



# 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 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. And now it offers greater scalability, a new nearline storage option, and more flexible systems management for on-the-go control.

## GAIN INCREDIBLE FLEXIBILITY WITH A SOFTWARE-DEFINED STORAGE PLATFORM

Avid NEXIS easily integrates into Avid and third-party application workflows, as well as solutions across the MediaCentral®, to accelerate media production. Powered by the common Avid NEXIS | FS file system, it enables you to mix and match engines and get on-demand access to a shared pool of centralized storage that can be quickly provisioned, repurposed, and scaled to more than 6.4 PB—with more than 25 GB/s of collaborative bandwidth. Tailor and tune each workspace's capacity, performance, and drive protection to the project and client. Streamline the workflow between active and non-active production. And conveniently manage the system through a responsive, easy-to-use HTML5 UI.

## BOOST PRODUCTION EFFICIENCY

Need more power to handle high-res finishing? With new 9.6 TB and 19.2 TB of flash SSD storage available for Avid NEXIS | E2 SSD engines, you get the access speed, increased throughput, and reliability you need to accelerate 4K mastering workflows. You can also now quickly park, browse, stage, and restore archived media with the new Avid NEXIS | E5 NL high-density nearline storage engine, which can be used standalone or integrated with other enterprise-class Avid NEXIS engines for greater workflow flexibility.

## 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® | Ultimate, Pro Tools®, and MediaCentral. And easily expand your workflow to new platform applications and services.

## GET EASY SYSTEMS MANAGEMENT

Avid NEXIS Management Console is a new easy-to-use, highly-responsive web-based application that makes it easier and more convenient to manage, control, and monitor Avid NEXIS systems. The redesigned user interface offers the flexibility and security of HTML5 to provide mobile device support, enabling you to monitor and configure your system while on the go. Its Dashboard provides an overview of your system's performance, bandwidth, and status, as well as access to configure and manage workspaces, storage groups, user access, notifications, and other functions quickly.

## 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 6.4 PB
- Scale bandwidth up to more than 25 GB/s for 4K/UHD and finishing workflows
- Get performance on demand with the intelligent Avid NEXIS | FS file system
- Streamline workflows between active and non-active production with nearline storage
- 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
- Manage, monitor, and configure the system from anywhere, using any device



FOR MORE INFORMATION, VISIT  
[avid.com/NEXIS](http://avid.com/NEXIS)

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## BUILD YOUR OWN

Mix and match enterprise-class (“E”) engines into a single system for maximum performance and capacity, and scale both by adding more Media Packs. For smaller teams and remote productions, Avid NEXIS | PRO is ideal.

Avid NEXIS | E2, E4, and PRO storage engines feature an embedded System Director for systems management, making it more affordable for smaller workgroups to benefit from the advantages Avid NEXIS offers. For larger scale deployments, high availability, and to deploy E5 and/or E5 NL engines, 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 SSD, E2, and E4 storage engines

- 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 SSD, E2, E4, E5, and E5 NL storage engine
- Enables up to 2.4 PB of raw storage capacity with 24 Media Packs (up to 9.6 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 SSD, E2, E4, E5, and E5 NL storage engines
- Enables up to 6.4 PB of storage capacity with 64 Media Packs (more than 25 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"> <li>▪ Avid NEXIS   FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)</li> <li>▪ 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)</li> <li>▪ Scalable from 80 TB–6.4 PB by combining E5 with other E-class engines into a single system with up to 64 Media Packs total</li> <li>▪ Modular field-replaceable storage engine controller</li> <li>▪ Two hot-swappable SSDs for system configuration and metadata management</li> <li>▪ Two hot spare hard disk drives</li> <li>▪ 40 Gigabit Ethernet (40GbE)</li> <li>▪ Redundant power and cooling</li> <li>▪ 5U rack-mountable chassis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Avid NEXIS   FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)</li> <li>▪ 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)</li> <li>▪ Scalable from 20 TB–6.4 PB by combining E4 with other E-class engines into a single system with up to 64 Media Packs total</li> <li>▪ Modular field-replaceable storage engine controller</li> <li>▪ Two hot-swappable SSDs for system configuration and metadata management</li> <li>▪ 10 Gigabit Ethernet (10GbE)</li> <li>▪ Redundant power and cooling</li> <li>▪ 4U rack-mountable chassis</li> </ul>
Base configurations	<ul style="list-style-type: none"> <li>▪ Single engine controller with 4 x 20 TB Media Packs</li> <li>▪ Single engine controller with 4 x 60 TB Media Packs</li> <li>▪ Single engine controller with 4 x 100 TB Media Packs</li> <li>▪ Single engine controller with 8 x 20 TB Media Packs</li> <li>▪ Single engine controller with 8 x 60 TB Media Packs</li> <li>▪ Single engine controller with 8 x 100 TB Media Packs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Single engine controller with 2 x 20 TB Media Packs</li> <li>▪ Single engine controller with 2 x 60 TB Media Packs</li> <li>▪ Single engine controller with 2 x 100 TB Media Packs</li> </ul>
Options	<ul style="list-style-type: none"> <li>▪ Redundant Controller</li> <li>▪ 20 TB Media Pack</li> <li>▪ 60 TB Media Pack</li> <li>▪ 100 TB Media Pack</li> </ul>	<ul style="list-style-type: none"> <li>▪ Redundant Controller</li> <li>▪ 20 TB Media Pack</li> <li>▪ 60 TB Media Pack</li> <li>▪ 100 TB Media Pack</li> <li>▪ Two hot spare hard disk drives</li> </ul>

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## STORAGE ENGINES

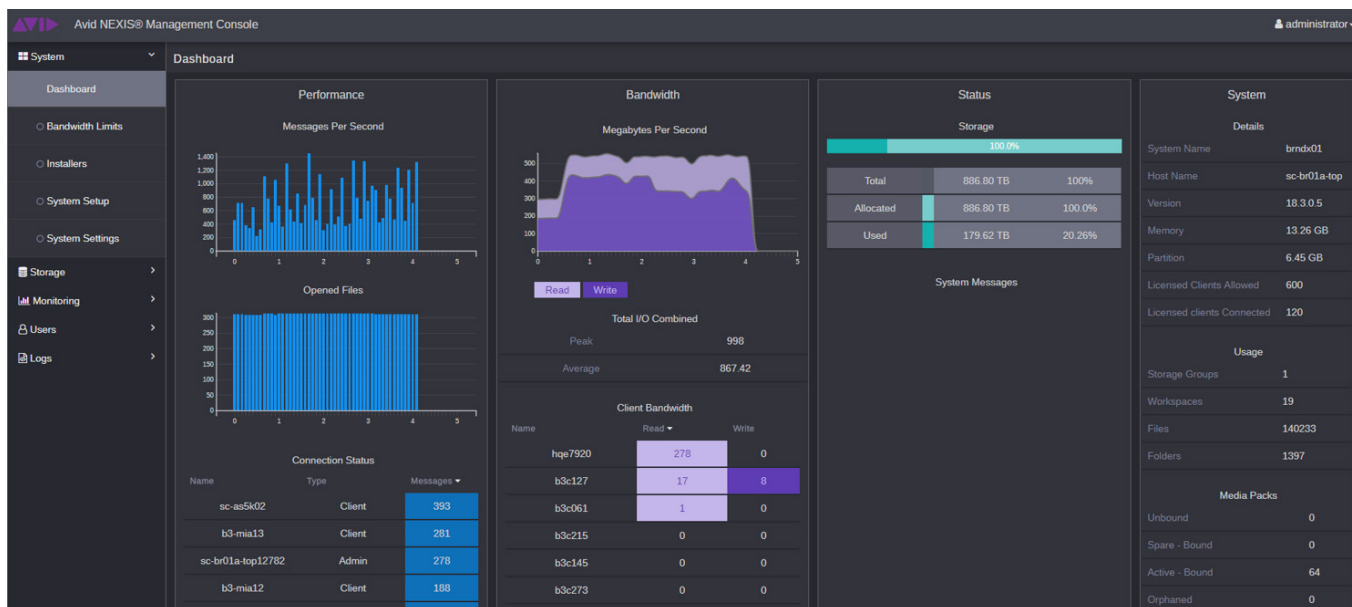
	Avid NEXIS   E2	Avid NEXIS   E2 SSD
		
	For small- to mid-size post-production, broadcast, audio, live event, house of worship, government, corporate, and media education environments, this enterprise-class, team-level storage engine offers great scalability, performance, and collaboration.	For post-production facilities that require maximum media throughput for demanding finishing, color grading, and VFX workflows, Avid NEXIS   E2 SSD delivers the highest level of performance.
Features	<ul style="list-style-type: none"> <li>▪ Avid NEXIS   FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)</li> <li>▪ 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)</li> <li>▪ Scalable from 20 TB–6.4 PB by combining E2 with other E-class engines into a single system with up to 64 Media Packs total</li> <li>▪ Modular field-replaceable storage engine controller</li> <li>▪ Two hot-swappable SSDs for system configuration and metadata management</li> <li>▪ 10 Gigabit Ethernet (10GbE)</li> <li>▪ Redundant power and cooling</li> <li>▪ 2U rack-mountable chassis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Avid NEXIS   FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)</li> <li>▪ 9.6 TB or 19.2 TB of storage capacity per E2 SSD engine with a single Media Pack, offering up to 3 GB/s of bandwidth</li> <li>▪ Scalable from 9.6 TB to more than 1 PB of flash storage by combining up to 64 E2 SSD engines into a single scale-out system</li> <li>▪ Modular field-replaceable storage engine controller</li> <li>▪ Two hot-swappable SSDs for system configuration and metadata management</li> <li>▪ 40 Gigabit Ethernet (40GbE)</li> <li>▪ Redundant power and cooling</li> <li>▪ 2U rack-mountable chassis</li> </ul>
Base configurations	<ul style="list-style-type: none"> <li>▪ Single engine controller with 1 x 20 TB Media Pack</li> <li>▪ Single engine controller with 1 x 60 TB Media Pack</li> <li>▪ Single engine controller with 1 x 100 TB Media Pack</li> </ul>	<ul style="list-style-type: none"> <li>▪ Single engine controller with 1 x 9.6 TB SSD Media Pack</li> <li>▪ Single engine controller with 1 x 19.2 TB SSD Media Pack</li> </ul>
Options	<ul style="list-style-type: none"> <li>▪ Redundant Controller</li> </ul>	

	Avid NEXIS   E5 NL	Avid NEXIS   PRO
		
	For Avid NEXIS-equipped, MediaCentral-enabled creative teams working in demanding broadcast and post-production environments, this high-density, disk-based, nearline storage engine streamlines the media workflow between active and non-active production and requires an external System Director Appliance.	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"> <li>▪ Avid NEXIS   FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)</li> <li>▪ 480 TB or 960 TB of nearline storage capacity with four or eight Media Packs (offering 1 GB/s of bandwidth per engine)</li> <li>▪ Scalable from 480 TB–7.5 PB by combining multiple engines together; can also be mixed with enterprise-class Avid NEXIS engines</li> <li>▪ Field-replaceable storage engine controller</li> <li>▪ Two hot-swappable SSDs for system configuration and metadata management</li> <li>▪ 10 Gigabit Ethernet (10GbE)</li> <li>▪ Redundant power and cooling</li> <li>▪ 5U rack-mountable chassis</li> </ul>	<ul style="list-style-type: none"> <li>▪ Avid NEXIS   FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)</li> <li>▪ 40 TB of storage capacity with a single Media Pack per engine (offering up to 600 MB/s of bandwidth)</li> <li>▪ Scalable from 40–160 TB by combining one to four Avid NEXIS   PRO engines together (cannot be mixed with E-class engines)</li> <li>▪ Field-replaceable storage engine controller</li> <li>▪ Two hot-swappable SSDs for system configuration and metadata management</li> <li>▪ 10 Gigabit Ethernet (10GbE)</li> <li>▪ Redundant power and cooling</li> <li>▪ 2U rack-mountable chassis</li> </ul>
Base configurations	<ul style="list-style-type: none"> <li>▪ Single engine with 1 x 480 TB or 960 TB Media Pack</li> </ul>	<ul style="list-style-type: none"> <li>▪ Single engine with 1 x 40 TB Media Pack</li> </ul>

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## OPTIONS

	System Director Appliance	Redundant Controller
		
	<p>The external 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"> <li>Requires more than 40 client connections</li> <li>Houses five or more Media Packs (50 drives) across all networked engines</li> <li>Contains an Avid NEXIS   E5 or E5 NL storage engine</li> <li>Requires mirror media protection</li> </ul>	<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"> <li>Enables a single Avid NEXIS system to support 5–24 Media Packs with an Extended File System license, or 5–64 Media Packs with an Advanced File System license</li> <li>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</li> <li>Enables high availability performance and protection</li> <li>Increases the total system-supported file count from 8 million to 20 million files</li> <li>Modular field-replaceable system director controller</li> <li>Two hot-swappable SSDs for system configuration and metadata management</li> <li>Redundant power and cooling</li> <li>Provides redundancy when used with the Redundant Controller</li> <li>2U rack-mountable chassis</li> </ul>	<ul style="list-style-type: none"> <li>Enables high availability performance and protection for each storage engine</li> <li>Supports automatic failover of critical services if a controller experiences issues</li> <li>Prevents disruptive and costly wait times for hardware replacement</li> <li>Supports configure-less controller replacement (swapping defective hardware requires no manual configuration)</li> </ul>
Options	<ul style="list-style-type: none"> <li>Redundant Controller—provides high availability when added</li> </ul>	



Easily manage, monitor, and configure your Avid NEXIS system from anywhere, using any computer or mobile device, with the new Management Console.