



# Course Outline

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**MCSA/MCSE - Configuring  
Advanced Windows Server 2012 R2  
Services (Course & Lab)**



16 Jan 2020



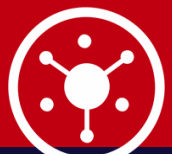
Lesson



Practice test



Lab



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## 1. Course Objective

Prepare for the Microsoft MCSA 70-412 exam with the MCSA/MCSE Configuring Advanced Windows Server 2012 R2 Services course and lab. Lab simulates real-world, hardware, software and command line interface environments and can be mapped to any text-book, course or training. The course and lab completely cover the objectives of the MCSA 70-412 exam and include topics such as configuring and managing high availability; configuring file and storage solutions; implementing business continuity and disaster recovery; configuring advanced network services; and more.

## 2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

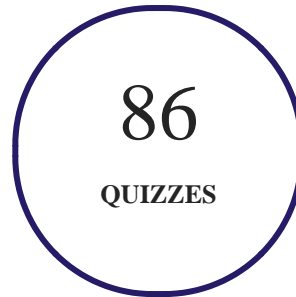
## 3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

**60**  
EXERCISES

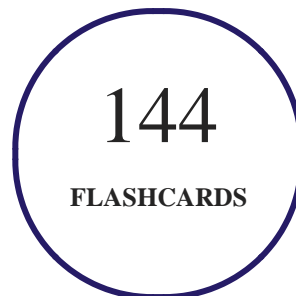
## 4. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



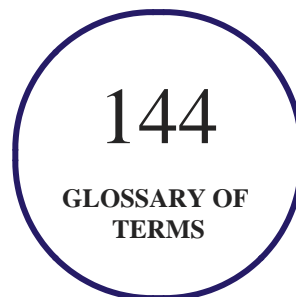
## 5. Flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



## 6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



## 7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assignments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's

finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 5 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas

### 3. Best Learning Relationship Management Solution

## 11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

## Syllabus

### Chapter 1: Configure and Manage High Availability

- Components of High Availability
- Achieving High Availability
- Configure Network Load Balancing
- Achieving High Availability with Failover Clustering
- Windows Server 2012 R2 Clustering Features
- Summary
- Exam Essentials

### Chapter 2: Configure File and Storage Solutions

- Configure Advanced File Services
- Implement Dynamic Access Control
- Configure and Optimize Storage
- Summary
- Exam Essentials

### Chapter 3: Implement Business Continuity and Disaster Recovery

- Protecting the System
- Backup and Recovery of Active Directory
- Understanding Shadow Copies
- Using Advanced Boot Options
- Configure Site-Level Fault Tolerance
- Using the Startup Repair Tool
- Summary
- Exam Essentials

### Chapter 4: Configure Advanced Network Services

- Working with Advanced DHCP Configuration Options



- The Ins and Outs of DNS
- IPAM Administration 101
- Summary
- Exam Essentials

## Chapter 5: Configure the Active Directory Infrastructure

- Overview of Network Planning
- Overview of Active Directory Replication and Sites
- Implementing Sites and Subnets
- Configuring Replication
- Monitoring and Troubleshooting Active Directory Replication
- Reasons for Creating Multiple Domains
- Creating Domain Trees and Forests
- Demoting a Domain Controller
- Managing Multiple Domains
- Summary
- Exam Essentials

## Chapter 6: Configure Access and Information Protection Solutions

- What's New in Windows Server 2012 R2 with Active Directory Certificate Services?
- Implement Active Directory Federation Services
- Workplace Join
- Active Directory Rights Management Services
- Summary
- Exam Essentials

### Chapter 7: Appendix A

- Videos

## Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

108

VIDEOS

19:17

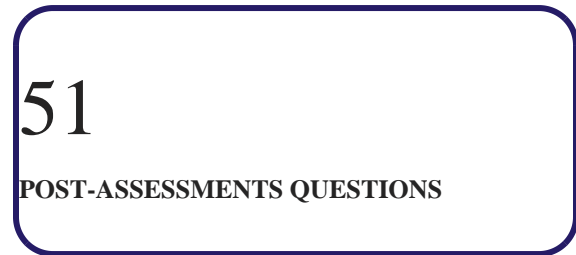
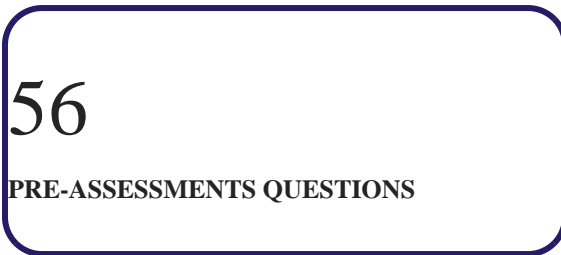
HOURS

## 12. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are

designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

## Here's what you get



## Features

### Full Remediation

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

### Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

### Learn, Test and Review Mode

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

## 13. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver

hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

## Lab Tasks

- Installing the Failover Clustering feature
- Creating a Network Load Balancing cluster
- Running the Validate a Configuration wizard
- Installing BranchCache
- Enabling auditing of Active Directory objects
- Installing Windows Server Backup
- Backing up Active Directory
- Configuring a shadow copy on a volume
- Creating an IPv4 Superscope
- Creating a New Multicast Scope
- Creating a DHCPv6 Scope
- Creating sites
- Creating subnets
- Creating a server in a new site
- Configuring the site-licensing options in a created site
- Creating site links
- Creating site link bridges
- Moving server objects between sites
- Assigning single-master operations

- Managing trust relationships
- Adding and removing a UPN suffix
- Managing global catalog servers
- Managing universal group membership caching
- Installing Active Directory Certificate Services
- Configuring Active Directory Certificates
- Configuring certificate auto enrollment
- Modifying Authority Information Access (AIA)
- Backing up the Certification Authority server
- Revoking a certificate
- Installing Active Directory Federation Services
- Configuring the AD FS server
- Installing Active Directory Rights Management Services

## Here's what you get



## 14. Live Labs

Live-Lab is a real computer equipment, networked together and conveniently accessible over the internet using virtualization. A live-lab has equipments such as a computer, server, switch or router in it that a user is free to configure.

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies

- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

## **Lab Tasks**

### **Configure and Manage High Availability**

- Installing the Failover Clustering feature
- Creating a Network Load Balancing cluster
- Running the Validate a Configuration wizard

### **Configure File and Storage Solutions**

- Installing BranchCache
- Enabling auditing of Active Directory objects

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

- Installing Windows Server Backup
- Backing up Active Directory
- Configuring a shadow copy on a volume

### **Configure Advanced Network Services**

- Creating an IPv4 Superscope
- Creating a New Multicast Scope
- Creating a DHCPv6 Scope

### **Configure the Active Directory Infrastructure**

- Creating sites

- Creating subnets
- Creating a server in a new site
- Configuring the site-licensing options in a created site
- Creating site links
- Creating site link bridges
- Moving server objects between sites
- Assigning single-master operations
- Managing trust relationships
- Adding and removing a UPN suffix
- Managing global catalog servers
- Managing universal group membership caching

### **Configure Access and Information Protection Solutions**

- Installing Active Directory Certificate Services
- Configuring Active Directory Certificates
- Configuring certificate auto enrollment
- Modifying Authority Information Access (AIA)
- Backing up the Certification Authority server
- Revoking a certificate
- Installing Active Directory Federation Services
- Configuring the AD FS server
- Installing Active Directory Rights Management Services

### **Appendix A**

## Here's what you get

32  
LIVE LABS

32  
VIDEO TUTORIALS

31  
MINUTES

## 15. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

Have Any Query? We Are Happy To Help!

### GET IN TOUCH:

■ Contact No

■ Email: [sales@ucertify.com](mailto:sales@ucertify.com)

■ [www.uCertify.com](http://www.uCertify.com)