Medical imaging solutions for Adobe® Photoshop® CS3

Realize the creative potential of Adobe Photoshop CS3 and DesAcc plug-ins for designing professional-quality publications, presentations, and clinical content

Adobe Photoshop CS3 software is the industry standard for working with digital imaging content. With Photoshop, millions of users worldwide efficiently manipulate, enhance, organize, and share their digital content on a daily basis. Within the healthcare environment, the Digital Imaging and Communications in Medicine (DICOM) 3.0 standard is utilized for the daily transmission and storage of all medical imaging data. From digital X-rays to CT, MR, and ultrasound scans, every frame of content is captured using the ubiquitous DICOM standard. With this movement from film to digital, a great potential for the efficient incorporation of medical images into publications, teaching files, and presentations can be realized through the addition of DICOM functionality in Adobe Photoshop.

Adobe Photoshop CS3 and DesAcc plug-ins make Photoshop fully DICOM compliant, meaning that it can communicate natively with MR, CT, ultrasound, and other medical scanning devices. As DICOM-compatible software, Photoshop can query and retrieve specific patient content directly from the picture archiving and communications systems (PACS) used by radiologists and healthcare professionals in their daily clinical workflow. New content originating within Photoshop, such as content created in medical photography departments, can also be transmitted directly from Photoshop for incorporation into a patient’s PACS healthcare record.

Create clinical content

Every day patient-specific surgical drawings, medical photographs, slides, and microscopy data are collected within a hospital environment. However, if the patient’s information is not integrated with medical testing and reports, this data needs to be printed and physically added to the patient’s folder. Now, with the DesAcc Clinical Context Wizard™ plug-in for Adobe Photoshop CS3, full patient demographics can be added to any digital image and transmitted to PACS or any other DICOM-compliant device. You can even transmit DICOM images between copies of Photoshop utilizing DesAcc plug-ins.

Deliver professional presentations

With DICOMaccess™ you can access a local database of patient data queried from remote DICOM devices or received directly from your medical scanners. Select a patient, study, series, or individual images to import into Photoshop. Whether you want to display a collection of images or create an animation from individual files or frames, Photoshop CS3 is capable of meeting your publication and presentation needs.

“We use Adobe Photoshop every day within the medical photography department of our hospital. The ability for Photoshop to interact with PACS on a DICOM network would greatly facilitate integrating medical photographs into the patient record.”

Stephen Moore, Bsc, MIMI, RMIP Manager, Department of Medical Photography, Gloucestershire Hospitals, NHS Foundation Trust
With preset templates, gradient color backgrounds, drop-shadows, anti-aliased patient data overlays, and user-definable Window/Level capabilities, creating an image to include in a magazine or presentation is now only several mouse clicks away. No more tedious laying out of individual medical images or importing loose JPEG files from PACS; Photoshop now natively can handle your creative needs within the healthcare environment.

By adding DICOM CD reading, file reading, writing, and network functionality to Photoshop CS3, healthcare professionals, medical students, publishers, and advertisers can now interact directly with any type of DICOM data and medical device that uses the DICOM standard.

Adobe Photoshop CS3 and the DesAcc plug-in provide the following features:

Centralized workspace—Easily integrate Adobe Photoshop into your DICOM environment with DICOMaccess/Explorer.

Photoshop files saved as DICOM—Add required patient demographics to make any image file DICOM compliant using the Clinical Context Wizard.

Template-driven image import—Create montages of your data with templated layout, gradient backgrounds, and drop shadows.

Multilayer animation image import—Turn single-frame MR and CT data and multiframe ultrasound files into production-quality video output.

PACS image retrieval from any DICOM-compliant device—Act as a full DICOM node within your hospital, querying and retrieving images from your PACS.

DICOM 3.0 Part 10 CD access—Examine a DICOM CD for a single image of interest, or load entire CDs of data locally.

Hospital network file exchange—Receive DICOM files directly from PACS, or create new content and send it to PACS.

Patient information overlays on each image cell—With sophisticated patient demographic data overlays, identify each image of your presentation.

Anonymous teaching files—For teaching purposes, easily conceal personal patient information.

Make Adobe Photoshop CS3 a DICOM-compliant part of your healthcare facility’s workflow:

Design professional-quality publications
Take advantage of the full range of image enhancement, editing, and layout tools available in Photoshop for creating professional graphics from your medical imaging data.

Create electronic teaching materials
Eliminate the stacks of X-rays and films that make up your current teaching files by directly integrating into your PACS environment. Receive DICOM data directly from originating scanners and store data locally within Photoshop.

Create and send content to your PACS
Use the Clinical Context Wizard to add patient demographics to your medical photographs, visible light images, and surgical drawings, and then send them straight to PACS.

Transform the way you make presentations
Create presentations with a single mouse click from individual images or a complete series of image data, choosing between templated layouts or multilayer animations.

With preset templates, gradient color backgrounds, drop-shadows, anti-aliased patient data overlays, and user-definable Window/Level capabilities, creating an image to include in a magazine or presentation is now only several mouse clicks away. No more tedious laying out of individual medical images or importing loose JPEG files from PACS; Photoshop now natively can handle your creative needs within the healthcare environment.

By adding DICOM CD reading, file reading, writing, and network functionality to Photoshop CS3, healthcare professionals, medical students, publishers, and advertisers can now interact directly with any type of DICOM data and medical device that uses the DICOM standard.

Adobe Photoshop CS3 and the DesAcc plug-in provide the following features:
SWF file creation—Unleash the power of SWF animations with your dynamic DICOM medical imaging data by creating SWF files for playback online or in Acrobat® Connect.

DICOM image import—Import to hundreds of images, automatically spanning additional windows as needed.

Searchable database of teaching files—Maintain a local searchable database of all your DICOM teaching assets—no more stacks of X-rays on your desk.

Transform your ideas into reality
Adobe Photoshop has long been an invaluable resource for capturing, manipulating, enhancing, and organizing digital imaging data. With DICOM network functionality, CD access, and DICOM file reading and writing capabilities, Photoshop CS3 becomes a fully DICOM-compliant component of your institution’s healthcare network. Whether you are creating content for publications or presentations or adding content to PACS, Photoshop unleashes your creative potential.

For more information
For more details about Adobe healthcare solutions, visit www.adobe.com/lifesciences.
For DesAcc DICOMaccess information, visit www.desacc.com/products/da.