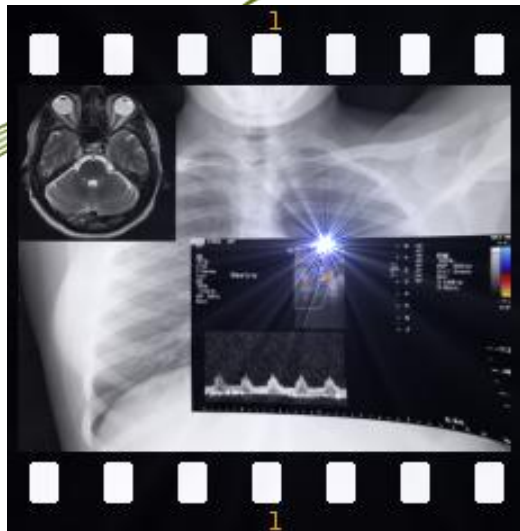


soaviem



Advanced IT Healthcare Solutions

Process Innovation

Soaviem design and develop DICOM solutions for entities of any size from a small private practice to the regional general hospital according to the IHE and HIPAA specifications.

The aim is to maximise the benefits of DICOM through fast, powerful, user-driven functionality and optimise the efficiencies of workflow throughout the whole DICOM environment in conjunction with the internet.

Modular integration between different applications permits the production of images and reports without film or paper to improve quality of service, reduce operating costs and benefit the environment.

Existing management applications integrate via DICOM and/or HL7 Sigma modules to enable communication between the DICOM modalities and Sigma PACS.

Main features of SigmaDICOM

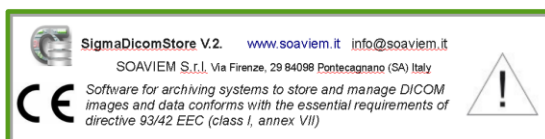
- * Faster access and more secure handling of all prior examinations
- * Manage and manipulate digital images with specific algorithms to improve the quality and diagnostic accuracy
- * Increase efficiency and productivity
- * Send or receive images for teleradiology consultation by external specialists
- * Deliver radiological images to the patient on plain paper and/or on CD/DVD with the digital information generated from the DICOM equipment
- * The Digital archive generates massive space saving for the re-designation of space or storage of radiographic films

Sigma DICOM includes three main components

Store: Core module used as plug-in and PACS archive manager

Paper: Prints DICOM images to various media in different standards paper, film, transparency on common printers in DICOM standard, Windows Print or Postscript

Send: Rapid Scanning and Transfer of DICOM Images; scan archives or CD/DVD's that contain DICOM files



Media/Aarch

Patient & Archive CD/DVD Manager

Plug-in for the production of Patient CD/DVD and for archive containing DICOM images and reports



	MediaL	Media	MediaXP
Automatic cd/dvd production at end of study reception	N	Y	Y
Archive function after operator selection	N	Y	Y
Numbers of managed disk producers at same time also from different vendors	1	1	2
Automatic switch to DVD if patient study dimensions are bigger than a CD	N	N	Y
Can produce CD and DVD at same time if a dual input bin robot is available	N	N	Y
Management of dual drive producers (make 2 media at same time)	Y	Y	Y
Database of all produced media	Y	Y	Y
Automatic split to multiple cd/dvd if a study is larger than media	Y	Y	Y



All versions include, on each media, a DICOM viewer (σ Viewer) with:

- selectable display mode
- automatic display of reference lines.

The images on the media are visible on any Windows or Linux PC (or Mac, via "Wine")

- Data recorded conform to Part 10 of the DICOM Protocol
- Stored on CD/DVD without compression.

The application manages a variety of CD/DVD robots:

- Primera (including SE model), Rimage, XLNT Idea and Epson.

The Aarch module enables the same robot or another one to automatically back-up all the archive during the night or at times of low system usage.



WebServer

Quick and Automatic Image Access - everywhere and anytime
 Web Access DICOM Object Dual Access System

Browser access used to:

- configure accounts and groups
- add study note
- download DICOM zip files
- download desktop viewer

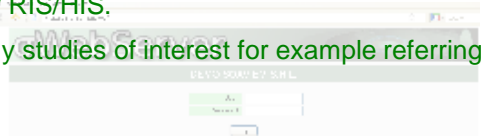
Desktop viewer access used to:

- program study download at specified time
- add study note
- fast view of images and structured report
- manage local archive up to 500 studies

Programmable Automatic Multi-Auto Pull-Down System avoids waiting times even when you are connected remotely with a slow broadband internet connection.

The viewer includes an XML server to easily interface with any RIS/HIS.

Through group management it is possible to limit access to only studies of interest for example referring physicians will see only their patients.



Medico ref.	Accession N.	Modalities	N. serie	N. inst.	Dwn	Note
	67373	CT	5	1013	100%	
		US	1	1	100%	
		US	1	5	100%	
		CT	3	116	100%	
LDV		MRISC	6	320	100%	
	20081004694	SCWMR	7	91	100%	
	4021q	CT	1	75	100%	
	VAS002	CT	4	509	100%	
	vk	XA	1	1		
	882	CT	4	1846		
pippo pluto	1	MR	13	287	48%	
		MR	10	791		

WorkFlowManager

DICOM Modality Worklist & PPS Server

The screenshot displays the 'Client XML' application window with several configuration sections:

- Host:** 10.0.2.15
- Port:** 16205
- Command:** querystate
- Parametri per delete/querystate/updatestate:** Request Proc ID: RP11, State: SCHEDULED
- Paziente:** Patient ID: 717PA17, Cognome: cogn, Nome: nom, Nascita (dd/mm/yyyy): 10/10/1920, Sesso: M
- Accettazione:** Accession Number: an667818, Medico cognome: rossi, Medico nome: paolo
- Prestazione:** Request Proc ID: RP11, Data Program.: 10/04/2010, Req Proc Code: tccranio, Descrizione: tac cranio, Study UID: 243.232.3345.48392
- SPS:** SPS ID: TCCRA, AE Title: TAC, Station name: pippo, Modality: DX
- Worklist and PPS Manager:** Enable: checked, Port: 6105, AE Title: SIGWKL, Server XML: Enable: checked, Port: 16205

A 'Client XML' dialog box is open, displaying the following XML message:

```
<?xml version="1.0"?>
<wkdirsp Name="querystate">
  <procedure>
    <id>RP11</id>
    <state>SCHEDULED</state>
  </procedure>
  <rsp>SUCCESS</rsp>
</wkdirsp>
```

Buttons for 'XML', 'Clear', and 'Send' are visible at the bottom of the main window.

WKFMGR is used to exchange data between modalities, PACS and HIS/RIS systems in order to standardise data and processes.

Diagnostic modalities can receive a list of exams and/or communicate the state of execution (PPS/SPS) or change the data through the IHE profile PIR.

Communication with the information system is via XML messages over TCP/IP

The module includes a client XML to generate XML messages to make integration with any application simple

A1 Autoroute

Automatic Routing of Studies to Local or Remote DICOM Nodes

The screenshot displays the sigmaDicomStore application window with the 'Aroute' configuration panel active. The panel includes a table for defining routing rules and a detailed configuration window for a specific rule.

Enable	Use AET	Pattern AET	Tag	Pattern tag	Modality
YES	NO		0		CT

Configuration rules

- Enable
- Studies filter**
 - Receiver AETitle
 - Dicom TAG ggggeeee (0: no filter) 0
 - Pattern tag dicom
 - Modality CT
- Time schedule
 - Start time 08:00 End time 09:00
 - Weekly schedule
 - M T W T F S S
- Sending studies**
 - Destination AETitle NEUROWS
 - Send mode from start time to end time
 - Start time 10:00 End time 11:00
 - Previous studies number to send 0
 - Send syntax Loss Lessy
 - Quality 90

Autorouting Manager used to send received studies automatically to one or more pre-assigned local/remote DICOM nodes using pre-configured filters with multiple protocols

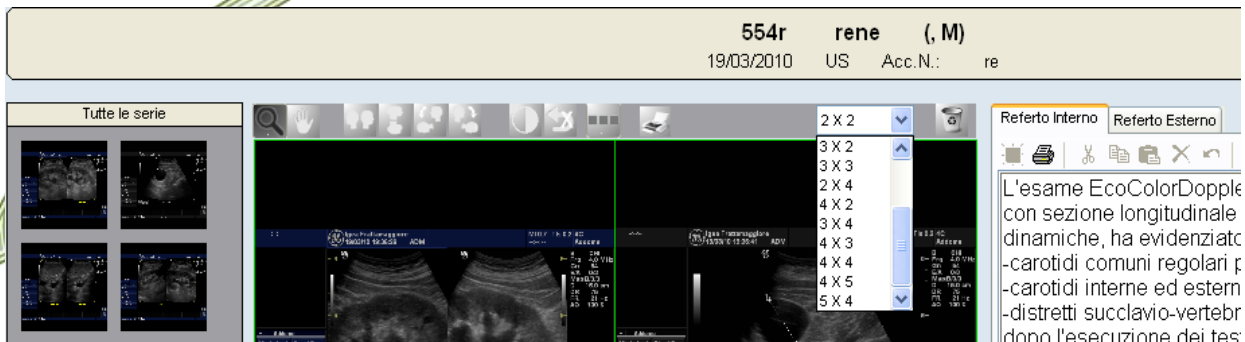
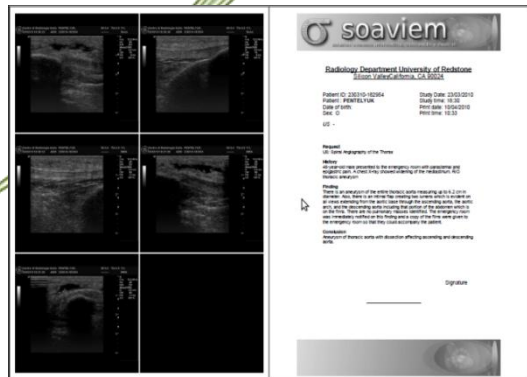
Composer

Optimised Print Times, High Quality & Reduced Cost in Ultrasound

Composer is the **σDICOMStore** print module for images and reports.

It enables the user to choose images from the archive, then modify parameters, manipulate and format (manually or automatically), as well as write the report and save to memory. The layout can be personalised just as is it possible to print only the report, or images, or both together even in reduced sizes or as thumbnails.

There is a page-formatting tool for up to 4 sides with the possibility to insert up to 4 graphic images (eg logos) on the internal notes and a single print command for the external pages



- Window / Level
- Zoom
- Pan
- Flip images horizontal/vertical
- Rotate left/right
- Reset values
- Select single image / all images
- Print – report only
- Print – images only
- Print – images with report
- Auto-format with block format
- Print cover – images and report with 2 pre-set profiles or 1 free profile
- Save internal report to archive
- Up to 20 images per page
- Export in pdf (both reports and images)
- Auto import of report from external applications
- “Drag-&-Drop” or click on preview image into print frame
- “Toner saver”

σDICOMPaper

A New Way to Handle Images

σDICOMPaper is a DICOM Print SCP server driven directly from a single or multiple modalities.

It enables users to print images on alternative media such as paper, film or transparency using standard printers. σDICOMPaper can print in the DICOM standard, Windows Print or Postscript.

σDICOMPaper manages multiple look-up tables (LUT) for every printer and DICOM modality. Because it stores a library of calibration reference images it can even handle monochrome or colour calibration test images via linear or dotted lines for a quick and reliable quality check.



Print images on paper or other media

Dicom size	Windows size
14INX17IN	8 - A3
8INX10IN	9 - A4
A4	9 - A4
14INX17IN	8 - A3
8INX10IN	9 - A4
11INX14IN	9 - A4

The interface also includes a 'Lut' window showing a color calibration chart and a 'NO MANUFACTURER NO MODEL' watermark.



σDICOMSend

Rapid Scanning and Transfer of DICOM Archive Images

σDICOMSend enables the scanning of archives or CD/DVD's that contain DICOM files, even if compressed, and sends the images to other servers or DICOM nodes in uncompressed format



Scan folders or CD/DVD to catch DICOM images and send them to your pacs

