

# Avid Education

## Certification Exam Study Guide



## Avid Certified Support Representative ISIS | 7500 & 5500

Exam	ACSR   ISIS 7500 & 5500
Exam Code	UN422
Type of Exam	Multiple choice
Certification Level	Avid Certified Support Representative (ACSR)
Duration	60 minutes
No. Of Questions	50 questions
Passing Score	80%
Exam Language	English, French, German

### Target Audience

Technical support staff, technical managers, installers, advanced administrators and others who need to install, maintain, or support Avid ISIS shared storage systems.

### Exam Preparation

Successful candidates will have extensive Avid ISIS experience on both 7500|7000 and 5500|5000 platforms. Although course attendance is not required to take the certification exam, Avid highly recommends candidates attend the course(s):

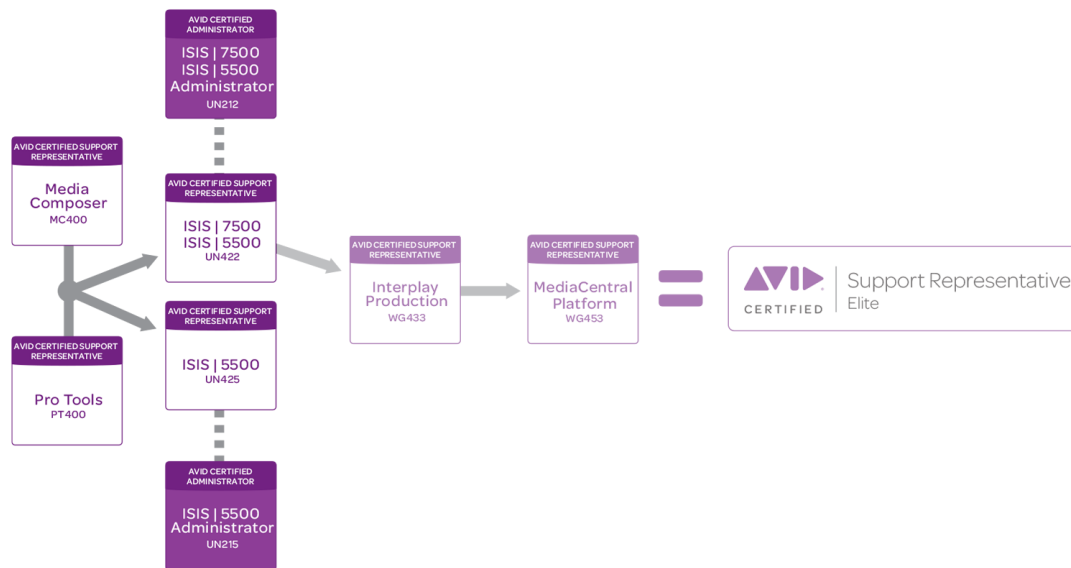
- UN422 ACSR ISIS 7500|5500

The UN422 course with its hands on training will help candidates build the skills and competencies required for certification.



## Certification Path

### ACSR | ISIS 7500 & 5500



The certification path provides a defined process by which individuals can prepare for the certification exam and, by extension, the role of ACSR ISIS 7500|5500. There are three possible routes into the UN422 course. Each is designed to ensure that candidates have sufficient knowledge of and experience with the client systems that will be connected to the ISIS 750000|5500 system they will be supporting.

Candidates are recommended to complete one of the following:

1. Avid Certified Support Representative | Media Composer certification, if supporting Media Composer clients
2. Avid Certified Support Representative | Pro Tools certification, if supporting Pro Tools clients
3. Pre-requisite experience, including all of the following:
  - a. 1-yr experience installing, using, and/or supporting Media Composer or Pro Tools client systems
  - b. Completion of the Avid eLearning UN422 Prerequisite Pack

Completing the recommended course(s), coupled with hands-on experience will help you build the skills and competencies need to pass the exam. Course attendance is optional, however. If you feel you have considerable, real-world experience implementing, installing, administering and troubleshooting Avid ISIS systems, then you may register and take the exam at any time.

**Next Steps:** Once you achieve ACSR ISIS certification, consider taking the Interplay 433 course for certification as an ACSR | Interplay Production. This is the next step toward the ACSR Elite certification.

## Certification Exam Topics

The following topics are included in the certification exam. You should be well versed in the technical and operational details of each:

1. ISIS Overview
  - a. Explain the intercommunication between the System Director, Storage Manager and Client
  - b. Describe the two types of ISIS File System
  - c. Explain the ISIS Architecture including:
    - i. File System
    - ii. Storage Manager
    - iii. Storage Group
    - iv. Workspace
  - d. Describe the various network zones
  
2. ISIS Hardware
  - a. System Director
    - i. Identify the various hardware platforms
    - ii. Describe the physical connections
    - iii. Explain the steps of the software install
    - iv. Describe System Director configuration
  - b. ISIS Engine
    - i. Describe storage sizes
    - ii. Explain switch generations
    - iii. Identify power supply considerations
  - c. Explain ISIS cabling
    - i. Interconnect
    - ii. Infrastructure fiber
    - iii. Client copper
    - iv. Client fiber
  - d. Calculate ISIS system bandwidth
  - e. Describe the use of third party switches
    - i. Qualified vs Approved
    - ii. Advantages

## Certification Exam Topics (cont)

3. ISIS software  
Explain the usage of ISIS software components:
  - a. Software Installer
  - b. System Director Control Panel
  - c. ISIS Launchpad
  - d. ISIS Management Console
  - e. Monitor Tool
  - f. ISIS Profiler
  - g. Switch Agent
  - h. Storage Manager Agent
  - i. Client Manager
  - j. Benchmark Utility/PathDiag
  
4. Explain the differences between ISIS 5500 and 7500
  - a. Hardware
  - b. Software
  
5. Explain the steps of an ISIS upgrade
  - a. System Director
  - b. ISIS Engine
  - c. Clients
  
6. ISIS Clients  
Identify the requirements of ISIS client systems
  - a. Hardware platforms
  - b. Supported operating systems
  - c. Network interface cards
    - i. 1Gb
    - ii. 10Gb
  - d. Calculate client bandwidth based on connection type
  - e. Bandwidth testing
  - f. Third party software interaction
  
7. ISIS Troubleshooting  
Explain troubleshooting steps for various ISIS conditions
  - a. Drive replacement
  - b. Redistribution
  - c. Network Degraded
  - d. Client connectivity problems

## Certification Exam Topics (cont)

8. Basic Networking  
Demonstrate understanding of basic networking concepts and tools
  - a. Subnet Mask
  - b. Gateway
  - c. Ping
  - d. ARP
  - e. Spanning Tree Protocol
  - f. Link Aggregation
  - g. DNS

## Practice Questions

The following questions are not part of the current UN422 exam but are similar to the questions likely to be asked.

1. Where can you find information to identify the IP address of a device sending bad packets to an ISB?
  - A. The Monitor Tool
  - B. "Network Statistics" in the Storage Manager Agent
  - C. "Network Tools" in the ISIS Management Console
  - D. "Network Statistics" in the Switch Blade Agent
  - E. The ISIS Network Utility
  
2. Which tool is used to set the IP addresses of an ISIS 7500 engine?
  - A. The Switch Blade Agent
  - B. The Storage Manager Agent
  - C. The Network Configuration Tool
  - D. The ISIS Management Console
  - E. The ISIS Software installer
  
3. True or False. ISIS clients must always be running the same software version as the System Director
  - A. True
  - B. False
  
4. True or False. ISIS requires DNS for proper operation.
  - A. True
  - B. False
  
5. Which of the following is NOT required to configure a second ISIS 5500 System Director?
  - A. A second ISIS 5500 engine
  - B. A second System Director License
  - C. Cables interconnecting the two System Directors
  - D. 10Gb connections for each ISIS 5500 Engine on the switch
  - E. No more than 16 direct connect clients
  
6. Which condition will result from incorrect Client Manager Windows Firewall settings?
  - A. The client will be able to write to ISIS but not read from the ISIS.
  - B. The client will be able to read from ISIS but not write to the ISIS.
  - C. The client will not be able to connect to the ISIS
  - D. The client will connect to the ISIS but cannot mount workspaces
  - E. The client will be limited to 50% bandwidth

## Practice Questions (cont)

7. Which tool can be used to test the bandwidth of a Linux client?
  - A. PathDiag
  - B. IO Perf Meter
  - C. Benchmark Utility
  - D. ISIS Disk Tester
  - E. None, Linux clients are not supported
  
8. Which is the approximate redistribution period following an ISIS 7500 ISB is removed from its slot?
  - A. 1 hour for each gigabyte of data
  - B. 1 hour for each terabyte of data
  - C. 1 hour for 360GB of data
  - D. Removing an ISB from its slot does not cause redistribution
  - E. Redistribution is not supported on ISIS 7500
  
9. Which of the following indicates a failure of the mirror status of an ISB's drives?
  - A. Rectifying files
  - B. Metadata Error
  - C. Disk Failure
  - D. Memory Error
  - E. None, drives in an ISB are not mirrored
  
10. True or false. Avid recommends that Storage Groups contain an odd number of Storage Managers.
  - A. True
  - B. False
  
11. What is a Storage Manager?
  - A. An ISIS 5500 Engine which has been bound to the File System
  - B. An ISB which has been bound to the File System
  - C. Each group of 40 drives in an ISIS 2500 Engine
  - D. A, B and C
  - E. None of the above
  
12. Which of the following ISIS 7500 tools do not exist on ISIS 5500?
  - A. The ISIS Toolbox
  - B. The Monitor Tool
  - C. The LDAP Sync Tool
  - D. Storage Manager Agent
  - E. The Profiler

## Practice Questions (cont)

13. Which of the following ISIS 7500 components would you upgrade first?
- A. System Director
  - B. ISB
  - C. ISS
  - D. IXS
  - E. None of the above
14. Which action should be performed first after inserting a replacement ISB into the ISIS 7500 Engine?
- A. Bind to File System
  - B. Add to Storage Group
  - C. Check firmware version
  - D. Wait for Redistribution to complete
  - E. None of the above
15. What does a status of Network Degraded indicate?
- A. The ISIS network is down
  - B. ISIS switch failure
  - C. Third party switch failure
  - D. An ISIS switch is receiving bad packets
  - E. A Storage Manager is receiving bad packets
16. Link Aggregation is required for:
- A. An ISIS system with more than 12 ISIS 7500 Engines
  - B. An ISIS system with more than 8 ISIS 7500 Engines
  - C. An ISIS system with more than 4 ISIS 5500 Engines
  - D. An ISIS system with more than 10 clients
  - E. Anytime 10Gb clients are present
17. Which of the following ISIS 5500 supported third-party switches can support more than 4 ISIS 5500 Engines?
- A. 2 stacked Force10 S25 switches
  - B. 2 stacked Force10 S60 switches
  - C. 2 stacked Dell 3024 switches
  - D. 2 cascaded Cisco 4948E switches
  - E. 2 cascaded Foundry x624 switches



## Practice Questions (cont)

18. Under what circumstances is it necessary to add an Intel i350 card to a HP Z440 for ISIS connectivity?
- A. Always
  - B. When dual connecting to the ISIS network
  - C. When connecting in Zone 3
  - D. When connecting in Zone 4
  - E. Never
19. When must a Macintosh client's MTU be set?
- A. Always
  - B. When connecting via a Myricom 10Gb card
  - C. When dual connecting to the ISIS network
  - D. When connecting in Zone 3
  - E. When connecting in Zone 4
20. Which condition might cause the System Director Service to not start?
- A. The File System is newer than today's date
  - B. The File System is more than 24 hours old
  - C. The File System is more than 3 days old
  - D. The File System is more than 7 days old
  - E. The File System is more than 14 days old

## Answers to Practice Questions

Use the answers below to check your knowledge on the practice questions.

1. B
2. A
3. False
4. False
5. E
6. A
7. C
8. D
9. E
10. False
11. D
12. B
13. A
14. C
15. E
16. A
17. C
18. B
19. B
20. E