



Avid® NEXIS™ ReadMe

Version 7.9

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 v7.x software releases of Avid NEXIS, which runs 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](#).



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

Revision History

Date	Release	Changes Made
10/03/2017	7.9 Update	Added data for SSD Performance to “System Performance” on page 15
09/29/2017	7.9	See “What’s New in Avid NEXIS 7.9” on page 6
09/06/2017	7.8	See “What’s New in Avid NEXIS 7.8” on page 6; added “One-Disk + Mirroring” data to “System Performance” on page 15
08/21/2017	7.7	See “What’s New in Avid NEXIS 7.7” on page 7
07/06/2017	7.6.1	See “Improvements in Avid NEXIS 7.6.1” on page 7
06/15/2017	7.6	See “What’s New in Avid NEXIS 7.6” on page 7
05/31/2017	7.5	See “What’s New in Avid NEXIS 7.5” on page 8
05/16/2017	7.4	See “What’s New in Avid NEXIS 7.4” on page 8
04/07/2017	7.3.2	Update. See “What’s New in Avid NEXIS 7.3.2” on page 9
03/31/2017	7.3.1	Update related to LDAP. See “What’s New in Avid NEXIS 7.3.1” on page 9
03/20/2017	7.3	See “What’s New in Avid NEXIS 7.3” on page 9
02/24/2017	7.2 Update	Update related to default gateway IP address connectivity. See “What’s New in Avid NEXIS 7.2” on page 10.
02/16/2017	7.2	See “What’s New in Avid NEXIS 7.2” on page 10
01/12/2017	7.1.1	See “What’s New in Avid NEXIS 7.1.1” on page 11

Date	Release	Changes Made
11/28/2016	7.1	See “What’s New in Avid NEXIS v7.1” on page 11
11/14/2016	7.0	Initial release

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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

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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).

What's New in Avid NEXIS 7.9

The Avid NEXIS v7.9 release includes the following improvements and new features:

- This release introduces a new Avid NEXIS E2 Engine with all SSD Media Pack drives, for workflows requiring extremely fast performance, such as playback of ultra high bandwidth media. Avid NEXIS | E2 SSD contains 10 SSDs of either 960GB or 1920GB in its Media Pack, and uses a 40GbE NIC on the single Controller (redundant Controllers are not supported).

You can combine up to three Avid NEXIS | E2 SSD Engines into a single shared-storage system. In the Management Console and the Client Manager UI, Storage Groups and Workspaces display “SSD” as the Performance type, and the Workspaces icon is a green circle with an “up” arrow. See the *Avid NEXIS Administration Guide* for more information.

Link aggregation (LACP, also known as NIC teaming or network redundancy) on Avid NEXIS | E2 SSD is not available in this release.

- This release introduces support for the Avid NEXIS | PRO 40TB. You can combine up to four Avid NEXIS | PRO engines in a single shared-storage system, containing any combination of Avid NEXIS | PRO 20TB or 40TB engines.

Avid NEXIS | PRO 40TB uses 4TB SATA hard disk drives (HDDs). The Avid NEXIS | PRO 40TB Controller is installed in slot 1 (bottom slot). Redundant Controllers are not supported. Avid is not selling upgrade disk packs to convert an Avid NEXIS | PRO 20TB to 40TB, however, these two engine capacities can be combined in the same system. Avid recommends a separate Storage Group for each engine capacity to maximize overall capacity.

Both High Performance and Scale-Out Performance are supported in Avid NEXIS | PRO 40TB. Workspaces can use 0-, 1-, or 2-disk protection.

What's New in Avid NEXIS 7.8

The Avid NEXIS v7.8 release includes the following improvements and new features:

- Support for 10TB drives, to create a 100TB Media Pack, in all Avid NEXIS Enterprise (E-series) Engines. When adding 100TB Media Packs to existing Avid NEXIS shared-storage systems, put them in a separate Storage Group from other capacity Media Packs. Otherwise the extra capacity of the 100TB Media Pack is reduced to match the smallest capacity Media Pack in a Storage Group.

You can add a 100TB Media Pack to an Engine that is not fully populated yet. But before you do, Avid recommends temporarily removing any spare drives. After you install all the 10TB drives, make sure the new Media Pack is created properly, then reinstall the spare drives. This prevents the system from creating a Media Pack from a mix of drive sizes, resulting in a Media Pack capacity based on its smallest drive.

- Support for Windows Server 2016 on client systems, able to connect to Avid NEXIS systems running Avid NEXIS v7.7 or higher, and ISIS systems running v4.7.5 or higher. Windows Server 2016 client systems can use the Edge or Internet Explorer browser.
- Fixed an issue that caused corruption during specific read/write patterns.
- Fixed an issue with filenames that contained a percent sign (%), which caused the System Director to lose connection.
- Improved I/O flush times.

What's New in Avid NEXIS 7.7

The Avid NEXIS v7.7 release introduces support for mirrored Workspaces that use one-disk Workspace protection. This option increases the usable storage capacity while protecting against the complete loss of an Avid NEXIS | Enterprise Engine or any three disk failures.

An Avid NEXIS | Enterprise system configured for Seamless Engine Protection (Mirror Protection) can sustain multiple drive failures of up to two drives in each Media Pack when using Dual-Disk protection and one drive in each Media Pack when using Single Disk Protection.

This release also introduces mirror recovery to rebuild media from the mirror copy in the unlikely event that an unrecoverable engine loss is encountered.

Recovery is prioritized to rebuild workspaces configured with mirror and one-disk protection before workspaces configured with mirror and dual-disk protection. This provides the highest level of protection and redundancy for all media and workspaces.

Improvements in Avid NEXIS 7.6.1

The Avid NEXIS v7.6.1 release includes the following improvements:

- Fixed issue where a greater than 1x playback speed in Media Composer consumed more bandwidth than it should.
- Improvements to redistribution with load when one or two disks are being rebuilt after a failure.
- Fixed Installation Wizard to display reboot countdown after user committed configuration changes.

What's New in Avid NEXIS 7.6

The Avid NEXIS v7.6 release includes the following improvements and new features:

- Support for High Performance Storage Groups and Workspaces.

High Performance Storage Groups and Workspaces support workflows where a small number of clients need to play back ultra-high bandwidth media. To create a High Performance Storage Group, bind Media Packs with the new High Performance bind setting. The default bind setting, called Scale-Out, is the new name for the previously supported setting, which supports large work groups and predictable bandwidth.

After you upgrade, all existing Media Packs, Workspaces, and Storage Groups continue to use the previous performance option, now called Scale-Out performance. Only new Media Packs added after the upgrade can be bound as High Performance.

Both 20TB and 60TB Media Packs are supported for High Performance use. Avid recommends that all the Media Packs in the Storage Group be the same capacity.

A shared-storage system can have a single High Performance Storage Group and any number of Scale-Out Performance Storage Groups, up to the total number of Storage Groups supported in your system (see [“System Configuration Limits”](#) on page 14).

High Performance Storage Groups do not support media mirroring. Workspaces in High Performance Storage Groups can use any Media Pack protection mode (unprotected, one-disk, or two-disk).



High Performance Media Packs, Storage Groups, and Workspaces are not supported on Avid NEXIS | E5 Engines.

After you upgrade to Avid NEXIS v7.6, Avid recommends performing a full redistribution, at your earliest convenience, on all Workspaces (in all Storage Groups). This release includes changes to the data layout across Media Packs to improve performance.

- Pro Tools HD 12.8 has been qualified for shared-storage workflows with Avid NEXIS. Supported workflows include streaming media from Avid NEXIS to Pro Tools for small to medium audio post production and small broadcast. For more information, see [Avid NEXIS Requirements with Pro Tools](#).

Connection ^a	Simultaneous Tracks with Audio	Sample Rate	Bit Depth
1 Gb	96	48k	24
2 x 1 Gb	128	48k	24
10 Gb	>256 (max testing done @256)	48k	24

a. Results may vary depending on Sample Rate, Bit Depth, CPU speed, Mixing and Matching Connection Types and available network bandwidth.

- Fixed a race condition causing occasional error messages in the system log.

What's New in Avid NEXIS 7.5

The Avid NEXIS v7.5 release includes the following improvements and new features:

- Avid NEXIS | Enterprise now fully supports Add, Remove and Full Redistribution with load for all configurations including mirrored workspaces. Redistribution occurs when you add or remove Media Packs from a Storage Group.
- MacOS Sierra 10.12.2 or higher is now supported with Firefox, Chrome, and Safari browsers for connection to the Avid NEXIS Management Console.
- The Avid NEXIS Client Manager kit now sets the Receive Side Scaling (RSS) value to Enabled for the Myricom 10Gb adapter on the following client operating systems: Windows 8, Windows 8.1, and Windows 10, and Windows Server 2012 to address some issues in Media Composer and Pro Tools.

The original default value (Disabled) does not change for clients running Windows 7, Windows Server 2008 R2, or Windows Storage Server 2008 R2 (64 bit).

The Avid NEXIS Client Profiler incorrectly returns a status of Failed for the RSS setting on the unchanged clients. However, those clients will perform as expected. Do not manually change the RSS setting. The Avid NEXIS Profiler issue will be fixed in a future release.

- Fixed an issue where the Avid LDAP Sync Tool could not connect to an LDAP server that only supports DIGEST-MD5 encryption.

What's New in Avid NEXIS 7.4

The Avid NEXIS v7.4 release includes the following improvements and new features:

- Support for CentOS as a client operating system.

This release adds support for CentOS Linux version 7.3 on client systems. Clients running CentOS and the Avid NEXIS v7.4 client software can connect to an Avid ISIS system running v4.7.5 and higher, and to any Avid NEXIS system. The CentOS client kit is available in the Installers page in the Management Console and also in the `Installers_Client\` folder in the Avid NEXIS kit, and is named `AvidNEXISClient_el.centos.x86_64_7.4.0_5.bin`.

- Avid Client software for Linux now displays and connects to more than 10 remote System Directors. Previous versions of the Linux client limited to 10 the number of remote System Director connections (and the number displayed in the Client Manager's Systems pane). The Client Manager now displays and connects to as many remote System Directors as are configured in the Remote Hosts dialog box.
- Fixed an edit-while-capture workflow problem involving clients using dual 1Gb connections to the Avid NEXIS.

What's New in Avid NEXIS 7.3.2

The Avid NEXIS v7.3.2 release includes the following bug fix:

- Fixed a timing issue where in some circumstances, an Avid Interplay Media Indexer would assert (blue screen).

What's New in Avid NEXIS 7.3.1

The Avid NEXIS v7.3.1 release includes the following bug fix:

- Fixed an issue in Avid NEXIS 7.2 and 7.3 where under some circumstances, including intermittent network connections, external user authentication using LDAP would fail.



Update all client systems to Avid NEXIS Client v7.3.1 before updating the Avid NEXIS system to v7.3.1. The Avid NEXIS v7.3 client cannot connect to a system running Avid NEXIS v7.3.1 or higher.

What's New in Avid NEXIS 7.3

The Avid NEXIS v7.3 release includes the following improvements and bug fixes:

- Avid NEXIS Client Kit available to download from the Avid Download Center: <http://esd.avid.com>.
Avid ISIS and Avid NEXIS customers can download and install the latest Avid NEXIS Client software, which connects to both Avid NEXIS and Avid ISIS (v4.7.5 and higher) systems.
- Fixed an issue introduced in Avid NEXIS v7.2 where the System Director was using the `ping` command to determine the presence and connectivity of the default gateway IP address, and counting on a valid address being configured. The `ping` command is no longer used to determine the presence or validity of a default gateway address. Avid recommends updating to Avid NEXIS v7.3 from v7.1 or earlier to avoid the possibility of losing access to the interface if no default gateway is configured, or if it is configured incorrectly.
- Fixed an issue where the hardware status on the Agent was displaying incorrect or no information for the power supplies and fans in an Avid NEXIS | E5.
- Fix an 'Edit While Capture' issue where constant reads of a data chunk led to a delayed write failure.
- Added support for the following Myricom 10GbE Rev C NICs for use in Avid NEXIS clients:
 - 10G-PCIE2-8C2-2T
 - 10G-PCIE2-8C-T
 - 10G-PCIE2-8C2-2S

The Myricom driver bundled with the Avid NEXIS kit works for these NICs. See "[Myricom® Drivers](#)" on page 22.

What's New in Avid NEXIS 7.2

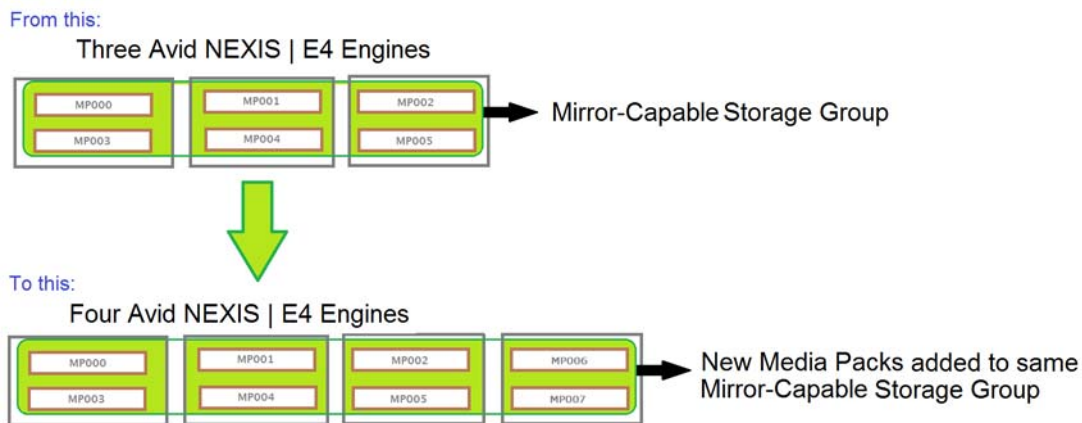
The Avid NEXIS v7.2 release includes the following improvements and new features:

- Support for adding Media Packs to a mirror-capable Storage Group during a maintenance window (no client I/O to Workspaces in that Storage Group).

After updating to v7.2, you can add more Media Packs to a mirror-capable Storage Group, as specified below:

- The Media Packs must be the same capacity as those already in the mirror-capable Storage Group
- Each Engine you are adding to the mirror-capable Storage Group must have the same number of Media Packs as the Engines already in it

For example, if a mirror-capable Storage Group contains three Avid NEXIS | E4 Engines each with two 60TB Media Packs, you can add another Avid NEXIS | E4 Engine with two 60TB Media Packs to the same mirror-capable Storage Group.



- Support for macOS Sierra (v10.12.2) clients.
- Avid NEXIS File Gateway software on an AS3000 Server.

Avid NEXIS v7.2 supports open access to Avid NEXIS workspaces using the Avid NEXIS | File Gateway installed on an Avid AS3000 Server running Microsoft® Windows® Storage Server 2008 R2. This allows access to Avid NEXIS from clients and infrastructures that do not have the Avid NEXIS Client installed. The Avid NEXIS File Gateway server and software is available now (see your Avid reseller or sales representative for details). The Avid NEXIS File Gateway documentation is available on the Avid Knowledge Base.

- Interface checking related to redundant controller configurations.

The default gateway IP address must be reachable by a ping command, otherwise the interface is disabled. This can cause the Avid NEXIS Engine or System Director Appliance to become disconnected from the network.



Before upgrading to Avid NEXIS v7.2, make sure there is a default gateway IP address configured, and that it can be reached by a ping command. For more information, see the Avid Knowledge Base.

What's New in Avid NEXIS 7.1.1

The Avid NEXIS 7.1.1 patch release includes an important fix for Avid NEXIS systems with clients that inadvertently attempt to connect through a 100Mbps Ethernet connection. Anything other than 1Gb or 10Gb is not a supported connection speed, and the client would fail to connect. However, beginning with v5.0, the client's attempt to connect at an unsupported speed caused the Storage Manager to assert and the Avid NEXIS system to become temporarily unresponsive.

This fix prevents the system from asserting, and rejects the unsupported client connection. Those clients must modify their connection speeds to connect to Avid NEXIS.

What's New in Avid NEXIS v7.1

The Avid NEXIS v7.1 release includes the following improvements and new features:

- Starting in the v7.x releases, the total scale of the Avid NEXIS Enterprise has been raised to 2.88PB of capacity and 192 GBytes/sec of bandwidth. The limits on the number of Media Packs in an Avid NEXIS system have increased, as follows:
 - Up to 24 Media Packs in systems with a System Director Appliance and the Avid NEXIS | FS Extended license and any combination of Avid NEXIS Enterprise Engines
 - Up to 48 Media Packs in systems with a System Director Appliance and the Avid NEXIS | FS Advanced license and any combination of Avid NEXIS Enterprise Engines
- This release introduces support for extended password lengths for users. Now, users can have passwords of up to 127 bytes, which is equivalent to 127 ASCII characters. The Administrator account for an Avid NEXIS system can also be up to 127 bytes (ASCII characters).
- This release fixes a problem where drives were marked as under-performing or failed in error. This could lead to media being offline. Avid requires upgrading to Avid NEXIS v7.0 or higher.
- This release fixes a problem specific to the Avid NEXIS | PRO running Avid NEXIS v7.0, where running the Log Aggregator caused the System Director to restart.
- This release fixes a problem isolated to Avid NEXIS v7.0 systems, where a client could not open a Pro Tools project stored on an Avid NEXIS system.

What's New in Avid NEXIS v7.0

The Avid NEXIS v7.0 release includes the following improvements and new features, as well as all of the fixes from the v6.x.x releases:

- This release introduces support for protecting Workspaces against the failure of an entire Engine. To use this feature, called media mirroring, your shared-storage system must comprise:
 - A System Director Appliance and at least three Engines of the same type (three Avid NEXIS | E2, three Avid NEXIS | E4, or three Avid NEXIS | E5 Engines)
 - All the Engines must have the same number and capacity of Media Packs
 - All of the Media Packs must belong to the same Storage Group

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.

You can upgrade an existing shared-storage system to support mirrored Workspaces. After the upgrade a new column called Mirror Capable is displayed on the Storage Groups page. If any existing Storage Groups meet the criteria for this feature, after the upgrade the Mirror Capable column displays a Yes. You do not need to manually enable this support on a Storage Group; it is automatic.

You can choose to use mirroring on new Workspaces you create in that group. Two-disk Media Pack protection is also applied to any new mirrored Workspaces.

Mirror-capable Storage Groups are subject to some restrictions on changes and redistribution; see the *Avid NEXIS Administration Guide* for more information.

- This release introduces support for Link Aggregation (also called NIC teaming) on the Ethernet ports in all Controllers in an Avid NEXIS Enterprise Engine or System Director Appliance. Link aggregation provides protection from a single point of failure (one Ethernet port or one switch, depending on how you configure your network).

For more detail, see the *Avid NEXIS Setup and Maintenance Guide*, the *Avid NEXIS Administration Guide*, and the *Avid NEXIS Network and Switch Guide*. All of these documents are available on the Knowledge Base.

- Fixed an issue where using copy and paste actions in the Agent did not work on the CONFIGURE tab, in the Data Interfaces fields.
- Removed the “Missing/Empty Disk” warnings in Engines that are not fully populated with Media Packs, because that is a supported configuration.
- Fixed an issue with LDAP authentication on Avid NEXIS systems, so that it no longer requires reverse DNS lookup.
- Restored the functionality of the Notification Service. In earlier versions of Avid NEXIS v6.x, the Notification Service did not work. This issue also affected Avid ISIS | 1000 systems running v5.x, on which the Notification Service was configured and working, which were upgraded to v6.x. After the upgrade, notification emails were no longer generated.
- Support for running an Aspera® data transfer application on an Avid NEXIS client to transfer files between Workspaces on local and remote NEXIS systems. This release also supports transferring data from Avid NEXIS Workspaces to an Aspera Enterprise Server running Aspera on Demand for Amazon Simple Storage Service (Amazon S3). For more information, see <http://asperasoft.com/>.

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
v6.0.x, v6.1.x, v6.2.x	v7.9
v7.1, v7.2.x, 7.3.x, 7.4.x, 7.5.x, 7.6.x, 7.7, 7.8	

ISIS | 1000 Upgrade Paths

You can upgrade any ISIS | 1000 to take advantage of its new features and capabilities. After the upgrade, an ISIS | 1000 becomes an Avid NEXIS | PRO. An Avid NEXIS | PRO cannot be combined with an Avid NEXIS Enterprise Engine in the same shared-storage system. The following procedure describes how to upgrade an ISIS | 1000.



When upgrading an ISIS | 1000, you must install v5.0.2 before upgrading to the current version.

This procedure assumes you are starting with an ISIS | 1000 running v5.0.x.

1. Upgrade to v5.0.2.
2. Upgrade to the current Avid NEXIS release.

The ISIS | 1000 becomes an Avid NEXIS | PRO.


3. **Important:** Install the patch **AvidNEXISSetup_Pro_Firmware_r4.1.16d.bin**.

After you upgrade an ISIS | 1000 to an Avid NEXIS | PRO, the following features are available:

- Workspace protection options. You can create Workspaces that are protected from one, two, or zero disks failing in a Media Pack. You can also continue to create Workspaces with two-disk protection (the only available option in v5.x).
- Flexible storage management. You can change the size of an existing Storage Group by adding or removing ISIS | 1000 or Avid NEXIS | PRO Engines.
- Media Pack performance has improved to 400MB/sec from 300MB/sec.

System Director and Client Version Compatibility

The v7.x Client software works with the following System Directors and minimum versions:

Avid ISIS or NEXIS System Director	Supported Versions
ISIS 7500 - 7000, ISIS 5500 - 5000, ISIS 2500 - 2000	v4.7.5 and higher
Avid NEXIS Enterprise Engine, System Director Appliance, Avid NEXIS PRO (Avid ISIS 1000)	v7.0.x, v7.1.x, v7.2.x, v7.3.x, v7.4.x, v7.5.x, 7.6.x, 7.7, 7.8, 7.9
	 <i>Avid no longer supports ISIS v5.x or Avid NEXIS v6.x., and strongly recommends upgrading to the current version on all Avid NEXIS systems.</i>



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

The following table lists the system configuration limits for all Avid NEXIS platforms in the v7.x release stream.

Item	Limit
Max Media Packs in same shared-storage system	<ul style="list-style-type: none"> • 24 in systems with a System Director Appliance, the Avid NEXIS FS Extended license and any combination of Avid NEXIS Enterprise Engines • 48 in systems with a System Director Appliance, the Avid NEXIS FS Advanced license and any combination of Avid NEXIS Enterprise Engines (Avid recommends running v7.3 for any system with more than 24 Media Packs) • 4 in systems composed entirely of Avid NEXIS PRO (with any combination of 20TB and 40TB Media Packs), or Avid NEXIS Enterprise Engines using the Avid NEXIS FS Foundation license for the embedded System Director function • 3 in systems composed entirely of Avid NEXIS E2 SSD
Files and Folders	<ul style="list-style-type: none"> • 8 million on Avid NEXIS E2 and Avid NEXIS E4 • 20 million on any configuration using a System Director Appliance • 3 million on Avid NEXIS PRO
Media Packs/Engine	<ul style="list-style-type: none"> • 1 or 2 in Avid NEXIS E4 • 4 to 8 in Avid NEXIS E5 • (No Media Packs in a System Director Appliance) • 1 in Avid NEXIS PRO (ISIS 1000), Avid NEXIS E2, Avid NEXIS E2 SSD
Storage Groups	<ul style="list-style-type: none"> • 1 to 32 in configurations with a System Director Appliance and any combination of Avid NEXIS Enterprise Engines with Scale-Out Performance Media Packs • 1 to 31 in configurations with a System Director Appliance and any combination of Avid NEXIS Enterprise Engines with one High Performance Storage Group • 1 to 4 in systems composed of Avid NEXIS Enterprise Engines with an embedded System Director • 1 to 4 in systems composed of all Avid NEXIS PRO • 1 to 3 in systems composed of all Avid NEXIS E2 SSD • One High Performance Storage Group per shared-storage system, with: <ul style="list-style-type: none"> - Up to four Media Packs in a system with an embedded System Director - Up to eight Media Packs in a system with a System Director Appliance • High Performance Storage Groups and SSD Performance Storage Groups do not support Media Mirroring
Users	5640 in all configurations
User Groups	1028 (a user can be in 15 groups) in all configurations

Item	Limit
Connected Clients	<ul style="list-style-type: none"> 40 active clients in Avid NEXIS systems with the Avid NEXIS FS Foundation license for the embedded System Director 165 active in a configuration with a System Director Appliance and the Avid NEXIS FS Extended license 330 active in a configuration with a System Director Appliance and the Avid NEXIS FS Advanced license 24 active (30 connected) in Avid NEXIS PRO
Workspaces	1024 in all configurations

System Performance

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
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

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
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 Mac OS 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
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

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 API's 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.

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 Avid NEXIS v7.x Workspaces

Software	Version
Apple Final Cut Pro X (see “Final Cut Pro X Software” on page 29)	10.3
Adobe Premiere Creative Cloud	Premiere Pro CC 2017 (v11)

Qualified Third-Party Editing Clients on Avid NEXIS v7.x Workspaces (Continued)

Software	Version
Blackmagic Design DaVinci Resolve	12.5
Grass Valley EDIUS Pro	7, 8

Supported Client Operating Systems

The following table lists the supported Avid client operating systems with Avid NEXIS 7.x. All of the listed client operating systems support single or dual 10 Gb Ethernet network interface cards.

Supported Client Operating Systems and Service Packs

Operating System	Version and Notes
macOS Sierra (64 bit kernel)	10.12.2 or higher with latest updates
OS X El Capitan (64 bit kernel)	10.11.x with latest updates
OS X Yosemite (64 bit kernel)	10.10.x with latest updates
CentOS Linux	7.3 with latest updates and security patches
Red Hat Linux	6.5 with latest updates and security patches
Windows 10	Latest Service Pack Disable Windows 10 Secure Boot; see “Disabling Windows 10 and Windows Server 2016 Secure Boot on Clients” on page 18 Defer automatic driver updates; see “Preventing Windows 10 Automatic Driver Updates” on page 20
Windows 8.1	Latest Service Pack
Windows 7 (64 bit)	Latest Service Pack and see “Installing Avid NEXIS Client Software on Windows 7 and Windows Server 2008 R2” on page 19
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 19
Windows Server 2016	Latest Service Pack See “Disabling Windows 10 and Windows Server 2016 Secure Boot on Clients” on page 18

Disabling Windows 10 and Windows Server 2016 Secure Boot on Clients

On a Windows 10 or Windows Server 2016 client system, to use the Avid NEXIS Client software to connect to an Avid ISIS or Avid NEXIS system, you first must disable the UEFI Secure Boot feature. For more information, see the following article from Microsoft: [Disabling Secure Boot](#).

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 Environment

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

Supported Client Browser per Operating System

Operating System	Browser
Windows Server 2016	Microsoft Edge, Internet Explorer 11
Windows Server 2012 R1 and R2, Windows Server 2008 R2, and Windows Storage Server 2008 R2	Internet Explorer 11
 <i>On Windows Storage Server 2012 R2, you must manually enable Adobe Flash Player through the Server Manager. For more information, see: http://www.tachytelic.net/2014/07/enable-adobe-flash-player-windows-server-2012-r2/</i>	
Windows 7, 8.1, 10	Microsoft Edge for Windows 10 Internet Explorer 11 Mozilla Firefox Google Chrome
macOS Sierra (10.12.2 or higher)	Apple Safari Mozilla Firefox Google Chrome
OS X 10.10, 10.11	Apple Safari (see “Known Issues” on page 24) Mozilla Firefox Google Chrome
Red Hat Enterprise Linux (RHEL) 6.5, CentOS Linux	Mozilla Firefox

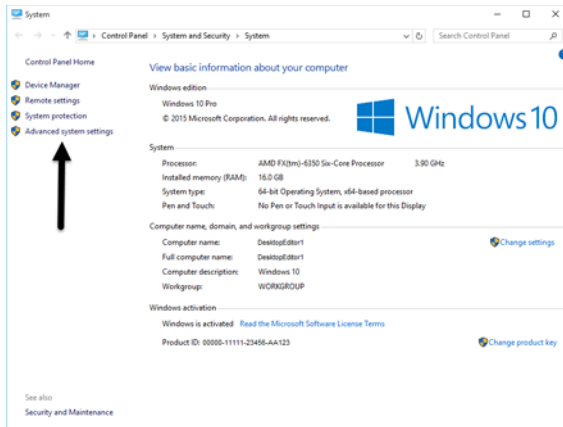
Windows 10 Updates Might Prevent Client Manager from Connecting to Systems

After you update a Windows 10 client using Windows Updates (specifically, after installing KB3176495 or Windows Creators Update Version 1703 [OS Build 15063.138]) 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.

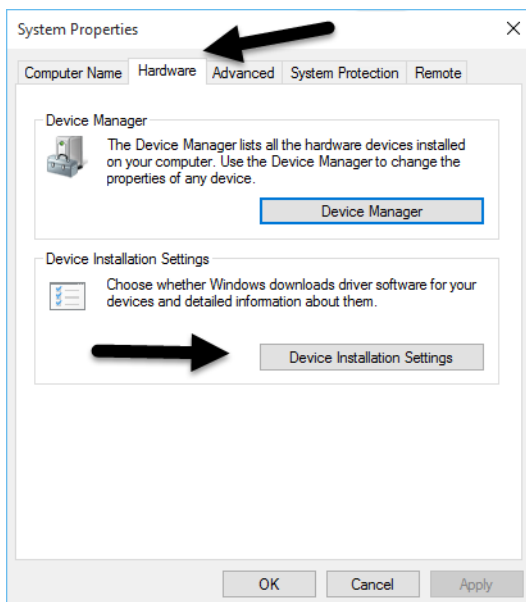
Preventing Windows 10 Automatic Driver Updates

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:

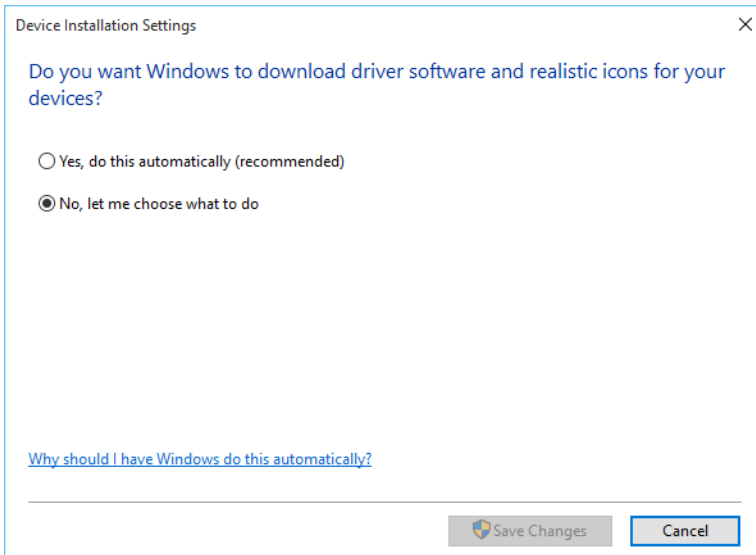
1. Right-click the “This PC” icon (formerly called “This Computer”).
2. Select Properties.
3. Select Advanced System Settings.



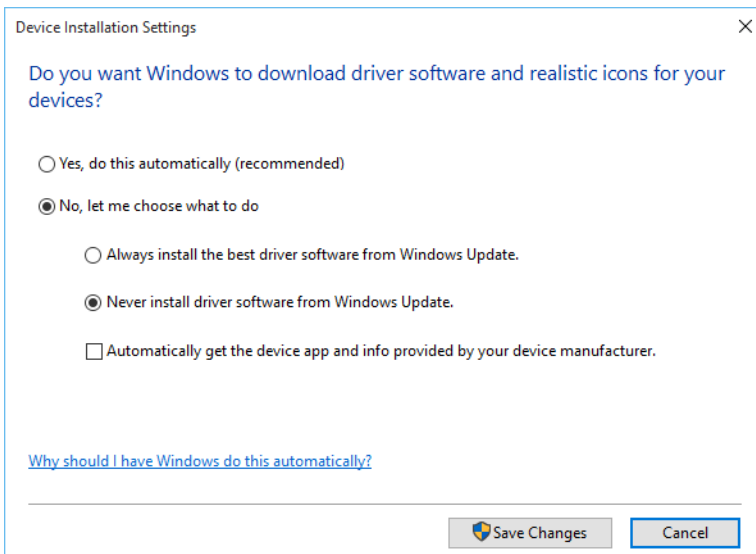
4. Click the Hardware tab, then click Device Installation Settings.



5. Select the option “No, let me choose what to do.”



6. Select the option “Never install driver software from Windows Update, and deselect the option “Automatically get the device app.”



7. Click Save Changes.

Support for Symantec™ Endpoint Protection

Symantec Endpoint Protection v14 has been qualified on ISIS and 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 Adapters for Mac

Avid NEXIS v7.x supports using any of the following ATTO ThunderLink adapters for Mac clients:

- TLNT-2102-D01 (10GbBaseT) — Provides two 10 GbE connections
- TLNS-2102-D01 (Optical SFP+) — Provides two 10 GbE connections
- TLNS-2101-D00 — Provides one 10 GbE connection

This release includes the ATTO v2.0.6 driver, which enables 10 Gb connections to OS X 10.10 and 10.11, and the ATTO v2.0.7 driver, which enables 10 Gb connections to macOS Sierra (10.12.2 and higher).

Install the appropriate driver for your operating system (either `osx_drv_tlnc_206.dmg` or `osx_drv_tlnc_207.dmg`) from the `Drivers\Avid NEXIS Client\ATTO` folder in the Avid NEXIS software kit. Use all the default values and settings.

For Windows clients using ATTO 10GbE adapters, see “[Intel® Adapters and Drivers](#)” on page 22.


Myricom® Drivers

The release kit for Avid NEXIS v7.x includes the following Mac and Windows Myricom drivers to enable 10Gb connections. Install the appropriate driver from the `Drivers\Avid NEXIS Client\Myricom` folder in the Avid NEXIS software kit.



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

Myricom Network Drivers per Operating System

Operating System	Minimum Supported Driver
Windows Server 2012, and 2008 R1/R2, Windows 10, Windows 8.1, Windows 7	Myricom_1.1.14_Win_64.msi  <i>When installed, the Myricom driver version reports 1.1.13; however, this is the 1.1.14 kit. This kit contains only a fix to the installer.</i>
OS X 10.10, 10.11, macOS Sierra (10.12.2 and higher)	myri10ge-1.3.5avid-1500-macosx.dmg

Intel® Adapters and Drivers

As of version 6.0, Avid NEXIS supports the following Intel (and Intel-based ATTO) NICs:

- Intel PRO/1000 PT and GT, 1GigE and 2x1GigE
- Intel I350 1GigE and 2x1GigE LC fiber optic and RJ-45 copper
- Intel Converged Ethernet X540-T2 1GigE, 2x1GigE, 10GigE, and 2x10GigE RJ-45 copper
- Intel Converged Ethernet X520-T2 1GigE, 2x1GigE, 10GigE, and 2x10GigE LC fiber optic and RJ-45 copper
- Intel Converged Ethernet X710 2 x 10GigE SFP+
- ATTO FF-NS12, NT12 (use `Intel_20.7.1_Win_64.exe` driver in the kit)

Intel PRO Ethernet adapter boards are recommended for most Windows-based editing systems that connect to the Avid NEXIS system. The Intel PRO/1000 PT and Intel I350 T2 are copper interfaces and the Intel PRO/1000 PF is an optical interface. Check the driver version listed in the Windows Control Panel on your Windows clients.

For Intel NICs, Avid includes the following drivers in the kit for convenience. Use the supplied driver or a newer one if available from the NIC vendor.

Intel Network Drivers per Operating System

Operating System	Driver Filename and Notes
Windows 10, Windows 8.1, Windows 7 (64-bit)	Intel_20.7.1_Win_64.exe
Windows Server 2012 R2	Use the driver included with the OS, or use an Intel I350 NIC with Intel_19.1_Win_64.exe
Windows Server 2012 R1, Windows Storage Server 2008 R2	Intel_19.1_Win_64.exe

Loading or Updating the Intel PRO Driver on Windows Clients

To load the Intel PRO driver on a Windows system:

1. Copy the file titled Intel_xx.x driver to your system; found on the Avid software kit in the \Drivers\Avid NEXIS Client\Intel_Pro1000\ folder.
2. Double-click the .exe file to expand the compressed file and run the installer.
3. Accept the default settings to install the driver.



The default Intel transmit and receive descriptors are set to 256 however, when loading the Avid client software the transmit and receive descriptors are set to 1024. For more information, see Avid Client Guide.

4. After the Intel driver is installed, restart the Windows system.

VMWare ESXi™

The Avid NEXIS v7.x 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 the Avid NEXIS software.

Avid NEXIS System Issues

The following issues exist in the v7.x releases.

- Do not use Disk Analyzer on a High Performance Storage Group. This can cause the Storage Manager to assert.
- When upgrading an Avid NEXIS system from v7.0 to v7.1, sometimes a Controller fails to reboot and complete the upgrade.

Workaround: Manually reboot the Controller by inserting a thin object like a straightened paper clip into the left recessed button on the Controller, as shown below.



- On computers running OS X 10.11.6 with the Safari v10.0.1 browser, you must manually re-enable the Adobe Flash Player for the Management Console to work. The current release of Safari turns off plug-ins, including the Flash player, by default. If you upgrade to a later version of Safari, Flash is disabled again, and you must re-enable it. For more information see [How to use Internet plug-ins in Safari for Mac](#).
- The Management Console Installers page displays an installer package (in the Avid NEXIS Engine section) with a different version number than the one actually installed on the system. This does not affect your system operation, and will not affect future upgrades because that file is not used to upgrade a system.
- The only supported method for upgrading a multi-Engine system (any configuration including more than one Avid NEXIS Engine, with or without a System Director Appliance) is to open the Management Console, click System Settings, and click Upgrade. This method upgrades all the system components in one operation, and sequences the updates correctly on all the Controllers in all the chassis.



Do not update Controllers or Engines individually through the context (right-click) menus, or through the Agent on individual Engines or the System Director Appliance.

However, in some cases, upgrading the system through the Management Console can fail to update all the system components. If this happens, the Management Console displays the status System Ready, but not all Controllers or Engines will be at the same version.

Workaround: Retry the upgrade using the Management Console, System Settings, Upgrade link again.

- When services fail over from one Controller to the other in a system with redundant Controllers, no information is displayed in the Management Console System Status History or in the system Logs about the resource migration.
- 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.

- Clicking the Info button in the Details pane in the Management Console does not automatically log you in to the Agent. Instead, it launches the login screen for the Agent.

Workaround: To open the Agent, log in using the Administrator password.

- Some Avid NEXIS | PRO systems experience high fan speed. A fix for this issue is available through your Avid Master Account, and installation instructions are available on the Avid NEXIS Documentation Knowledge Base page.

Workaround: The fan speed decreases to normal levels after you reboot the Avid NEXIS | PRO.

- If you resize your browser window while the Management Console is open, the screen might not rescale properly, and drop-down menus and their mouse controls might not work properly.

Workaround: If possible, always keep the browser window sized as large as possible to best display the Management Console.

- 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.
- On an Avid NEXIS system with a single Workspace, if you move the resize slider all the way to the right, the resize handle disappears, and you are unable to move it back to the left.

Workaround: Do either of the following:

- Click the Zoom out button on the Workspace size heading until the resize handle becomes visible again.
- Change the Workspace size in the Details panel. When the Workspace is resized, the resize handle becomes available.

- When accessing the Storage Manager agent using a Chrome browser, you might receive a “This web page is not available” message.

Workaround: Press the F5 key. When page reloads, on the “Site’s Security certificate is not trusted” window click Proceed anyway.

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.

- Microsoft has released a new build version of Windows 10 since the last release of Avid NEXIS Profiler. When using Avid NEXIS Profiler on a client running Windows 10 operating system build version 15063 or higher, the Profiler displays a Failed status because it does not recognize the newer build version. You can safely ignore this error.
- On a Mac client, you cannot install the LDAP Sync Tool and the Toolbox. The issue is due to a conflict between the Avid self-signed certificate and the security settings on OS X.

Workaround: To allow these tools to run on OS X, do the following:

1. Quit your System Preferences.
2. Open the Terminal app from the /Applications/Utilities/ folder and enter the following command:

```
sudo spctl --master-disable
```
3. Press return and enter an administrator password.
4. Launch System Preferences and go to Security and Privacy, then click the general tab.
 The Gatekeeper options list now allows apps to be downloaded from anywhere.
5. Try again to start LDAP Sync Tool or the Toolbox utilities.



Disabling the Gatekeeper is not recommended for the majority of Mac OS X users. Allowing apps from anywhere can make your system vulnerable to malware and junkware.

You can return to the stricter (default) Gatekeeper settings by repeating the above steps and entering the following command in Step 2:

```
sudo spctl --master-enable
```

- 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 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.

- Do not disconnect the PCI interface cable from either a Nitris DX or Mojo DX while it is powered up on the Macintosh editing system. If Avid ISIS or NEXIS is running on this system and the cable is removed, the Macintosh produces a kernel panic and reports ISIS or NEXIS as the problem. You must power down Macintosh before removing the PCI interface cable between the Macintosh and the Nitris DX or Mojo DX. The only way to power down the Nitris DX or Mojo DX system is to shut down the client connected to it.
- 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.

- 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 Linux clients running Red Hat 6.5, the file manager (Nautilus v2.28.4) and Firefox (v17) browser cannot display the contents of an FTP directory with a virtual hostname.

Workaround: Use the terminal command for FTP, or use a third-party FTP application.

- 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.

For optimal performance Avid recommends storing only media on Avid NEXIS and storing the Apple FCP-X libraries (library files) on the client’s local drive.

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