Archiving Avid Projects and Backup Avid Storage

marquis
moves media

Avid Media Composer and Avid NEXIS/ISIS online storage are leading products for professional video editing. Marquis and XenData provide a total storage management solution for your Avid environment, archiving finished projects and backing up current projects.

The Marquis Parking software runs on the XenData Server and delivers a total storage solution based on the following Parking software modules:

Marquis **Archive Parking** software is used to free up space on NEXIS/ISIS online storage by moving complete Avid projects to XenData second tier storage which may be near-line disk, LTO cartridges or cloud object storage.

Marquis **Workspace Tools** is used to create a backup copy of your selected workspaces on XenData near-line disk and/or cloud object storage.

Together these Parking software modules deliver:

- reduced overall cost because you avoid expensive capacity upgrades of NEXIS/ISIS;
- secure archive of completed projects to LTO or the cloud; and
- data protection for your work in progress

Marquis Parking and Workspace Tools running on a XenData Server provide Archiving of Finished Projects and Data Protection for Current Projects

Introduction

A XenData Server manages near-line disk and LTO libraries or cloud object storage to create a digital archive on a Windows platform with a straight forward NAS architecture and a standard file/folder interface. With over 1,000 installations in media and entertainment applications, the XenData storage platform is well proven and trusted by some of the largest media organizations in the world.

Marquis Broadcast is an Avid® Alliance Partner with a reputation for high quality media management products. The Marquis Parking family of software provides storage management, backup and disaster recovery for Avid environments; it includes Project Parking and Workspace Tools.

Project Parking understands the relationships between Avid projects, folders and bins and all its media. It does this by examining all project files and compiles a list of complete media references. It then looks at all the media and matches the project references to that media allowing the application to provide sophisticated archive, backup and storage management operations.

There are two variants of Project Parking available, Archive Parking and the full Project Parking.

- **Archive Parking** software is used to free up space on NEXIS/ISIS online storage by moving complete Avid projects to XenData second tier storage which may be near-line disk, LTO cartridges or cloud object storage. MD5 checks and routines are used to ensure the copied data is bit for bit identical to the original.

- **Project Parking** includes all of the functionality of Archive Parking while also including the tools to fully analyze the Avid shared storage system, track the usage of Projects and Workspaces over time and to remove duplicated and orphaned material.

Workspace Tools is the Marquis backup and disaster recovery tool for Avid Shared Storage systems:

- **Workspace Tools** is used to create a backup copy of your selected workspaces on XenData near-line disk and/or cloud object storage. It runs on a user defined schedule, providing de-duplication and checksums. A retention policy controls how long media and projects are held in the backup after they have been deleted from the Avid shared storage.

Archive Parking Moves Completed Projects to Archive Storage

For facilities running to capacity on high value primary edit storage, Archive Parking is used to free up space by copying complete Avid projects to near-line disk and/or LTO or cartridges. It archives whole Avid projects: all the bins, sequences and media files.

Archive Parking gives you the tools to find out what is using up space on your Avid edit storage and park storage intensive projects to lower cost, secure XenData archive storage. This saves the need for significant capital expenditure in additional shared edit storage.

Archive Parking allows archived projects to be stored on different destinations and will list all of the Avid projects in each destination. It provides information on when that archive was made and details the number of versions that are available along with user comments. The user can choose which version to restore, where to restore it and select how the original workspaces map onto the currently available ones.

Furthermore, Archive Parking has the ability to make Avid projects portable, delivering a number of additional benefits:

- Sharing media via the cloud using a XenData edge appliance;
- Taking projects offsite to re-edit (adding flexibility to a production); and
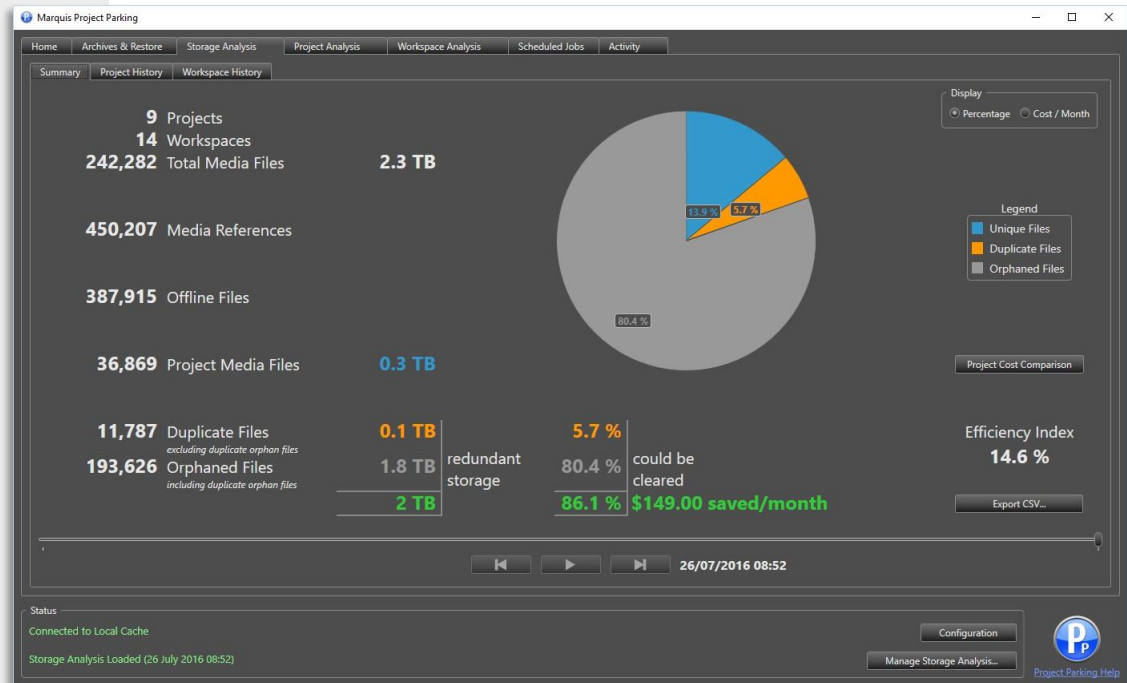- Archiving (Creating Disaster Recovery files for storing offsite - projects can later be restored to Avid)

Archive Parking provides re-editable archiving with flexible merge & restore options:

- Restore a whole project, or just the bins that matter, to any other project.
- Merge a new version of a project with the one currently on-line.

If a project has been previously archived, when restored, Project Parking will update the original archive and only move across any new media or changed project files.

Project Parking offers Full Management of your Avid Storage

Project Parking includes all of the functions of Archive Parking while also including the tools to manage the Avid Shared Storage.

Project Parking understands the relationships between Avid projects, folders and bins and all its media. It does this by examining all project files and compiles a list of complete media references. Project Parking then looks at all the media and matches the project references to that media allowing the application to complete some very useful tasks:

- Analyze & Manage Media & Workspaces
- Locate all media associated with a project
- Understand which projects are using up the most space
- Identify duplicate and orphaned media
- Free up shared storage
- Move storage intensive media offline
- Delete duplicated media
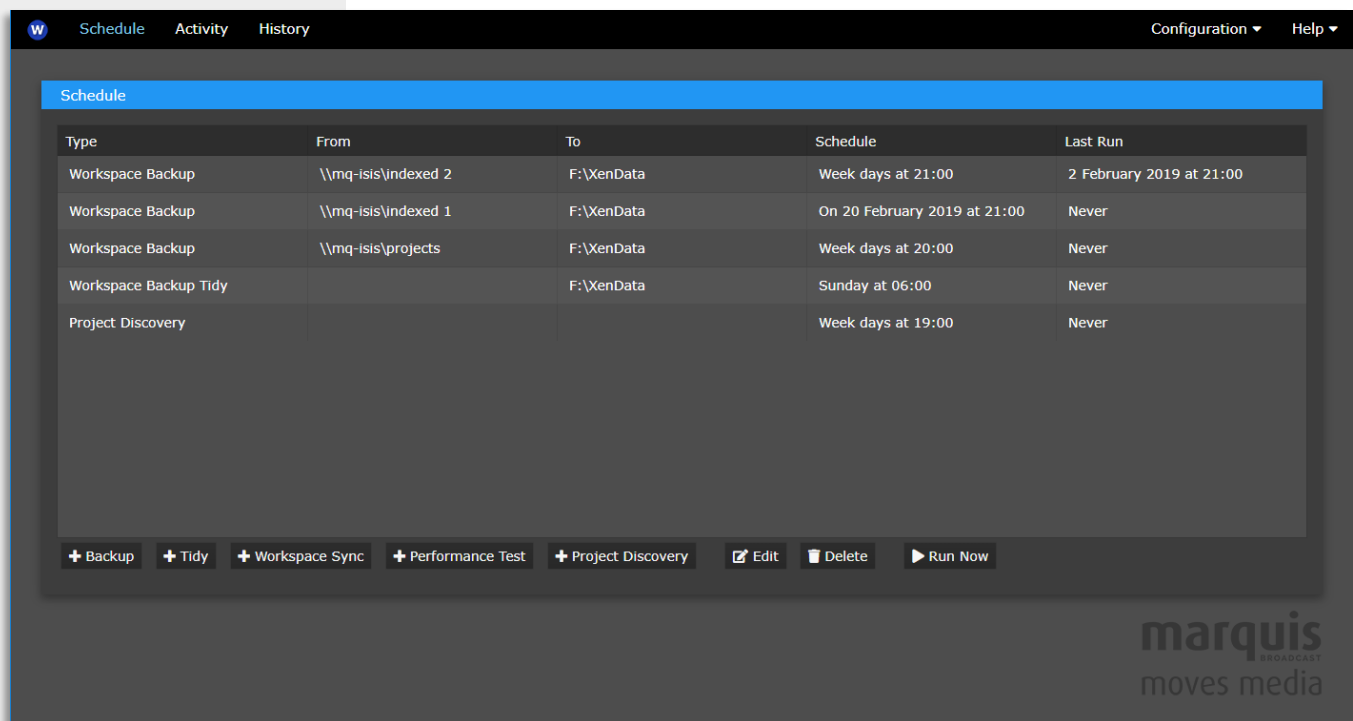- Delete or move orphaned files to lower tier storage

With the ever increasing demand to use more media, there is a growing need for organizations to optimize shared storage resources. Recent research by Marquis has shown that broadcasters are typically wasting up to 20% of their shared storage capacities due to duplicate files or orphaned media.

Combining the ability of Archive Parking to copy Projects to the XenData archive with the Storage Analysis capabilities of Project Parking gives users a powerful toolset to ensure they are making the most efficient usage of their high value edit storage systems.

Workspace Tools Backs Up Current Projects

Workspace Tools creates a backup of your selected workspaces on XenData near-line disk storage and/or cloud object storage. It identifies which projects reference the media and adds the project files to the backup, along with any additional media that those projects need (AMA or on other workspaces). No media is duplicated, no matter how many projects use it.

Workspace Tools can be set to run regularly at specific times, perhaps at midnight daily, or just on the weekend. It stores the backup on the XenData near-line disk and/or cloud object storage in a simple, open file folder structure which is easy to understand. Every copy operation whether in or out of the backup is MD5 checksum assured.

Type	From	To	Schedule	Last Run
Workspace Backup	\\mq-isis\indexed 2	F:\XenData	Week days at 21:00	2 February 2019 at 21:00
Workspace Backup	\\mq-isis\indexed 1	F:\XenData	On 20 February 2019 at 21:00	Never
Workspace Backup	\\mq-isis\projects	F:\XenData	Week days at 20:00	Never
Workspace Backup Tidy		F:\XenData	Sunday at 06:00	Never
Project Discovery			Week days at 19:00	Never

Every time Workspace Tools updates the backup it adds any new media and any new projects. Projects that have been changed are stored as a new version, meaning that the previous version is still available in the backup. Completion of backups can trigger SMS or email alerts.

A retention policy controls how long media and projects are held in the backup after they have been deleted from the Avid shared storage. Once the retention period has passed, old media and projects are purged, keeping your backup compact.

When it comes time to restore from the backup you have several choices:

- Any version of any project can be restored in its entirety
- Any bin(s) from any version of any project can be restored to any existing project
- Any workspace can be restored to any new workspace

The restoration process will be completed in the time it takes to copy the media and project files to the new location and check the MD5 checksums.

XenData On-Premises Digital Archives

A XenData Archive Server manages near-line disk and LTO libraries to create an on-premises digital archive on a Windows platform. XenData offers a wide range of near-line disk and LTO capacities.

Archive Parking and Workspace Tools are ideally run on the XenData Archive Server as this provides direct data paths between the shared edit storage and the XenData server for best performance.

Benefits include the following:

- **Supports Multiple Simultaneous Applications.** Create multiple LTO cartridge groups and use these for different applications. For example, combine Marquis Project Parking and a simple file-folder archive - all with one XenData system.

- **Fast Archiving and Restores.** Files are written at RAID speed. The system does not wait for LTO cartridges to be mounted. The system restores a queue of files in the shortest possible time. The restore requests are processed in an order that minimizes unnecessary tape movement.

- **Built-In Data Protection.** The system will automatically create extra replica copies of LTO cartridges for offsite retention.

- **Industry Standard File Security.** The archive server integrates fully with the Microsoft Windows security model based on Active Directory.

- **Manages Unlimited Externalized Cartridges.** The system manages any number of externalized cartridges, providing an unlimited total capacity. There are no license fees for externalized capacity.

- **Scales to Multiple Petabytes of Near-line Capacity.** Scales to support multiple enterprise-class robotic libraries from a wide range of manufacturers.

XenData Hybrid Cloud Archives

A XenData edge appliance manages near-line disk and cloud object storage to create a hybrid cloud archive on a Windows platform. XenData supports several different cloud providers including AWS, Microsoft and Wasabi. The XenData hybrid system will store multiple petabytes in the cloud and cache up to 256 TiB on local RAID for fast restores.

Archive Parking and Workspace Tools are ideally run on the XenData Server as this provides direct data paths between the shared edit storage and the XenData server for best performance.

Benefits include the following:

- **Fast Restores.** By implementing a system with a large on-premises RAID, the cached content may be restored rapidly.

- **Fast Archiving.** Files are written at RAID speed. The system is not limited by the speed of your Internet connection.

- **Share Projects via the Cloud.** Use the capabilities of Archive Parking to create portable projects; save these to the cloud using the XenData edge appliance and then provide credentials to a remote user or facility to allow sharing.

- **Replicate to Multiple Clouds.** For example, send archived content to the Wasabi cloud and automatically create a copy on AWS Glacier for added data protection.

- **Industry Standard File Security.** The archive server integrates fully with the Microsoft Windows security model based on Active Directory.