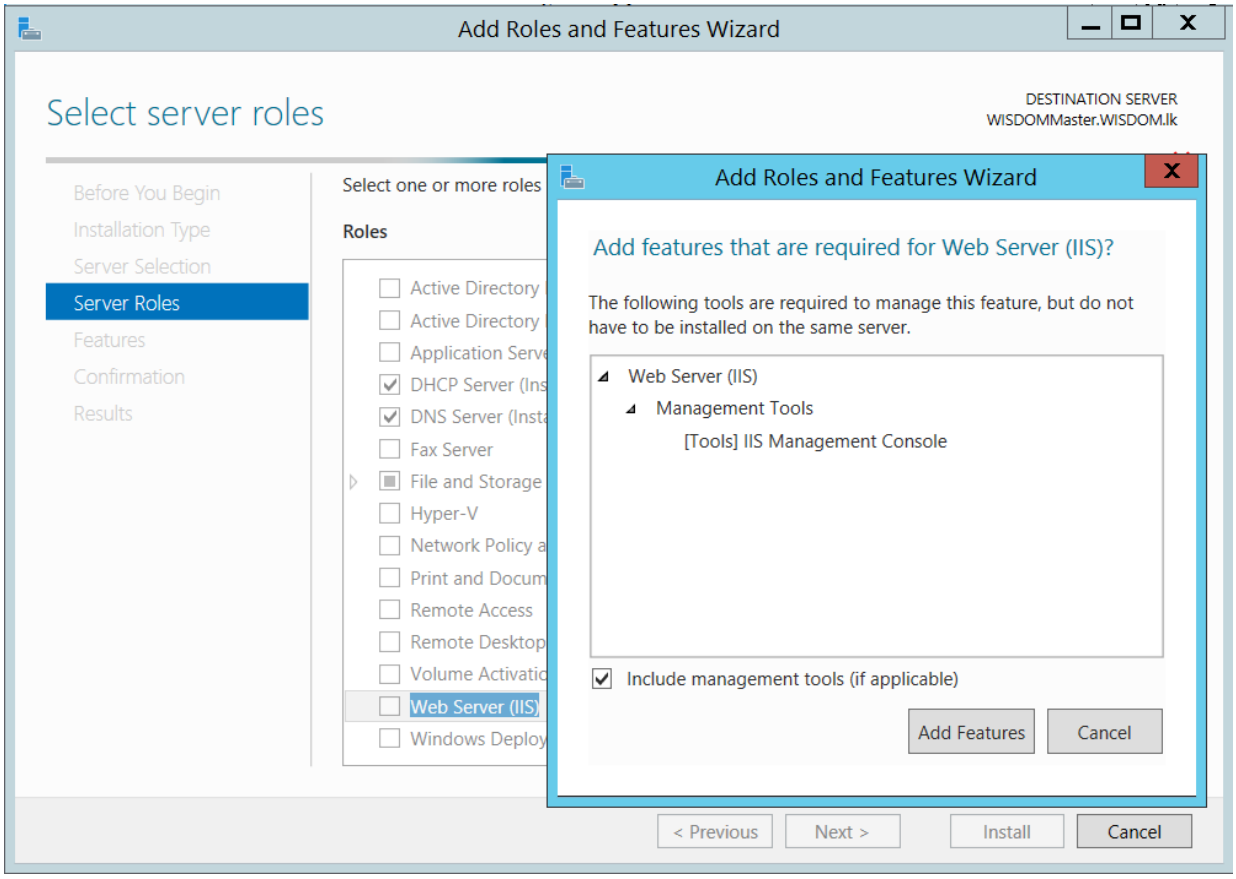


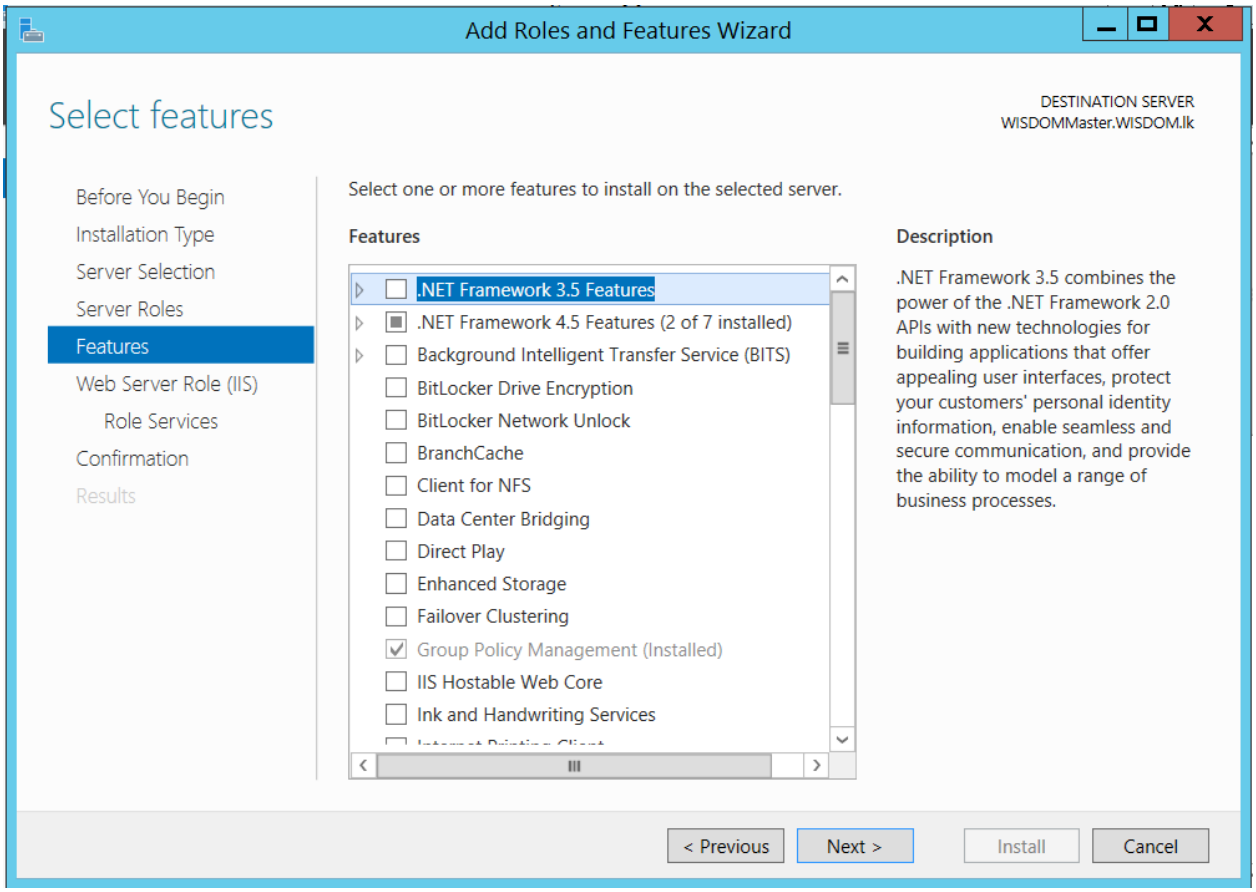
4.15). Web Server Configuration

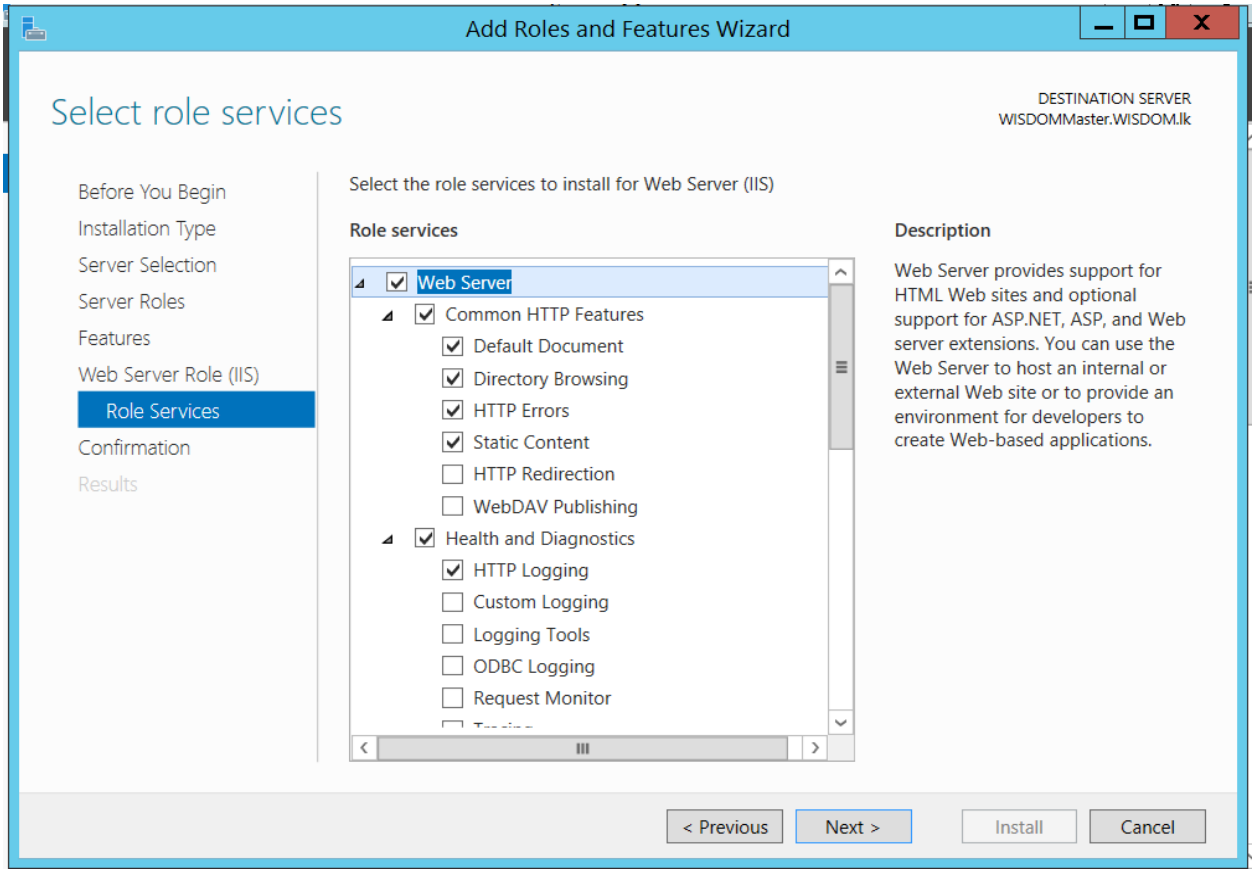


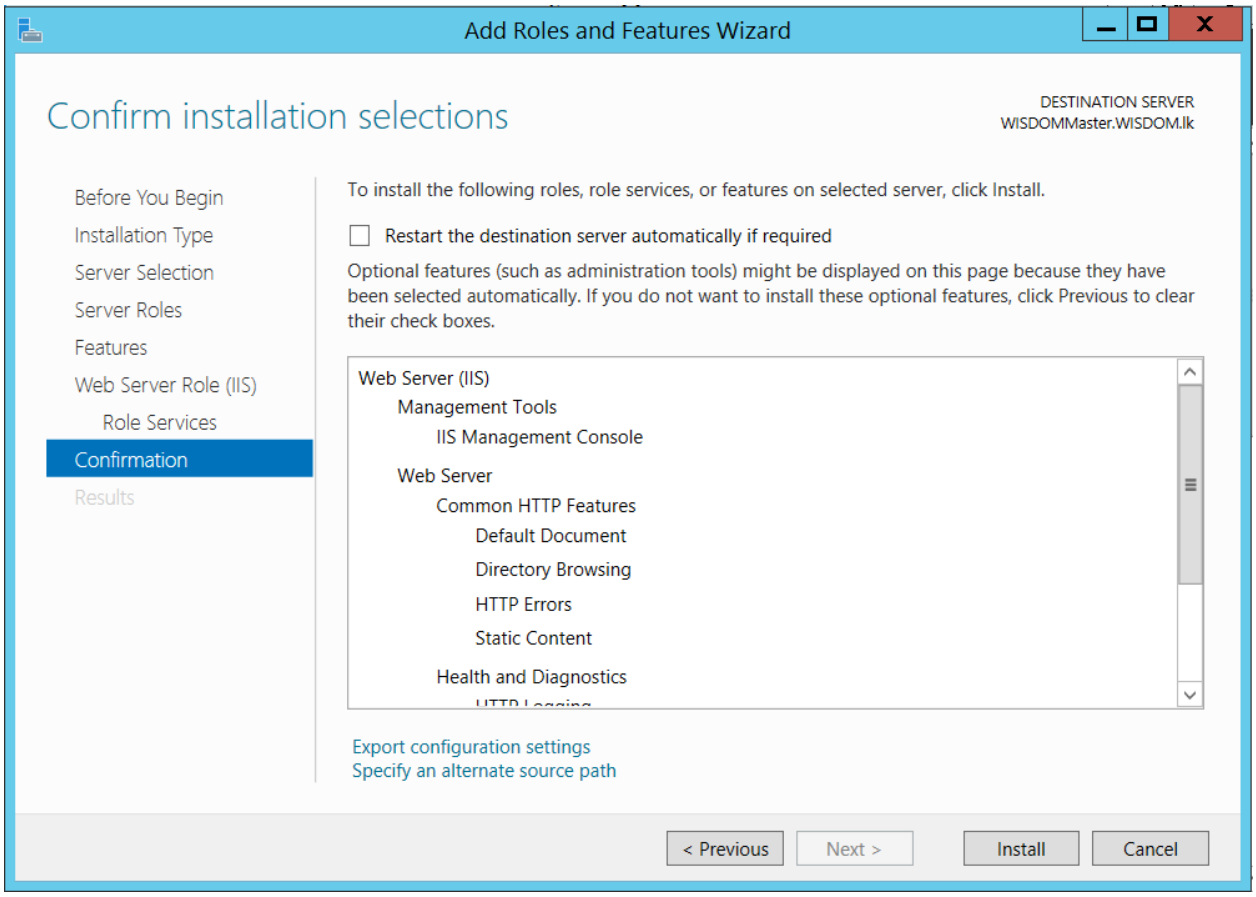


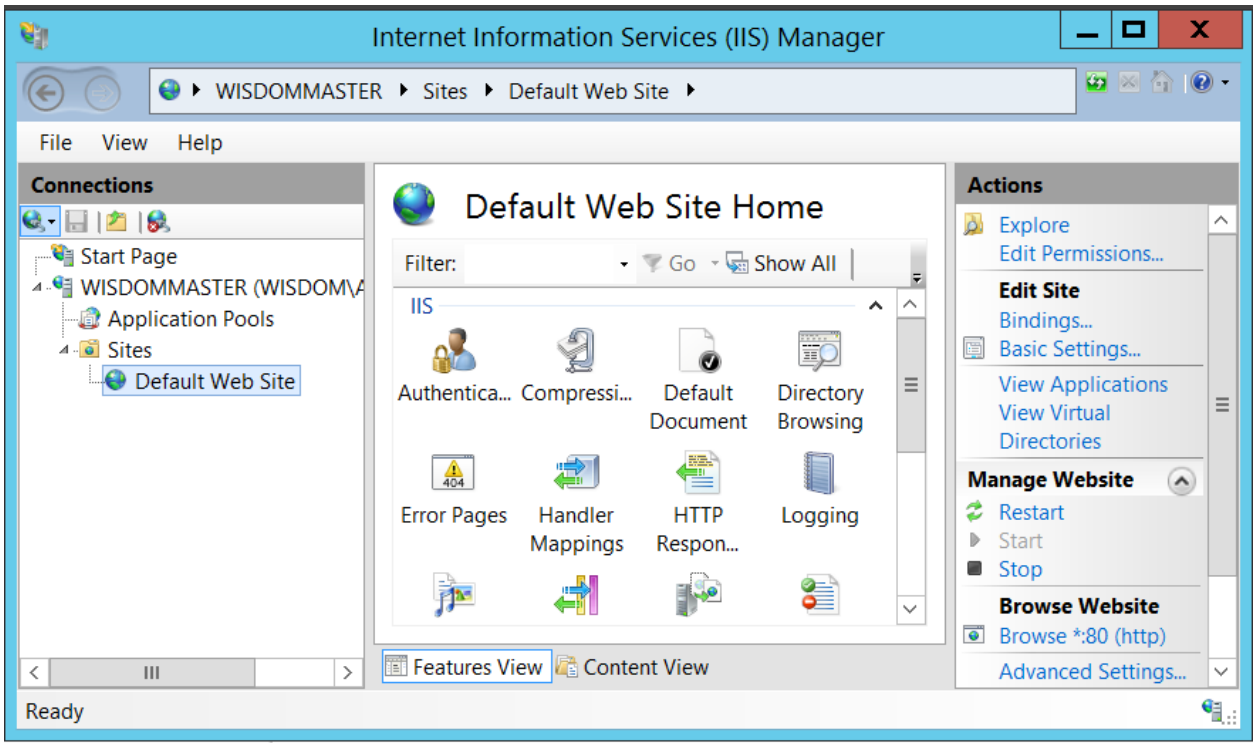

Add Roles and Features Wizard
Select destination server
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select a server or a virtual hard disk on which to install roles and features.
Select a server from the server pool
Select a virtual hard disk
Server Pool
Filter:
Name
IP Address
Operating System
WISDOMMaster.WISDO...
192.168.0.2
Microsoft Windows Server 2012 R2 Standard Evaluation
1 Computer(s) found
This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.
< Previous
Next >
Install
Cancel

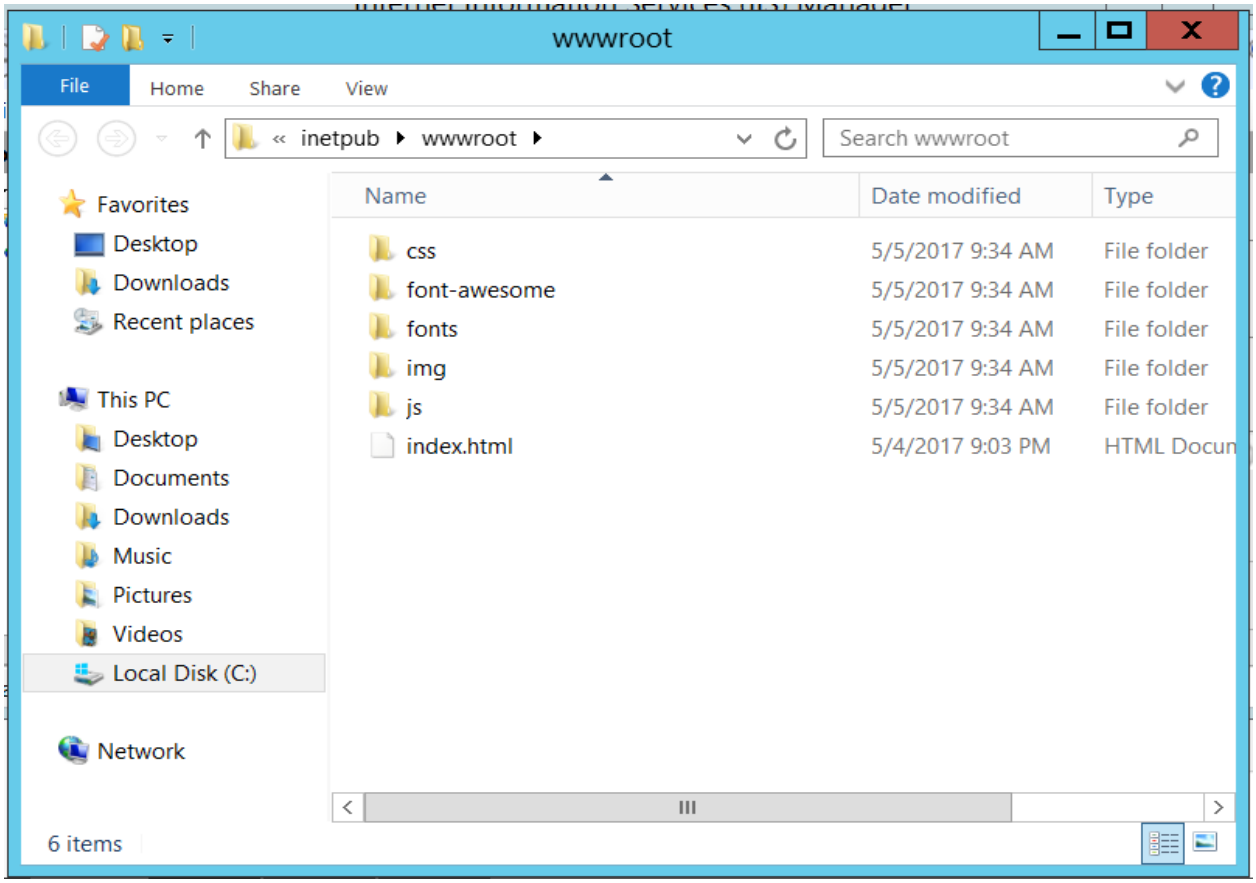

Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles
Roles
Active Directory
Active Directory
Application Serve
DHCP Server (Ins
DNS Server (Insta
Fax Server
File and Storage
Hyper-V
Network Policy a
Print and Docum
Remote Access
Remote Desktop
Volume Activatio
Web Server (IIS)
Windows Deploy
Add Roles and Features Wizard
Add features that are required for Web Server (IIS)?
The following tools are required to manage this feature, but do not have to be installed on the same server.
Web Server (IIS)
Management Tools
[Tools] IIS Management Console
Include management tools (if applicable)
Add Features
Cancel
< Previous
Next >
Install
Cancel

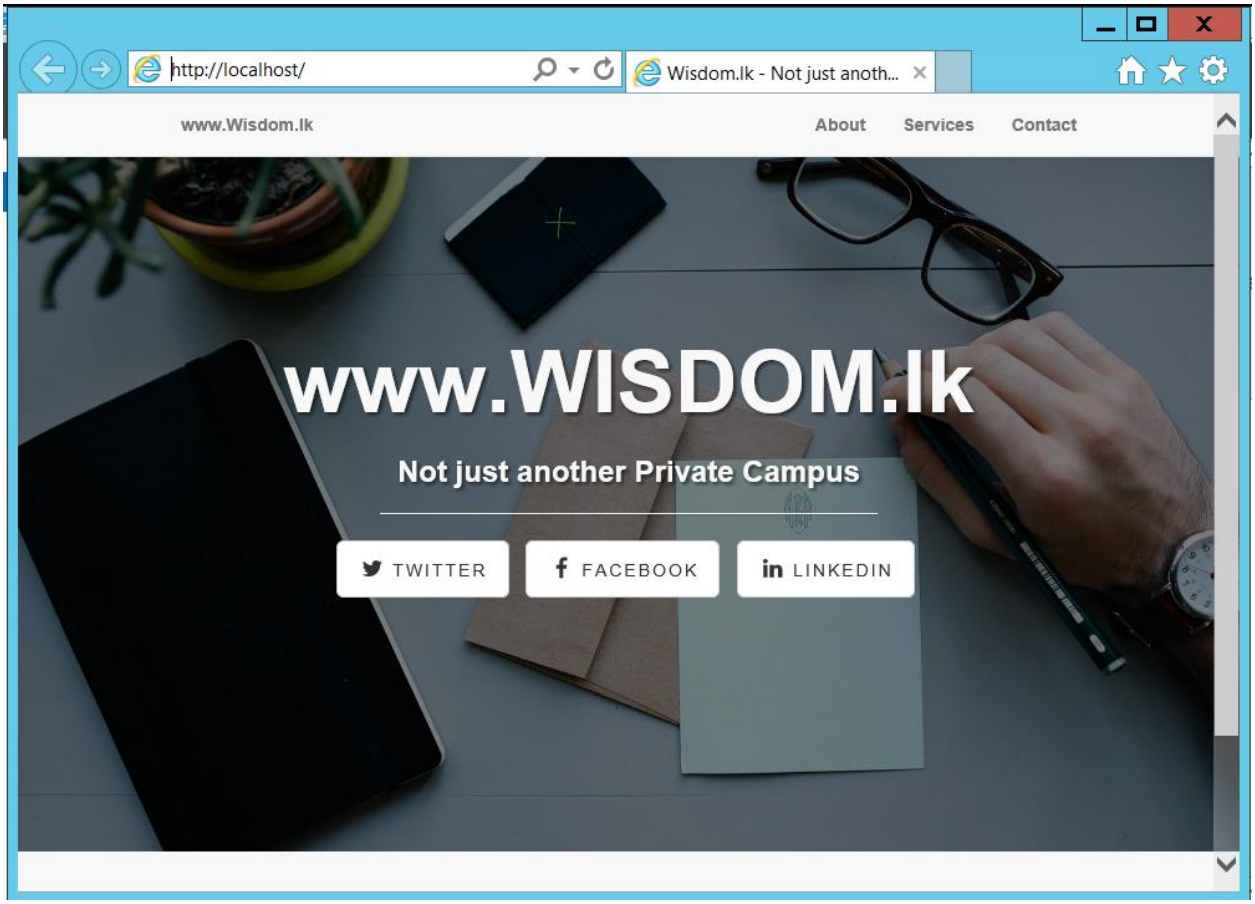

Add Roles and Features Wizard
Select features
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Web Server Role (IIS)
Role Services
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features
.NET Framework 4.5 Features (2 of 7 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management (Installed)
IIS Hostable Web Core
Ink and Handwriting Services
Description
.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.
< Previous
Next >
Install
Cancel

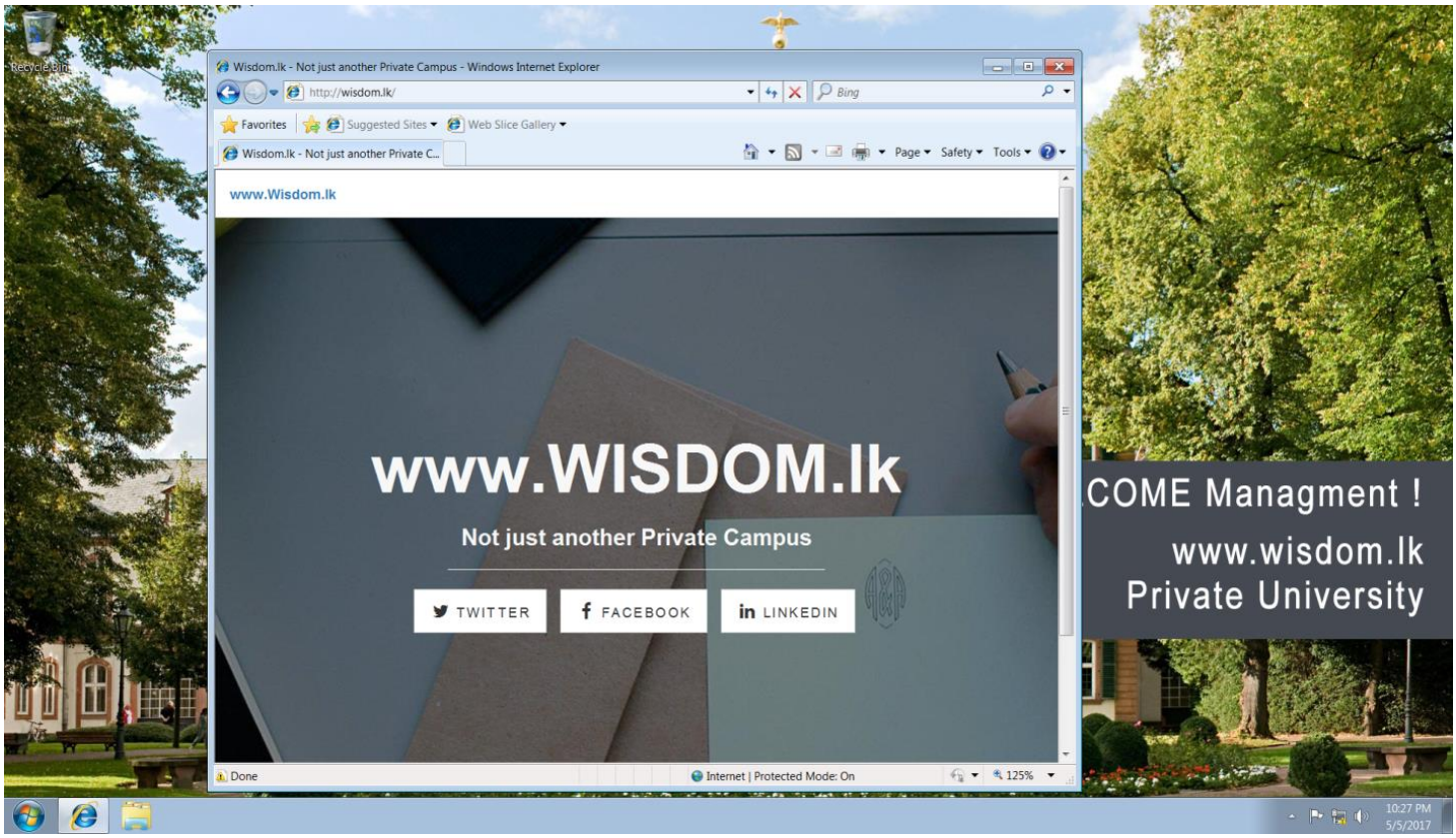

Add Roles and Features Wizard
Select role services
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Web Server Role (IIS)
Role Services
Confirmation
Results
Select the role services to install for Web Server (IIS)
Role services
Web Server
Common HTTP Features
Default Document
Directory Browsing
HTTP Errors
Static Content
HTTP Redirection
WebDAV Publishing
Health and Diagnostics
HTTP Logging
Custom Logging
Logging Tools
ODBC Logging
Request Monitor
Description
Web Server provides support for HTML Web sites and optional support for ASP.NET, ASP, and Web server extensions. You can use the Web Server to host an internal or external Web site or to provide an environment for developers to create Web-based applications.
< Previous
Next >
Install
Cancel


Add Roles and Features Wizard
Confirm installation selections
DESTINATION SERVER
WISDOMMaster.WISDOM.lk
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Web Server Role (IIS)
Role Services
Confirmation
Results
To install the following roles, role services, or features on selected server, click Install.
Restart the destination server automatically if required
Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.
Web Server (IIS)
Management Tools
IIS Management Console
Web Server
Common HTTP Features
Default Document
Directory Browsing
HTTP Errors
Static Content
Health and Diagnostics
Export configuration settings
Specify an alternate source path
< Previous
Next >
Install
Cancel


Internet Information Services (IIS) Manager
WISDOMMASTER ▸ Sites ▸ Default Web Site ▸
File View Help
Connections
Start Page
WISDOMMASTER (WISDOM\A
Application Pools
Sites
Default Web Site
Default Web Site Home
Filter:
Go
Show All
IIS
Authentica...
Compressi...
Default Document
Directory Browsing
Error Pages
Handler Mappings
HTTP Respon...
Logging
Features View
Content View
Actions
Explore
Edit Permissions...
Edit Site
Bindings...
Basic Settings...
View Applications
View Virtual Directories
Manage Website
Restart
Start
Stop
Browse Website
Browse *:80 (http)
Advanced Settings...
Ready


wwwroot
File
Home
Share
View
« inetpub ▸ wwwroot ▸
Search wwwroot
Favorites
Desktop
Downloads
Recent places
This PC
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Network
Name
Date modified
Type
css 5/5/2017 9:34 AM File folder
font-awesome 5/5/2017 9:34 AM File folder
fonts 5/5/2017 9:34 AM File folder
img 5/5/2017 9:34 AM File folder
js 5/5/2017 9:34 AM File folder
index.html 5/4/2017 9:03 PM HTML Docun
6 items


http://localhost/
Wisdom.lk - Not just anoth...
www.Wisdom.lk
About
Services
Contact
www.WISDOM.lk
Not just another Private Campus
TWITTER
FACEBOOK
LINKEDIN


Wisdom.lk - Not just another Private Campus - Windows Internet Explorer
http://wisdom.lk/
Favorites
Suggested Sites
Web Slice Gallery
Wisdom.lk - Not just another Private C...
Page
Safety
Tools
www.Wisdom.lk
www.WISDOM.lk
Not just another Private Campus
TWITTER
FACEBOOK
LINKEDIN
Done
Internet | Protected Mode: On
125%
10:27 PM
5/5/2017
COME Managment !
www.wisdom.lk
Private University

5). Software Requirements

- We recommend Windows Office 2007 software package for all Server PCs and an Office package for all PCs without server PCs.

- For Lab PCS and Lecturer PCs, we recommend to install NetBeans, Codeblock, PackettTracer, Notpad++, WireShark.

- We prescribe to install an antivirus software called Kespersky Internet Security 2017 for all PCs.

6). Future Implementation

Since we have disabled removable devices from PCs, We propose a media sharing PC with a lab assistant for Labs. As a result of that, all students can access removable devices and get lecture data to the devices in secure manner.

7). Bibliography

- Microsoft (2016) *What's New in 802.1X Authenticated Wired Access*. Available at: https://technet.microsoft.com/en-us/library/dn452432 (Accessed: 04 May 2016).

- Microsoft (2016) *What's New in Active Directory in Windows Server*. Available at: https://technet.microsoft.com/en-us/library/dn268294 (Accessed: 04 May 2016).

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