



The need for hard copies in the PACS digital word

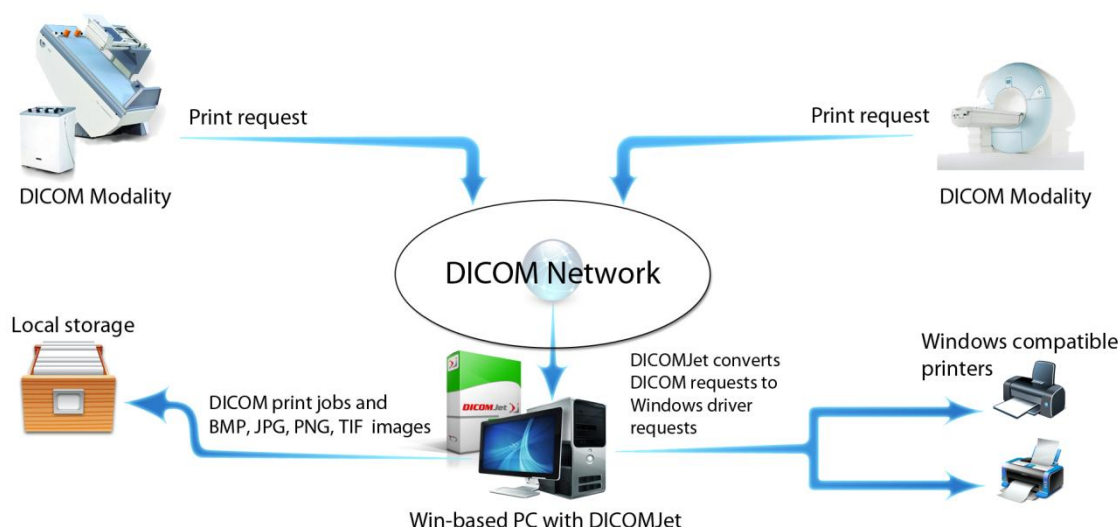
Radiologists of most medical institutions which already completed the transition to digital technologies and to PACS perform their diagnosis directly on the screen of dedicated workstations.

Nevertheless, there is still the need to take medical images out of the hospital, or out of the boundaries of the hospital's network, for instance to provide copies of the exam images to the patient, or to accompany the report for the referring physician. A "hard copy" of the acquired medical images is certainly the most immediate and effective mean for most "users".

Paper DICOM prints with DICOMJet

Today's diagnostic digital modalities (CR, CT, MRI, US, etc.) are usually only able to print medical images to specialized and expensive film printers supporting the DICOM protocol, which is a universally-used communication standard in the medical imaging world. On the other side, hospitals and imaging centers all around the world need to reduce every-day costs, and x-ray films imply high production, storage, shipping and disposal costs.

The DICOMJet software, coupled with an appropriate Windows-compatible printer, allows obtaining a high-quality and cost-efficient DICOM printing solution for the radiology department and the other hospital departments. Paper hard-copies of exams images can be easily produced in a cost-efficient way.



Architecture of a **DICOMJet**-based DICOM paper-printing solution

DICOMJet: benefits

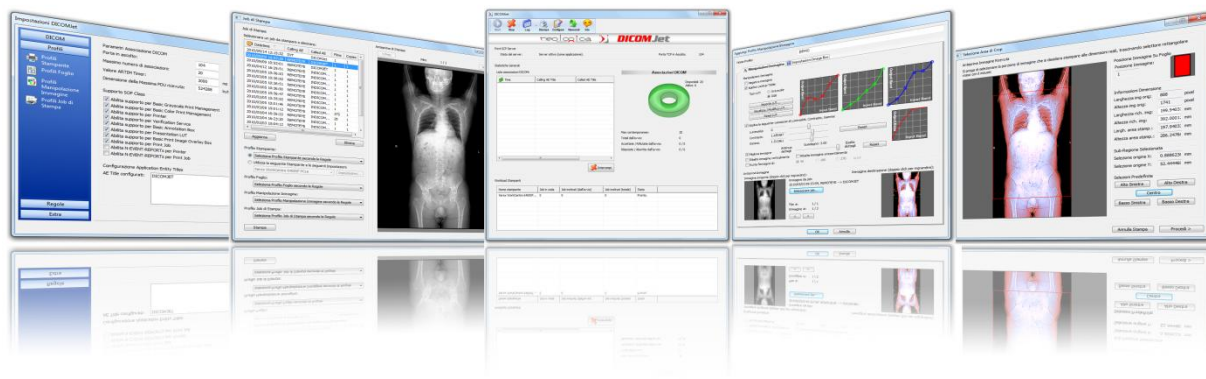
- ◆ Seamless integration in any DICOM network: digital modalities see the "DICOMJet + office printer" system as it was an actual DICOM film printer.
- ◆ In small imaging center, DICOMJet can be coupled even with a single modality supporting DICOM print.
- ◆ Dramatic reduction costs (from 1.5 Euros per copy to few cents per copy).
- ◆ Near-diagnostic print quality.
- ◆ Easy filing, storage, shipping and disposal of paper printouts.
- ◆ Environment-friendly.



DICOMJet: technical features

DICOMJet enables your office Windows-compatible printer to receive DICOM print requests directly from digital modalities, thus supporting a low-cost paper printing solution dedicated to medical imaging. Here are some of the key features of the DICOMJet software:

- ◆ Full DICOM 3.0 compliance: DICOMJet exactly reproduces the behavior of a full-featured DICOM film printer on your office printer.
- ◆ Supports up to 20 simultaneous DICOM associations.
- ◆ High-quality grayscale and color print: produced images are of near-diagnostic quality.
- ◆ Fully customizable layout, header, footer and logos on the printed sheets.
- ◆ Advanced management of DICOM print jobs, which can be saved, previewed and re-submitted in a second time.
- ◆ Advanced support for true-size printing.
- ◆ Single software instance is able to drive several printers, with forwarding tables and rules.
- ◆ Advanced image manipulations and quality adjustments are possible, thanks to the support for modality-specific driver settings, software lookup tables (LUT's) and image transformations.
- ◆ Support for JPEG, PNG, TIFF, BMP export of images.
- ◆ CE-marked as a class I medical device.
- ◆ FDA-listed as a class I medical device (Image Communications Device category).



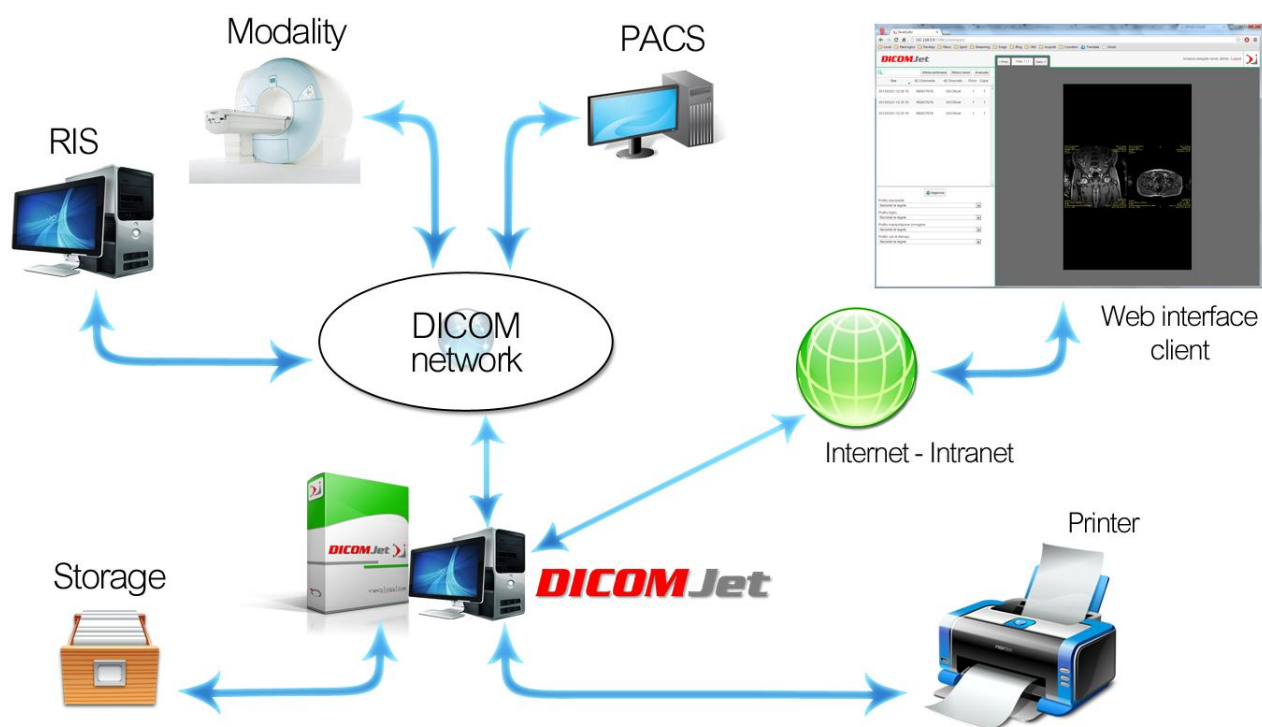
Screenshots of DICOMJet's Graphical User Interface



DICOMJet: print jobs web management

DICOMJet supports print jobs archive web management. The print jobs in DICOMJet's archive can be browsed through a standard web browser. An appropriate administration interface allows setting up web user accounts with configurable privileges; enabled web users may perform searches on print jobs performing the following operations:

- ◆ Jobs to PACS: acquire images from print jobs previously saved by the DICOMJet server, transform them to DICOM images including patient and exam data (manually or querying RIS/PACS), and finally send them to a DICOM server.
- ◆ Saved Jobs: view, delete and print the DICOM print jobs previously saved by the DICOMJet server, with real-time print preview on the client PC browser.
- ◆ Server Status: review the current status of the DICOMJet print server, stop and restart the server, view currently-active DICOM associations, abort inactive associations.



Web access to print jobs stored in **DICOMJet**'s archive



DICOMJet and Xerox devices

DICOMJet now supports the Xerox Extended Interface Platform (EIP) technology, as an optional software module. Many DICOMJet features are available directly on the touch screen of EIP-capable Xerox devices, thus delivering an extremely streamlined and optimized workflow.

In addition, some exclusive image acquisition and DICOMization features have been introduced in the DICOMJet EIP application.

Here is a short summary of the features of the DICOMJet EIP application module:

- ◆ Scan to PACS: acquire paper documents, transform them to DICOM images including patient and exam data (automatically retrieved through DICOM services), and finally send them to a DICOM server. All this without stepping away from your Xerox device! Transformation to DICOM of printed or hand-written reports, forms or other paper documents has never been easier!
- ◆ Jobs to PACS: acquire images from print jobs previously saved by the DICOMJet server, transform them to DICOM images including patient and exam data (automatically retrieved through DICOM services), and finally send them to a DICOM server.
- ◆ Saved Jobs: view, manipulate and print the DICOM print jobs previously saved by the DICOMJet server, with real-time print preview on the screen of the Xerox EIP device.
- ◆ Server Status: review the current status of the DICOMJet print server, stop and restart the server, view currently-active DICOM associations, abort inactive associations. The **DICOMJet EIP** application running on a Xerox device.

