



Avid NEXIS

Intelligent storage for real-time media production



Invest in your future with the reliability you need today, the scalability for tomorrow, and the technology to take you beyond. Avid NEXIS® is the world's first and only software-defined storage platform that enables true storage virtualization for any media application. This powerful system delivers unrivalled media performance, scalability, and reliability to streamline production in the most demanding broadcast, video post, audio, education, and corporate environments. Mix and match engines to form virtualizable pools of storage to accelerate workflows. It's the only storage solution that can grow with you at every stage of your business.

GAIN FLEXIBILITY WITH A SOFTWARE-DEFINED STORAGE PLATFORM

Avid NEXIS easily integrates into both Avid and third-party application workflows, as well as solutions across the MediaCentral® Platform, to accelerate media production. Get on-demand access to a shared pool of centralized storage that can be quickly provisioned and repurposed. Tailor and tune each workspace's capacity, performance, and drive protection to the project and client. And conveniently manage the system through a web interface.

BOOST PERFORMANCE AND SPEED

Need more power to handle high-res finishing? With new 9.6 TB and 19.2 TB SSD Media Packs available for Avid NEXIS | E2 engines, you get the access speed, increased throughput, and reliability you need to accelerate 4K mastering workflows. Edit bandwidth-intensive media in real time with up to 8x greater read performance over hard disk drives. Plus, because there are no moving parts, it adds great robustness to your workflow too.

GET INCREDIBLE SCALABILITY AND PROTECTION

Powered by the common Avid NEXIS | FS file system, Avid NEXIS easily scales to accommodate the smallest teams to the largest media enterprises, offering up to 4.8 PB of total storage and more than 20 GB/s of bandwidth in a single system. Its scale-out architecture enables you to mix and match engines in a single system, upgrade capacity and bandwidth as needed, and add redundancy when high availability is required. All while providing the bulletproof security and fail-safe disk protection you need.

MAKE CHANGES ON THE FLY

Media production is unpredictable. With Avid NEXIS, you can make changes dynamically, without disruption or downtime. Give critical projects and high-priority teams maximum performance while throttling back on less important workflows. Enable remote and collaborative workflows with Media Composer® | Cloud Remote and MediaCentral. And easily expand your workflow to new platform applications and services.

KEY FEATURES

- Adapt quickly to unpredictable changes, without downtime
- Manage your system with unrivaled ease, visibility, and control
- Scale your system for any workflow—from 9.6 TB up to 4.8 PB
- Scale bandwidth up to more than 20 GB/s for 4K/UHD and finishing workflows
- Get performance on demand with the intelligent Avid NEXIS | FS file system
- Secure assets with the utmost reliability and flexible protection
- Eliminate complexity and lower costs with an economical solution
- Enable real-time collaboration with anyone, anywhere
- Accelerate workflows with industry proven media technology
- Work with your favorite Avid and third party tools and systems, including Media Composer, Pro Tools®, and MediaCentral
- Find assets fast to boost media production and content monetization



FOR MORE INFORMATION, VISIT
avid.com/NEXIS

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BUILD YOUR OWN

All Avid NEXIS hardware components are powered by Avid NEXIS | FS, a highly intelligent, scalable file system that unites all of your media together—no matter how many storage engines you have. Mix and match multiple enterprise-class (“E”) engines for maximum scalability, or choose the standalone professional-class Avid NEXIS | PRO system for smaller productions. Then simply add more Media Packs to increase storage capacity and performance at any time.

Avid NEXIS | E2 and E4 storage engines feature an embedded System Director for robust systems management, making it easy and more affordable for smaller workgroups and environments to benefit from the advantages Avid NEXIS offers. For larger scale deployments, E5 engines, and high availability, add the external System Director Appliance to boost your capabilities. You can even add a Redundant Controller to your System Director Appliance for an additional level of protection.

Using the embedded System Director

Avid NEXIS | E2 and E4 storage engines—single or mixed

- Enables up to 400 TB of storage capacity with 4 Media Packs (up to 2.4 GB/s total bandwidth)
- Supports up to 40 active clients
- Supports 8 million files

Adding the System Director Appliance with Extended File System license

Avid NEXIS | E2, E4, and E5 storage engines—single or mixed

- Enables up to 2.4 PB of raw storage capacity with 24 Media Packs (up to 14.4 GB/s total bandwidth)
- Supports up to 165 active clients and 20 million files
- Provides redundancy when a second controller is added



Adding the System Director Appliance with Advanced File System license

Avid NEXIS | E2, E4, and E5 storage engines—single or mixed

- Enables up to 4.8 PB of storage capacity with 48 Media Packs (more than 20 GB/s total bandwidth)
- Supports up to 330 active clients and 20 million files
- Provides high availability when used with the Redundant Controller



Here's a look at the hardware components you can choose to create your own custom Avid NEXIS storage system.

STORAGE ENGINES



	Avid NEXIS E5	Avid NEXIS E4
		
	Designed for large-scale broadcast and post-production environments, this enterprise-class, enterprise-level storage engine offers the highest level of scalability, performance, and client connections, and requires an external System Director Appliance.	For mid- to large-size post-production, broadcast, audio, government, corporate, and media education environments, this enterprise-class, facility-level storage engine offers high scalability, performance, and collaboration.
Features	<ul style="list-style-type: none"> ▪ Avid NEXIS FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system) ▪ 80–800 TB of storage capacity with up to 8 Media Packs (20 TB, 60 TB, or 100 TB HDDs, offering up to 3.2 GB/s of bandwidth) ▪ Scalable from 80 TB–4.8 PB by combining E5 with other E-class engines into a single system with up to 48 Media Packs total ▪ Modular field-replaceable storage engine controller ▪ Two hot-swappable SSDs for system configuration and metadata management ▪ Two hot spare hard disk drives ▪ 40 Gigabit Ethernet (40GbE) ▪ Redundant power and cooling ▪ 5U rack-mountable chassis 	<ul style="list-style-type: none"> ▪ Avid NEXIS FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system) ▪ 20–200 TB of storage capacity with up to 2 Media Packs per engine (20 TB, 60 TB, or 100 TB HDDs, offering up to 1.2 GB/s of bandwidth) ▪ Scalable from 20 TB–4.8 PB by combining E4 with other E-class engines into a single system with up to 48 Media Packs total ▪ Modular field-replaceable storage engine controller ▪ Two hot-swappable SSDs for system configuration and metadata management ▪ 10 Gigabit Ethernet (10GbE) ▪ Redundant power and cooling ▪ 4U rack-mountable chassis
Base configurations	<ul style="list-style-type: none"> ▪ Single engine controller with 4 x 20 TB Media Packs ▪ Single engine controller with 4 x 60 TB Media Packs ▪ Single engine controller with 4 x 100 TB Media Packs ▪ Single engine controller with 8 x 20 TB Media Packs ▪ Single engine controller with 8 x 60 TB Media Packs ▪ Single engine controller with 8 x 100 TB Media Packs 	<ul style="list-style-type: none"> ▪ Single engine controller with 2 x 20 TB Media Packs ▪ Single engine controller with 2 x 60 TB Media Packs ▪ Single engine controller with 2 x 100 TB Media Packs
Options	<ul style="list-style-type: none"> ▪ Redundant Controller ▪ 20 TB Media Pack ▪ 60 TB Media Pack ▪ 100 TB Media Pack 	<ul style="list-style-type: none"> ▪ Redundant Controller ▪ 20 TB Media Pack ▪ 60 TB Media Pack ▪ 100 TB Media Pack ▪ Two hot spare hard disk drives

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STORAGE ENGINES

	Avid NEXIS E2	Avid NEXIS PRO
		
	For small- to mid-size post-production, broadcast, audio, live event, house of worship, government, corporate, and media education environments, this enterprise-class, team-level storage engine offers great scalability, performance, and collaboration.	For independent professionals, small post-production, audio, house of worship, government, corporate, and media education environments, this professional-class standalone storage system can be used alongside other Avid NEXIS storage engines, but not physically mixed with them.
Features	<ul style="list-style-type: none"> Avid NEXIS FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system) 20–100 TB of storage capacity with a single Media Pack per engine (20 TB, 60 TB or 100 TB HDDs, offering up to 600 MB/s of bandwidth), or 9.6 TB or 19.2 TB with a single SSD Media Pack (offering up to 3 GB/s of bandwidth) Scalable from 9.6 TB–4.8 PB by combining E2 with other E-class engines into a single system with up to 48 Media Packs total Modular field-replaceable storage engine controller Two hot-swappable SSDs for system configuration and metadata management 10 Gigabit Ethernet (10GbE) Redundant power and cooling 2U rack-mountable chassis 	<ul style="list-style-type: none"> Avid NEXIS FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system) 40 TB of storage capacity with a single Media Pack per engine (offering up to 600 MB/s of bandwidth) Scalable from 40–160 TB by combining one to four Avid NEXIS PRO engines together (cannot be mixed with E-class engines) Field-replaceable storage engine controller Two hot-swappable SSDs for system configuration and metadata management 10 Gigabit Ethernet (10GbE) Redundant power and cooling 2U rack-mountable chassis
Base configurations	<ul style="list-style-type: none"> Single engine controller with 1 x 20 TB Media Pack Single engine controller with 1 x 60 TB Media Pack Single engine controller with 1 x 100 TB Media Pack Single engine controller with 1 x 9.6 TB SSD Media Pack Single engine controller with 1 x 19.2 TB SSD Media Pack 	<ul style="list-style-type: none"> Single engine with 1 x 40 TB Media Pack
Options	<ul style="list-style-type: none"> Redundant Controller (not applicable with SSD systems) 	

OPTIONS

	System Director Appliance	Redundant Controller
		
	<p>The external (non-embedded) System Director Appliance is available in two options and is required for any Avid NEXIS E-class system that meets one or more of the following criteria:</p> <ul style="list-style-type: none"> Requires more than 40 client connections Houses five or more Media Packs (50 drives) across all networked engines Contains an Avid NEXIS E5 storage engine Requires mirror media protection 	<p>This optional controller enables system redundancy, providing high availability when combined with Avid NEXIS E-class storage engines and the System Director Appliance.</p>
Features	<ul style="list-style-type: none"> Enables a single Avid NEXIS system to support 5–24 Media Packs with an Extended File System license, or 5–48 Media Packs with an Advanced File System license Enables a single Avid NEXIS system to support more connected clients simultaneously—up to 165 with an Extended license or up to 330 with an Advanced license Enables high availability performance and protection Increases the total system-supported file count from 8 million to 20 million files Modular field-replaceable system director controller Two hot-swappable SSDs for system configuration and metadata management Redundant power and cooling Provides redundancy when used with the Redundant Controller 2U rack-mountable chassis 	<ul style="list-style-type: none"> Enables high availability performance and protection for each storage engine Supports automatic failover of critical services if a controller experiences issues Prevents disruptive and costly wait times for hardware replacement Supports configure-less controller replacement (swapping defective hardware requires no manual configuration)
Options	<ul style="list-style-type: none"> Redundant Controller—provides high availability when added 	