



This course supports the assessments for Directory Services. The course covers 7 competencies and represents 6 competency units.

Introduction

Overview Microsoft Windows Server 2008 is one of the most widely used Windows server operating systems in the industry today. This system provides robust functions of computing that no other Windows Server operating systems has previously provided. Successfully mastering Windows Server 2008 is beneficial for a number of reasons, including:

- the opportunity to become an expert in the field of information technology;
- the ability to improve productivity through installation, configuration; and troubleshooting, and
- the chance to learn how to plan within, implement, troubleshoot, and maintain a Microsoft Windows Server 2008 network environment.

If you have prior experiences with other Microsoft server operating systems, including:

- Windows NT Server 4.0,
- Windows 2000 Servers/Advance Servers, and/or
- Windows Server 2003,

it will be relatively easy for you to command Windows Server 2008 R2, as it inherits many attributes from those earlier operating systems.

Watch the following video introduction for this course:

Note: To download this video, right-click the following link and choose "Save as...": [download video](#).

Competencies

This course provides guidance to help you demonstrate the following 7 competencies:

- **Competency 429.2.1: Directory Infrastructure**
The graduate designs and configures a directory infrastructure to meet business needs and technical requirements.
- **Competency 429.2.2: Domain Name Systems for Directory Services**
The graduate designs and implements domain name systems for directory services for an organization.
- **Competency 429.2.3: Configuring Directory Services Infrastructure**
The graduate creates configuration strategies for directory services infrastructures for networks.
- **Competency 429.2.4: Configuring Servers for User Authentication**



The graduate implements plans for configuring directory services with authentication.

- **Competency 429.2.5: Directory Server Objects**

The graduate creates and maintains different directory server objects.

- **Competency 429.2.6: Performance Tuning and Maintenance of Directories**

The graduate creates plans for performance tuning and maintenance; and creates strategies for the backup and recovery of directories, including Microsoft Active Directory, in various environments.

- **Competency 429.2.7: Certificate Services**

The graduate identifies and plans strategies for installing and configuring certificate services on a directory server.

Course Instructor Assistance

As you prepare to successfully demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don't work out on your first try, course instructors act as a support system to guide you through the revision process. You should expect to work with course instructors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course instructors are fully committed to your success!

Preparing for Success

The information in this section is provided to detail the resources available for you to use as you complete this course.

Pacing Guide

The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.

- [Directory Services](#)

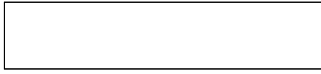
Note: This pacing guide does not replace the course. Please continue to refer to the course for a comprehensive list of the resources and activities.

Learning Resources

The assessment experience is different for each and every student but there is one constant: you must take advantage of multiple learning resources to complete this assessment successfully. Below are suggestions and best practices to help you use the provided learning resources effectively. Keep in mind these are general best practices and may not be applicable for every student or every study plan. Please contact a course instructor right away if you have



any questions. The course instructor shared inbox is cmMicrosoft@wgu.edu.



- Click [here](#) for a short article that provides step-by-step instructions on how to use DreamSpark to download and install an operating system. Included is an example of a Microsoft test lab on a Hyper-V machine (you may be asked to provide your WGU credentials).



- Go to "About this Course" and download the "NuggetLab Files." The CBT Nuggets trainer will refer to these resources throughout the videos. If you wish to download the lecture audio files, you can access the download link from the same page.
- It is recommended that you work with the MeasureUp lab technologies as the CBT Nuggets' instructor is speaking. Pause the videos when you need more time to set up your own environment.
- When you watch a video, take detailed notes. This video series provides demos, and a high-level understanding of the topics. However, this video series is not designed to provide all the content for the assessment. As the trainer completes a given topic (not an entire video in most cases), find a relevant lab and duplicate that lab the best you can in your home lab environment. Do not move on until you try working the material in your own environment and researching the material in detail via TechNet.
- Feel free to supplement CBT Nuggets with an optional textbook. If this is your preference, please let your course instructor know. We can provide suggestions on texts that can supplement your studies.

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- It is recommended that you work with the MeasureUp lab technologies as the CBT Nuggets' instructor is speaking. Pause the videos when you need more time to set up your own environment.
- Click [here](#) to view the MeasureUp FAQ document for technical support and additional best practices on using MeasureUp Labs.



- Go through the labs multiple times. The repetition and redundancy will improve your recollection and familiarity with services and processes assessed on the exam.
- Venture outside the lab document. The MeasureUp Lab environment contains fully functional virtual machines, not simulations. So go further than what the instructions provide and take multiple angles at fulfilling the requirements of the lab document. Where the lab asks for steps to be completed in the GUI, try doing those steps in PowerShell.
- Although each lab environment differs with varying levels of hardware and resources, work these labs in your own environment as much as you can.
- *Note: The Measureup lab experience can be much like going to a computer lab; there are occasions when there is a line to be able to get access to a machine, and there can also be a wait time for the lab to load. Load times usually take around 30 seconds. A wait time for the specific lab you would like to enter may take about 10 minutes and you can be emailed a lab-availability notification should you request one.*

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- Take the Preset Exam Experience first to get an idea of what you are going to be studying, and to check your level of preparation before you start reviewing the material.
- As you complete each "week" in the pacing guide, take the Optimized Exam Experience in Transcender multiple times. Do not be concerned with your score at this point, and make sure you score each item individually so you can review the explanations and TechNet articles. This information is key and should also be worked in your own environment!
- There are features within the Transcender that allow you to set up your own preferences for flashcards and practice; this is a good tool to use throughout your studies in this course. It is customizable as your knowledge progresses, and might also serve as a good self-preassessment.
- Once confident in all the areas, return to Transcender's Preset Exam Experience to assess your exam readiness.

OPTIONAL: Review additional material

- [Pluralsight \(90-day free trial\)](#)

Configuring Domain Name System (DNS) for Active Directory

The content and practice provided in this section represents **18%** of the total 70-640 exam.

Configuring Domain Name System (DNS) for Active Directory

This section addresses the following competency:



- Competency 429.2.2: Domain Name Systems for Directory Services
The graduate designs and implements domain name systems for directory services for an organization.

This topic highlights the following objectives:

- configuring zones
- configuring DNS server settings
- configuring zone transfers and replication

Complete: CBT Nuggets Module

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

- DNS Part 1
- DNS Part 2

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- [Configuring Domain Name System for Active Directory](#)

Complete: Transcender Optimized Test

Click the following link and take the optimized test as noted.

- [Configuring Domain Name System \(DNS\) for Active Directory](#)

Configuring the Active Directory Infrastructure

The content and practice provided in this section represents **17%** of the total 70-640 exam.

Configuring the Active Directory Infrastructure

This section addresses the following competency:

- Competency 429.2.1: Directory Infrastructure
The graduate designs and configures a directory infrastructure to meet business needs and technical requirements.

This topic highlights the following objectives:

- configuring a forest or a domain
- configuring trusts
- configuring sites
- configuring Active Directory replication
- configuring the global catalog
- configuring zone transfers and replication.



Complete: CBT Nuggets Module

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

- Installing Active Directory
- Server Core
- Operations Masters
- Domain Functional, Forest Functional Level
- Replication and Sites
- UPN and Trusts

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- [Configuring the Active Directory Infrastructure](#)

Complete: Transcender Optimized Test

Click the following link and take the optimized test as noted.

- [Configuring Additional Active Directory Server Roles](#)

Configuring Active Directory Roles and Services

The content and practice provided in this section represents **14%** of the total 70-640 exam.

Configuring Active Directory Roles and Services

This section addresses the following competencies:

- **Competency 429.2.3: Configuring Directory Services Infrastructure**
The graduate creates configuration strategies for directory services infrastructures for networks.
- **Competency 429.2.4: Configuring Servers for User Authentication**
The graduate implements plans for configuring directory services with authentication.

This topic highlights the following objectives:

- configuring active directory lightweight directory service (AD LDS)
- configuring active directory rights management service (AD RMS)
- configuring the read-only domain controller (RODC)
- configuring active directory federation services (AD FSv2).

Complete: CBT Nuggets Module

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

- Read Only Domain Controllers
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services



- Active Directory Federation Services

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- [Configuring Active Directory Roles and Services](#)

Complete: Transcender Optimized Test

Click the following link and take the optimized test as noted.

- [Configuring Additional Active Directory Server Roles](#)

Creating and Maintaining Active Directory Objects

The content and practice provided in this section represents **18%** of the total 70-640 exam.

Creating and Maintaining Active Directory Objects

This section addresses the following competency:

- **Competency 429.2.5: Directory Server Objects**
The graduate creates and maintains different directory server objects.

This topic highlights the following objectives:

- automating creation of active directory accounts
- maintaining active directory accounts
- creating and applying group policy objects (GPOs)
- configuring GPO templates
- deploying and managing software by using GPOs
- configuring account policies
- configuring audit policy by using GPOs

Complete: CBT Nuggets Module

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

- Automating Active Directory Accounts Part 1
- Automating Active Directory Accounts Part 2
- Managing User Accounts
- Groups and Computer Accounts
- UPN and Trusts
- Create and Apply Group Policy Objects
- GPO Account and Audit Policy
- GPO Software and Templates
- What's New in R2: AppLocker
- What's New in R2: Group Policy Objects

Complete: MeasureUp Lab



Complete the following MeasureUp lab:

- [Creating and Maintaining Active Directory Objects](#)

Complete: Transcender Optimized Test

Click the following link and take the optimized test as noted.

- [Creating and Maintaining Active Directory Objects](#)

Maintaining the Active Directory Environment

The content and practice provided in this section represents **18%** of the total 70-640 exam.

Maintaining the Active Directory Environment

This section addresses the following competency:

- **Competency 429.2.6: Performance Tuning and Maintenance of Directories**
The graduate creates plans for performance tuning and maintenance; and creates strategies for the backup and recovery of directories, including Microsoft Active Directory, in various environments.

This topic highlights the following objectives:

- configuring backup and recovery
- performing offline maintenance
- monitoring active directory
- configuring audit policy by using GPOs

Complete: CBT Nuggets Module

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

- Configuring Backup and Recovery
- Backup and Active Directory Maintenance
- Monitoring Active Directory
- What's New in R2: Active Directory Recycle Bin and Offline Domain Join
- What's New in R2: Active Directory Management
- What's New in R2: Windows PowerShell

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- [Maintaining the Active Directory Environment](#)

Complete: Transcender Optimized Test

Click the following link and take the optimized test as noted.

- [Maintaining the Active Directory Environment](#)



Configuring Active Directory Certificate Services

The content and practice provided in this section represents **15%** of the total 70-640 exam.

Configuring Active Directory Certificate Services

This section addresses the following competency:

- **Competency 429.2.7: Certificate Services**

The graduate identifies and plans strategies for installing and configuring certificate services on a directory server.

This topic highlights the following objectives:

- installing active directory certificate services
- configuring CA server settings
- managing certificate templates
- managing enrollments
- managing certificate revocations

Complete: CBT Nuggets Module

The following [CBT Nuggets](#) module covers content for the matched exam objective items:

- Configuring Active Directory Certificate Services Part 1
- Configuring Active Directory Certificate Services Part 2
- Configuring Active Directory Certificate Services Part 3
- What's New in R2: Certification Authorities
- What's New in R2: Biometrics, Smartcards, Dfs

Complete: MeasureUp Lab

Complete the following MeasureUp lab:

- [Configuring Active Directory Certificate Services](#)

Complete: Transcender Optimized Test

Click the following link and take the optimized test as noted.

- [Configuring Active Directory Certificate Services](#)

Final Steps

Congratulations on completing the activities in this course! This course has helped prepare you to complete the associated assessments. If you have not already been directed to complete the assessments, schedule and complete your assessments now.

First Attempt Checklist

One of the many things that make WGU unique is its competency based education model. If you know the material, all you have to do is prove it by passing the exam. If you can do this, you



can accelerate the receipt of your degree.

To make sure you have the best chance possible to pass the exam on your first attempt, **the following should be completed before you refer to take it:**

1. Read, review, and/or utilize all of the learning resources: CBT Nuggets, MeasureUp and Transcender Practice exams. These resources are some of the best in the industry at helping you prepare for this difficult assessment. Do not skip anything.
2. Take a Transcender randomized practice exam. Based on the score report of this practice exam, revisit the CBT Nuggets materials for those areas indicated as needing additional study. When you review the practice exam results, select “Sort by Objective” as an option to help you focus on the objectives needing additional study.
3. Use your own hands-on lab, in conjunction with CBT Nuggets and MeasureUp, to review the objectives indicated by Transcender as needing additional study. This will help you gain additional familiarity with the technologies. Repeat this process until you can score 90% or higher at least 5 times on the Transcender randomized practice exam.
4. Contact a course instructor at cmMicrosoft@wgu.edu for additional resources and valuable test-taking strategies. This is very important, as a course instructor can provide valuable advice and save you time when you focus on exam preparation.

If this has been done, and you feel comfortable with all of the concepts presented, you are most likely ready to refer for the first attempt of the exam.

If the first attempt is failed, you will be required to get in contact with the course instructor to see what went wrong and how you can prepare to make sure your second attempt is a success. Once the course instructor feels you are ready to refer for the second attempt of the exam, he or she will approve your second exam referral. However, why not contact a course instructor **before** you make your first assessment attempt?

Accessing Outside Vendor Assessments

Complete the Microsoft Exam 70-640 assessment:

For directions on how to receive access to outside vendor assessments, see the “[Accessing Objective and Outside Vendor Assessments](#)” page.

Submitting Outside Vendor Assessment Scores

After completing an outside vendor assessment, follow the directions for submitting a score report on the “[Following Outside Vendor Assessments](#)” page.