



Backup & Archiving to CD/DVD



Rimage Producer II
CD/DVD autoloader

New features (version 2)

- File spanning: split large files across CD/DVD
- File checksum: check data integrity for long term archiving
- New graphical interface
- Support for Windows 2003

Actually, advanced digital storage media gradually take the place of hard-copy (paper), microfilm and analogue video tape. Hard disks usually are the first media of choice for storing this rapidly expanding digital content. But although hard disks are ideally suited for storing large amounts of 'living' data, they should be questioned when it comes to storing infrequently accessed data for archival purposes (be it for business or legal reasons).

Scanned invoices, sent and received fax messages, email archives, production logs, video recordings,... to name just a few, are examples of digital assets that contain important business information, but the vast majority of it will probably never be needed again. Keeping these digital assets on secure hard disk based storage will be extremely expensive due to the cost of high-capacity RAID volumes and especially their related management costs (including regular backups), which are calculated to be at least 5 times the cost of the storage itself.

It is therefore more economical to off-load these inactive data to much cheaper and highly reliable media. With Perennity, automatic migration can be triggered from an unlimited number of data volumes to on-line or off-line storage. A back-end database keeps track of where all files are stored.

Perennity has originally been developed as a solution for migrating data to DVD for off-line storage. DVD technology offers several attractive advantages for data archival : a very low cost coupled with an interesting capacity (4,7 GB per media) and an important lifetime (more than 20 years). Furthermore, since a DVD is universally readable thanks to its standardized file system, long-term information accessibility is guaranteed.

Perennity has a direct output to the Rimage CD/DVD producer systems (www.rimage.com). With these devices, the off-line archival and retrieval process can be easily automated. DVDs will be written whenever certain criteria (or a combination of them) are met : the size of a folder, the presence of a specific file (trigger) or a latency time. One or more copies can then be produced and they will be printed with a unique (customizable) label using either thermal or inkjet technology.

Files that have been written out to DVD can then be deleted from the file server, freeing up space; they can also be left intact (but will not be eligible for migration again) or they can be moved to NAS, hard disk, CD/DVD library, ...

Multiple applications

- Broadcast compliance recording
- Production log files archiving
- Prepress project archiving
- Large files archiving like medical imaging
- Photo mini-lab automated CD/DVD output
- Incremental backup/archiving of file servers
- Paper scan to CD/DVD
- Fax server backup/archiving

Fully unattended process

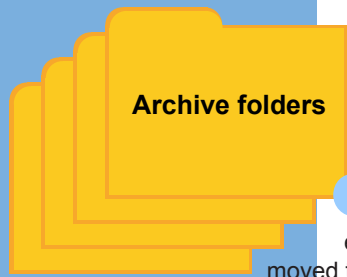
Backup & archiving operations will start automatically, triggered by:

- Folder capacity (watermarking)
- Presence of a file (polling)
- Latency time
- A schedule (every day, month, ...)

Easy to use

A user-friendly graphical interface will help you manage and monitor the backup, archive & restore operations. A query tool lets you find and retrieve all backed up/archived files based on search criteria (file name/type, date range, content, ...).

How it works ...



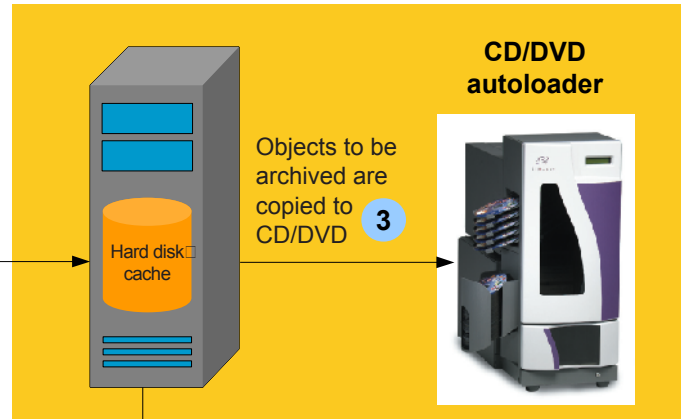
1 A trigger starts the archiving process

A copy of the Archive Folder contents is retrieved

2

5 Original files are either kept, deleted or moved to another destination

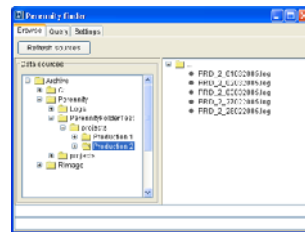
Perennity server



Objects to be archived are copied to CD/DVD **3**

Database is updated 'Where is what?' **4**

Query or browse the database using the Perennity Finder tool **7**



Database
MySQL, MSDE*, SQL Server* or Oracle*



Store your off-line CD/DVD copies **6** in a safe place

System requirements

Operating system

Windows 2000, XP, 2003
Linux*
Solaris*
Mac OSX*
JAVA (JRE 1.4.2) required

Memory

512MB RAM

Processor

Pentium IV processor

Hard disk space

At least 40GB

Database

Perennity is delivered with MySQL
Possible link to Microsoft SQL Server* or Oracle* databases

CD/DVD output

Rimage Desktop Publisher
Rimage Producer II
Rimage DL5200/DLN5200

* Planned Q4/2005

An Archive folder is a local or network-shared directory in which users or applications store the files/folders to be archived or backed up. One or several of these folders can be created and controlled by the Perennity application. Based on predefined 'triggers', which are customizable for each Archive Folder individually, their content will be automatically copied to CD or DVD (or other storage media).

A trigger can be a watermark (i.e. a Hot Folder reaches a certain capacity), the presence of a particular file (e.g. start.xml or any file having a .end extension) or a latency time (e.g. no new file has been added since more than 1 minute). You may also restrict the backup/archive process to happen within a specific timeframe (e.g. only between 8PM and 11PM) or force its execution to start every day or week.

When using Perennity with a Rimage Autoloader, a unique label will be printed on every CD/DVD for proper media identification. Multiple copies can also be generated, for instance a copy to be stored locally and one to be stored remotely.

Files surpassing the media capacity may be split over multiple CDs/DVDs. Optionally, Perennity can compute a CRC32 checksum on each file to ensure its integrity.

All backup/archival operations can be logged in the Perennity database. Perennity Finder allows for querying and browsing the database to find out on which CD/DVD files have been stored based on their name, date or even content.