

PeekMed® | v2.7.7.1

User Manual

Pre-operative Planning Software

Your planning helper for surgeries



Welcome to PeekMed®!

We are grateful you are using our products and services!



PeekMed® is a pre-operative planning tool that allows healthcare professionals **to improve in a quick and intuitive way** their perception of patients' injuries, as well as their decision about the strategy to follow for any surgery. This software aims to improve the **quality** of pre-operative planning, as well as increase **productivity** and patient **safety**. Therefore, the clinical benefit is to provide accurate and precise measurements for the surgery in order to ensure the safest surgical outcome for the patient.

The proper usage of PeekMed® requires the judgment and expertise of trained healthcare professionals who have received appropriate medical training as well as knowledge in new technologies. The software allows surgeons to analyze and manipulate digital medical images during planning. Any deviation of the use or application of medical information other than the original design or intended use thereof is not advised and considered a misuse of the software product. PeekMed® allows the orthopedic surgeon to perform the pre-operative planning efficiently in the following orthopedic subspecialties:

- Hip
- Knee
- Spine
- Upper Limb
- Foot and Ankle
- Trauma
- Pediatrics

PeekMed® supports DICOM images (X-ray, CT and MRI) and conventional images (.jpeg, .png, .bmp and .tiff).

The software can be integrated with the PACS and has a database of digital representations of implants (templates) from leading manufacturers. This database is constantly updated according to the information provided by the manufacturers.

PeekMed® is created with surgeons for surgeons. So, the surgeon's feedback is very important, please share it [here](#).

ANVISA n°: 80117580926

FDA Cleared



Caution: Federal (USA) law restricts this device to sale by or on the order of a physician or other licensed healthcare practitioner.

Note: In case of any serious incident that has occurred in relation to PeekMed® should be reported to us (see [Technical Support](#)) and to the competent authority of the Member State in which the user and/or patient is established. Peek Health will notify all stakeholders in case of improper access to personal data.

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1 Introduction to PeekMed®

PeekMed® can be installed to run locally on your computer. To extend its connectivity, it can also be connected to a PACS. The software installation can be performed either on a computer running Windows or macOS. An internet connection is required to perform the installation and run the software.

Warning: The proper usage of PeekMed® requires the judgment and expertise of healthcare professionals who have received appropriate medical training as well as knowledge in new technologies. Before performing the surgical procedure, all information reported by PeekMed® must be clinically reviewed regarding its plausibility before use in treating patients. If you experience difficulties in using and understanding PeekMed® or a problem occurs, contact the [Technical Support](#).

1.1 Intended Purpose

PeekMed® is a system designed to help healthcare professionals carry out pre-operative planning for several surgical procedures, based on their imported patients' imaging studies. Experience in usage and a clinical assessment is necessary for the proper use of the system in the revision and approval of the output of the planning.

The multi-platform system works with a database of digital representations related to surgical materials supplied by their manufacturers.

1.2 Recommended System Requirements

Recommended system requirements regarding hardware and operating system are:

- **Processor:** (x64) i5 10th Gen (or equivalent) or higher / Processor (arm64) M1;
- **RAM:** 8GB or higher;
- **Graphics card:** NVIDIA GeForce GTX 900 series (or equivalent) or better and compatible with OpenGL 4.6;
- **Graphics memory:** 2.0 GB;
- **Monitor resolution:** min. 1920x1080 / 1680x1050;
- **Disk space:** 10 GB free disk space (based on a general use case);
- **macOS/ Windows** - last major OS version;
- **Antivirus** and **firewall** for data protection.

1.3 Minimum System Requirements

Minimum system requirements regarding hardware and operating system for PeekMed® to work correctly are:

- **Processor:** i5 7th Gen (or equivalent);
- **RAM:** 6GB;
- **Graphics card:** compatible with OpenGL 2.0;
- **Graphics memory:** 2.0 GB;
- **Monitor resolution:** 1920x1080 / 1680x1050;
- **Disk space:** 5 GB free disk space;
- **macOS/ Windows** - last 2 major OS versions;
- **Antivirus** and **firewall** for data protection.

Warning: Update of your system components may change compatibility with PeekMed®. Always keep your antivirus and firewall up to date to avoid unauthorized access and potential loss of information.

Warning: Check if your Antivirus or Firewall is not blocking the communication between PeekMed® software and PeekMed® servers. If so, please add the PeekMed® application to the “white list”.

1.4 PeekMed® Installation and Uninstallation

After downloading the installation file (only use installation file provided officially by PeekMed®), the following process will depend on the operating system you are using:

Warning: Make sure that the computer is connected to the Internet.

1.4.1 Windows

Double-click the file PeekMed.exe and follow the instructions provided by the installer.

To uninstall, find PeekMed® in the Start menu. Right-click it, select uninstall and follow the on-screen steps to complete the uninstallation process.

1.4.2 macOS

Double-click the PeekMed.dmg file and follow the instructions provided by the installer.

To uninstall, find PeekMed® in the *Applications* folder and drag the icon to the trash.

Warning: After installation, open PeekMed® to verify if it is properly installed. In case the PeekMed® window does not open, uninstall it and install it once again. If the same problem occurs, contact the [Technical Support](#).

1.5 Automatic Updates

To make sure you always have access to the latest and best features, PeekMed® will automatically download and install additional features and improvements whenever a new update is available.

Automatic updates notify you before you download or install updates after opening PeekMed®, by displaying a dialog box that shows the period until the update becomes mandatory. After this period, the update is mandatory. Every time you open the software, the notification will reappear until the update is installed.

Warning: PeekMed® updates are mandatory. After an update, check that PeekMed® is installed correctly. If not, uninstall and install again. If the same problem occurs, contact the [Technical Support](#).

1.6 Workflow

After login, the PeekMed® process is shown right away in the *Main Menu*. You should start by importing the medical images of the patient to the software via a CD, a local folder or a PACS.

With PeekMed® you can work with Computed Radiography (CR), Computed Tomography (CT), Magnetic Resonance Image (MRI) and conventional image files that will act similar to CRs.

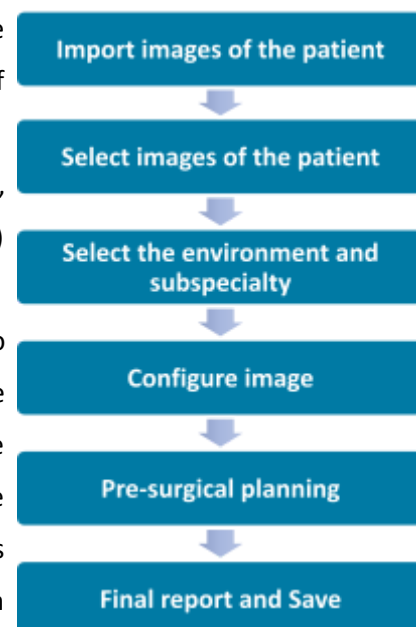
After importing the desired images, you have the possibility to view and select the image series that you wish to perform the pre-operative planning on. Next, you must specify the environment and subspecialty you want to plan with, so that the software can select the most appropriate tools, i.e., it determines and displays specific procedures and measurement tools that can be used in the application.

All medical images must be configured before starting the plan. For CR and common images, this configuration means defining the scaling factor and for CT and MRI it includes the specification of the image orientation.

Warning: Ensure the PeekMed® system folders remain intact. Otherwise, you may lose information or cause software malfunction.

During the planning process, you have at your disposal a set of measuring tools, a digital library of prosthetic materials representations (Templates) and a group of wizards that will help you perform the procedure digitally, according to the medical image of the patient. Finally, a full report can be generated, which can be saved, printed locally or sent to a PACS.

If you want to return to the planning later, you should save it using the *Save Planning* option, which is under *File* in the menu bar.



1.7 Clinical Requirements

For accurate measurements and models, the images and CRs must be calibrated while CTs and MRIs are already calibrated. There are three ways to perform this step, using the manual, the magnification or the automatic option. See more information in the [Image Configuration](#) section.

Warning: All images used must have been correctly acquired (in a compatible format - DICOM and conventional images) and calibrated. In case the image was acquired with a calibration marker, check if it was correctly positioned during the image acquisition to be used in the calibration process.

The measurements executed with PeekMed® are displayed in length and angle units internationally accepted and easily recognized: millimeters (mm) and degrees (°), respectively.

Warning: It is possible to change the position of the points of the measurement objects. To do this, simply click on each point with the left mouse button and move it to the most appropriate position. Consider the location of these points to ensure the precision and accuracy of measurements.

Below, you can find the accuracy and precision of length and angle measurements:

Accuracy and precision for length measurements: +/- 0.50mm

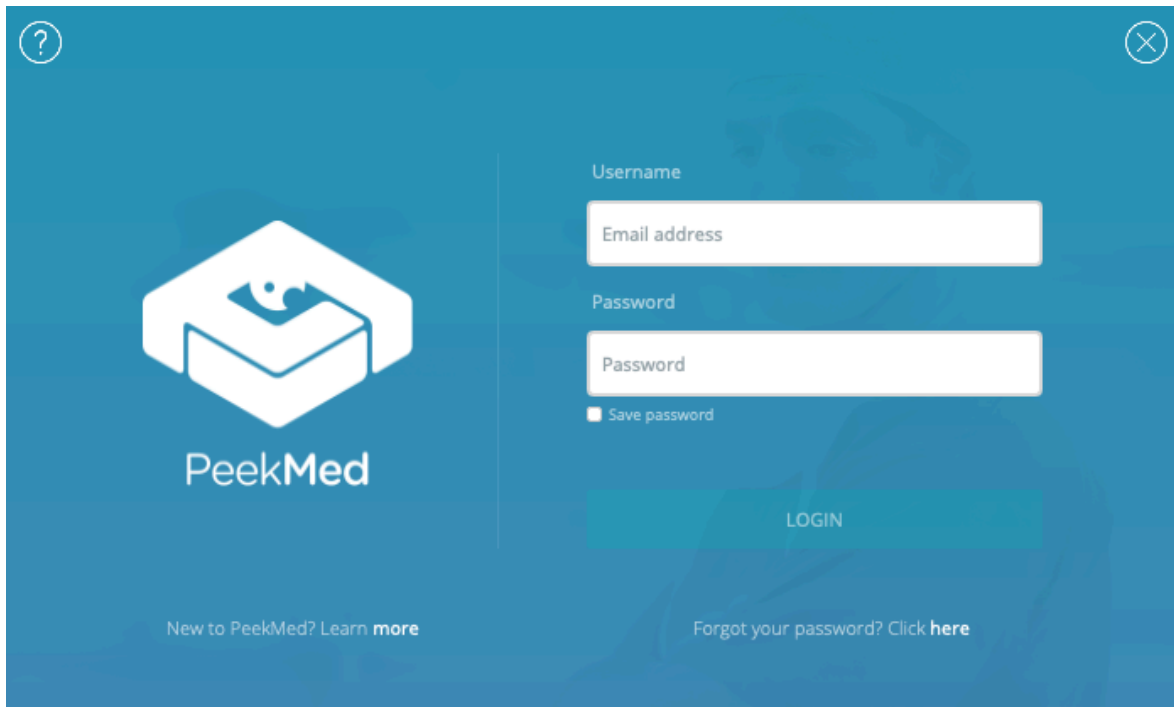
Accuracy and precision for angle measurements: +/- 0.30°

Warning: The proper use of PeekMed® requires the critical capacity and expertise of healthcare professionals with adequate medical training, thus allowing them to analyze and manipulate digital medical images during planning. You must have a stereoscopic view in order to understand the different perspectives of the objects during their visualization, as well as understand the positioning of the objects in different environments. Always ensure that the manual and automatic steps of PeekMed® are clinically correct. If you experience difficulties in using and understanding PeekMed® or a problem occurs, contact the [Technical Support](#).

2 Getting Started

2.1 Login

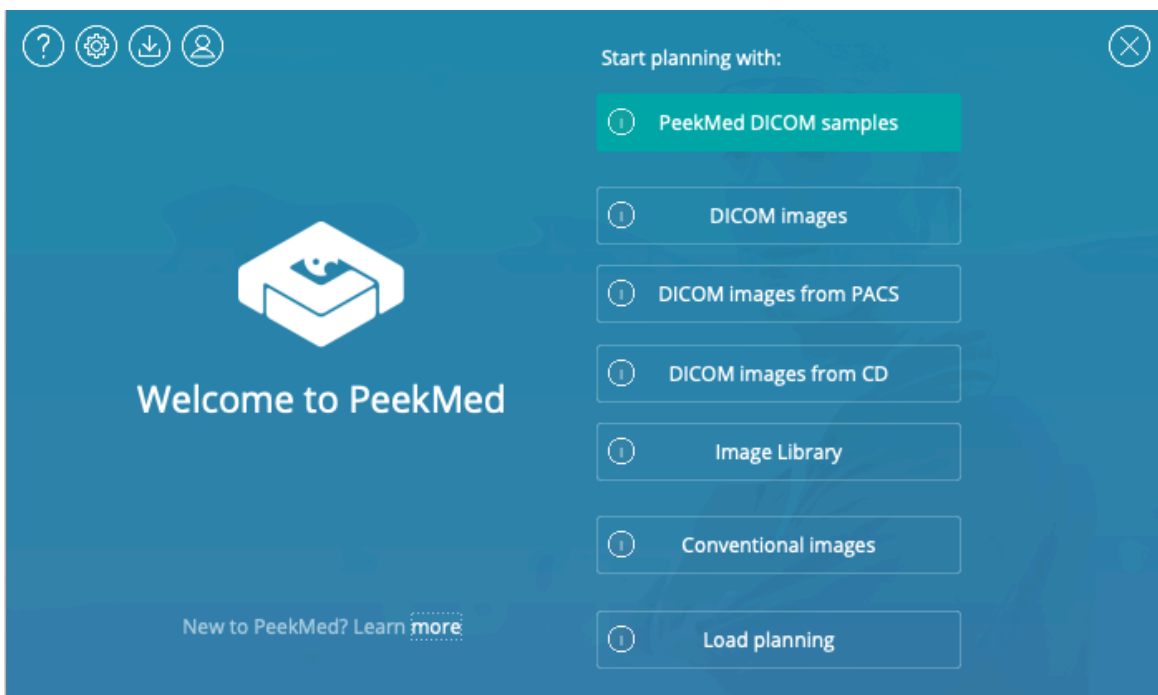
When the software starts running, it requires you to login using your username and password. The username is the email address you signed up with and in which you should have received a password. In case you forgot your password, or someone stole it, there's also an option to [restore](#) it. After the first login, please change the original password.



Warning: The security of communication is guaranteed since communication is encrypted. Do not share your login credentials to prevent improper access and ensure the safety and security of the data.

2.2 Main Menu

This is the first window after login. In this initial window, there is a set of options you must choose:



a. PeekMed® DICOM samples

Open a set of DICOMs provided by PeekMed® in case you want to test the application but do not have any medical images to use. This option is only available during the trial period.

b. DICOM images

Open image(s) in the DICOM format (CR, CT, and MRI) stored in your computer or removable disk.

c. DICOM images from PACS

Search and download DICOM images from a previously integrated PACS. To integrate correctly PACS with PeekMed® follow the instructions from the [PACS Configuration](#).

Warning: If PACS integration is not performed correctly, the medical images import may be compromised.

d. DICOM images from CD

Open DICOM images stored on a CD, if the CD is correctly inserted in the drive.

e. Image library

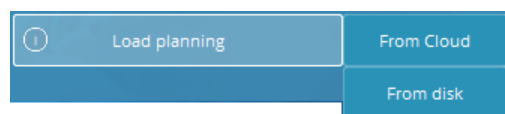
Open previously loaded DICOM images. This library contains all DICOM images that have been opened with PeekMed®. Note that there's a maximum cache value for the library, thus, once it is reached, you will either have to delete the unwanted studies manually or the software can delete the oldest ones. You have the option to choose if you want to save or not your images in the library. These options can be posteriorly changed in the *Settings*.

f. Conventional images

Open conventional images that are in .jpeg, .png, .bmp, or .tiff formats.

g. Load planning

Open a previously saved planning. However, only one saved planning can be opened at a time. It is possible to either load a plan previously saved to the disk or to the Cloud. Further information in the [File](#) section.



Warning: Check that all objects in your planning have been correctly loaded in the system.

2.3 Selection View

After choosing *PeekMed DICOM samples*, *DICOM images*, *DICOM images from PACS*, *DICOM images from CD* or *Conventional images*, you must select the medical images for planning, in *Selection View*.


All patients are listed on the left side of the window. Clicking on each of them you can view the imported images that belong to each study.



Beware: Make sure that you import data from the correct patient, and use the correct image from the correct patient.

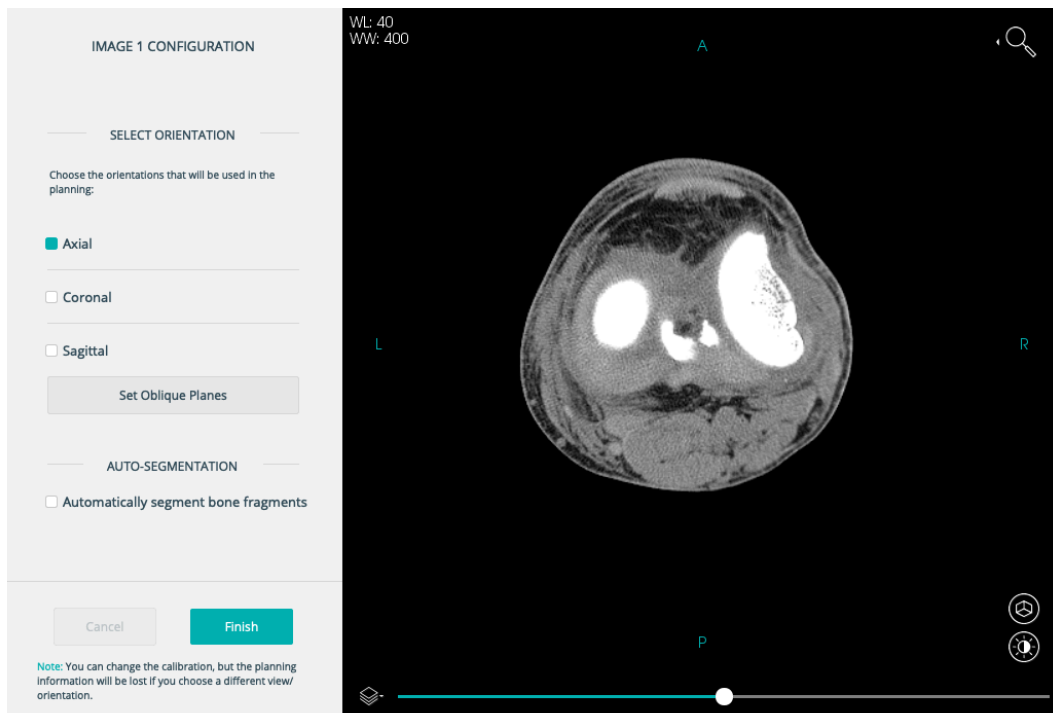
If you need images from different studies, you must select the image (by clicking on it with the left mouse button) and click the *Add Image* button at the bottom of the 2D viewer.

Beware: Simultaneous planning of more than 4 CRs, 1 CT or 1 MRI scan is not supported. You will receive a warning if you try to do that. PeekMed performance may be compromised if you use a large image dataset

If you want to remove an image, just click on the button  that appears at the upper right-hand corner of the desired image. To proceed to the planning, you must click on the *Start planning* button. You can go back to the *Main Menu* by pressing *Cancel*. You can also open additional images by clicking on *Add more images* (open conventional images from a folder) or on *Add more DICOM images*. The *Add more DICOM images* option is subdivided between *Folder*, *Image library*, and *PACS*. The *Folder* button lets you load DICOM images from a Folder, the *Image library* button lets you load DICOM images saved in your Image library and the *PACS* button opens the Import from PACS window and lets you import DICOM images from a PACS station.

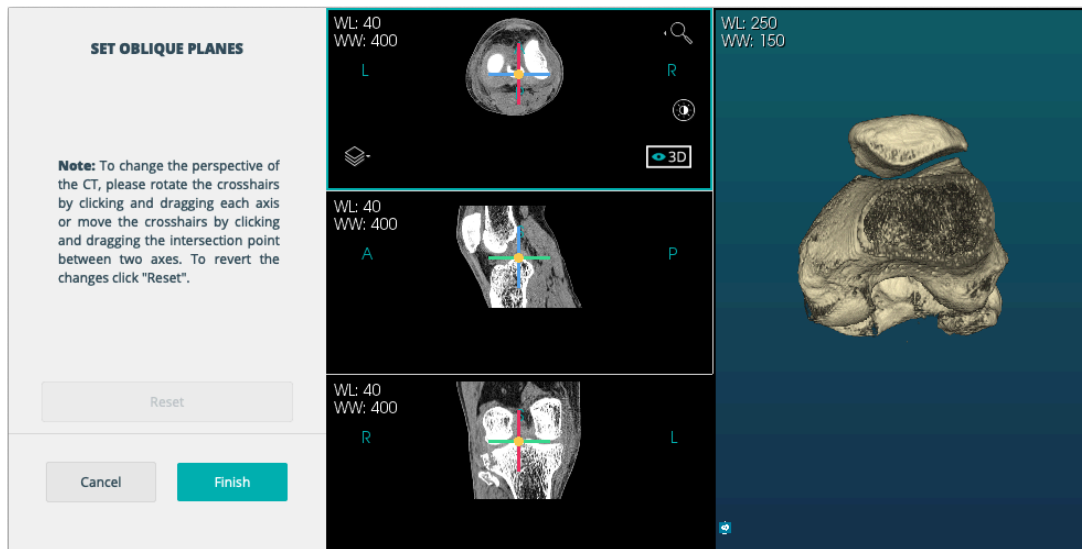
2.4 Image Configuration

After selecting the planning environment, it is necessary to configure the image before starting to plan. **This step is mandatory.** You cannot start planning until this setting is completed. You have to define the image orientation and calibrate it. If you are working with more than one CR or conventional image, this step will be required for all the images. After completing one image, the software automatically switches to the next one, up to a limit of four CRs or conventional images. Thus, to successfully complete this process you must:



2.4.1 Select Orientation

For CT and MRI scans you must choose at least one of the three options, Coronal, Sagittal, or Axial, to specify the image orientation that will be used for planning. In order to have a better perception of the patient's data, you can change the orientation of the image in *Set Oblique Planes*.



By moving (rotating and translating) the crosshairs, it's possible to change the perspective of the CT to then be used in the planning view. It is possible to revert the changes made by clicking on the *Reset* button. The changes are applied to both 2D and 3D renderers in the planning view.

If you have selected *Hybrid* in the *Planning Environment*, you are able to select one, two, or three orientations simultaneously.

Warning: By moving the crosshairs you might change the orientation that is being displayed (you might be changing a left side to the right side, for example). Make sure you correctly set the image orientation.

2.4.2 Auto-Segmentation

When you select *Hybrid* or *3D* in the *Planning Environment* window, the image configuration box includes an *Auto-Segmentation* section. When you select this option, the image in your planning window will appear with multiple segments that represent the different bone pieces. This allows you to select, manipulate, and delete different fragments, according to the requirements. In the 2D section of the hybrid environment, the image is also segmented into different 2D bone fragments.

When all fields are filled correctly, you must click on the *Finish* button. In case there is more than one CR or conventional image you must repeat this configuration for each image. After configuring the last image and pressing *Finish*, the software will proceed to the planning.

In case a CT study has implants on it, they will be automatically removed from the CT and a Planning View sidebar entry will be added to the fragments section, to notify you.

In order to ensure that the tool works correctly, the images used should follow the parameters defined in the [PeekMed® Imaging Protocol](#).

After setting the environment preferences and configuring the image, you are ready to start planning. PeekMed® planning window is simple and intuitive, so it is easy to find all the tools you need to do the best planning.

2.4.3 Calibrate image

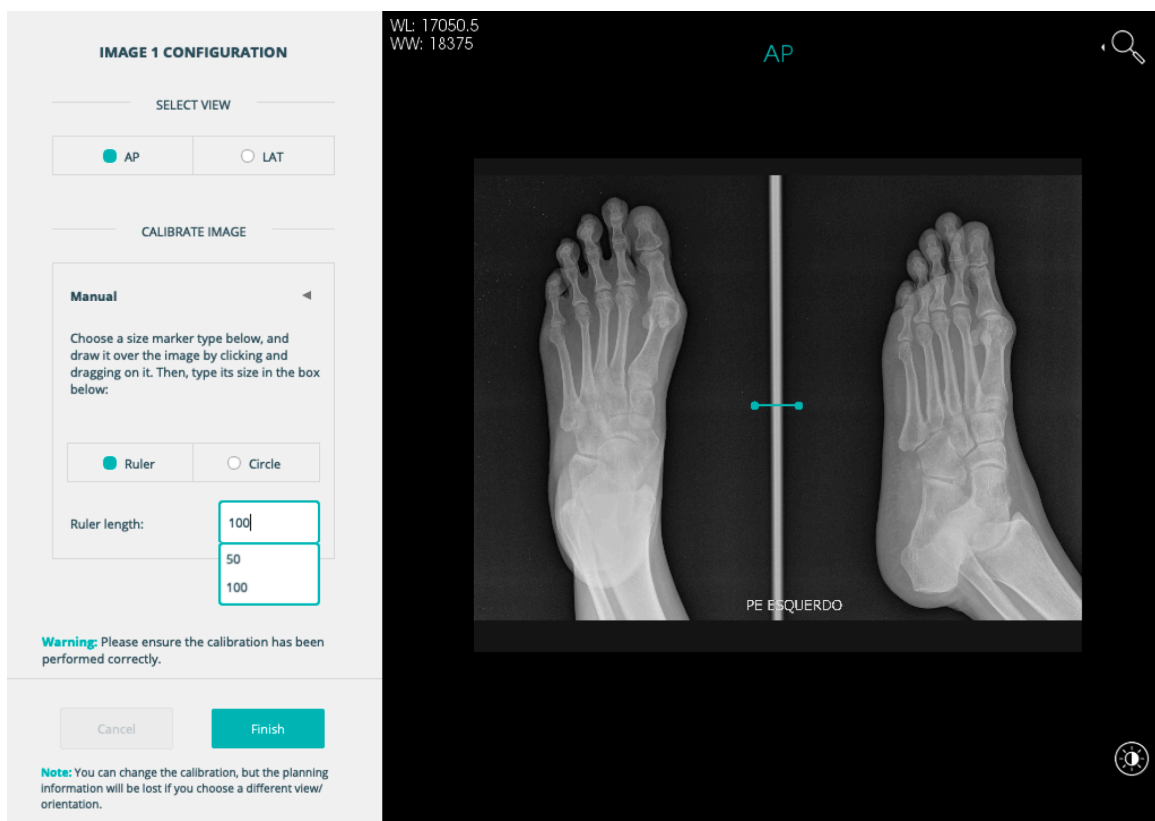
This configuration is only needed with CRs or conventional images due to the unknown magnification factor at the time of image acquisition. Thus, you must define CRs' or conventional images' scaling factors. PeekMed® allows three ways of setting the image calibration: manual, magnification, and automatic. The calibration method selected by default is according to the calibration method selected in the [Settings](#).

Warning: Ensure all images used have been correctly acquired. During the acquisition of CRs, pay attention to avoid oblique positioning, abduction or external rotation.

2.4.3.1 Manual

You can set the image scaling based on an object placed at the patient's bone level (commonly known as a marker) at the time of image acquisition. When you select the manual scaling option, you must draw a line or a circle and identify its real size in the field *Ruler length* or *Circle radius*, respectively.

To draw the line, you must select the *Ruler* option. A default line will be added to the image. Then, you can reposition and resize this line by clicking on its extremities (handles) with the left mouse button.



If the image has a circular marker (e.g. a sphere) in it, choose the *Circle* option. A circle will automatically appear as soon as you click on this option. Then, you only need to resize it according to the marker. The actual size must be specified in the appropriate field, in the scaling section.

Warning: Ensure that the scale objects are correctly positioned on the image marker in order to perform the measurement.

2.4.3.2 Magnification

When there is no known measurement, you can define a percent magnification factor, selecting the *Magnification* option, which defines the percentage to which the image is scaled to. Magnification is only available for CR images. Usually, CRs are scaled to a value of around 100% - 115% of their actual size. To perform this step, you must enter the most appropriate scaling percentage in the text box.

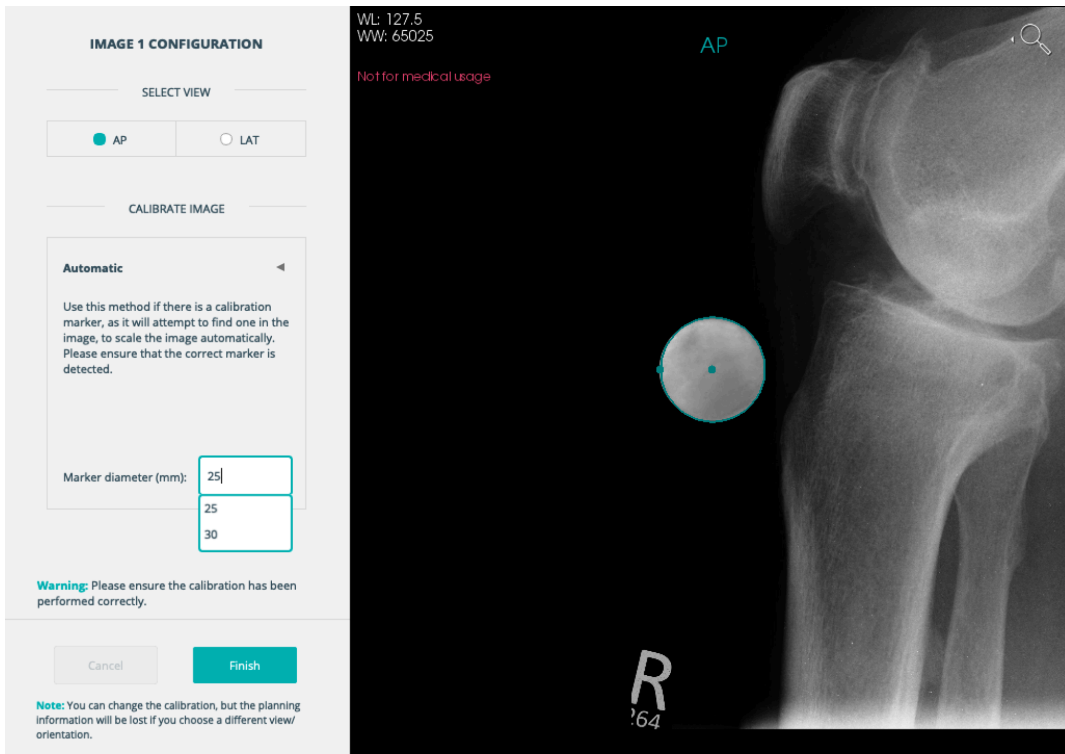
Warning: Magnification is performed without a verifiable scaling object. This scaling method is not recommended. It cannot be used if there is no available data for the image calibration, for example, if the image has a .jpeg, a .png, .bmp, .tiff format.



2.4.3.3 Automatic

By clicking on this option, the software tries to find a marker in a CR or conventional image, displaying a contour around it (circle).

In case a CT study has implants on it, they will be automatically removed from the CT and a Planning View sidebar entry will be added to the fragments section, to notify you.



Afterward, it is possible to define the diameter of the detected circle.

Warning: Ensure that the scale object is correctly positioned on the image calibration marker to perform the measurement.

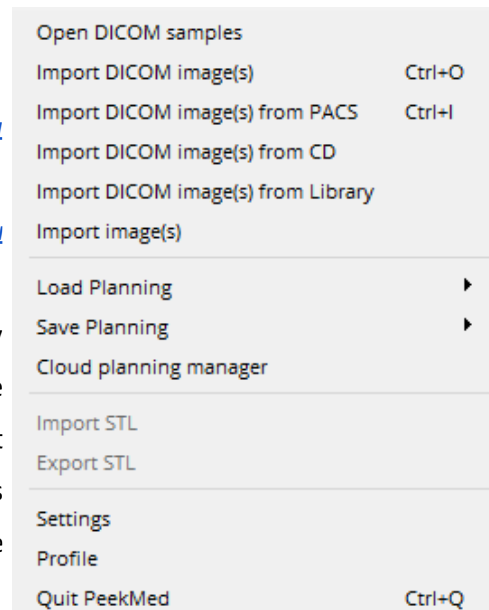
2.5 Menu Bar

The menu bar offers you a whole new set of options organized in the menus listed below.



2.5.1 File

- a. **Open DICOM samples:** See [Main Menu](#) section;
- b. **Import DICOM image(s):** See [Main Menu](#) section;
- c. **Import DICOM image(s) from PACS:** See [Main Menu](#) section;
- d. **Import DICOM image(s) from CD:** See [Main Menu](#) section;
- e. **Import DICOM image(s) from Library:** the image library consists of a library where every DICOM opened in the software is saved, so you don't have to worry about accessing your images. The image library supports DICOM images only. Minimum and maximum cache



values can be set to control the amount from your device the library can use.

Once the library is full and you try to load a DICOM study, you'll be asked to either clean the library manually or the software will automatically delete the oldest studies until there's free space available;

- f. **Import image(s):** See [Main Menu](#) section;
- g. **Load planning:** load a previously saved plan. If there is some incorrect input data, PeekMed® will alert that something cannot be loaded;
 - **From Cloud:** load a plan saved to your Cloud (the plan had a .pmd extension);
 - **From disk:** load a plan saved locally (the plan had a .pmd extension);
- h. **Save planning:** save the current state of the surgery planning, including images, measurements and report if any has been created.

Warning: Make sure to save the planning to avoid loss of data in case of failure of power or loss of internet connection.

To note that PeekMed® periodically automatically saves planning. You can save the plan:

- **To Cloud:** save the current state of your plan to the Cloud. Within this window, you can also select the option to save your plan to a mobile device: if you want to view the planning on your iPad, this option allows you to save it in the Cloud (planning has a .pmm extension);
- **To disk:** save the current state of your plan locally;
- **As pre operative CSV file:** save the CSV file with the pre-operative planning to the disk;
- **As post operative CSV file:** save the CSV file with the post-operative revision to the disk.

Beware: Ensure that your patient has given you his/her informed consent to share his/her data.

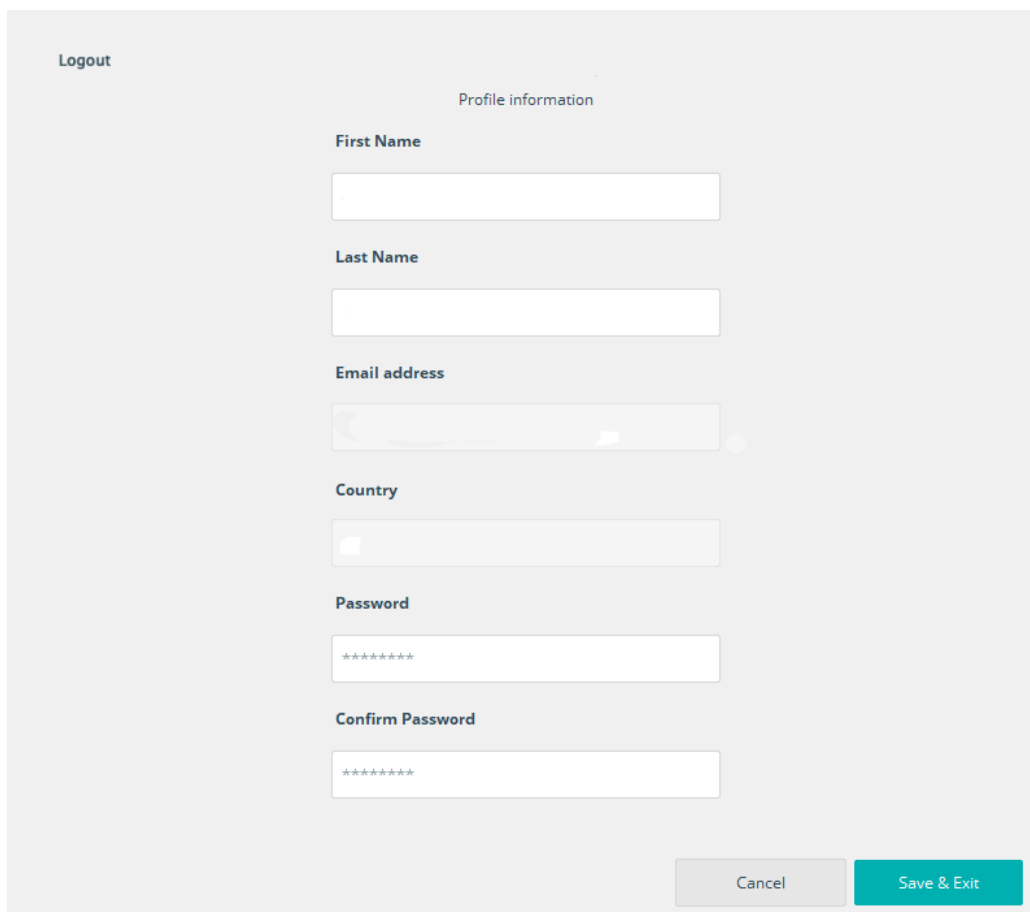
- i. **Cloud planning manager:** manage the plans saved to the Cloud. It is possible to delete, load, download, and save new plans. It is also possible to edit the name of a plan and order the list by name, creation date, or update date;

Warning: Do not share your login credentials to avoid improper access to private patient data. PeekMed® ensures data encryption (patient data and login credentials) in our servers.

- j. **Import STL:** if you are doing a plan in the 3D and Hybrid (2D and/or 3D) environment, the software allows you to import files in .stl format. Note that every STL file has a 2D representation if a 2D renderer is open;
- k. **Export STL:** if you are doing a plan in the 3D and Hybrid environment, the software allows you to export the bone model in .stl format. This format allows, for instance, the model to be subsequently printed in a 3D printer;
- l. **Settings:** you can modify a few properties of the system as well as add and configure the integration with the PACS;

Note: The captions of the procedures are followed by abbreviations “(L)” or “(R)”, left or right, respectively, considering the side where the procedure was performed. Cases that are common to both anatomical sides, such as “Coronal Balance” are not followed by the abbreviations aforementioned.

m. Profile: here you can access your user account, change your password, first and last names and log out of the software;



The screenshot shows a 'Logout' window with a 'Profile information' section. It contains the following fields:

- First Name:** A text input field.
- Last Name:** A text input field.
- Email address:** A text input field with a magnifying glass icon on the right.
- Country:** A dropdown menu with a flag icon on the left.
- Password:** A text input field with asterisks for masking.
- Confirm Password:** A text input field with asterisks for masking.

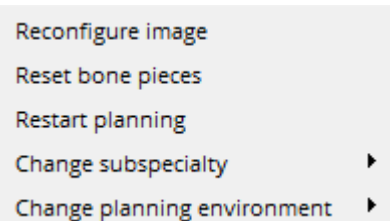
At the bottom right, there are two buttons: a grey 'Cancel' button and a teal 'Save & Exit' button.

n. Quit PeekMed: confirming the notification that appears after clicking on this option will close the software. On macOS, this option is available under the PeekMed® menu in the menu bar and is named *Quit PeekMed*.

2.5.2 Edit

a. Reconfigure image: you can change the image configurations, such as calibration and orientation. Beware that the entire planning done until then will be lost;

b. Reset bone pieces: reset all fragments to their initial position;



c. Restart planning: restart your planning from the beginning, resetting all options to their original state;

- d. **Change subspecialty:** change the current subspecialty to a new one from the list of available subspecialties;
- e. **Change planning environment:** change the current planning environment to a new one from the list of available environments. When planning over CRs this option is disabled as it is only possible to plan on the 2D environment.

2.5.3 View

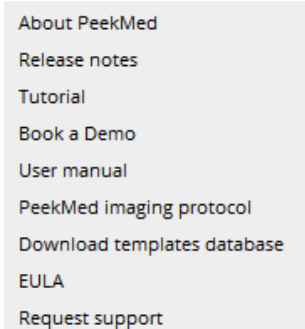
- a. **Zoom in:** lets you zoom in (applies to plan view);
- b. **Zoom out:** lets you zoom out (applies to plan view);
- c. **Fit to screen:** lets you reset the starting position of the image and/or three-dimensional objects;
- d. **WL+:** increase brightness;
- e. **WL-:** decrease brightness;
- f. **WW+:** increase contrast;
- g. **WW-:** decrease contrast;
- h. **WL/WW reset:** reset the image contrast and brightness levels to the original values;

Zoom in	Ctrl++
Zoom out	Ctrl+-
Fit to screen	Ctrl+0
WL+	Ctrl+Up
WL-	Ctrl+Down
WW+	Ctrl+Right
WW-	Ctrl+Left
WL/WW reset	Ctrl+R
Pan/Rotate	Ctrl+T
Load preset	▶
Orientations	▶
Reset splitters	

- i. **Pan/Rotate:** pan/rotate the image;
- j. **Load preset:** the planning over MRI/CT scans lets you load the preset for the three-dimensional object from the following available options:
 - Default;
 - CT Bones;
 - CT Vessels;
 - CT Skin;
 - MRI;
- k. **Orientations:** lets you choose the orientations of 2D/Hybrid CT/MRI's. It's mandatory to have at least one orientation selected:
 - Axial;
 - Coronal;
 - Sagittal;
- l. **Reset splitters:** reset the sizes of the 2D and/or 3D renderers.

2.5.4 Help

- a. **About PeekMed:** lets you find useful information about your software license (which may be requested by the Technical Support team to resolve any issue), and also the End User License Agreement. On macOS, this option can be found under the PeekMed® menu in the menu bar;
- b. **Release notes:** opens a web browser page of the [Release Notes](#) page on the PeekMed® desktop;
- c. **Tutorial:** lets you have an overview of the software;
- d. **Book a Demo:** opens a web browser page to [book a Demo](#);
- e. **User manual:** lets you access the [User Manual](#);
- f. **PeekMed imaging protocol:** lets you access the PeekMed® imaging protocol;
- g. **Download templates database:** lets you download the most recent version of the templates database;
- h. **EULA:** opens a web browser page of the [End User License Agreement](#) on the PeekMed® desktop;
- i. **Request support:** opens a web browser page of the [Contact us](#) form on the PeekMed® website.

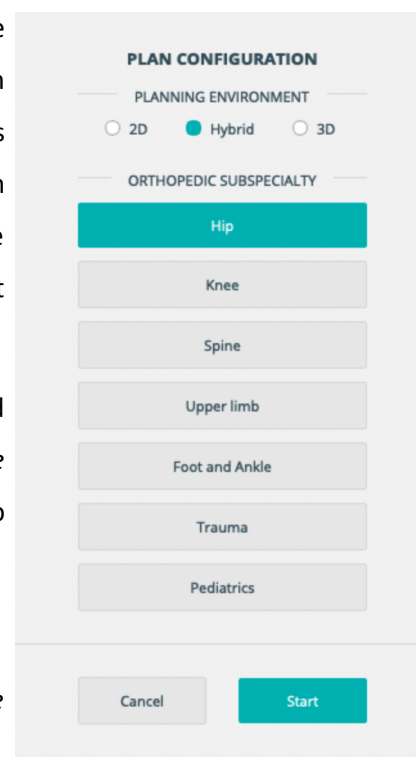


2.6 Planning Configuration

After pressing *Start planning* you are prompted to select the planning environment and the orthopedic subspecialty in which the planning will be made. The subspecialty selected by default is according to the subspecialty selected in the [Settings](#). Each environment and subspecialty has its own specific features. The template's database will be appropriate to the subspecialty that has been selected.

After starting planning, you can change its environment and subspecialty. Click *Edit* on the menu bar, select the *Change Subspecialty* option and select the subspecialty you want to switch to.

Note: If you select this option the entire planning previously done will be eliminated.



2.6.1 Subspecialties

PeekMed® automates several procedures allowing you to perform the pre-operative planning efficiently. In PeekMed® you can find the following orthopedic subspecialties:

- Hip
- Knee
- Spine
- Upper limb
- Foot and Ankle
- Trauma
- Pediatrics

After you select the subspecialty, the software features auxiliary procedures that will help you get the measurements required for the planning, further described in the [Procedures](#) section. Only the relevant templates and measurements for the chosen subspecialty are presented. In the *Edit* menu on the menu bar, you can select the *Change subspecialty* option.

Note: If you choose to change the subspecialty, all measurements and planning made so far will be lost.

2.6.2 Planning

The software is able to adapt to different environments by realizing that CR images or conventional images do not have a third dimension, unlike CT and MRI.

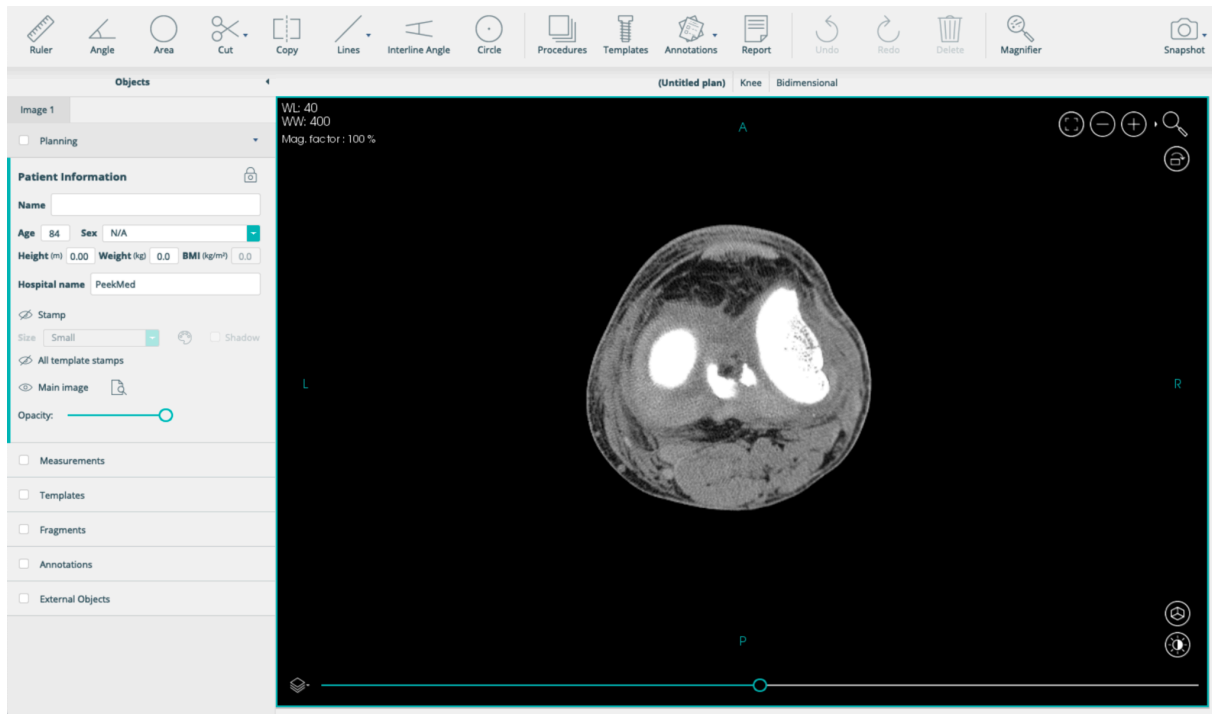
The planning environment has two common sections: the toolbar and the object edition. The planning section can be: 2D, hybrid or 3D.

2.6.2.1 Planning Environments

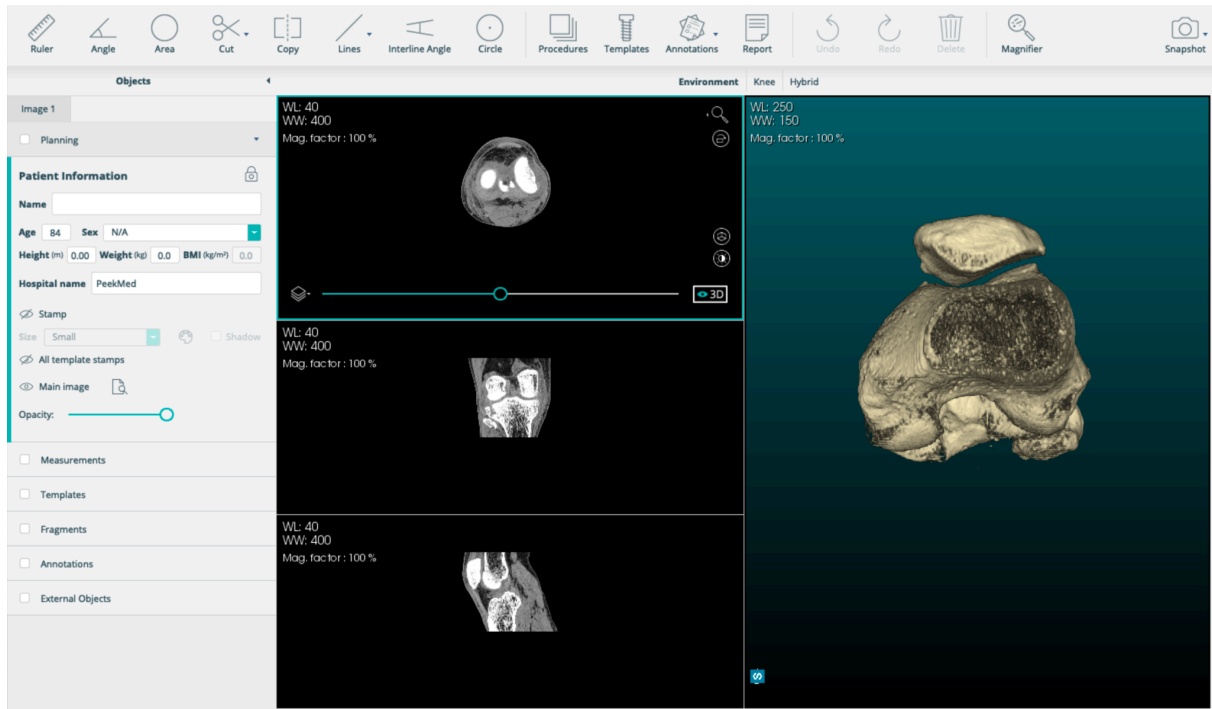
2.6.2.1.1 2D Environment

The 2D environment is divided into three sections:

- **Toolbar:** you can find additional information in the [Toolbar](#) section;
- **2D renderer:** where the 2D image is placed and you have at your disposal a complete set of tools to do the entire pre-operative planning which includes measurements, fragments, and templates;
- **Objects edition:** you can find additional information in the [Objects](#) section.



2.6.2.1.2 Hybrid Environment



This environment is not available for either CRs, or conventional images. The window is divided into four main sections:

- A. Toolbar:** you can find additional information in the [Toolbar](#) section;
- B. 2D renderer:** if you selected more than one orientation on the *Image Configuration* window, all the views you selected will appear in this 2D section of your window. You have at your disposal a complete set of tools to do the entire pre-operative planning which includes



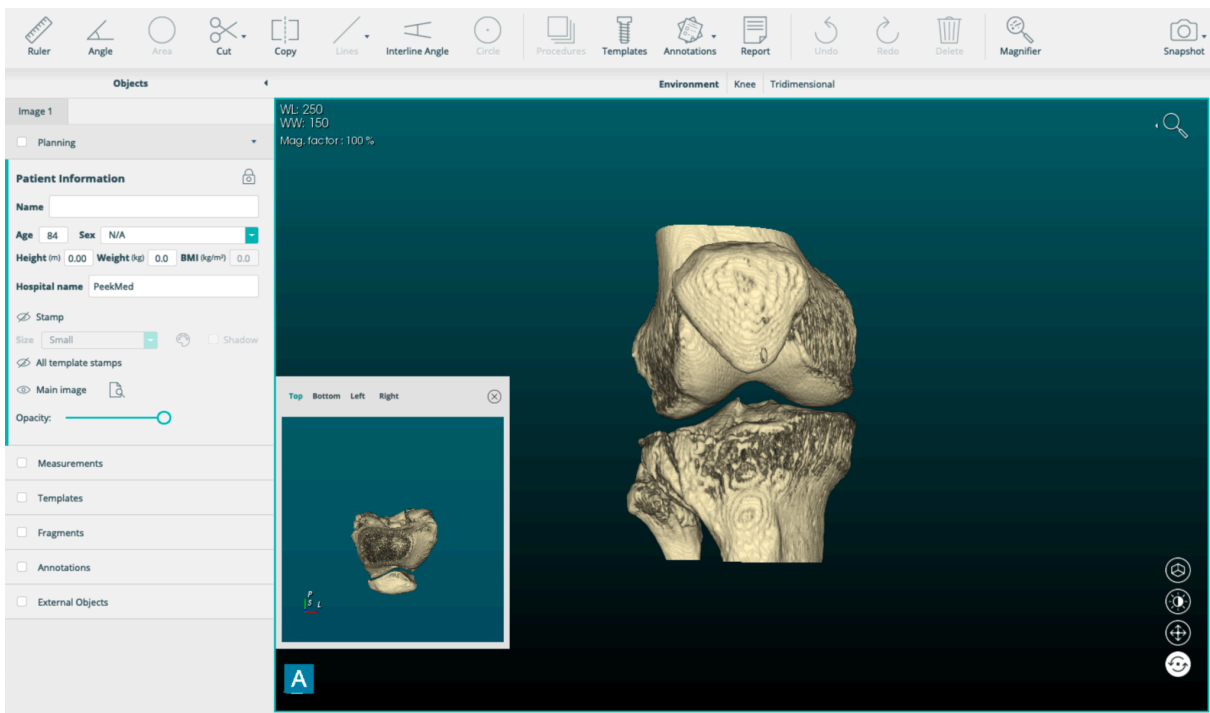
measurements, fragments, and templates. Below the MIP (Maximum Intensity Projection) image is a slider that allows you to browse through the digital image slices. To do this, simply click on the image you want to format, and with the left button of your mouse click on the slider control button and drag the mouse to the left or the right;

- C. **3D renderer:** where the 3D models are placed, you can see the result of these actions. For example, the location of a fragment or a template is simultaneously displayed on the 3D model;
- D. **Objects edition:** you can find additional information in the [Objects](#) section.

2.6.2.1.3 3D Environment













This environment is not available for CRs nor conventional images. This section is divided into three sections:

- A. **Toolbar:** you can find additional information in the [Toolbar](#) section;
- B. **3D renderer:** where the 3D models are placed and you have at your disposal a complete set of tools to do the entire pre-operative planning which includes measurements, fragments, and templates;
- C. **Objects edition:** you can find additional information in the [Objects](#) section.







2.6.2.2 Planning Interactions

The interaction tools are in the renderer. You can interact with them by clicking on the icons with the left mouse button. To navigate in the software, use the mouse and a combination of shortcuts as auxiliary tools.

-  **Magnifying glass** to enlarge or reduce the image size, use these tools in the renderer:
 -  **Zoom In:** the image moves closer to the camera;
 -  **Zoom Out:** the image moves further away from the camera;
 -  **Fit to Screen:** image size reverts to fit in the screen (original size);
-  **Rotate 2D image:** to rotate your 2D image, just click on the icon with your left mouse button. For each click, your image will rotate 90 degrees clockwise.
-  **Window Width/Window Level (WW/WL):** By changing the brightness and contrast of the image, you can improve the visible distinction between contrasting tissues. This value can be changed. First, click on this icon to activate the function, the icon will change color, meaning it is activated. Then press the left mouse button over the image and drag the mouse up and down or left and right, until you get the best level. To reset the WW/WL value click on the button .
- **Manipulate a CT/MRI:** you can easily scroll through CT or MRI with the slider below it. There is also the possibility to view a single slice at a time or a stack of nearby slices. It is possible to create a stack with the minimum size of 0 mm (one slice) and maximum size that is variable according to the size of the image for both CT and MRI scans. The value should be in the respective field after clicking on the button . To enable a slice in 3D (in Hybrid Environment) you can click on the button . You can pan the images in the 2D renderer by moving the horizontal slider.
- **Select objects:** you can easily select an object by clicking on it with the left mouse button. The selected objects will change color according to their selection status. Image fragments, templates, and measurements will exhibit a set of handles to configure their position.
- **Pan 2D objects:** to move the 2D model, you can use the right mouse button and move the object to the most convenient position; the object will follow this movement. You can pan the objects in the 2D renderer by pressing the *Ctrl* key, for Windows, or the *cmd* key, for macOS and the left mouse button simultaneously.
-  **ROI (Region of Interest):** to define a region of interest, just click on the ROI button and move the handles to hide sections of your 3D model, as desired. You can move the ROI box by clicking on its surface with your left mouse button. To reset your ROI changes to the original position, just click on the reset button . To remove this feature from your 3D environment, just click on the ROI button and it will disappear.
-  **Pan 3D objects:** to move a 3D object, first you must select the object by clicking over it and then select the pan mode using the icon that will appear in the middle of the rightmost side. Three arrows representing the X, Y, and Z axes, as well as a light sphere around the object, will

appear, meaning you are in translation mode. You are now able to move the object by pressing and dragging the left mouse button on the object or using the axes arrows.

-  **Rotate 3D objects:** to rotate a 3D object, first you must select the object by clicking over it and then select the rotate mode using the icon that will appear in the middle of the rightmost side. Three circumferences representing the rotation axes and a light sphere around the object will appear, meaning you are in rotation mode. You are now able to rotate the object by pressing and dragging the left mouse button on the object or using the rotation axes.
-  **Pan 3D camera:** in the hybrid and 3D environment it is possible to move the camera. Panning the camera will not change the objects' position but will change the way you see the objects. To move the camera view you must select the pan mode using the icon that appears in the lower right section of the 3D renderer. You are now able to move the camera view by pressing and dragging the right mouse button over the 3D environment.
-  **Rotate 3D camera:** in the hybrid and 3D environment it is possible to rotate the camera. Rotating the camera will not change the objects' position but will change the way you see the objects. To rotate the camera view you must select the rotation mode using the icon that appears in the lower right section of the 3D renderer. You are now able to rotate the camera by pressing and dragging the right mouse button over the 3D environment.
-  **Auxiliary View:** in the 3D environment it is possible to have a secondary view of the 3D model. To enable this view you must select the icon that appears on the top left corner of the 3D renderer. A window will popup with four preset camera views: Top, Bottom, Left, and Right view. Click on the view you want to see to switch it.

2.6.2.3 Objects

The *Objects* edition option displays all the objects available in the planning. This includes *Fragments*, *Templates*, *Measurements*, and *External objects*. In this option, you can individually manipulate each object, through the [Object Card](#).

▪ Planning

This section contains patient information fields such as name, age, sex, height and weight. When using DICOM images, the fields are populated with the available DICOM's metadata. When using Conventional images, the fields are empty. In both cases, the user can add or edit the information.

For more information on planning info, see the [planning cards](#) section.

▪ Fragments

This section groups all image fragments, i.e., the main image and all performed cuts will be represented under this section. It is also possible to change the fragments' display preferences.

- **Templates**

This section groups all templates added to the plan. It is also possible to reconfigure the added templates, as well as changing their display preferences.

For more information on templates, see the [templates](#) section.

- **Measurements**

This section groups all measurements and tools performed under active planning. It is also possible to change the measurements' display preferences.

- **External objects**

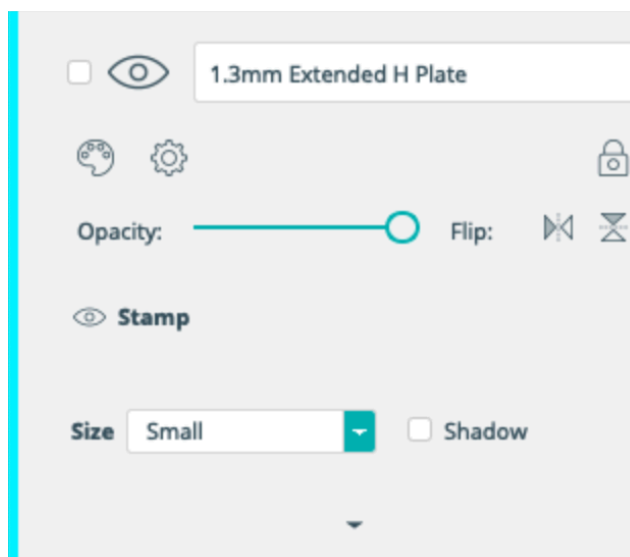
This section groups all external STL objects added to the planning and it is possible to change the objects' display preferences.

- **Annotations**

This section groups all annotations added to the plan. It is also possible to reconfigure the added annotations, as well as changing their display preferences.


2.6.2.3.1 Objects Cards


The planning objects are presented by cards in the left sidebar. Inside each card, there are several options according to the type of object selected to configure.





 **Show/Hide:** show/hide object from the Planning View in all renderers where that object exists;

 **Color:** change the color of the object selected;


 **Lock:** lock the movements/ changes of the selected object;

 **Advanced configuration:** this button can have different types of configuration according to the type of object. It can establish dependencies between fragments, templates, and external objects. For templates, it is possible to define other advanced properties (e.g. size, degrees, dimensions). For procedures, it can be used to start the automated procedure;

 **Collision:** create the collision mesh of fragments, templates, or external objects. This button needs to be enabled on at least two object cards to use the collision system. Whenever two objects are overlapping, you will visualize their collisions;


 **Flip:** flip the template vertically or horizontally. This option is only available for a 2D renderer;

Opacity slider: change the transparency of a fragment or template. In the case of templates, this option is only available for a 2D renderer;

 **Show/Hide Stamp:** show/hide the template information stamp from the Planning View in the renderer selected at the time;

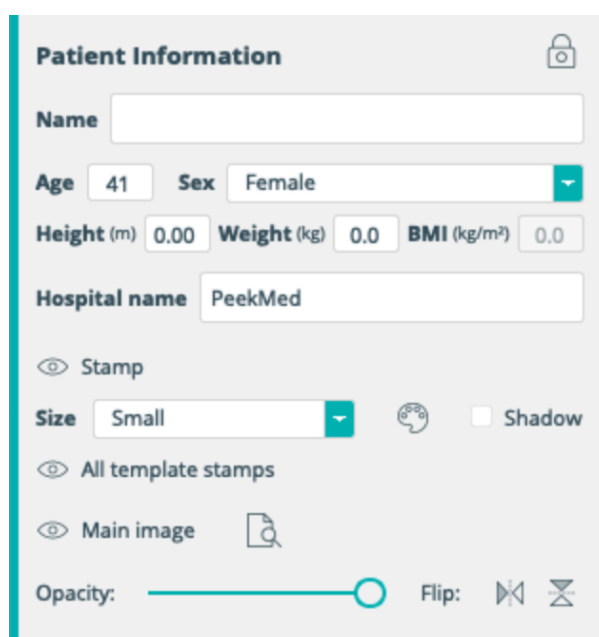
Size dropdown: change the size of the template information stamp;

Shadow checkbox: when checked, an outer shadow is applied to the template information stamp;

For more details on the object click on the  button.


2.6.2.3.1.1 Planning cards


Each medical image has its own Patient Information card. The user can access, read and edit information concerning the patient in the Planning View using this card. Inside each card, there are several fields and options. DICOM metadata can be used to populate these fields.




The screenshot shows a 'Patient Information' card with the following fields and controls:

- Name:** A text input field.
- Age:** A numeric input field with the value '41'.
- Sex:** A dropdown menu with 'Female' selected.
- Height (m):** A numeric input field with the value '0.00'.
- Weight (kg):** A numeric input field with the value '0.0'.
- BMI (kg/m²):** A numeric input field with the value '0.0'.
- Hospital name:** A text input field with the value 'PeekMed'.
- Stamp:** A toggle switch with an eye icon, currently turned on.
- Size:** A dropdown menu with 'Small' selected.
- Shadow:** A checkbox, currently unchecked.
- All template stamps:** A toggle switch with an eye icon, currently turned on.
- Main image:** A toggle switch with an eye icon and a document icon, currently turned on.
- Opacity:** A horizontal slider control.
- Flip:** A toggle switch with a double-headed arrow icon, currently turned on.


 **Lock:** locks changing the data in the Planning section;


 **Show/Hide Stamp:** show/hide the planning information stamp from the Planning View in the renderer selected at the time;


 **Color:** change the color of the planning information stamp;

Size dropdown: change the size of the planning information stamp;


Shadow checkbox: when checked, an outer shadow is applied to the planning information stamp;

 **Show/Hide All template stamps:** show/hide all the template information stamps from the Planning View in the renderer selected at the time;

 **Show/Hide Main image:** show/hide the main image from the Planning View in all the renderers where the main image exists;

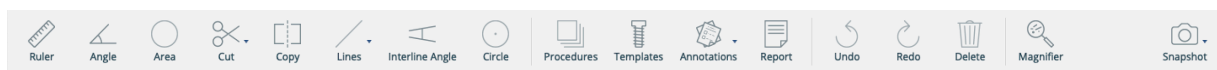
 **Preview:** preview the main image in a new window;

Opacity slider: change the transparency of the main image. This option is only available for X-Rays and conventional images;

 **Flip:** flip the main image vertically or horizontally. This option is only available for X-Rays and conventional images.

2.7 Toolbar

The toolbar appears at the top of the planning window and it is common to every environment and subspecialty.



2.7.1 Ruler

The *Ruler* performs a linear measurement of the distance between two points in millimeters (for calibrated images).

After picking the option on the toolbar a default line will show up over the image with the corresponding caption representing the line distance, in millimeters. You can reposition and resize this line by clicking the handles on each extremity of the line with the left mouse button and dragging the mouse to the most appropriate position.

Also, you can move the entire ruler by clicking over it and dragging the mouse. The ruler will follow this movement.

This applies to both 2D and 3D environments.

2.7.2 Angle

The *Angle* tool measures the angle between three points of the image.

After picking the option on the toolbar, a default angle of 90° will show up over the image with the corresponding caption representing the angle degrees. You can reposition and resize this angle by clicking the three handles with the left mouse button and dragging the mouse to the most appropriate position to set the desired angle.

Also, you can move the entire angle by clicking over it and dragging the mouse. The angle will follow this movement.

This applies to both 2D and 3D environments.

2.7.3 Area

The *Area* tool measures the area of any round object.

After picking the option on the toolbar, a default circumference with five handles will show up over the image with the corresponding caption representing its area, in square millimeters (mm²). If you click and press the left mouse button on one of the handles over the circumference, you can shape and resize the circumference. If you click and press the left mouse button on the center handle, you can move the circumference to the desired area in the image.

2.7.4 Cut

The *Cut* tool lets you outline an object, which will be separated from the rest of the image.

After picking the option on the toolbar, there are three options available: Image (see section [Image](#)), Bone (see section [Bone](#)), and Manual Segmentation (see section [Manual Segmentation](#)). After selecting one of the options, the cut mode is automatically available and you can immediately start marking a set of points with the left mouse button on the image, in order to define a border. This marking will delimit an area or volume (in a 3D environment), which will subsequently be cut. The area/volume is only cut after closing the contour outlined. After performing the cut, one can add new nodes to the cut's outline and alter their position and, also, one must approve or cancel the cut to effectively make it by clicking on the check button on the right side of the Planning View. The fragmented area/volume can be moved by clicking on it with the left mouse button and moving it to the appropriate position.

You can visualize a central point in the area that was segmented. This handle defines the fragment rotation axis. You can move this handle by clicking on it with the left mouse button and moving it to the most appropriate position. To rotate the fragment, you must press the left mouse button on the rotation handles, which is pending in the cropped area, and move it to the position that seems most appropriate.

For a volume, there are three rotation handles, one for each orientation (axial, coronal, and sagittal). After adjusting the rotation axis, to rotate the fragment you must press the left mouse button on the rotation handle and move the mouse to the position that seems most appropriate.

When this option is enabled within some procedures, you will be able to identify the anatomical area that this fragment corresponds to.

Every cut can be deleted like any other object.

In the 3D environment, the *Cut* tool allows trimming any part of the 3D model turning it into an independent fragment. When the tool is activated, a box appears. The bone volume inside the box will be trimmed from the rest of the 3D bone model, turning it into an independent object. Use the handles in the center of each square face to adjust the box size or drag the mouse up and down while pressing the right mouse button. The handle in the center of the box allows you to drag it. To rotate the box, just press the left mouse button anywhere on the box and drag the mouse to the side you want to rotate it. Once the box is in the appropriate position, press *Enter* on the keyboard. The bone volume will then be cropped.

Warning: Ensure that all cuts are performed correctly and that they have all the clinical information necessary.

2.7.4.1 Image

This option allows to cut the image as a whole, not distinguishing soft tissue from bones, and vice versa. This option is available for all images supported by the software, in both 2D and 3D renderers.

2.7.4.2 Bone

This option takes into consideration the bones as well as the soft tissues of an image. For this reason, by choosing this option, only the bone portion of the image will be segmented within the region of the cut. This option is only available with CTs, on both 2D and 3D renderers.

In order to ensure that the tool works correctly, the images used should follow the parameters defined in the [PeekMed® Imaging Protocol](#).

2.7.4.3 Manual Segmentation

This option allows to paint each slice of a CT or MRI to show the area to be cut/segmented.

2.7.5 Copy

The *Copy* tool allows you to copy a selected region on the image.

After picking the option on the toolbar, the copy mode is automatically available and you can immediately start marking a set of points with the left mouse button on the image, in order to define a border. This marking will delimit an area or volume (in the 3D environment), which will subsequently be copied. The area/volume is only copied after closing the contour outlined. After performing the copy, one can add new nodes to the copy's outline and alter their position and, also, one must approve or cancel the copy to effectively make it by clicking on the check button on the right side of the Planning View. The fragmented area/volume can be moved by clicking on it with the left mouse button and moving it to the appropriate position.

You can visualize a central point in the area that was segmented. This handle defines the fragment rotation axis. You can move this handle by clicking on it with the left mouse button and moving it to the most appropriate position. To rotate the fragment, you must press the left mouse button on the rotation handles, which is pending in the cropped area, and move it to the position that seems most appropriate.

For a volume, there are three rotation handles, one for each orientation (axial, coronal, and sagittal). After adjusting the rotation axis, to rotate the fragment you must press the left mouse button on the rotation handle and move the mouse to the position that seems most appropriate.

When this option is enabled within some procedures, you will be able to identify the anatomical area that this fragment corresponds to.

Every copy can be deleted like any other object.

In the 3D environment, the *Copy* tool allows copying any part of the 3D model turning it into an independent fragment. When the tool is activated, a box appears. The bone volume inside the box will be copied, turning it into an independent object. Use the handles in the center of each square face to adjust the box size or drag the mouse up and down while pressing the right mouse button. The handle in the center of the box allows you to drag it. To rotate the box, just press the left mouse button anywhere on the box and drag the mouse to the side you want to rotate it. Once the box is in the appropriate position, press Enter on the keyboard. The bone volume will then be copied.

2.7.6 Lines

After picking this option on the toolbar, you can choose from a list of available *Lines*.

Having two lines, the software automatically calculates the angle between its intersections.

2.7.6.1 Simple Line

If you select the *Simple Line* tool, a line will be automatically added to the image. To place the line in the appropriate position, grab the handles on the line with the left mouse button and drag them to the most appropriate position.

2.7.6.2 Center Line

With the *Center Line* tool, you can locate the centerline of the long bones. To do so, it is necessary to adjust the four points to the bone edges. Doing that, the software automatically adjusts the central line. After selecting this option, in the section that appears on the left side of the software, the tool appears over the image. You can then adjust the tool points to the locations that appear most suitable.

2.7.6.3 Joint Line

With the *Joint Line* tool, you can select the slope, location, and orientation of the line of the joint for several measurements, such as evaluation of deformity, joint replacement, pre-operative planning, etc. After selecting this option, in the section that appears on the left side of the software, the tool appears over the image. You can then adjust the tool points to the locations that appear most suitable. By adjusting the points, you can adjust the angle, its orientation (top-down), and direction (left-right).

2.7.7 Interline Angle

The *Interline Angle* tool measures the angle between two lines in an image.

After picking the option on the toolbar, a default interline angle of 0° is automatically added to the image with the corresponding caption representing the angle degrees.

You can adjust the measurement by clicking and pressing the left mouse button on the handles and dragging the mouse to the most appropriate position, allowing you to adjust the interline angle. Also, by pressing the left mouse button on one of the lines and moving the mouse, you can move the tool to the desired position.

This applies to both 2D and 3D environments.

2.7.8 Circle


The *Circle* tool measures the diameter of a circle. After picking the option on the toolbar, a default circumference is automatically added to the image with the corresponding caption representing the diameter, in millimeters. If you click and press the left mouse button on the handle over the circumference, you can resize the circumference. If you click and press the left mouse button on the center handle, you can move the circumference to the desired area in the image.

2.7.9 Procedures

This option opens the *Procedures* section, on the left side. Each subspecialty has specific procedures. The procedures are split according to the subspecialties selected before:


- Hip
 - Hip Dysplasia Correction
 - Limb Length Discrepancy
 - Center of Rotation – Ranawat Method
 - Acetabular Angle
 - Total Hip Arthroplasty
 - Proximal Femoral Osteotomy
 - Femoroacetabular Impingement
 - Acetabular Cup Position
- Knee
 - Knee Osteotomy
 - AP Knee Resection
 - Total Knee Arthroplasty
 - ACL Tunnel Reconstruction
 - Medial Patellofemoral Ligament
 - Leg Deformity Correction
 - Posterior Tibial Slope Correction
- Spine
 - Femoral Angles
 - Thoracic Kyphosis Angle
 - Lumbar Lordosis Angle
 - Sagittal Vertical Axis
 - Pelvic Angles
 - Coronal Balance
 - Sacro-femoral Angle
 - Sagittal Balance
 - Smith-Petersen Osteotomy
- Pedicle Subtraction Osteotomy
- Cobb Angle
 - Single Cobb Angle
 - Double Cobb Angle
 - Triple Cobb Angle
- Upper Limb
 - Total Shoulder Replacement
 - Clavicular Angle
 - Shoulder Resurfacing
- Foot and Ankle
 - Talar Tilt
 - Hallux Valgus
 - Moreau-Costa-Bertani Internal Angle
 - Moreau-Costa-Bertani External Angle
 - Maestro Formula
- Trauma
 - Diaphyseal Shaft Fracture Angle
 - Metaphyseal Shaft Fracture Angle
 - Roof Arc
- Pediatrics
 - Limb Deformity Analysis
 - Hip Deformation Analysis (AP)
 - Acetabular Angle
 - Caput-collum-diaphyseal Angle
 - Central Edge Angle
 - Hilgenreiner Angle

If you need more information about procedures, see [Clinical Procedures](#).

After selecting a procedure in the left bar and the anatomical side where you will perform the procedure if needed, you can identify the anatomical points to perform the automated procedure, for more information about the points you need to click on this button . When there are common

points between procedures, you only need to mark them once because they are saved the first time and used in the next procedures with common points.

Beware: You can change the position of the points at the stage you mark them or later. To do this, simply click on each handle with the left mouse button and move them to the most suitable position.

When you finish a procedure you will see it in the image together with the measurements. When a procedure has additional configurations, you can click on the button .

If you end the planning, you can then generate the final report in the *Report* (see the [Report](#) section) or save the planning through the *File* menu on the menu bar (see the [File](#) section).

2.7.10 Templates

PeekMed® offers the possibility to insert the templates of prosthetic materials to be used during the surgery. The template database is adequate for each specialty. A template database is integrated into the software.

Warning: The templates dimensions and geometry are provided by the implants' manufacturer data or templates. In case of incorrect or false data provided by them, liability is excluded.

Template manager ✕

Template source: Server | Name: | Manufacturer: All | 3D templates only

Subspecialty: All | Type: All



[Download Templates](#)

Clear filters Find

<input type="checkbox"/>	Name ▲	Manufacturer	Subspecialty	Type
<input type="checkbox"/>	1.3mm Cortex Screw Self Tapping	Depuy Synthes	Trauma	Screw
<input type="checkbox"/>	1.3mm Extended H Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.3mm Straight Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.3mm T Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.3mm Y Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.5mm Cortex Screw	Depuy Synthes	Trauma	Screw
<input type="checkbox"/>	1.5mm Cortex Screw Self Tapping	Depuy Synthes	Trauma	Screw
<input type="checkbox"/>	1.5mm Cortex Screw Stardrive Self Tapping	Depuy Synthes	Trauma	Screw
<input type="checkbox"/>	1.5mm Extended H Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.5mm H Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.5mm HCS Headless Compression Screw Self Dr...	Depuy Synthes	Trauma	Screw
<input type="checkbox"/>	1.5mm LCP Plate Straight	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.5mm Locking Condylar Plate	Depuy Synthes	Trauma	Plate
<input type="checkbox"/>	1.5mm Locking Plate Straight	Depuy Synthes	Trauma	Plate

Note: Templates are provided by manufacturers. You may only use templates in certain combinations, approved by the respective manufacturer. Before using the implants, check for their suitability and allowed combinations according to the current catalog. Liability is therefore excluded.

1-100 of 2259 rows

The database of templates can be accessed from the *Main Menu*, with the button , Menu Bar, and Toolbar, both with the button . The first time you access this tool a download will be required. To access the templates, you should click on *Templates* and then on the download option in the sidebar. Afterward, you will be redirected to the template database (*Template source: Server*)


and you will be able to choose which templates you want to download. In case the download fails, there will be an option to retry the download of failed templates. After the download, the templates will be transferred to the *Template source: Local*.



When there is an update of the database, you will receive a notification when starting the software.

After you select this option in the toolbar, the sidebar on the left automatically changes to give place to the templates that can be added to the planning.


After you select this option in the toolbar, the sidebar on the left automatically changes to give place to the templates that can be added to the planning.

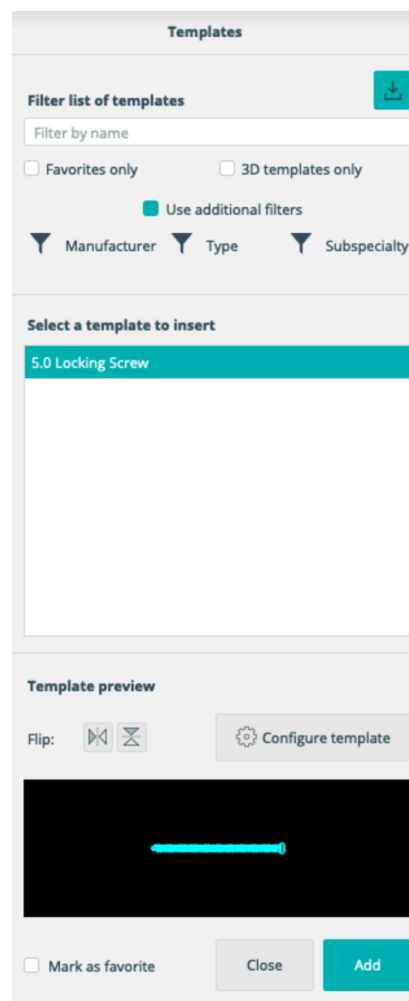
The templates sidebar displays the templates filtered by the plan's subspecialty and the "Trauma" subspecialty with the most recently used templates at the top. However, you can browse templates by selecting favorites only, the manufacturer, the type of material, the subspecialty for which they are classified, or entering the template name directly in the text box. The result list will automatically update according to the input.

If you click once with the left mouse button on each template, you can preview its geometry. You can change its available dimensions and features by clicking on the *Configure template* button . You can change the template's orientation as well,

by clicking on the buttons  and/or  to invert the template horizontally and/or vertically, respectively. Thus, if the preview shows the template's right side, you will automatically switch it to the left side.

Clicking on the *Add* button, below the template preview, the template is automatically added to the planning. In each template, there is a checkbox that can be activated by clicking on it with the left mouse button to *Mark as favorite*. This feature adds the template as a favorite, facilitating the way you can find it later.

Once a template has been added to planning, you can change its configurations by clicking *Objects* on the toolbar, picking *Templates*, and selecting the button  next to the corresponding template. A window, where you can change the template's dimensions and the view will pop up. You can change the side of the template and its color under this section.



Note: By not leaving the manufacturer and type options empty, the search returns specific data of the company and the selected type.

The templates must be positioned in the image, based on the healthcare professional's previous knowledge and surgical considerations. The positioning of the templates in the planning depends on the environment you are in:

- **2D Environment:** you can only enter 2D templates that appear on each 2D renderer;
- **Hybrid Environment:** you can enter any 2D template into the 2D renderer. If there is a corresponding 3D template it will automatically appear in the 3D renderer;
- **3D Environment:** you can only enter 3D templates in the 3D renderer.

In either environment, to move the template you must click on it with the left mouse button and drag it to the most appropriate position.

When selected with the left mouse button, each template will display a set of control options to allow its positioning and rotation. In the 3D environment, there are three rotation handles, one for each orientation (axial, coronal, and sagittal). To rotate the template in the 3D environment, you should press the left mouse button on the rotation handle and move the mouse to the most appropriate position. Clicking the left mouse button outside the template makes the rotation handles disappear.

Note that the template database can also be downloaded right after the login (*Main Menu*).

2.7.11 Annotations

With this option, you can make notes directly on the image, in every environment (2D, hybrid, and 3D), and for any type of image.

2.7.11.1 Text

You can add text directly into the planning area by writing it in the annotations sections in *Objects*. You can change the text content and size in *Objects*.

2.7.11.2 Arrow

You can add an arrow in the planning area by clicking the icon above in the toolbar. You can change the size of the Arrow in *Objects*.

2.7.12 Report

By clicking on this option, PeekMed® generates a report of the plan. A new window will be prompted. The software will automatically fill the hospital name, surgeon name and patient data fields, if this information is available. You can complement the report's information by introducing additional comments. The software will automatically attach pre and post-operative screenshots of the planning

to the report. A list of all procedures' values and materials added to the planning is also listed in a proper section.

The snapshot option adds several extra images to complete the planning. These snapshots could be the ones taken using the software's snapshot option or could've been taken externally. The formats supported are .jpeg, .png, .bmp and .tiff.


The final report may be previewed, saved as PDF, printed or sent to a pre-configured PACS. It is also possible to save the original medical image, pre-op screenshot, post-op screenshot, and report in a local folder by clicking on the "Save DICOM" button (this button is only shown if the "Save DICOM files automatically" option is checked in the [Settings](#)). The files exported are according to the options selected in the "Include in Send to PACS information and Export DICOM files" section in the [Settings](#). The post-op screenshot is always exported.

Note: Save planning is not the same as generating the report. If you wish to save all the planning, to use in the future, for example, please use the option Save planning. If you only want the final report (typically in pdf) you should use the Report option.

PLANNING REPORT

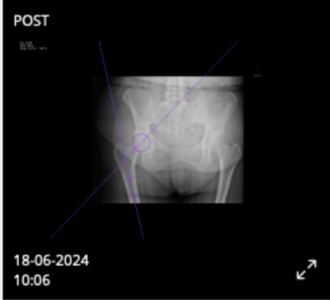
PLANNING IMAGES

PRE




18-06-2024
10:06

POST



18-06-2024
10:06

Snapshots +ADD



INFORMATION

Hospital name

Surgeon name

Patient name

Patient age

Patient sex

Additional comments

Orthopedic subspecialty: Hip

2.7.13 Undo

Click the *Undo* button to revert the last performed action, reverting the plan to its previous state.

2.7.14 Redo

Click the *Redo* button to revert the effects of the *Undo* action.

2.7.15 Delete

After selecting an object, you can delete it by clicking this button. You can also press the backspace key on your keyboard to delete the selected object.

2.7.16 Magnifier

The user may select this button when in need to magnify a detail of an image. Magnifier provides a 2x magnification, displaying, in a smaller window, only the image region defined by the mouse pointer position. The mouse pointer can be moved, and the magnifier will show the area in the mouse pointer position in real-time. It is applicable to both 2D and 3D renderers.

2.7.17 Snapshot

This option gives the opportunity to snapshot each view separately (Selected view button) or the planning view as a whole (All views button). After clicking the *Select view* or *All views* button, the Snapshot is automatically added to the Report.

3 Technical Support

PeekMed® has a technical support team available during business hours, which can be reached via email at support@peekmed.com. At www.peekmed.com you can also refer to the *Contact* section.

The User Manual is provided in electronic format. If a paper copy is required, it can be requested free of charge, including shipping, through the following contact: info@peekmed.com.

In order to provide proper technical support, team members may request information regarding the PeekMed® license you have installed. You may access this information through the software's menu bar by consulting the *About* menu, in which the software version will be displayed. If you detect a security problem, such as someone is using your account without your permission or you lost your surgical plans, please contact our support team immediately.

PeekMed® is a software manufactured by Peek Health, S.A, located in Centro de Negócios Ideia Atlântico, Rua Padres Carmelitas, 4719-005 Braga, Portugal.

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4 Other Manuals

- [Quick Guide](#)
- [Clinical Procedures](#)
- [PACS Configuration](#)
- [PeekMed® Imaging Protocol](#)