

## SIENET MagicSAS

Information and Administration System for Radiology

VA30

HS



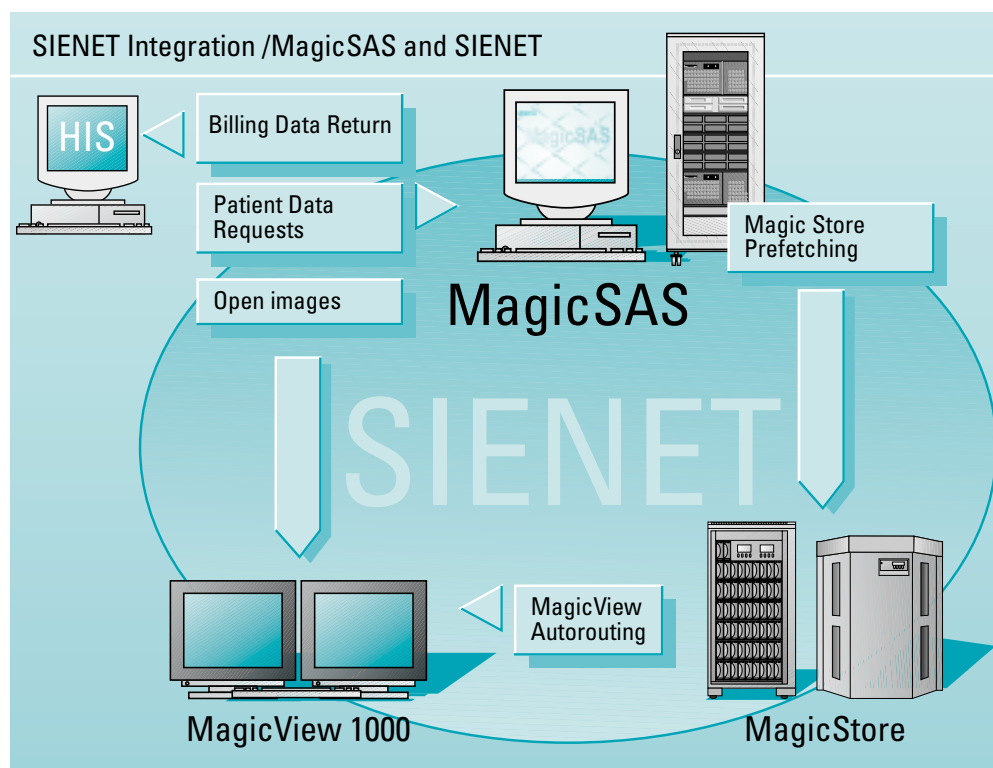
# SIENET MagicSAS

## Short Description

The SIENET® MagicSAS VA30 Administration System is a digital Radiology Information System (RIS) with integrated modules for patient administration, examination, reporting, billing, statistics and system administration. The optional additional voice recognition and appointment planning modules round off the package.

MagicSAS facilitates management of all patient-relevant data from patient admission up to reporting and billing. Within the workflow, MagicSAS is the link between a Hospital Information System (HIS) and the PACS (Picture Archiving and Communication System).

The outstanding advantage of MagicSAS is its seamless integration into the SIENET PACS using a common SIENET MagicStore database. As a part of the SIENET system, MagicSAS uses the same database and the same archive as all the other SIENET components.



Your advantages because of the common database:

- The consistency of the demographic data is guaranteed
- Data only needs to be saved *once* for MagicStore and MagicSAS
- No interface gateway is needed for communication between MagicSAS and SIENET
- Compatibility of all system components is guaranteed during upgrades (Archive or MagicSAS)
- There is direct communication between MagicSAS and SIENET for automatic prefetching and transmission of previous examinations to the reporting workstation.
- A single common database platform means less work for system administrators
- You have *one* contact for SIENET and SIENET MagicSAS.

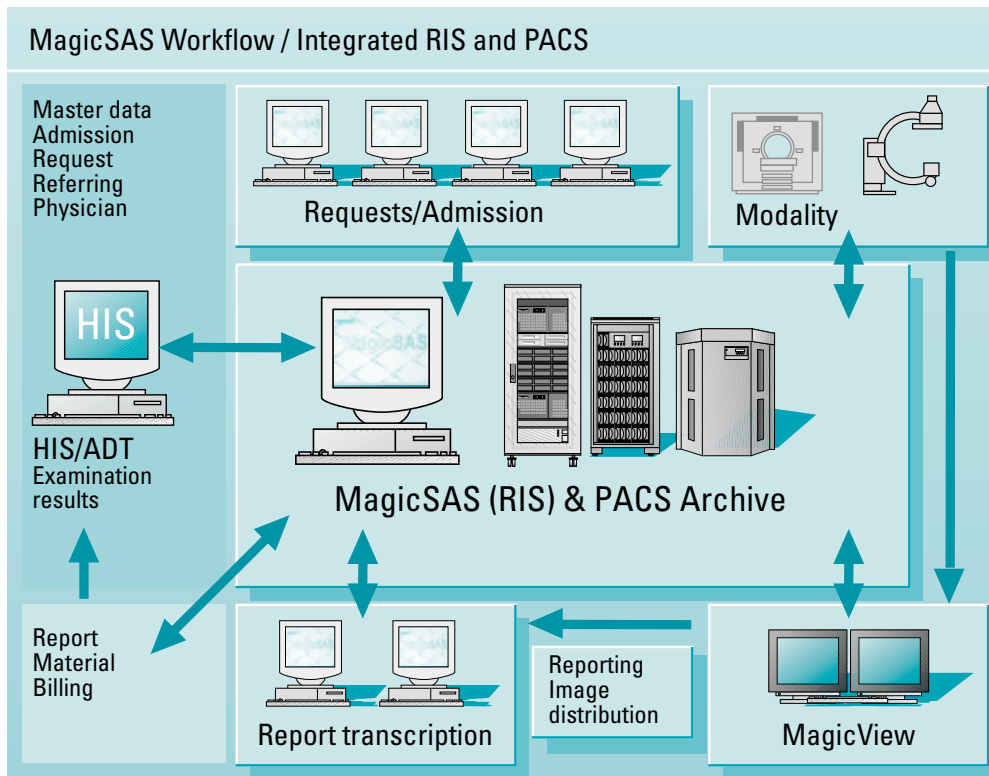
Your advantages because of the integrated reporting workstation:

- You can call the MagicSAS user interface on one of the monitors of a MagicView 1000 reporting workstation – reporting radiologists can control both systems using only *one* keyboard and *one* mouse.
- Double-clicking in the worklist starts reporting in the RIS and the system automatically loads the images for reporting on the MagicView 1000 monitors.

- At the same time, radiographers and reporting physicians have access to the entire MagicSAS functionality and all the radiological patient data, e.g. radiological indication, previous examinations, prior reports, examination settings, etc. The radiological patient information includes all the information that radiographers or reporting physicians need to carry out an examination. This makes the reporting module the control center for the entire radiological workflow.
- The integrated voice recognition facility (using Philips SpeechMagic, Version 4.0) allows physicians to dictate reports directly at the workplace.

When a patient is entered in MagicSAS, MagicStore can automatically prefetch previous examinations from the long-term archive medium to the RAID (Redundant Array of Independent Disks). You specify prefetching e.g. in dependence on the organ and/or modality. For example in the case of a new skull exam you can automatically have the last three skull examinations of the patient called up from the archive. These previous examinations will automatically be autorouted to the corresponding MagicView and are available to the radiologist for comparison purposes when he is reporting. Previous reports are also available in the MagicSAS to support the diagnosis.

SIENET MagicSAS mirrors the organization and processes in your radiological department and optimizes your workflow.



# SIENET MagicSAS

## Interface to HIS

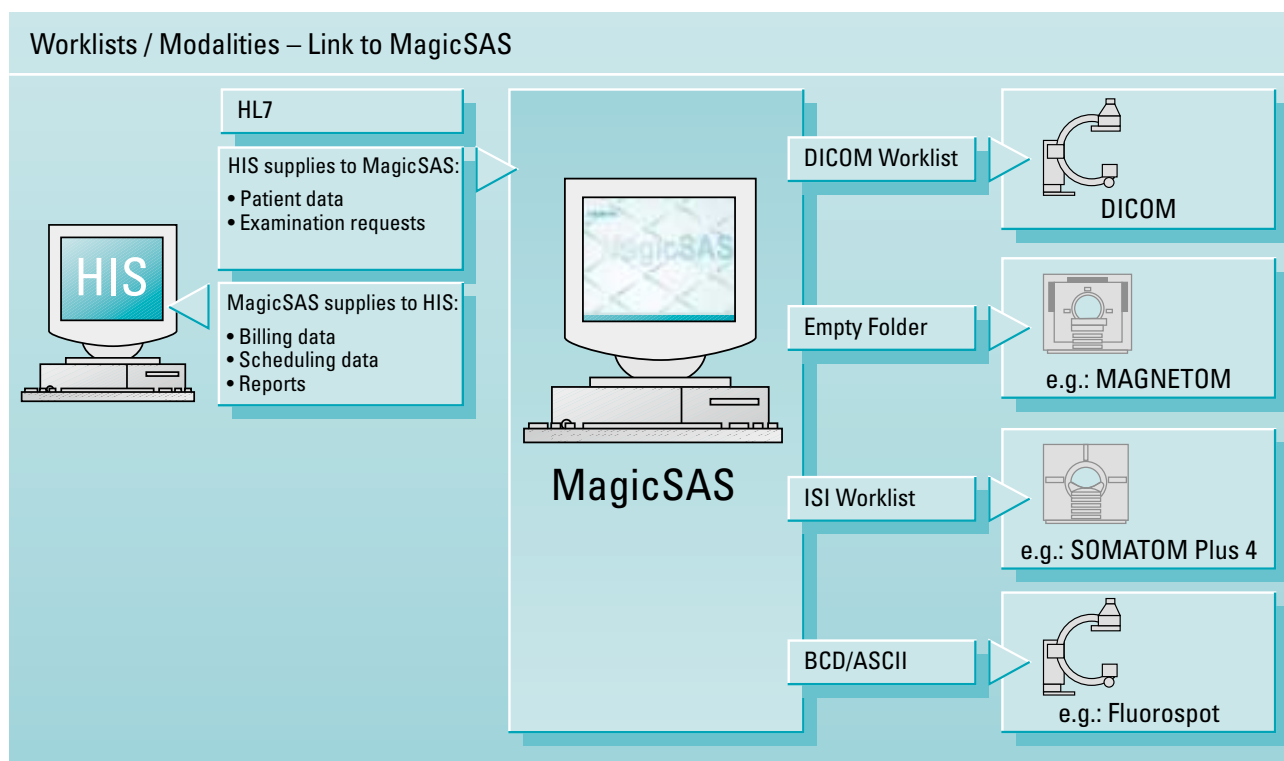
SIENET MagicSAS can exchange data with a Hospital Information System (HIS) and thus optimize the workflow between patient admission, examination, reporting, archiving and controlling.

There are two different functional principles for data transfer:

- HIS supplies data to MagicSAS
  - Patient data
  - Requests for examination (with optional scheduling data).

- MagicSAS returns data to the HIS
  - Billing/controlling data
  - Scheduling data
  - Reports
  - Material consumption data.

HIS interfaces are implemented as project-specific solutions. The extent and type of communication mainly depends on the functionality of the HIS. In this connection, you can use, amongst others, the HL7 and BDT formats as well as other proprietary ones.



## Interfaces to PACS

SIENET MagicSAS supports the following worklists for linking modalities:

- DICOM Worklist
- ISI Worklist
- Empty Folder
- ASCII

This wide selection of standards makes it possible to link virtually all available modalities to SIENET MagicSAS.

## Functions



### Patient Administration

- Accepting patient data from the HIS
- Entering and searching patient data
- Accepting requests from HIS or generating them yourself at patient admission
- Maintaining the patient database, e.g. modifying and merging patients with duplicate names
- Loading patient data from chip cards
- Scheduling examinations
- Printing labels and X-ray registration cards.



### Exam / QA

- Planning and documenting examinations (e.g. in accordance with German RöV §28), receipting (GOÄ/EBM billing numbers, etc.)
- Billing by means of a link to an external billing system or via the HIS with transfer of the receipted billing numbers (e.g. GOÄ/EBM numbers/controlling data)
- Assigning diagnostic codes (ACR or ICD-10)
- Material consumption
- Optional online appointment scheduling (manually and/or automatically).



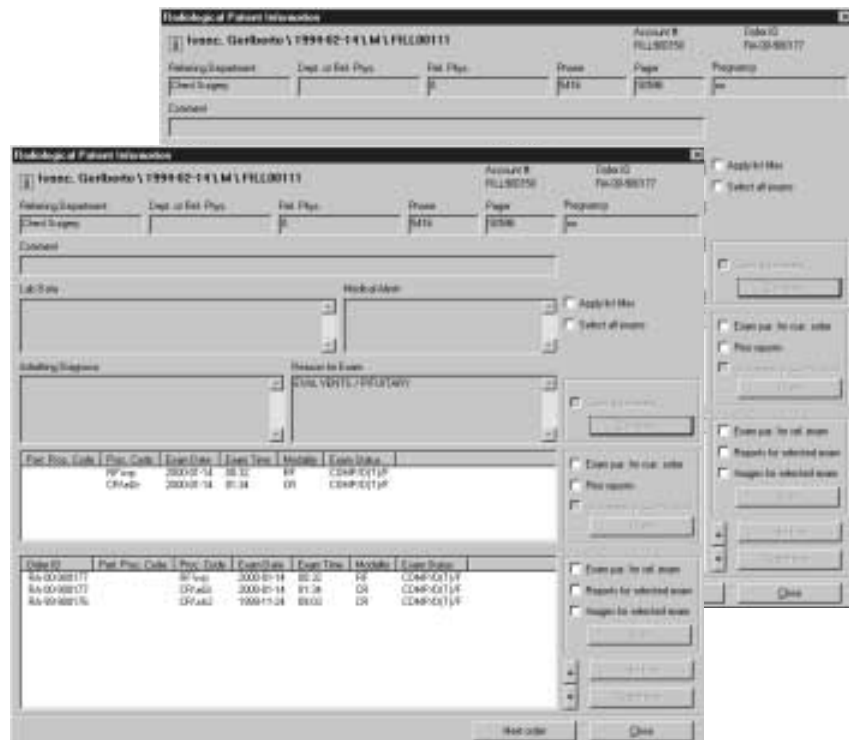
### Reporting

- Optimized reporting due to automatic prefetching of previous examinations to the reporting workstation
- Radiological patient information
- Transcription (in MS Word), correcting, validating and printing reports
- Opening the images on the MagicView 1000 (integrated reporting workstation)
- Option of voice recognition (offline, online, electronic dictation system) using Philips SpeechMagic 4.0
- Hospital-wide image and report distribution e.g. via MagicWeb (option).



### Radiological Patient Information

The radiological patient information provides you at a glance with all the information that is available about the patient in the database. Apart from this, it makes available all the functions that you need when carrying out an examination or dictating the report.





## Voice Recognition

Together with Philips SpeechMagic, Version 4.0, the voice recognition system that is integrated in MagicSAS offers reporting physicians the following three options:

- **Background/offline recognition**  
Physicians dictate their reports, which the system converts to written text in the background and displays in the transcriptionist's worklist. The system automatically merges the report and the case. When transcriptionists call the report to transcribe it, the system loads the detected text as a Word document and they can either use a foot switch or click on a tool bar to get the physician's dictation and correct any recognition errors that may have occurred. After this, the report is displayed in the finalizing radiologist's worklist for sign-off.
- **Straight dictation function**  
With the straight dictation function, the system digitally records the spoken text. Transcriptionists listen to the text and enter it in the system using the integrated word processing program. In this case too, the system automatically merges the report and the examination – transcriptionists work through a corresponding MagicSAS worklist.
- **Real time/online recognition**  
The system recognizes online on the dictation workstation the report that the physician dictates. Physicians can correct recognition errors immediately after completing a dictation or even while dictating. They can immediately sign the report and release it for distribution. This function is particularly useful for night shifts or emergency cases.



## Online Scheduling (Option)

The MagicSAS online scheduling option allows you to schedule appointments online automatically and/or manually. Appointments are made within defined times and on working days. The system checks for appointment clashes on a per patient basis. System administrators can specify default values for the duration of each type of examination. The system takes these values into account when searching for available appointments; you can, however, change them to deal with special cases (e.g. when treating children).

If all the patient data is not available, e.g. in the case of appointments made by phone, it is possible to book appointment identifiers.

The user interface has an integrated appointment calendar that you can use to make appointments for your own workstation as well as arranging them for other workstations.



## Miscellaneous

- Transportation lists for the transport service
- Analog archive management
- Material inventory management
- Statistics by means of modular 2D/3D statistics package as well as using predefined standard statistics (MS Excel)



## Statistics

- **2D/3D statistics**  
This option allows you to define easily statistics that you can quickly and conveniently generate using appropriately implemented tools.
- **Standard statistics**  
This collection of statistics is for visualization (using MS Excel) of predefined database queries which radiology departments need.



## Administration and Configuration

- System administration
- User management
- Management and configuration of hospital-specific structures (catalogue editor, tree editor)
- Department calendar of online appointment scheduling.



## Online Help

Functions are explained with examples in the Online Help.

MagicSAS fulfils the requirements of data protection acts in Germany and other locations.

## Technical Data

### SIENET MagicSAS Server

Software is provided for MagicSAS Server including 5, 10, 15, 20, 30, 50 or 100 MagicSAS clients.

The MagicSAS server is installed on a MagicStore.

For a description of the server hardware, refer to the current MagicStore data sheet (Version VB22D and above).

### SIENET MagicSAS Client

Minimum requirements for the system

- Windows NT 4.0 / Service Pack 5
- MS Internet Explorer 5.0
- MS Office 2000 (is supplied; Office 97 can be used if available)
- At least 200-MHz Pentium II PC
- At least 64 MB RAM
- 2-GB hard drive
- CD-ROM drive
- On-board graphics chip or PCI/AGP card
- At least 15" color monitor

Recommended system

- Windows NT 4.0 / Service Pack 5
- MS Internet Explorer 5.0
- MS Office 2000 (is supplied; Office 97 can be used if available)
- 600-MHz or better Pentium III PC
- At least 128 MB RAM
- 10-GB hard drive
- CD-ROM drive
- On-board graphics chip or PCI/AGP card
- At least 15" color monitor

MagicStore Advance	for 5 or 10 Clients
MagicStore Advance + MagicStore P Advance	fo 5, 10, 15, 20 or 30 Clients
MagicStore Advance + MagicStore P Professional	fo 30, 50 or 100 Clients
MagicStore Advance + MagicStore P Professional RH	fo 30, 50 or 100 Clients
MagicStore Advance + MagicStore P Premium	fo 50 or 100 Clients

For use as a dictation workstation for voice recognition, the following are needed in addition:

- SpeechMagic-compatible sound card
- Philips SpeechMike Pro LFH 6174
- 256 MB RAM
- At least 10-GB hard drive

The requirements for voice recognition depend on the respective configuration (the number of physicians who are dictating at the same time, the number of dictation workstations, etc.). Please contact your local Siemens representative.

You can connect a Windows-compatible DIN A4 or DIN A6 laser or inkjet page printer.

The network connection is possible by means of FastEthernet (100 BaseT/ 10 BaseT).



The software described herein is CE-compliant in accordance with Regulation MOD 93/42/EEC Appendix VII of June 14,1993.  
For Appendix IX this software is defined as a Class I product.

Whenever the hardware is supplied by us and is labelled accordingly, then this is also CE-compliant in accordance with EMCD 89/336/EEC and,if applicable,in accordance with LVD 73/23/EEC.

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