Avid Certified Support Representative
Pro Tools

Exam	Pro Tools 400
Exam Code	PT400
Type of Exam	Multiple choice
Certification Level	Avid Certified Support Representative (ACSR)
Duration	60 minutes
Number of Questions	50 questions
Passing Score	80%
Exam Language	English

Target Audience

This certification exam is designed for technical support staff, technical managers, system integrators and others who need to install, maintain, or support Pro Tools HD-series systems.

Exam Preparation

Successful candidates will have extensive experience with Pro Tools HD-series hardware and software. Although course attendance is not required to take the certification exam, Avid highly recommends candidates attend the course(s):

- Pro Tools 400 ACSR

The PT400 class will help candidates build the skills and competencies required for certification. The PT400 is a blended class in which participants complete 9 hours of self-paced e-learning, followed by 15 hours of Live online or classroom Instructor-Led Training. During the class, participants will learn configuration and troubleshooting techniques in a practical, hands on environment to minimize system downtime and maximize productivity, focusing on Pro Tools | Ultimate software and HD-series hardware problems.

CERTIFIED

Certification

The certification process provides a defined means by which individuals can prepare for the certification exam and, by extension, the role of ACSR | Pro Tools. It is designed to ensure that candidates have sufficient knowledge of and experience with the client systems that will be connected to the Pro Tools HD-series systems they will be supporting.

Candidates are recommended to complete at least one of the following:
1. Pro Tools 101 course (recommended)
2. Pro Tools 400 ACSR course
3. Sufficient experience to possess an in-depth working knowledge of the concepts and procedures covered in the following documentation:
   a. ProTools | Ultimate software and hardware documentation, available here.
   b. Pro Tools Reference Guide, including, but not limited to:
      i. Working with Synchronization
      ii. Pro Tools | MachineControl
      iii. Satellite Link
      iv. Pro Tools Video Satellite

Completing the recommended course(s), coupled with hands-on experience 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 Pro Tools HD-series systems, then you may register and take the exam at any time.

Next Steps: Once you achieve ACSR | Pro Tools certification, consider taking the MC400: Media Composer class for certification as an ACSR Media Composer. This is the first 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. Pro Tools HD-series Hardware
   a. HD-series Hardware specifications, voice count, compatibility
   b. HD-series Interface specifications, I/O count, compatibility
2. Configuring macOS & Windows Operating Systems
   a. Optimizing OS performance for Pro Tools
   b. Hard Drive maintenance
   c. Backing Up the System
3. Installation and Setup of Pro Tools Software
   a. Pro Tools application
   b. Device drivers
   c. Avid Link
   d. iLok
   e. EUCON
4. Installation of Pro Tools HD-series hardware and software
   a. Pro Tools | HDX and HD Native hardware
   b. Avid audio interfaces
   c. SYNC HD and Sync X synchronization peripherals
   d. Avid control surfaces
   e. Avid PRE remote control mic pre
5. Installation and configuration of Peripherals
   a. MIDI devices
   b. Control surfaces
   c. Sync devices
   d. Mic Pre's
   e. Satellites
   f. Avid Video Peripherals
6. Pro Tools software skills
   a. Playback Engine
   b. System Usage
   c. Task Manager
   d. Hardware Setup
   e. I/O Setup
   f. Session Setup
7. Audio/video synchronization principles
   a. Frame rates
   b. Word clock
   c. Loop sync
   d. Video reference
   e. Device offsets
      i. Video screen display latency
      ii. Offsetting two or more synchronized devices

8. Audio and Video Routing and Signal flow
    a. Routing, configuring, and laying back audio from two Pro Tools HD-series systems to a third, in sync
9. MachineControl of 9-pin serial decks
    a. Installation and configuration
    b. Capturing audio from 9-pin devices
    c. Laying back audio to 9-pin devices
10. Pro Tools Satellite Link technology
    a. Avid Video Satellite
    b. Pro Tools Video Satellite
    c. Satellite Link
11. General troubleshooting skills
    a. Avid DigiTest
    b. System Maintenance
    c. Troubleshooting Hardware

Practice Questions

The following questions are not part of the current PT400 exam but are similar to the questions likely to be asked.

1) Accurate synchronization requires clock reference and _____.
   a. Positional Reference
   b. Temporal Reference
   c. VITC
   d. BITC
   e. All of the above

2) Which peripheral is needed to allow Pro Tools to be accurately synchronized to other audio and/or video devices?
   a. Pro Tools | HD I/O
   b. Avid Eleven Rack
   c. Pro Tools | Carbon
   d. Avid Nitris DX
   e. Pro Tools | Sync X

3) Which technology enables multiple Pro Tools HD-series systems to be linked together and synchronized over an Ethernet network?
   a. Digital multiplexing
   b. Hypertext Transfer Protocol
   c. RTP Control Protocol
   d. Satellite Link
   e. None of the above

4) Enabling the macOS Energy Saver feature is a great way to reduce system wear and tear when Pro Tools is not in use.
   a. True
   b. False

5) What connections are required when connecting the Pro Tools | SYNC HD or Sync X peripheral to a Pro Tools HD-series system?
   a. Mini DIN serial cable to an HDX, HD Native or HD Native Thunderbolt card.
   b. Word clock
   c. Loop Sync in and out
   d. Video Ref
   e. Both A and C.

6) Which system configuration is incompatible with a SYNC HD or Sync X peripheral?
   a. Pro Tools software
   b. Pro Tools | HDX
   c. Pro Tools | HD Native
   d. Pro Tools | HD Native Thunderbolt
   e. None of the above

7) When co-installing Media Composer 2021.x and Pro Tools 2021.x, you should install Pro Tools first then Media Composer?
   a. True
   b. False

8) Pro Tools | Ultimate 2021.6 requires that a physical iLok be connected to authorize use of the software.
   a. True
   b. False

9) Linking multiple Pro Tools HD-series systems using Satellite Link requires that each system have a sync peripheral.
   a. True
   b. False

10) What is the name of the software that the Avid Control app uses to communicate with Pro Tools and other DAWs?
   a. Avid E6
   b. EuControl
   c. Point to Point Protocol
   d. Transmission Control Protocol
   e. All of the above

11) In addition to QuickTime, which video format is Pro Tools 2021.6 capable of playing back?
   a. .FLV
   b. .MP4
   c. .MXF
   d. .R3D
   e. None of the above.

12) What video peripheral is required for QuickTime video playback in Pro Tools 2021.6?
   a. Avid Mojo SDI
   b. Pro Tools | Sync X
   c. Avid DNxID
   d. Avid Nitris DX
   e. None of the above

13) Which plug-in format is not supported with Pro Tools | Carbon?
   a. AAX Native
   b. AudioSuite
   c. AAX DSP
   d. AAX TDM
   e. None of the Above

14) Which real-time audio plug-ins are supported in standard Pro Tools 11 and later systems?
   a. AudioSuite
   b. AAX DSP
   c. AAX Native
   d. RTAS
   e. All of the above

15) Linking multiple Pro Tools HD-series systems requires a separate Satellite Link iLok license for each system.
   a. True
   b. False

16) The two DigiLink Mini ports on an HDX card support a combined maximum of how many channels of I/O?
   a. 16
   b. 32
   c. 48
   d. 64
   e. 128

17) What is the maximum voice count for a single card Pro Tools | HDX system at 192 kHz sample rate with the Hybrid Engine disabled?
   a. 32 voices
   b. 64 voices
   c. 96 voices
   d. 128 voices
   e. 192 voices

18) What is the maximum voice count of an HD Native system at 96 kHz sample rate?
   a. 64 voices
   b. 128 voices
   c. 256 voices
   d. 512 voices
   e. 2048 voices

19) What is the maximum number of Pro Tools | HD Native Thunderbolt interfaces that can be simultaneously linked together to obtain a higher track count and more I/O?
   a. 1
   b. 2
   c. 3
   d. 4
   e. 5

20) What is the maximum number of video tracks allowed in Pro Tools | Ultimate software?
   a. 1 track
   b. 16 tracks
   c. 32 tracks
   d. 64 tracks
   e. 128 tracks

Answers to Practice Questions

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

1. A: Positional Reference
2. E: Pro Tools | Sync X
3. D: Satellite Link
4. B: False
5. E: Both A and C
6. A: Pro Tools | Software
7. A: True
8. B: False
9. A: True
10. B: EuControl
11. C: MXF
12. E: None of the above. No video peripheral is required to play back QuickTime movies.
13. D: AAX TDM
14. C: AAX Native
15. B: False
16. D: 64 channels of I/O
17. B: 64 voices
18. E: 2048 voices
19. A: 1 interface
20. D: 64 tracks