

KNWE 0642 Installing and Configuring Windows Servers 1

Course Description

In this course, students will learn to install, configure, and troubleshoot the Windows Server operating system and server services such as disks and volumes, RAID, storage, PowerShell, remote server management, Server Core, Active Directory Users and Computers, Domain Controllers, DNS name resolution, as well as system and network virtualization. These skills are used in business environments to manage day-to-day network and systems operations. This course followed by KNWE 0742 can be used as preparation to take the Microsoft 70-410 industry exam which validates candidate's knowledge and skills required to implement and configure Windows Server 2012 core services and can lead to valuable resume-building titles such as Microsoft Certified Professional (MCP) and Microsoft Certified Solutions Associate (MCSA). The MCP title requires candidates to pass any single Microsoft exam and the MCSA title requires candidates to pass the following three exams: 70-410, 70-411, 70-412. Pursuing the MCSA title will validate the skills and knowledge necessary for implementing, managing, maintaining, and provisioning services and infrastructure in a Windows Server 2012 environment.

Skills developed in this course are used by Server Administrators, Systems Administrators, Network Administrators, Information Technology Specialists (IT Specialists), Local Area Network Administrators (LAN Administrators), IT Managers, Network Specialists, Network Engineers, Network Specialists, Help Desk Techs, and others.

Course Competencies

1. Students will demonstrate their ability to install the server operating system and perform initial post-configuration tasks. Students will demonstrate knowledge of installation and post-configuration tasks.
2. Students will perform an upgrade from a previous operating system to the current server operating system.
3. Students will configure and manage server storage including disks, volumes, and RAID. Students will demonstrate knowledge of server storage.
4. Students will configure servers for remote management and perform remote management tasks. Students will demonstrate knowledge of remote management configuration and implementation.
5. Students will create and configure virtual machines and virtual networks using Hyper-V. Students will demonstrate knowledge of Hyper-V topics.
6. Students will install and configure Active Directory Domain Services including creating a new domain, joining computers and adding domain controllers to domains, configuring sites and Global Catalog servers. Students will demonstrate knowledge of these Active Directory topics.
7. Students will create and manage Active Directory users, computers, and groups implementing GUI and command-line tools. Students will demonstrate knowledge of these topics.
8. Students will install and configure the DNS service for host name resolution for various scenarios including to support Active Directory Domain Services and internal domain name resolution. Students will demonstrate knowledge of name resolution configuration and implementation.

0642 Assignment: Access a Windows Server

Assignment: Access a Windows Server

For study and practice purposes, you will need access to a couple of Windows Server 2012 R2 server installations. In the classroom, your instructor may already have servers ready for you to access. If not, it should take just a few minutes to prepare those for you. Please see your instructor who will provide you with IP addresses for two Windows 2012 R2 servers and a Windows 7 client that should be available for your exclusive use which you can access in the classroom as well as from wherever you have Internet access.

You will access those computers by using a Remote Desktop connection. From within TB 517 and 517A, simply bring up the Remote Desktop Connection on any computer and type the IP address of your server and then connect using the user name and password which your instructor will provide for you.

When connecting from anywhere else including TB 525 or from your home, open a web browser and go to allaccess.slcc.edu and sign in with your MyPage credentials (click [here \(Links to an external site.\)](#)[Links to an external site.](#) if you don't know your MyPage credentials). After signing in, if needed, complete the steps to install the Citrix client and then launch the SLCC Desktop. From within the SLCC Desktop, launch the Remote Desktop Connection and type in the IP address of your server and then enter the user name and password which your instructor provided you. You should test your access to each of your assigned servers and let your instructor know if you have any problems connecting.

Some students may wish to create a home study lab. For an installation on your personal computer at home or on a laptop, ask your instructor for information about software and product keys available to students at no cost through DreamSpark (<http://e5.onthehub.com/d.ashx?s=gmgev616l2>[Links to an external site.](#)).

You will also want to become familiar with Oracle VirtualBox (<https://www.virtualbox.org/>[Links to an external site.](#)) or a similar virtualization product that will allow you to install the server operating systems on your home computer in a virtual environment that won't disrupt the configuration of your home computer.

Below is a short VirtualBox introduction and tutorial video that should allow you to get started with VirtualBox. Please ask your instructor if you need further assistance or recommendations in setting up your home study lab. <http://www.youtube.com/watch?v=HzO4BfFXPjQ>[Links to an external site.](#)

Module 1: Learning Objectives and Competency

Students who complete this module will be able to demonstrate knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Navigate server interfaces
- Plan for server installations
- Install server operating systems
- Upgrade a server operating system
- Perform common post-installation tasks utilizing command line and GUI tools

Competency: Install the server operating system and perform common post-installation tasks

Learning activities will include TestOut sections 1.1 through 1.3 and 2.1 through 2.4 and sections of chapters 2 and 3 from the textbook.

Assessment activities will include a closed-book module exam as well as a hands-on skills demonstration.

Learning Activity: TestOut - Complete all three sections under 1.0 Introduction and section 2.1 Installation

In the TestOut online training product, complete all three of the sections under 1.0 Introduction including the 3 end of section exams and the two lab simulations. Also, complete section 2.1 Installation and the end of section exam. Complete each of the exams with a passing score. TestOut will track your test scores and the labs you have completed and your completion of this assignment will help you prepare for the Module 1 closed-book exam.

Learning Activity: TestOut - Complete sections 2.2, 2.3, and 2.4

In TestOut, complete the next three sections under 2.0 Installation and Configuration including the lab simulations that are part of the lessons and the 3 end of section exams. Complete each of the exams with a passing score. TestOut will track your test scores and the labs you have completed.

2.2 PowerShell

2.3 Server Roles

2.4 Server Roles

0642 Module 1 Skills Demonstrations

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 1 Skills Development & Demonstration Worksheet](#)) using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Please download the Skills Demo paperwork and fill it out electronically to help us Go Green and save paper and toner. Insert your screenshots directly into the document.

The following links are included in the worksheet and included here as well as it is recommended that you spend some time in chapters 2 and 3 of the textbook to complete the step-by-step activities that are covered in these chapters including:

[Chapter 1](#)

[Chapter 2](#)

1. Installing the operating system (pages 23-31 of printed textbook)
2. Perform an upgrade installation (scroll halfway down the linked page to get to the upgrade section) (pages 31-43 of the printed textbook)
3. Common Post-installation Configuration Tasks (pages 42-76 of the printed textbook (when using the linked web page, this content starts about 6 paragraphs down the page) and includes:

- Activating Windows (pages 45-46)
- Changing network adapter properties (pages 46-50)
- Renaming a server (pages 50-53)
- Joining a domain (pages 53-54)
- Enabling remote administration (pages 55-56)
- Adding and removing roles using both the GUI and PowerShell (pages 56-70)

[Chapter 3](#)

1. Install Server Core (106 -108)

2. Switch between server core and GUI and also Switch between server core and the GUI and vice versa using a script (109)
3. Access the task manager, Close then open the command prompt, change the Admin password, Access a remote file share, reboot, shutdown, (109-112)
4. [Links to an external site.](#) Activate the server, rename the server, enable automatic updates, set the time zone, configure the network settings, enable Remote Desktop, add the DNS role (114-118)

KNWE 0642 Module 1 Exam – Installations

Module 2: Learning Objectives and Competency

Students who complete this module will be able to demonstrate knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Configure a server for remote management
- Deploy roles and features to remote servers
- Manage domain and non-domain computers remotely
- Configure NIC teaming

Competency: Configure servers for remote management and perform remote management tasks.

Learning Activity: TestOut - Complete sections 2.5 and 2.6

In TestOut, Complete sections 2.5 and 2.6 including the lab simulations that are part of the lessons and the 2 end of section exams. Complete each of the exams with a passing score. TestOut will track your test scores and the labs you have completed.

0642 Module 2 Assignment: Remote Desktop and Accessing Your Classroom Servers

In this program, you will be assigned multiple servers and client computers to use for study, practice, and assignment completion. You will use Remote Desktop or similar tools to connect to these computers and you should become familiar with how to use these remote management tools. Please see your instructor who will provide you with IP addresses for two Windows 2012 R2 servers and a Windows 7 client that should be available for your exclusive use which you can access in the classroom as well as from wherever you have Internet access.

To access those systems from within TB 517 and 517A, simply bring up the Remote Desktop Connection on any computer and type the IP address of your server and then connect using the user name and password which your instructor will provide for you.

When connecting from anywhere else including TB 525 or from your home, open a web browser and go to allaccess.slcc.edu and sign in with your MyPage credentials (click [here \(Links to an external site.\)](#)[Links to an external site.](#) if you don't know your MyPage credentials). After signing in, if needed, complete the steps to install the Citrix client and then launch the SLCC Desktop. From within the SLCC Desktop, launch the Remote Desktop Connection and type in the IP address of your server and then enter the user name and password which your instructor provided you. You should test your access to each of your assigned servers and let your instructor know if you have any problems connecting.

Some students may wish to create a home study lab. For an installation on your personal computer at home or on a laptop, ask your instructor for information about software and product keys available to students at no cost through DreamSpark (<http://e5.onthehub.com/d.ashx?s=gmgev616l2>Links to an external site.).

You will also want to become familiar with Oracle VirtualBox (<https://www.virtualbox.org/Links to an external site.>) or a similar virtualization product that will allow you to install the server operating systems on your home computer in a virtual environment that won't disrupt the configuration of your home computer.

Below is a short VirtualBox introduction and tutorial video that should allow you to get started with VirtualBox. Please ask your instructor if you need further assistance or recommendations in setting up your home study lab.

[Have you gone Virtual: Series 001 - An intro to VirtualBoxLinks to an external site.](#)

For your classroom systems, the specific tasks you should become familiar with include the following:

Enabling Remote Desktop ([Printable PDF](#))

To allow remote computers to connect to a system using Remote Desktop, Remote Desktop must first be enabled. The systems you will be working on generally have had Remote Desktop enabled by the instructor. To enable Remote Desktop connections, go to the Remote Tab on the System Properties page. System Properties is accessible through the Control Panel or by right-clicking Computer from the Start menu and selecting Properties (In Windows 8.1 and 2012 there are additional ways to access the System Properties). Next, select the option to allow connections to this computer as shown in the image below.

Allowing Users to Connect to the Computer Through Remote Desktop

Members of the local Administrators group and the Domain Admins group are able to connect to Remote Desktop sessions by default. In classroom exercises, you will be creating user accounts that are not members of the Administrators group by default. To allow those users to login to the computer using Remote Desktop, you should generally click the Select Users... button shown in the image above on the local computer and add the users to allow Remote Desktop access. There are additional ways to grant users Remote Desktop access (add users to the Domain Admins group, change Group Policy settings, or add users to the Remote Desktop Users group) but the method mentioned above should be sufficient for scenarios encountered in the classroom.

Remote Desktop Connection

This is the utility commonly used to connect to Remote Desktop sessions that are open on remote computers. The Remote Desktop Connection is available on all computers you will be working with including Windows XP, 7, 8.1, 2008, and 2012.

You can launch the Remote Desktop Connection in various ways. A few popular ways are as follows:

1. On your administrative workstation or a computer you work at frequently where you are accessing remote systems, it is beneficial to have the Remote Desktop Connection on your desktop or pinned to the Start menu or task bar. Locate the Remote Desktop Connection in the Accessories folder and right-click on it and pin it to your start menu or your taskbar.
2. On any computer, you can open the Search or Run fields and type Remote Desktop Connection (or possibly even just remote) press enter. This will launch the Remote Desktop Connection. You could also type mstsc to launch the Remote Desktop Connection.

Practice Activities

1. Using a server available on the West wall in TB 517, enable Remote Desktop, note the IP address of the server, and then from another computer, use the Remote Desktop Connection to connect to the server.

2. Using Remote Desktop, connect to the two Windows Server 2012 R2 systems and the Windows 7 system you have been assigned by your instructor.

Troubleshooting

The most common cause of failed connections in the classroom is due to Windows Firewall settings. If you have enable Remote Desktop on the server and you are using an account which has permissions to connect to Remote Desktop sessions, check the Windows Firewall to ensure Remote Desktop access is allowed on both the Public and Private network. It is common that Windows will configure an adapter to be Public which then applies a more strict firewall and blocks Remote Desktop access by default.

Other causes of Remote Desktop access not working include typing the wrong user name or password, the user not have permission to connect remotely, connecting to the wrong name or IP address, etc.

When you have successfully completed the practice activities, submit this assignment indicating you are ready to work with the remote computers in the classroom or, if you need further information or assistance, please speak with your instructor.

See the following or your instructor if you need further information on Remote Desktop basics.

[Windows 7 - Access another computer using Remote Desktop \(Links to an external site.\)](#)[Links to an external site.](#)

0642 Module 2 Skills Demonstrations

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 2 Skills Development & Demonstration Worksheet](#)) using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Please download the Skills Demo paperwork and fill it out electronically to help us Go Green and save paper and toner. Insert your screenshots directly into the document.

Some of the following links are included in the worksheet and included here as well as it is recommended that you spend some time in chapters 17 and 4 of the textbook to complete the step-by-step activities that are covered in these chapters including:

Textbook References

[Chapter 17](#)

1. Configure Remote Desktop (883-897) (Start from the top of 883 and read to about 1/3 down the page of 897 and stop at "INSTALLING REMOTE DESKTOP SERVICES WITH SESSION HOST SERVICE"
2. Configure Remote Assistance (917-918) (Scroll to the bottom of the page and refer to the "CONFIGURING A SERVER FOR REMOTE ASSISTANCE" section.
3. Configure Windows Remote Management Services (919-921)
4. Install and configure Remote Server Administration Tools (RSAT) (922-927) [Installing RSAT on Windows 7 \(Links to an external site.\)](#)[Links to an external site.](#)

[Chapter 4](#)

1. Configure NIC teaming using GUI tools (155 - 159).

- [Home](#)
- [Modules](#)
- [Media Gallery](#)
- [My Media](#)
- [Google Drive](#)

- [MySuccess](#)

KNWE 0642 Module 2 Exam - Remote Management

Module 3: Learning Objectives and Competency

Students who complete this module will be able to demonstrate a knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Install hard drives
- Initialize and format hard drives
- Configure basic and dynamic disks
- Configure volumes
- Assign volume labels and drive letters
- Create a mount point
- Configure fault tolerant volumes
- Create and mount VHDs
- Configure storage pools and disk pools

Competency: Configure and manage server storage

Learning Activity: TestOut - Complete sections 2.7 and 2.8

In TestOut, Complete sections 2.7 and 2.8 including the lab simulations that are part of the lessons and the 2 end of section exams. Complete each of the exams with a passing score. TestOut will track your test scores and the labs you have completed.

Learning Activity: Textbook - Chapter 12 Windows 2012 R2 Storage (Pages 589-622 and Pages 631-636)

It is recommended that you spend some time exploring [chapter 12](#) of the textbook (pages 589-622 and 631-636) and complete the step-by-step activities that are covered in the chapter including those related to Creating a Storage Space (pages 598-617).

There is equipment in the classroom that you can access and use to complete the activities.

Please ask your instructor for assistance if you are having any concerns understanding a topic or any challenges configuring a lab activity or scenario.

0642 Module 3 Skills Demonstrations

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 3 Skills Development & Demonstration Worksheet](#)) using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Please download the Skills Demo paperwork and fill it out electronically to help us Go Green and save paper and toner. Insert your screenshots directly into the document.

KNWE 0642 Module 3 – Storage

Module 4: Learning Objectives and Competency

Students who complete this module will be able to demonstrate a knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Install the Hyper-V role
- Create a virtual machine and install an operating system
- Configure Virtual Machine Settings
- Create and Configure Virtual Machine Storage
- Create and Configure Virtual Networks

Competency: Create and configure virtual machines, virtual machine storage, and virtual networks.

Learning Activity: TestOut - Complete all content under section 3.0 Hyper-V

In TestOut, complete all content under section 3.0 Hyper-V including the lab simulations and end of lesson quizzes.

0642 Module 4 Skills Demonstrations

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 4 Skills Development & Demonstration Worksheet rev1.docx](#)) which are related to chapter 27 and TestOut section 3 using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Please download the Skills Demo paperwork and fill it out electronically to help us Go Green and save paper and toner. Insert your screenshots directly into the document.

[Chapter 27](#)

1. Install Hyper-V (1359-1362)
2. Create a Virtual Disk (1368- 1370)
3. Create a Virtual Switch (1375-1377)
4. Create a Virtual Machine (1377-1390)
5. Create a Checkpoint (1393-1396 - Scroll to the bottom of this link and review the Time Travel with Checkpoints section)

Please ask your instructor for assistance if you are having any concerns understanding a topic or any challenges configuring a lab activity or scenario.

KNWE 0642 Module 4 Exam - Hyper-V

Module 5: Learning Objectives and Competency

Students who complete this module will be able to demonstrate a knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Create a new domain and forest
- Configure multiple domain controllers for a domain
- Install Active Directory on Server Core
- Join computers to a domain
- Configure a Global Catalog server
- Configure sites

Competency: Install and configure Active Directory Domain Services including creating a new domain, joining computers to domains, adding domain controllers to domains, and configuring sites and global catalog servers.

Learning Activity: TestOut - Complete sections 4.1, 4.2, and 4.3

In TestOut, complete sections 4.1, 4.2, and 4.3 including end of lesson quizzes.

Learning Activity: Logging in Locally vs Logging in to the Domain

In preparation for the Skills Development and Demonstration assignment, please review the following PDF: [Local vs Domain Login](#)

Learning Activity: Textbook - Chapter 7 Active Directory in Server 2012

Chapter 7 is a long chapter and there are topics discussed that are beyond the scope of this course and will be covered in other courses. Use the information below to help guide you through things you should know and be able to configure related to [chapter 7](#)

Things to understand:

1. Active Directory terminology such as Workgroup, Domain, Forest, AD Domain Services, Site, Replication, Object, Schema, Group Policy, OUs, GPOs, Forest, Global Catalog, Trust, Tree (257-260)
2. Choosing a domain name and creating a new domain and forest (260-266)
3. Domain and forest functional levels (266-270)
4. SYSVOL and DSRM Password (270-274)
5. Domain upgrade and migration paths and options (313-367 - get an overview of this and don't get too in depth)

Things to know how to configure:

1. Install Active Directory and create a new domain and forest. (275-278)

2. Add additional domain controllers to a domain (279-284)
3. Create OUs, Groups, and Accounts (285-297)
4. Join computers to a domain (298)
5. Remove Active Directory (299-300)
6. Raise domain and forest functional levels (302-304)
7. Using Netdom (304-305)
8. Manage domain time (306-308)

There is equipment in the classroom that you can access and use to complete the activities.

Please ask your instructor for assistance if you are having any concerns understanding a topic or any challenges configuring a lab activity or scenario.

0642 Module 5 Skills Demonstration

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 5 Skills Development & Demonstration Worksheet](#)) using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Things to understand from TestOut and Chapter 7 of the textbook (on the web page related to the links below, you will need to scroll down the page to find the topics mentioned here).

1. Active Directory terminology such as Workgroup, Domain, Forest, AD Domain Services, Site, Replication, Object, Schema, Group Policy, OUs, GPOs, Forest, Global Catalog, Trust, Tree (257-260)
2. Choosing a domain name and creating a new domain and forest (260-266)
3. Domain and forest functional levels (266-270)
4. SYSVOL and DSRM Password (270-274)

Things to know how to configure (more specific links are provided in the worksheet):

1. Install Active Directory and create a new domain and forest (275-278)
2. Add additional domain controllers to a domain (279-284)
3. Joining a domain (pages 298-299)
4. Decommissioning a DC (pages 299 - 301)

KNWE 0642 Module 5 Exam - Active Directory

Module 6: Learning Objectives and Competency

Students who complete this module will be able to demonstrate a knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Create and manage OUs

- Delegate administrative control
- Create and manage user accounts
- Perform bulk user operations
- Create and manage computer accounts
- Create and manage group accounts
- Create and manage objects using command line tools

Competency: Create and manage Active Directory users, computers, and groups.

Learning Activity: TestOut - Complete sections 4.4 through 4.9

In the TestOut online training product, complete sections 4.4, 4.5, 4.6, 4.7, 4.8, and 4.9 including the end of section exams and the lab simulations. Complete each of the exams with a passing score.

Learning Activity: Textbook - Read chapter 8 Creating and Managing User Accounts

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet () using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Things to understand from TestOut and Chapter 8 of the textbook :

1. Creating and Managing User Accounts (pages 378 - 412)
 1. Create local and domain accounts
 2. Create domain accounts
 3. Create domain accounts using ds commands (page 387)
 4. Set domain-based user account properties
2. Managing Groups (pages 412 - 433)
 1. Create local groups
 2. Create domain groups
 3. Create groups using dsadd
3. Monday Morning Admin Tasks (pages 433 - 436)
 1. Reset passwords
 2. Unlock user accounts
4. Using the New Features For User and Group Management (pages 437 - 451)
 1. Using ADAC
5. Active Directory Module For Windows PowerShell (pages 451 - 465)
 1. Create users with PowerShell
 2. Manage accounts with PowerShell

6. Delegating Control (pages 521-531)
 1. Create OUs
 2. Move accounts into OUs
 3. Delegate permissions to manage control of the OU
 4. Determining Which Delegations Have Been Set and Undelegating
7. Joining a Domain (pages 929-950)
 1. Join computers to a domain
 2. Join offline computers to a domain
 3. Join computers to a domain using command line tools

0642 Module 6 Skills Demonstrations

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 6 Skills Development & Demonstration Worksheet](#)) using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

Things to understand from TestOut and sections of the textbook (all of chapter 8 and sections of chapters 9 and 18) :

1. Creating and Managing User Accounts (pages 378 - 412)
 1. Create local and domain accounts
 2. Create domain accounts
 3. Create domain accounts using ds commands (page 387)
 4. Set domain-based user account properties
2. Managing Groups (pages 412 - 433)
 1. Create local groups
 2. Create domain groups
 3. Create groups using dsadd
3. Monday Morning Admin Tasks (pages 433 - 436)
 1. Reset passwords
 2. Unlock user accounts
4. Using the New Features For User and Group Management (pages 437 - 451)
 1. Using ADAC
5. Active Directory Module For Windows PowerShell (pages 451 - 465)
 1. Create users with PowerShell
 2. Manage accounts with PowerShell
6. Delegating Control (pages 521-531)
 1. Create OUs

2. Move accounts into OUs
 3. Delegate permissions to manage control of the OU
 4. Determining Which Delegations Have Been Set and Undelegating
7. Joining a Domain (pages 929-950)
1. Join computers to a domain
 2. Join offline computers to a domain
 3. Join computers to a domain using command line tools

KNWE 0642 Module 6 Exam - OUs, Users, and Groups

Module 7 Learning Objectives and Competency

Students who complete this module will be able to demonstrate a knowledge of the following technologies and perform the following tasks:

Learning Objectives:

- Install the DNS role
- Configure DNS client settings
- Identify and configure name resolution methods
- Configure DNS registration
- Configure forwarding of name resolution requests
- Create and manage DNS zones
- Create and manage DNS resource records
- Configure DNS server properties
- Troubleshoot DNS using Ping, IPconfig, and NSLookup

Competency: Install and configure the DNS service to support name resolution in network environments.

Learning Activity: TestOut - Complete all content under section 5.0 DNS

In TestOut, complete all content under section 5.0 DNS including the lab simulations and end of lesson quizzes.

Learning Activity: Textbook - Chapter 6 DNS and Name Resolution in Windows Server 2012 R2

It is recommended that you spend some time reading through [chapter 6](#) of the textbook which includes pages 211 - 255.

0642 Module 7 Skills Demonstration

To complete this module, you will be required to demonstrate your ability to perform the tasks listed in this worksheet ([KNWE 0642 Module 7 Skills Development & Demonstration Worksheet](#)) using equipment in the classroom. Please complete the worksheet and upload it and click the Submit button.

In this lab, you will completing the following tasks:

1. Install the DNS role
2. Create and document FQDNs and DNS resource records for workgroup computers
3. Configure name resolution and IP address settings to allow two workgroup computers to communicate with each other by FQDN
4. Create different zone types for given scenarios including AD-integrated and Primary
5. Describe 6 different name resolution methods which may be used to resolve Windows computer names on a LAN
6. Use Wireshark or other network monitoring software to capture traffic to determine the name resolution method used to resolve names for given scenarios

KNWE 0642 Module 7 Exam – DNS

KNWE 0642 Final Skills Assessment

The Final Skills Assessment will allow students to demonstrate their ability to configure services and settings presented throughout this course. The exam will be administered through TestOut as the other exams have been and will include 15 performance-based assessment items and will require a score of 80% or higher to pass. Students are allowed 150 minutes to complete this closed-book exam which must be taken in the TB 517 classroom or other room as directed by your instructor.

Please notify your instructor when you are ready to take this exam. Once you have passed the exam, upload a screen capture of your score here in Canvas and click on the Submit button.

KNWE 0642 Final Knowledge Assessment

The Final Knowledge Assessment will allow students to demonstrate their understanding of services and settings presented throughout this course. The exam will be administered through TestOut as the other exams have been and will include 50 assessment items and will require a score of 80% or higher to pass. Students are allowed 150 minutes to complete this closed-book exam which must be taken in the TB 517 classroom or other room as directed by your instructor.

Please notify your instructor when you are ready to take this exam. **All material will be cleared from your desk. The instructor has the right to seat a student that is taking the final at any station.** Once you have passed the exam, upload a screen capture of your score here in Canvas and click on the Submit button.

Instructor Use Only - Assign Student Pass Status

Students who instructors determine have successfully PASSED the course should be identified as complete in the gradebook. This action is performed by assigning students a check in the gradebook view. Before a student is assigned a complete they should complete each of the following:

1. Hands on Skills Exams for modules 2-5 graded with a numerical score meeting at least the minimum requirements



**SCHOOL OF APPLIED TECHNOLOGY &
TECHNICAL SPECIALTIES
NETWORK ENGINEER (KNWE)**

2. TestOut assignments for modules 1-5 graded with a COMPLETE grade
3. Mid-term exam
4. Final exam

Students who have either NOT completed the course or FAILED the course should be identified as incomplete. This action is performed by assigning students an "x" in the gradebook view.