
synedra View Professional Diagnostic Edition

Feature overview
Version 3.1.0.x "Artemis"

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1. Feature overview

1.1. General features

- Available in German, English and French
- Supported operating systems: Microsoft Windows XP, XP Professional x64, Windows 7, Windows 7 x64
- Can be run as a native 64-bit application; for an optimized performance and quick loading of very big studies > 4GB
- Intelligent mechanism to swap documents for loading and editing big amounts of data (e.g. DICOM multi-frame studies and DICOM embedded MPEG videos,...) on 32-bit and 64-bit operating systems
- Integration of synedra View Professional with RIS, HIS and web applications also in terminal server environments
- Patient-oriented, hierarchical document overview
- Direct display of all relevant image formats as well as of PDF/PDF/A documents without the need to change the application
- Integrated media player for the display of video files (AVI, DICOM MPEG2)
- Integrated call of external applications (MS Word, MS PowerPoint, MS MediaPlayer, Adobe Photoshop,...)
- Documents can be copied to all relevant office and graphic programs for further editing
- Configurable image resolution for clipboard copies and for Drag & Drop
- Export function for data to local media:
 - Data can be anonymized
 - Export options: one out of n images; marked images
- Convenient creation of patient CDs (with their own viewer - synedra View Personal - on the CD, support of DICOMDIR and anonymization option)

- Support of Rimage and Epson burn robots: CDs with patient data and an integrated viewer (synedra View Personal) can be created easily and customized
- Integrated file and CD browser with preview function
- Extensive WYSIWYG print functions (What You See Is What You Get):
 - for DICOM printers (also in color)
 - for paper printers
 - selective printing (one out of n images, marked images) is possible
- State tab providing feedback on synedra View Professional activities running in the background (e.g., saving, sending,...)
- Keyboard shortcuts for an efficient access to tools and functions for key users
- Different functions can be assigned individually to mouse keys
- IHE-compliant implementation of the following components:
 - Patient CD
 - DICOM Query/Retrieve
 - Viewer
 - "Same Size" and "True Size" functions

1.2. Diagnostic imaging, image viewing and image editing

- DICOM display
 - All DICOM image types: x-ray (CR), MR, CT, nuclear medicine, PET, angiography, fluoroscopy,...
 - In DICOM embedded data: MPEG2, PDF
 - DICOM Structured Reports
- Support of HL7 CDA
- Display of graphic image formats: JPEG, JPEG 2000, TIFF, PNG, BMP (Windows Bitmap), XPM, PNM, GIF,...
- Can be run on single- and multiple-monitor systems
 - Regular clinical application on standard PCs with 1 monitor on each workstation in the hospital possible
 - Radiologische Befundung üblicherweise auf 3-Monitor-Workstations: 1 Steuermonitor und 2 Hochkontrastbildschirme (2,3 oder 5 Megapixel)
- Image display on all available monitors possible
- Automated arrangement of series/sequences via an integrated script engine for hanging-protocols
- Hanging option "Serpentine mode": Images of a series are distributed over the available screens and the "Synchronize scroll" function is activated
- Specific user interface for the creation of individual hanging-protocols (creation, activation and deactivation of hanging rules)
- Automated arrangement of examinations/series in 1x2, 2x1, 2x2, 2x3, 3x2 and 3x3 modes (also available for multiple-selections of examinations or series)
- Screens can be filled individually from one another; screen contents can be distributed on the available monitors and moved flexibly

- Display of loaded, but not yet visualized images
- Wide range of standard image viewing functions: window, zoom, loupe function, shutter tool, scroll, pan, rotate, mirror, false colors,...
- Synchronization tools for synchronous scrolling, windowing as well as zooming and panning in several series
- Window values can be set manually
- User-specific window presets can be saved individually
- Window values can be transferred from one image of a series to an image of another series
- The Window tool also allows to adjust the contrast and luminosity of color images
- Splitting of DICOM series in sequences based on pre-defined criteria (e.g., resolution, slice thickness, MR weighting,...)
- Individually configurable window presets for CT examinations: bone window, lung window,...
- Images of a series can be manipulated simultaneously or independently from one another
- Component for multiplanar reconstruction (MPR):
 - Rotation cube for an easy handling of the MPR view
 - Support of thickslab reconstructions (MinIP, MIP, AVG, MED)
 - Tools for synchronizing several open MPR views
- Annotations in the form of arrows, circles and text
- Tool for refinding the position of an image point in different series of the same study
- Wide range of measurement functions:
 - Length and area measurements (also in percent), angle measurement (3 and 4 point), freehand measurement
 - Density/grey values measurement
- Calibration of measurements in different measurement units possible
- Length, circle, density and angle measurements can be annotated
- Measurements and annotations are transferred as well when copying and/or dragging & dropping images
- All text displays contained in the image can be magnified and/or reduced independently from one another
- A grid, which can be moved and adjusted in size, can be laid over a loaded image
- Position display (localizers) when scrolling in series of sliced images
- Undo and redo for image editing functions
- Cine Loops: display of multiframe sequences (angiography, nuclear medicine, ultrasound sequences,...) and series of sliced images (CT, MR,...) as film
- Different possibilities for format conversion:
 - Multiframe sequences and series of sliced images as video (AVI). (The set window values are preserved.)
 - DICOM in JPEG
 - DICOM in DICOM
- Synchronous display of the ECG graph in cardiac catheter loops

- Configurable image texts
- Image data can be loaded from the clipboard

1.3. Integrated special features

- DICOM Query/Retrieve: Requests can be made to a DICOM archive or a modality and data can be transferred from this external system to synedra View Professional
- DICOM/EXIF Dump: display of the DICOM and EXIF information contained in the image

1.4. Use and support

- synedra View Professional Diagnostic Edition is a class IIb medical device certified to the directive 93/42/EEC
- synedra View Professional Diagnostic Edition may be used for medical purposes
- synedra View Professional Diagnostic Edition includes a professional e-mail and telephone support
- synedra View Professional Diagnostic Edition may be used on diagnostic workstations