



This course supports the assessment for Network Reliability and Fault Tolerance. This course covers 6 competencies and represents 6 competency units.

## Introduction

### Overview

This course prepares students for the following certification exam:

- 70-412: Configuring Advanced Windows Server 2012 Services:

Watch the following video for an introduction to 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 6 competencies:

- **Competency 4007.1.1: Configure and Manage High Availability**  
The graduate configures and manages high availability.
- **Competency 4007.1.2: Configure File and Storage Solutions**  
The graduate configures file and storage solutions.
- **Competency 4007.1.3: Implement Business Continuity and Disaster Recovery**  
The graduate implements business continuity and disaster recovery.
- **Competency 4007.1.4: Configure Network Services**  
The graduate configures network services.
- **Competency 4007.1.5: Configure the Active Directory Infrastructure**  
The graduate configures Active Directory infrastructure.
- **Competency 4007.1.6: Configure Identity and Access Solutions**  
The graduate configures identity and access solutions.

### Course Instructor Assistance

As you prepare to 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 help you prepare for another attempt. You should



expect to work with course instructors for the duration of your coursework, and you are encouraged to contact them as soon as you begin. Course instructors are fully committed to your success!

## Getting Started

Welcome to Network Reliability and Fault Tolerance! The 70-412 Configuring Advanced Windows Server 2012 Services exam is the third in a series of three exams that test the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure in an existing enterprise environment. Passing this exam, along with the other two exams (70-410 and 70-411), confirms you have the skills and knowledge necessary for implementing, managing, maintaining, and provisioning services and infrastructure in a Windows Server 2012 environment.

After passing all three exams, you will have earned your MCSA certification (and credit towards your MCSE). Obtaining your MCSA: Windows Server 2012 qualifies you for a position as a network or computer systems administrator, or a computer network specialist.

Before beginning this course, you should already have passed the 70-410 Installing and Configuring Windows Server 2012 exam (included in WGU's course C185: Network Policies and Services Management) and the 70-411 Administering Windows Server 2012 exam (included in WGU's course C186: Server Administration).

Microsoft recommends that candidates for this certification should have at least 6 - 12 months of experience within the specific objectives identified.

For further information, please access the [Microsoft Certification Exams](#) page. This site contains videos describing the types of questions on your test.

For assistance with PowerShell, refer to the Lynda.com playlist [PowerShell – Getting Started!](#)

## Learning Resources

The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

### Automatically Enrolled Resources

You can access the learning resources listed in this section by clicking on the links provided throughout the course. You may be prompted to log in to the WGU student portal to access the resources.

### Pluralsight

You will have access to instructional videos from the following video sets provided by Pluralsight:



- Windows Server 2012 R2 (70-412) MCSA and the 70-412 Exam
- Windows Server 2012 R2 (70-412) Configure Network Services
- Windows Server 2012 R2 (70-412) Continuity and Disaster Recovery
- Windows Server 2012 R2 (70-412) Identity and Access Solutions
- Windows Server 2012 R2 (70-412) File and Storage Solutions
- Windows Server 2012 R2 (70-412) Configure Active Directory
- Windows Server 2012 R2 (70-412) Configure High Availability

Direct links to these video sets are included in the "Pluralsight Videos" activities that can be found throughout the course.

## Transcender Practice Exams

Transcender practice exams are provided to help you gauge your readiness for the 70-412 exam, and for use as practice. Links to the Transcender practice exams are included in the "Transcender Optimized Test" activities that can be found throughout the course, and also in the section titled "Transcender Practice Exam."

## Practice Labs

Use the Practice Labs simulations to work through and practice the exam content. Direct links to these simulations are included in the "Practice Labs" activities that can be found throughout the course.

Please review the article with the title, Best Practices for MS Resources in Course Tips (right navigation bar) to learn more about how to use these resources effectively and improve your chances of passing this certification exam on your first attempt. In addition, please feel free to take advantage of the following supplemental resources:

### OPTIONAL: Review additional material

- [Mastering Windows Server 2012 R2](#)
- [Skillsoft](#)

## 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.

### Week 1

#### MCSA and the 70-412 Exam Introduction

Watch the following Pluralsight videos:

- An Introduction to the MCSA's Final Exam (27m 42s)



- Building Your 70-412 R2 Environment (32m 50s)

## **Configure High Availability**

### **Configure Network Load Balancing**

Watch the following Pluralsight videos:

- Introduction (6m 16s)
- Configure Network Load Balancing (29m 58s)

Complete the following Practice Labs:

- Configure Network Load Balancing NLB

Review additional TechNet articles:

- 70-412: Configure Network Load Balancing (NLB)

### **Configure Failover Clustering**

Watch the following Pluralsight videos:

- Configure Failover Clustering (1h 5m)

Complete the following Practice Labs:

- Configure Failover Clustering

Review additional TechNet articles:

- 70-412: Configure Failover Clustering

## **Week 2**

### **Configure High Availability (Continued)**

#### **Manage Failover Clustering Roles**

Watch the following Pluralsight videos:

- Manage Failover Clustering Roles (40m 9s)

Review additional TechNet articles:

- 70-412: Manage Failover Clustering Roles



## **Manage VM Movement**

Watch the following Pluralsight videos:

- Manage VM Movement (31m 46s)

Review additional TechNet articles:

- 70-412: Manage VM movement

Complete the Transcender Optimized Test:

- Configure and Manage High Availability

## **Week 3**

### **File and Storage Solutions**

#### **Configure and Optimize Storage**

Watch the following Pluralsight videos:

- Introduction (4m 38s)
- Configure and Optimize Storage (56m 4s)

Complete the following Practice Labs:

- Configure and Optimize Storage

Review additional TechNet articles:

- 70-412: Configure and Optimize Storage

#### **Configure Advanced File Services**

Watch the following Pluralsight videos:

- Configure Advanced File Services (36m 0s)

Complete the following Practice Labs:

- Configure Advanced File Services

Review additional TechNet articles:

- 70-412: Configure Advanced File Services



## **Implement Dynamic Access Control**

Watch the following Pluralsight videos:

- Implement Dynamic Access Control (46m 1s)

Review additional TechNet articles:

- 70-412: Implement Dynamic Access Control (DAC)

Complete the Transcender Optimized Test:

- Configure File and Storage Solutions

## **Week 4**

### **Implement Business Continuity and Disaster Recovery**

#### **Configure and Manage Backups**

Watch the following Pluralsight videos:

- Introduction (5m 24s)
- Configure and Manage Backups (30m 55s)

Complete the following Practice Labs:

- Configure and Manage Backups

Review additional TechNet articles:

- 70-412: Configure and Manage Backups

#### **Recover Servers**

Watch the following Pluralsight videos:

- Recover Servers (30m 13s)

Complete the following Practice Labs:

- Recover Servers

Review additional TechNet articles:

- 70-412: Recover Servers



## **Configure Site-Level Fault Tolerance**

Watch the following Pluralsight videos:

- Configure Site-Level Fault Tolerance (38m 35s)

Review additional TechNet articles:

- 70-412: Configure Site-Level Fault Tolerance

Complete the Transcender Optimized Test:

- Implement Business Continuity and Disaster Recovery

## **Week 5**

### **Configure Network Services**

#### **Implement an Advanced Dynamic Host Configuration Protocol (DHCP) Solution**

Watch the following Pluralsight videos:

- Introduction (3m 16s)
- Implement an Advanced DHCP Solution (35m 49s)

Complete the following Practice Labs:

- Implement an Advanced DHCP Solution

Review additional TechNet articles:

- 70-412: Implement an Advanced Dynamic Host Configuration Protocol (DHCP) Solution

#### **Implement an Advanced DNS Solution**

Watch the following Pluralsight videos:

- Implement an Advanced DNS Solution (39m 40s)

Complete the following Practice Labs:

- Implement an Advanced DNS Solution

Review additional TechNet articles:

- 70-412: Implement an Advanced DNS Solution



## **Week 6**

### **Configure Network Services (Continued)**

#### **Deploy and Manage IP Address Management (IPAM)**

Watch the following Pluralsight videos:

- Deploy and Manage IP Address Management (53m 47s)

Complete the following Practice Labs:

- Deploy and Configure IPAM

Review additional TechNet articles:

- 70-412: Deploy and Manage IP Address Management (IPAM)

Complete the Transcender Optimized Test:

- Configure Network Services

## **Week 7**

### **Configure Active Directory**

#### **Configure a Forest or Domain**

Watch the following Pluralsight videos:

- Introduction (6m 21s)
- Configure a Forest or Domain (39m 0s)

Complete the following Practice Labs:

- Configure a Forest or a Domain

Review: Additional TechNet articles:

- 70-412: Configure a Forest or a Domain

### **Configure Trusts**

Watch the following Pluralsight videos:

- Configure Trusts (30m 31s)





Complete the following Practice Labs:

- Configure Trusts

Review: Additional TechNet articles:

- 70-412: Configure Trusts

## **Week 8**

### **Configure Active Directory (Continued)**

#### **Configure Sites**

Watch the following Pluralsight videos:

- Configure Sites (34m 24s)

Complete the following Practice Labs:

- Configure Sites

Review additional TechNet articles:

- 70-412: Configure Sites

### **Manage Active Directory and SYSVOL Replication**

Watch the following Pluralsight videos:

- Manage Active Directory and SYSVOL Replication (37m 46s)

Complete the following Practice Labs:

- Manage Active Directory and SYSVOL Replication

Review additional TechNet articles:

- 70-412: Manage Active Directory and SYSVOL Replication

Complete the Transcender Optimized Test:

- Configure the Active Directory Infrastructure

## **Week 9**



## **Identity and Access Solutions**

### **Install and Configure Active Directory Certificate Services (AD CS)**

Watch the following Pluralsight videos:

- Introduction (4m 1s)
- Install and Configure AD Certificate Services (57m 56s)

Complete the following Practice Labs:

- Install and Configure AD Certificate Services

Review additional TechNet articles:

- 70-412: Install and Configure Active Directory Certificate Services (AD CS)

### **Manage Certificates**

Watch the following Pluralsight videos:

- Manage Certificates (53m 9s)

Complete the following Practice Labs:

- Manage Certificates

Review additional TechNet articles:

- 70-412: Manage Certificates

## **Week 10**

### **Identity and Access Solutions (Continued)**

#### **Install and Configure Active Directory Rights Management Services (AD RMS)**

Watch the following Pluralsight videos:

- Install and Configure AD Rights Management Services (44m 13s)

Complete the following Practice Labs:

- Configure AD Rights Management Services

Review additional TechNet articles:



- 70-412: Install and Configure Active Directory Rights Management Services (AD RMS)

## **Implement Active Directory Federation Services (AD FS)**

Watch the following Pluralsight videos:

- Implement AD Federation Services (33m 36s)

Complete the following Practice Labs:

- Implement Active Directory Federation Services

Review additional TechNet articles:

- 70-412: Implement Active Directory Federation Services (AD FS)

Complete the Transcender Optimized Test:

- Configure Identity and Access Solutions

## **Week 11**

- Review areas of concern to reinforce understanding of concepts and processes
- Complete the Transcender Preset Exam

## **Week 12**

- Schedule your 70-412 Assessment

*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.*

## **Pretest**

Before you start this course, review the skills you will need to master. Take a practice test to get a sense of what you will face on the exam and to identify areas where you will need to focus your studying.

### **Skills Measured**

Review the "Skills Measured" section of [Microsoft's Exam 70-412 Configuring Advanced Windows Server 2012 Services](#) page. Expand each of the categories to see detailed expectations and topics.

### **Pretest**

Access the [Transcender Practice Exams for Cert-70-412](#). Click the Preset Exam Experience button, then complete "Preset: Exam A." This test includes 50 questions and allows two hours to complete. Give your best effort, then review your results.



## MCSA and the 70-412 Exam Introduction

View the following selections from [Windows Server 2012 R2 \(70-412\) MCSA and the 70-412 Exam](#):

- An Introduction to the MCSA's Final Exam (27m 42s)
- Building Your 70-412 R2 Environment (32m 50s)

## Configure and Manage High Availability

The content and practice provided in this section represents **16%** of the total 70-412 exam.

### Configure Network Load Balancing (NLB)

This topic addresses the following competency:

- **4007.1.1 Configure and Manage High Availability**  
The graduate configures and manages high availability.

**Complete: Pluralsight Videos**

Prior to viewing the Pluralsight videos for this subject, read **Chapter 17: Configure and Manage High Availability** from [MCSA: Windows Server R2 2012 Complete Study Guide \(Exams 70-410, 70-411, 70-412, and 70-417\)](#).

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure High Availability](#):

- Introduction (6m 16s)
- Configure Network Load Balancing (29m 58s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure Network Load Balancing NLB](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure Network Load Balancing \(NLB\)](#)

### Configure Failover Clustering

This topic addresses the following competency:

- **4007.1.1 Configure and Manage High Availability**  
The graduate configures and manages high availability.

**Complete: Pluralsight Videos**



View the following selections from [Windows Server 2012 R2 \(70-412\) Configure High Availability](#):

- Configure Failover Clustering (1h 5m)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure Failover Clustering](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure Failover Clustering](#)

## Manage Failover Clustering Roles

This topic addresses the following competency:

- **4007.1.1 Configure and Manage High Availability**

The graduate configures and manages high availability.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure High Availability](#):

- Manage Failover Clustering Roles (40m 9s)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Manage Failover Clustering Roles](#)

## Manage Virtual Machine (VM) Movement

This topic addresses the following competency:

- **4007.1.1 Configure and Manage High Availability**

The graduate configures and manages high availability.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure High Availability](#):

- Manage VM Movement (31m 46s)

**Review: Additional TechNet Articles**



The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Manage VM movement](#)

**Complete: Transcender Optimized Test**

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

- [Configure and Manage High Availability](#)

## Configure File and Storage Solutions

The content and practice provided in this section represents **18%** of the total 70-412 exam.

### Configure and Optimize Storage

This topic addresses the following competency:

- **4007.1.2 Configure File and Storage Solutions**  
The graduate configures file and storage solutions.

**Complete: Pluralsight Videos**

Prior to viewing the Pluralsight videos for this subject, read **Chapter 18: Configure File and Storage Solutions** from [MCSA: Windows Server 2012 R2 Complete Study Guide \(Exams 70-410, 70-411, 70-412, and 70-417\)](#).

View the following selections from [Windows Server 2012 R2 \(70-412\) File and Storage Solutions](#):

- Introduction (4m 38s)
- Configure and Optimize Storage (56m 4s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure and Optimize Storage](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure and Optimize Storage](#)

### Configure Advanced File Services

This topic addresses the following competency:

- **4007.1.2 Configure File and Storage Solutions**  
The graduate configures file and storage solutions.

**Complete: Pluralsight Videos**



View the following selections from [Windows Server 2012 R2 \(70-412\) File and Storage Solutions](#):

- Configure Advanced File Services (36m 0s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure Advanced File Services](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure Advanced File Services](#)

## **Implement Dynamic Access Control (DAC)**

This topic addresses the following competency:

- **4007.1.2 Configure File and Storage Solutions**

The graduate configures file and storage solutions.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) File and Storage Solutions](#):

- Implement Dynamic Access Control (46m 1s)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Implement Dynamic Access Control \(DAC\)](#)

**Complete: Transcender Optimized Test**

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

- [Configure File and Storage Solutions](#)

## **Implement Business Continuity and Disaster Recovery**

The content and practice provided in this section represents **14%** of the total 70-412 exam.

### **Configure and Manage Backups**

This topic addresses the following competency:

- **4007.1.3 Implement Business Continuity and Disaster Recovery**



The graduate implements business continuity and disaster recovery.

**Complete: Pluralsight Videos**

Prior to viewing the Pluralsight videos for this subject, read **Chapter 19: Implement Business Continuity and Disaster Recovery** from [MCSA: Windows Server 2012 R2 Complete Study Guide \(Exams 70-410, 70-411, 70-412, and 70-417\)](#).

View the following selections from [Windows Server 2012 R2 \(70-412\) Continuity and Disaster Recovery](#):

- Introduction (5m 24s)
- Configure and Manage Backups (30m 55s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure and Manage Backups](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure and Manage Backups](#)

## Recover Servers

This topic addresses the following competency:

- **4007.1.3 Implement Business Continuity and Disaster Recovery**

The graduate implements business continuity and disaster recovery.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Continuity and Disaster Recovery](#):

- Recover Servers (30m 13s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Recover Servers](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Recover Servers](#)





## Configure Site-level Fault Tolerance

This topic addresses the following competency:

- **4007.1.3 Implement Business Continuity and Disaster Recovery**  
The graduate implements business continuity and disaster recovery.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Continuity and Disaster Recovery](#):

- Configure Site-Level Fault Tolerance (38m 35s)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure Site-Level Fault Tolerance](#)

**Complete: Transcender Optimized Test**

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

- [Implement Business Continuity and Disaster Recovery](#)

## Configure Network Services

The content and practice provided in this section represents **17%** of the total 70-412 exam.

### Implement an Advanced Dynamic Host Configuration Protocol (DHCP) Solution

This topic addresses the following competency:

- **4007.1.4 Configure Network Services**  
The graduate configures network services.

**Complete: Pluralsight Videos**

Prior to viewing the Pluralsight videos for this subject, read **Chapter 20: Configure Advanced Network Services** from [MCSA: Windows Server 2012 R2 Complete Study Guide \(Exams 70-410, 70-411, 70-412, and 70-417\)](#).

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Network Services](#):

- Introduction (3m 16s)
- Implement an Advanced DHCP Solution (35m 49s)

**Complete: Practice Lab**



Complete the following Practice Lab:

- [Implement an Advanced DHCP Solution](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Implement an Advanced Dynamic Host Configuration Protocol \(DHCP\) Solution](#)

**Complete: Transcender Optimized Test**

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

- [Configure Network Services](#)

## **Implement an Advanced DNS Solution**

This topic addresses the following competency:

- **4007.1.4 Configure Network Services**  
The graduate configures network services.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Network Services](#):

- Implement an Advanced DNS Solution (39m 40s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Implement an Advanced DNS Solution](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Implement an Advanced DNS Solution](#)

## **Deploy and Manage IP Address Management (IPAM)**

This topic addresses the following competency:

- **4007.1.4 Configure Network Services**  
The graduate configures network services.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Network Services](#):



- Deploy and Manage IP Address Management (53m 47s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Deploy and Configure IPAM](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Deploy and Manage IP Address Management \(IPAM\)](#)

**Complete: Transcender Optimized Test**

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

- [Configure Network Services](#)

## Configure the Active Directory Infrastructure

The content and practice provided in this section represents **15%** of the total 70-412 exam.

### Configure a Forest or a Domain

This topic addresses the following competency:

- **4007.1.5 Configure the Active Directory Infrastructure**

The graduate configures Active Directory infrastructure.

**Complete: Pluralsight Videos**

Prior to viewing the Pluralsight videos for this subject, read **Chapter 21: Configure the Active Directory Infrastructure** from [MCSA: Windows Server 2012 R2 Complete Study Guide \(Exams 70-410, 70-411, 70-412, and 70-417\)](#).

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Active Directory](#):

- Introduction (6m 21s)
- Configure a Forest or Domain (39m 0s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure a Forest or a Domain](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.



- [70-412: Configure a Forest or a Domain](#)

## Configure Trusts

This topic addresses the following competency:

- **4007.1.5 Configure the Active Directory Infrastructure**

The graduate configures Active Directory infrastructure.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Active Directory](#):

- Configure Trusts (30m 31s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure Trusts](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure Trusts](#)

## Configure Sites

This topic addresses the following competency:

- **4007.1.5 Configure the Active Directory Infrastructure**

The graduate configures Active Directory infrastructure.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Active Directory](#):

- Configure Sites (34m 24s)

**Complete: Practice Lab**

Complete the following Practice lab:

- [Configure Sites](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Configure Sites](#)



## Manage Active Directory and SYSVOL Replication

This topic addresses the following competency:

- **4007.1.5 Configure the Active Directory Infrastructure**

The graduate configures Active Directory infrastructure.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Configure Active Directory](#):

- Manage Active Directory and SYSVOL Replication (37m 46s)

**Complete: Practice Lab**

Complete the following PracticeLab:

- [Manage Active Directory and SYSVOL Replication](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Manage Active Directory and SYSVOL Replication](#)

**Complete: Transcender Optimized Test**

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

- [Configure the Active Directory Infrastructure](#)

## Create Identity and Access Solutions

The content and practice provided in this section represents **19%** of the total 70-412 exam.

### Install and Configure Active Directory Certificate Services (AD CS)

This topic addresses the following competency:

- **4007.1.6 Configure Identity and Access Solutions**

The graduate configures identity and access solutions.

**Complete: Pluralsight Videos**

Prior to viewing the Pluralsight videos for this subject, read Chapter 22: Configure Access and Information Protection Solutions from [MCSA: Windows Server 2012 R2 Complete Study Guide \(Exams 70-410, 70-411, 70-412, and 70-417\)](#).

View the following selections from [Windows Server 2012 R2 \(70-412\) Identity and Access Solutions](#):

- Introduction (4m 1s)



- Install and Configure AD Certificate Services (57m 56s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Install and Configure AD Certificate Services](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Install and Configure Active Directory Certificate Services \(AD CS\)](#)

## Manage Certificates

This topic addresses the following competency:

- **4007.1.6 Configure Identity and Access Solutions**  
The graduate configures identity and access solutions.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Identity and Access Solutions](#):

- Manage Certificates (53m 9s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Manage Certificates](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Manage Certificates](#)

## Install and Configure Active Directory Rights Management Services (AD RMS)

This topic addresses the following competency:

- **4007.1.6 Configure Identity and Access Solutions**  
The graduate configures identity and access solutions.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Identity and Access Solutions](#):



- Install and Configure AD Rights Management Services (44m 13s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Configure AD Rights Management Services](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Install and Configure Active Directory Rights Management Services \(AD RMS\)](#)

## **Implement Active Directory Federation Services (AD FS)**

This topic addresses the following competency:

- **4007.1.6 Configure Identity and Access Solutions**

The graduate configures identity and access solutions.

**Complete: Pluralsight Videos**

View the following selections from [Windows Server 2012 R2 \(70-412\) Identity and Access Solutions](#):

- Implement AD Federation Services (33m 36s)

**Complete: Practice Lab**

Complete the following Practice Lab:

- [Implement Active Directory Federation Services](#)

**Review: Additional TechNet Articles**

The following link contains some TechNet articles that will help further your understanding of the concepts discussed in this module. This is not all-inclusive, but is a good starting point.

- [70-412: Implement Active Directory Federation Services \(AD FS\)](#)

**Complete: Transcender Optimized Test**

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

- [Configure Identity and Access Solutions](#)

## **Transcender Practice Exam**

Use the Transcender practice exam to help you prepare for the 70-412 exam.

### **Transcender Practice Exam**

Use the practice exam to gauge your readiness.

**Complete: Practice Exam**



Take the following preset practice exams to gauge your readiness for the 70-412 exam:

- [MSCert: Configuring Advanced Windows Server 2012 Services R2](#)

## Final Steps

Congratulations on completing the activities in this course! You are now prepared to complete the associated assessment. If you have not already been directed to complete it, schedule and complete the assessment now.

*\*\*Note: When you complete the final Microsoft test in the MCSA series, you will receive a Microsoft "badge" in an email from Acclaim. This will make it easier to market yourself, find average salaries for MCSA recipients, and search job opportunities. Please visit the [Microsoft Learning Badges page](#) for more information.*

## First Attempt Checklist

One of the many things that makes 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 steps should be completed successfully before you take it:

### 1. Find areas of concern

1. Use the Skills Measured section of the exam web page as a roadmap for verifying competency. Print out the Skills Measured section, then cross out those topics with which you are 100% comfortable. Get more study and hands-on practice with the remaining topics.
2. Test your understanding in Transcender on relevant objectives as you progress. Use the "Optimize" practice exam option with 5 questions per objective, one objective at a time. Use your own personal lab to practice (where appropriate).

### 2. Fill the gaps

1. Select the TechNet links when reviewing Transcender questions, for additional information.

### 3. Get more hands-on practice

1. Consider [installing](#) and [configuring a personal lab using Hyper-V](#).
2. [Microsoft Lab Setup Guide](#)
3. Review the List of [Real World Scenarios](#) and ensure you have completed all scenarios in Chapters 17 through 22.
4. Review the [List of Exercises](#) to ensure you have completed all exercises in Chapters 17 through





22.

5. Complete Practice Labs multiple times to reinforce familiarity.

**4. Take a periodic "progressive snapshot"**

1. Attempt the random 50-question Preset Exam from Transcender to assess your progress. To be fully prepared, you should score 90% or higher on multiple attempts.

**5. Recommended progress check prior to scheduling assessment**

1. Transcender Preset Exam score of 90% or higher.

2. Skillsoft TestPrep exam score of 90% or higher (see access instructions below as optional material).

**6. Relax**

1. 24 hours before you take the assessment, take a day off from studying.

If you have completed the steps above and you feel comfortable with all of the concepts presented, you are most likely ready to attempt the exam.

If you do not pass your first attempt, you will be required to contact the course instructor to see what went wrong and how you can prepare to ensure a successful second attempt. After determining you are ready, your course instructor will approve your request to make another exam attempt.