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# synedra View Professional

Version 20 "Kassiopeia"

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synedra information technologies

[www.synedra.com/en/](http://www.synedra.com/en/)<sup>1</sup>

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## 1. Feature Overview

### 1.1. General features

- Available in German, English, French and Russian
- Documentation available in German, English, French
- Supported operating systems: Windows 10 Windows 10 x64, Windows Server 2008 R2 with Citrix XenApp, OS X x64
- Can be run as a native 64-bit application; for an optimized performance and quick loading of big studies > 4GB
- Login via 2-factor authentication possible
- Integration of synedra View Professional with RIS, HIS or web applications
- Browser integration of archives via a URL call
- Users may create a local catalog, thus enabling them to access data without accessing the archive
- Search function: Search in local catalog and/or in synedra Archive via a configurable web portal; easy search for previous examinations of a patient; previous examinations can also be loaded on the diagnostic monitor
- Options for the export of data to local media:

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<sup>1</sup> <https://www.synedra.com/en/>

- Data can be anonymized
- Export of one image out of n, marked images
- Convenient production of patient CDs/DVDs, optionally with synedra View Personal; support of DICOMDIR and possibility to anonymize data
- Integrated file and CD browser with preview function; optional web browser
- Keyboard shortcuts for an efficient access to tools and functions for key users
- Functions can be assigned individually to mouse keys
- Numerous possibilities for format conversions of images and videos; creation of conversion templates
- Easy compilation of key images to print on film (or paper), as PDF or as a new DICOM series

## 1.2. Diagnostic imaging, image viewing and editing

- Direct display of all common image formats without the need to change the application
- Integrated PDF viewer with many features, including search, page preview, rotate, print
- Integrated media player based on ffmpeg, providing extensive support of different video formats
- DICOM display:
  - All DICOM image types, including x-ray (CR), MR, CT, nuclear medicine, PET, angiography, fluoroscopy
  - Data embedded in DICOM: MPEG2, MPEG4, PDF
  - DICOM Structured Reports
  - DICOM ECG data
- Support of HL7 CDA
- Support of image and multimedia file formats, including JPEG, JPEG 2000, Photoshop, TIFF, PNG, BMP (Windows Bitmap), XPM, PNM, GIF
- Single- and multi-monitor set-ups:
  - Standard clinical application on standard PCs with 1 monitor on each workstation in the hospital
  - Workstations for radiological image interpretation usually consist of three monitors: 1 control monitor and 2 high-resolution monitors (2, 3 or 5 megapixels)
- Specified elements, e.g., presentation states, localizers, can be shown and hidden in the documenttree with a toggle button
- Wide range of image viewing functions, including window, zoom, magnifier, shutter, scroll, rotate, mirror, false colors
- Individually configurable window presets for CT examinations, including bone window, lung window
- Support of Thick Slab projections (MIP, MinIP, AVG) in stack view

- Support of localizers for scrolling in series of slice images
- Visualization of the scroll direction when scrolling through an image stack
- Cycling through hung series by means of keyboard shortcuts
- Cine Loops: play-back of multiframe sequences (e.g., angiography, nuclear medicine, ultrasound) and series of slice images (e.g., CT, MR) as film
- Synchronize tools for synchronous scrolling, windowing, zooming and panning as well as for the synchronous application of the viewing properties "Invert" and "Edge enhancement" in several series
- Support of multiplanar reconstructions (MPR):
  - Rotation cube for an easy handling of multiplanar reconstructions
  - Orientation lines to visualize how planes are situated to one another; orientation lines can be shown and hidden
  - Support of Thick Slab reconstructions (MinIP, MIP, AVG, MED); configuration of user-defined slice thickness possible
  - Configurable initial view of MPR examinations and configurable layout in MPR view
  - In the reconstructed view, it is possible to display two topograms (scouts), which inform users about the position of the reconstructed slice
- Specific tools for mammographic image interpretation
- Pre-configured labeling templates to label vertebrae and intervertebral spaces; creation of user-specific labeling templates possible
- Wide range of measurement and annotation tools:
  - Distances with optional display of the midpoint and snapping at 45 degree increments
  - Areas
  - Angles (3-point, 4-point, 2-line angle measurements) including snapping at 45 degree increments
  - Freehand
  - Spline
  - Circles with calculation of diameter, circumference and area
  - Density/gray value measurements
  - Measurements on Doppler ultrasound images: time and velocity measurements; display of the Resistive Index
  - Deleting/applying/modifying selected measurements/annotations
  - Image calibration tool; support of different measurement units
- Undo and redo for image editing functions
- Hanging protocols:

- Flexible configuration of hanging protocols; specific GUI for the creation and adaptation of hanging protocols
- Automated hanging of examinations/series/sequences based on default hanging protocols supplied with synedra View Professional
- Users can adjust the priority and activation of the hanging protocols available
- Configuration of comparative protocols
- Identification rules for hideable elements and for elements that are not to be hung are configurable
- Hanging protocols can be activated with buttons and keyboard shortcuts
- Possibility to select a certain hanging directly on the diagnostic monitor
- Mammo-specific hanging protocols (vertical image alignment and edge orientation)
- Dynamic grid adjustment to the aspect ratio of the display

### 1.3. Integrated special features

- DICOM Query/Retrieve: requests can be made to a DICOM archive or a modality; data can be transferred from this external system to synedra View Professional
- Support of DICOM ECG documents including specific tools (i.e., ECG time measurement, ECG heart rate measurement, ECG tension measurement) and display of interpretation
- DICOM/EXIF Dump: display of the DICOM and EXIF information contained in the image
- Support of punctures (puncture cube):
  - Automatic recognition and display of the puncture cube in CT exams in the MPR view
  - Display of the top and bottom template of the puncture cube
  - Tool for the positioning of the puncture needle
  - Preset window values for an optimized image rendering

### 1.4. Usage and support

synedra View Professional is a class IIb medical device certified to directive 93/42/EEC.

synedra View Professional may be used for medical purposes.

synedra View Professional includes a professional e-mail support.

synedra View Professional may be used on diagnostic workstations.