

## **Piql Preservation Services - A Holistic Approach to Digital Long-Term Preservation**

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**Abstract :** Piql Preservation Services ("Piql") is a turnkey solution designed for secure, migration-free long-term preservation of digital data. Piql sets an open standard for long-term preservation for the future. It consists of equipment and processes needed for writing and retrieving digital data. Exponentially growing amounts of data demand for logistically effective and cost effective processes. Digital storage media (hard disks, magnetic tape) exhibit limited lifetime. Repetitive data migration to overcome rapid obsolescence of hardware and software bears accelerated risk of data loss, data corruption or even manipulation and adds significant repetitive costs for hardware and software investments. Piql stores any kind of data in its digital as well as analog form securely for 500 years. The medium that provides this is a film reel. Using photosensitive film polyester base, a very stable material that is known for its immutability over hundreds of years, secure and cost-effective long-term preservation can be provided. The film reel itself is stored in a packaging capable of protecting the optical storage medium. These components have undergone extensive testing to ensure longevity of up to 500 years. In addition to its durability, film is a true WORM (write once- read many) medium. It therefore is resistant to editing or manipulation. Being able to store any form of data onto the film makes Piql a superior solution for long-term preservation. Paper documents, images, video or audio sequences - all of those file formats and documents can be preserved in its native file structure. In order to restore the encoded digital data, only a film scanner, a digital camera or any appropriate optical reading device will be needed in the future. Every film reel includes an index section describing the data saved on the film. It also contains a content section carrying meta-data, enabling users in the future to rebuild software in order to read and decode the digital information.

**Keywords :** digital data, long-term preservation, migration-free, photosensitive film

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