Quantum.

CATDV ASSET MANAGEMENT PLATFORM

THE INDUSTRY-LEADING ASSET MANAGEMENT, WORKFLOW ORCHESTRATION, AND AI MEDIA ENRICHMENT PLATFORM



DATASHEET

FEATURES & BENEFITS

- Deliver projects faster: Eliminate time lost searching for and retrieving content by giving your team a true 'single point of reference' to all content wherever it resides at every workflow step.
- Integrates with leading NLEs: Use CatDV's Adobe Premiere Panel or Final Cut Pro X Extension, ingest raw formats, even ingest and manage Avid codecs without the need for transcoding or proxying.
- Reduce manual intervention and repetitive file movement: Use powerful workflow automation tools to view folders, connect to services, and transform content.
- Deploy quickly and scale flexibly:
 CatDV is available as an integrated solution with Quantum StorNext® (H4000 Essential), a software installation on dedicated servers onsite, as a single-tenant cloud as-a-Service offering, or as part of an integrated Al and ML content enhancement solution that includes NVIDIA GPU and Al/ML libraries.
- Amplify human content loggers and analyst expertise: Use powerful Al and ML tools with GPU acceleration to automate, curate, and organize Al and ML development from a centralized workflow platform.
- The widest customization choices:
 Easily extend CatDV with proven plugins to move content to and from archives, or to integrate with encoder, transcoder, distribution, or publication tools. Develop customized functionality or integrations with your choice of the Server Plugin API, Javascript APIs, or 'no-code' custom worker and workflow actions.
- Al-driven media enrichment: The platform can use multiple dropin plugins for popular cloud Al Services like transcription and object recognition or can be integrated with NVIDIA and other Al Services for 'push-button' content enhancement that can be adapted to unique content needs to give a competitive advantage.

Unite Content Production, Accelerate Delivery, and Monetize Your Asset Library

Content production operations get highly complex very quickly as the pace of production increases, delivery time expectations narrow, and the velocity of raw content increases. With team members increasingly on the move and remote, organizations need more flexibility and efficiency while producing non-stop content. Above all, these teams need to harness the latest Al and ML tools to boost efficiency and monetize content from growing content archives for ever-more delivery channels and markets.

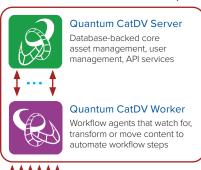
CatDV is an asset management and workflow orchestration platform that solves these challenges with a proven platform architecture that can scale for a small team or for the largest global operations using the cloud. It powers some of the world's most sophisticated media workflows across a range of industries, including broadcasters, production companies, professional sports leagues and teams, corporate media and training centers, educators, advertisers, marketers, healthcare providers, military, and government.

CatDV helps you organize content, deliver production projects as a team faster, and enhance content with powerful Al and ML tools. It not only indexes and tags content needed for production, it serves as a workflow automation hub as content moves from raw to finished state, delivery, archive, and automatic content processing and enhancement with intelligent Al and ML tools. CatDV can be quickly deployed onpremises, in the cloud, and for hybrid and remote environments.

CatDV Architecture and Features

CatDV architecture allows scaling and customization at every point and can be deployed on premises, in the cloud, or as a hybrid solution.

Quantum CatDV Solution Components and Levels





Enterprise	Pegasus	Options
10s of usersMid-100Ks assetsAsset API accessHierarchical security groups	100s of users High-100Ks assets Audit tools Extended DB support	Archive support via plugin including StorNext Admin APIs
Unlimited automations and actions	Dashboard Load-balancing	Custom transcoding: Vantage, Episode, Compressor Custom delivery to social media sites File transfer accelerator integration
Rich Client: Security groups and permissions Production blog	RED, AVID workflows and custom actions	Custom UI, colors, logos and branding
Web Client: • Streamlined web interface • Advanced web interface		Custom UI, colors, logos and branding

CatDV Server

The CatDV Server is the heart of your solution and provides the core workflow intelligence in conjunction with a high-performance database to store and correlate all media attributes. It also manages all the solution administration settings, user management, and API services, and provides a web interface for user and admin access.

CatDV Workers

Workers are highly configurable and scalable workflow agents that watch for, transform or move content to automate workflow steps. New actions can be created easily using the CatDV Worker panel in a 'drag and drop,' no-code interface. Workers are highly flexible and can interact with cloud services, remote API, or the built-in API gateway as deployed in the Quantum AI/ML Content Enhancement Solution.

CatDV Clients

Users can access their shared CatDV solution from the web interface—ideal for web browsers and mobile devices, as native or proxy workflows with their editing tool of choice, with a local CatDV client on the desktop, and as panels or extensions within non-linear editing solutions such as Adobe Premiere Pro or Final Cut X.

Example CatDV Workflows

CatDV's flexibility and scale supports a wide variety of workflows across every industry where rich media is produced. Some of the most common examples of typical CatDV workflows include:

- Central Production Workflow Coordination: Enables collaboration between creative and editorial teams. Metadata is shared between Producers and Editors from and into leading creative tools including Premiere Pro, Final Cut Pro X, and Media Composer.
- Shared Storage and Archiving Front End: Integrates with shared storage, such as Quantum StorNext, SAN and NAS, archive and cloud storage to let users focus on the assets in a visual search interface, yet easily archive to and retrieve from connected storage. Even when finished projects are archived to other storage, such as tape or object storage, the proxy version of the asset is still searchable and active for tagging or Al/ML content enhancement.
- **Highly Configurable Logging Interface:** The user interface can be customized in minutes with custom tags, panels, and buttons to streamline specific content logging and content loggers, minimize logging errors.
- Content Ingest Dashboard: The dashboard monitors the progress of your system as new content arrives, then is automatically moved to the storage specified by your workflow, and is securely saved to your archive storage. Chesksums are calculated and compared, and metadata is harvested from files including paths and names; media is transcoded, and all information is recorded in the CatDV database.
- Review and Approval Coordination: Multi-stage review and approve workflows can be set up using CatDV clients to share media links over the internet, comment on assets, notify team members of changes and actions needed, and track approval signoffs.
- Production Planning and Tracking: Metadata fields can be easily configured and added to reflect your workflow's
 processes such as which department or person is responsible for content creation steps, project due dates, client
 information, and more.
- Video, Photo, Audio Archive and Curation: The database and powerful search tools make it an excellent choice as a media archive and curation tool for every kind of rich media, whether for reuse in house, as a historic record, research tool, or as a service to end user customers.

Comparing Quantum CatDV Offerings

CatDV can be deployed on a single system of your choice, as part of an integrated asset management and shared storage solution in the H4000 Essential, on dedicated servers and storage on-premises, or in the cloud. CatDV Professional Services can further customize your solution for any needs including integration with custom content applications or other production services.

- **H4000 Essential** is an all-in-one shared storage and content indexing solution powered by Quantum StorNext and CatDV and can be deployed in minutes. The H4000 Essential is for teams of up to 10 connected users and supports up to 100,000 assets.
- CatDV Enterprise Server is the standard deployment option and provides a great collaboration platform, adding configurable security (via CatDV production groups), simple logging of user activity, shared configurations between users, and powerful search options.

- CatDV Pegasus Server adds more functionality and integration options to Enterprise Server, including AI media analysis, a
 custom search engine, optimized for Google style, text searches against very large databases with many millions of assets.
 Pegasus Server also has full audit capability, reporting, and analytics and sophisticated access control rules to set asset
 visibility based on metadata.
- **Custom Deployments** offer the ultimate in scale and flexibility. The Professional Services team can create tailored deployments from the toolsets that are completely customized to your specific needs.

Large-Scale CatDV Deployments

CatDV can be comfortably deployed in large, managed IT environments: insourced, outsourced, multi-site, including cloud, virtualized or in containers, or as a managed service in the cloud. Whether ingesting tens of thousands of assets per day, supporting large user communities, working with other best of breed tools and products, or delivering the most sophisticated distributed workflows, it can handle your growing and evolving workflow needs.

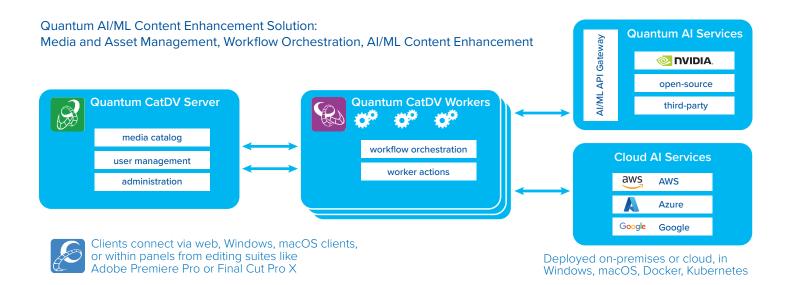
Highly Resilient and Available: CatDV Server and Worker can be deployed with failover, clustering, and load-balancing strategies to ensure continuous service and reliability. From warm stand-by and failover to clustered and fault tolerant models, CatDV fits with your IT strategy and directives.

Multi-Site, Distributed Workflows and Cloud: In addition to large, resilient, single server installations, CatDV can be deployed across multiple sites, with configurable policies and rules to determine how content and metadata is shared. The platform can be configured to support hub and spoke designs, peer to peer system collaboration, and remote harvesting from multiple locations. Cloud deployments are supported, as are distributed storage pools including cloud storage via S3 such as Amazon S3, Glacier, Azure, Wasabi, and Backblaze.

Security and Permissions: CatDV's access control rules enable granular permissions down to the asset level and can be linked to corporate identity management tools, including Active Directory and Open Directory with LDAP, plus OKTA, ADFS, Workspace One, and Shibboleth using SAML2. A CatDV Publication Server can be used to share media outside an organization, adding another layer of protection. Media links that expire after a set time period can shared as proxy or full-res media with an optional watermark.

Optimize Existing Investments and Prevent Lock In: Today's storage, archive, and restore landscapes often span a variety of storage platforms as customers seek to balance performance and cost of storage. CatDV enables fine-grained storage policies based on asset metadata beyond simple file names, dates, and sizes and can automatically archive projects when they are approved, or content has been delivered. With the storage front-end, you can enable self-service for your teams to archive or restore assets and projects on demand, minimizing administrator overhead.

Centralize and Automate Powerful Al/ML Tools: CatDV's extensive range of APIs and worker flexibility are highlighted in the Al/ML Content Enhancement solution that boosts workflow efficiency and automates common Al and ML operations. By integrating with powerful server and GPU hardware, the solution can perform automatic or on-demand services such as transcription, translation, deep indexing with object, logo, and celebrity identification, trainable person recognition and tagging, and more.



Quantum CatDV Version Specifications

Server Versions

H4000 Essential	Enterprise	Pegasus
 Pre-configured - out of the box Up to 10 named users Two predefined roles: Administrator and User All users see the same metadata, views, and panels Custom metadata on media assets Simple Review and Approve Converged with StorNext for user management and administration Archive options for Quantum ActiveScale™ object storage and other S3-compatible cloud services including AWS S3, Azure, Wasabi, and Backblaze B2 	 Unlimited users and roles with Active Directory / LDAP integration MS SQL Server option A few hundred thousand assets Advanced Review and Approve Flexible cloud, on-premise, multi-site and hybrid deployment Different roles see different assets Different users have custom UI: metadata, views and panels Custom metadata on catalogs, users, group and markers Extendable API and UX toolkit Archive integrations with Archiware, Quantum Storage Manager, Spectra Logic Black Pearl 	SAML2 for SSO and 2FA with OKTA Shibboleth, ADFS and more MariaDB database option Fast, full text search index Millions of assets Audit of all metadata changes Al integrations Metadata-based access control and permissions Clustering and failover support Admin REST API option Text message collaboration with discussions around assets, markers, and catalogs

Web Versions, and Creative Tool Integrations

Creative Panels: Pr, Ae, Ai, Ps, FCPX	CatDV Browser Client	Advanced Web Client
Runs inside NLE or software panel Preview media, fast keyboard navigation, update metadata directly inside creative tool Adobe Premiere project files check-in/ check-out in CatDV	 Browser-based interface with all core CatDV capabilities Responsive, mobile and tablet friendly UX refreshed in 2023 	Condensed user experience – one screen version for power users that need to work with multiple assets at the same time

Worker Versions

H4000 Essential / CatDV Gateway	Enterprise	Pegasus
 Pre-configured indexing Automated proxy creation including pro camera formats RED,ARRI, MXF Extraction of metadata from folder names Not configurable 	 Rich workflow automation Graphical Workflow builder Extendable with custom plugins Multiple processes per installation Mac, Windows and Container deployment Policy-based archive automation 	 Javascript custom actions Remote configuration Remote monitoring (including web) REST API Load Balancing and resilience between Workers Al workflow automations Encoding to Avid DNx

Desktop Client Versions

H4000 Essential	Enterprise	Pegasus
Not Available	 Rich capabilities for indexing, logging and tagging, sub-clipping, markers, Direct playback of most common media formats Pro camera format media analysis Pro CODEC playback macOS and Windows 	 Custom Actions (client automations) RED, BRAW and ARRI playback support Avid Media Composer AAF export and AVB bin reading Encoding to Avid formats

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Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter – so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit way quantum com

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