## **KNWE 0740 Server Admin 2**

This course preceded by KNWE 0640 can be used as preparation to take the Microsoft 70-411 industry exam which validates candidates' knowledge and skills required to perform administration tasks necessary to maintain a Windows 2012 infrastructure and can lead to valuable resume-building titles such as Microsoft Certified Professional (MCP) and Microsoft Certified Solutions Associate (MCSA).

### **Course Description**

In this course, students will develop skills to configure Active Directory, Service Authentication, maintain FSMO roles, configure Group Policy settings, configure Active Directory backup and recovery, improve network share performance and reliability, secure data, and configure Audit Policies. These skills are used in business environments to manage day-to-day network and systems operations.

This course and the pervious course, KNWE 0640, can be used as preparation to take the Microsoft 70-411 industry exam which validates candidates' knowledge and skills required to perform administration tasks necessary to maintain a Windows 2012 infrastructure 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, 70411, 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**

## Students who successfully complete this course will be competent to perform the following functions:

- Configure Name Resolution
  - This competency covers name resolution, resolving queries for records, creating and managing DNS zones, and creating DNS records.
- Configure Remote Access
  - Students will learn concepts about managing remote access. This includes understanding and
    configuring routers, securing communications over an untrusted network, authorizing remote
    clients and protecting access to a network.
- Perform Server Management tasks
  - This competency covers management of a server such as, updating software, deploying operating systems, and monitoring server, logs, and network traffic.

## **Module 1 Learning Outcomes and Objectives**

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

#### **Configure Name Resolution**

- Configure DNS Zones
  - Configure primary and secondary zones, Configure stub zones, Configure conditional forwarders, Configure zone delegation, configure zone transfer settings, configure notify settings
- Configure DNS Records
  - Create and configure DNS Resource Records including A, AAA, PTR, SOA, NS, SRV, CNAME, and MX records, Configure zone scavenging, Configure record options, Configure Round Robin, Configure secure dynamic updates

# **Learning Activity: TestOut - Complete the 6 sections including quizzes under lesson 4 DNS**

## Module 1, KNWE0740 TestOut 4.0 Evidence of Completion

Students are required to complete each of the TestOut labs and Lesson Review Exams with a passing grade through section 4.6. In TestOut, select the Score Sheet under Personal Reports as shown in the image below. Also, ensure that Exams and Labs are selected under Resource Types. Next, use the Build Report button in the bottom right corner of the screen to build your report. Use the Windows Snipping Tool to capture an image of your report that represents you have completed all labs and quizzes with a passing score then save the image as a jpg and **submit the assignment here in Canvas**.

## **Learning Activity: Review Textbook Chapter 3 Configuring Name Resolution**

Link to Chapter 3 Configuring Name Resolution

## **Module 1, KNWE0740 Practice Exercises**

Using live equipment, complete the practice exercises from chapter 3 of the textbook. Following the format used in the <a href="Example Lab Demonstration">Example Lab Demonstration</a> document, use MS Word and the MS Snipping Tool or equivalent tools to create screenshots of the key moments of each exercise, briefly describe what the screenshots show and briefly describe the steps you took to successfully completed the exercises. Upload here and submit the assignment for your instructor's review.

Chapter 3 practice exercises:

#### **Exercises**

- 1. Manage DNS Zones
- 2. Configure Partition-based Replication
- 3. DNS Delegation and Secondary Zones
- 4. Configure a Secondary Zone



- 5. Single-label Name Resolution
- 6. Configure and Manage DNSSEC

#### **KNWE 0740 Module 1 Exam DNS**

### **Module 2 Learning Outcomes and Objectives**

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

- 1. Install and configure the Remote Access role. Configure VPN settings, network address translation (NAT), and routing.
- 2. Configure Network Policy Server (NPS). Configure RADIUS server infrastructures, RADIUS clients, RADIUS templates, and RADIUS accounting.
- 3. Configure connection request policies; configure network policies for VPN clients; manage NPS templates; import and export NPS policies
- Configure System Health Validators (SHVs); configure health policies; configure NAP enforcement using DHCP and VPN; configure isolation and remediation of non-compliant computers using DHCP and VPN; configure NAP client settings

## Learning Activity: TestOut - Complete the 7 sections including quizzes under lesson 5 Remote Access Management

### Module 2, KNWE0740 TestOut 5.0 Evidence of Completion

Students are required to complete each of the TestOut labs and Lesson Review Exams with a passing grade for each of the sections from 5.0. In TestOut, select the Score Sheet under Personal Reports. Also, ensure that Exams and Labs are selected under Resource Types. Next, use the Build Report button in the bottom right corner of the screen to build your report. Use the Windows Snipping Tool to capture an image of your report that represents you have completed all labs and quizzes with a passing score then save the image as a jpg and **submit the assignment here in Canvas**.

## **Learning Activity: Review Textbook Chapter 7 Administering Network Policies**

Link to Chapter 7 Administering Network Policies

## **Learning Activity: Review Textbook Chapter 8 Administering Remote Access**

Link to Chapter 8 Administering Remote Acces

## **Module 2, KNWE0740 Practice Exercises**

Using live equipment, complete the practice exercises from chapters 7 and 8 of the textbook. Following the format used in the Example Lab Demonstration document, use MS Word and the MS Snipping Tool or equivalent tools to create screenshots of the key moments of each exercise, briefly describe what the screenshots show and briefly describe the steps you took to successfully completed the exercises. Upload here and submit the assignment for your instructor's review.

**Chapter 7 Exercises** 

Chapter 8 Exercises

#### **Chapter 7 Exercises**

- 1. Installing the DHCP Role
- 2. Deploying the NPS Role
- 3. Configuring Windows Security Health Validator
- 4. Configuring a Remediation Server Group
- 5. Configuring Client Policies For DHCP Enforcement
- 6. Configuring NAP DHCP Enforcement

#### **Chapter 8 Exercises**

- 1. Configure a RADIUS Server
- 2. Configure a RADIUS Server Group
- 3. Configure a RADIUS Client
- 4. Set Up RADIUS Accounting
- 5. Install a VPN Server
- 6. Configure a VPN Server
- 7. Prepare for Web Application Proxy
- 8. Configure AD FS to Support Web Application Proxy
- 9. Deploy Web Application Proxy pass-through preauthentication

### **KNWE 0740 Module 2 Exam Remote Access**

## **Module 3 Learning Outcomes and Objectives**

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

- 1. Install the Windows Deployment Services role. Configure settings and install features to deploy and manage server and client system images
- 2. Install the Windows Server Update Services (WSUS) role. Configure WSUS for Windows update and patch management.
- 3. Monitor server performance using Data Collector Sets, Task Manager, Resource Monitor, Performance Monitor, Event Viewer, and Reliability Monitor.
- 4. Monitor network performance using command line tools and protocol analyzers.



# Learning Activity: TestOut - Complete the 6 sections including quizzes under lesson 6 Server Management

### Module 3, KNWE0740 TestOut 6.0 Evidence of Completion

Students are required to complete each of the TestOut labs and Lesson Review Exams with a passing grade for each section in 6.0. In TestOut, select the Score Sheet under Personal Reports as shown in the image below. Also, ensure that Exams and Labs are selected under Resource Types. Next, use the Build Report button in the bottom right corner of the screen to build your report. Use the Windows Snipping Tool to capture an image of your report that represents you have completed all labs and quizzes with a passing score then save the image as a jpg and **submit the assignment here in Canvas**.

## Learning Activity: Review Textbook Chapter 1 Deploying and Updating Windows Server 2012 R2

Link to Chapter 1 Deploying and Updating Windows Server 2012 R2

# **Learning Activity: Review Textbook Chapter 10 Monitoring and Auditing**

Link to Chapter 10 Monitoring and Auditing

## Module 3, KNWE0740 Practice Exercises

Using live equipment, complete the practice exercises from chapters 1 and 10 of the textbook. Following the format used in the Example Lab Demonstration document, use MS Word and the MS Snipping Tool or equivalent tools to create screenshots of the key moments of each exercise, briefly describe what the screenshots show and briefly describe the steps you took to successfully completed the exercises. Upload here and submit the assignment for your instructor's review.

Chapter 10 Exercises

#### **Chapter 10 Exercises**

- 1. Configure data collector sets
- 2. Configure alerts
- 3. Manage event subscriptions
- 4. Perform network monitoring
- Configure removable device auditing
- 6. Configure logon auditing
- 7. Configure expression-based audit policies
- 8. Enable folder auditing

## **KNWE 0740 Module Exam 3 Server Management**

#### **KNWE 0740 Final Skills Assessment**

Please read through the information below and then information about the TestOut certification test that is part of the next assignment before taking this exam.

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 your other exams have been and will include 14 performance-based assessment items and will require a score of 80% or higher to pass. Students are allowed 140 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 this exam or the TestOut certification exam, upload a screen capture of your score here in Canvas and click on the Submit button.

This exam can be waived for students who pass the TestOut Windows Server Pro: Install and Configure certification exam prior to their course end date.

## **TestOut Windows Server Pro: Manage and Administer**

#### Please read carefully!

Included with the purchase of TestOut, the instructor has access to a single voucher per student that allows the instructor to enable the <u>TestOut Windows Server Pro: Install and Configure exam</u> for students to take in the classroom. This exam is CLOSED-BOOK and instructor proctored and the exam will include 11 performance-based questions and there will be a 120 minute time limit (information subject to change) and allows students the opportunity to demonstrate their knowledge, skills, and abilities in managing and administering the server operating system. This exam is scored automatically by TestOut and the instructors have no say in the scoring.

Students who pass the exam will receive a certificate signed by TestOut and may forgo the KNWE 0740 course final exam. Students who do not pass the exam may retake the exam at an additional cost if they would like the TestOut certification by following these steps:

#### Student TestOut Pro Exam Voucher Order process - \$39

Go to www.testout.com (Links to an external site.)Links to an external site. and click on the **Shopping Cart icon** in upper right corner.

- Enter Price Code: **14-339TA** and press Continue
- Select the Exam voucher you need. Add to Cart and press Checkout
- Type in School Name: Salt Lake Community College
- No State Sales Tax except for Utah residents.
- You will be emailed your LabSim activation code.
- Please enter the 16-digit code on your LabSim Home page under My Products by clicking Add button. Then contact your teacher to let him/her know that the new Pro Exam voucher has been activated.

Students who do not pass this exam must pass the KNWE0740 Final Skills Assessment to pass the KNWE0740 course.

Once you have taken the exam, submit your score here.

Please speak with your instructor if you have questions or would like further clarification.

#### Microsoft Exam 70-411

The Microsoft 70-411 exam is a challenging exam that will validate your ability to administer the tasks required to maintain a Windows Server 2012 infrastructure.

#### Before taking the exam:

- 1. Request the MeasureUp practice exam software from your instructor. It is recommended to start in Custom Exam mode and focus on one specific topic at a time until you have it mastered.
- 2. Check to see if Microsoft is offering a free 2nd try for those who may not pass the exam on their first attempt. This information can usually be found on the exam website (https://www.microsoft.com/learning/en-us/exam-70-411.aspxLinks to an external site.).
- 3. Refer to the following Microsoft web page for recommendations on preparing for an exam and preparing for exam day: <a href="https://www.microsoft.com/learning/en-us/certification-exams.aspx">https://www.microsoft.com/learning/en-us/certification-exams.aspx</a> (Links to an external site.) Links to an external site.

#### Register to Take the Exam

You should generally schedule your exam a few days in advance to ensure the day and time you would like to test are available.

- 1. Click the *Register For An Exam* button found on the right side of the page at the following link: <a href="http://www.pearsonvue.com/microsoft/">http://www.pearsonvue.com/microsoft/</a>.)Links to an external site.
- 2. Select the 70-411 exam for instance (there are two options; one exam you schedule to take at a testing center and the 70-411-OP you schedule to take in the online proctored format. You can read more about the online proctored exams here <a href="https://www.microsoft.com/learning/en-us/online-proctored-exams.aspxLinks">https://www.microsoft.com/learning/en-us/online-proctored-exams.aspxLinks</a> to an external site.)
- 3. This takes you here: <a href="https://www.microsoft.com/learning/en-us/exam-70-411.aspxLinks">https://www.microsoft.com/learning/en-us/exam-70-411.aspxLinks</a> to an external site.. Click on the Schedule exam button. This takes you to login with your Windows Live account (you will need to create an account if you do not already have one).
- 4. The Welcome screen pops up and **to receive the student pricing ensure you select Student as your job function**. Click Save Profile. After updating your profile, the next screen is Confirm Your Registration Details and click Submit which transfers you to Pearson Vue to schedule and pay.
- 5. On PearsonVue's site, select the "I will be scheduling for a future date at a test center."
- 6. Select English as the language.
- 7. The price should show as \$83.00 (\$150 is the regular price) and you can pay either with a credit card or with a voucher. If you intend to purchase a voucher through the SLCC bookstore, the voucher price is approximately \$110. \*If you plan to buy a voucher, at least a week in advance, you will need to request that the department coordinator place a request to have the bookstore order in a voucher for you.
- 8. Click the Schedule this exam button and then select the location where you would like to test. Select a testing center convenient to your location that has time slots available to meet your needs. SLCC offers testing at the South City campus and at the Miller campus but testing times may be limited. In the PearsonVue online scheduler, the SLCC South City campus shows appointments available on Mondays and Tuesdays only. If you would like to test on a different day, contact your instructor who can work with the Testing Center to arrange an alternative time. To proceed with scheduling to test at the South City campus at a time that is not showing as available, perform the following:



- 1. Speak with your instructor to have him/her contact the South City testing center to see if the time you would like to test is available
- 2. Schedule your test online through PearsonVue and select a testing date 3 or 4 weeks out and pay for the exam. Inform your instructor that you have scheduled the exam online and your instructor will then contact the South City campus testing center to request they modify your testing appointment.

Please see your instructor if you have any questions or need further assistance.