Welcome to KNWE 0680, Configuring Windows Clients!

In this course, students will learn to upgrade, install, and deploy client operating systems, migrate user profiles and data, configure pre-installation and post-installation system settings, configure disks and devices, configure and test network connectivity and configure resource sharing and access to shared resources working mainly with Windows 7 as the desktop operating system. These skills can be applied to working with other versions of the operating system and where time permits, students are encouraged to explore using these skills to configure Windows 8.1 or Windows 10 as well.

Why is the focus not on Windows 8.1 or Windows 10? While nearly all versions of Windows are available to students both inside and outside of the classroom through our DreamSpark subscription, Windows 8.1 has not been widely adopted into corporate environments and Windows 7 remains the desktop client standard. It is expected that this course content will update to Windows 10 as soon as Windows 10 becomes the standard corporate desktop operating system in use.

This is course 1 of 2 which can be used as a preparation step for the Microsoft 70-680 industry exam. The next course students will take to continue learning about the Windows client operating system is KNWE 0780.

Course Competencies

After completion of this course, students will be able to:

- Perform installations of the Windows 7 operating system
- Create and deploy system images
- Configure and manage disks and volumes
- Configure devices and drivers
- Configure and test network connectivity
- Configure resource sharing and resource access

Lesson 1: Learning Objectives and Competency

After completing this lesson, students will be able to:

- List the new features in Windows 7
- Name the various editions of Windows 7, their intended markets, and the differences between them
- Understand the Windows 7 system requirements
- Determine whether an existing computer is capable of running Windows 7
- Explain the upgrade paths to Windows 7
- Describe the modular architecture of Windows 7
- Upgrade to Windows 7 from previous versions of Windows.

Learning activities will include reading through lesson 1 of the course textbook and viewing related videos online.

Skills will be practiced and demonstrated by using the online practice labs which include:

70-680 Lab 01 – Upgrading to Windows 7

- Run Upgrade Advisor *1.1*

- Upgrade to Windows 7 from previous versions of Windows. *1.2*

To complete the lesson, students will complete an assignment and a quiz.

The assignment is to submit a screen shot showing the online lab has been successfully completed.

The quiz will be open book and students must score 22 of 25 or higher to pass.

Lesson 1: Learning Activities - Textbook and Videos

Read lesson 1 from the textbook. As this is an introductory chapter, there will be concepts mentioned briefly which will be covered in greater detail in subsequent chapters.

Remember to:

- Take notes and frequently review your notes

- Practice implementing the skills discussed in this lesson

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

- Share with others resources you locate and find valuable that improved your learning experience

- Have fun!!!

Related videos -

Professor Messer: Windows 7 Editions

https://www.youtube.com/watch?v=AxTES80aWbA&feature=youtu.be (Links to an external site.)Links to an external site.

Windows 7 Requirements

https://www.youtube.com/watch?v=hYvGXG_mzfs&feature=youtu.be (Links to an external site.)Links to an external site.

KNWE 0680 Lesson 1 Online Labs (Includes Access & Usage Instructions)

Log into your MOAC Labs Online at https://moac.microsoftlabsonline.com (Links to an external site.)Links to an external site. and complete the first lab which is Upgrading to Windows 7. In your account, click on the following lab to launch it.

While the lab is loading, you will have the option to download the manual as represented in the first image below. After the lab is launched, as shown in the 2nd image, you will also have an option to download the manual if you did not do it while the lab was loading.

Follow the instructions in the lab manual. As part of this lab, you will be completing the following exercises:

- Run Upgrade Advisor (1.1)

- Upgrade to Windows 7 from previous versions of Windows (1.2*)*

Once you have successfully completed these exercises and ended the lab, click on the Lab History link and create a screen capture using the Snipping Tool similar to the image shown below that shows lab 1 of 18 has been completed. Save the screen capture and upload it here and click on the Submit button to complete this assignment. These types of assignments are graded as Complete or Incomplete (a score of 25 will indicate the assignment has been graded "Complete"). Comments to you returned by your instructor will indicate there is additional work to do to receive a grade of "Complete."

Please let your instructor know if you have any questions or have any problems while you are going through this lab or submitting the assignment.

Lab Challenges are optional.

KNWE 0680 Lesson 1 Quiz

Instructions

This is an open-book quiz to test and build your knowledge and understanding of concepts covered in lesson 1. You may take this quiz as many times as you choose. You must score 21 of 25 or better on this quiz to pass.

Be sure to communicate with your instructor if there are terms or concepts you are finding it difficult to understand or remember!

Lesson 2: Learning Objectives and Competency

After completing this lesson, students will be able to:

- Distinguish between the various types of Windows 7 installations
- Upgrade Windows
- Perform various types of installations
- Create user profiles
- Migrate user profiles
- Use Windows Easy Transfer

Learning activities will include reading through lesson 2 and a section of lesson 4 of the textbook and viewing related online videos.

Skills will be practiced and demonstrated by using the online practice labs which include:

- Create user profiles (2.1)
- Install Windows Easy Transfer on Windows Vista (2.2)
- Collect user profile data (2.3)
- Import user profile data (2.4)
- Test user profiles (2.5)
- Install Windows 7 from a DVD (2.6)
- Join a workstation to a domain (2.7)

To complete the lesson, students will complete an assignment, a quiz, and a skills assessment.

The assignment is to submit documentation that represents the online lab activities have successfully been completed.

The quiz will be open book and students must score 22 of 25 or higher to pass.

The skills assessment, will require students to use live equipment in the classroom to demonstrate their ability to perform the following tasks: Prepare a Windows 7 system for a customer, perform a dual-boot installation, and start an installation from a USB device.

Lesson 2: Learning Activities - Textbook and Videos

For this lesson, read chapter 2 from the textbook as well as read about working with drivers from pages 135 - 143.

Remember to:

- Take notes and frequently review your notes

- Practice implementing the skills discussed in this lesson

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

- Share with others resources you locate and find valuable that improved your learning experience

- Get to know at least one other person in the class

Related Videos -

Professor Messer - Windows 7 Installation Sources

https://www.youtube.com/watch?v=3WJ1cDuXxgQ (Links to an external site.)Links to an external site.

Professor Messer- Clean Installation

https://www.youtube.com/watch?v=EacSaER_1ac (Links to an external site.)Links to an external site.

Professor Messer - Dual Boot Installation

https://www.youtube.com/watch?v=LzKrSWn4c4Y (Links to an external site.)Links to an external site.

Professor Messer - Upgrading to Windows 7

https://www.youtube.com/watch?v=bsVoENCfBR8 (Links to an external site.)Links to an external site.

Professor Messer - Migrating User Profiles with Windows Easy Transfer

https://www.youtube.com/watch?v=FnW4P_qqXMk (Links to an external site.)Links to an external site.

Professor Messer - Migrating User Profiles with the User State Migration Tool

https://www.youtube.com/watch?v=xmV7idcECsM (Links to an external site.)Links to an external site.

 Dual-boot Windows 7 and Windows 8.1

https://www.youtube.com/watch?v=v5iZKZ_CZvo (Links to an external site.)Links to an external site.

Lesson 2; Windows Command Prompt Tutorial

Go to Link (Links to an external site.)Links to an external site. for an excellent tutorial on the windows command prompt.

KNWE 0680 Lesson 2 Online Labs (Labs 2 & 3)

Log into your MOAC Labs Online at https://moac.microsoftlabsonline.com (Links to an external site.)Links to an external site. and complete the second and third labs which are Migrating User Profiles and Installing Windows 7.

Download and follow the instructions in the lab manual. Additionally, step 10 in exercise 2.4 refers to this lab sheet lab02.doc and step 10 in exercise 3.2 refers to this lab sheet lab03.doc

Answer/complete all of the items that are in blue text in those two documents and upload them here and click on the submit button when you have finished this lab. Lab Challenges are optional. As part of these labs, you will be completing the following exercises:

- Create user profiles (2.1)
- Install Windows Easy Transfer on Windows Vista (2.2)
- Collect user profile data (2.3)
- Import user profile data (2.4)
- Test user profiles (2.5)
- Lab Challenge: Migrating User Profiles Over the Network
- Install Windows 7 from a DVD (3.1)
- Join a workstation to a domain (3.2)

Please let your instructor know if you have any questions or have any problems while you are going through this lab or submitting the assignment.

These types of assignments are graded as Complete or Incomplete (a score of 25 will indicate the assignment has been graded "Complete"). Comments to you returned by your instructor will indicate there is additional work to do to receive a grade of "Complete."

KNWE 0680 Lesson 2 Quiz

Instructions

This is an open-book quiz to test and build your knowledge and understanding of concepts covered in lesson 2. You may take this quiz as many times as you choose. Be sure to communicate with your instructor if there are terms or concepts you are finding it difficult to understand or remember!

Reimaging lab computers

In this course we use hands-on skills demonstrations with live equipment. It is expected that students keep the lab area clean, well maintained, and the computers to be in the default state they found it for the next student.

To this end, after each skills demonstration please re-image every computer you used. Here are the directions to follow.

After completing Module 2 Skills Demonstration, re-image your computers and submit your initials or a brief statement acknowledging that you were successful and will re-image your lab computers after every use.

KNWE 0680 Module 2 Skills Demonstration

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 0680 Lesson 2 Skills Demonstration - Installations Rev 5.docx

You will have a maximum of 4 hours to complete this skills demonstration. When the paperwork is completed, click the Submit Assignment button here and upload your paperwork and click the Submit Assignment button.

Lesson 3: Learning Objectives and Competency

After completing this lesson, students will be able to:

- Understand the Windows 7 mass deployment process
- Install and use the deployment tools provided by Microsoft
- Capture image files
- Modify image files
- Deploy image files

Learning activities will include reading through lesson 3 of the textbook and viewing related online videos.

Skills will be practiced and demonstrated by using the online practice labs which include:

- Installing Windows 7 AIK (4.1)
- Creating an Answer File (4.2)
- Creating a Windows PE Boot Image (4.3)
- Capturing an Image (4.4)
- Using DISM.exe (5.1)
- Installing MDT 2010 (5.2)
- Creating a Deployment Share (5.3)
- Creating a Task Sequence (5.4)
- Deploying an Image (5.5)

To complete the lesson, students will complete an assignment, a quiz, and a skills assessment.

The assignment is to submit documentation that represents the online lab activities have successfully been completed.

The quiz will be open book and students must score 22 of 25 or higher to pass.

The skills assessment, will require students to use live equipment in the classroom to demonstrate their ability to perform the following tasks: Customize, create, and capture a Windows 7 image. Utilize Microsoft deployment tools to deploy the image to at least one other computer.

Lesson 3: Learning Activities - Textbook and Videos

For this lesson, read chapter 3 from the textbook.

Remember to:

- Take notes and frequently review your notes

- Practice implementing the skills discussed in this lesson

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

- Share with others resources you locate and find valuable that improved your learning experience

- Enjoy learning new things!!!

Related Videos -

Professor Messer - Deploying Windows 7 Overview

https://www.youtube.com/watch?v=RzWq2PgYKqE (Links to an external site.)Links to an external site.

Professor Messer - Creating a Windows 7 Reference Image

https://www.youtube.com/watch?v=ra7tSMaKm2o (Links to an external site.)Links to an external site.

Professor Messer - Capturing a Windows 7 Image

https://www.youtube.com/watch?v=tf_JHHm0xSg (Links to an external site.)Links to an external site.

Professor Messer - Preparing Windows 7 for Deployment

https://www.youtube.com/watch?v=mCfVu8PhNXI (Links to an external site.)Links to an external site.

Professor Messer - Deploying a Windows 7 System Image

https://www.youtube.com/watch?v=j9om1gUdf1w (Links to an external site.)Links to an external site.

KNWE 0680 Lesson 3 Online Labs (Labs 4 & 5)

Log into your MOAC Labs Online at https://moac.microsoftlabsonline.com (Links to an external site.)Links to an external site. and complete the fourth and fifth labs which are Capturing a Reference Image and Deploying a Captured Image.

Download and follow the instructions in the lab manual. Additionally, refer to the two following documents lab04.doc and lab05.doc and answer/complete all of the items that are in blue text and upload the documents here and click on the submit button. **Lab Challenges are optional.** As part of these labs, you will be completing the following exercises:

- Installing Windows 7 AIK (4.1)

- Creating an Answer File (4.2)

- Creating a Windows PE Boot Image (4.3)

- Capturing an Image (4.4)

- Lab Challenge: Creating a Capture Image

- Using DISM.exe (5.1)

- Installing MDT 2010 (5.2)

- Creating a Deployment Share (5.3)

- Creating a Task Sequence (5.4)
- Deploying an Image (5.5)
- Lab Challenge: Configuring a Multicast Deployment

Please let your instructor know if you have any questions or have any problems while you are going through this lab or submitting the assignment.

These types of assignments are graded as Complete or Incomplete (a score of 25 will indicate the assignment has been graded "Complete"). Comments to you returned by your instructor will indicate there is additional work to do to receive a grade of "Complete."

KNWE 0680 Lesson 3 Quiz

Instructions

This is an open-book quiz to test and build your knowledge and understanding of concepts covered in lesson 3. You may take this quiz as many times as you choose. Be sure to communicate with your instructor if there are terms or concepts you are finding it difficult to understand or remember!

KNWE 0680 Module 3 Skills Demonstration

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 0680 Lesson 3 Skills Demonstration - Imaging and Deployment (REV 6).docx

You will have a maximum of 4 hours to complete this skills demonstration. When the paperwork is completed, click the Submit Assignment button here and upload your paperwork and click the Submit Assignment button.

Additional Resources (Optional)

If you would like further information, please refer to the following resources:

Deploying Windows 7 - Essential Guidance from the Windows 7 Resource Kit and TechNet Magazine

DeployingWindows7EssentialGuidance.pdf

Lessons 1-3 Practice Exam

Instructions

This is a ungraded practice exam. You may take it as many times as you wish. There are fill in the blank and short answer questions. This exam is not required.

Lesson 3: Fix the sysprep issue of only be allowed to use it twice.

http://www.wintips.org/fix-sysprep-fatal-error-dwret-31-machine-invalid-state-couldnt-update-recorded-state/

KNWE 0680 Mid-course Exam for Lessons 1-3 (Required)

Instructions

This exam must be taken in the TB 517 classroom or alternate as assigned by the instructor. A passing score of 48 of 60 (80%) is required. Students who do not pass on the first attempt may retake the exam a 2nd time on a day following their first attempt.

Lesson 4: Learning Objectives and Competency

After completing this lesson, students will be able to:

Configure and manage disks and volumes & Configure devices and drivers

- Select a disk partitioning style
- Select a disk type
- Create disk partitions and volumes
- Select a file system
- Work with disk tools
- Configure a VHD
- Manage disks
- Configure devices and drivers

Learning activities will include reading through lesson 4 of the textbook and viewing related online videos.

Skills will be practiced and demonstrated by using guided activities from the textbook and online videos as well as the online practice labs which include:

Lab 6 Working with Disks

- Creating a Basic Disk Partition (6.1)
- Extending a Basic Disk Partition (6.2)
- Creating Additional Partitions (6.3)
- Mounting a Volume (6.4)
- Working with Dynamic Disks (6.5)

To complete the lesson, students will complete an assignment, a quiz, and a skills assessment.

The assignment is to submit documentation that represents the online lab activities have successfully been completed.

The quiz will be open book and students must score 35 or higher to pass.

The skills assessment will require students to use live equipment in the classroom to demonstrate their ability to perform the following tasks: Add two additional hard drives to a computer, create partitions and volumes, format disks, mount disks, create VHDs, boot to a VHD, and use disk utilities.

Example of Recommended Time Utilization for This Lesson

- Learning Activity 1: Approximately 2.5 hours practice, exploration, and memorization.
- Learning Activity 2: Approximately 3 hours practice, exploration, and memorization.

- Learning Activity 3: Approximately 1 hour practice, exploration, and memorization.

- MOAC labs – 1.5 hours

- Quiz – 2 hours (time for multiple attempts)

- Skills Demonstration – 2 hours

Students requiring more time than is defined for this lesson to master the competencies and objectives should spend the time needed beyond their normal study schedule (i.e., Home Work) to achieve success!

Learning Activity 1: Working With Disks

For this learning activity, read textbook lesson 4 pages 106 through 129. Use the textbook and the following videos and follow along and practice on your own system as you learn to perform the following tasks (in the classroom, your instructor can assist in providing you with a machine with 3 hard drives):

- Use Disk Management to create, shrink, extend, and format volumes and partitions

- Assign drive letters to volumes and partitions

- Move data between volumes

- Initialize disks

- Create spanned volumes

- Create striped volumes

- Configure Disk Mirroring and Disk Striping

- Defragment a volume

Remember to:

- Take notes

- Practice implementing the skills presented in the book and videos

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

Learn to use Disk Management to shrink, create, format, and delete volumes.

https://www.youtube.com/watch?v=MXUB41BBq18&feature=youtu.be (Links to an external site.)Links to an external site.

 Learn to resize a partition and merge two partitions into one partition

https://www.youtube.com/watch?v=GjDRiTu2SP8 (Links to an external site.)Links to an external site.

Learn to configure software-based RAID 1 in Windows 7

https://www.youtube.com/watch?v=Ecb9UZZqP-w (Links to an external site.)Links to an external site.

Learn the differences between RAID 0 and RAID 1. Watch a demonstration of hardware RAID configured through motherboard settings. Research online or ask your instructor the difference between software and hardware-based RAID.

https://www.youtube.com/watch?v=RYBtmVMtH1g (Links to an external site.)Links to an external site.

Learning Activity 2: Working With VHDs

For this learning activity, read pages 130-135 of the textbook and refer to the following video.

Learn and practice the following:

- Create VHDs

- Attach and detach VHDs

- Boot to a VHD

Professor Messer - Working With Virtual Hard Disks
Learn how to create VHDs and learn how to set up a system to boot from VHD

https://www.youtube.com/watch?v=U4ky1Tqml90 (Links to an external site.)Links to an external site.

Learning Activity 3: Devices and Drivers

For this learning activity, refer to pages 135-144 of your textbook and watch the following video to learn about working with device drivers in Windows 7.

Professor Messer - Configuring Windows 7 Devices **Instruction on working with drivers in Windows 7**

https://www.youtube.com/watch?v=VL9C-zC6-kE (Links to an external site.)Links to an external site.

KNWE 0680 Lesson 4 Online Labs (Lab 6)

Log into your MOAC Labs Online at https://moac.microsoftlabsonline.com (Links to an external site.)Links to an external site. and complete the 6th lab which is Working with Disks.

Download and follow the instructions in the lab manual. Additionally, refer to the following document (lab06.doc) and answer/complete all of the items that are in blue text and upload the document here and click on the submit button. **Lab Challenges are optional.** As part of this lab, you will be completing the following exercises:

NOTE For Exercise 6.1 please delete the existing partition labeled "System Backup" before performing lab.

- Creating a Basic Disk Partition (6.1)

- Extending a Basic Disk Partition (6.2)

- Creating Additional Partitions (6.3)

- Mounting a Volume (6.4)

- Working with Dynamic Disks (6.5)

- Lab Challenge: Working with VHDs

Please let your instructor know if you have any questions or have any problems while you are going through this lab or submitting the assignment.

These types of assignments are graded as Complete or Incomplete (a score of 25 will indicate the assignment has been graded "Complete"). Comments to you returned by your instructor will indicate there is additional work to do to receive a grade of "Complete."

KNWE 0680 Lesson 4 Quiz

Instructions

This is an open-book quiz to test and build your knowledge and understanding of concepts covered in lesson 4. You may take this quiz as many times as you choose. Be sure to communicate with your instructor if there are terms or concepts you are finding it difficult to understand or remember!

KNWE 0680 Module 4 Skills Demonstration

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 0680 Module 4 Skills Demonstration Rev3.docx

You will have a maximum of 2 hours to complete this skills demonstration. When the paperwork is completed, click the Submit Assignment button here and upload your paperwork and click the Submit Assignment button.

Resources: pages 130-135 in the text book and these websites:

VHD link 1 (Links to an external site.)Links to an external site.

VHD link 2 (Links to an external site.)Links to an external site.

Lesson 5: Learning Objectives and Competency

After completing this lesson, students will be able to:

Configure and Manage Network Connections

- Identify the functions of a variety of common services used in TCP/IP networks

- Configure IPv4 network settings appropriate to connect to a network including IP addressing, subnet mask, default gateway, and name resolution settings

- Configure IPv6 network settings network settings appropriate to connect to a network including IP addressing, subnet prefix, default gateway, and name resolution settings

- Manage Network Connections

- Use the Network and Sharing Center

- Use TCP/IP tools to test, troubleshoot, and resolve network connectivity

Learning activities will include reading through lesson 5 of the textbook and viewing related online videos.

Skills will be practiced and demonstrated by using guided activities from the textbook and online videos as well as the online practice labs which include:

Lab 7 Configuring Network Connections

- Using the Network and Sharing Center

- Enabling Network Map

- Manually Configuring TCP/IP

- Testing Network Connections

- Lab Challenge: Using Nslookup.exe

To complete the lesson, students will complete an assignment, a quiz, and a skills assessment.

The assignment is to submit documentation that represents the online lab activities have successfully been completed.

The quiz will be open book and students must score 35 or higher to pass.

The skills assessment will require students to use live equipment in the classroom to demonstrate their ability to perform the following tasks: Document TCP/IP configuration settings, configure and test connectivity between computers using IPv4 and IPv6, configure network locations, configure advanced sharing, identify ports and services, and utilize TCP/IP tools.

Example of Recommended Time Utilization for This Lesson

- Learning Activity 1: Approximately 2 hours practice, exploration, and memorization.

- Learning Activity 2: Approximately 4 hours practice, exploration, and memorization.

- Learning Activity 3: Approximately 1.5 hours practice, exploration, and memorization.

- MOAC Online Labs: Approximately 1.5 hours

- Quiz – 2 hours (time for multiple attempts)

- Skills Demonstration – 2 hours

Students requiring more time than is defined for this lesson to master the competency and objectives should spend the time needed beyond their normal study schedule (i.e., Home Work) to achieve success!

Lesson 5: Learning Activity 1: Networking Basics

For this learning activity, read textbook lesson 5 pages 146 through 160 and watch the following videos to be introduced to the OSI model and the TCP/IP protocol suite. Although the Microsoft exams do not test you on the layers of the OSI model, you will need to understand the function of the following items in a network:

- MAC addresses

- UTP cabling and RJ45 connectors

- IP Routing

- IPv4 Addressing (covered in further detail in another learning activity)

- IPv6 Addressing (covered in further detail in another learning activity)

- Common Services and their function along with their TCP and/or UDP port numbers (memorize those listed on page 159 of the textbook)

Remember to:

- Take notes

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

- Have fun!!!

Professor Messer - Common TCP and UDP Ports

https://www.youtube.com/watch?v=dp7R5-7acyw (Links to an external site.)Links to an external site.

Professor Messer - Management Protocols

https://www.youtube.com/watch?v=jAEt5ZugqEQ (Links to an external site.)Links to an external site.

Professor Messer - Application Protocols

https://www.youtube.com/watch?v=fmvRPBvKezE (Links to an external site.)Links to an external site.

Lesson 5: Learning Activity 2: IPv4 Addressing

For this learning activity, reread textbook lesson 5 starting at the page 150 IPv4 Addressing section through the first two lines on page 153 then read pages 161 through 169 and watch the videos below. Use the textbook and the following videos to learn and practice the following tasks:

- Configure a computer to obtain an IP address automatically

- Configure a computer with a static IP address including appropriate subnet mask, default gateway, and preferred DNS server addresses

- Identify the function of each of the following:

  o IP address

  o Default gateway

  o Subnet mask

  o DHCP

  o DNS

  o APIPA

  o NAT

  o IP router

- Identify IPv4 public and private address ranges

- Demonstrate IPv4 subnetting fundamentals (subnetting of class C networks)

- Describe IPv4 to IPv6 transition technologies

- Configure Advanced Sharing

- Change network locations

Remember to:

- Practice implementing the skills presented in the book and videos

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

- Take notes and frequently review your notes

- Share with others resources you locate and find valuable that improved your learning experience

Professor Messer - Overview of IPv4 and IPv6

https://www.youtube.com/watch?v=W_aTIbTRYeI (Links to an external site.)Links to an external site.

Professor Messer - Configuring IPv4 in Windows 7

https://www.youtube.com/watch?v=8pxerj_pgug (Links to an external site.)Links to an external site.

The Basics of Subnetting IPv4 - (Short video demonstrating one subnetting technique)

https://www.youtube.com/watch?v=y-HLDYhpAaY (Links to an external site.)Links to an external site.

IP Subnet Calculator

IPv4 Subnetting will be covered in much more detail in the Windows Server course and in the Cisco courses. If you plan to take the Microsoft 70-680 exam prior to completing those courses, you will want to spend time ensuring you fully understand how to subnet Class C networks. Those who have not worked with binary or been introduced to subnetting previously generally find subnetting to be a bit challenging at first but are able to master it with sufficient study and practice. It really is not too difficult but may take more hours than are allocated to this lesson to master. Please speak with your instructor for further guidance and instruction in subnetting if you plan to take the 70-680 exam before completing the Server courses.

Lesson 5: Learning Activity 3: IPv6 Adressing and TCP/IP Tools

For this learning activity, read textbook lesson 5 starting at the bottom of page 169 (Configuring IPv6 Settings) through page 183 and watch the videos(s) below. Use the textbook and the following videos to learn and practice the following tasks:

- Document IPv4 and IPv6 addresses and settings

- Configure IPv6 addresses manually including subnet prefix, default gateway, and DNS server settings

- Test and troubleshoot connectivity between IPv4 and IPv6 computers using TCP/IP tools

Remember to:

- Take notes

- Research using online resources to help fill knowledge gaps

- Ask your instructor questions to help fill knowledge gaps

Professor Messer - Configuring IPv6 in Windows 7

https://www.youtube.com/watch?v=0RvJG96iwBg (Links to an external site.)Links to an external site.

KNWE 0680 Lesson 5 Online Labs (Lab 7)

Log into your MOAC Labs Online at https://moac.microsoftlabsonline.com (Links to an external site.)Links to an external site. and complete the 7th lab which is Configuring Network Connections.

Download and follow the instructions in the lab manual. Additionally, refer to the following document (lab07.doc) and answer/complete all of the items that are in blue text and when complete, upload the document here and click on the submit button. **Lab Challenges are optional.** As part of this lab, you will be completing the following exercises:

- Using the Network and Sharing Center (7.1)

- Enabling Network Map (7.2)

- Manually Configuring TCP/IP (7.3)

- Testing Network Connections (7.4)

- Lab Challenge: Using Nslookup.exe

Please let your instructor know if you have any questions or have any problems while you are going through this lab or submitting the assignment.

These types of assignments are graded as Complete or Incomplete (a score of 25 will indicate the assignment has been graded "Complete"). Comments to you returned by your instructor will indicate there is additional work to do to receive a grade of "Complete."

KNWE 0680 Lesson 5 Quiz

Instructions

This is an open-book quiz to test and build your knowledge and understanding of concepts covered in lesson 5. You may take this quiz as many times as you choose. Be sure to communicate with your instructor if there are terms or concepts you are finding it difficult to understand or remember!

KNWE 0680 Module 5 Skills Demonstration

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 0680 Lesson 5 Skills Demonstration - IP Networking (REV 3).docx

You will have a maximum of 2 hours to complete this skills demonstration. When the paperwork is completed, click the Submit Assignment button here and upload your paperwork and click the Submit Assignment button.

Lesson 6: Learning Objectives and Competency

After completing this lesson, students will be able to:

- Demonstrate understanding of the Windows permission system

- Manage NTFS permissions

- Distinguish between the three types of sharing

- Manage share permissions

- Configure shared resources

- Configure file and folder access

- Install printers

- Share printers
- Control printer access
- Create a printer pool

Learning activities will include reading through lesson 5 of the textbook and viewing related online videos.

Skills will be practiced and demonstrated by using guided activities from the textbook and online videos as well as the online practice labs which include:

Labs 8 & 9 Working With Shares & Printers

- Setting up a Workstation (8.1)
- Sharing a Folder (8.2)
- Using the Shared Folders Snap-in (8.3)
- Configuring NTFS Permissions (8.4)
- Lab Challenge: Compressing Files and Folders
- Installing a Printer (9.1)
- Sharing a Printer (9.2)
- Controlling Access to a Printer (9.3)
- Creating an Additional Logical Printer (9.4)
- Lab Challenge: Creating a Printer Pool

To complete the lesson, students will complete an assignment, a quiz, and a skills assessment.

The assignment is to submit documentation that represents the online lab activities have successfully been completed.

The quiz will be open book and students must score 35 or higher to pass.

The skills assessment will require students to use live equipment in the classroom to demonstrate their ability to perform the following tasks: Create different share types, configure share and NTFS permissions, install printers, share printers, control printer access and create a printer pool.

Example of Recommended Time Utilization

- Learning Activity 1: Approximately 1.5 hours practice, exploration, and memorization.
- Learning Activity 2: Approximately 2 hours practice, exploration, and memorization.
- Learning Activity 3: Approximately 2 hours practice, exploration, and memorization.
- MOAC Online Labs: Approximately 2 hours
- Quiz – 2 hours (time for multiple attempts)
- Skills Demonstration – 2.5 hours

Students requiring more time than is defined for this lesson to master the competency and objectives should spend the time needed beyond their normal study schedule (i.e., Home Work) to achieve success!

Lesson 6: Learning Activity - Textbook and Videos

For this lesson, read chapter 6 from the textbook.

Remember to:

- Take notes and frequently review your notes
- Practice implementing the skills discussed in this lesson
- Research using online resources to help fill knowledge gaps
- Ask your instructor questions to help fill knowledge gaps
- Share with others resources you locate and find valuable that improved your learning experience

Related Videos -

Professor Messer - Windows 7 Shared Resources

https://www.youtube.com/watch?v=ELVdJNoXxHg (Links to an external site.)Links to an external site.

Professor Messer - Windows 7 File and Folder Access

https://www.youtube.com/watch?v=GGCcK2HBVRE (Links to an external site.)Links to an external site.

Overview of NTFS Permissions in Windows 7

https://www.youtube.com/watch?v=CHQ9LxpZJqk&feature=youtu.be (Links to an external site.)Links to an external site.

Windows 7 File Sharing

https://www.youtube.com/watch?v=gHoLRxbWdCE (Links to an external site.)Links to an external site.

Learning Activity 1: NTFS Permissions

For this learning activity, read textbook lesson 6 pages 184 - 197. Related videos will be presented in the next learning activity.

Learn and practice the following:

- Manage NTFS permissions
- Allow and deny permissions
- Identify and manage permission inheritance
- Identify effective permissions
- Assign NTFS permissions
- Memorize permissions listed on pages 192, 195, and 196
- Use ICACLS.exe
- Manage resource ownership

Remember to:

- Take notes and frequently review your notes

- Practice implementing the skills discussed in this lesson
- Research using online resources to help fill knowledge gaps
- Ask your instructor questions to help fill knowledge gaps

Learning Activity 2: Sharing Files and Folders

For this learning activity, read textbook lesson 6 pages 198 - 206 and watch the videos below

Learn and practice the following:

- Sharing folders in Windows 7
- Creating and joining Homegroups
- Sharing the public folder
- Managing share permissions
- Combining share and NTFS permissions

Remember to:

- Take notes and frequently review your notes
- Practice implementing the skills discussed in this lesson
- Research using online resources to help fill knowledge gaps
- Ask your instructor questions to help fill knowledge gaps

Professor Messer - Windows 7 Shared Resources

https://www.youtube.com/watch?v=ELVdJNoXxHg (Links to an external site.)Links to an external site.

Windows 7 File Sharing

https://www.youtube.com/watch?v=gHoLRxbWdCE (Links to an external site.)Links to an external site.

Professor Messer - File and Folder Access

From this video, start at 6:15 (Prior to 6:15, EFS is discussed which will be part of a different lesson)

https://www.youtube.com/watch?v=GGCcK2HBVRE (Links to an external site.)Links to an external site.

Overview of NTFS Permissions in Windows 7

https://www.youtube.com/watch?v=CHQ9LxpZJqk&feature=youtu.be (Links to an external site.)Links to an external site.

Learning Activity 3: Working with Printers

For this learning activity, read textbook lesson 6 pages 206 - 225 as well as the following handout: Setting an IP Address on a Printer

There are a few different printers in the classroom and you can use them as you learn and practice the following:

- Add a local printer
- Share a printer
- Assign printer permissions
- Add a network printer
- Manage documents
- Set printer priorities
- Schedule printer access
- Create a printer pool

Remember to:

- Take notes and frequently review your notes
- Practice implementing the skills discussed in this lesson
- Research using online resources to help fill knowledge gaps
- Ask your instructor questions to help fill knowledge gaps

KNWE 0680 Lesson 6 Online Labs (Lab 8 & 9)

Log into your MOAC Labs Online at https://moac.microsoftlabsonline.com (Links to an external site.)Links to an external site. and complete the 8th and 9th labs which are Working with Shares and Working with Printers.

Download and follow the instructions in the lab manual. Additionally, refer to the following documents (lab08.doc and lab09.doc) and answer/complete all of the items that are in blue text and when complete, upload the documents here and click on the submit button. **Lab Challenges are optional.** As part of this lab, you will be completing the following exercises:

- Setting up a Workstation (8.1)
- Sharing a Folder (8.2)
- Using the Shared Folders Snap-in (8.3)
- Configuring NTFS Permissions (8.4)
- Lab Challenge: Compressing Files and Folders
- Installing a Printer (9.1)
- Sharing a Printer (9.2)
- Controlling Access to a Printer (9.3)
- Creating an Additional Logical Printer (9.4)
- Lab Challenge: Creating a Printer Pool

Please let your instructor know if you have any questions or have any problems while you are going through this lab or submitting the assignment.

These types of assignments are graded as Complete or Incomplete (a score of 25 will indicate the assignment has been graded "Complete"). Comments to you returned by your instructor will indicate there is additional work to do to receive a grade of "Complete."

KNWE 0680 Lesson 6 Quiz

Instructions

This is an open-book quiz to test and build your knowledge and understanding of concepts covered in lesson 6. You may take this quiz as many times as you choose. Be sure to communicate with your instructor if there are terms or concepts you are finding it difficult to understand or remember!

KNWE 0680 Module 6 Skills Demonstration

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 0680 Lesson 6 Skills Demonstration - Shares and Permissions (Rev3).docx

You will have a maximum of 4 hours to complete this skills demonstration. When the paperwork is completed, click the Submit Assignment button here and upload your paperwork and click the Submit Assignment button.

Lessons 4-6 Practice Exam

Instructions

This is a ungraded practice exam. You may take it as many times as you wish. There are fill in the blank and short answer questions. This exam is not required.

This site needs to be opened in a new browser window.

Open SAT Program Questionnaire - CBE Students Only in a new window   Links to an external site.

KNWE 0680 Final Exam (Lessons 1-6)

Instructions

This exam must be taken in the TB 517 classroom or alternate as assigned by the instructor. A passing score of 45 of 60 (75%) is required. Students who do not pass on the first attempt may retake the exam a 2nd time on a day following their first attempt.

Lessons 1-3 All Questions (for students who have passed the course final exam)

Instructions

All questions for chapters 1-3 as practice for industry exam for those who have passed the required course final. **This exam is not required.**

Lessons 4-6 All Questions (for students who have passed the required course final)

Instructions

All questions for chapters 4-6 as practice for industry exam for those who have passed the required course final. **This exam is not required.**