NASA’s Jet Propulsion Laboratory (JPL) records and shares its breakthrough work in space exploration by producing numerous videos. To better organize and manage its large volume of current and historical video assets, JPL implemented a CatDV asset management system. CatDV streamlines video production workflows, accelerates asset searches, and even makes it simpler for people viewing the JPL website to find inspiring and informative videos.

**CASE STUDY**

CatDV Helps NASA’s Jet Propulsion Laboratory Manage Over 50 Years of Historic Space Exploration Content

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**FEATURED PRODUCTS**

Sorting through large volumes of video files used to be time consuming. Now with CatDV, all of the files are cataloged and tagged, enabling quick and easy access to the media content.
Built by NASA’s JPL, Explore 1 launched into orbit in 1958, successfully marking the United States’ first entry into space. The event ignited excitement for space exploration in America that has not diminished since.

For more 50 years, JPL has continued to explore the solar system, stars, and galaxies, and even Earth itself with robotic spacecraft. The organization has played pivotal roles in many historic missions, including Mariner, Viking, Voyager, and Cassini. In 2012, the Mars Science Laboratory Curiosity Rover landed on Mars, kick-starting a mission to determine if the planet could have hosted life. In addition to designing, building, and operating robotic spacecraft, JPL is responsible for NASA’s Deep Space Network—a worldwide system of communications complexes that serve as portals to distant spacecraft.

JPL’s television production facility is tasked with archiving and preserving the historical content of over 50 years of media files from the early days of rocketry and interstellar space exploration. JPL also produces videos to communicate details of exploration missions to the public at large and generates educational materials for students at all levels.

JPL had struggled to manage that large volume of media assets. The organization’s in-house production team needed to address three main workflow challenges: an obsolete asset management database with very limited search capabilities, a time-consuming review and approval process, and a complex procedure for publishing content to the web.

SELECTING CATDV ASSET MANAGEMENT—IMPLEMENTING A TAILORED SOLUTION

JPL chose CatDV to organize and manage all of its priceless media assets.

The CatDV team tailored the solution for the organization’s unique requirements. For example, the CatDV team created a new component that enables labeling of a wide
range of physical media. With that component, JPL team members can more easily find media across both online and off-line storage.

**SPEEDING ACCESS TO ASSETS**
CatDV helps the JPL production team dramatically reduce the time needed to find files. The team—which includes producers, editors, technicians, a 3D animator, a media librarian, and freelance post-production professionals—produces on average three live shoots per week. Raw video footage is moved to hard disk while automatically creating a Pro Res version, which is stored along with any other raw materials, such as audio files or graphics, on a SAN.

In the past, sorting through all of these files was time consuming. The editors had to search the database by title, hoping it contained the file they were seeking. Now with CatDV, all of the files are cataloged and tagged, enabling quick and easy access to content.

**ACCELERATING REVIEWS AND APPROVALS**
Review and approval processes are also faster with CatDV. Previously, producers were unable to view projects throughout the editing process, since there was no simultaneous access to all the materials. Now all the metadata generated in the system simply imports directly from CatDV to the project so that everyone can access, edit via proxy, or review.

Producers can view the source materials or raw materials and mark using timecode or in and out points, simply feeding their choices into CatDV. These capabilities have enabled them to dramatically increase productivity and complete more and more projects.

Using CatDV, editors can create eight different web compressions. Those assets are then effortlessly delivered to the web team and ultimately published onto the website.
SIMPLIFYING DELIVERY OF
HIGH-QUALITY ASSETS
Once a project has been edited, reviewed, and approved, it needs to be sent to multiple destinations both inside and outside the organization. The JPL team needs to maintain the quality of assets, which are published to the web. Editors make a backup of the project and, using CatDV, create eight different compression algorithms. Files are then effortlessly delivered to the web team and ultimately published onto the website.

ENABLING USERS TO FIND ASSETS EASILY
In addition to addressing multiple internal production workflow issues for JPL, CatDV helps people who want to view the media assets that JPL creates. The JPL team uses CatDV to catalog finalized programs as well as continuing projects, such as videos on the Mars rover, so that the public can search the website to quickly see what is available to download.

ABOUT JET PROPULSION LABORATORY
Founded in the 1930s, Jet Propulsion Laboratory (JPL) is a research and development lab federally funded by NASA and managed by the California Institute of Technology. The organization strives to explore space in pursuit of scientific discoveries that benefit humanity. Current missions have a broad array of goals, from measuring the height of Earth’s oceans to determining whether there has been life on Mars.