# Table of contents

1 System requirements ........................................................................................................... 4

2 Overview of SICAT Suite .................................................................................................... 6

3 Differences between full featured mode and viewer mode ..................................................... 8

4 Safety information ............................................................................................................... 9
   4.1 Identification of danger levels ........................................................................................... 10
   4.2 Qualification of operating personnel ............................................................................... 11

5 Used symbols and styles .................................................................................................... 12

6 Getting started .................................................................................................................... 13

7 Installing SICAT Suite ...................................................................................................... 15

8 Starting SICAT Suite ......................................................................................................... 20

9 Overview of the user interface ........................................................................................... 21

10 Opening the online help .................................................................................................... 23

11 Overview of the SICAT Suite Home window ..................................................................... 24

12 Licenses ........................................................................................................................... 26
   12.1 Opening the license overview window ............................................................................ 27
   12.2 Activating licenses with an active internet connection .................................................... 28
   12.3 Activating licenses manually or without an active internet connection ......................... 30
   12.4 Deactivating licenses .................................................................................................... 32

13 Patient record depots ...................................................................................................... 33
   13.1 Opening the Patient record depots window ................................................................. 34
   13.2 Adding patient record depots ....................................................................................... 35
   13.3 Activating another patient record depot ...................................................................... 37
   13.4 Removing patient record depots .................................................................................. 38

14 Data import ..................................................................................................................... 39
   14.1 Supported DICOM format ............................................................................................ 41
   14.2 Selecting the data to be imported .................................................................................. 42
   14.3 Selecting an import option ............................................................................................ 44
   14.4 Assigning data to an existing patient record ................................................................. 45
   14.5 Creating a new patient record by importing data .......................................................... 48

15 Patient records ............................................................................................................... 49
   15.1 Opening the patient record browser window ............................................................... 50
   15.2 Searching for and sorting patient records in the patient record depot ......................... 51
   15.3 Activating patient records ............................................................................................ 53
   15.4 Working with active patient records ............................................................................. 54
   15.5 Changing the attributes of patient records .................................................................. 56
   15.6 Opening 3D scans or planning projects from patient records .................................... 57
15.7 Closing active patient records and saving contained planning projects .............................................................. 59
15.8 Deleting patient records from patient record depots ............................................................................................ 60
15.9 Deleting 3D scans or planning projects from patient records ................................................................................ 62

16 Data export ........................................................................................................................................... 64
16.1 Opening the export data window ........................................................................................................................ 65
16.2 Exporting studies from the active patient record depot ........................................................................................ 66

17 Options ................................................................................................................................................ 67
17.1 Changing general options ........................................................................................................................................ 68
17.2 Monitor calibration with the SMPTE test pattern ................................................................................................. 70

18 Support ................................................................................................................................................ 73
18.1 Online Help ......................................................................................................................................................... 74
18.2 Support contact information and tools ................................................................................................................ 75
18.3 About .................................................................................................................................................................... 76

19 Viewing data ......................................................................................................................................... 77

20 Closing SICAT Suite ................................................................................................................................ 79

21 Uninstalling SICAT Suite ................................................................................................................................ 80

22 Safety instructions ........................................................................................................................................ 82
  Glossary ............................................................................................................................................................... 85
  Index .................................................................................................................................................................... 86

23 Manufacturer information ................................................................................................................................ 87
  Explanation of labeling symbols ............................................................................................................................ 88
# 1 SYSTEM REQUIREMENTS

If your system does not meet the system requirements, the software might not start or work as intended.

- Prior to installing the software, check your system for compliance with the minimum software and hardware requirements.

## MINIMUM

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>1 GHz</td>
</tr>
<tr>
<td>RAM</td>
<td>1 GB</td>
</tr>
<tr>
<td>Video card</td>
<td>Dedicated*</td>
</tr>
<tr>
<td></td>
<td>128 MB video memory</td>
</tr>
<tr>
<td></td>
<td>Shader Model 3</td>
</tr>
<tr>
<td></td>
<td>&quot;INTZ&quot;-Surfaces</td>
</tr>
<tr>
<td></td>
<td>Current driver</td>
</tr>
<tr>
<td>Monitor resolution</td>
<td>1280 x 1024 pixels</td>
</tr>
<tr>
<td>Free space on HDD</td>
<td>5 GB</td>
</tr>
<tr>
<td>Input devices</td>
<td>Keyboard, mouse</td>
</tr>
<tr>
<td>Network</td>
<td>Ethernet, 100 Mbit/s</td>
</tr>
<tr>
<td>Operating system</td>
<td>Windows XP (32 bit) with SP3</td>
</tr>
<tr>
<td></td>
<td>Windows Vista (32 bit or 64 bit)</td>
</tr>
<tr>
<td></td>
<td>Windows 7 (32 bit or 64 bit)</td>
</tr>
<tr>
<td></td>
<td>Windows 8 (32 bit or 64-bit, desktop)</td>
</tr>
</tbody>
</table>

## RECOMMENDED

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Dual Core 1 GHz</td>
</tr>
<tr>
<td>RAM</td>
<td>1.5 GB</td>
</tr>
<tr>
<td>Video card</td>
<td>256 MB video memory</td>
</tr>
<tr>
<td>Monitor resolution</td>
<td>1920 x 1080 pixels</td>
</tr>
<tr>
<td>Network</td>
<td>Ethernet, 1000 Mbit/s</td>
</tr>
</tbody>
</table>
PREREQUISITES

The following software is required by SICAT Suite and is installed together with SICAT Suite, if not already available:

- Microsoft .NET Framework 4.0
- Microsoft DirectX Redistributable
- CodeMeter license management software

*SICAT Suite only supports dedicated video cards (NVIDIA GeForce 8 and ATI Radeon HD 4xxx or newer). Integrated video cards are not supported.
2 OVERVIEW OF SICAT SUITE

SICAT Suite consists of the following parts:
- SICAT Suite manages patient records and global options.
- SICAT Function - for the intended use of SICAT Function, see the SICAT Function instructions for use.

LANGUAGES

SICAT Suite supports the following languages in the user interface:
- English
- German

LICENSING

Licensing in SICAT Suite works as follows:
- Acquired licenses are associated with your customer activation key and stored in your license pool on the SICAT license server.
- An active internet connection to the SICAT license server is required for license activation.
- Activation can either take place automatically on the computer that runs SICAT Suite by an automated process or manually by using license files.
- Licenses can be deactivated for each SICAT application independently.
- Deactivated licenses are returned to your license pool and are available again for activation on any other computer.

FULL FEATURED MODE AND VIEWER MODE

SICAT applications can start in two different modes:
- With an acquired and activated license, an application starts in full featured mode.
- Without an acquired and activated license, an application starts in viewer mode.
- You do not need to decide for a mode when installing SICAT Suite.

STANDALONE VERSION AND INTEGRATED VERSION

SICAT Suite can start in two different versions:
- The standalone version of SICAT Suite contains central management of volume data and patients.
- The integrated version of SICAT Suite is started together with a study from the overlying software.
- You do not need to decide for a version when installing SICAT Suite.
- The standalone version and the integrated version of SICAT Suite use the same licenses.
- At the moment, SICAT Suite can be integrated in the following software:
  - SIDEXIS XG
PATIENT RECORDS

The concept of patient records in SICAT Suite can be compared to classic patient records:

- Patient records are stored in patient record depots that can be compared to file cabinets.
- Activating a patient record can be compared to fetching a patient record from a file cabinet and placing it on your table.
- Opening patient data from a patient record in SICAT Suite applications can be compared to fetching sheets of paper from a patient record.
- Adding 3D scans to a patient record can be compared to adding 2D X-ray images to a classical patient record.
- A 3D scan can be the basis of multiple planning projects. Planning projects are also part of a patient record.
- A 3D scan together with the associated planning projects is called study.
3 DIFFERENCES BETWEEN FULL FEATURED MODE AND VIEWER MODE

If a license is activated and a patient record depot is active, SICAT Suite runs in full featured mode. In full featured mode, you can make changes to data and save data.

If no license is activated, SICAT Suite runs in viewer mode. In viewer mode, you can view data but neither make changes to data nor save data. See Viewing data [Page 77].

The following table shows the differences between full featured mode and viewer mode:

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>AVAILABLE IN FULL FEATURED MODE?</th>
<th>AVAILABLE IN VIEWER MODE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient record depots</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Managing patient records</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Data import</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Make changes to data</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Save changes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Data export</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Open data in viewer mode</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Support area</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Options area</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The license status also influences the available options in the SICAT Suite Home window. See Overview of the SICAT Suite Home window [Page 24].
4 SAFETY INFORMATION

It is mandatory that you read and understand the following security relevant chapters:

- Identification of danger levels [► Page 10]
- Qualification of operating personnel [► Page 11]
- Safety instructions [► Page 82]
4.1 IDENTIFICATION OF DANGER LEVELS

The following warning signs are used in these instructions for use to avoid injuries of operating personnel or patients and material damage:

<table>
<thead>
<tr>
<th>WARNING</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTION</td>
<td>Indicates a hazardous situation that, if not avoided, <em>could</em> result in minor injury.</td>
</tr>
<tr>
<td>NOTICE</td>
<td>Indicates information considered important but not hazard-related.</td>
</tr>
</tbody>
</table>
4.2 QUALIFICATION OF OPERATING PERSONNEL

Use of software by unqualified personnel could result in incorrect diagnosis and treatment.
- The use of the software is restricted to qualified professionals.

Only skilled or properly trained personnel are allowed to use the software.

If you are undergoing education or training, or you are using the software as part of your general training, you may only operate the software under the constant supervision of a qualified person.

The following prerequisites have to be fulfilled by you to be allowed to use the software:
- You have read and understood the instructions for use.
- You are familiar with the fundamental structure and the functions of the software.
- You are able to recognize irregularities in the functioning of the software and implement the appropriate measures where necessary.

CAUTION! Federal Law (USA) restricts use of this device to or on the order of a physician, dentist or licensed practitioner.
5 USED SYMBOLS AND STYLES

The hint symbol is used to indicate useful information, for example, alternative approaches.

USER INTERFACE TEXTS

Texts and names of elements that are displayed in SICAT Suite are written in **bold** type. This includes the following objects in the user interface:
- Names of areas
- Names of buttons
- Names of icons
- Texts from hints and on-screen messages

INSTRUCTIONS

Instructions are written in ordered lists:
☑ Prerequisites are marked with this symbol.

1. Steps are marked with numbers.
   ▶ Interim results are marked with this symbol and are indented.

2. This is another step.
   ▶ Final results are marked with this symbol.

   • However, if an instruction consists of only one step, the step is marked with this symbol.
6 GETTING STARTED

Security leaks in your information system environment could result in unauthorized access to your patient data and put the privacy or integrity of your patient data at risk.

1. Make sure policies are established within your organization to prevent security threats to your information system environment.
2. Install and run an up-to-date virus scanner.
3. Make sure the pattern files of the virus scanner are updated on a regular basis.

Unauthorized access to your workstation could result in risks to the privacy and integrity of your patient data.

- Limit the access to your workstation to authorized individuals only.

Cyber security problems could result in access to your patient data and impose risks to the privacy and integrity of your patient data.

- If you suspect cyber security related problems with your system, contact SICAT GmbH & Co. KG immediately.

Before you start working with SICAT Suite, it is mandatory that you have read and understood these instructions for use and especially all the security instructions. Keep these instructions for use readily available for future reference.

To install SICAT Suite, see Installing SICAT Suite [Page 15].

To start SICAT Suite, see Starting SICAT Suite [Page 20].

The standard workflow of SICAT Suite is as follows:

1. If you did not acquire a license for a SICAT Suite application, open a single 3D scan in viewer mode. See Viewing data [Page 77].
2. If you acquired a license for a SICAT Suite application, activate the license in SICAT Suite to enable full featured mode. See Licenses [Page 26].
3. To store your data, create and activate at least one patient record depot. See Patient record depots [Page 33].
4. To have data to work with, import data to the patient record depot. See Data import [Page 39].
5. To search for patient records and manage imported data, see Patient records [Page 49].
6. To work with data from patient records, open a patient record in a SICAT Suite application. See the instructions for use of the respective SICAT Suite application.
7. Export your work, for example, to get a second opinion from a colleague. See Data export [Page 64].
8. To finish or pause your work, save it by closing the active patient record. See Closing active patient records and saving contained planning projects [Page 59].
Furthermore, you can perform the following tasks anytime:

- Change settings in the **Options** area. See Options [» Page 67].
- Find assistance in the **Support** area. See Support [» Page 73].

If the computer that runs SICAT Suite is located in a network environment and the network configuration allows so, you can store patient record depots and the contained patient records in a network file system. Typically, the network file system needs to support the NFS protocol or the SMB protocol. See **Patient record depots** [» Page 33].
7 INSTALLING SICAT SUITE

⚠️ CAUTION

Modifications to the software could result in a software that does not start or work as intended.

1. Do not perform any modification to the installation of the software.
2. Do not delete or modify any of the components contained within the installation directory of the software.

⚠️ CAUTION

Damaged installation media could result in an installation failure.

- Handle the installation media with care and store it in an appropriate way.

⚠️ CAUTION

If your system does not meet the system requirements, the software might not start or work as intended.

- Prior to installing the software, check your system for compliance with the minimum software and hardware requirements.

⚠️ CAUTION

Insufficient privileges could result in a failure of the software installation or update.

- Make sure you have sufficient privileges on your system if you install or update the software.

The AutoPlay function of Windows may be disabled on your computer. In this case, you can open the optical media in the Windows File Explorer and start the SICATSuiteSetup_<version>.exe file manually.

To install SICAT Suite, proceed as follows:

1. Insert the SICAT Suite installer medium into the optical drive of your computer.
   - The AutoPlay window opens.
2. In the AutoPlay window, select the Run SICATSuiteSetup_<version>.exe option.
   - The software prerequisites are installed if they are not already available on your computer.
   - The SICAT Suite installer starts and the Introduction window opens:

   ![Installation Image]

   Welcome to SICAT Suite Installer
   
   It is strongly recommended that you quit all programs before continuing this installation.

   Click the “Next” button to proceed to the next screen. If you want to make changes to a previous screen click the “Previous” button.

   You can cancel this installation at any time by clicking the “Cancel” button.

3. In the upper right corner of the Introduction window, choose the desired language for the SICAT Suite installer and click Next.
   - The License Agreement window opens:

   ![License Agreement Image]

   Installation and use of SICAT Suite requires acceptance of the following license agreement:

   **SICAT Suite Agreement EULA**
   
   This is a legal agreement between you (either an individual or a single entity) and SICAT (MHS & Co. KG) (hereinafter called SICAT) for the software SICAT Suite and their integrated application SICAT Function (hereinafter collectively called SICAT Suite) and associated media, as the implant database, plugins and printed materials, as well as the Viewer CD (hereinafter collectively called SICAT Suite). By installing or otherwise using SICAT Suite, you accept all the terms and conditions of this agreement. SICAT Suite is owned by SICAT and is protected by international copyright laws.

   By this license agreement, SICAT grants you a non-exclusive license to use SICAT Suite on the terms set forth below.

   0. Designated use
   
   Consecutively the designated use of the integrated SICAT Suite Applications:
   
   SICAT Function is a software application for the visualization and segmentation of imaging information of the oral-maxillofacial

   ![License Agreement Options]

   I accept the terms of the License Agreement
   I do not accept the terms of the License Agreement

   Next >
4. Completely read the EULA, select the **I accept the terms of the License Agreement** check box and click **Next**.
   ▶ The **Options** window opens:

5. To change the hard drive folder where SICAT Suite will be installed, click the **Browse** button.
   ▶ The **Select folder** window opens.

6. Browse to the desired folder and click **OK**.
   ▶ The path to the selected folder is pasted into the **Where would you like to install the software** field.

7. If desired, clear the **Create shortcut to SICAT Suite on my desktop** check box or the **Create start menu group for SICAT Suite** check box.
8. Click the **Install** button.
   - The **Progress** window opens:

   ![Progress Window](image)

   - SICAT Suite and the remaining software prerequisites are installed.
   - After the installation is complete, the **Confirmation** window opens:

   ![Confirmation Window](image)

9. Click the **Finish** button.
   - The SICAT Suite installer closes.

If you do not want SICAT Suite to start automatically after the installation, you can clear the **Start SICAT Suite** check box.

If SICAT Suite does not start automatically, proceed with **Starting SICAT Suite** [Page 20].
After SICAT Suite has started, you can also find the instructions for use in the online help. See *Opening the online help [Page 23]*.
To start SICAT Suite, proceed as follows:
- SICAT Suite has already been installed successfully. See Installing SICAT Suite [Page 15].
- On the Windows Desktop, double-click on the SICAT Suite icon.
- SICAT Suite starts and the SICAT Suite Home window opens. See Overview of the SICAT Suite Home window [Page 24].

You can also start SICAT Suite from the Windows Start Menu by choosing All Programs > SICAT Suite > SICAT Suite.
The user interface of SICAT Suite consists of the following parts:

- The navigation bar at the top of SICAT Suite shows tabs for switching between different windows and applications of SICAT Suite.
- The application area that is located in the remaining part of SICAT Suite shows the different windows and applications.

The navigation bar consists of three different areas. The area on the left-hand side and the area on the right-hand side are always visible. The area in the middle is only visible if a patient record is currently activated.

The area on the left-hand side contains the following tabs:

- **SICAT Suite Home** - see *Overview of the SICAT Suite Home window* [▶ Page 24].
- **Patient records** - see *Patient records* [▶ Page 49].
- **Import new data** - see *Data import* [▶ Page 39].
- **Export data** - see *Data export* [▶ Page 64].

The area in the middle contains the following tabs:

- **Active patient record** - see *Working with active patient records* [▶ Page 54].
• **Applications** - see the instructions for use of the respective SICAT Suite application.

The area on the right-hand side contains the following tabs:

• **Options** - see Options [► Page 67].

• **Support** - see Support [► Page 73].
10 OPENING THE ONLINE HELP

The instructions for use of SICAT Suite and SICAT applications are integrated in the **Support** window in form of an online help.

You can open the **Support** window by clicking the **Support** icon in the navigation bar or by pressing the **F1** key.

The SICAT Suite instructions for use are divided into multiple sections:

- General functions that are used by all SICAT Suite applications like data management are described in the SICAT Suite instructions for use.
- Functions that are available in SICAT applications are described in the additional instructions for use of each SICAT application.
11 OVERVIEW OF THE SICAT SUITE HOME WINDOW

The **SICAT Suite Home** window welcomes you when you start SICAT Suite:

You can always go back to this window by clicking the **SICAT Suite Home** icon. The content of the **SICAT Suite Home** window depends on the following parameters:

- A license is activated or not.
- A patient record depot is set up and activated or not.

If no license is activated, SICAT Suite runs in viewer mode. In this mode, you cannot connect to patient record depots, create patient record depots and the functions for importing, editing and saving patient data are not available. Therefore, only the **View new data** button and the **Activate license** button are available in the **SICAT Suite Home** window.

If a license is activated but no patient record depot is set up and activated in SICAT Suite, you can create patient record depots but the functions for importing, editing and saving patient data are not available. Therefore, only the **View new data** button and the **Set up patient record depot** button are available in the **SICAT Suite Home** window.
If a license is activated and a patient record depot is set up and activated in SICAT Suite, the following buttons are available in the **SICAT Suite Home** window in the **What would you like to do** area:

- **Open patient record** - see *Patient records [Page 49]*.

- **Import new data** - see *Data import [Page 39]*.

- **Export data** - see *Data export [Page 64]*.

- Additionally, the **Recent patient records** area shows a list of recently opened patient records. You can double-click on those patient records to open them.
12 LICENSES

Please contact your local sales representative for more information on how to purchase SICAT licenses. For evaluation purposes, SICAT provides promotional licenses that enable full featured mode of SICAT Suite applications for a limited period of time.

Licensing of SICAT Suite applications works as follows:

- Your license pool on the SICAT license server contains the purchased number of licenses for each SICAT Suite application.
- If a license is activated on a computer, it is taken from your license pool and is no longer available for activation on another computer.
- After purchasing one or more licenses, SICAT provides you or your organization with a personal activation key. You can use the activation key to activate licenses on different computers on which SICAT Suite is installed.
- An activated license enables full featured mode of one or more applications. Applications without licenses run in viewer mode.

Licenses on the computer that runs SICAT Suite are listed in the License Overview window. See Opening the license overview window [Page 27].

You can activate licenses in two ways:

- If the computer that runs SICAT Suite has an active internet connection, license activation can be performed automatically. See Activating licenses with an active internet connection [Page 28].
- If the computer that runs SICAT Suite does not have an active internet connection or if desired, license activation can be performed manually by using license request files. Such license request files need to be uploaded to the SICAT homepage. In return, you will receive a license activation file that needs to be activated in SICAT Suite. See Activating licenses manually or without an active internet connection [Page 30].

Licenses can be deactivated and returned to the license pool for each application independently. The computer that runs SICAT Suite requires an active internet connection. Returned licenses are available for activation on the same computer or other computers. See Deactivating licenses [Page 32].
12.1 OPENING THE LICENSE OVERVIEW WINDOW

To open the License Overview window, proceed as follows:

1. In the navigation bar, click the Options icon.
   - The Options window opens.

2. Click the Licenses tab.
   - The License Overview window opens:

Proceed with one of the following actions:

- Activating licenses with an active internet connection [Page 28]
- Activating licenses manually or without an active internet connection [Page 30]
- Deactivating licenses [Page 32]
12.2 ACTIVATING LICENSES WITH AN ACTIVE INTERNET CONNECTION

It is mandatory that you close the active patient record before you make changes to licenses.

To start the activation process, proceed as follows:

☑ The computer that runs SICAT Suite has an active internet connection.
☑ The License Overview window is already opened. See Opening the license overview window [▶ Page 27].

1. In the License Overview window, click the Activate license button.
   ▶ The License Overview area expands:

   ![License Overview Window]

   1. **Activate license** button
   2. **Enter your activation key** area
   3. **Start** button

2. In the Enter your activation key field, enter your customer activation key or a promotional license activation key.

3. Click the Start button.

4. If a Windows Firewall window opens, allow SICAT Suite to access the internet.
   ▶ Acquired licenses for installed applications are taken from your license pool and activated in SICAT Suite on the current computer.
   ▶ The message window opens and shows the following message: **License was successfully activated.**
In the **Enter your activation key** area, you can click the **Clear** button to clear the current license key.

- To activate a deactivated SICAT Suite, you can use your customer activation key again by clicking the **Use my customer activation key** button.
12.3 ACTIVATING LICENSES MANUALLY OR WITHOUT AN ACTIVE INTERNET CONNECTION

It is mandatory that you close the active patient record before you make changes to licenses.

To activate licenses manually or without an active internet connection, proceed as follows:

☐ The License Overview window is already opened. See Opening the license overview window [➤ Page 27].

1. In the License Overview window, click the Activate license button.
   ▶ The License Overview area expands.
2. In the Manual activation area, click the Show button.
   ▶ The Manual activation area expands:
3. If you want to activate a full license, click the Full license button.
4. If you want to activate a promotional license, click the Promotional license button.
   ▶ A Windows Explorer window opens.
5. Select the desired location for the license request file and click OK.
   ▶ A license request file with the filename extension WibuCmRaC is generated and saved at the selected location.
6. Copy the license request file to a computer with an active internet connection, for example with the help of a USB flash drive.


8. Follow the instructions on the activation web page.
   ▶ Acquired licenses for installed applications are taken from your license pool.
   ▶ The SICAT license server generates a license activation file with the filename extension WibuCm-RaU that you have to download to your computer.

9. Copy the downloaded license activation file back to the computer that runs SICAT Suite.

10. Check the Enter your activation key field for the correct key.

11. In the License Overview window, click the Load and activate button.
    ▶ A Windows Explorer window opens.

12. Browse to the license activation file, select it and click OK.
    ▶ The license in the license activation file is activated in SICAT Suite on the current computer.
    ▶ The message window opens and shows the following message: License was successfully activated.
12.4 DEACTIVATING LICENSES

It is mandatory that you close the active patient record before you make changes to licenses.

To deactivate a license and return it to the license pool, proceed as follows:
☑ You have already activated a full version license of a SICAT Suite application.
☑ The computer that runs SICAT Suite has an active internet connection.
☑ The License Overview window is already opened. See Opening the license overview window [→ Page 27].

1. License status of SICAT Suite applications
2. Return to license pool button

- In the License Overview window, in the row of the desired SICAT Suite application, click the Return to license pool button.

  The selected license is returned to your license pool and available for activation once again.

  The message window opens and shows the following message: License was successfully returned to the license pool.

  Without a license, the selected application is only available in viewer mode. If the licenses of all SICAT Suite applications have been returned to your license pool, SICAT Suite completely switches to viewer mode.
13 PATIENT RECORD DEPOTS

CAUTION

The absence of a backup mechanism for the patient record depots could result in patient data being irreversibly lost.
- Make sure that a regular data backup is created of all patient record depots.

CAUTION

Saving SICAT application data in an unreliable or incompatible network file system could result in data loss.
- Together with your network administrator, assure that SICAT application data can be safely stored in the desired network file system.

CAUTION

Using SICAT Suite and the contained SICAT Suite applications together with other devices within a computer network or storage network could result in previously unknown risks for patients, users and other persons.
- Make sure policies are established within your organization to determine, analyze, assess and control risks that are related to your network.

CAUTION

Changes to your network environment could result in new risks. Examples are changes to your network configuration, connection of additional devices or components to your network, disconnection of devices or components from the network and update or upgrade of network devices or components.
- Perform a new network risk analysis after any network changes.

Management of patient record depots is only available if a license is activated with SICAT Suite.

In SICAT Suite, patient data is managed as follows:
- Each 3D scan of a patient and each corresponding planning project are organized in patient records.
- Patient records are saved in patient record depots.
- Patient record depots are saved in folders on a local file system or a network file system.

SICAT Suite requires at least one patient record depot to run in full featured mode. Multiple patient record depots can be managed. Patient record depots both on a local file system and a network file system can only be accessed by one SICAT Suite at a time. You can only edit and save patient records from the active patient record depot.

Patient record depots on network file systems require a network connection with a certain minimum bandwidth. See System requirements [Page 4].

The following actions are available for managing patient record depots:
- Opening the Patient record depots window [Page 34]
- Adding patient record depots [Page 35]
- Activating another patient record depot [Page 37]
- Removing patient record depots [Page 38]
13.1 OPENING THE PATIENT RECORD DEPOTS WINDOW

To open the Patient record depots window, proceed as follows:

1. In the navigation bar, click the Options icon.
   - The Options window opens.
2. Click the Patient record depots tab.
   - The Patient record depots window opens:

   ![Patient record depots window](image)

   1. Patient record depots tab
   2. Patient record depots window

Proceed with one of the following actions:
- Adding patient record depots [Page 35]
- Activating another patient record depot [Page 37]
- Removing patient record depots [Page 38]
13.2 ADDING PATIENT RECORD DEPOTS

Patient record depots are stored on file systems. Only one patient record depot can be stored per folder. Therefore, a folder where you want to save a new patient record depot has to be empty. An existing patient record depot will be added to the patient record depot list if the following conditions are met: The selected folder already contains a patient record depot but is not contained in the patient record depot list.

To create a new patient record depot or add an existing patient record depot, proceed as follows:

☑ The **Patient record depots** window is already opened. See *Opening the Patient record depots window* [Page 34].

1. In the **Patient record depots** window, click the **Add patient record depot to list** button.
   ▶ A row for a new patient record depot is added to the **Your patient record depots** list.

2. In the row of the new patient record depot, click the **Browse** button.
   ▶ The **Select file or directory** window opens.

3. In the **Select file or directory** window, select the desired folder and click **OK**.
   ▶ The **Select file or directory** window closes and the path to the desired folder is added to the row of the new patient record depot.

4. In the row of the new patient record depot, click in the **Name** field and type a recognizable name for the new patient record depot.

5. While the new patient record depot is still selected click **Save Changes**.
   ▶ If a patient record is currently active, a confirmation message opens.
6. In the confirmation message, click the **Switch patient record depot (active patient record will be closed)** button.

- The new patient record depot is activated. The font style of the corresponding row changes to bold.
- The patient record depot that has been active previously is deactivated. The font style of the corresponding row changes to normal.

You can click **Cancel** to cancel adding a patient record depot.
13.3 ACTIVATING ANOTHER PATIENT RECORD DEPOT

Changing the active patient record depot can be useful, for example, in the following cases:

- You want to switch between a patient record depot on a local network file system of your practice and a patient record depot on your laptop.
- You want to publicly show patient data that is saved anonymized in another patient record depot, for example, for educational purposes.

To activate another patient record depot, proceed as follows:

☑ No patient record is active. If a patient record is active, it will be closed automatically.
☑ The patient record depot that you want to activate is not opened in any SICAT Suite on another computer.
☑ The Patient record depots window is already opened. See Opening the Patient record depots window [Page 34].

1. In the Patient record depots window, from the Your patient record depots list, select the desired patient record depot.

2. Click the Activate <value> button, where <value> is the name of the desired patient record depot.
   - If a patient record is currently active, a confirmation message opens.

3. In the confirmation message, click the Switch patient record depot (active patient record will be closed) button.
   - The selected patient record depot is activated.
13.4 REMOVING PATIENT RECORD DEPOTS

A patient record depot is only removed from the Your patient record depots list. It is not deleted from the file system. An existing patient record depot that has been removed from the Your patient record depots list can be added again. See Adding patient record depots [Page 35].

To remove a patient record depot from the Your patient record depots list, proceed as follows:

☑ No study is opened.
☑ The Patient record depots window is already opened. See Opening the Patient record depots window [Page 34].

1. In the Patient record depots window, from the Your patient record depots list, select the desired patient record depot.
2. Click the Remove <value> from list button, where <value> is the name of the desired patient record depot.
   - The selected patient record depot is removed from the Your patient record depots list.
14 DATA IMPORT

**CAUTION**

Inappropriate 3D data could result in incorrect diagnosis and treatment.
- Always verify the quality, integrity and correct orientation of the displayed 3D data.

**CAUTION**

Deletion of original data could result in data loss.
- Do not delete original data after import.

Data import is only available if a license is activated and a patient record depot is set up and activated. Without a license or a patient record depot, you can only open data in viewer mode. See Viewing data [Page 77].

SICAT Suite can import 3D scans from the following data:
- 3D data (DICOM)
- SICAT Implant data
- SICAT surgical guide order data
- Galileos Wrap&Go data

Two sets of options determine in which way data is imported to the active patient record depot:
- The import options determine if a 3D scan is imported, not imported, overwrites an existing 3D scan, or creates a duplicate.
- The assignment options determine the patient record to that imported 3D scans are assigned.

**IMPORT OPTIONS FOR 3D DATA**

The available import options depend on if the ID of the data that is to be imported matches the ID of a patient record in the active patient record depot or not. You can select an import option for each 3D scan individually:

<table>
<thead>
<tr>
<th>DATA TYPE</th>
<th>THE ID MATCHES</th>
<th>THE ID DOES NOT MATCH</th>
<th>ALWAYS AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SICAT Suite DICOM data</td>
<td><strong>Overwrite existing</strong> – the 3D scan is imported and overwrites the existing dataset with the same ID.</td>
<td><strong>Import</strong> – the 3D scan is imported as a new dataset.</td>
<td><strong>Do not import</strong> – the 3D scan is not imported.</td>
</tr>
<tr>
<td>SICAT Implant data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SICAT surgical guide order data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third-party DICOM data</td>
<td><strong>Import anyway</strong> – the 3D scan is imported as a duplicate of an existing dataset.</td>
<td><strong>Import</strong> – the 3D scan is imported as a new dataset.</td>
<td><strong>Do not import</strong> – the 3D scan is not imported.</td>
</tr>
<tr>
<td>Galileos Wrap&amp;Go data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ATTRIBUTE COMPARISON FOR PATIENT RECORD ASSIGNMENT

SICAT Suite analyzes several attributes of the data that is to be imported. These attributes are:

- Last name
- First name
- Date of birth
- Patient ID, for example the Social Security number or an internal patient ID of your practice

OPTIONS FOR PATIENT RECORD ASSIGNMENT

The following list shows the import option SICAT Suite suggests in dependence of the attribute comparison:

- All attributes of the data that is to be imported match the attributes of a patient record in the active patient record depot: SICAT Suite suggests the **Assign to existing patient record** option.
- Not all attributes of the data that is to be imported match the attributes of a patient record in the active patient record depot: SICAT Suite suggests the **Create new patient record** option.

In both cases, you can manually assign data to another patient record.

To import data, perform the following actions in the given order:

- **Selecting the data to be imported** [Page 42]
- **Selecting an import option** [Page 44]
- **Assigning data to an existing patient record** [Page 45]

or

- **Creating a new patient record by importing data** [Page 48]
14.1 SUPPORTED DICOM FORMAT

SICAT Suite can import DICOM datasets meeting the following specifications:

- Dataset is provided in DICOM 3.0 standard.
- Dataset contains only parallel slices.
- Dataset corresponds to one of the supported types.
- Dataset is uncompressed, JPEG compressed or JPEG 2000 compressed.

The supported dataset types are:

- CT Image
- Digital X-Ray Image
- Digital Intraoral X-Ray Image
- X-Ray 3D Craniofacial Image
- Secondary Capture Image (grayscale) (only for modality CT)
- Multiframe Grayscale Word Secondary Capture Image (only for modality CT)

You can gather further specifications from the DICOM Conformance Statement provided by SICAT on demand. See Manufacturer information [→ Page 87].
14.2 SELECTING THE DATA TO BE IMPORTED

**CAUTION**

Inappropriate X-ray devices could result in incorrect diagnosis and treatment.
- Only use 3D data from X-ray devices cleared as medical devices.

**CAUTION**

X-ray devices without DICOM conformity could result in incorrect diagnosis and treatment.
- Only use 3D volume data from x-ray devices with DICOM conformity declared.

To import data to the active patient record depot, proceed as follows:

1. In the navigation bar, click the **New data** icon.
   - The **New data** window opens:

   ![New data window](image)

   - **1.** Where is the data located field
   - **2.** Browse button
   - **3.** Data found at the given location list
   - **4.** Import button

2. Click the **Browse** button.
   - The **Select file or directory** window opens.
3. In the **Select file or directory** window, select the desired file or folder and click **OK**.

   ▶ The **Select file or directory** window closes and the path to the desired file or folder is transferred to the **Where is the data located** field.

   ▶ If a compatible file was selected, the file contents are shown in the **Data found at the given location** list.

   ▶ If a folder was selected, the folder and all subfolders are searched. Compatible files that are contained in any folder are shown in the **Data found at the given location** list.

You can also use drag and drop to import data into SICAT Suite.

If you use the described procedure, the search starts automatically. If you manually type or paste the path to a file or a folder in the **Data found at the given location** field, you need to click the **Start search** button. This can also be useful to restart a search in case that the content of the folder has changed or you stopped the last search unintentionally.

Proceed with **Selecting an import option** [» Page 44].
14.3 SELECTING AN IMPORT OPTION

To select an import option for each study, proceed as follows:

1. From the **Data found at the given location** list, select the desired study and click the **Import** button.
   - The **Import** window opens:

   ![Import window](image)

   **Action** column

2. In the **Import** window, from the **Action** column, select **Do not import**, **Import anyway**, **Import**, or **Overwrite existing** for each study. For a description of each option and in what case an option is available, see **Data import [Page 39]**.
   - All studies are individually selected to be imported or not to be imported.

Proceed with one of the following actions:

- **Assigning data to an existing patient record [Page 45]**
- **Assigning data to a new patient record [Page 48]**
14.4 ASSIGNING DATA TO AN EXISTING PATIENT RECORD

Incorrect assignment of patient name or scan could result in confusion of patient scans.

- Verify that the 3D scan that is to be imported or already loaded in a SICAT Suite application is associated with the correct name of the patient and the correct scan information.

The **Assign to existing patient record** option is automatically selected with the corresponding patient record if the following condition is met: all attributes of the data that is to be imported match the attributes of a patient record in the active patient record depot.

1. **Assign to existing patient record** option
2. **Select patient record** button
To manually assign data that is to be imported to an existing patient record, proceed as follows:

☑ The active patient record depot contains at least one patient record.

1. In the **Assign to existing patient record** window, select the **Assign to existing patient record** option and click the **Select patient record** button.

   - The **Select patient record** window opens:

     ![Select patient record window](image)

     **1** Patient records list
     **2** Select patient record button
2. Select the desired patient record and click the **Select patient record** button.
   - The **Select patient record** window closes.
   - The **Import** window shows the attributes of the selected patient record:

   ![Attributes of the selected patient record]

   1. **Attributes of the selected patient record**
   2. **Proceed** button

3. In the **Import** window, click **Proceed**.

4. If the attributes of the data that is to be imported do not match the attributes of the selected patient record, a warning message opens:

   ![Warning message]

   5. If you want to import the data anyway, click **OK**.

   - The selected data is imported and assigned to the selected patient record.

   - The **Patient record browser** window opens and the imported study is highlighted in the **Patient records** list. See **Patient records** [→ Page 49].
Creating a new patient record by importing data is only available if the following condition is met: no patient record with the attribute combination of the data that is to be imported is contained in the active patient record depot.

To assign data that is to be imported to a new patient record, proceed as follows:

- In the **Assigning to patient record** window, select the **Create new patient record** option and click the **Proceed** button.
  - A new patient record with the attributes of the selected data is created.
  - The selected data is imported and assigned to the new patient record.
  - The **Patient record browser** window opens and the imported study is highlighted in the **Patient records** list. See Patient records [Page 49].
15 PATIENT RECORDS

Patient records can contain multiple 3D studies. A study consists of a 3D scan and the corresponding planning projects.

The following actions are available for managing patient records:

- Opening the patient record browser window [Page 50]
- Searching for and sorting patient records in the patient record depot [Page 51]
- Activating patient records [Page 53]
- Opening 3D scans or planning projects from patient records [Page 57]
- Working with active patient records [Page 54]
- Changing the attributes of patient records [Page 56]
- Deleting patient records from patient record depots [Page 60]
- Deleting 3D scans or planning projects from patient records [Page 62]

Additionally, actions for importing data to and exporting data from patient records are available:

- Data import [Page 39]
- Data export [Page 64]
## 15.1 OPENING THE PATIENT RECORD BROWSER WINDOW

To open the **Patient record browser** window, proceed as follows:

- In the navigation bar, click the **Patient records** icon.
  - The **Patient record browser** window opens:

  ![Patient record browser window](image)

Proceed with one of the following actions:

- **Searching for and sorting patient records in the patient record depot** [→ Page 51]
- **Activating patient records** [→ Page 53]
- **Opening 3D scans or planning projects from patient records** [→ Page 57]
- **Working with active patient records** [→ Page 54]
- **Changing the attributes of patient records** [→ Page 56]
- **Deleting patient records from patient record depots** [→ Page 60]
- **Deleting 3D scans or planning projects from patient records** [→ Page 62]
15.2 SEARCHING FOR AND SORTING PATIENT RECORDS IN THE PATIENT RECORD DEPOT

SEARCHING FOR PATIENT RECORDS

SICAT Suite searches the attributes of all patient records for the entered search text.

To search for a patient record, proceed as follows:

☑ The Patient record browser window is already opened. See Opening the patient record browser window (Page 50).

• In the Search for field, type the desired search text.

► The Patient records list shows all patient records that contain the entered search text in any attribute.

SICAT Suite starts searching in the moment you start typing.

SORTING PATIENT RECORDS BY ATTRIBUTES

Patient records can be sorted by the following attributes:

• Last name
• First name
• Date of birth
• Modified
To sort patient records by attributes, proceed as follows:

☑ The Patient record browser window is already opened. See Opening the patient record browser window [► Page 50].

1. In the Patient records list, click the column header of the desired attribute.
   ► The Patient records list is sorted in order of the desired attribute.

2. In the Patient records list, click the column header of the desired attribute again.
   ► The Patient records list is sorted in inverse order of the desired attribute.

Per default, patient records are sorted in ascending order of the modification date.
15.3 ACTIVATING PATIENT RECORDS

To work with a patient record, activate it follows:

☑ The Patient record browser window is already opened. See Opening the patient record browser window [→ Page 50].

1. From the Patient records list, select the desired patient record.

2. Click the Open <value> button, where <value> is the last name of the patient.

▶ The selected patient record is activated.

Proceed with Working with active patient records [→ Page 54].
15.4 WORKING WITH ACTIVE PATIENT RECORDS

Deleted patient records, studies, 3D scans, and planning projects cannot be recovered.
- Only delete patient records, studies, 3D scans, and planning projects if you are sure you will never need those data again.

When deleting 3D scans, all dependent planning projects will be deleted as well.
- Only delete 3D scans if you are sure you will never need any dependent planning project again.

To work with an active patient record, proceed as follows:
☑ A patient record is already active. See Activating patient records [Page 53].

1. In the Active Patient Record window, from the 3D Scans and Planning Projects list, select the desired 3D scan or planning project.
   - The Preview area shows a preview of the selected 3D scan or planning project.
   - The Details area shows details of the selected 3D scan or planning project, for example DICOM meta data.

2. To open the selected 3D scan or planning project in SICAT Function, click the Open button.
3. To import data to the active patient record, click the **Add** button. See *Data import* [» Page 39].

4. To export the selected study from the active patient record, click the **Export** button. See *Data export* [» Page 64].

5. To delete the selected 3D scan or planning project from the active patient record, click the **Delete** button. See *Deleting 3D scans or planning projects from patient records* [» Page 62].

6. To change the attributes of the active patient record, see *Changing the attributes of patient records* [» Page 56].
15.5 CHANGING THE ATTRIBUTES OF PATIENT RECORDS

The attribute combination of every patient record in the active patient record depot has to be unique.

The following attributes of a patient record can be changed:

- Last name
- First name
- Date of birth
- Patient-ID

To change the attributes of patient records, proceed as follows:

☐ A patient record is already active. See Activating patient records [► Page 53].

1. In the Active Patient Record window, enter the desired values in the fields of the attributes.
2. Click the Save Changes button.

► Your changes are saved.

The patient ID is not to be confused with any DICOM ID. You can enter any desired ID as patient ID, for example the Social Security number or an internal patient ID of your practice.
15.6 OPENING 3D SCANS OR PLANNING PROJECTS FROM PATIENT RECORDS

**CAUTION**

Incorrect assignment of patient name or scan could result in confusion of patient scans.
- Verify that the 3D scan that is to be imported or already loaded in a SICAT Suite application is associated with the correct name of the patient and the correct scan information.

**CAUTION**

Inappropriate X-ray devices could result in incorrect diagnosis and treatment.
- Only use 3D data from X-ray devices cleared as medical devices.

**CAUTION**

Inappropriate 3D data could result in incorrect diagnosis and treatment.
- Always verify the quality, integrity and correct orientation of the displayed 3D data.

To open a 3D scan or a planning project from a patient record, proceed as follows:

1. The **Patient record browser** window is already opened. See Opening the patient record browser window [Page 50].

![Patient record browser window]

1. **Patient records** list
2. **3D Scans and Planning Projects** list
3. **Open** button
1. In the **Patient record browser** window, from the **Patient records** list, select the desired patient record.
   - In the **Selected record** area, the **3D Scans and Planning Projects** list shows all 3D scans and planning projects of the selected patient record.

2. From the **3D Scans and Planning Projects** list, select the desired 3D scan or planning project.

3. Click the **Open** button.
   - The selected 3D scan or planning project is opened in SICAT Function.
15.7 CLOSING ACTIVE PATIENT RECORDS AND SAVING CONTAINED PLANNING PROJECTS

To close an active patient record and save contained planning projects, proceed as follows:

- In the active patient record area, click the **Close** button.
- The active patient record is closed and changes made to contained planning projects are saved.
15.8 DELETING PATIENT RECORDS FROM PATIENT RECORD DEPOTS

When deleting patient records, all 3D scans and planning projects contained in these patient records will be deleted as well.

- Only delete patient records if you are sure you will never need any contained 3D scans and planning projects again.

To delete a patient record and all contained 3D scans and planning projects, proceed as follows:

☑ The Patient record browser window is already opened. See Opening the patient record browser window [Page 50].

1. In the Patient record browser window, from the Patient records list, select the desired patient record.

2. Click the Delete <value> button, where <value> is the last name of the patient.

   ▶ A confirmation message opens:

   Are you sure that you want to delete this patient record: Winter, Christopher, *1/1/1981, ID: 54187871?

   — Yes, delete
   — Cancel
3. If you want to delete the selected data anyway, in the confirmation message, click **Yes, delete**.

- The selected patient record and all contained 3D scans and planning projects are deleted from the active patient record depot and the **Patient records** list.
15.9 DELETING 3D SCANS OR PLANNING PROJECTS FROM PATIENT RECORDS

**CAUTION**

Deleted patient records, studies, 3D scans, and planning projects cannot be recovered.

- Only delete patient records, studies, 3D scans, and planning projects if you are sure you will never need those data again.

**CAUTION**

When deleting 3D scans, all dependent planning projects will be deleted as well.

- Only delete 3D scans if you are sure you will never need any dependent planning project again.

To delete a 3D scan or a planning project from a patient record, proceed as follows:

1. In the **Patient record browser** window, from the **Patient records** list, select the desired patient record. ▶ In the **Selected record** area, the **3D Scans and Planning Projects** list shows all 3D scans and planning projects of the selected patient record.

2. From the **3D Scans and Planning Projects** list, select the desired 3D scan or planning project.
3. Click the **Delete** button.
   ▶ A confirmation message opens:

   ![Confirmation Message]

4. If you want to delete the selected data anyway, in the confirmation message, click **Yes, delete**.
   ▶ The selected 3D scan or planning project is deleted from the patient record and from the **3D Scans and Planning Projects** list.

You can also delete 3D scans or planning projects from patient records in the **Active Patient Record** window. See *Working with active patient records* [» Page 54].
16 DATA EXPORT

You can export the currently opened 3D study.

SICAT Suite can export the following data:

- Patient records (DICOM)
- 3D studies

Exported data always contains the following elements:

<table>
<thead>
<tr>
<th>DATA TYPE</th>
<th>EXPORT FORMAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D scans</td>
<td>DICOM</td>
</tr>
<tr>
<td>Planning projects</td>
<td>SICAT proprietary</td>
</tr>
</tbody>
</table>

Studies including all planning projects can be exported from an active patient record. If required, patient records can be anonymized for the export.

To export data, perform the following actions in the given order:

- *Opening the export data window* [Page 65]
- *Exporting studies from the active patient record depot* [Page 66]
16.1 OPENING THE EXPORT DATA WINDOW

To open the Export data window, perform one of the following actions:

1. If a patient record is currently active, in the navigation bar, click the Export data icon.
   ▶ The Export data window opens.

2. In the SICAT Suite Home window, click the Export data button.
   ▶ The Export data window opens.

3. In the Active Patient Record window, select a 3D scan, a study, or a planning project and click the Export data button.
   ▶ The patient record is activated and the Export data window opens. The selected 3D scan or planning project of the patient record is selected for export.

4. In the Patient record browser window, select a patient record and click the Export <value> button, where <value> is the name of the desired patient.
   ▶ The patient record is activated and the Export data window opens. All 3D scans and planning projects of the patient record are selected for export.

5. In the Patient record browser window, select a 3D scan or a planning project, and click the Export data button.
   ▶ The patient record is activated and the Export data window opens:

   ![Export data window]

   Only the selected 3D scans and planning projects of the patient record will be exported.

Proceed with Exporting studies from the active patient record depot [► Page 66].
16.2 EXPORTING STUDIES FROM THE ACTIVE PATIENT RECORD DEPOT

To export studies, proceed as follows:

☑ The Export data window is already opened. See Opening the export data window [Page 65].

1. If desired, in the Export data window, select the Anonymize check box.
   ▶ The attributes of the exported patient record change to Patient for the Last name, Anonymous for the First name, and 01.01.<year of birth> for the Date of birth. The attributes of the patient record in the patient record depot remain unchanged.

2. Make sure the desired 3D studies of the desired patient record are selected.

3. Click the Browse button.
   ▶ The Select file or directory window opens.

4. In the Select file or directory window, select a target folder and click OK.
   ▶ The Select file or directory window closes and the path to the desired file or folder is transferred into the Choose the export path field.

5. Click the Export data button.
   ▶ The desired studies are exported to the selected folder.
17 OPTIONS

These instructions for use describe common options of SICAT Suite. Application-specific options are described in the instructions for use of the respective applications.

You can change common options in the Options window. After clicking the Options icon, the options bar on the left-hand side of the Options window shows the following tabs:

- **General** - see Changing general options [► Page 68].
- **Your patient record depots** - see Patient record depots [► Page 33].
- **Licenses** - see Licenses [► Page 26].
- Other tabs originate from the SICAT Suite applications and are described in the corresponding instructions for use.
17.1 CHANGING GENERAL OPTIONS

To change the language, the tooth scheme, and the anonymization option, proceed as follows:

1. In the navigation bar, click the Options icon.
   ▶ The Options window opens.

2. Click the General tab.
   ▶ The General window opens:

3. Under REGIONAL SETTINGS, from the Language list, select the desired language.
   ▶ The language of SICAT Suite changes immediately.

4. Under REGIONAL SETTINGS, Tooth scheme, select the desired tooth scheme.
   ▶ The tooth scheme of SICAT Suite changes immediately.

5. Under PATIENT, Anonymization, select or clear the Display patient information anonymously check box.
   ▶ The attributes of the patient record in the navigation bar are shown as Patient for the Last name, Anonymous for the First name, and 01.01.<year of birth> for the Date of birth.
   ▶ In the SICAT Suite Home window, the Recent patient records list is hidden.

6. Under TOOLS, Monitor calibration, click the Show SMPTE test pattern button to calibrate your monitor. See Monitor calibration with the SMPTE test pattern [→ Page 70].
The supported tooth schemes are:

- FDI
- ADA
17.2 MONITOR CALIBRATION WITH THE SMPTE TEST PATTERN

CAUTION

Insufficient environmental visualization conditions could result in incorrect diagnosis and treatment.

1. Only perform planning if the environmental conditions allow for sufficient visualization quality. For example, check for appropriate lighting.
2. Check for sufficient visualization quality using the SMPTE test pattern.

Four main properties determine the suitability of your monitor to display data in SICAT Suite applications:

- Brightness
- Contrast
- Spatial resolution (linearity)
- Aliasing (distortion)
The SMPTE test pattern is a reference picture that helps you to check and set up your monitor regarding those properties:

**CHECKING BRIGHTNESS AND CONTRAST**

In the center of the SMPTE test pattern, a series of squares show the grey scale from black (0% brightness) to white (100% brightness):

- The 0% square contains a smaller square to show the difference in brightness between 0% and 5%.
- The 100% square contains a smaller square to show the difference in brightness between 95% and 100%.

To check or set up your monitor, proceed as follows:

- The SMPTE test pattern is already opened. See *Changing general options* [Page 68].
- In the 0% square and the 100% square, check if you can see the visual difference between the inner square and the surrounding square. If required, adjust your monitor.
A lot of monitors are only able to show the difference in brightness in the 100% square, but not in the 0% square. You can reduce the ambient light to improve the differentiability of the different brightness levels in the 0% square.

CHECKING SPATIAL RESOLUTION AND ALIASING

On the edges and in the middle of the SMPTE test pattern, 6 squares show a bar pattern with high contrast. Regarding spatial resolution and aliasing, you have to be able to distinct the varying widths of alternating black and white horizontal as well as vertical lines:

- From wide to narrow (6 pixels, 4 pixels, and 2 pixels)
- Horizontally and vertically

To check or set up your monitor, proceed as follows:

- In the 6 squares showing a bar pattern with high contrast, check if you can differentiate all lines. If required, adjust your monitor.

CLOSING THE SMPTE TEST PATTERN

To close the SMPTE test pattern, proceed as follows:

- Press the ESC key.

- The SMPTE test pattern closes.
18 SUPPORT

You can open the Support window by clicking the Support icon in the navigation bar or by pressing the F1 key.

The SICAT Suite Support window consists of the following tabs:

- Instructions for Use - see Online Help [ » Page 74].
- Support - see Support contact information and tools [ » Page 75].
- About - see About [ » Page 76].
18.1 ONLINE HELP

Multiple windows show the instructions for use of SICAT Suite or the instructions for use of a SICAT application in form of an online help:

1 Instructions for Use tabs
2 Instructions for Use window
18.2 SUPPORT CONTACT INFORMATION AND TOOLS

The **Support** window contains all relevant information for the SICAT support:

In the **INTERACTIVE SUPPORT** area, the following tools are available:

- The **TeamViewer session** button opens a Team Viewer session.

Team Viewer is a software that allows to remotely control mouse and keyboard commands and transfer the screen content of a computer over an active internet connection. A connection is only established with your explicit permission that is granted by you with a dedicated TeamViewer ID and a password. This allows the SICAT support to help you with problems that cannot be solved via telephone or e-mail.

In the **SUPPORT TOOLS** area, the following tools are available:

- The **System information** button opens the system information of the operating system.
- The **Log files** button opens the log directory of SICAT Suite in a Windows Explorer window.
- The **SICAT Suite information** button exports the information about the current SICAT Suite installation to a text file.

System information, log files, and the SICAT Suite information text file allow the SICAT support to help you.
18.3 ABOUT

The About window provides information about SICAT Suite and all installed SICAT Suite applications.

1 About tab
2 About window
19 VIEWING DATA

The type of data that can be viewed depends on the license status and the availability of an active data depot:

<table>
<thead>
<tr>
<th>ACTIVE LICENSE?</th>
<th>ACTIVE PATIENT RECORD DEPOT?</th>
<th>VIEWABLE DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>SICAT data</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>SICAT data and DICOM data</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>None, only data import is available. See Data import [Page 39].</td>
</tr>
</tbody>
</table>

To view data, proceed as follows:

☐ SICAT Suite runs in viewer mode.

1. In the navigation bar, click the View data icon.
   ▶ The View data window opens:

   ![View data window](image)

   1. Where is the data located field
   2. Data found at the given location list
   3. View button

2. Click the Browse button.
   ▶ The Select file or directory window opens.
3. In the **Select file or directory** window, select the desired file or folder and click **OK**.
   - The **Select file or directory** window closes and the path to the desired file or folder is transferred to the **Where is the data located** field.
   - If a compatible file was selected, the file contents are shown in the **Data found at the given location** list.
   - If a folder was selected, the folder and all subfolders are searched. Compatible files that are contained in one of the searched folders are shown in the **Data found at the given location** list.

4. From the **Data found at the given location** list, select the desired 3D scan or planning project and click the **View data** button.
   - A temporary patient record that contains 3D scans and planning projects is created and activated.

5. Proceed with **Working with active patient records** [Page 54].

You can also use drag and drop to view data in SICAT Suite.

If you use the described procedure, the search starts automatically. If you manually type or paste the path to a file or a folder in the **Data found at the given location** field, you need to click the **Start search** button. This can also be useful to restart a search in case that the content of the folder has changed or you stopped the last search unintentionally.
20 CLOSING SICAT SUITE

- In the upper right corner of SICAT Suite, click the Close button.
  - If SICAT Suite runs in full featured mode and a study is opened, the planning project is saved.
  - SICAT Suite closes.
21 UNINSTALLING SICAT SUITE

To uninstall SICAT Suite, proceed as follows:

1. In the Windows Control Panel, click Programs and Features.
   ▶ The Programs and Features window opens.

2. Select SICAT Suite - <version>.

3. Click the Uninstall button.
   ▶ The uninstalling starts and the Progress window opens:

   ![Progress Window](image1)

   ▶ After the uninstalling is complete, the Confirmation window opens:

   ![Confirmation Window](image2)

   SICAT Suite is successfully removed from this computer.
4. Click the **Finish** button.

- The SICAT Suite uninstaller closes.

To open the SICAT Suite uninstaller, you can also insert the SICAT Suite installer medium into the optical drive of your computer and select the `Run SICATSuiteSetup_<version>.exe` option.

There may be other software installed on your computer that depends on the software prerequisites that are installed together with SICAT Suite. Therefore, the software prerequisites are not automatically uninstalled together with SICAT Suite.
## 22 SAFETY INSTRUCTIONS

### 3D DATA

| CAUTION | Inappropriate X-ray devices could result in incorrect diagnosis and treatment.  
|         | • Only use 3D data from X-ray devices cleared as medical devices. |
| CAUTION | Inappropriate 3D data could result in incorrect diagnosis and treatment.  
|         | • Always verify the quality, integrity and correct orientation of the displayed 3D data. |
| CAUTION | X-ray devices without DICOM conformity could result in incorrect diagnosis and treatment.  
|         | • Only use 3D volume data from x-ray devices with DICOM conformity declared. |

### DATA MANAGEMENT

| CAUTION | Incorrect assignment of patient name or scan could result in confusion of patient scans.  
|         | • Verify that the 3D scan that is to be imported or already loaded in a SICAT Suite application is associated with the correct name of the patient and the correct scan information. |
| CAUTION | Deletion of original data could result in data loss.  
|         | • Do not delete original data after import. |
| CAUTION | The absence of a backup mechanism for the patient record depots could result in patient data being irreversibly lost.  
|         | • Make sure that a regular data backup is created of all patient record depots. |
| CAUTION | When deleting patient records, all 3D scans and planning projects contained in these patient records will be deleted as well.  
|         | • Only delete patient records if you are sure you will never need any contained 3D scans and planning projects again. |
| CAUTION | Deleted patient records, studies, 3D scans, and planning projects cannot be recovered.  
|         | • Only delete patient records, studies, 3D scans, and planning projects if you are sure you will never need those data again. |
SAFETY INSTRUCTIONS

CAUTION

When deleting 3D scans, all dependent planning projects will be deleted as well.

- Only delete 3D scans if you are sure you will never need any dependent planning project again.

NETWORK

CAUTION

Saving SICAT application data in an unreliable or incompatible network file system could result in data loss.

- Together with your network administrator, assure that SICAT application data can be safely stored in the desired network file system.

CAUTION

Using SICAT Suite and the contained SICAT Suite applications together with other devices within a computer network or storage network could result in previously unknown risks for patients, users and other persons.

- Make sure policies are established within your organization to determine, analyze, assess and control risks that are related to your network.

CAUTION

Changes to your network environment could result in new risks. Examples are changes to your network configuration, connection of additional devices or components to your network, disconnection of devices or components from the network and update or upgrade of network devices or components.

- Perform a new network risk analysis after any network changes.

QUALIFICATION OF PERSONNEL

CAUTION

Use of software by unqualified personnel could result in incorrect diagnosis and treatment.

- The use of the software is restricted to qualified professionals.

SOFTWARE INSTALLATION

CAUTION

Modifications to the software could result in a software that does not start or work as intended.

1. Do not perform any modification to the installation of the software.
2. Do not delete or modify any of the components contained within the installation directory of the software.

CAUTION

Damaged installation media could result in an installation failure.

- Handle the installation media with care and store it in an appropriate way.
SAFETY INSTRUCTIONS

CAUTION

If your system does not meet the system requirements, the software might not start or work as intended.

- Prior to installing the software, check your system for compliance with the minimum software and hardware requirements.

CAUTION

Insufficient privileges could result in a failure of the software installation or update.

- Make sure you have sufficient privileges on your system if you install or update the software.

VISUALIZATION CONDITIONS

CAUTION

Insufficient visualization quality could result in incorrect diagnosis and treatment.

- Prior to using a SICAT Suite application check for sufficient visualization quality.

CAUTION

Insufficient environmental visualization conditions could result in incorrect diagnosis and treatment.

1. Only perform planning if the environmental conditions allow for sufficient visualization quality. For example, check for appropriate lighting.
2. Check for sufficient visualization quality using the SMPTE test pattern.

SECURITY

CAUTION

Security leaks in your information system environment could result in unauthorized access to your patient data and put the privacy or integrity of your patient data at risk.

1. Make sure policies are established within your organization to prevent security threats to your information system environment.
2. Install and run an up-to-date virus scanner.
3. Make sure the pattern files of the virus scanner are updated on a regular basis.

CAUTION

Unauthorized access to your workstation could result in risks to the privacy and integrity of your patient data.

- Limit the access to your workstation to authorized individuals only.

CAUTION

Cyber security problems could result in access to your patient data and impose risks to the privacy and integrity of your patient data.

- If you suspect cyber security related problems with your system, contact SICAT GmbH & Co. KG immediately.
<table>
<thead>
<tr>
<th><strong>3D scan</strong></th>
<th>A 3D scan is a volumetric X-ray image.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADA</strong></td>
<td>American Dental Association</td>
</tr>
<tr>
<td><strong>application</strong></td>
<td>An SICAT application is an application that is part of SICAT Suite.</td>
</tr>
<tr>
<td><strong>FDI</strong></td>
<td>Fédération Dentaire Internationale, World Dental Federation</td>
</tr>
<tr>
<td><strong>navigation bar</strong></td>
<td>The navigation bar in the upper part of SICAT Suite contains the most important icons of SICAT Suite. If a patient record is active, the navigation bar allows you to switch between the patient record and different applications.</td>
</tr>
<tr>
<td><strong>patient record</strong></td>
<td>A patient record contains all 3D scans and planning projects that belong to a specific patient. Patient records are saved in patient record depots.</td>
</tr>
<tr>
<td><strong>patient record depot</strong></td>
<td>A patient record depot contains patient records. Patient record depots are saved in a directory on a local file system or network file system.</td>
</tr>
<tr>
<td><strong>planning project</strong></td>
<td>A planning project consists of planning data of a SICAT Suite application and the corresponding 3D scan.</td>
</tr>
<tr>
<td><strong>SMPTE</strong></td>
<td>Society of Motion Picture and Television Engineers</td>
</tr>
<tr>
<td><strong>study</strong></td>
<td>A study consists of a 3D scan and the corresponding planning projects.</td>
</tr>
</tbody>
</table>
INDEX

D
data export
exporting studies 66
opening the Export data window 65
overview 64
data import
assigning to existing patient record 46
assigning to new patient record 48
import options 44
overview 39
selecting data 42

G
getting started 13

H
help
overview 23
symbols and styles 12

L
licenses
deactivating 32
opening the License Overview window 27
overview 26
registering automatically 28
registering manually 30
returning to license pool 32

M
mode
full featured mode / viewer mode 8
monitor calibration 70

O
options
color theme 68
language 68
monitor calibration 68
overview 67
patient anonymization 68
tooth scheme 68

P
patient record depots
activating another 37
adding 35
opening the Patient record depots window overview 34
removing 33
patient records
activating 53
changing attributes 56
deleting 60
opening 57
opening the Patient records window overview 49
searching 51
sorting 51, 52
working with active 54

S
safety
danger levels 10
information 9
qualification of operating personnel 11
SICAT Suite
overview 6
starting 20
SMpte
test pattern 70
studies
deleting 62
support
about 76
contact information 75
help 74
overview 73
tools 75
system requirements 4

U
user interface
overview 21
SICAT Suite Home 24

V
viewer mode 77

W
workflow
standard 13
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The information in this document was correct at the time of release, but are subject to change without prior notice.

PRINT INFORMATION
Part number: 6458710
Change number: 000 000
Printed in Germany
EXPLANATION OF LABELING SYMBOLS

- Caution! Consult accompanying documents.

- Consult instructions for use.

- Manufacturer

- Serial number

This is an example for a serial number:

\[ \text{S1020130921} \]

1. Beginning of every serial number
2. Product version in the format AB (10 means V1.0)
3. Manufacturing year
4. Manufacturing month
5. Manufacturing day

2, 3, 4, and 5 represent the lot.