## AVID LEARNING SERVICES

Certification Exam Study Guide





# Avid Certified Support Representative Media Composer | Support

Exam: Media Composer MC400

Exam Code: MC400

Type of Exam: Multiple Choice

Certification Level: Avid Certified Support Representative (ACSR)

Duration: 60 minutes

Number of Questions: 50

Passing Score: 80% (40 correct answers)

Exam Language: English

## **Target Audience**

Advanced Media Composer technical support staff, technical managers, installers and others who need to install maintain or support the Media Composer editor

## **Exam Preparation**

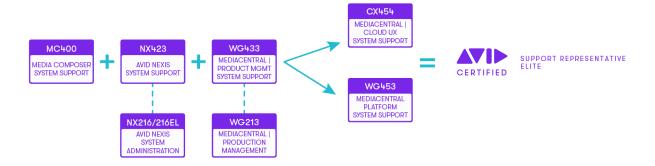
Successful candidates will have extensive experience with Avid Media Composer, Avid peripherals, and qualified workstation requirements. Although course attendance is not required to take the certification exam, Avid highly recommends candidates attend the course:

## MC400 Avid Media Composer | Support

The MC400 class will help the candidates to build the competencies, skills, and background knowledge required for certification. During the class, participants learn to assess and configure hardware for different workflow requirements, how to install and configure the editing application, and troubleshooting strategies. What you learn here will help you maximize productivity and minimize system downtime. After completing the class, participants will be able to provide first line support to the Avid Media Composer community.



#### Certification



The certification process provides a defined means by which individuals can prepare for the certification exam, and by extension, the role of the Avid Media Composer Support Representative. It is designed to ensure that candidates have sufficient knowledge of and experience with the Editor, its hardware requirements and storage systems.

The following prerequisites are recommended:

- 1. Media Composer MC101
- 2. Media Composer MC400 pre-learning online content
- 3. Sufficient experience to acquire an in-depth knowledge of the concepts, configuration requirements of the different models of Media Composer, and the hardware requirements for both physical workstations and virtual environments

Completing the recommended course(s) will help you build the skills and competencies needed to pass the exam. You are not required, however, to complete the training courses prior to taking the certification exam. If you feel you have considerable, real-world experience implementing, installing, administering, and troubleshooting Media Composer in a wide range of environments with different models of Media Composer, then you may register and take the exam at any time.

## **Certification Topics**

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

## 1. Options and Features

- a. What is an NLE?
- b. Avid NLE Requirements
  - i. Streams
  - ii. Realtime Decompress
  - iii. Hardware Requirements
- c. Version Numbering
- d. Media Composer Models
- e. Media Composer Options
- f. Features and Capabilities
- a. Consideration
  - i. Workflow
  - ii. Storage
  - iii. Media Management
  - iv. Bandwidth and Codecs

#### 2. Workstation Hardware

- a. Feature Performance Requirements
- b. CPU
- i. Match Workflow and Codecs to CPU Type
- ii. Symmetric Multiprocessing
- iii. SIMD
- c. RAM
- i. Memory Type
- ii. Memory Lanes
- iii. Media Composer RAM Requirements
- d. PCle
  - i. PCle Generations
  - ii. Lanes
- e. GPU
- i. AMD
- ii. Nvidia
- iii. Accelerator Cards
- f. Network Adapters
  - i. Onboard
  - ii. Plugin
- g. HIB Cards
  - i. SAS
  - ii. Thunderbolt
- h. Oualified Workstations



- 3. UEFI & BIOS Settings
  - a. Accessing the BIOS/UEFI
  - b. Bios
  - c. UEFI
  - d. Settings
    - i. Date and Time
    - ii. Multiple Processors
    - iii. Multi Core
    - iv. Hyperthreading
    - v. RAM
    - vi. Boot Order
    - vii. PCle Speed
    - viii. Numa
    - ix. Power Management
    - x. Turbo Mode
- 4. Operating System Optimizations and Device Driver Settings
  - a. Operating Systems
    - i. Power Management
    - ii. Display Settings
    - iii. Update Settings
    - iv. Date and Time
    - v. Computer Name
    - vi. User Permissions
    - vii. OS Performance Settings
  - b. GPU Settings
  - c. Network Adapter Settings
  - d. Additional Components
- 5. MC Installation
  - a. What Gets Installed
  - b. What Are the Installed Components?
  - c. Prerequisites
    - i. System ID
    - ii. Activation Number
    - iii. Device ID
    - iv. Dongle
    - v. Administrator or Domain Administrator Privileges
    - vi. Floating Licence Server
    - vii. Internet Access
  - d. The Application Manager
  - e. Avid Link
  - f. Starting the Application
    - i. Avid Media Composer Activation
    - ii. Licensing



- a) Subscription
- b) Software
- c) Dongle
- d) First
- e) Trial
- g. Upgrading Media Composer
- h. Upgrading the Software License
- i. Updating a Dongle
- j. Deactivating the Avid Editing Application and Options

### 6. Floating License Server

- a. System Requirements
- b. Installing and Configuring The FlexNet Device Manager
- c. Installing Floating Licenses
- d. Configuring a Redundant Floating License Server
- e. Checking Out a License
- f. Adding Reservations

#### 7. Breakout Boxes

- a. Avid Open I/O and Third-Party Hardware
- b. FPGA
- c. The Blackmagic Artist DNxID
- d. The Blackmagic Artist DNxIO
- e. The Blackmagic Artist DNxIQ
- f. Universal Mastering
- g. AJA Artist DNxIV
- h. AJA Artist DNxIP
- i. Connectivity

### 8. Deep Dive into Media Composer

Application Component Locations: Projects, Settings, and the Media File System

- a. Install Locations on Windows and MacOS
- b. The Media File System
  - i. Folder Structure
  - ii. Database Files
- c. File Counts and Management
- d. Media Files
- e. What Media Composer Does on Launch
  - i. The Splash Screen
  - ii. Environment Checks
- f. Project Settings
- g. Important Settings
  - i. Media Cache



- ii. Formats
- iii. MediaCentral
- iv. Bin
- v. User Settings
- vi. MC States
- vii. Site Settings
- h. AMA
- i. UME
- j. Media Creation Settings
- k. The Timeline
- I. The Console

## 9. Media Composer | Enterprise

- a. System Requirements
- b. MediaCentral Requirements
- c. Configuration
- d. Functionality
- e. Installation

## 10. Distributed Processing

- a. Functionality
- b. Supported Versions
- c. Supported OS
- d. MediaCentral Requirements
- e. Services
- f. Minimum and High-End Hardware
- g. Install Requirements
- h. Changing MediaCentral Host
- i. Installation
- j. Terminal Commands
- к. Logs
- I. Media Composer Configuration
- m. Submitting a Job
- n. How It Works
- o. Monitoring Jobs

### 11. Virtualisation, Media Composer | Cloud VM

- b. Current Limitations
- c. Configuration Options
- d. Virtual Environments
- e. Management of Virtual Environments
- f. Connecting to VMs
- g. Virtualisation Requirements
  - i. Media and Project Storage



- ii. Overheads
- iii. Redundancy
- iv. Affinity/Anti-Affinity
- h. Avid Validation Testing Hardware
- i. Grid Computer GPU
- j. Networking
- k. VM Storage
- I. Media Composer | Cloud VM Models
- m. Licensing Avid Software
- n. Installation
- o. Remote Client Sync Offset

## 12. Remote Editing

- a. Teradici PCoIP
- b. VMWare Horizons
- c. HP ZCentral Remote Boost

## 13. Troubleshooting

- a. General Approach to Troubleshooting Media Composer
- b. Launch Failures
- c. Playback Problems
- d. Project Settings
- e. Media Problems
  - i. Incorrect Settings
  - ii. Core Consistency Errors
- f. Media Cache Problems
- g. Settings Files and Database Files
  - i. User Settings
  - ii. MCStates
  - iii. SiteSettings
  - iv. msmFMID.pmr
- h. Desktop Play Delay
- i. Missing Resolutions
- j. Display Problems
- k. Empty Effects Adapters
- I. Warnings and Error Messages
- m. MCFAX
- n. Fatal Error Reports
- o. The Collect Suite
- p. Avid Mac Logs



### **Practice Questions**

The following questions are not part of the current MC400 exam, but are similar to the questions likely to be asked.

- 1. Media Composer | Ultimate includes which features?
  - a. Symphony Option
  - b. Newscutter Option
  - c. Script Sync and PhraseFind
  - d. Enterprise Option
  - e. VM Option
- 2. Deleting the Site Settings xml will cause this to happen?
  - a. A new project will be created and the Bins from affected projects imported.
  - b. On launch, a default set of site settings will be created and applied to the application.
  - c. On launch, the Project Settings will be used instead.
  - d. The Site Settings will be rebuilt from the MCState file.
  - e. The Site Settings will be rebuilt from the users MCState file.
- 3. What is the Avid Media File Folder structure when in shared storage environment?
  - a. Avid MediaFiles

MXF

[Computername].1 [AnotherComputername].1

UME

[Computername].1 [AnotherComputername].1

b. Avid MediaFiles

**MXF** 

[Computername].1 [AnotherComputername].1



c. Avid OMFIMediaFiles

OMFI

- d. Avid MediaFiles
- e. Users

Avid MediaFiles MXF

[Computername].1 [AnotherComputername].1

- 4. What could be the consequence of opening a Media Composer 2019 Project that has AMA-linked media in a Media Composer 2020.x or newer version on an Apple computer, running Catalina or newer?
  - a. The AMA-linked clips will be offline.
  - b. You will need to manually relink back to the AMA-linked master clips.
  - c. You will need to reinstall QuickTime libraries.
  - d. The AMA plugins used to link clips will be automatically swapped out for the UME AMA-FI plugins.
  - e. The project will not be compatible with older Media Composer versions.
- 5. When fitting a new network adaptor for Media Composer licensed with software license, what should be done first?
  - a. Uninstall Media Composer.
  - b. Remove the Nexis Client Manager.
  - c. Back up the Media Composer Projects.
  - d. Deactivate Media Composer.
  - e. Uninstall Avid Link.
- 6. What determines the number of frames that can be cached in the Interactive Video Memory?
  - a. The number of plugins used in the sequence
  - b. Amount of RAM allocated to the cache along with the frame's raster size, video playback quality setting, and processing bit depth
  - c. The duration of the sequence
  - d. The duration of the individual master clips
  - e. Amount of RAM allocated to the cache along with the frame's raster size



- 7. How much network bandwidth should be reserved for a standard virtualized Media Composer?
  - a. 10 Gb/s per guest
  - b. 2 Gb/s per guest
  - c. 1 Gb/s per guest
  - d. 20 Gb/s per host
  - e. 40 Gb/s per host
- 8. Media Composer has been validated to run in which of the following private virtual environments?
  - a. VMware Workstation
  - b. VMWare vSphere
  - c. Nutanix
  - d. Virtualbox
  - e. Kubernates
- 9. What is the maximum recommended RAM allocation from each host server to the guest computers?
  - a. 40% of the host RAM should be reserved.
  - b. 10% of the host RAM should be reserved.
  - c. No more than 75% of the host RAM should be allocated to guest computers.
  - d. No more than 50% of the host RA should be allocated to guest computers.
  - e. Allocating 100% of the host RAM is supported.
- 10. Distributed Processing supports up to how many Worker Services?
  - a. 4
  - b. 5
  - c. 6
  - d. 8
  - e. 10

## **Answers to Practice Questions**

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

- 1. a, b, and c
- 2. b
- 3. a
- 4. a
- 5. d
- 6. b
- 7. c
- 8. a and b
- 9. c
- 10. e