



# 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 unmatched flexibility, scalability, control, and extensibility to Avid MediaCentral™ Platform applications. Mix and match engines to form virtualizable pools of storage to streamline, expand, and accelerate workflows. It's the only storage solution that can grow with you at every stage of your business.

## 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 terabytes to petabytes
- Get performance on demand with the intelligent 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
- Find assets fast to boost media production and content monetization

## Get flexible media production with a software-defined storage platform

Avid NEXIS is designed to accelerate online and nearline production, giving teams easy on-demand access to a shared pool of configurable storage resources that can be quickly provisioned and repurposed. Tailor and tune each workspace's capacity, performance, and drive protection to the project and client. Conveniently manage the system through a web interface or management APIs. And it easily scales to accommodate the smallest teams to the largest media enterprises.

## Save money while protecting your investment

Why waste time and money piecing together a workflow that may change months down the line? Avid NEXIS is built for the MediaCentral Platform, so it easily integrates with your existing Avid and third-party platform applications and services. And its scale-out storage architecture enables you to mix and match components to meet your needs and budget now and in the future. Upgrade capacity and bandwidth as your needs grow. And add redundancy when higher availability is required.

## Gain the agility to adapt quickly to changes

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 to shared assets while throttling back on less important workflows. Enable remote and collaborative workflows with Media Composer | Cloud and MediaCentral | UX. Scale capacity and bandwidth linearly to keep large productions moving. And easily expand your workflow to new platform applications and services.

## Experience the industry's most secure and reliable workflows

All Avid NEXIS systems are powered by a common, unique file system at their core—NEXIS | FS. This highly intelligent, scalable file system delivers the unrivaled industry-trusted performance and reliability today's media production demands. And it empowers your production with the bulletproof security, fail-safe disk protection, workspace flexibility, and open extensibility you and your business need to succeed.

For more information, visit [www.avid.com/NEXIS](http://www.avid.com/NEXIS)

# Avid NEXIS—Intelligent storage for real-time media production

## Build your own

All Avid NEXIS hardware components are powered by 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 NEXIS | PRO system for smaller productions. And add more Media Packs to increase storage capacity.

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 NEXIS offers. For larger scale deployments, E5 engines, and high availability, add the optional external System Director Appliance to boost your capabilities. Here's how each differs:

### Using the embedded System Director

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

- Up to 240 TB of storage capacity with 4 Media Packs (1.6 GB/s total bandwidth)
- Supports up to 40 active clients
- Supports 8 million files

### Adding the System Director Appliance

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

- Up to 1.44 PB of storage capacity with 24 Media Packs (9.6 GB/s total bandwidth)
- Supports up to 330 active clients (600 inactive)
- Supports 20 million files

With this in mind, 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

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.

#### Features

- Avid NEXIS | FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)
- 80–480 TB of storage capacity with up to 8 Media Packs (20 TB or 60 TB, offering up to 3.2 GB/s of bandwidth)
- Scalable from 80 TB–1.44 PB by combining multiple E-class engines with a total of 1–24 Media Packs
- Modular field-replaceable storage engine controller
- Two hot-swappable SSDs for system configuration and metadata management
- 40 Gigabit Ethernet (40GbE)
- Redundant power and cooling
- 5U rack-mountable chassis

#### Base configurations

- Single engine controller with 4 x 20 TB Media Packs
- Single engine controller with 4 x 60 TB Media Packs
- Single engine controller with 8 x 20 TB Media Packs
- Single engine controller with 8 x 60 TB Media Pack

#### Options

- Redundant Controller
- 20 TB Media Pack
- 60 TB Media Pack
- Two hot spares



### Avid NEXIS | E4

For mid- to large-size post-production, broadcast, government, corporate, and media education environments, this enterprise-class, facility-level storage engine offers high scalability, performance, and collaboration.

#### Features

- Avid NEXIS | FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)
- 20–120 TB of storage capacity with up to 2 Media Packs per engine (20 TB or 60 TB, offering up to 800 MB/s of bandwidth)
- Scalable from 20 TB–1.44 PB by combining multiple E-class engines with a total of 1–24 Media Packs
- Modular field-replaceable storage engine controller
- Two hot-swappable SSDs for system configuration and metadata management
- 10 Gigabit Ethernet (40GbE)
- Redundant power and cooling
- 4U rack-mountable chassis

#### Base configurations

- Single engine controller with 1 x 20 TB Media Pack
- Single engine controller with 1 x 60 TB Media Pack
- Single engine controller with 2 x 20 TB Media Packs
- Single engine controller with 2 x 60 TB Media Packs

#### Options

- Redundant Controller
- 20 TB Media Pack
- 60 TB Media Pack
- Two hot spares



## Avid NEXIS | E2

For small- to mid-size post-production, broadcast, live event, house of worship, government, corporate, and media education environments, this enterprise-class, team-level storage engine offers great scalability, performance, and collaboration.

### Features

- Avid NEXIS | FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)
- 20–60 TB of storage capacity with a single Media Pack per engine (20 TB or 60 TB, offering up to 400 MB/s of bandwidth)
- Scalable from 20 TB–1.44 PB by combining multiple E-class engines with a total of 1–24 Media Packs
- 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

### Base configurations

- Single engine controller with 1 x 20 TB Media Pack
- Single engine controller with 1 x 60 TB Media Pack

### Options

- Redundant Controller

## Options



## System Director Appliance

This 2U appliance is required for any Avid NEXIS E-class system that meets one or more of the following criteria:

- Houses five or more Media Packs (50 drives) across all networked engines
- Contains an Avid NEXIS | E5 storage engine
- Requires mirror media protection (coming soon)

### Features

- Enables a single Avid NEXIS system to support 5–24 Media Packs, for example:
  - Up to 24 Avid NEXIS | E2 storage engines (1 Media Pack per engine)
  - Up to 12 Avid NEXIS | E4 storage engines (2 Media Packs per engine)
  - Up to 3 Avid NEXIS | E5 storage engines (8 Media Packs per engine)
  - Any combination of E-class engines with a maximum total of 24 Media Packs
- Enables a single Avid NEXIS system to support 600 connected clients (330 active)
- 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
- 2U rack-mountable chassis

### Options

- Redundant Controller

## Avid NEXIS | PRO

For independent professionals, small post-production, 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

- Avid NEXIS | FS file system (enables you to access, scale, customize, reconfigure, manage, protect, and secure your system)
- 20 TB of storage capacity with a single Media Pack per engine (20 TB, offering up to 400 MB/s of bandwidth)
- Scalable from 20–80 TB by combining one to four 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

## Redundant Controller

This optional controller enables system redundancy, providing high availability when combined with Avid NEXIS E-class storage engines and the System Director Appliance.

### Features

- 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)

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For more information,  
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