*syngo.*plaza

Data sheet

Software version VB30A and higher

siemens-healthineers.com/pacs

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Content

Intended use

syngo.plaza is a Picture Archiving and Communication System intended to display, process, read, report, communicate, distribute, store, and archive digital medical images, including mammographic images. It supports the physician in diagnosis and treatment planning.

For primary image diagnosis in Mammography only uncompressed or non-lossy compressed images and only preprocessed DICOM "For Presentation" images must be used.

Also monitors (displays) and printers which received FDA clearance for Mammography must be used

syngo.plaza also supports DICOM Structured Reports.

In a comprehensive imaging suite, *syngo*.plaza integrates Hospital/Radiology Information Systems (HIS/RIS) to enable customer-specific workflows.

syngo.plaza optionally uses a variety of advanced postprocessing applications.

Beyond PACS.

syngo.plaza – Your access to 3D, mobile viewing, and VNA.[1]

syngo.plaza is the smart PACS for reading and reporting of all types of cases – from routine to complex. It brings 3D technology to everyday reading, within your PACS, and opens up powerful storage capacities, enabling vendor-neutral archiving across your enterprise. Viewing, reading, image sharing, and archiving are core processes. Your PACS is the radiology centerpiece and should be designed for frequent use, supporting users with robust performance, intuitive operation, and intelligent reading tools. With our PACS you establish a state-of-the-art productivity driver for radiology and beyond. This IT solution grows with you and makes reading and reporting pay off – today and in the years to come.

Lasting investment

syngo.plaza helps make routine reading pay off with the latest technology: it offers 3D at an improved TCO and provides cost-effective upgrades to keep your IT investment up-to-date – and ready to grow with future plans.

Smart PACS

syngo.plaza gives routine reading a boost with intuitive operation, intelligent work aids, mobile access, and 3D technology – that increases quality and productivity in your radiology department.

Modular Centerpiece

syngo.plaza is a highly scalable, modular PACS solution that lets you connect, integrate, and manage all IT components effortlessly – today and tomorrow. From VNA up to enterprise wide archiving.

1 *syngo*.plaza is not commercially available in all countries. Due to regulatory reasons it's future availability cannot be guaranteed. Please contact your sales representative for further details. These options are realized by seamless interfaces to other Siemens Healthineers or 3rd party products.

System overview

syngo.plaza Reporting Client

Introduction

As a DICOM-based PACS, *syngo*.plaza is the central image management system in radiology for exchanging images and information with the connected systems.

An innovative, intelligent, and intuitive graphic user interface (GUI) allows an optimized usability of the system with just a few mouse clicks and makes *syngo*.plaza easy   to operate.

The graphical user interface (GUI) is available in German, English, French, Spanish, Chinese, Russian, or Japanese.
syngo.plaza can be fast and easily installed, configured, and upgraded.

It is possible to extend the *syngo*.plaza system by adding hardware and software components.

syngo.plaza offers you a highly scalable PACS that can cover a wide range of scenarios from a single workplace up to an Enterprise PACS.

For experiencing the new concise and clear *syngo*.plaza user interface, your Siemens Healthineers sales representative can provide you a trial version.

System overview

Typical workplaces

Reporting workplace
Workplace for image evaluation
and reporting. The save functionality is only available
with an additional license.

Demo/rounds workplace
syngo.plaza as a demonstration console with a
connected projector or for ward rounds running on a
laptop. Preparation of the data with the *syngo*.plaza
feature "manual worklist".

Quality assurance (QA) workplace
Workplace for 2D image post- processing and report
preparation by the radiographer.

Image distribution workplace
Web-enabled workplace for viewing images and
reports distributed by a *syngo*.plaza server to the
wards, or outpatient ward. Access to images and
reports are controlled by the reading workflow and by
the user rights.

Mammography workplace
The *syngo*.plaza Mammography Workplace provides a
dedicated mammography reading environment with
special tools and a wide variety of display modes. It can
be ordered as a license extension to *syngo*.plaza or as a
standalone workstation.

Data security

syngo.plaza includes a coordinated concept to protect
patient privacy against misuse and unauthorized use.
This concept includes a mechanism for user
authentication and access control.

Thus *syngo*.plaza provides all technical prerequisites for
fulfilling the legal requirements of data security, for
example, HIPAA (Health Insurance Portability and
Account- ability Act) for the U.S.A.

However, the system administrator is responsible for
actual compliance with laws and regulations.

Security measures
syngo.plaza provides a highly configurable access
control:
*   Access to functions and to data is only permitted
    to authorized and authenticated users. Each user
    is identifiable at all times.
*   *syngo*.plaza can record all securityrelated actions
    in an audit trail, providing the hospital with proof
    of responsibility. This includes logging on to the
    system, sending, and deleting data.
*   *syngo*.plaza workplace can be configured to
    logout a user, if this user has not used the application
    for a specified time period (auto logoff functionality).

Virus protection
Anti-virus software should be in- stalled on each server
and workplace.

Please note: *syngo*.plaza is tested together with
Trendmicro virus scanner. Other virus scanner can be
validated by the customer. A validation procedure is
provided together with the *syngo*.plaza Release
Information.

Storage and archiving

Storage systems
In general, a distinction is made between short-term
storage (STS) and long-term storage (LTS):

*   STS provides fast access to image data
*   LTS provides large capacity to archive image data.
    Images are periodically copied from STS to LTS.
    syngo.plaza supports writing multiple copies of the
    data to be archived. For more detailed information,
    refer to chapter "Archiving".

Migration to *syngo*.plaza

Customers with Sienet Magic, *syngo* Imaging XS, *syngo*
Imaging or any 3rd party PACS can migrate to
syngo.plaza. For an easy and seamless migration,
Siemens Healthineers offers various tools and services.

Smart data conversion (SDC)

SDC provides a unique method to convert images from
legacy SIENET Magic archives to *syngo*.plaza. A
dedicated SDC controller processes native SIENET
Magic image data and transfers the converted images
directly into *syngo*.plaza.

Workplace features
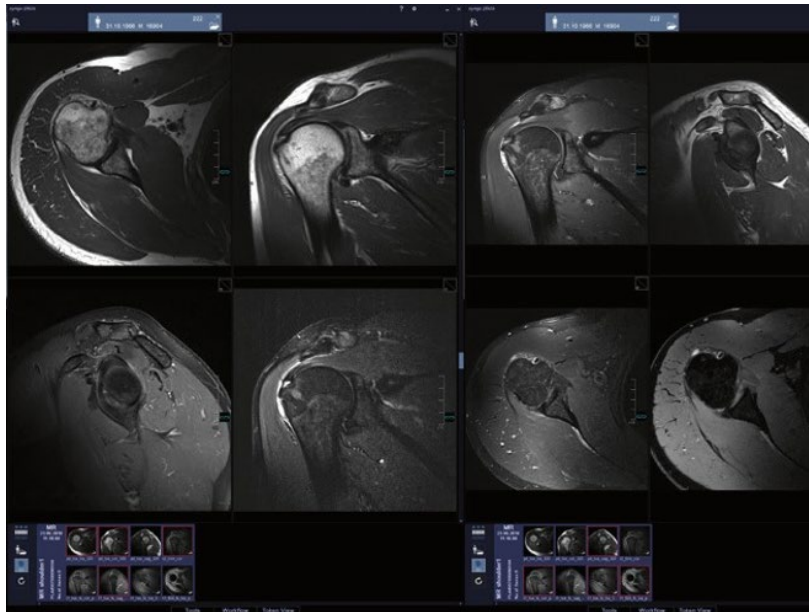
Image processing

- Inversion, rotation, windowing, flipping, magnifying glass
- Continuous zooming and panning of images
- Opening and processing of images while receiving them (work in progress)
- Scrolling through images
- Drag-and-drop functionality from the Token Navigator
- Support of reading in a limited bandwidth network environment
- Zooming of image sections (Rectangle Zoom)
- Synchronized zoom and display of images to the same field of view (Synchronize Zoom)
- Length and angle measurement including calibration function, Pixel lens, histogram
- Comments about images with text and graphics
- Function "Shutter" for masking nonrelevant image parts
- Dynamic image display (movie mode)

Image navigation

- Image Navigator
- Findings Navigator
- Image transfer by drag&drop
- Synchronized display of examinations
- Anchoring studies to layout
- Simultaneous marking of a specific spatial location in different series of a study (Cross Reference)

Token View with Token Navigator
- Advanced overview of currently displayed series and images
- Options for identifying the viewing status of these images

Patient Jacket
- Providing all required information about previous procedures of
- a patient at just one glance
- Easy access to previous and current studies, reports, DICOM Structured Reports and DICOM Presentation States

Layout
- Highly configurable loading of image and patient data
- Symmetric and asymmetric layouts
- Changing the current layout by one click (Layout Navigator)

Quality assurances[1]

- Splitting series
- Image processing functions copy/ paste/cut
- Sorting images, merging studies
- Display, processing, and splitting of multiframes
- Renaming patients and studies
- Moving series to the right study
- Merging two studies
- Correcting important study details
- Correcting important series details
- User-independent saving of a new image order
- "Save As" function for intended duplication of studies, for example, correction reports
- Rearranging the image order by drag&drop

1 Not available for *syngo*.plaza Web Client

Reporting

- Creation of manual worklists
- Sending studies/series to manual Worklist
- Creation of KIN (Key Image Notes) for marking images
- Display and setting of flags for report-relevant images
- Reporting on multiple procedures belonging to the same patient at the same time
- Displaying the report status
- Setting the report status
- Loading of several patients/studies at the same time
- Simultaneous loading of current and prior studies
- Configurable load behavior of prior studies
- Current and prior studies can be easily identified by color codes
- Loading of flagged images
- Emergency symbol to identify acute Examinations
- Batch mode to process all patient data in your worklist one after the other.
- Viewing and storing of DICOM Structured Reports
- Working with DICOM Grayscale Softcopy Presentation States

Wide spectrum of clinical applications

- Measurement of the cardiothoracic ratio (CTR Mode)
- Digital Subtraction Angiography Reading
- Display of MPEG-2 video DICOM Files
- With Spine Labeling the vertebrae will be assigned in sagittal view and automatically labeled in all corresponding axial views.

Nuclear (nuclear medicine)
This feature enhances *syngo*.plaza by offering functions for a nuclear medicine environment.

- NUC color LUT to create color images from black-and-white images in accordance with the modality
- Autowindowing mechanisms adapted to nuclear medicine: for example, maximum flow of entire series

Data sharing options

- DICOM Query/Retrieve
- DICOM worklist for importing image data
- Import of DICOM, JPEG, TIFF, BMP, PNG, and GIF
- Export of DICOM, JPEG, TIFF, BMP, PNG, GIF, and AVI
- Releasing images for other computers (global access rights)
- Prioritizing of send jobs in case of emergency
- DICOM send of single images
- Image exchange with other Windows programs
- Image and report printing on paper printer
- Display and print of images in an "as-last-seen" view
- Reading of CDs/DVDs, import of data from CD/DVD into the *syngo*.plaza database

Innovative and intuitive GUI

User-specific configuration of:
- Shortcut keys for all tools , Text layout, Corner Menus, Context menu, tool boxes
- Quick start of functions with Smart Select

Study management

Study management permits you to optimize your reporting workflow by:

- Color image display in true color (16 million colors) or monochrome
- Opening images from all worklists as well as from the Patient Jacket
- Creating filters for the patient list, saving them and reusing them
- Windowing of color images
- Display of nearline studies in Patient Browser
- Assignment of window level presets
- Display of images with VOILUT, assignment of other VOILUTs

Smart Read
Enables special handling for a defined subset of series. Series are marked rule based as Smart Read series.

Preferences:
- Minimizing wait times to speed up the overall reading process
- Identifying selected large volume data, for example, thin slice series, to prevent them from loading

DICOM print (Filming)[1]

DICOM Print permits exposure of images on film by connecting a digital camera (DICOM printer). The films can be output in black-and-white or in color.

For validated digital cameras, please contact your Siemens Healthineers sales representative.

Please note that there may be a loss in diagnostic quality of the film compared with the original image.
Functional scope

- Display of the assigned window values when transferring an image from the Viewer to Filming
- Full range of DICOM printer functions for printing on film
- DICOM color printing on paper and film, for example, for Doppler studies, 3D reconstructions
- Applying presentation LUTs by the DICOM printers
- Changing which images compose the virtual filmsheet, rearranging images
- Different film layouts
- Any selection of single images by drag&drop or complete series
- Films in anatomical size: The anatomy shown in the images can be exposed on film in its real-life size
- Control of film job execution

Creating patient media

syngo.plaza supports creation of patient media. Please note, the CD/DVD burning software has to be provided by the customer.

Functional scope
- Writing data to CD/DVD in DICOM conformant format according to IHE PDI profile
- Writing a user-selected DICOM Viewer onto the media to review the DICOM images on any PC
- Decompressing images before writing

If a RIS is integrated:
- Fetching latest reports
- Writing reports onto CD/DVD

syngo.plaza CD Viewer

syngo.plaza CD Viewer can be written onto a media to read DICOM-compliant media on any PC. It provides the well-known *Syngo* UI style and the following features:

- Patient Browser
- Display layouts
- Multipatient Comparison mode

Extending the functional scope

The functionality of *syngo*.plaza can be extended by several useful advanced post-processing features and applications.

DICOM SR Viewer

The DICOM SR Viewer application is used to display DICOM Structured Reports.

You can create or edit DICOM Structured Reports for reporting purposes.[2]

Different style sheets are made available to display different report types. Please note that DICOM Structured Reports sent or received as read-only files can be opened only for viewing.
The support of a BI-RADS reporting scheme for mammography reporting can be ordered as an option.

syngo.plaza Web Client

syngo.plaza Web Clients permit authorized users to view images and reports through a local area network (intranet) or through the internet.

This allows direct online exchange of images and reports between the requesting physician and the radiology department.
The *syngo*.plaza Web Client applica- tion is independent of the internet browser and runs in an own window.

The *syngo*.plaza Web Client applica- tion can be installed without admin rights.

syngo.plaza web services are running on the *syngo*.plaza server. For DMZ deployments a dedicated *syngo*.plaza web server is available.

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1 Not available for *syngo*.plaza Web Client
2 On a *syngo*.plaza Web Client, you can only view the DICOM Structured Reports for reporting purposes

syngo.plaza 3D+

syngo.plaza 3D+[1] integrates 3D reading into the routine interpretation process of multiplanar images. Standard 3D methods such as MPR/ MIP/VRT are available but also advanced functions like automatic Spine/Rib labeling and Image Fusion can be applied.

Key benefits

- Simultaneously working with both 2D and 3D images
- Comparison of different time points and modality types in 2D and 3D
- User interface is consistent across 2D and 3D display
- 3D key images (snapshots and ranges) are easily stored and immediately available in *syngo*.plaza
- Supported image types in 3D are: CT, MR, PT, NM, CR, RF, XA, and US
- Create 3D key images (snapshots) and reconstruction (ranges) for further processing and archiving

Features

Image presentation
- MPR Standard, MPR thick
- MPR Oblique, MPR Curved
- MIP, MIP thin
- MinIP
- VRT, VRT thin
- Multimodal Image Fusion

PET/CT, PET/MR Reading
- Enables reading of hybrid images, for example, PET/CT, SPECT/CT, and CT/MR data
- Quantification in SUV where enabled by the reconstruction

Image evaluation
- Distance, Angle, Marker
- Region of interest
- Volume of interest
- Arrow
- Pixel lens
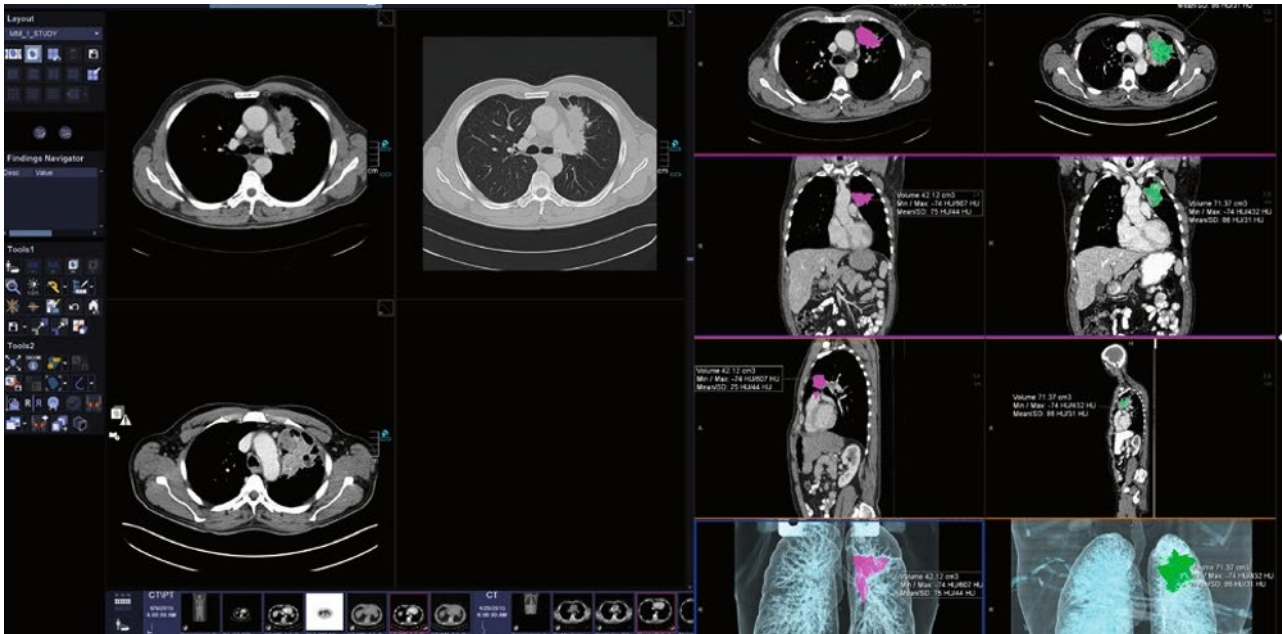- Plane annotation text
- Correlated Cursors

System Automatism
- Synchronized Scrolling based on Anatomical Registration
- Automatic Spine Labeling for CT and MR
- Automatic Rib Labeling for CT
- Auto Processing, for example, Auto Bone/Table removal
- Auto Layouts

Image processing
- Clip plane slab
- Clip box
- Punching
- Bone removal
- Table removal
- Parallel and radial ranges
- Curved Ranges
- 2D and 3D reference lines
- 3D reference point
- Interactive Segmentation ("Region Growing")
- Volume measurement

1 *syngo*.plaza 3D+ is a product deployment, which combines *syngo*.plaza with *syngo*.via functionality.
  Please refer to your sales representative whether the product is available in your country.

Workflow support for mammography

The *syngo*.plaza Mammography Module provides a dedicated mammography reading environment. Ideal for basic mammography reading and selectable with a scalable archive.

Mammography-specific software features

- Display of Conventional and Tomosynthesis (DBT) images
- Mammo-specific layouts
- Ability to create workflow steps
- Background air suppression
- Option for reporting inline with BI-RADS classification
- Images displayed according to their laterality
- Chest wall alignment
- Image text aligned opposite chest wall
- Display modes relevant for mammography
- Display of different VOI LUTs
- IHE compliance as to Mammo Display

General software features

- Multimodality reading
- Create dedicated filters, for example, all of today's examinations
- Browsing patient data of remote DICOM nodes
- Display of CAD1 markers
- Use the Patient Jacket function to find prior images and reports
- across multiple modalities – giving you a clear view of the patient's clinical status over time
- Image manipulation, for example, Zoom, Pan, Window, Inverted grayscale of soft tissue
- Image evaluation, for example, Distance, Angle,Marker, Region of Interest, Arrow, Pixellens Automatic prefetching of prior mammograms from PACS or other DICOM nodes triggered by incoming images
- Printing of MG images
- Exporting images and creating patient media

Please note: Printing of DBT images is not supported.

Accessories
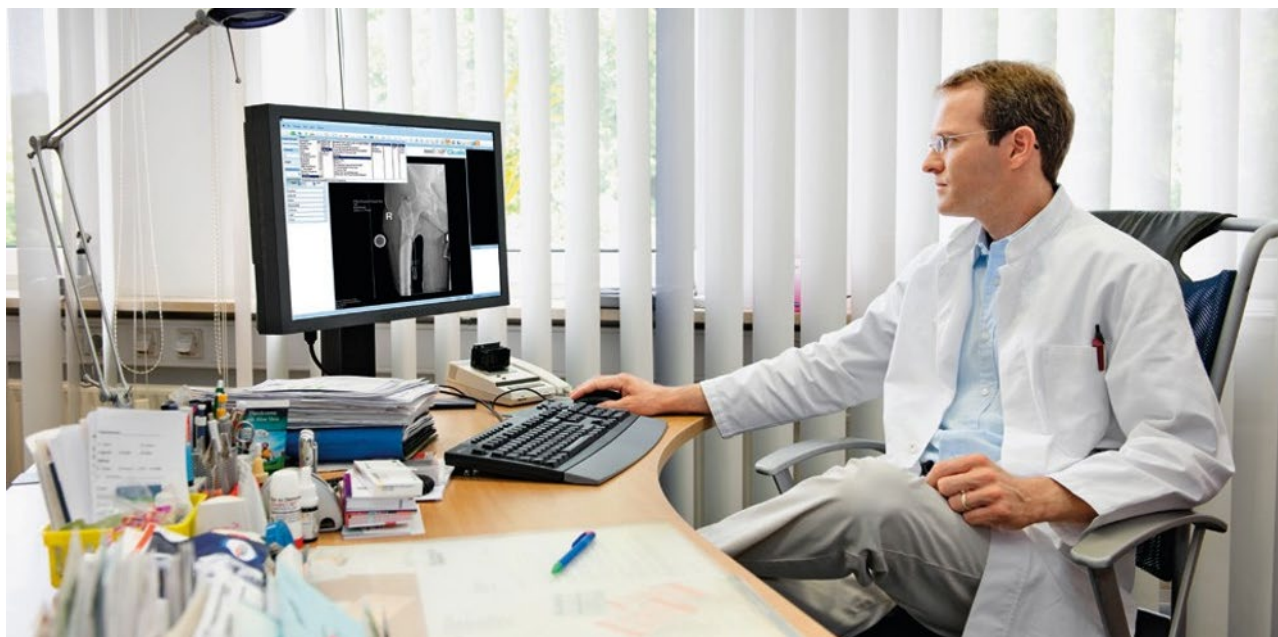
syngo.plaza can be used together with several accessories to fulfill specific tasks in connection with radiological images in an effective way.

Film scanner

syngo.plaza supports receiving digitized image data from film scanners via DICOM interface.

Please contact your Siemens Healthineers sales representative for further information about recommended film scanners.

CD/DVD producer

If you need to create large amounts of patient media, DICOM compatible CD/DVD producers can be connected to *syngo*.plaza.

Please contact your Siemens Healthineers sales representative for further information.

Surgical planning software

This application is used for digital surgery planning, for example, in:

- Traumatology
- Surgery
- Orthopedics
- Pediatrics

Please contact your Siemens Healthineers sales representative for further details and to confirm the availability of this module in your country.

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PACS backend features

DICOM and IHE

syngo.plaza provides support for different IHE profiles and is DICOM compliant.
The following IHE profiles are supported:

- IHE ANTA for secure DICOM communication and audit logging
- IHE XDS-I.b based on eHealth integration for sharing imaging documents across a group of affiliated enterprises1
- IHE IOCM for synchronization of image objects
- IHE KIN for marking images
- IHE XDS-i.b for access to the radiology report across health enterprises1

Please refer to *syngo*.plaza conformance statements:

https://www.healthcare.siemens.com/services/it-standards/dicom

https://www.healthcare.siemens.com/services/it-standards/ihe-inte- grating-the-healthcare-enterprise

syngo.plaza and modalities

The connection of *syngo*.plaza to modalities is based on the DICOM standard.

After the examination at the modality, the generated images and associated patient and examination data are transmitted to *syngo*.plaza. The images are saved and archived in *syngo*.plaza and Storage Commitment is returned to the modality.

Autorouting

syngo.plaza can automatically route received data to remote DICOM nodes based on configurable rules.

Compression

syngo.plaza can compress any data it receives in order to save space in the Short Term Storage (STS).

The following compression formats are supported:

- JPEG lossless
- JPEG lossy
- JPEG 2000 lossless
- JPEG 2000 lossy

Prefetching

syngo.plaza offers several methods for prefetching prior data.

- Prefetching based on new images received
- Prefetching based on HL7 procedure scheduled messages
- Prefetching based on DICOM Modality Worklist

STS fill level deletion

syngo.plaza continuously monitors the fill level of its Short Term Storage (STS).

As soon as the defined upper fill level is reached, the oldest data is deleted automatically.

Automatic deletion stops at the defined lower fill level.

Images that are not yet archived are excluded from automatic data deletion.

Query spanning

This feature performs simultaneous queries on several DICOM nodes to retrieve data sets from these nodes in one step.

MPPS manager

syngo.plaza can forward DICOM Modality Performed Procedure Step (MPPS) messages. The Performed Procedure Step manager (PPS manager) functionality is assigned to a specific DICOM AET.

1 Please contact your Siemens Healthineers sales representative for further details and to confirm the availability of this module in your country.

Integration and communication with the Radiology Information System (RIS)

syngo.plaza can be connected to any RIS using the HL7 standard.

Integrated RIS-PACS workplace
The integrated RIS-PACS workplace is a computer on which the RIS client software and the *syngo*.plaza client software have been installed, allowing you to use both applications simultaneously.

OEM callup
The RIS client can trigger *syngo*.plaza to load images.

HL7 communication
Based on HL7 communication, *syngo*.plaza supports synchronization of data with the information system at patient and examination level.

This helps to avoid inconsistencies in patient and examination data in the hospital IT environment.

Displaying reports
The *syngo*.plaza Report Viewer is available for displaying RIS reports.

MWL Scheduler (planning module)[1]

For hospitals without either a RIS or a HIS the Modality Worklist Scheduler (MWL Scheduler) is available as a basic separate feature for entering and planning examination orders.

The MWL Scheduler also serves as a DICOM Worklist provider. It makes the patient information and data of scheduled examinations directly available to the relevant modalities.

Archiving of radiological images is one of the core tasks of *syngo*.plaza.

Archiving

syngo.plaza supports two types of archives:
* Archiving to NAS-based storage systems
* Archiving to DICOM Long-Term Archive

You can use *syngo*.plaza as
* An archive for one or more DICOM modalities
* A department archive or
* An enterprise PACS for radiological facilities

syngo.plaza archiving functionality is protected by a license.

1 Option

According to the amount of examinations to be archived a volume-based license is required additionally.

* The volume is based on the number of examinations (Study Instance UID in LTS): One counted license for each 10,000 exams
* The number of remaining volume licenses can be monitored

DICOM Long-Term Archive

A DICOM Long-Term Archive (LTA) enables the long-term storage (LTS) of DICOM Composite Objects (DCOs), such as images, or DICOM Structured Reports. *syngo*.plaza supports Vendor Neutral Archiving (VNA) scenarios that help to reduce the administrative effort of managing the LTS of different products.

To make use of DICOM mechanisms for archiving, *syngo*.plaza can act as DICOM archive provider (DAP) or as DICOM archive user (DAU):

* DICOM Archive Provider (DAP) *syngo*.plaza can act as the DICOM Archive for other PACS systems
* DICOM Archive User (DAU) *syngo*.plaza can   be configured to archive to a 3rd party DICOM Archive. This feature is protected by the DICOM LTA User license

Synchronization between *syngo*.plaza, RIS, and a connected DICOM LTA

Based on DICOM communication, *syngo*.plaza supports updating of *syngo*.share (DICOM LTA) when data that has already been archived is rearranged locally. This feature helps to avoid inconsistencies between *syngo*.plaza and *syngo*.share.

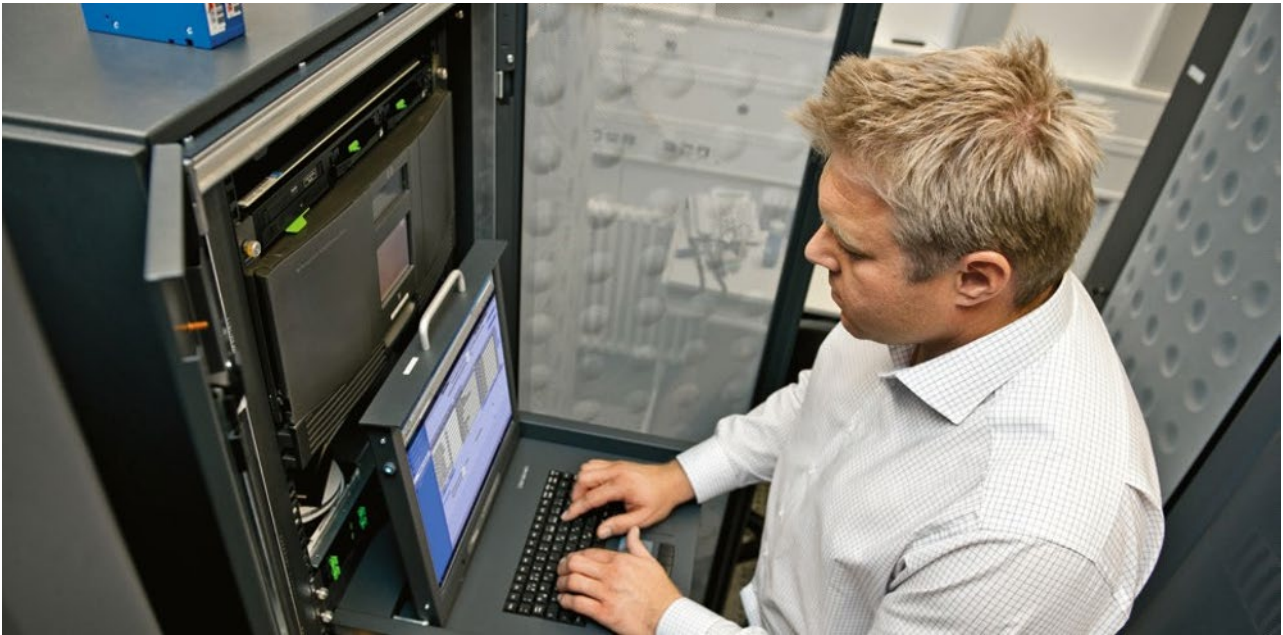Integration of other DICOM LTA products is possible on request after technical clarification.

Functional Scope

* Displaying the content of the archive
* De-archiving data from long-term storage (LTS) into short-term storage (STS)
* Rule-based archiving, for example, rules based on AET
* Support of a second copy (backup archive) to increase data security and availability

User management

The *syngo*.plaza user management ensures that only authorized users can access the *syngo*.plaza system.

This includes:

- Logging on to *syngo*.plaza Web Client and *syngo*.plaza Report Client by entering user name and password
- Full integration into the Windows User Management (local and Active Directory)
- Management of user accounts on different user roles to administer user rights by users or user groups to role assignment with the Windows built-in Authorization Manager.
- Switching between users during work with *syngo*.plaza
- User profiles are saved in a central repository
- A roaming profile feature for every user is available
- Protection of VIP/staff patient data sets can be configured
- A user role for emergency accounts is available

Network requirements

As a faultless communication between *syngo*.plaza clients and *syngo*.plaza server is crucial to the operability of the system, a reliable and performant network is a precondition for a successful integration.

syngo.plaza clients

	Minimum	Recommended
Reporting Client	100 Mbit/s Latency: maximum of 10ms	1 Gbit/s Latency: maximum of 10ms
Web Client	Download: 16 Mbit/s[1] Upload: 2 Mbit/s Latency: maximum of 20ms	1 Gbit/s Latency: maximum of 10ms

Deployment scenario

	Minimum	Recommended
Hospital internal network connection	100 Mbit/s Latency: maximum of 10ms	1 Gbit/s Latency: maximum of 10ms
Remote Client connection	Download: 16 Mbit/s[1] Upload: 2 Mbit/s Latency: maximum of 20ms Supported by Web Client	100 Mbit/s Latency: maximum of 10ms

[1] Minimum network requirements do not consider multiple concurrent clients.
Image load performance depends on image size, numbers, and network throughput.

Software requirements

syngo.plaza Reporting Client

- Microsoft Windows 10 Pro and Enterprise Edition (64 Bit)
- Microsoft Windows 10 Enterprise Edition (64 Bit) LTSB(1607)
- Microsoft Windows 8.1 Pro and Enterprise Edition (64 Bit)
- Microsoft Windows 7 Professional Edition with SP1 and editions inclusive of (32/64 Bit)

Please note: All native OS language versions and Multilingual User Interface (MUI) packs are supported.

syngo.plaza Web Client

- Microsoft Windows 10 Pro and Enterprise Edition (64 Bit)
- Microsoft Windows 10 Enterprise Edition (64 Bit) LTSB(1607)
- Microsoft Windows 8.1 Pro and Enterprise Edition (32/64 Bit)
- Microsoft Windows 7 Professional Edition with SP1 and editions inclusive of (32/64 Bit)

Please note: All native OS language versions and Multilingual User Interface (MUI) packs are supported.

syngo.plaza CD Viewer

- Microsoft Windows 10 Home,
- Pro and Enterprise Edition (64 Bit)
- Microsoft Windows 8.1 Pro all Editions (32/64 Bit)
- Microsoft Windows 7 all Editions with SP1 (32/64 Bit)

Standalone Workstation

- Microsoft Windows 10 Pro and Enterprise Edition (64 Bit)
- Microsoft Windows 7 Ultimate and Enterprise Edition with SP1 (64 Bit)[1]

Please note: Only English OS language version including MUI packs are supported

Central server, application server, and web server

- Microsoft Windows Server 2012 R2 Standard Edition (64 Bit)
- Microsoft Windows Server 2008 R2 Standard Edition (SP1 and higher) (64 Bit)[1]
- Microsoft Windows Server 2016 (64 bit)

Please Note: For all servers only English OS language version is supported. Native OS versions in other languages and MUI packs are not supported.

Remote service software

To ensure appropriate Service support a VPN connection in place from customer site to Siemens Remote Service (SRS) is mandatory.

- A minimum broadband internet connection bandwidth for uncompromised service support with 768 kbit/s downstream and 128 kbit/s upstream. Otherwise, certain support services may not be provided and the agreed remote response time cannot be guaranteed.
- A recommended broadband internet connection bandwidth for uncompromised service support with 2000 kbit/s downstream and 256 kbit/s upstream

Remote Assistance

- Request of a Remote Assistance session to appropriate Siemens Healthineers Support Team, for example, Customer Care Center for support concerning questions on Reporting Client or Web Client.
- The connection to the customer system is established through a SRS connection.

1 Only supported in case of upgrade of existing system with mentioned OS

Hardware requirements

Hardware for clients and server can be obtained from Siemens Healthineers. When using your own hardware, please contact your sales representative for further details.

Monitor requirements

A large selection of validated flat screens of various manufacturers is available for *syngo*.plaza, for example, color monitors or gray scale monitors with landscape and portrait format and different resolutions.

Color monitors with high resolution should be used for 3D postprocessing and for clinical demonstrations.

In some countries, grayscale monitors with 5MP resolution must be used for reading mammography images.

In the U.S.A., monitors (displays) should not be used for diagnosis, unless the monitor (display) has specifically received 510(k) clearance for this purpose.

syngo.plaza Reporting and Web Client
syngo.plaza Reporting and Web Client supports up to four diagnostic monitors.

According to your needs, each monitor can be configured to display *syngo*.plaza Viewer, *syngo*.plaza 3D, or a RIS browser, *syngo*.plaza Filming, or CDR application.

Depending on the graphic card used, additional non-diagnostic monitors can be connected, for example, to display a RIS browser.

Please note:
• A resolution of 1280 x 1024 pixels is the minimum requirement for the application.
• *syngo*.plaza Viewer and Patient Browser support monitors up to 8MP resolution.
• All reporting monitors at a reporting workplace shall be of the same resolution and orientation.

Server hardware solutions

The server hardware of *syngo*.plaza can be scaled in an extendable and modular way. Solutions with a single server are offered as well as solutions consisting of a server farm such as Central Server, Application Servers or Web Servers.

Please contact your Siemens Healthineers sales representative for further information.

DICOM printer

The following DICOM printer are supported with *syngo*.plaza.

Please find restrictions to anatomical size printing in the table below.

Device name	Support of anatomical size printing
Agfa Drystar Axys	Yes
Agfa Drystar 2000	No
Agfa Drystar 3000	Only supported for portrait printouts
Agfa Drystar 4500	No
Agfa Drystar 4500M	Yes
Agfa Drystar 4500M – HR	Yes
Agfa Drystar 5200	No
Agfa Drystar 5200 – HR	No
Agfa Drystar 5300	Yes

Device name	Support of anatomical size printing
Agfa Drystar 5302	Yes
Agfa Drystar 5500	Yes
Agfa Drystar 5503	Yes
Carestream Dryview 5850	Yes
Carestream Dryview 5950	Yes
Carestream Dryview 6850	No
Carestream Dryview 6950	Yes
Codonics Horizon	Yes
Codonics Horizon GS	Yes
Codonics NP-1660MD	No
Fuji Drypix 1000	No
Fuji Drypix 2000	No
Fuji Drypix 3000	Yes
Fuji Drypix 4000	No
Fuji Drypix 4000 – HR	No
Fuji Drypix 7000	No
Fuji Drypix 7000 – HR	No
Fuji Drypix Plus	No
Fuji Drypix Prima	No
Fuji FM-DPL	No
Fuji FM-DPL – HR	No
Kodak Dryview 5800	Yes
Kodak Dryview 6800	Yes
Kodak Dryview 8100	Yes
Kodak Dryview 8150	No
Kodak Dryview 8200	Yes
Kodak Dryview 8300	No
Kodak Dryview 8500	No
Kodak Dryview 8610	No
Kodak Dryview 8700	Yes
Kodak Dryview 8900	No
Kodak Dryview 8900 – HR	No
Kodak HQ 969	No
Kodak KELI 160	No
Kodak KELP 1120	No
Kodak KELP 2180	No
Kodak MLP 190	No
Konica Drypro 722	No
Konica Drypro 752	No
Konica Drypro 771	No
Konica Drypro 793	Yes
Konica Drypro 832	Yes
Konica Drypro 873	No, please get in contact with your Siemens Healthineers sales representative
Sony UP-DF 500	Yes
Sony UP-DF 550	Yes
Sony UP-DF 750	No

Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability. The information in this document contains general technical descriptions of specifications and options as well as standard and optional features which do not always have to be present in individual cases. Siemens Healthineers reserves the right to modify the design, packaging, specifications, and options described herein without prior notice. Please contact your local Siemens Healthineers sales representative for the most current information.

Caution: Federal Law restricts this device to sale by or on the order of a physician.