

# Archive of Patient Records at CHUV in PDF/A-ISO 19005-1 Standard



Centre  
hospitalier  
universitaire  
vaudois



## CHUV

CHUV, a European hospital center, is one of five university hospitals in Switzerland. The center provides care in all areas of medicine and plays a leading role in many disciplines. In addition, the University Hospital is involved in training doctors and conducting cutting-edge operations research with national and international funding.

There are more than 8,000 employees representing 92 nationalities participating in the activity of the hospital, which receives more than 41,000 inpatients each year.

### Background / Needs / Project goals

CHUV required an installation that would automate the conversion of all document work flows that enter the archiving systems. Files with various formats such as doc(x), html, rtf and PDF in TIFF G4 are handled within their archive.

This solution fulfilled the following requirements:

- Consideration of a new workflow for scanned documents in TIFF format.
- The detection of incoming formats to then conform to the outgoing format (eg tif->tif), avoiding unnecessary conversions.
- Adds to the conversion workflow, the information for the images is indexed in a third-party archiving tool
- Ability to switch easily to PDF/A conversions, after a first replication of the existing process (conversion to TIFF G4)

The new solution also improves the stability of the conversion platform while absorbing a bigger volume of files to convert, approximately 4000 per day.

Mr. Pascal Duvoisin from the CHUV Information Systems Management Department stated that, "The potential of the SEAL Systems solution has validated the achievability of our goals. We especially appreciate the adaptability of the product to our needs and the flexibility and responsiveness of support offered by SEAL Systems throughout the implementation phases of the solution."





## The SEAL Systems solution: DPF

SEAL Systems has used its technology DPF (Digital Process Factory) to meet the requirements for mass conversion while integrating into the CHUV document workflow. This technology, already proven in a similar context for FHVI Lausanne, has easily found its place within CHUV.

The Digital Process Factory© Technology is a development environment which allows users to build, develop and execute a series of treatments on data, files and documents. This technology is ideal for conversion processes and editing. Working units are chained together to form a workflow corresponding to the desired result. Administration and supervision tools create the opportunity to easily implement, adapt and operate in a safe and transparent way. The processing chain can easily be adapted to take account of document workflow evolutions.



## SEAL Systems and PDF/A

Since the publication of the PDF/A standard, SEAL Systems is involved in the promotion of the standard 19005-1 and the development of a comprehensive range of solutions to meet the requirements of long-term archiving. SEAL Systems, as a member of the PDF/A Competence Center has developed a set of solutions dedicated to PDF/A to generate compliant files from all file types (MS Office, graphics, CAD).



## PDF/A

The ISO 19005 standard (PDF/A) defines requirements for creating documents suitable for archiving, based on the PDF file format widely used. The standard specifies in detail what types of content are allowed and which are not. These specifications are intended to ensure the readability of the file for a long term period, regardless of the application software and operating system with which it was produced. Experts predict that the designation of PDF/A as an ISO standard will promote the recognition of the format, also benefits of the text search functions will accelerate the replacement of TIFF.

