



Avid NEXIS® ReadMe

Version 2019.4.1

Important Information

Avid recommends that you read all the information in this ReadMe file thoroughly before installing software or attempting to use the Avid NEXIS system. This ReadMe provides information that is not in the other Avid NEXIS documentation. This ReadMe applies to the v2019.x software releases of Avid NEXIS, which run on Avid NEXIS infrastructures.

Search the Avid Knowledge Base for the most up-to-date ReadMe file, which contains the latest information that might have become available after the documentation was published. To view the online version, visit the Knowledge Base at www.avid.com/support.

This ReadMe provides hardware and software requirements, an overview of the major features of this release, and limitations and known issues. See the appropriate *Avid NEXIS Setup Guide* for information on physical connection of the system and loading the system and client software. You can access the documentation from the [Avid NEXIS Knowledge Base](#).

For compatibility with other Avid products, see the Knowledge Base page for [Avid Audio and Video Compatibility Charts](#).

Avid recommends that you purchase installation services with your Avid NEXIS system.

Revision History

Date	Release	Changes Made
05/06/2019	2019.4.1	See “What’s New in Avid NEXIS 2019.4.1” on page 4
04/08/2019	2019.4.0	See “What’s New in Avid NEXIS 2019.4.0” on page 5
03/21/2019	2019.2.2	See “What’s New in Avid NEXIS 2019.2.2” on page 6
02/21/2019	2019.2	See “What’s New in Avid NEXIS 2019.2” on page 6

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Accessing the Online Documentation

The Avid NEXIS documentation is accessible in PDF format from the [Avid NEXIS Knowledge Base](#).

If You Need Help

If you are having trouble using your Avid product:

1. Retry the action, carefully following the instructions given for that task in this guide. It is especially important to check each step of your workflow.
2. Check the latest information that might have become available after the documentation was published. New information is provided in the ReadMe file, available online.

You should always check online for the most up-to-date release notes or ReadMe because the online version is updated whenever new information becomes available. To view the online versions, visit the Knowledge Base at www.avid.com/US/support.

3. Check the documentation that came with your Avid application or your hardware for maintenance or hardware-related issues.
4. Visit the online Knowledge Base at www.avid.com/US/support. Online services are available 24 hours per day, 7 days per week. Search this online Knowledge Base to find answers, to view error messages, to access troubleshooting tips, to download updates, and to read or join online message-board discussions.

Avid Training Services

Avid makes lifelong learning, career advancement, and personal development easy and convenient. Avid understands that the knowledge you need to differentiate yourself is always changing, and Avid continually updates course content and offers new training delivery methods that accommodate your pressured and competitive work environment.

For information on courses/schedules, training centers, certifications, courseware, and books, please visit www.avid.com/support and follow the Training links, or call Avid Sales at 800-949-AVID (800-949-2843).

Recommended and Required Releases

The following Avid NEXIS | FS releases are either recommended or required in the cases listed below:

Version	Avid NEXIS Engines and System		
	Director Appliance	Avid NEXIS Client	Firmware
Recommended for all new installations	2019.4.1	2019.4.1 or higher	USM 1.37
Acceptable alternate	2019.2.0	2019.2.2	USM 1.37
Minimum required	2018.11.0 ^a	2019.2.2	USM 1.32

- a. Installations running older versions of Avid NEXIS | FS will be supported if covered by an Avid Global Services contract. Customers are strongly encouraged to upgrade to the recent releases shown above.

What's New in Avid NEXIS 2019.4.1

Avid NEXIS version 2019.4.1 is a patch release that fixes the following issues:

- [SSENG-21404] If multiple Storage Groups are selected for deletion, including the Cloud Storage Group, only the on-premise Storage Groups will be deleted. Deleting the Cloud Storage Group is not supported.
- [SSENG-21499] After a Media Pack drive was physically removed, the Management Console continued to report it as missing.
- [SSENG-21504] Microsoft® AzCopy version 10 (Preview) did not work properly with an Avid NEXIS Workspace as the top-level directory parameter as either the source or destination of the copy operation.
- [SSENG-21540] It was possible to enter a name in the Management Console using an invalid Unicode string that caused the System Director to become unresponsive. Now if an invalid Unicode string is entered, a message is displayed in the Management Console saying “Invalid characters in name.”
- [SSENG-21550] When the event triggers for any Workspace were edited and the changes saved, if the user then selected any other Workspace while still in Edit mode, the Event Trigger values were not updated for the selected Workspace.
- [SSENG-21551] In the Client Manager, the protection type for Avid NEXIS | Cloudspaces now displays Cloud instead of unprotected.
- [SSENG-21570] Avid NEXIS | Cloud Storage system stopped responding when user tried to download from a link in the Installers section of the Management Console.
- [SSENG-21574] The Management Console displayed a warning about unsaved changes when trying to modify additional attributes while creating a new Workspace.
- [SSENG-21588] A hidden character (which are invalid) was accidentally pasted into a user name field in the Classic Management Console (Flash) and was accepted but not displayed. After upgrading the system to a version using the new Management Console (HTML-5), those hidden characters caused problems. The new Management Console (HTML-5) now ignores hidden characters.
- [SSENG-21593] The Capacity Tracker (new in version 2019.4) now correctly displays values for Avid NEXIS | Cloud Storage systems.
- [SSENG-21596] In an Avid NEXIS Enterprise Engine with Media Packs containing drives of different sizes, the system incorrectly reported that a spare drive was not large enough to be used as a spare in such a Media Pack. The system was improperly comparing the size of the spare drive to the largest drive in the Media Pack, instead of (correctly) the smallest.

- [SSENG-21630, 21518] After an initial Avid NEXIS | Cloudspaces activation failure then subsequent success, the Dashboard in the Management Console continued to show Activation Failed in the Cloudspaces service field.
- [SSENG-21646] The Cloud Dashboard in the Management Console displayed incorrect data for Used space under Total Cloud Usage.
- [SSENG-21658] The first attempt to activate Avid NEXIS | Cloudspaces failed, but the second activation succeeded.
- [SSENG-21666] If access to the DNS server was temporarily lost, the Avid NEXIS system falsely indicated that the Avid NEXIS | Cloudspaces subscription was invalid.
- [SSENG-21911] Avid NEXIS Linux client was not flushing data as expected in response to fsync() calls. This could affect edit-while-capture scenarios such as FastServe Ingest.

What's New in Avid NEXIS 2019.4.0

Avid NEXIS version 2019.4.0 introduces the following new features:

- This release introduces support for Avid NEXIS | Cloudspaces, which are Workspaces you can create in the cloud with a subscription through Avid. With Avid NEXIS | Cloudspaces, you can use cloud-based storage in conjunction with your on-premise Avid NEXIS system to park or archive media files that don't require frequent access. Subscriptions are available in a variety of storage amounts. For more information, see the Avid website: [About Avid NEXIS | Cloudspaces](#).

See also “[Known Issues](#)” on page 17.

- After you upgrade Avid NEXIS | E2 SSD Engines to this release, you can use spare drive part number 9900-71306-01 (1920GB) to replace a failed SSD Media Pack drive of either the same part number or 9900-71306-00.

Avid NEXIS 2019.4.0 includes the following fixes and improvements:

- Resolved an issue for specific formats during Edit While Capture workflows. Occasionally the file headers information was written incorrectly.
- [SSENG-21482] Storage Manager (Media Pack) metadata was not updated after a failed write, and subsequent reads caused the system to become unresponsive.
- [SSENG-20355] A Media Pack drive was replaced and during the rebuild operation the drive experienced a `device_blocked` error. This prevented the drive from being completely rebuilt. Improved the handling of this case so the drive gets rebuilt.
- [SSENG-21113] After a software upgrade from version 7.10.1 to 2018.11, the system warned about missing product names. Between Avid NEXIS version 7.10 and 2018.11, a new product (Avid NEXIS | E5 NL) was introduced, which the older Avid NEXIS system did not recognize and handle properly.

What's New in Avid NEXIS 2019.2.2

Avid NEXIS version 2019.2.2 is a patch release that fixes the following issues:

- [SSENG-21110, SSENG-21039, SSENG-20864] Fixed related issues in which Windows clients running Avid NEXIS Client Manager version 2018.11 or 2019.2 with Media Composer encountered errors during auto or manual bin-save operations. Media Composer displayed any of the following messages when the user tried to save bins:
 - “Failure renaming temp bin”
 - “Changes cannot be saved to bin”
 - “Access is denied to path”

You do not need to apply this patch to Avid NEXIS Engines or the System Director Appliance.

What's New in Avid NEXIS 2019.2

Avid NEXIS v2018.4 is the minimum required release for all Avid NEXIS systems (Enterprise and PRO). This release resolves an issue that prevented correct reporting of SSD system drive failures.

The Avid NEXIS v2019.2 release includes the following new features and improvements.

New Features

- Support for the Data Migration Utility (DMU) on Mac OS client systems. The Avid NEXIS Administration Guide describes using DMU on both Windows and Mac OS clients.
- Support for Mac OS 10.14 (Mojave) on Avid NEXIS client systems. Mac systems running 10.14 with 10GbE (or higher) NICs can see a performance decrease of up to 10% compared to 10.13. The higher performing Macs, like the 18 core iMacPro 1,1, are less susceptible to this issue, but still can see up to a 5% decrease in Mojave vs. High Sierra. See also [“Myricom® Driver for Mac OS” on page 16](#).
- Support for 2PB in a single Storage Group on an Avid NEXIS | Cloud Storage system.

Fixes and Improvements

- [SSENG-20933] Fixed an issue in High Performance Storage Groups when the system has a failed or missing drive, where a read that directly follows a write can result in a spurious read error.
- [SSENG-20513] Updated the Avid NEXIS management interface running on IP port 80 to block attempts to traverse the operating system file structure.
- [SSENG-20295] Improved internal validation checking for system configuration changes.
- [SSENG-18445] Windows clients previously reported file size rounded up to the full stripe size (4MB for Scale-Out and SSD Performance Media Packs, or 8MB for High Performance Media Packs). Both operating systems now correctly report the file size rounded up to the strip size (512KB for Scale-out and SSD Performance Media Packs, and 1024KB for High Performance Media Packs).
- [SSENG-19362] Fixed an issue with logging into the HTML-5 Management Console on systems with redundant Controllers after a Controller failover.
- [SSENG-19228] Fixed an issue where the Avid NEXIS Profiler reports “Not Found” for the ATTO NQ42 40 Gb NIC despite its presence in the system.
- [SSENG-20151] Fixed an issue on Mac clients when attempting to install the LDAP Sync Tool or the Toolbox downloaded from an Avid NEXIS system running version 2018.11, a message indicated that the .dmg installer file was damaged and should be discarded.

- [SSENG-18301] Fixed an issue where after the system rebooted (for example, after an upgrade) a message appeared indicating an internal server error and the potential symptom that no file system exists, and suggested creating a new file system. This occurred because during a reboot, subsystems temporarily lose communication with each other and cannot report or receive status until connections are restored.
- [SSENG-20144] Occasionally when logging into the Avid NEXIS Management Console, if the file system was not available and ready to support logins, the message “Unauthorized user” was displayed.
- [SSENG-18450] Deleting large amount of data from an Avid NEXIS | Cloud Storage workspace caused performance degradation for read operations.

Supported Upgrade Paths

You can upgrade an Avid NEXIS E-Series Engine, System Director Appliance, and an Avid NEXIS | PRO according to the upgrade path described next. For instructions on how to upgrade an Engine or System Director Appliance, see the *Avid NEXIS Setup and Maintenance Guide*, or the *Avid NEXIS Administration Guide*.

Avid NEXIS Upgrade Paths

The Avid NEXIS Enterprise Engines, the System Director Appliance, and the Avid NEXIS | PRO can upgrade to the following versions.

Current Avid NEXIS Version	Can Upgrade Directly To
v6.x, v7.x, v2018.x, v2019.2.x, v2019.4.x	v2019.4.1

System Director and Client Version Compatibility

The Avid NEXIS Client software works with the following versions:

Avid NEXIS Client Version	Avid Shared-Storage System Version
Version 7.x, v2018.x, v2019.x and higher	Avid ISIS version 4.7.5 and higher
Version 2019.2.2 or higher	v7.x, v2018.x, v2019.2.x—2019.4.x and higher

The Avid NEXIS Toolbox and other utilities are tested and known to work only against a System Director of the same version. If you want to install two different versions of the Toolbox on the same system, install one of them into a directory other than the default.

System Configuration Limits

Different configuration limits apply to on-premise versus Avid NEXIS | Cloud Storage systems.

Avid NEXIS | Cloudspaces, available in Avid NEXIS v2019.4.0 and higher, is considered part of an on-premise Avid NEXIS system. The On-Premise limits table reflects updates for Avid NEXIS | Cloudspaces support.

On-Premise Limits

The following table lists the system configuration limits for all Avid NEXIS on-premise platforms.

Item	Limit
Media Packs with embedded System Director (includes all Avid NEXIS PRO configurations)	<ul style="list-style-type: none"> • 4 with all Avid NEXIS PRO (with any combination of 20TB and 40TB Media Packs) • 4 with any combination of Avid NEXIS E2 or Avid NEXIS E4 Engines and the Avid NEXIS FS Foundation license • 4 with all Avid NEXIS E2 SSD Engines, all running 2018.5 and higher • Any of the above plus 1 Cloud performance Media Pack (when Avid NEXIS Cloudspaces is activated)
Media Packs with System Director Appliance	<ul style="list-style-type: none"> • 24 with a System Director Appliance, the Avid NEXIS FS Extended license and any combination of Avid NEXIS Enterprise Engines • 25–48 with a System Director Appliance, the Avid NEXIS FS Advanced license, Avid NEXIS v7.6 or higher, and any combination of Avid NEXIS Enterprise Engines • 64 with a System Director Appliance, the Avid NEXIS FS Advanced license, Avid NEXIS v2018.3 or higher, and any combination of Avid NEXIS Enterprise Engines • Any of the above plus 1 Cloud performance Media Pack (when Avid NEXIS Cloudspaces is activated)
Media Packs per Engine (No Media Packs in a System Director Appliance)	<ul style="list-style-type: none"> • 1–2 in Avid NEXIS E4 • 4–8 in Avid NEXIS E5 • 1 in Avid NEXIS PRO, Avid NEXIS E2, Avid NEXIS E2 SSD
Storage Groups with embedded System Director ^a	<ul style="list-style-type: none"> • 1–4 with any combination of Avid NEXIS Enterprise Engines • 1–4 with all Avid NEXIS PRO • 1–4 with all Avid NEXIS E2 SSD, running 2018.5 and higher
Storage Groups with System Director Appliance	<ul style="list-style-type: none"> • Up to 32 per shared storage system, in the following combinations: <ul style="list-style-type: none"> - All SSD performance - All Scale-Out performance - Combination of SSD and Scale-out - SSD and/or Scale Out with 1 High Performance (up to 8 Media Packs) - SSD and/or Scale Out with 1 Cloud Performance (1 Cloud Media Pack) - SSD and/or Scale Out with 1 High Performance and 1 Cloud performance
Workspaces	1024 with an embedded System Director 3072 with a System Director Appliance
Users	5640 (all configurations)
User Groups	1028 (all configurations; a user can be in 15 groups)

Item	Limit
Connected Clients	<ul style="list-style-type: none"> 40 active clients with the Avid NEXIS FS Foundation license (embedded System Director) 165 active clients with the Avid NEXIS FS Extended license (and a System Director Appliance) 330 active with the Avid NEXIS FS Advanced license (and a System Director Appliance)
Files and Folders	<ul style="list-style-type: none"> 24 active (30 connected) in Avid NEXIS PRO 8 million on Avid NEXIS E2 and Avid NEXIS E4 3 million on Avid NEXIS PRO 20 million on any configuration with a System Director Appliance

- a. All numbers can optionally include one Cloud Storage Group, if Avid NEXIS | Cloudspaces is activated, and one High Performance Storage Group (with up to 4 Media Packs).

Avid NEXIS | Cloud Storage Limits

The following table lists the system configuration limits for Avid NEXIS | Cloud Storage systems.

Item	Limit
Media Packs per shared-storage system	One Media Pack (virtualized) with 500TB capacity
Storage Groups	One Storage Group (virtualized)
Workspaces	3072
Users	5640
User Groups	1028 (a user can be in 15 groups)
Connected Clients	330
Files and Folders	20 million

System Performance (On-Premise)

The nominal bandwidth rating for all-read workflows is 400MB/sec per Media Pack bound with the Scale-Out Performance setting regardless of protection type, and 600MB/sec per Media Pack bound with the High Performance setting. The actual write bandwidth depends on protection type. Aggregate bandwidth is therefore a function of protection type and proportion of reads to writes in the workflow.

The following table provides details on aggregate bandwidth by protection scheme and workflow proportion per Media Pack. To calculate the total performance of an Avid NEXIS system, multiply these figures by the number of Media Packs in the Storage Group. For design guidance a typical workflow is 80% reads and 20% writes.

Aggregate Throughput per Media Pack with Scale-Out Performance Bind Setting (MBytes/Sec)

Read %	Write %	Workspace Protection				
		No Protection	One Disk	Two Disk	One-Disk + Mirroring	Two Disk + Mirroring
100%	0%	400	400	400	400	400

Aggregate Throughput per Media Pack with Scale-Out Performance Bind Setting (MBytes/Sec)

Read %	Write %	Workspace Protection				
		No Protection	One Disk	Two Disk	One-Disk + Mirroring	Two Disk + Mirroring
90%	10%	400	396	392	378	376
80%	20%	400	392	384	356	352
70%	30%	400	388	376	334	328
60%	40%	400	384	368	312	304
50%	50%	400	380	360	290	280
Usable Storage		100%	89%	80%	44%	40%

Aggregate Throughput per Media Pack with High Performance Bind Setting (MBytes/Sec)

Note: Media Mirroring is not supported in High Performance Storage Groups.

Read %	Write %	Workspace Protection		
		No Protection	One Disk	Two Disk
100%	0%	600	600	600
90%	10%	600	594	588
80%	20%	600	588	576
70%	30%	600	582	564
60%	40%	600	576	552
50%	50%	600	570	540
Usable Storage		100%	89%	80%

Linux 10GbE clients can experience lower throughput than Microsoft® Windows® and macOS X® clients against both Avid NEXIS | PRO and Avid NEXIS Enterprise Engines.

Aggregate Throughput per Media Pack with SSD Performance Bind Setting (MBytes/Sec)

Note: Media Mirroring is not supported in SSD Performance Storage Groups.

Read %	Write %	Workspace Protection		
		No Protection	One Disk	Two Disk
100%	0%	3000	3000	3000
90%	10%	2900	3000	2860
80%	20%	2800	2760	2720

Aggregate Throughput per Media Pack with SSD Performance Bind Setting (MBytes/Sec)*Note: Media Mirroring is not supported in SSD Performance Storage Groups.*

Read %	Write %	Workspace Protection		
		No Protection	One Disk	Two Disk
70%	30%	2700	2640	2580
60%	40%	2600	2520	2440
50%	50%	2500	2400	2300
40%	60%	2400	2280	2160
30%	70%	2300	2160	2020
20%	80%	2200	2040	1880
10%	90%	2100	1920	1740
0%	100%	2000	1800	1600
Usable Storage		100%	89%	80%

Drive Rebuilds and System Performance

When a drive in a Media Pack fails, the data from that drive is rebuilt from the other drives in that Media Pack, and involves only those drives. During a rebuild, the Media Pack's performance rating drops by the rating of one drive, or 40MB/sec (for Scale-Out Performance) or 60MB/sec (for High Performance).

With no I/O on the system, the fastest a drive can be rebuilt is 40MB/sec (for Scale-Out Performance) or 60MB/sec (for High Performance). On a Media Pack that is under full load (at complete bandwidth capacity), the minimum repair rate is 512KB/s. As the drive is rebuilt it begins contributing to the overall Media Pack performance rate for both reads and writes, so during the rebuild, the rate of 40MB/sec or 60MB/sec gradually decreases.

Performance Type	Media Pack Size (Drive Size)	Rebuild Time for One Drive (Approx.)
Scale-Out	100TB (10TB)	70 hours
	60TB (6TB)	42 hours
	20TB (2TB)	14 hours
High Performance	100TB (10TB)	50 hours
	60TB (6TB)	30 hours
	20TB (2TB)	10 hours
SSD Performance	9.6TB (960GB)	3 hours
	19.2TB (1920GB)	6 hours

The rebuild time increases with client load, and decreases as less data remains to be rebuilt.

Workspaces with One-Disk Protection are rebuilt before Workspaces with Two-Disk Protection, due to their higher vulnerability to a second drive failure.

Media Mirroring and System Performance

For mirrored Workspaces, Avid NEXIS clients can continue working through an Engine failure without interruption or needing to reconnect. To ensure all clients can work seamlessly through an Engine failure, provision the shared-storage system with enough bandwidth to account for an Engine being offline.

Hardware and Software Requirements

To meet the stringent needs of media applications the Avid NEXIS family of storage solutions is built using patented intellectual property in Avid NEXIS software running on Avid NEXIS hardware. Avid tests and qualifies configurations of Avid NEXIS software deployed on Avid NEXIS hardware. The Avid NEXIS System Director is designed to allow the binding of Avid NEXIS *only*. Avid has not published its file system specifications, protocols, or file system APIs used among the components of the file system (Avid NEXIS System Director, Avid NEXIS client, Avid NEXIS expansion engines) and these are subject to change without notice. Therefore, any connection of third party storage as part of an Avid NEXIS file system is not a licensed, approved or supported configuration.

Avid NEXIS | Cloud Storage does not support third-party editing clients.

The full compatibility matrix of Avid editors and hardware is available on the Avid support site at the following URL: http://avid.force.com/pkb/articles/en_US/compatibility/Avid-Video-Compatibility-Charts

The following table lists the compatibility between Avid NEXIS and editors from vendors other than Avid:

Qualified Third-Party Editing Clients on On-Premise Avid NEXIS Workspaces

Software	Version
Apple Final Cut Pro X (see “Final Cut Pro X Software” on page 21)	10.4.2 and higher n <i>As of Final Cut Pro X 10.4, you can store library files on Avid NEXIS instead of on local drives.</i>
Adobe Premiere Creative Cloud	Premiere Pro 2018 (v12.1.1) and higher
Blackmagic Design DaVinci Resolve	14.3 and higher
Grass Valley EDIUS Pro	9 and higher

Supported Client Operating Systems

The following table lists the currently supported client operating systems with on-premise Avid NEXIS. All of the listed client operating systems support single or dual 10 Gb Ethernet network interface cards.

Avid NEXIS | Cloud Storage supports only Windows and Linux clients.

Supported Client Operating Systems and Updates

Operating System	Version and Notes
macOS Mojave (64 bit kernel)	10.14 or higher with latest updates
macOS High Sierra (64 bit kernel)	10.13 or higher with latest updates
macOS Sierra (64 bit kernel)	10.12.2 or higher with latest updates
CentOS Linux	7.4, kernel version 3.10.0-693 7.5, kernel version 3.10.0-862
Red Hat Linux	6.5, kernel versions 2.6.32-431 and 2.6.32-696
Windows 10	Latest Updates Defer automatic driver updates; see “Preventing Windows 10 Automatic Driver Updates” on page 14
Windows 8.1	Latest Updates
Windows 7 (64 bit)	Latest Service Pack and see “Installing Avid NEXIS Client Software on Windows 7 and Windows Server 2008 R2” on page 13
Windows Server 2016	Latest Service Pack
Windows Server 2012 R1 and R2	Latest Service Pack
Windows Server 2008 R2	Latest Service Pack
Windows Storage Server 2008 R2 (64 bit)	Latest Service Pack and see “Installing Avid NEXIS Client Software on Windows 7 and Windows Server 2008 R2” on page 13

Installing Avid NEXIS Client Software on Windows 7 and Windows Server 2008 R2

The Avid NEXIS Client driver for Windows uses an SHA-2 certificate. On Windows 7 and Windows Server 2008 R2 clients, the Avid NEXIS Client software will install, but the Client Manager will not see any Avid NEXIS or ISIS systems. Make sure Windows Updates are enabled, or install Microsoft Hotfix KB3033929, which allows applications with an SHA-2 certificate to run.

For more information, see <https://www.microsoft.com/en-us/download/details.aspx?id=46148>

Upgrading Avid NEXIS Client Software on Linux

For information on upgrading Avid NEXIS Client software on a Linux client, see the Avid NEXIS Client Guide and this link: [Upgrading Linux Clients from a bin File on a MediaCentral Server](#).

Supported Browsers in an Avid NEXIS On-Premise Environment

The following are the minimum browser versions qualified for the current Avid NEXIS release stream. These browsers were qualified with the client operating systems supported in the current release.

When installing Avid NEXIS software on a new Engine, Avid recommends using the Google Chrome or Mozilla Firefox browser.

Supported Client Browser per Operating System

Operating System	Minimum Browser Version
Windows	Microsoft Edge Mozilla Firefox Google Chrome
macOS	Apple Safari Mozilla Firefox Google Chrome
Red Hat Enterprise Linux (RHEL), CentOS Linux	Mozilla Firefox (see “Known Issues” on page 17)

Windows 10 Updates Might Prevent Client Manager from Connecting to Systems

After you update a Windows 10 client using certain Windows Updates the Client Manager might not display or be able to connect to any Avid NEXIS systems. If this happens, close and quit the Client Manager, then uninstall and reinstall the Avid NEXIS client software on the system.

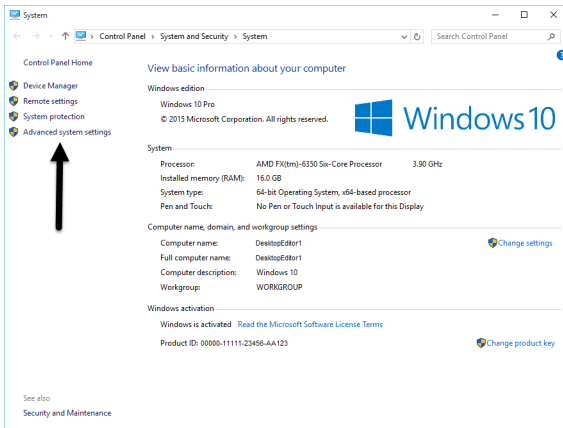
The Windows Updates causing this problem are:

- Windows 10 KB3176495 (OS Build 14393.51)
- Windows Creators Update Version 1703 (OS Build 15063.138 or Insider Preview Build 16299)
- Windows Fall Creators Update Version 1709 (OS Build number 10.0.16299)
- Windows 10 Version 1803
- Definition Update for Windows Defender Antivirus KB2267602 (Definition 1.267.836.0)

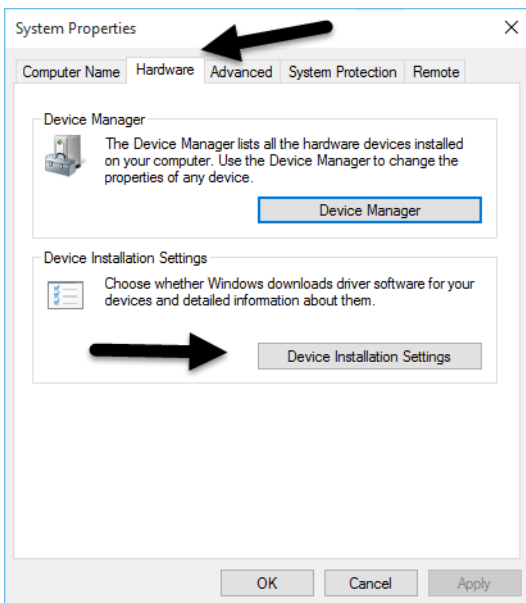
Preventing Windows 10 Automatic Driver Updates

On client systems running Windows 10, automatic Windows driver updates can remove critical NIC driver settings needed for the correct functioning of the Avid Client. To prevent disruption of clients running Windows 10 (Professional and Enterprise), you can defer automatic driver updates as follows:

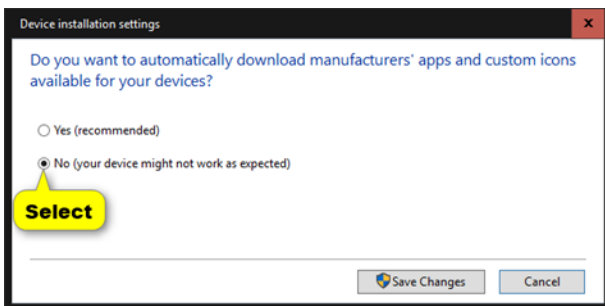
1. Right-click the “This PC” icon (formerly called “This Computer”).
2. Select Properties.
3. Select Advanced System Settings.



4. Click the Hardware tab, then click Device Installation Settings.



5. Select the option “No” to prevent downloading apps and icons automatically.



6. Click Save Changes.

Support for Symantec™ Endpoint Protection

Symantec Endpoint Protection v14 has been qualified on ISIS and Avid NEXIS (version 7.2 and higher) clients in an Interplay environment.

Do not install Symantec on the Avid NEXIS system, and do not scan network drives from an ISIS or Avid NEXIS client. For more information, see *Using Antivirus Software in an Interplay Production or Interplay Central Environment*.

ATTO® ThunderLink™ 10 GbE and 40 GbE Adapters for Mac

Avid NEXIS v2018.5 and higher supports using several ATTO ThunderLink adapters for Mac clients. See the *Avid NEXIS Network and Switch Guide* for details.

Get the latest ATTO driver from their website. Install the appropriate driver for your operating system. Use all the default values and settings.

On macOS 10.13 (High Sierra) or higher clients, you might need to unblock ATTO from the Security & Privacy preferences in the System Preferences menu.

For Windows clients using ATTO 10GbE adapters, see “[Intel® Adapters and Drivers](#)” on page 16.

Myricom® Driver for Mac OS

The Avid NEXIS kit includes a Myricom driver named myri10ge-1.3.5avid-1500-macosx.dmg for Mac clients to enable 10Gb connections. Install the driver from the Drivers\Avid NEXIS Client\Myricom folder in the Avid NEXIS software kit.

If using a 10GbE Myricom connection to Avid NEXIS, macOS 10.14 is not supported. Either continue to use an older macOS version (10.12 or 10.13), or use a supported 10GbE connection, such as ATTO Thunderlink or Sonnet Solo™ 10G (copper only).

If using VMWare on Windows clients, use the 10GbE drivers that come with the Windows OS, not the Myricom driver.

On macOS 10.13 (High Sierra) clients, you might need to unblock Myricom from the Security & Privacy preferences in the System Preferences menu.

Intel® Adapters and Drivers

See the Avid NEXIS Network and Switch Guide for supported Intel (and Intel-based ATTO) NICs.

VMWare ESXi™

The Avid NEXIS v2018.5 Client is supported with VMWare ESXi v6.0.0 (Update 1) using a VMXNET3 adapter with the Mellanox ConnectX-3 adapter and the Mellanox ESX OFED Driver version 1.9.10.2 or later.

VMWare on Windows

To use VMWare on Windows clients, use the 10GbE drivers that come with the Windows OS, not the Myricom drivers. The Avid NEXIS Client software no longer changes the speed of the VMWare virtual NIC to 1 Gb.

Qualified and Approved Avid NEXIS Switches

For a list of the current qualified and approved switches for use in the Avid NEXIS Production Network (APN), see the *Avid NEXIS Network and Switch Guide* on the [Avid NEXIS Documentation KB page](#).

Known Issues

The following are known issues with Avid NEXIS software or third-party vendors.

Avid NEXIS System Issues

The following issues relate to the Avid NEXIS system (including hardware) and Management Console.

If, after Avid NEXIS | Cloudspaces activation, connection is lost to the cloud storage, Cloudspaces created in the Management Console are silently deleted.

CentOS Linux clients using the Linux GUI can experience a delay in seeing all files when browsing contents of Cloudspaces with more than a few thousand files. Browsing Cloudspaces files using the terminal avoids the delay.

New HP® workstations (for Media Composer) are shipped with HP Velocity preinstalled. However, the LiveQoS® filter driver installed by HP Velocity causes Media Composer errors such as delayed write failures and unsaved project settings.

Workaround: On HP workstations with HP Velocity, disable the LiveQoS filter driver on the NICs used for Avid NEXIS connections.

On systems running Red Hat 6.5, Firefox browser version 17.0.10 cannot connect to the Management Console. Firefox version 17.0.10 is the highest version supported on Red Hat 6.5. Try using an older Firefox version.

When looking at switch statistics for the Dell N2024, Dell N3024, and NETGEAR XS712T, you might see the OutDiscard counter (on Dell switches) or the Transmit Packets Discarded counter (on the NETGEAR switch) incrementing. This is acceptable as long as the rate of discards is no more than 1% of the total packets transmitted, or as long as workflows are not experiencing any dropped frames.

Data Migration Utility Issues

The following are known issues with the Avid NEXIS Data Migration Utility, introduced in Avid NEXIS version 2018.9.

During a migration, if either the source or destination system is disconnected from within the Client manager interface, the migration is interrupted and fails.

Workaround: Do not disconnect from systems in the Client Manager while a migration is occurring.

Client Issues

The following are known issues with the Avid NEXIS client software. When a workaround exists, it appears in the paragraph directly following the issue description.

When attempting to install tools downloaded from the Management Console (LDAP Sync Tool, File Gateway, and the Avid NEXIS Toolbox) onto a Windows system, you might see a message that the file is considered unsafe because Windows cannot read the publisher certificate from Avid.

Workaround: You can safely click “Run anyway” to install the tool or utility.

If the Client Manager is connected to an Avid NEXIS system with dual controllers and the System Director service has failed over to the second controller, the Management Console launch button in the Client Manager does not redirect to the new System Director and cannot successfully open the Management Console.

Workaround: To launch the Management Console for an Avid NEXIS system, either open a browser and enter its IP address, or add the IP address of the redundant controller to the Remote Hosts list in the Client Manager.

macOS 10.13 and higher has enhanced security. By default, third-party kernel extensions that were not previously installed are denied. If you are installing the Avid NEXIS client on a macOS 10.13 or higher system for the first time, during the installation process, watch for the System Extension Blocked alert, and click OK to allow the Avid NEXIS client installer to complete. See the Apple Technical Note [TN2459](#).

To see if anything was denied during installation and allow it, do the following:

1. As Administrator, open System Preferences.
2. Click Security and Privacy.
3. Click the General tab.
4. Click the lock button to make changes.
5. See if any applications or drivers are listed in the dialog box as having been denied. If so, click Allow apps downloaded from the App Store and identified developers.
6. Close the System Preferences window.

On a client with multiple NICs, all network paths from the client to a particular Avid ISIS or Avid NEXIS must be via NICs with the same speed.

Do not use a computer running macOS Sierra to install Avid NEXIS software on a new Engine or System Director Appliance.

If the Avid NEXIS Client software is installed accidentally on OS X 8.5 (or any other unsupported OS X version), running the uninstaller does not work.

Workaround: Use AppCleaner (a free download) to uninstall the Avid NEXIS v6.0 Client software.

1. Download AppCleaner from: <http://www.freemacsoft.net/appcleaner/>
2. Follow the instructions for removing an application (in this case, Avid NEXIS v6.0 Client).
3. Restart the Mac.

On Mac Pro 5,1 using a 2 x 1Gb connection to the Avid NEXIS system, you might not receive expected data rates.

During Media Pack rebuilds the Engine performance might not reach the full Engine rating.

If one workspace in Client Manager is mounted by Mapping a Network drive in Windows, when you unmount the workspace and then mount a different workspace in Client Manager manually using the same drive letter, Windows Explorer displays the previous workspace name instead of the new workspace name.

The estimated amount of space available (usually measured in an amount of time at a particular resolution) might differ between what Avid NEXIS calculates and what the Avid editing system calculates. Avid NEXIS accurately reports the amount of space available for file storage. The Avid editing application accounts for overhead in formatting of the media and is more conservative in reporting how much space is available.

The Macintosh Finder might display the Avid ISIS or Avid NEXIS folder contents incorrectly, such as the contents of folders containing items whose name includes a pound sign (#) followed by numeric characters. For example, “project # 12” might be erroneously displayed with some items duplicated and some items missing.

Workaround: Avid recommends avoiding the use of names that include a pound sign (#) followed by numeric characters.

The Path Diagnostics customized setting for Posix tests does not work correctly on the Macintosh clients.

Workaround: Use the default option to automatically select the File Access Method instead.

File Gateway Issues

The following are known issues with the Avid NEXIS File Gateway software.

On macOS, when an Avid NEXIS Workspace is SMB-mounted from the File Gateway, files cannot be newly copied into the Workspace using the Finder. Finder operations to files that already exist in the Workspace succeed. For most apps other than Finder, operations to create and copy files also succeed, including bash commands issued through the Terminal. The File Gateway incorrectly reports that no space is available in the Workspace, and Finder does not allow creation and copy when available space is reported to be zero.

Workaround: You can move and copy new files to the directory using the Mac Console.

After using the Configuration Editor to create a CIFS share, it is possible to open the network drive mounted by the Configuration Editor and delete all the directories (Workspaces) in the PartitionRoot folder. However, the Workspaces are not removed from view in the Management Console (they are not deleted from the perspective of the Avid NEXIS system, and no logs reflect the deletions). Deleting a Workspace by any method deletes all the data in the Workspace. Unless your Workspaces are backed up separately, there is no way to recover them.

For best results, do not delete directories (Workspaces) from the mount points. Always (and only) delete Workspaces using the Management Console.

On Red Hat Linux 6.5 clients, copy and paste operations done within Avid NEXIS Workspaces using the Desktop's graphical File Browser return errors about insufficient space. However, terminal (command line) operations work.

Workaround: If you need the ability to drag and drop (copy/paste) into Avid NEXIS Workspaces using the File Browser, do the following:

To support File Browser Copy/Paste operations:

1. Add your user name to the `fuse` group with the following command:

```
sudo usermod -a -G fuse <username>
```

2. Log out, then log back in to start a new session with the new group membership credentials.
3. Open the File Browser.
4. From the File menu, select Connect to Server.

5. In the Service type drop-down list, choose Windows share.
6. Enter the following information:
 - a. In the Server field, enter the File Gateway server name.
 - b. In the Share field, enter the Workspace name.
 - c. In the User Name field, enter the user name.
7. Click Connect.
8. Enter the Avid user's password.
9. Click Connect again.

This workaround allows copy/paste operations within the CIFS shares using the Desktop's graphical File Browser. You can also access the Workspace in a terminal window using the full path to the Workspace name; for example: `/home/user_name/.gvfs/CIFS_share_name`.

Special Notes

This section contains important information about the Avid NEXIS environment.

User Permissions

A user account with Administrator privileges is required to install the Avid NEXIS client software on your workstations.

LDAP Requires ASCII User Names and Passwords

The Avid implementation of LDAP (Lightweight Directory Access Protocol) requires that you restrict LDAP user names and passwords to ASCII. The LDAP/Avid NEXIS Account Synchronizer searches for groups and their users on an LDAP server and synchronizes (reconciles) user and group accounts by adding or removing users and/or groups from Avid NEXIS.

Fast User Switching Not Supported

Fast User Switching is a Windows feature that allows multiple user accounts to log on to a computer simultaneously. Fast User Switching is enabled by default in Windows computers. The Fast User Switching feature and multiple concurrent logged on user modes are not supported in the Avid NEXIS environment. The Avid NEXIS software does not distinguish the different drive letters mapped to the same workspaces on the same computer. Conflicts appear in the following two scenarios:

- When one user maps a drive letter to one workspace and another user maps the same drive letter to a different workspace
- When one user maps a workspace to one drive letter, and another user maps a different drive letter for the same workspace.

Macintosh Resource Files and Windows Clients

If Macintosh files are copied to a Windows system with the Macintosh resource fork files, the resource fork files cannot be copied to mounted workspaces from a Windows client. Avid NEXIS does not accept Macintosh resource fork files from Windows clients. Appropriate "properties" error messages are displayed if this is attempted.

Adobe Premiere Pro

Avid has tested Adobe Premiere Pro as a client in Avid NEXIS environments.

Adobe Premiere clients follow the same guidelines for Client Manager Preference settings as Avid editors. The default Client Type setting is set to Medium Resolution (limited to resolutions that draw 16 MB/s or less). Use the High Resolution setting when working with High Definition media (resolutions that draw higher than 16 MB/s). There are some HD resolutions that draw less than 16 MB/s for a single stream, but you should still use the High Resolution setting (for example, XDCAMHD 50). For more information, see the Knowledge Base at www.avid.com/support.

Final Cut Pro X Software

Avid has tested Final Cut Pro X as a client in the Avid NEXIS environments. There is no Avid restriction on the QuickTime version. Use the QuickTime version recommended in the Final Cut Pro application. Avid NEXIS supports Final Cut Pro X Macintosh clients in Switched Media Network (Layer 2), Routed Media Network (Layer 3), and Non-media Optimized Network (Mixed Layer 2 and 3) environments.

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