PLANMECA

Planmeca Romexis® Smile Design

EN

user's manual

30026599

The manufacturer, assembler and importer are responsible for the safety, reliability and performance of the unit only if:

- installation, calibration, modification and repairs are carried out by qualified authorised personnel
- electrical installations are carried out according to the appropriate requirements such as IEC 60364
- equipment is used according to the operating instructions.

Planmeca pursues a policy of continual product development. Although every effort is made to produce up-to-date product documentation this publication should not be regarded as an infallible guide to current specifications. We reserve the right to make changes without prior notice.

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1 Introduction

This manual describes how to use the Planmeca Romexis Smile Design software.

Planmeca Romexis Smile Design software is a dedicated tool for digital smile design. A patient smile image and intelligent tooth design are used to design a new smile in a matter of minutes. A retractor image can be aligned with the smile image to aid e.g. in more detailed gum-line and tooth dimensions design. The finished smile design can be exported on top of CADCAM or Ortho Software, sent to a dental lab using Planmeca Romexis Cloud service or printed out.

Use of Planmeca Romexis Smile Design software requires activation of a life time license or a monthly subscription.

This manual is valid for the Planmeca Romexis Smile Design software version 6.0. or later.

Read this manual carefully before using the system.

In addition to this manual you can watch Smile Design tutorial videos at: https://www.planmeca.com/software/tutorial-videos/

To access the videos directly click this button at the top right corner of the screen.

2 System requirements

The Planmeca Romexis Smile Design can be used with the following operating systems:

- Windows 10 (64 bit)
- Windows 8 & 8.1. (64 bit)
- Windows 7 (64 bit)
- Windows (64 bit)
- Mac OS X 10.11, 10.10 & 10.9.

Planmeca Romexis Smile Design conforms to Windows user interface standards. Mac OS operating systems are supported with certain limitations. User organization must take care of protecting the computer and the network by using upto- date virus and malware protection software and fire wall.

3 Windows installation

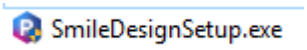
3.1 Fresh installation

Before you begin

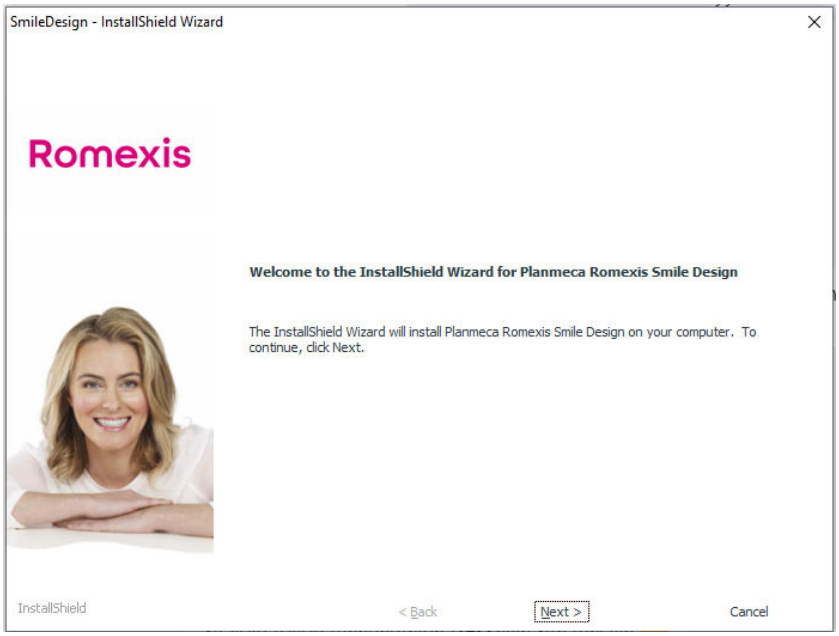
Before beginning the installation download the Planmeca Romexis installation package for Windows.

Steps

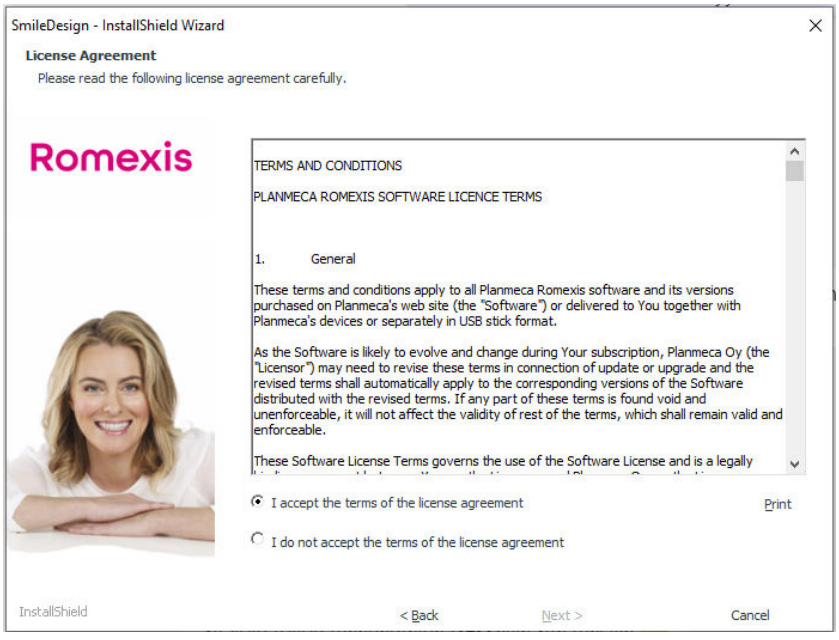
1. Double-click the **SmileDesignSetup.exe** to start the installer application.



2. Proceed through the installation by clicking the **Next** button.

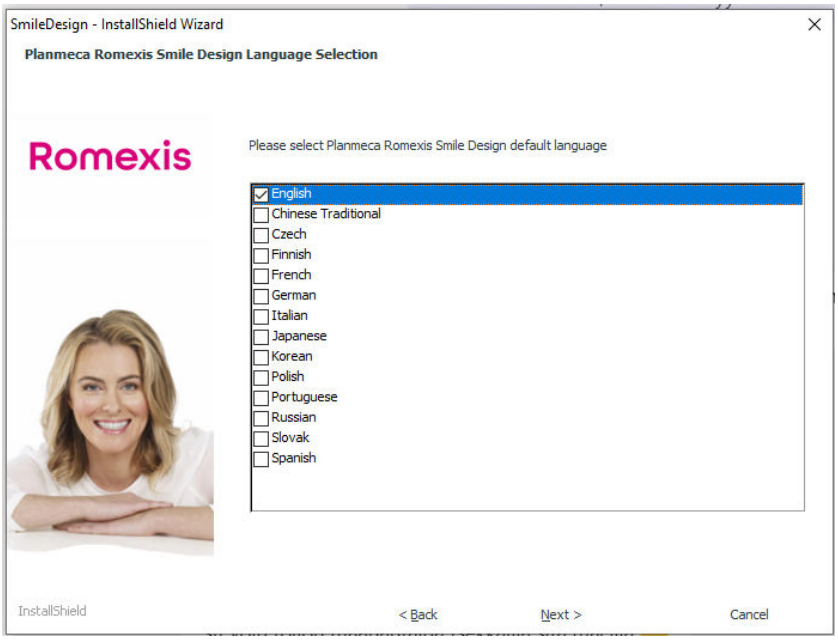


3. Accept the license agreement by selecting I accept... and clicking Next.



4. To install the software to the defaulf folder *C:\Program Files\Planmeca \SmileDesign*, click **Next**.
   - If needed, you can change the installation folder by clicking **Change**.

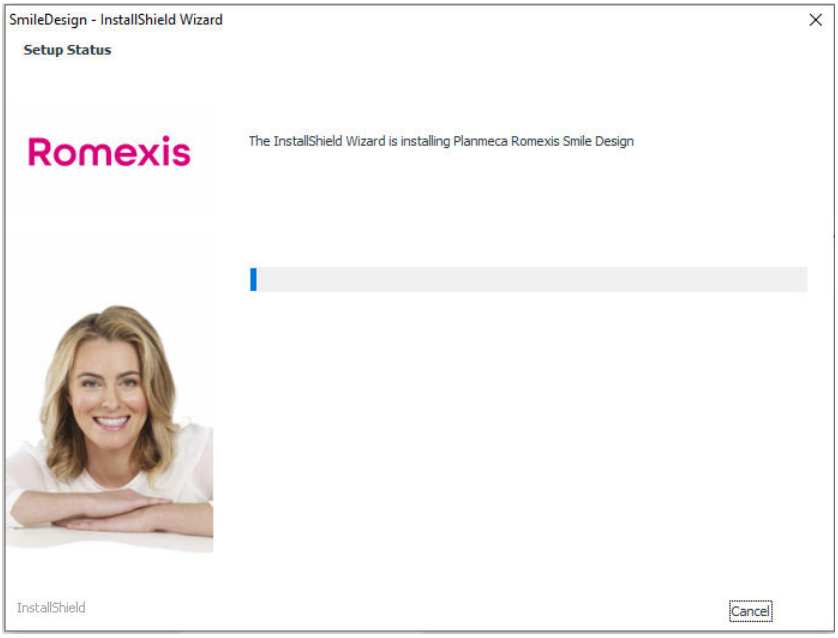
5. Select the default language to be used for Planmeca Romexis Smile design.



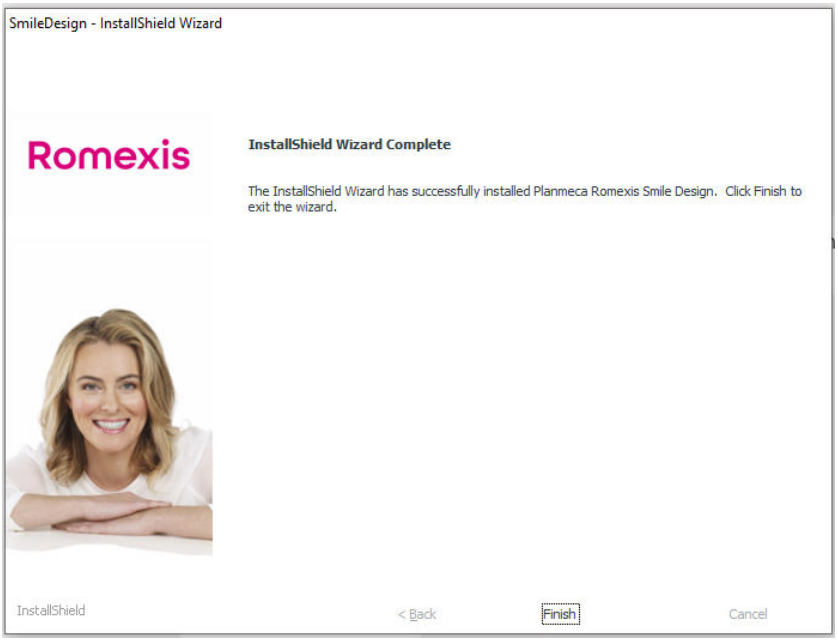
6. Select the default country to be used for Planmeca Romexis Smile design.

7. Click **Install**.

The installation starts and the installation progress bar appears.



8. When installation completes click **Finish**.



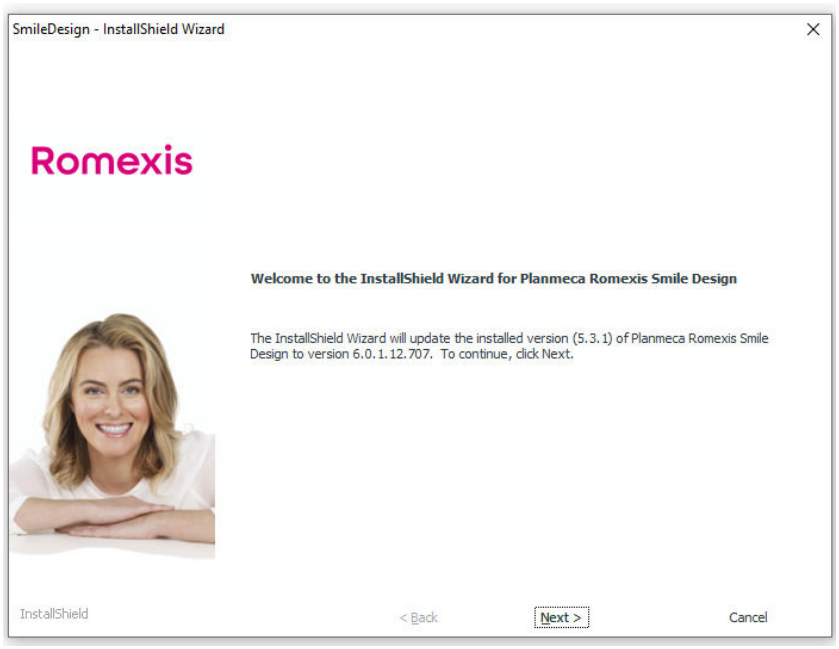
3.2 Update installation

About this task

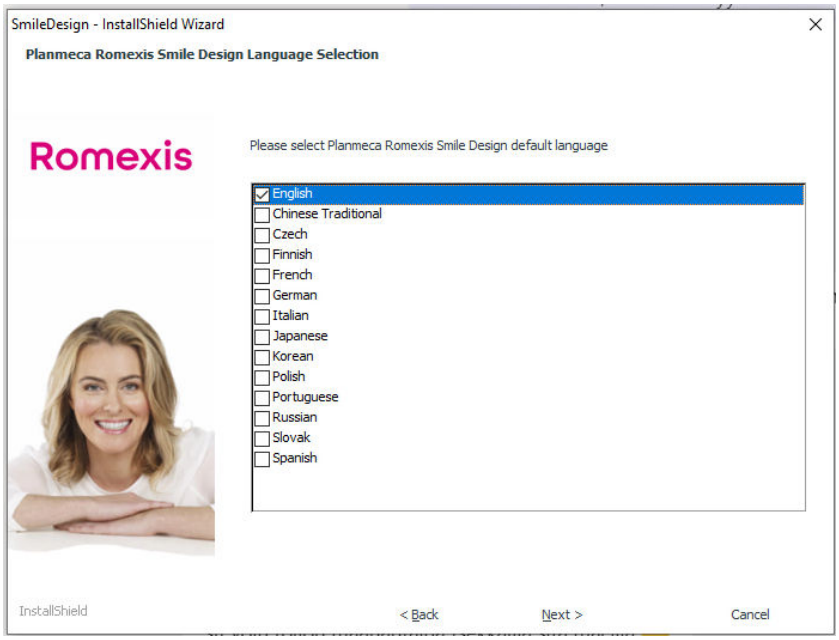
In an update installation the current software version is updated to the most recent one.

Steps

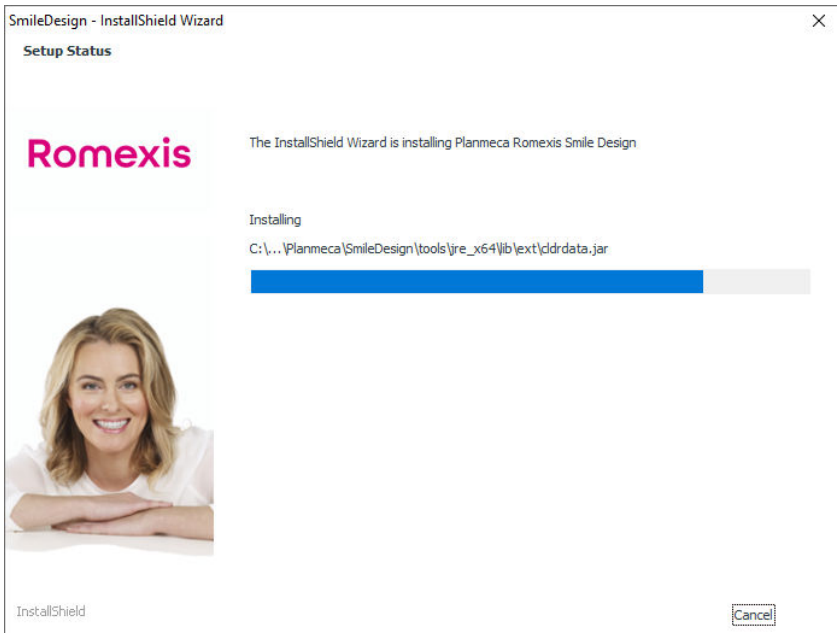
1. Click **Next**.



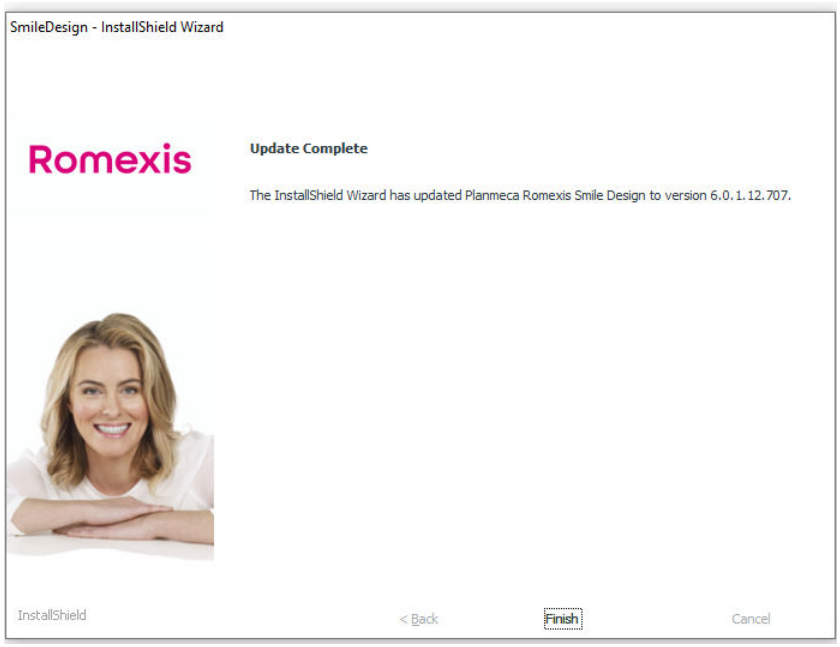
2. Select installation language.



3. Wait for the installation.



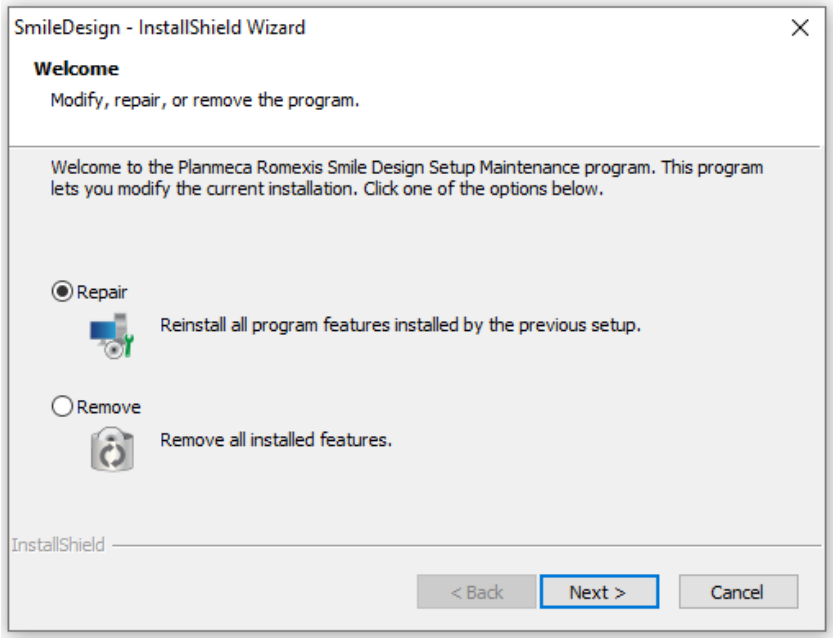
4. Complete the installation by clicking **Finish**.



3.3 Repairing current installation

About this task

Select the *Repair* option and click **Next**.



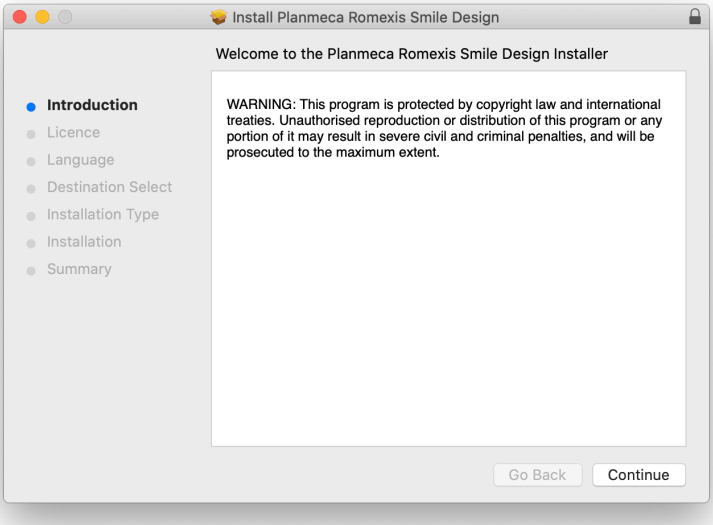
4 Mac OS installation

Before you begin

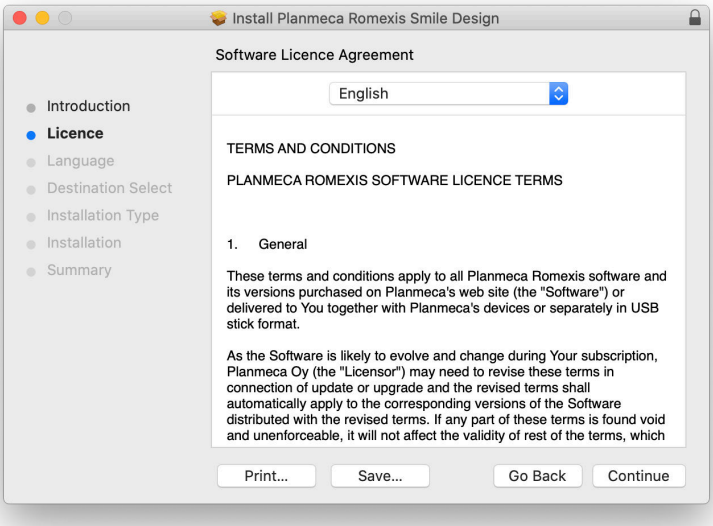
Before starting the installation download the Planmeca Romexis Smile Design installation package.

Steps

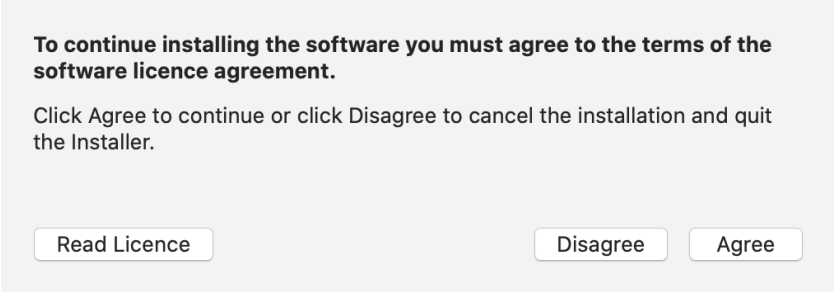
1. Start the installer application by double-clicking on the **Planmeca Romexis Smile Design.pkg**.



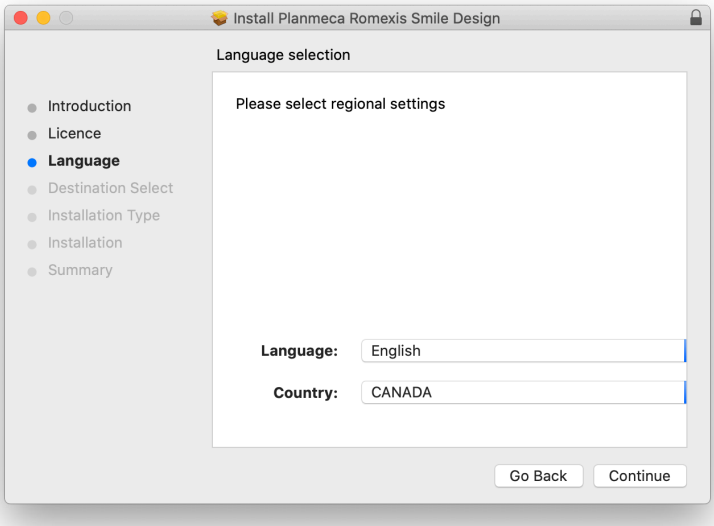
2. Click **Continue**.



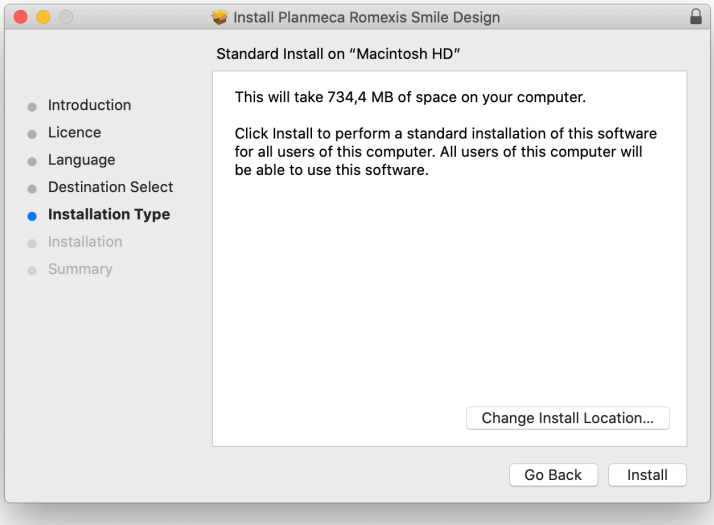
3. Click **Agree**.



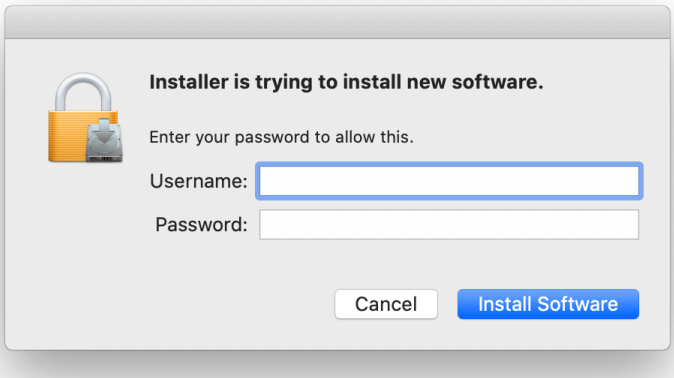
4. Select installation language and country and click **Continue**.



5. Click **Install**.



6. Enter your name and password and click **Install Software**.



5 Getting started with Planmeca Romexis Smile Design

Starting Planmeca Romexis Smile Desing application

Double-click this icon on your desktop or on Windows menu.

5.1 Activating Planmeca Romexis license

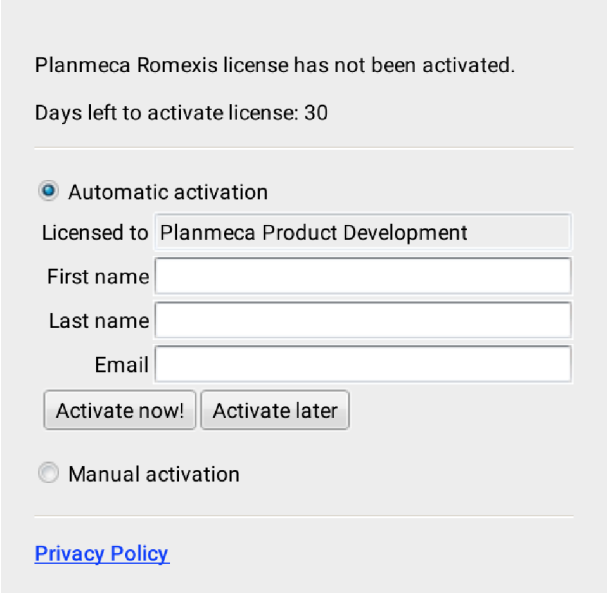
The functions in the Planmeca Romexis application are controlled by license and user rights. In order to use the application the license must be activated.

NOTE

Depending on the installed license and user rights the functions described in this manual can vary.

When Planmeca Romexis Client is started (until activated) after new and updated Planmeca Romexis server installations a dialog requesting for activation will pop up. A period of 30 days is given to activate the Planmeca Romexis license.

When connected to the Internet, activate the license by filling in user name and email address.

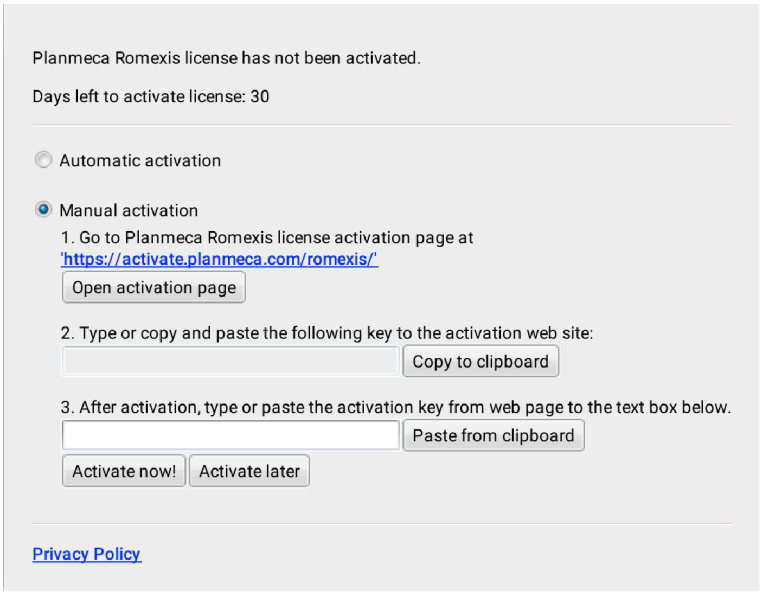


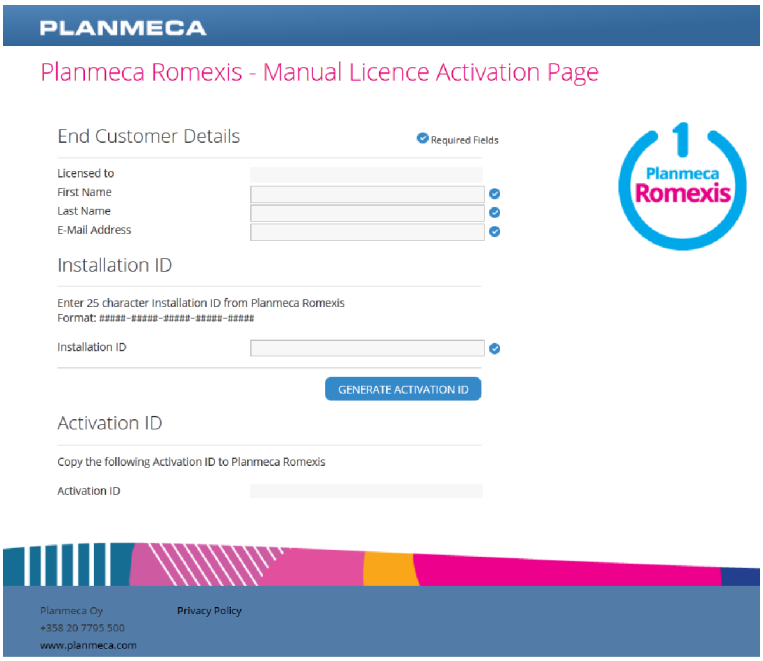
5.1.1 Manual activation

When there is no fixed Internet connection available the license can be manually activated using a mobile phone, for example. If manual activation is selected the following dialog appears. Follow the instructions in the dialog and web page.

NOTE

Use the end customer details, not the dealer's.



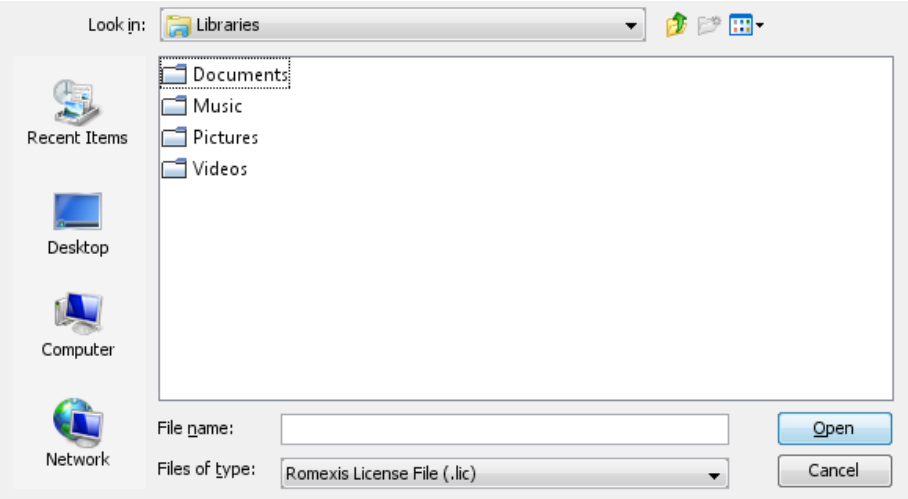


5.1.2 Installing license

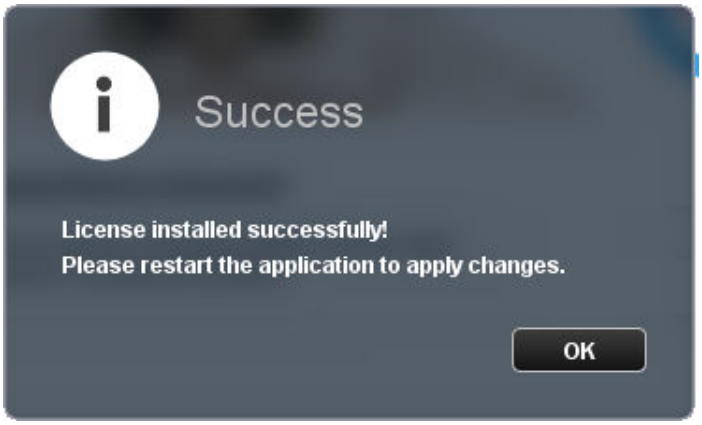
Steps

1. Click the **Install License** button.
2. A license installation dialogue opens and asks for the license file **romexis.lic**.

3. Browse to the license file and click **Open**.

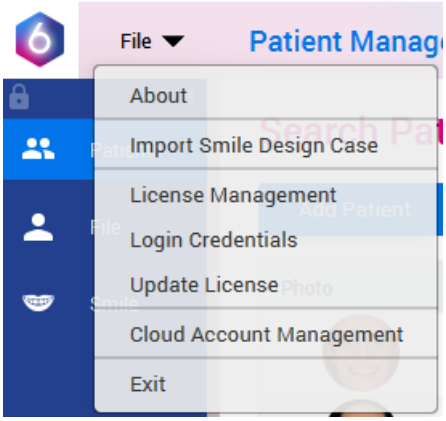


4. When the license has been successfully installed the following message appears. Click **OK**.

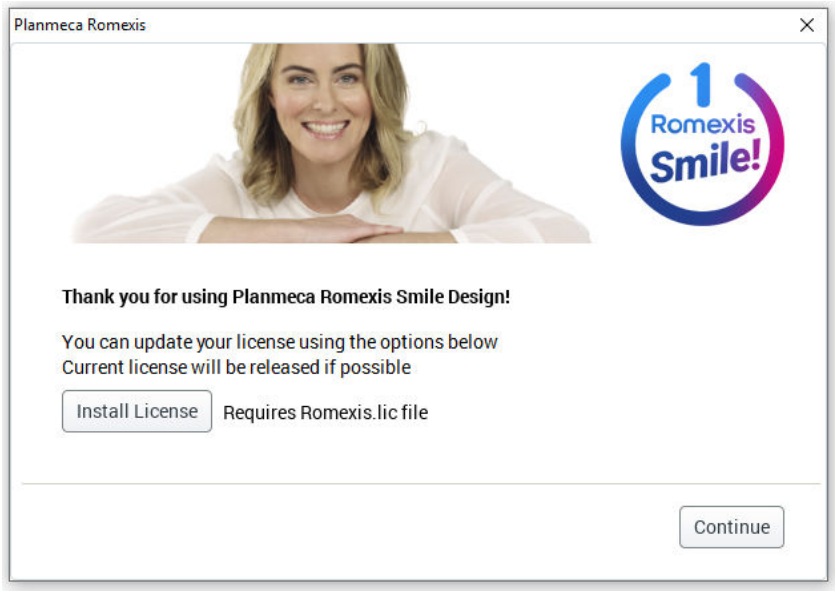


5.1.3 Updating license

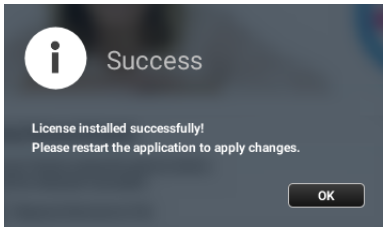
1. From the *File* menu select **Update License**.



2. Click **Install License** button and browse to the *.lic* file.



3. When the license has been successfully installed the following message appears.



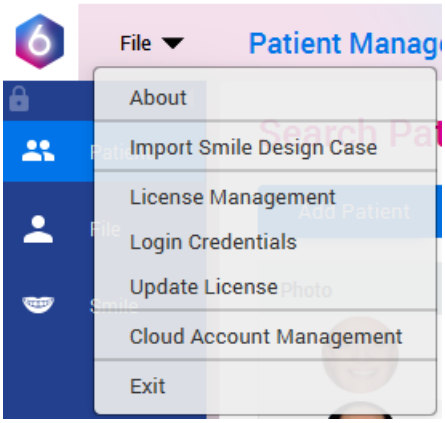
4. Click **OK**.

5.1.4 Managing license

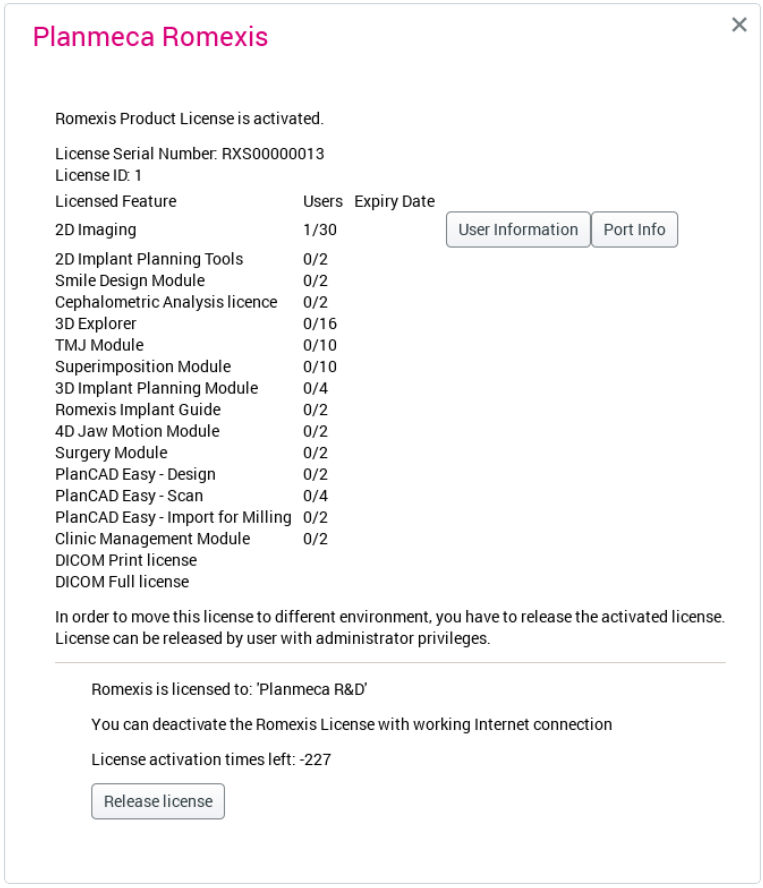
NOTE

Only users with administrator rights have access to license management.

To start managing license select **License management** from the *File* menu.



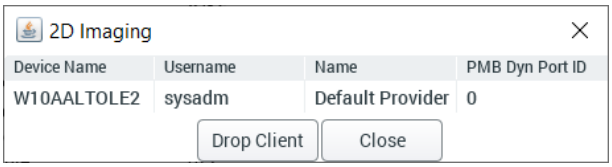
The License management window opens.



In the window you can view:

- the number of Romexis clients currently using the license
- expiry dates
- list of current users:

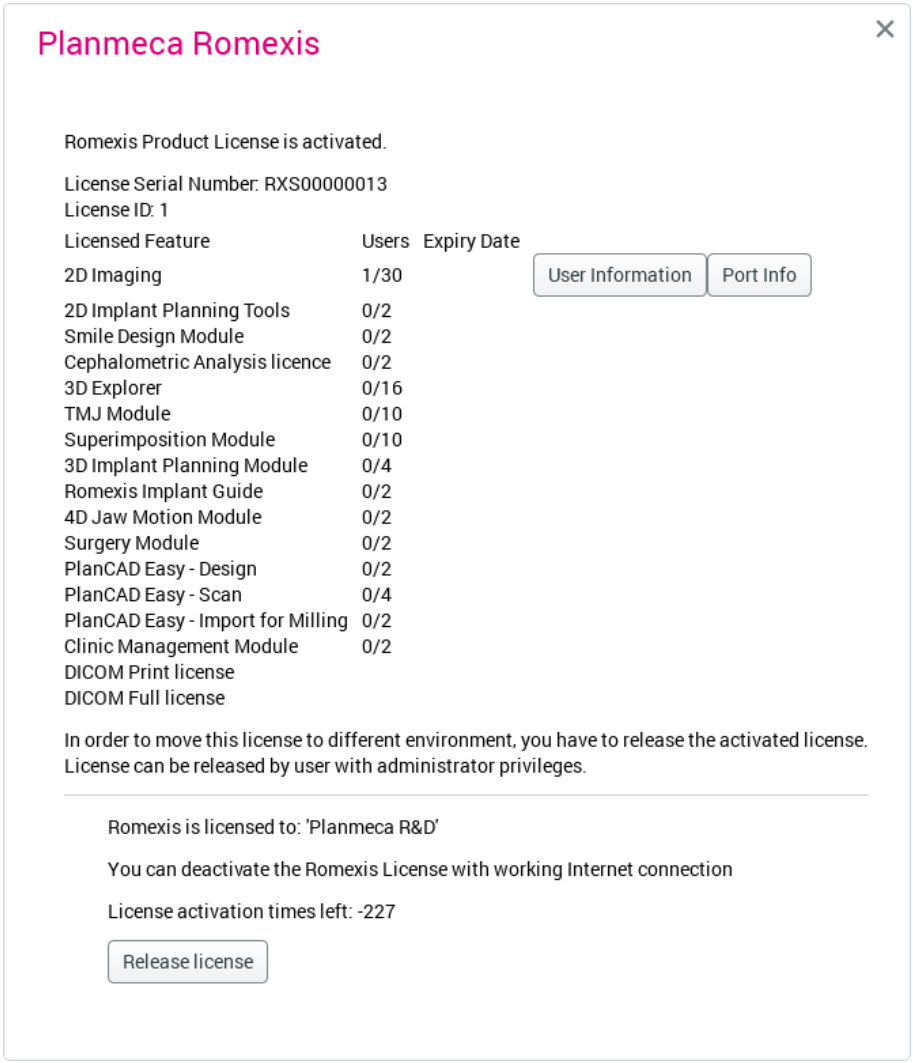
  To remove users from the list select the user you want to remove and click **Drop Client**.



- the software modules and features included in the license

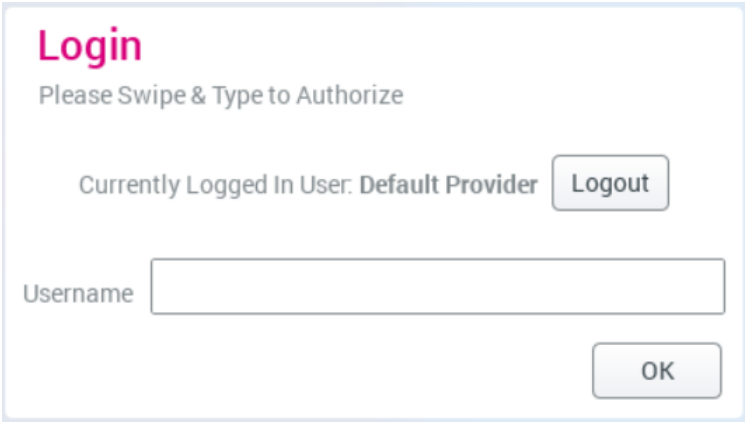
5.1.5 Transferring license to another installation

If you are transferring license from one Planmeca Romexis server installation to another it must first be released from the current workstation by selecting **Release license**.



5.2 Login

Enter user name and password and click **OK**.

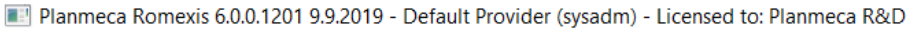


NOTE

The appearance of the *Login*window may differ depending on the settings configured by your administrator, see the Planmeca Romexis technical manual.

The Planmeca Romexis application opens in *Patients* module.

The name of the current user is shown in the title bar on top of the window.



To login as different user click this button.

NOTE

If you are trying to log in while another user is currently logged in, all patient records are closed but the current views will be stored and shown when the patient is next accessed by the user. This allows authorized personnel to view and modify patient status using their own credentials. If you log out no views will be stored and the patient data will be opened with default view when accessed next time.

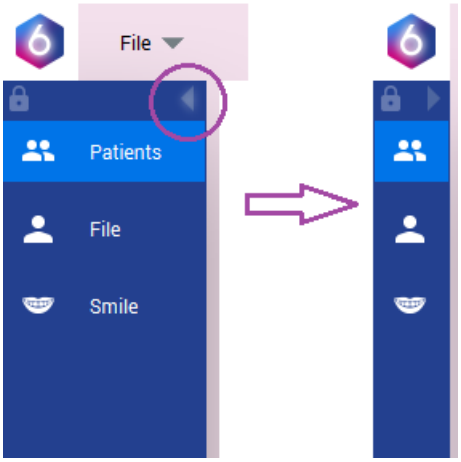
To logout click the **Logout** button. All currently opened files will be closed.

5.3 Settings and support

5.3.1 Show/hide module icons

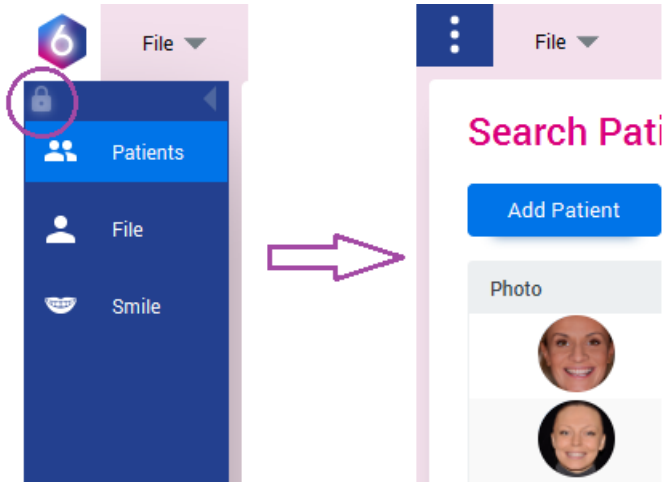
To hide/show the names of the modules, click the arrow on the top right corner.

The names of the modules are hidden while their icons stay visible.



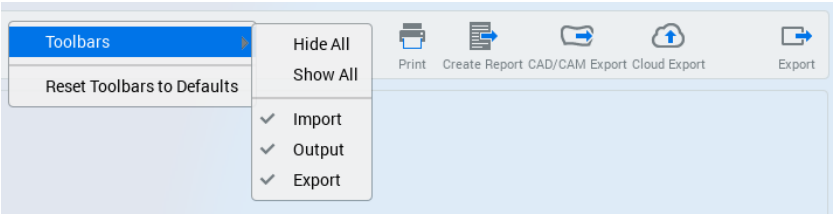
To hide both the names and the icons of the modules click the lock button.

The default settings can be modified in Planmeca Romexis Configuration application, see Planmeca Romexis Technical manual.

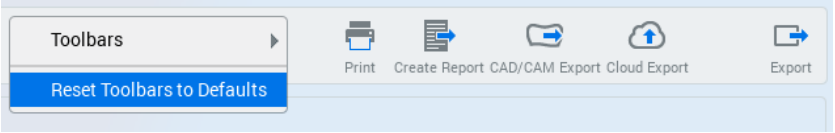


5.3.2 Customising toolbars

Hiding toolbars from the top toolbar area

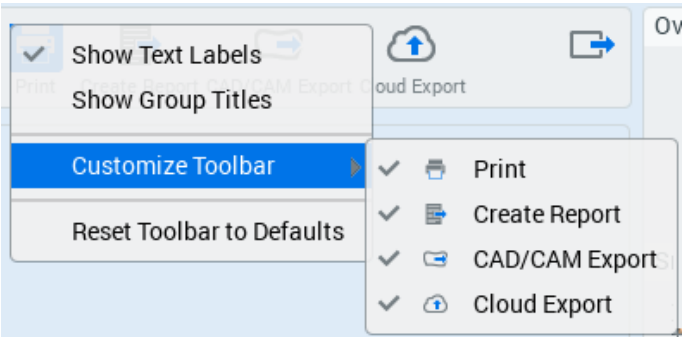


Right-click on an *empty area* on the toolbar and select the toolbars to hide.



To restore the default settings, click the **Reset Toolbars to Defaults**.

Hiding individual icons from the toolbars



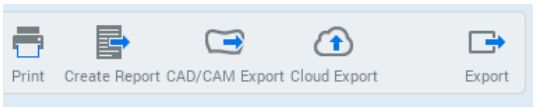
Right-click on the toolbar icon area, select **Customize Toolbar** and select the icon to hide.

Icons can be hidden from the top toolbar and from the side toolbar.

Adjusting toolbars

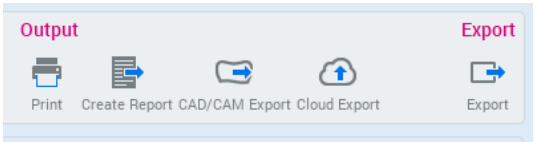
There are 3 different options for toolbar appearance:

- With text labels.



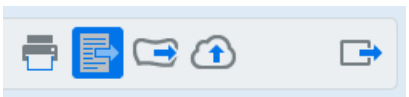
This is the default option in the imaging modules.

- With group titles.

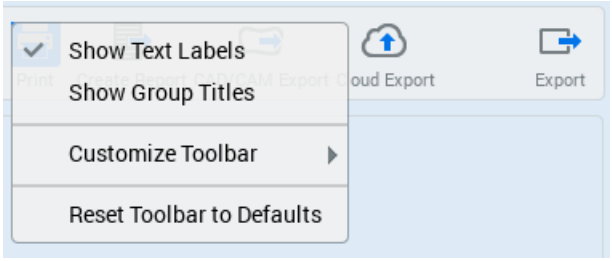


This is the default option in the *Patients* and *File* module.

- Without text labels and group titles.



To select the option, right-click on the toolbar button area and select the desired option.



5.3.3 Access tutorial videos and user's manual

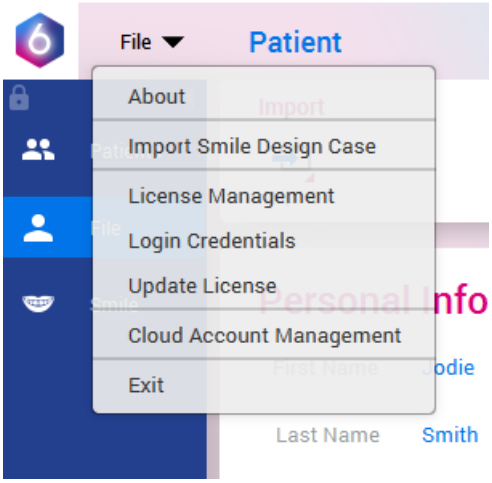
To watch Planmeca Romexis tutorial videos or open user's manual, in *Patients* module click the icons on the top right corner of the screen.

NOTE

For viewing the manual a pdf reader is required.

5.3.4 Check software version

Click **File** on the top left corner and select **About**.



The software version and other software related information is displayed.

Close the window by clicking **OK**.

5.3.5 Mouse and keyboard short cuts

The table below list the shorcuts you can use when working with Romexis.

On Mac operating systems **Ctrl** + mouse corresponds to right mouse click. For example, instead of **Ctrl** +**Shift** + mouse, use **Ctrl** +**Shift** +**fn** keys.

Alternatively the MacOS mouse commands can be changed to equivalent of those on Windows in MacOS *System Preferences*.

The table uses the following abreviations:

LMB Left mouse button

RMB Right mouse button

MMB Middle mouse button

GENERIC SHORTCUTS		
All text fields		
	Windows OS	**Mac OS**
Copy	Ctrl + C	Ctrl + C
Paste	Ctrl + V	Ctrl + V
Cut	Ctrl + X	Ctrl + X
OK / Cancel & Yes / No prompt dialogs		
OK	Enter	Enter
Cancel	Esc	Esc
Lists & scrollable tables		
Move	Cursor keys & PageUp / PageDown	Cursor keys & PageUp / PageDown
Annotations		
Delete selected annotation	Delete (or Del)	Fn + Backspace

6 Starting Planmeca Romexis Smile Design application

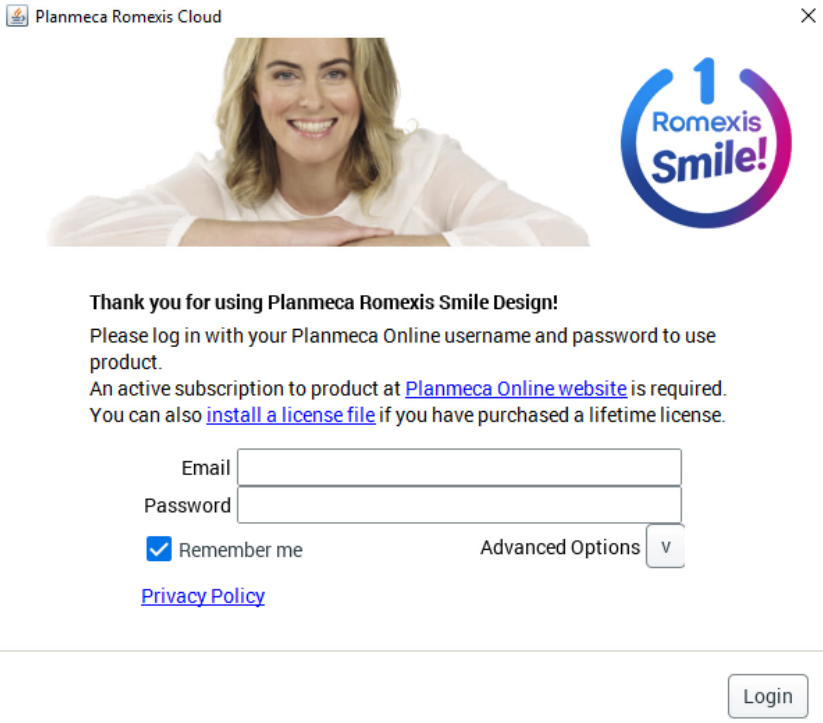
Steps

1. Double-click this icon on your desktop or on Windows menu.

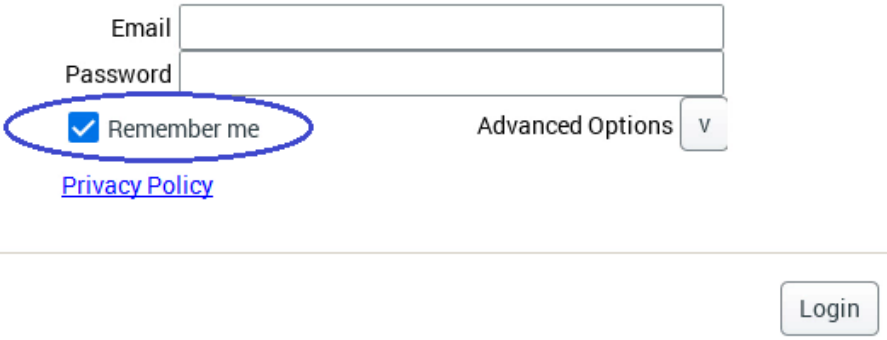
Smile Design

App

2. Enter your username and password from Planmeca Online.

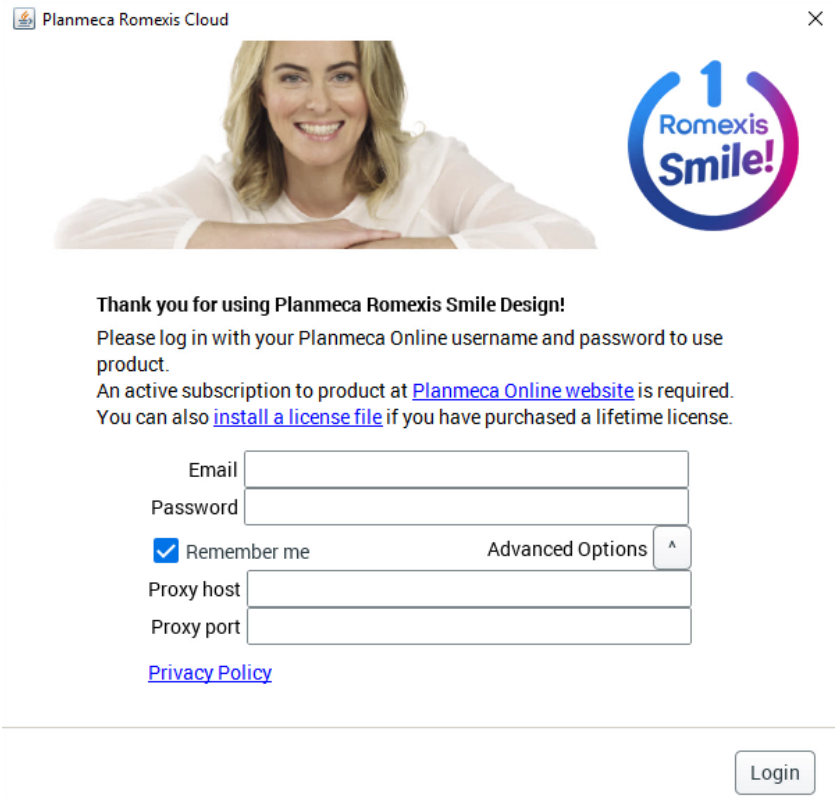


To avoid seeing this window every time you open the software select *Remember me*.



Note that the window can still be displayed later if there's no connection to Internet or your monthly subscription is not valid.

If you need to set proxy settings, click on **Advanced Options**.

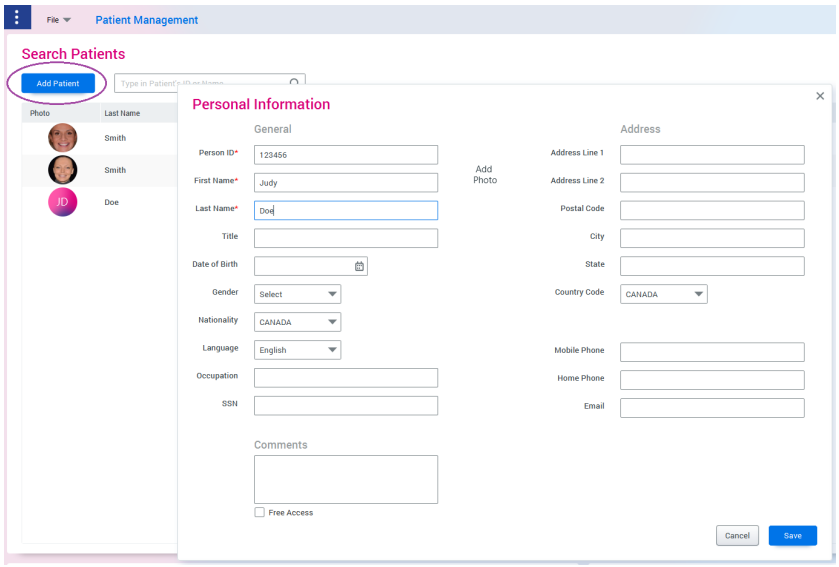


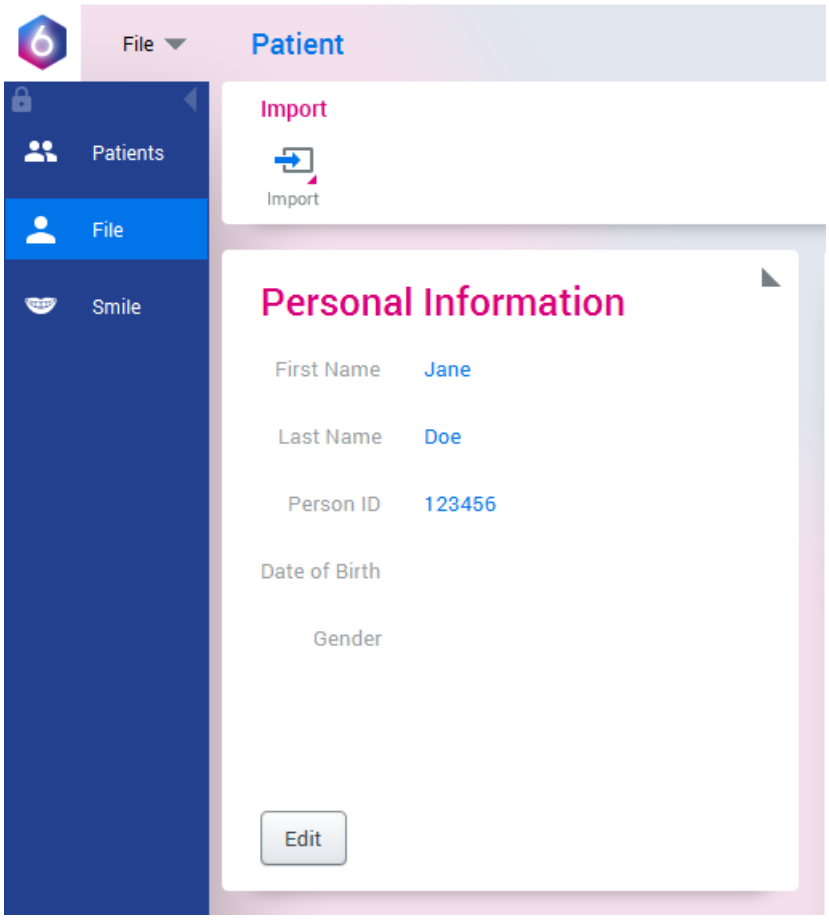
3. Click **Login**.

7 Patients module

7.1 Adding patients

Click **Add Patient** button, enter patient data (person ID, first name and last name are obligatory) and click **Save**.



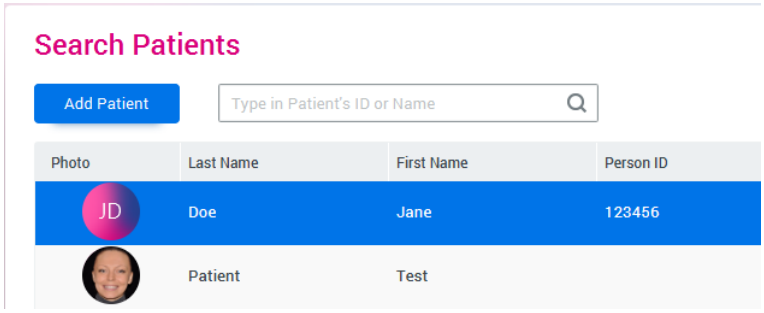


The added patient opens in *File* module.

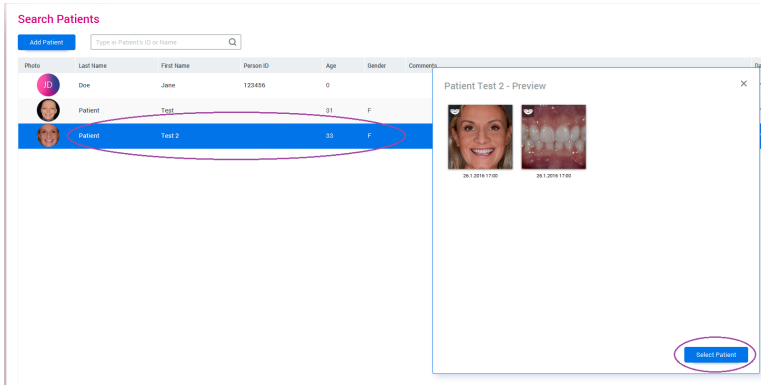
7.2 Opening patients

You can open patients by:

- double-clicking the patient name on patient list

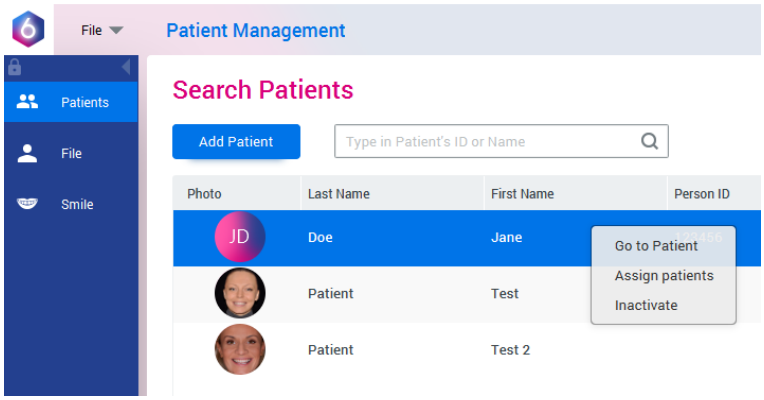


- selecting the patient and clicking **Select patient** in the preview dialog.



- right-clicking on patient and selecting **Go to patient**.

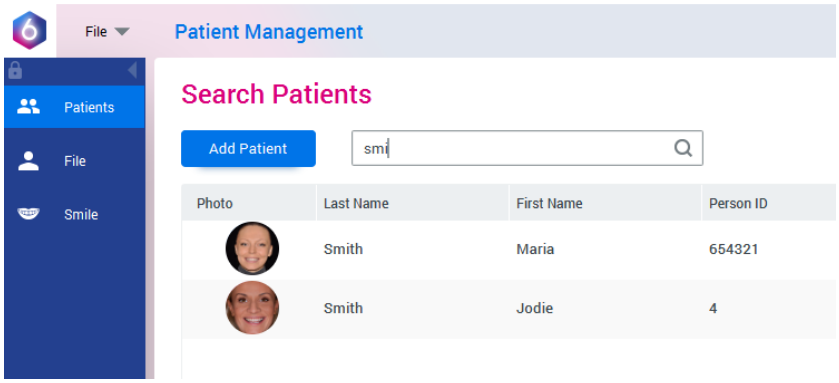
  The patient opens in the *File* module (see section "File module" on page 34).



7.3 Searching patients

Enter name or patient ID into search field.

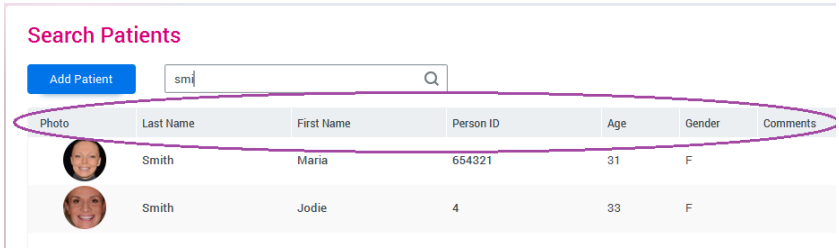
The software automatically returns patients corresponding to the typed entry.



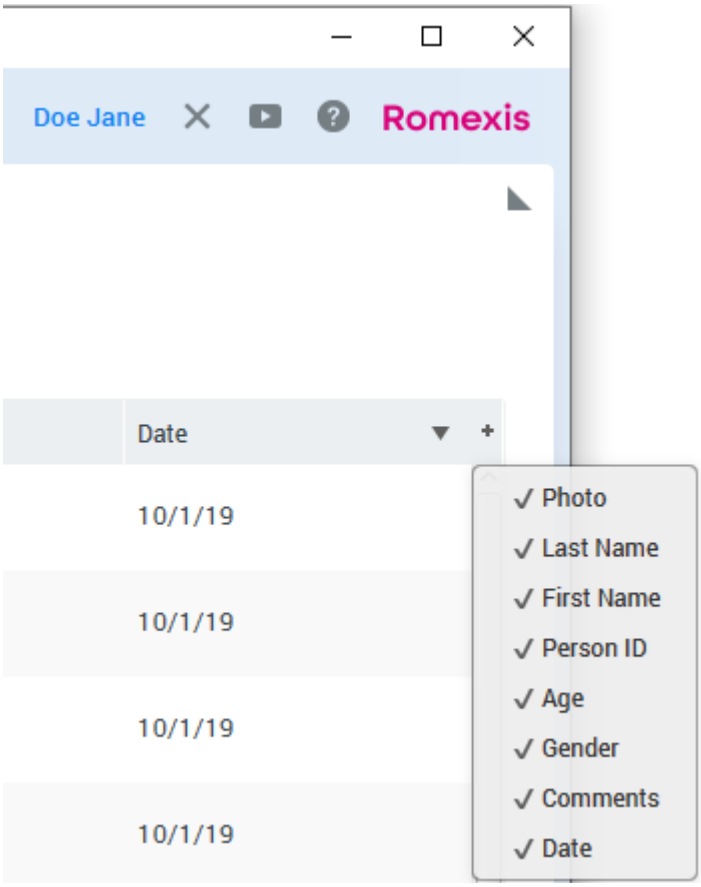
NOTE

Auto Find Patients **(default setting) must be enabled in Romexis Configuration application. With large databases the setting can be disabled and Find must be clicked for the search to start.**

To sort the search results by specific information, click on the columns.



To display / hide columns from search view, click the **+** button on the top right corner of the columns and select the colums.

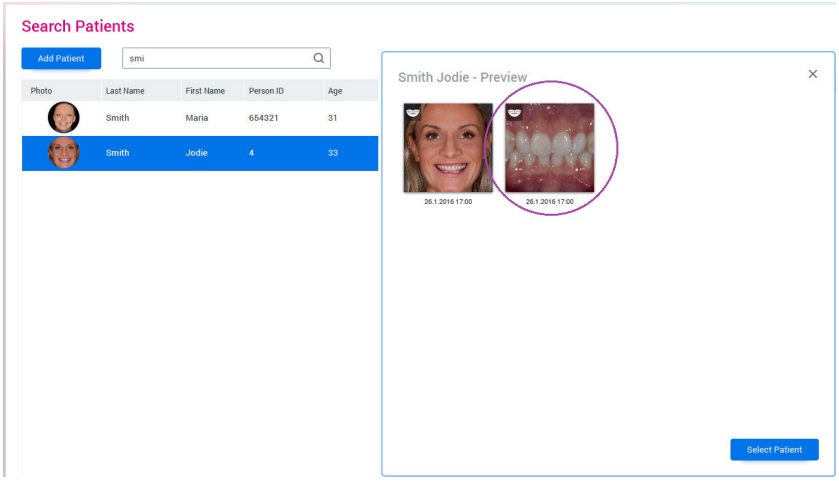


7.4 Image preview

Click on the patient on the list to view a preview of all patient's images.

The images are sorted by acquisition date.

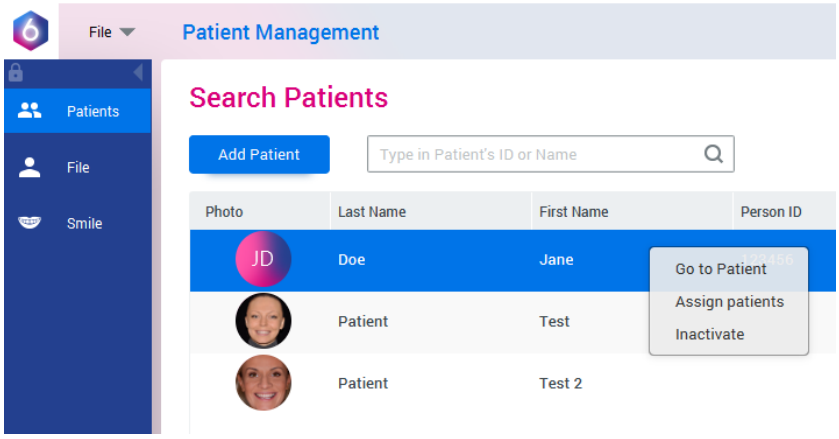
Click the thumbnail of the image you want to open.



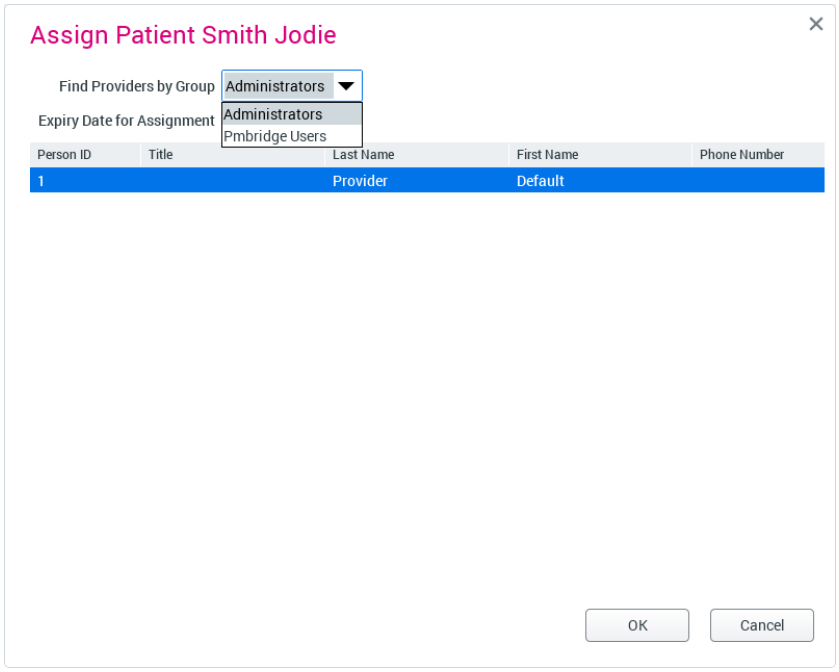
The image opens automatically in the right Planmeca Romexis module.

7.5 Assign patient to user

Right-click on patient and select **Assign patient** to assign the patient to a certain user.



Select the user to whom assign the patient and click **OK**.

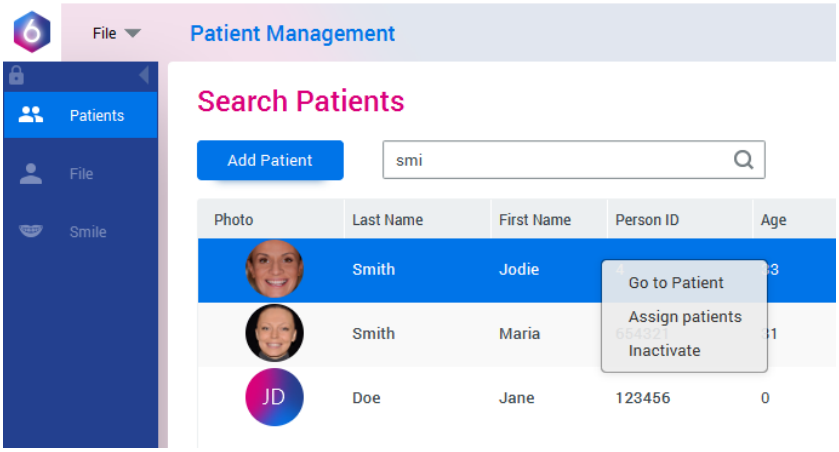


7.6 Inactivate patient

Click **Inactivate** to inactivate patient (and to no longer show the patient on the list).

NOTE

The patient is still stored in the image folder on the hard drive. To permanently delete the patient, see section "Reactivate and empty trash" in Planmeca Romexis technical manual.



Confirm by clicking **Yes.**

To cancel, select No.

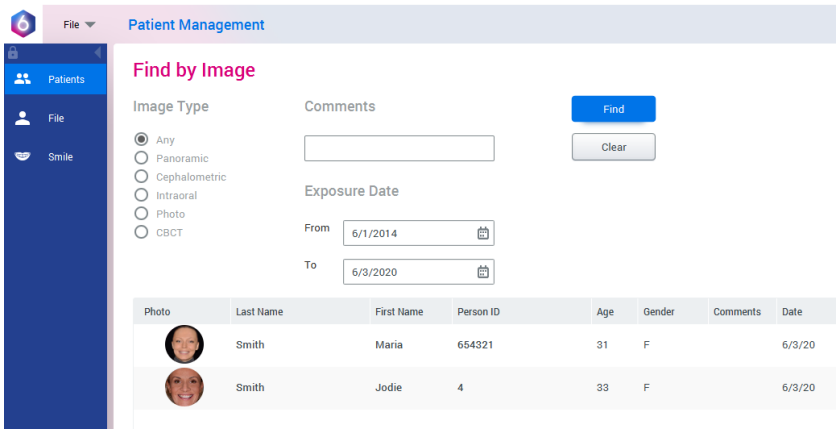
7.7 Find patient by image

Patients can be searched by image comment, image type, and date.

Click **Find by image** in *Patients* module.

Enter or select the desired search term and click **Find**. Use asterisk (*) as wildcard to find matches within comments.

The patients matching the criteria appear in the list. You can open the found patient by clicking.

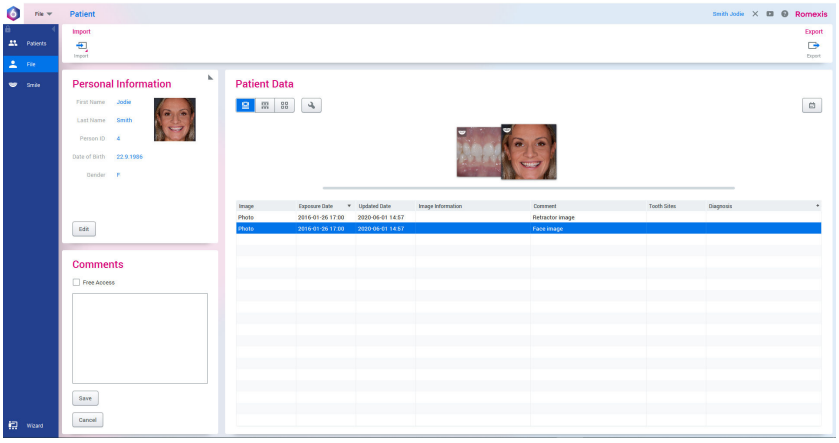


8 File module

In the *File* module you can:

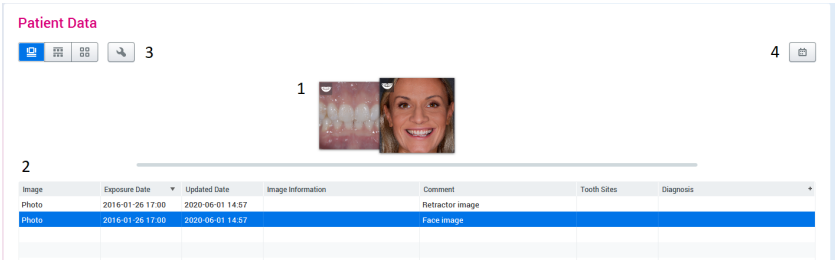
- Import images for the current patient
- Start image capture and scanning
- Export patient files and images
- Browse all types of images in single browser
- Open images
- Sort images by tooth number, date and type
- Set comments on images
- Edit patient's personal information

These functions are described in detail in the following sections.



8.1 Browsing patient files

- Click the thumbnails **(1)** or the images on the list **(2)** to browse images and attachments.
- Click these icons **(3)**to select browsing mode.
- Click the date icon **(4)** to sort images by date



File tags explanation

Smile design photo, image imported for smile design, smile design case

Intraoral scan

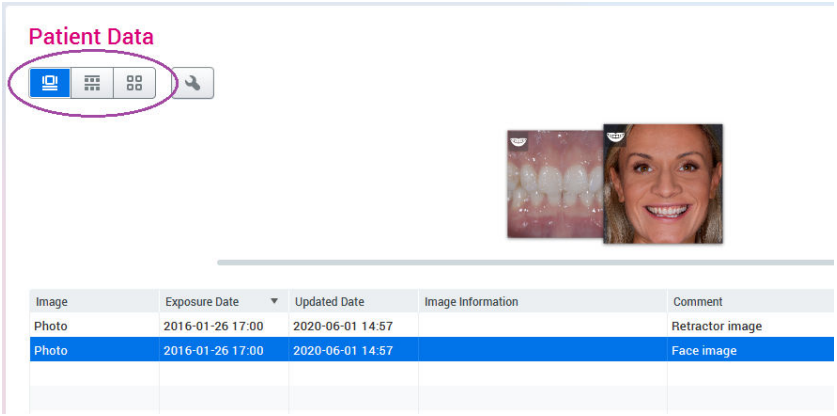
Image added to study

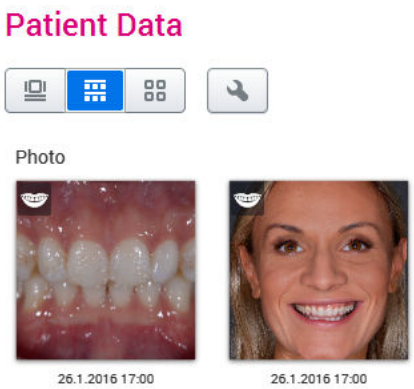
Image with diagnosis

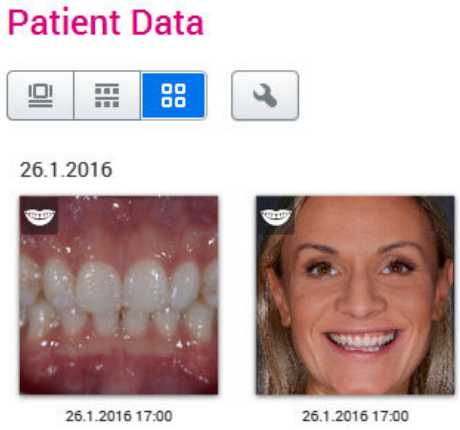
Diagnosis can be viewed in Image properties dialog

8.1.1 Switching browsing mode

Click the icons under *Patient Data*, to switch browsing modes.



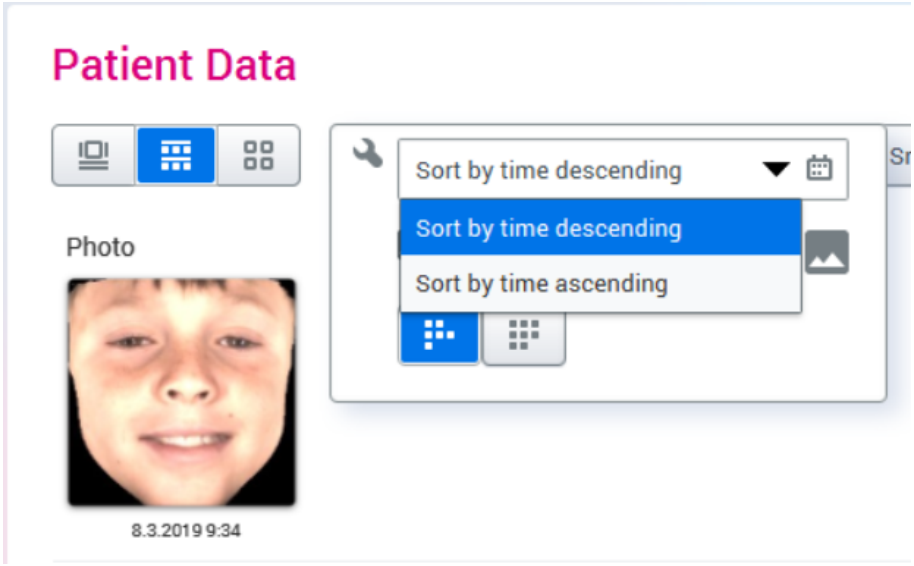




8.1.2 Sorting images

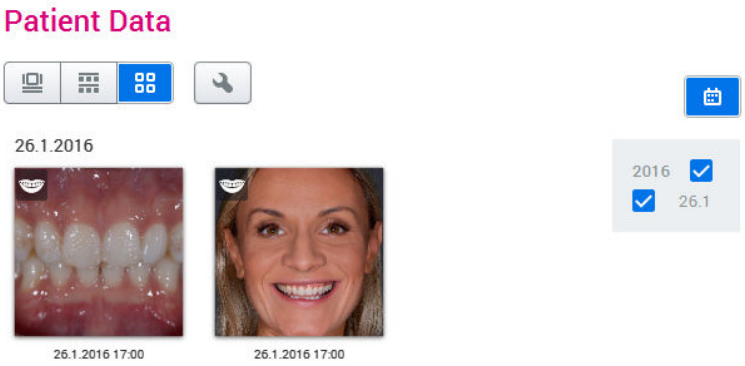
Sorting by time

Click the wrench icon to sort the time of exposure by descending or ascendig order.



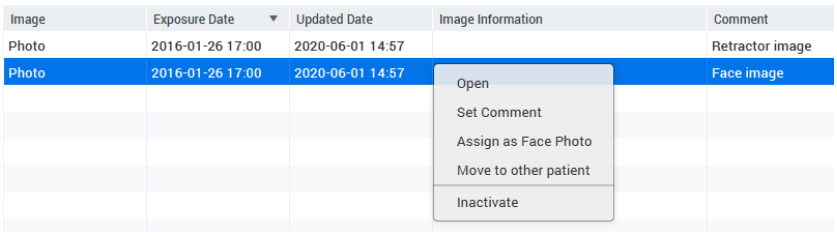
Sorting by date

Check/uncheck the date boxes on the right side of the sceen.



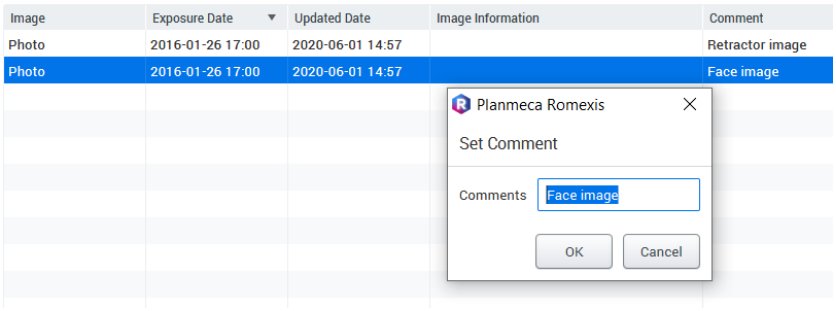
8.1.3 Setting comments on images

1. Right-click the image on the list and select **Set Comment**.



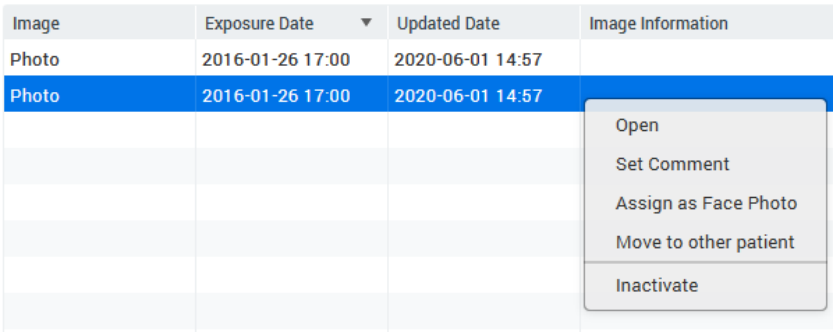
2. Enter the comment and click **OK**.

The comment appears on the image list

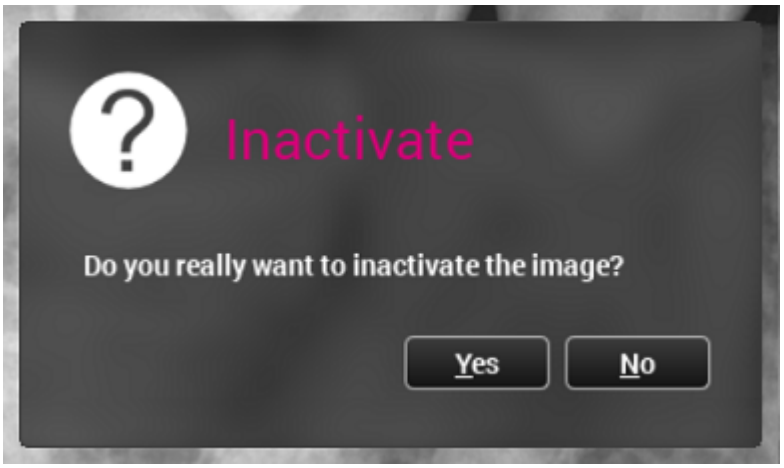


8.1.4 Inactivating images

1. Right-click on the image on the list.
2. Select **Inactivate**.



3. If you select **Yes** the image is deleted but it is still stored in Romexis database.



TIP

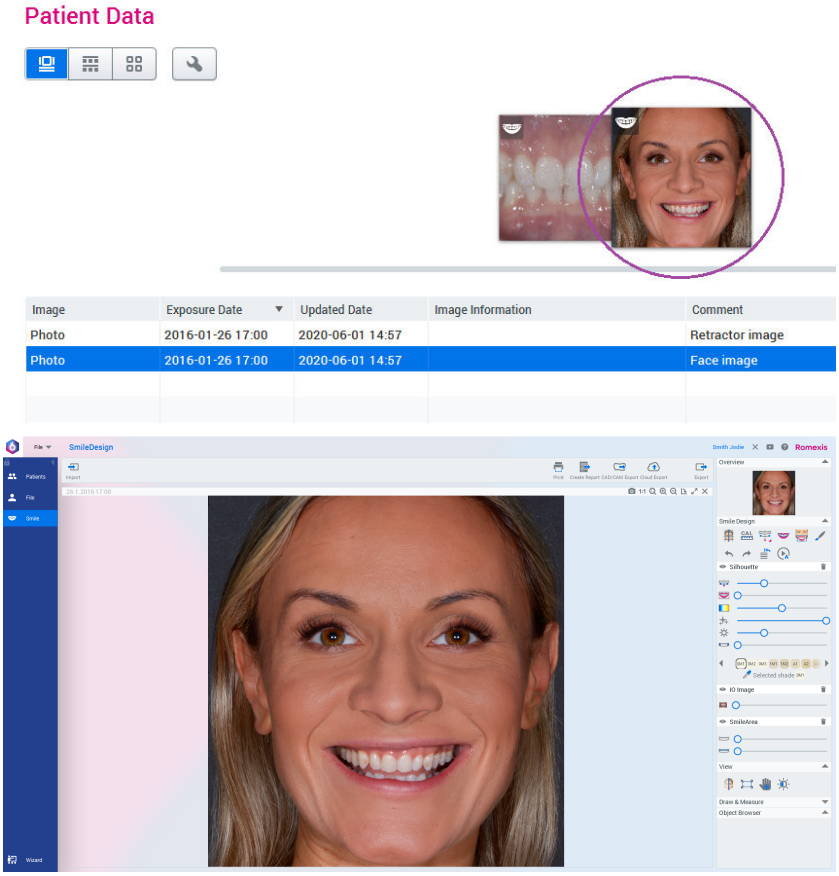
To permanently delete images, see section "Reactivate and empty trash" in Planmeca Romexis technical manual.

8.2 Opening images

Images opened from *File* module open direcly in the imaging module by their image type.

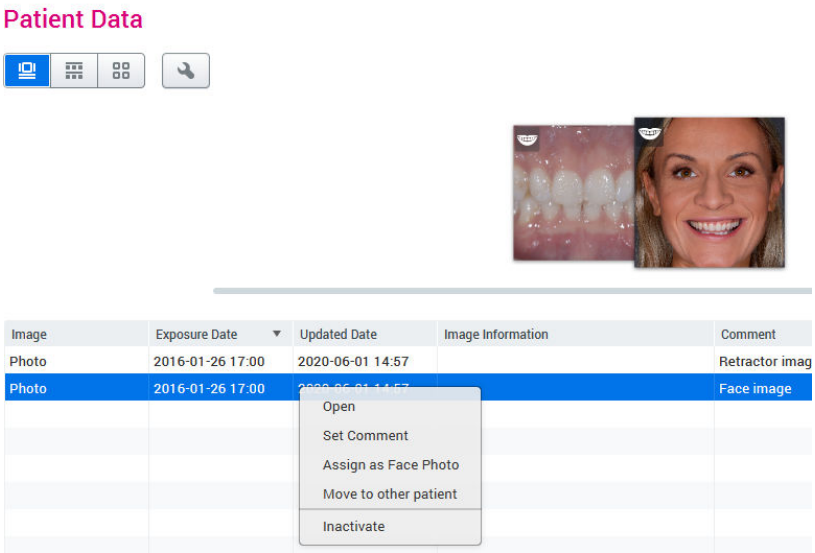
Opening by double-clicking

Double-click the tumbnail or the image/study on the list.



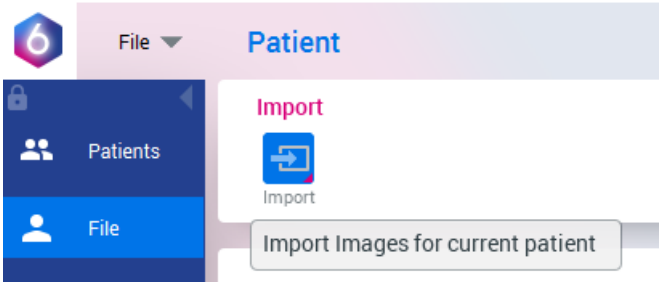
Opening via right-clicking

Select **Open** to open the files in their own module.



8.3 Importing images for current patient

1. Click the **Import** icon.



2. Select the file(s) to import.

8.4 Exporting files

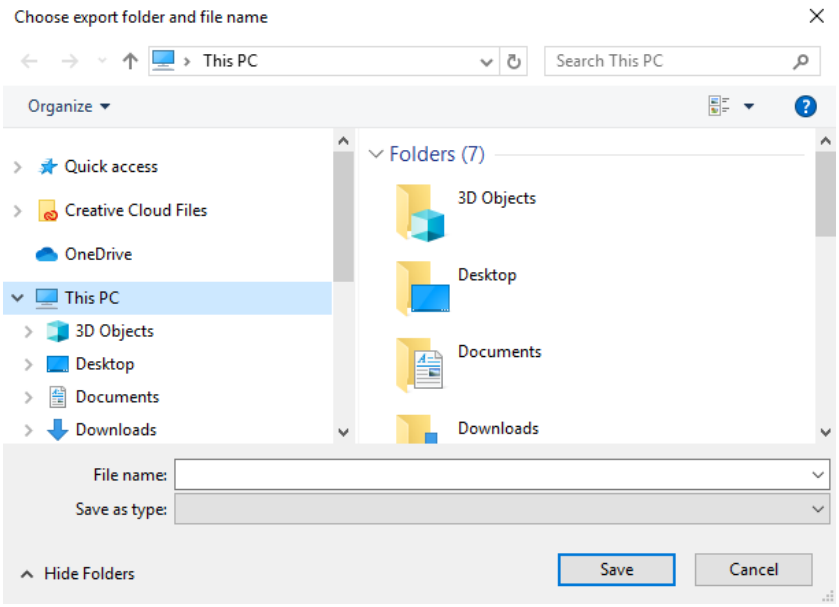
Images from *File* module are exported in original file format.

Exporting currently selected files

1. Select the image(s) to export.
2. Click **Export** on the top right corner of the window.

3. Browse to the folder where to export the file.

   Enter file name, select file type and click **Save**.



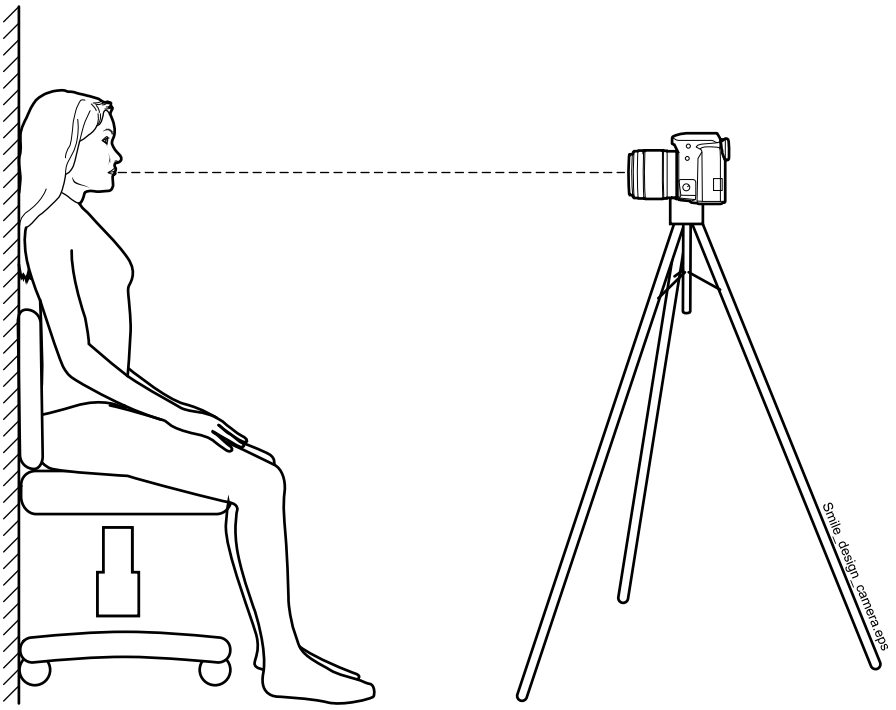
9 Capturing images for smile design

A frontal smile photograph is needed for digital smile design. If the gum line is not visible in the smile photograph a retractor image is alsorecommended.

The patient should be positioned near the wall or imaging background to eliminate shadows.

Capture images from the same angle from the front of the patient so that the camera is perpendicular to the patient's face. The use of a camera stand is strongly recommended. Direct the face of the patient straight towards the camera so that both ears remain equally visible.

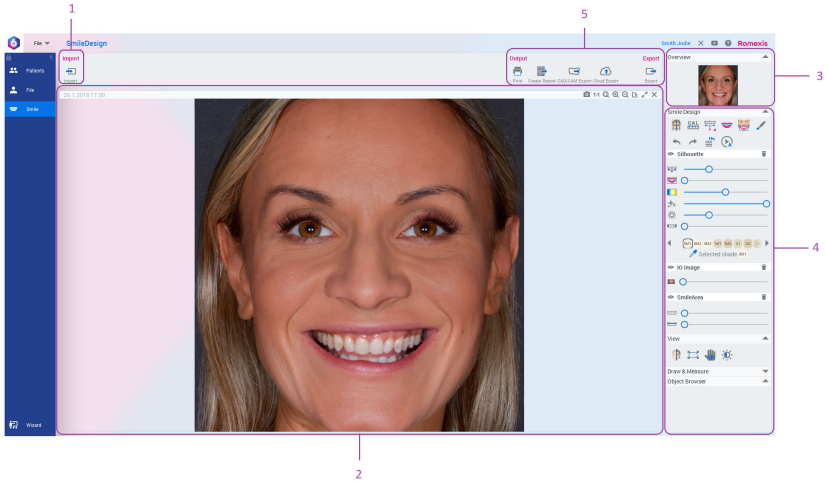
The distance between the camera and the patient depends on the camera and objective used – it is recommended to capture photographs including the whole face.



Save images in JPG, PNG, TIFF or BMP format.

10 Smile Design module

The tools in the module are presented in the following.



1.Import image

2. Design area and window tools

3. Overview image

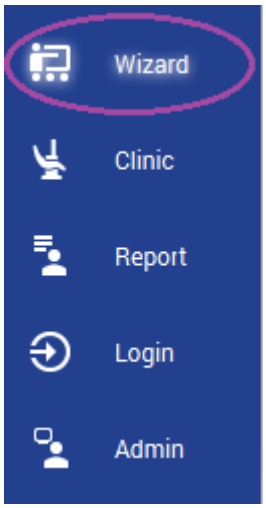
4. Smile design tools (Teeth shade, simulation, viewing, drawing & measurement tools)

5. Export tools

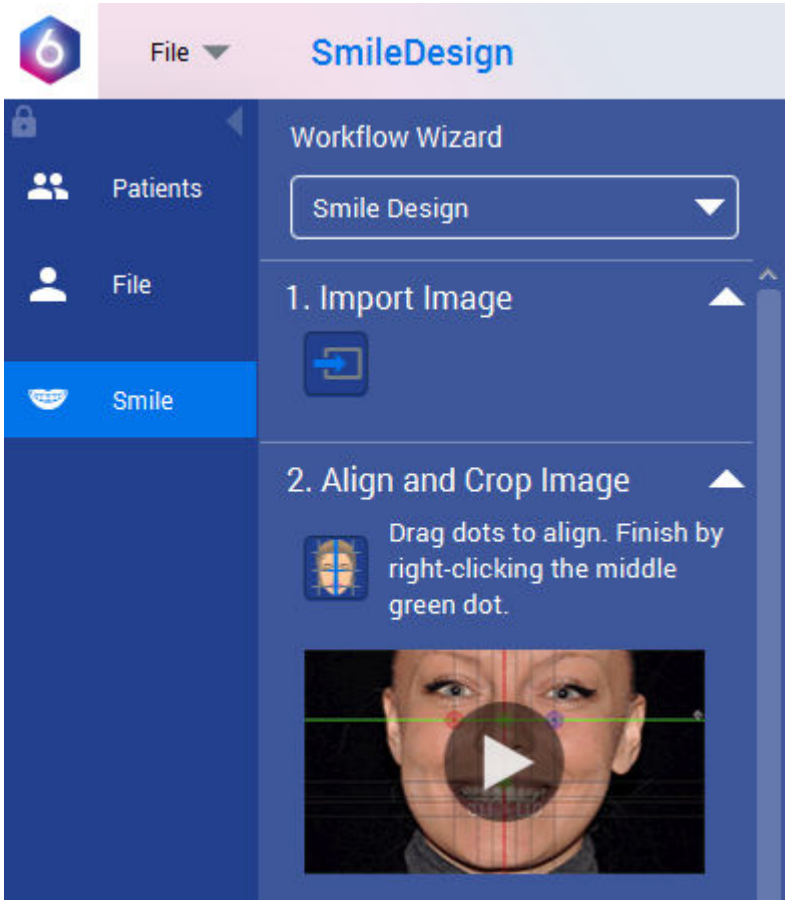
The different functions of these user interface elements are explained in detail in the following sections.

11 Smile design workflow

1. Click **Wizard** at the bottom left of the screen.



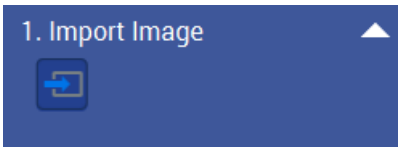
2. Start smile design by selecting Smile Design from the *Workflow Wizard* menu.



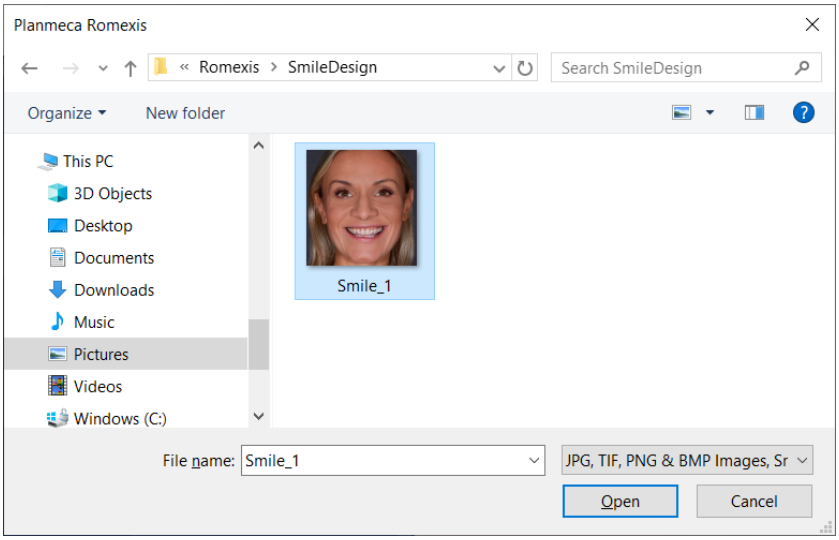
The following sections describe the different smile design steps and use of smile design tools.

11.1 Import smile image

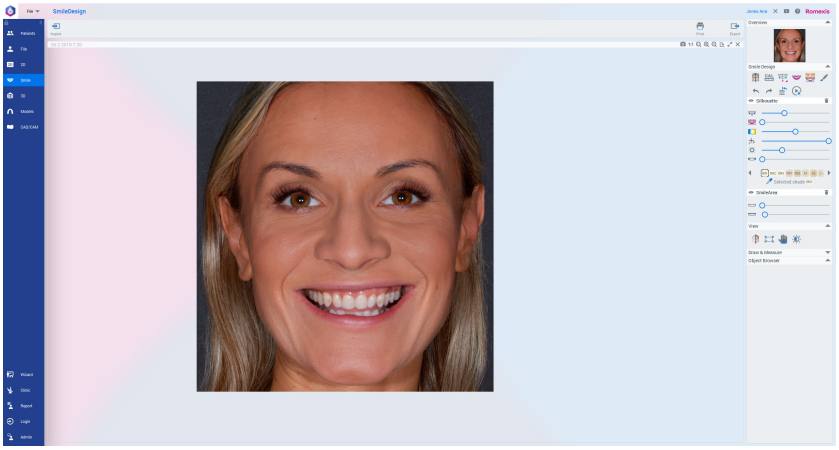
1. Click **Import** on the Smile design wizard or on the top left corner of the screen.



2. Browse to the folder where the patient smile images are stored, select the image and click **Open**.



The image opens in Smile design module.

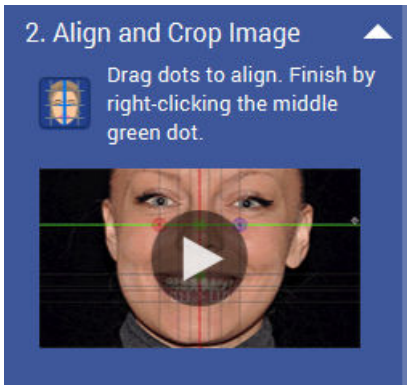


11.2 Align and crop smile image

Align the smile image using any two points in the image, e.g. pupils as follows:

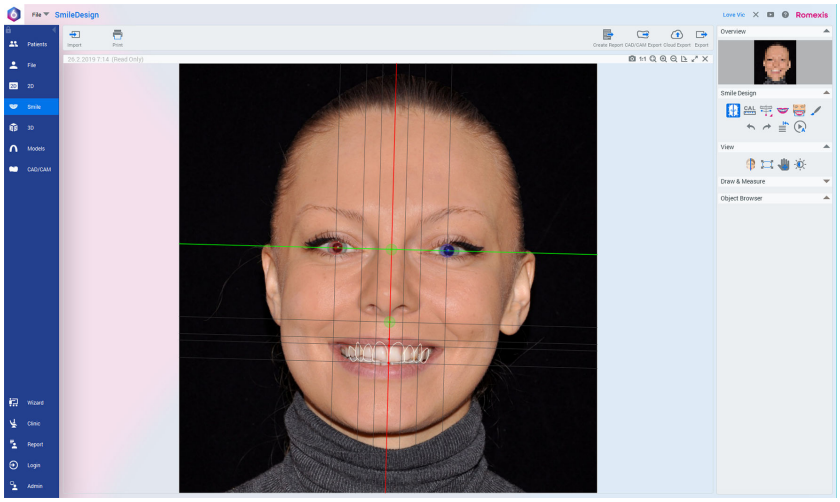
1. Click **Align and crop** button in the wizard or under *Smile Design* tools on the the right side of the screen.

To view the instructional video, click the Play button on the wizard.



2. Position the red and blue control points by dragging or double-clicking.
3. Double-click the green control point in the middle to align.
4. Drag the borders of the image for cropping.
5. Start dragging the lower green dot until the three horizontal grid lines below the dot are aligned as follows:
   - The highest line aligned with the upper border of the upper lip,
   - The middle line with the lower border of the upper lip,
   - The lowest line with the upper border of the lower lip.

   The silhouette is now correctly positioned.



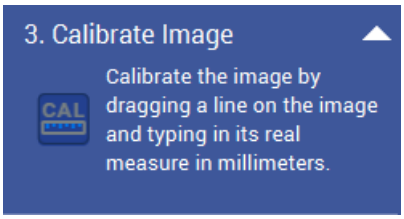
6. Finish by double right-clicking on the image.

11.3 Image calibration

The image can be calibrated e.g. using the width or height of the object selected for calibration. The calibration affects the teeth dimensions visualized in the teeth silhouette and measurements made using the measuring tools.

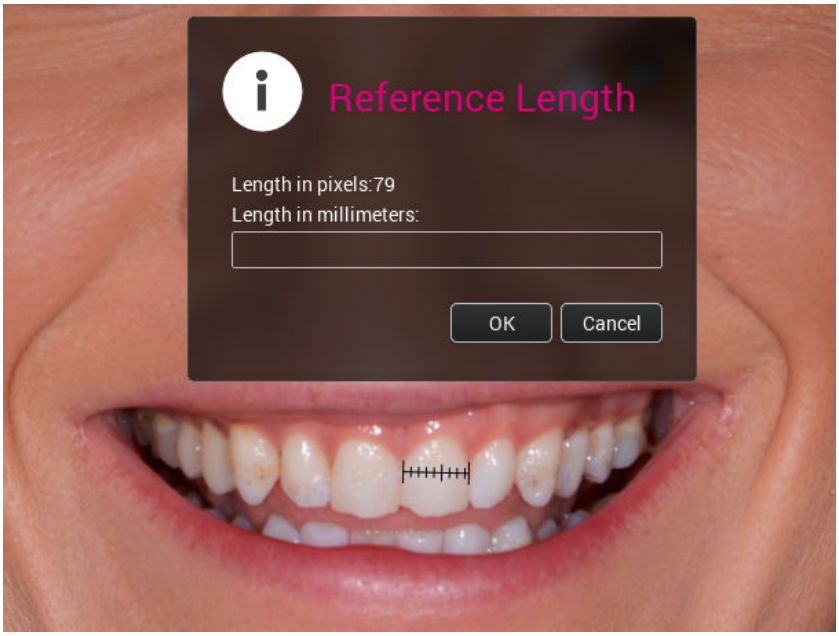
In the following instructions the calibration is done by measuring the incisor width.

1. Click **Calibrate** in the wizard or on the right side in *Smile Design* group.



2. Measure the incisor by dragging with the left mouse button from the left edge to the right edge of the incisor.

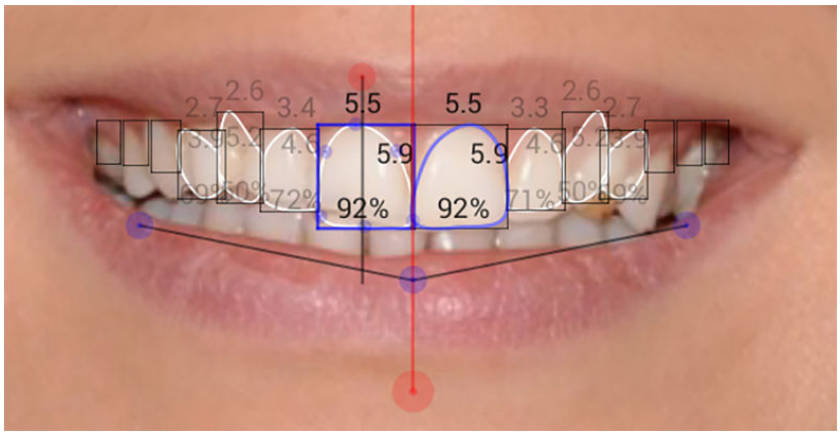
   Enter the width of the physical incisor in millimetres and click **OK**.



11.4 Select and position teeth silhouette

1. Add a teeth silhouette on image by clicking the **Teeth** button on the wizard or on the toolbar on the right.

The default silhouette opens on top of the smile image.



2. Position the silhouette on teeth by dragging the blue dot in the middle.

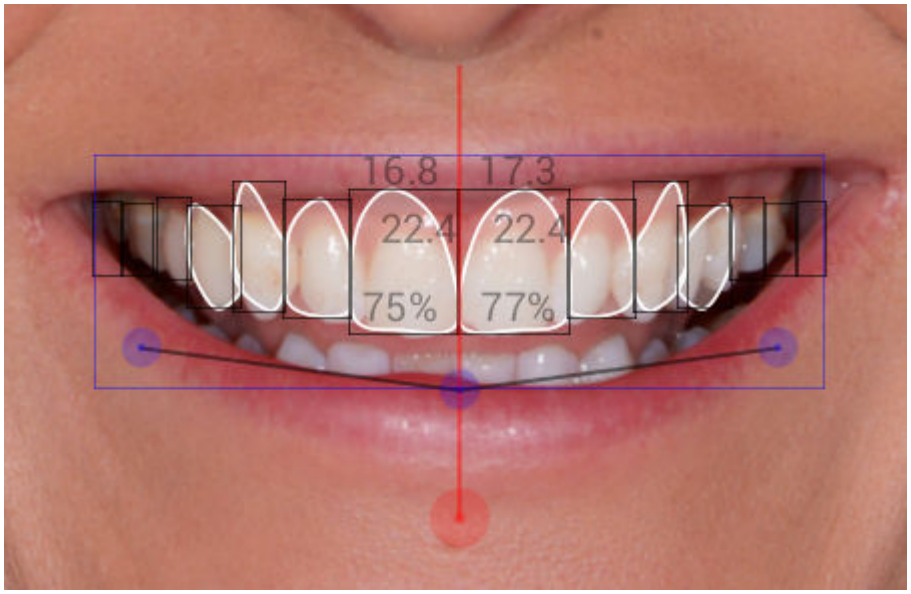
- To select a different silhouette:

  Click the pink corner of the teeth button and select silhouette from the list.

11.4.1 Adjusting teeth silhouette

Move the mouse over the teeth design so that a blue rectangle appears around it.

To adjust the width or length of all teeth simultaneously place the mouse cursor on the blue rectangle and hold down the left mouse button while dragging.



- To translate drag the design from the blue control point at the centre.
- To rotate drag from the red control point at the bottom.
- To bend and scale drag from the lateral blue control points.

Visualizing designs

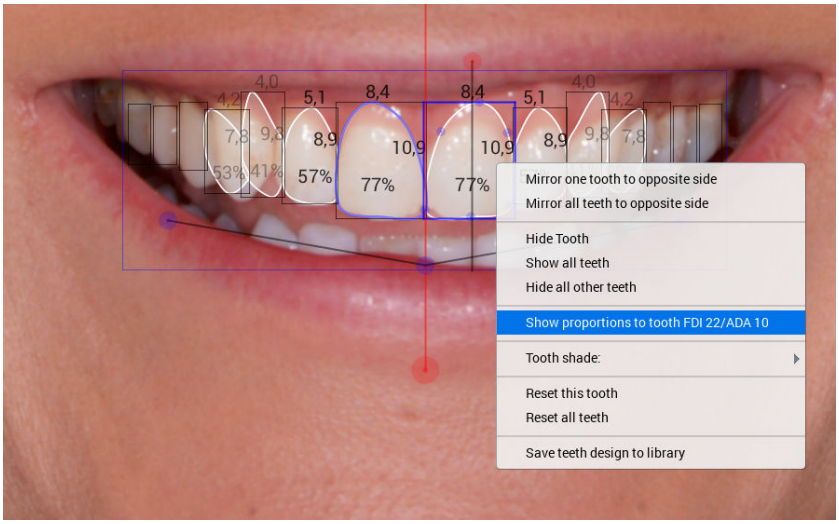
By right-clicking on an individual tooth you can:

- Mirror one tooth to opposite side
- Mirror all teeth on one side of the midline to the other side
- Hide the selected tooth
- Show all teeth
- Reset the selected tooth
- Hide all other teeth
- Reset all teeth

Visualizing teeth proportions

You can also switch between showing individual teeth proportions (width / height) and showing width proportions compared to tooth 22 (FDI) / 10 (ADA).

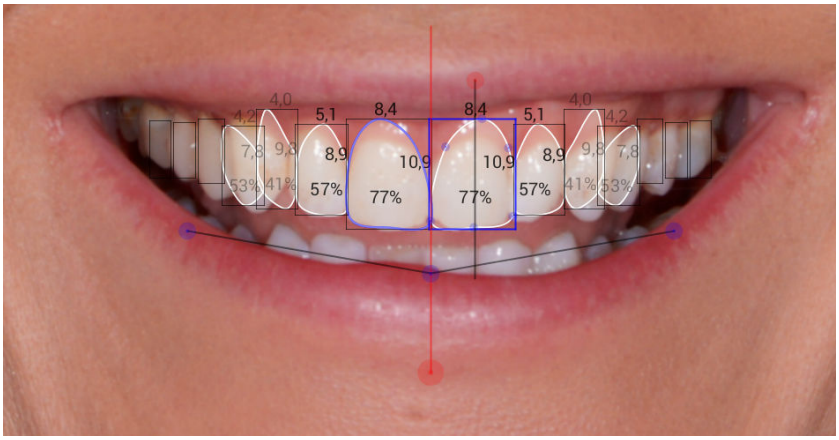
To change the percentage ratio to proportions ratio, right-click on the design and select *Show proportions to tooth...*



The percentage values change to proportions values.

The golden proportions in relation to tooth FDI 22 (left 2nd incisor) are the following: 1st incisor = 1,6; 2nd incisor = 1 and canine = 0,6.

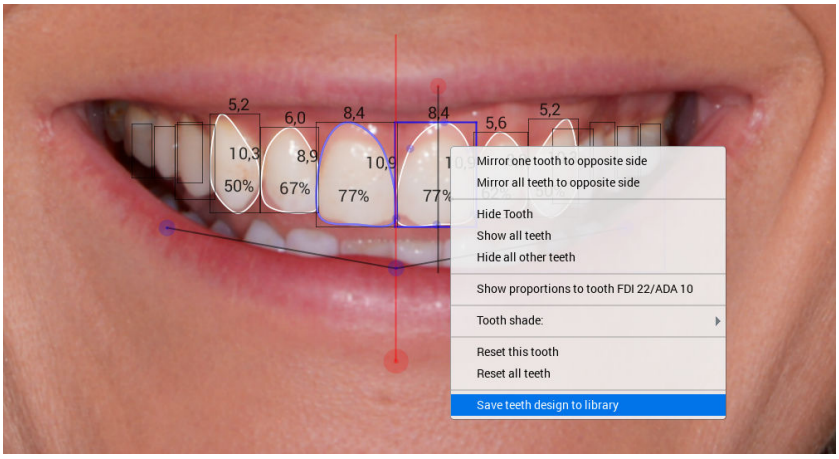
The proportion value shows the width of the each tooth in relation to the left maxillary lateral incisor.



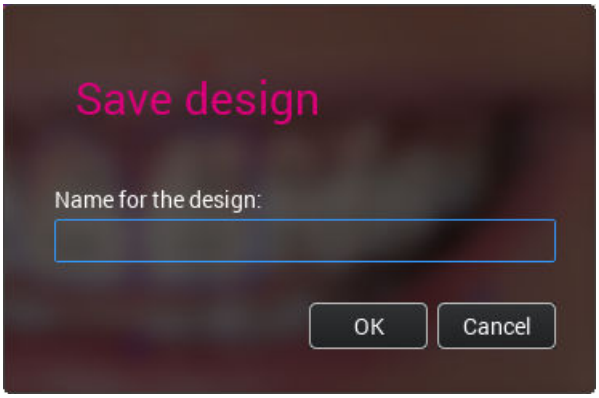
11.4.2 Saving silhouettes to library

After creating a teeth silhouette you can save it in the teeth library for later use.

1. Right-click on top of the silhouette and select *Save teeth design to library*.



2. Enter a name for your silhouette design and click **OK**.



The designed silhouette appears on the teeth silhouettes list and can be used in the same way as the default silhouettes.

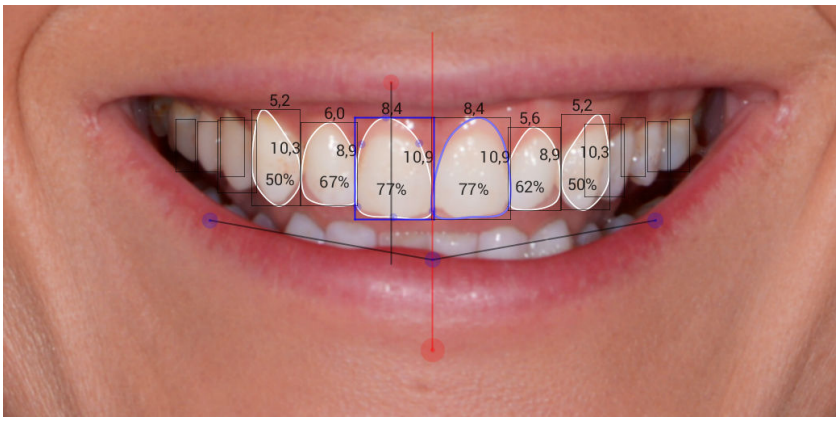
To delete a silhouette from the library, right-click on it and confirm the deletion by clicking **Yes**.

11.4.3 Adjusting single tooth on silhouette

Start by clicking on the tooth you want to adjust.

The selected tooth is surrounded with a blue box.

- To lengthen the tooth drag from the bottom or top of the box that is around the tooth
- To widen the tooth drag from the sides of the box that is around the tooth
- To reshape drag from the blue control points on the tooth outline
- To add or remove control points double-click on the outline
- To rotate the tooth drag from the red control point above the tooth

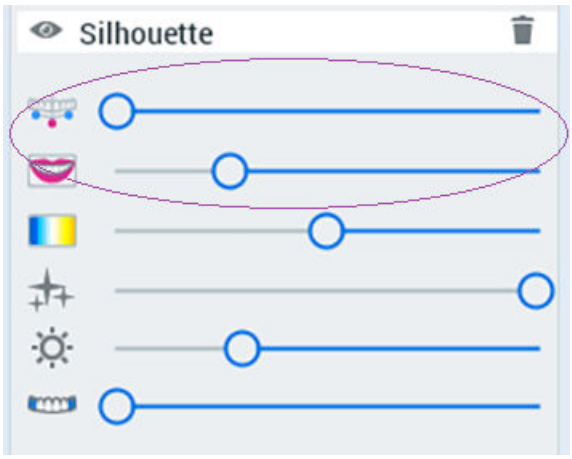


NOTE

The design of the selected tooth shows as mirrored to the other side.

To hide the design click the eye icon in the *Silhouette* group.

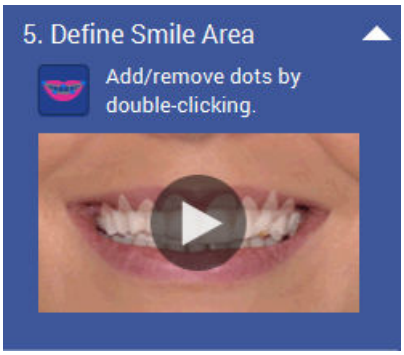
To adjust the transparency of the design use the transparency sliders.



11.5 Define smile area

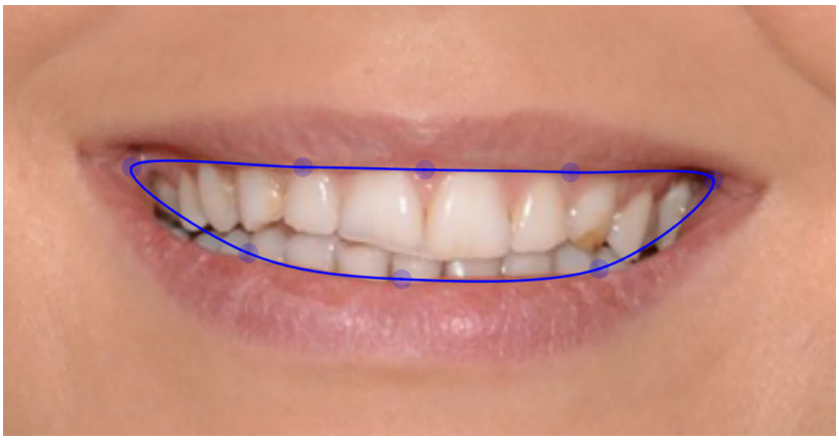
The smile area needs to be defined so that the teeth can be hidden behind the lips.

1. Click the **Smile area** button on the wizard or on the toolbar on the right.



2. Move the smile area as necessary by dragging.

   Adjust the area by dragging the blue control points on the line.



   Add or remove dots by double-clicking.

3. Hide the teeth under the lips by re-clicking the tool.

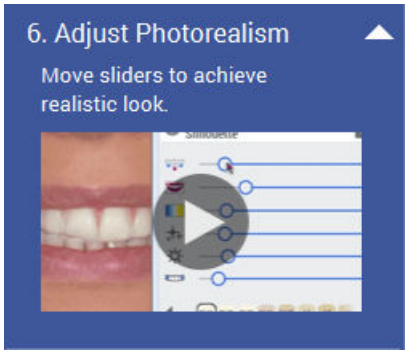
To show / hide smile area click the eye button.

Use the sliders to adjust:

- Whitening
- Lip shadow

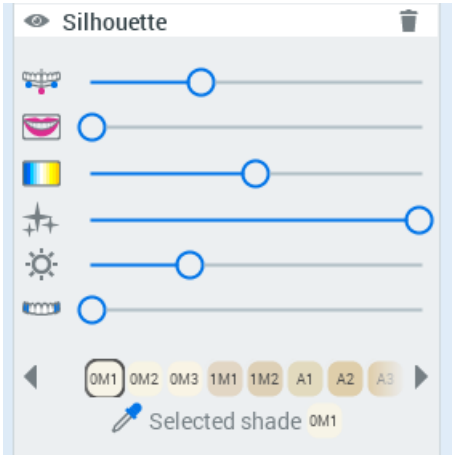
To delete the selected smile area click the **Delete selected** icon.

11.6 Adjust photorealism



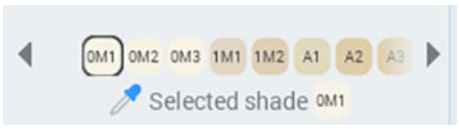
Use the sliders to adjust:

- Teeth transparency
- Texture transparency
- Simulated texture colour temperature
- Highlights
- Brightness
- Opacity shadow

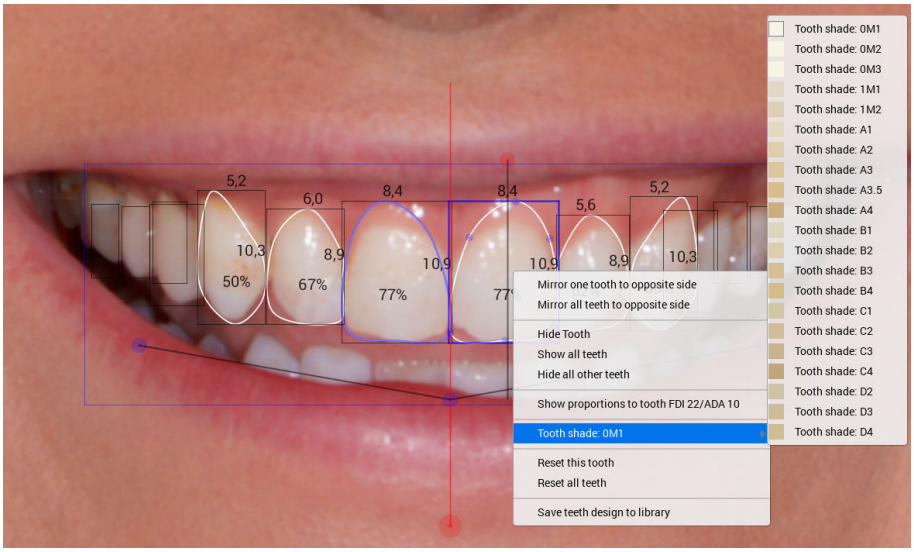


To delete the selected silhouette, click the **Delete selected** icon in the upper right corner.

To set the teeth shade select the desired shade from the shade map. The available shades are as determined in the VITA Classical shades guide including bleached shade.



To select shade for single tooth, right-click the tooth and select shade from the menu.



To pick a shade from a tooth on the design, click **Pick colour** and then click the tooth with wanted teeth colour.

The selected shade is set to all teeth.

View tools

Fit image to viewing window.

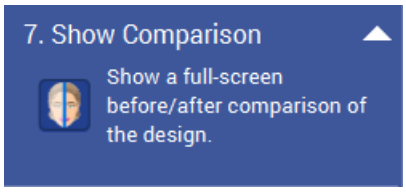
Move image on the screen

Adjust contrast and brightness

When enabled, vertical movement affects contrast and horizontal movement brightness. Drag the sliders or move the mouse on the image while holding down the left mouse button.

11.7 Show comparison

Show comparison of original imported image and of current design by clicking the button on the wizard or from the right side toolbar.



To exit the comparison view click any key or mouse button.

11.8 Create report

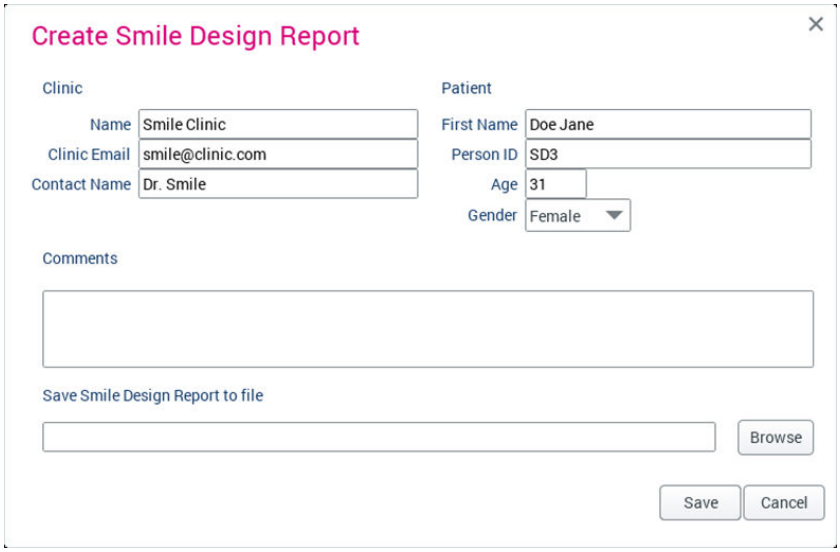
This section describes how to create a standard smile design case report in PDF format.

NOTE

To create custom reports see "Selecting print layout" in section "Printing smile design images" on page 64.

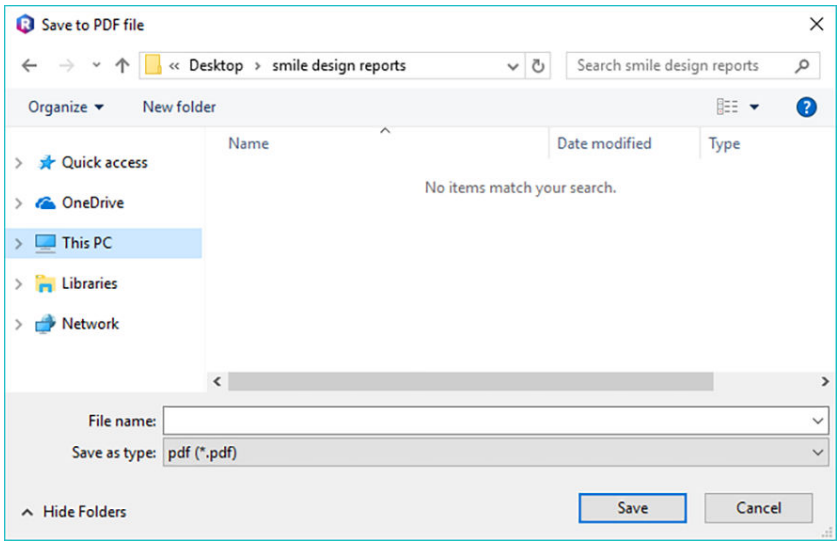
1. Click the **Create report** button on the wizard or on the toolbar on the right.

2. Type the case information in the fields of the dialog box.
3. Click the **Browse** button.

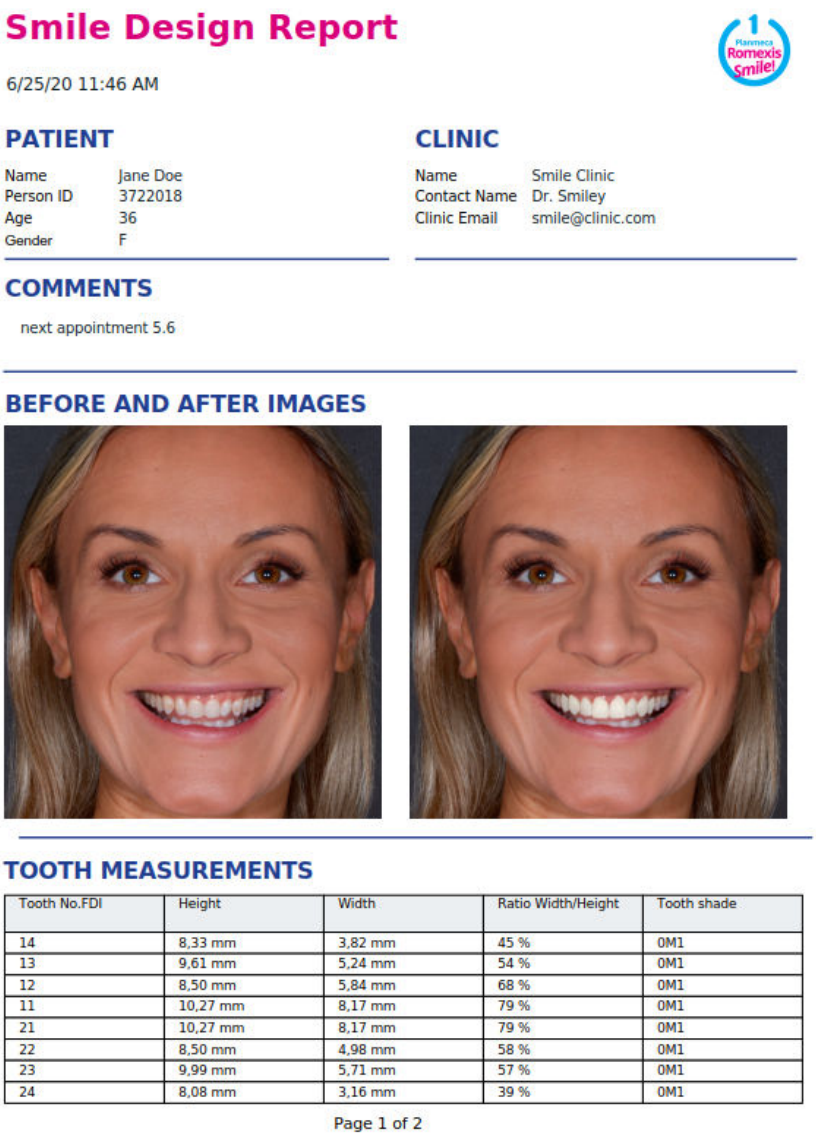


4. Select the destination folder and enter the name for the report file in the *File name* field.

   Click **Save**.



The report is saved in the selected folder and opens automatically.



Smile Design Report

6/25/20 11:46 AM

PATIENT

Name	Jane Doe
Person ID	3722018
Age	36
Gender	F

CLINIC

Name	Smile Clinic
Contact Name	Dr. Smiley
Clinic Email	smile@clinic.com

COMMENTS

next appointment 5.6

BEFORE AND AFTER IMAGES

TOOTH MEASUREMENTS

Tooth No.FDI	Height	Width	Ratio Width/Height	Tooth shade
14	8,33 mm	3,82 mm	45 %	0M1
13	9,61 mm	5,24 mm	54 %	0M1
12	8,50 mm	5,84 mm	68 %	0M1
11	10,27 mm	8,17 mm	79 %	0M1
21	10,27 mm	8,17 mm	79 %	0M1
22	8,50 mm	4,98 mm	58 %	0M1
23	9,99 mm	5,71 mm	57 %	0M1
24	8,08 mm	3,16 mm	39 %	0M1

Page 1 of 2

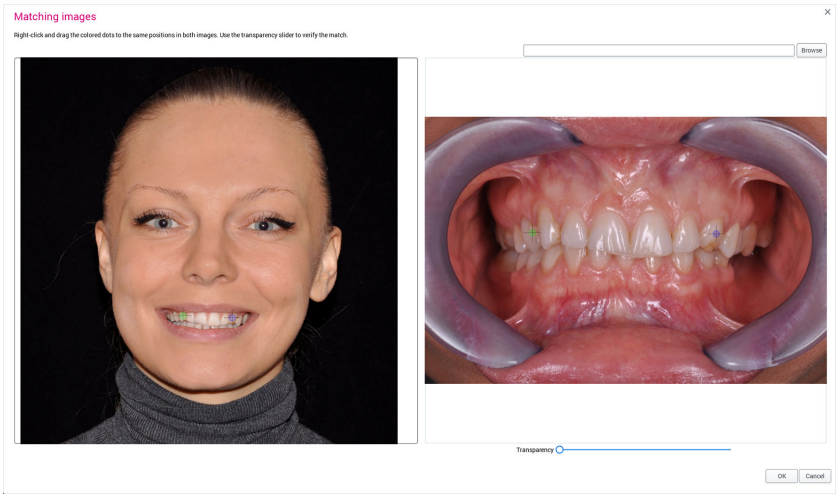
11.9 Aligning intraoral image with smile image (optional)

The alignment is done by placing two dots on same places in two images. The alignment can be fine-tuned by adjusting intraoral image transparency.

1. Click the **Intraoral image import** button.
2. Select a retractor image and click **Open**.
3. Align the intraoral image by right-clicking and dragging the coloured dots to same position in both images.

The image can be moved by left-clicking and dragging.

If necessary fine-tune the alignment by adjusting transparency and the placing of the dots.

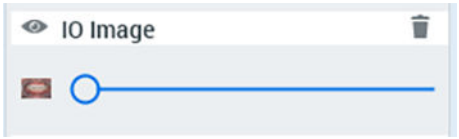


4. Save by clicking **OK**.

   To adjust the alignment or to change the intraoral image return to step 1 to import intraoral image.

IO image

Use the transparency slider to adjust the visibility of matched images.



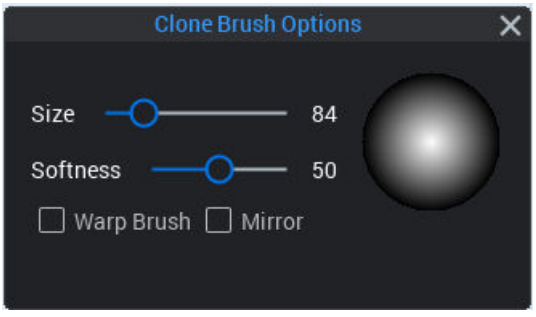
To delete the selected IO image click the **Delete selected** icon in the upper right corner.

11.10 Clone brush (optional)

The clone brush can be used to make photorealistic changes in the image for example for adjusting the gumline. Also minor adjustments elsewhere in the image can be made.

1. Select **Clone brush** tool.

If necessary adjust the size and softness of the brush.



2. Right-click on the area to clone.

   The area you are about to copy shows as a dashed circle in the image.

   The mouse cursor automatically turns to a continuos light-blue circle.

3. Move the cursor over the area where you want to clone the selected area and clone the area by clicking once the mouse left button.

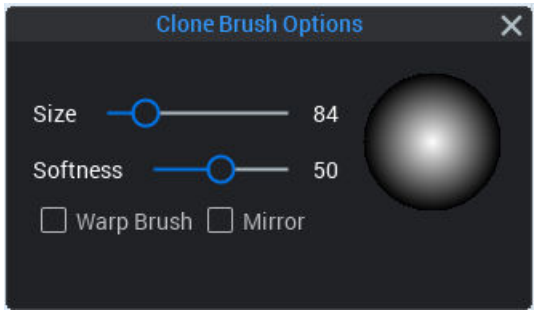
   Use clone brush e.g. to remove stains from teeth. Select an area with good shade and clone it on top of a stain.

   To clone a larger area from around the area you are about to copy hold down the left mouse button while dragging.

   The tooth can also be shortened by cloning, for example by dragging with the left mouse button.

   The image on the left illustrates the situation before and the image on the right the situation after cloning.

11.10.1 Clone brush options



Size

To adjust the size of clone brush:

- Use the size slider in the dialog box in the upper right corner of the image.

  or

- Hold down the right mouse button while dragging to up-left and down-right over the image.

Softness

To adjust the transparency of the border of the cloned area, drag the *Soft* slider in the dialog box. The greater the softness value, the more transparent the cloned area. Minimizing softness produces a sharper cloning result.

The size and softness adjustments apply also for warp brush..

Warp brush

The warp brush can be used for stretching or moving tissues and for straightening teeth.

To activate the tool

Select *Warp brush* option.

Drag with the left mouse button to stretch the image area inside the dashed line circle. On the left before and on the right after warping.

Mirror

NOTE

The mirror option cannot be used with Warp brush.

Use mirror to copy a mirror image of an area to another one for example for creating symmetrical teeth and gumline on both sides of the teeth or to copy a missing tooth. On the left before and on the right after mirroring.

11.11 Undo and redo changes

Undo, Redo and Revert work for clone and warp brush adjustments made during the same session even if the tool has been inactive for a while. All changes will be reverted. For re-opened images only Revert work.

Click **Undo** to cancel the latest change.

Click **Redo** to redo the latest change.

Click **Undo history** and select the changes to undo or redo.

11.12 Automatic alignment

Use the **Auto Align** button for automatic alignment, cropping and teeth silhouette alignment.

The center of the eyes is automatically recognized and the image is aligned according to this data.

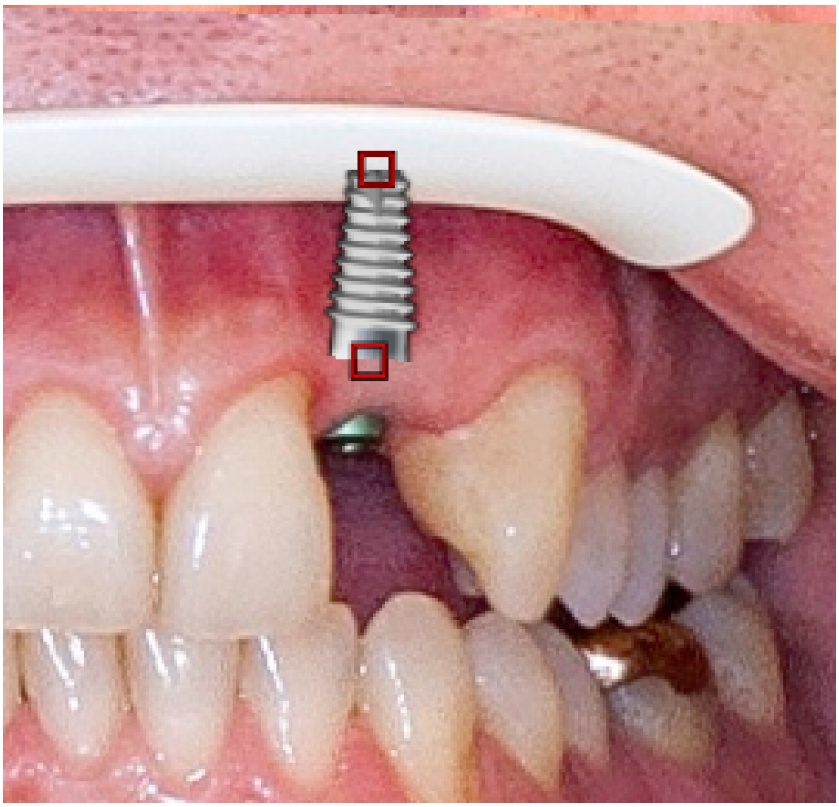
11.13 Draw & Measure

Implant

To add an implant on top of the image click **Implant**.

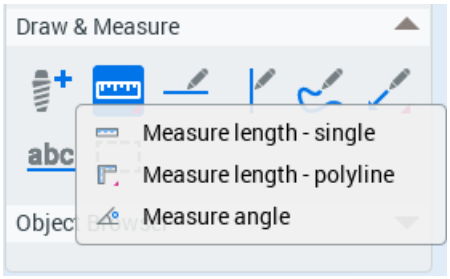
To move implant, drag with the left mouse button.

To rotate implant, drag from the squares on top and at the bottom of implant.



The annotations and measurements appear in the object browser where their properties can be adjusted.

Measure length



1. Click the **Measure length** button.
2. Select ***Single measurement*** to measure length between 2 points (default) or ***Polyline measurement*** over multiple points.
3. Draw the line by dragging with the left mouse button and release to finish.

TIP

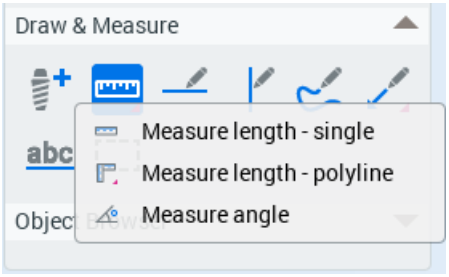
For setting colour for measurements, see "Setting colour for annotations and measurements" in section "Object Browser" on page 62.

TIP

The measurements are stored as saved views, click Open Saved View to view the saved measurements.

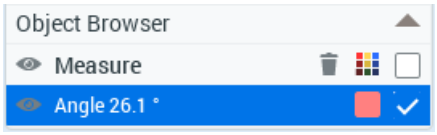
The measurement label can be dragged freely on the view (unless disabled in the default settings). Fix the label in place by clicking.

Measure angle



1. Right-click the Measure length button and select **Measure angle**.
2. Draw a line on the image.
3. Release the mouse and draw a second line starting from the end of the first line.

   The lines are combined and the measurement appears on the image and in the object browser.



Draw horizontal line

Draw vertical line

Draw curve

NOTE

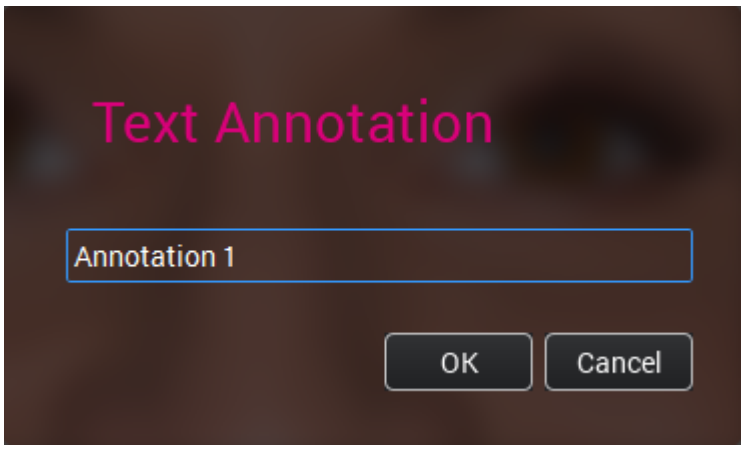
Sketched lines are not saved or stored and are lost when image is closed.

Add arrow

Add text

Click this button and click on the image where to add annotation.

Enter the annotation and click **OK**.



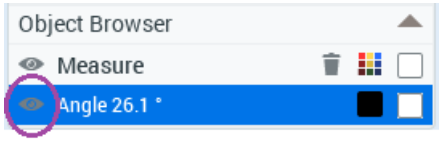
Select annotation

To edit annotation, click **Select annotation(s)** and double-click the annotation.

11.13.1 Object Browser

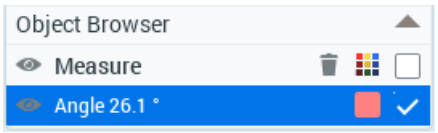
Show/hide annotations

- To show/hide all annotations or measurements, click the eye icon next *Annotations* or *Measure* group.
- To show/hide single annotation or measurement, click the eye icon next to it.

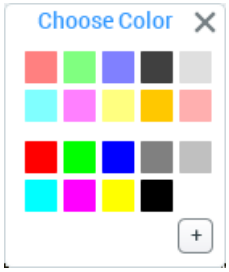


Setting colour for annotations and measurements

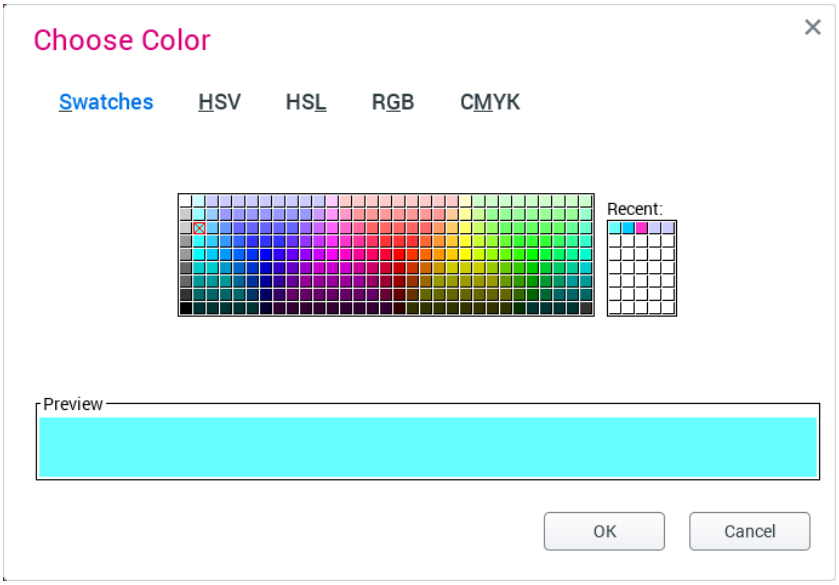
1. To set colour for:
   - single annotation or measurement, check the box next to it and click the **Choose color** icon.
   - all annotations/measurements, check the box next to the group and click the **Choose color** icon.



2. Click the desired colour.

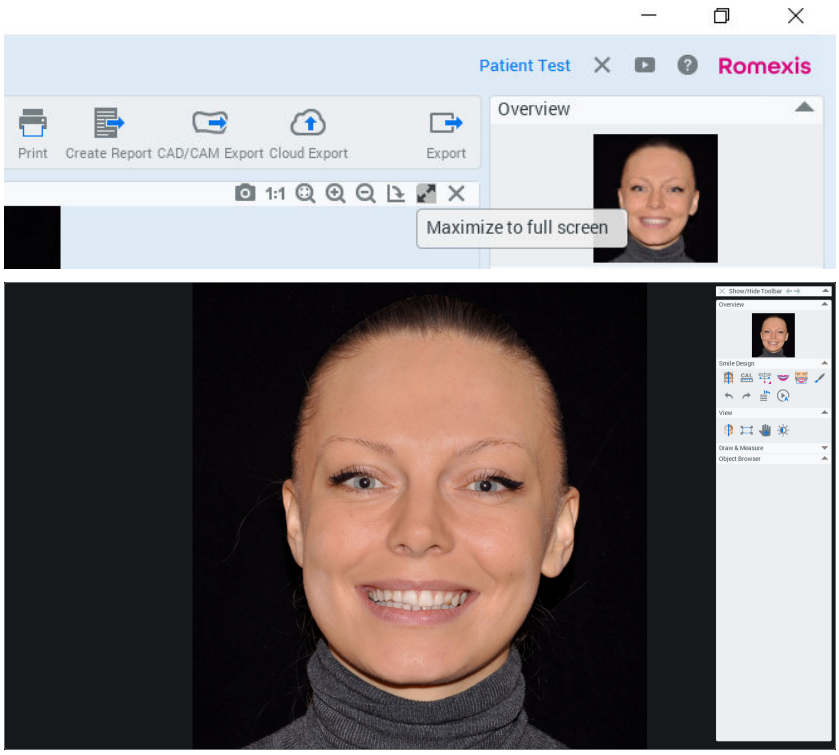


3. Select a colour from the swatches.

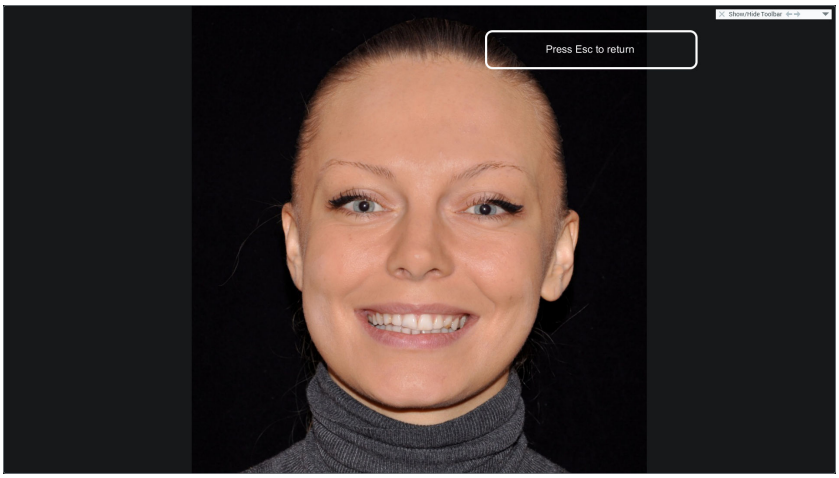


11.14 Maximizing design area

To maximize the design area, press the arrows button on the top right corner of the design window.



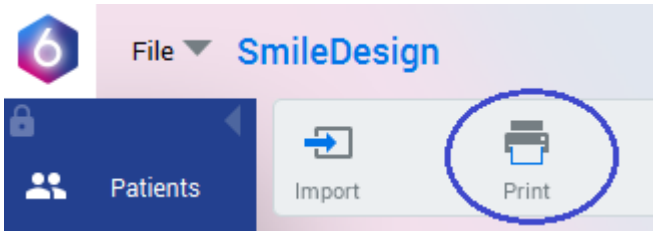
To return to default view mode press the **Esc** button on your keyboard.



11.15 Printing smile design images

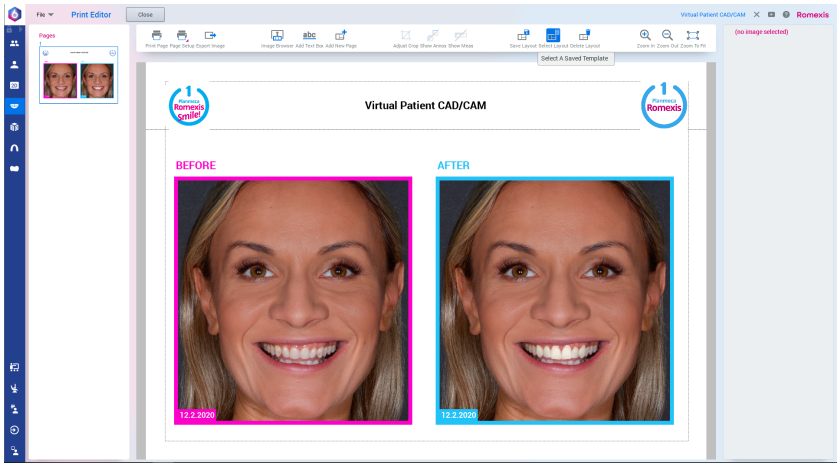
1. Open the image to print.

   The image is printed as it appears on the screen.
2. Click the **Print** button on the top left corner of the window.



3. Select the image to print.

   The image opens directly in the *Print editor*.



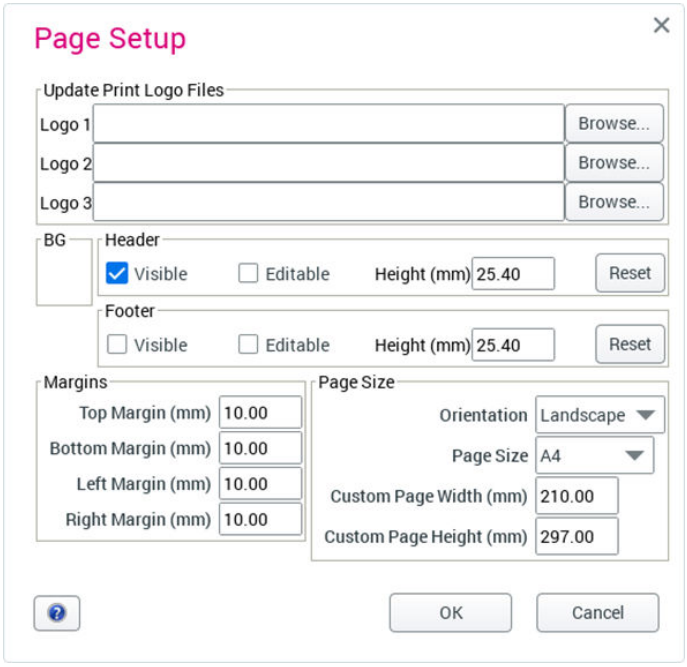
4. When finished start printing by clicking **Print**.

11.15.1 Print page setup

1. Click **Page Setup** button.
2. In the following window you can:
   - Browse for logos to be added to the printout

- Hide or show the header and footer, set them visible, editable and define their height. To reset the default settings click **Reset**.
- Define page margins
- Set page orientation, size, and define the custom width and height of the pages.

3. Click **OK**.

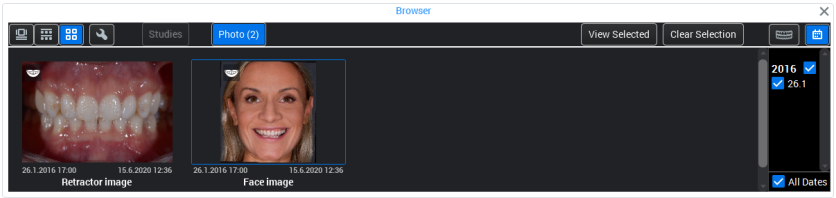


11.15.2 Editing print pages

Add images to print layout

Click **Image browser**.

Select the image(s) by double-clicking.

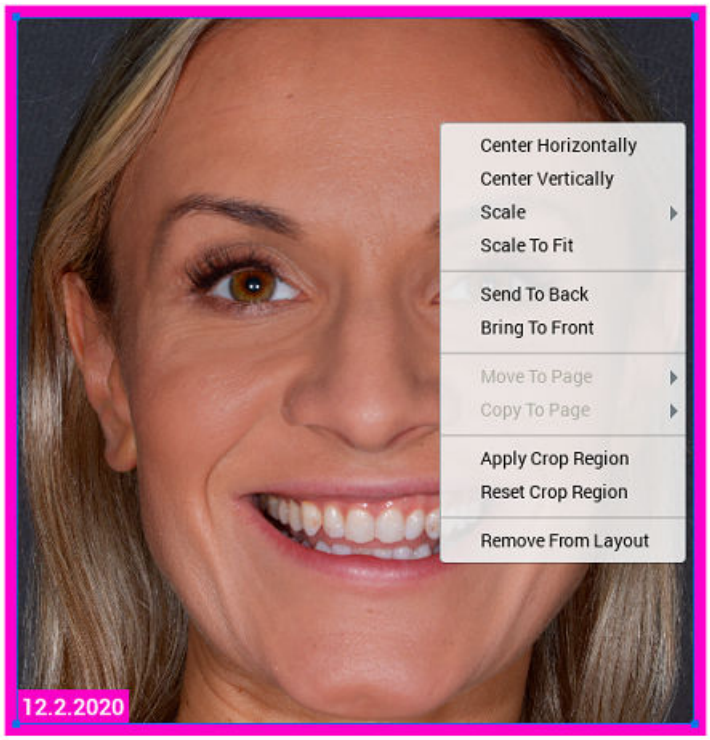


Adjust images on layout

Adjust images by dragging and dropping.

To resize, drag the image it from its corners.

To open a shortcut list for layout adjustments, right-click the image.



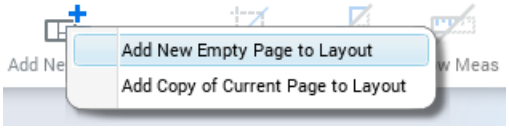
Add new pages to layout

Click the **Add New Page** button and select:

- an empty page with no predefined image slots

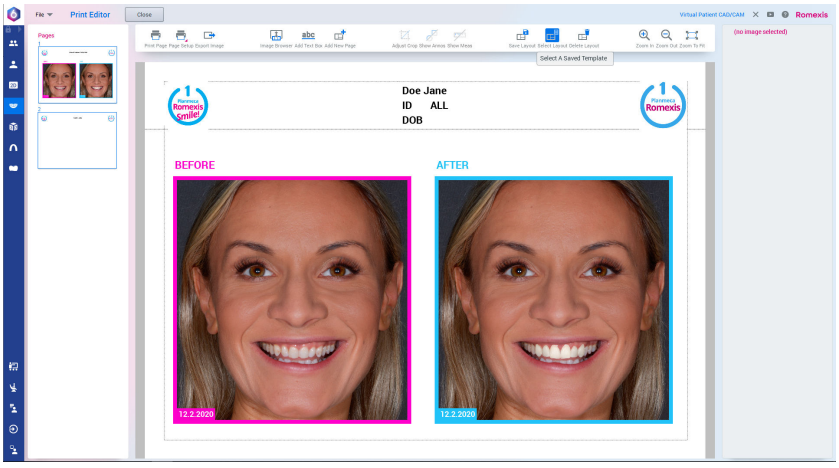
  or

- a copy of the current page with its predefined image slots.



Browse pages

Use the scroll bar or click the thumbnails.



Save pages as snapshots

Click **Save Print**.

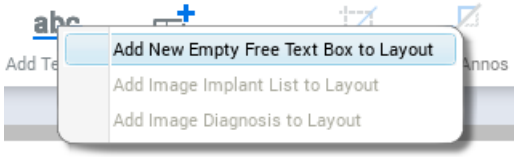
The snapshots appear in *2D Imaging* module in the image browser under *Photo* category.

Add text box

Click this button.

Select from the following text box types:

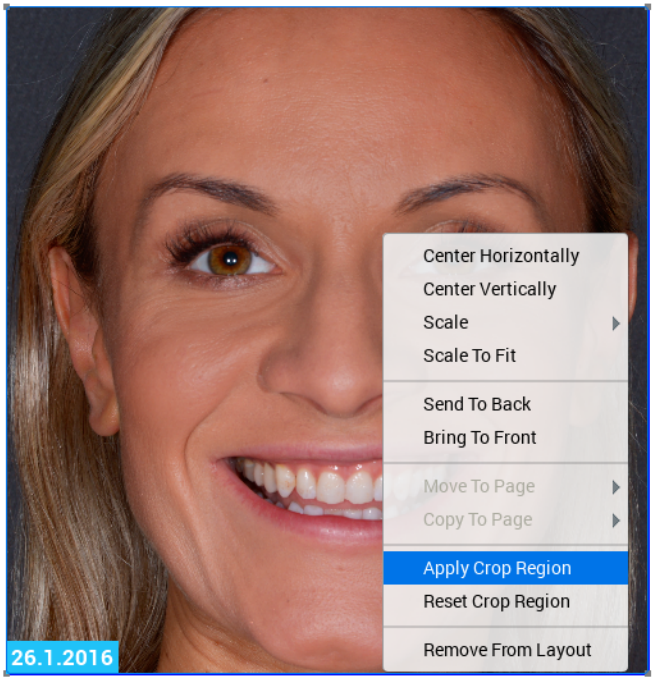
- *Add Free Text Box to Layout* – a freely editable text box.
- *Add Image Implant List to Layout* – a list of implants (only for 3D print).
- *Add Image Diagnosis to Layout* – a copy of the image diagnosis if entered in the *Image Properties* dialog (only for 2D images or snapshots).



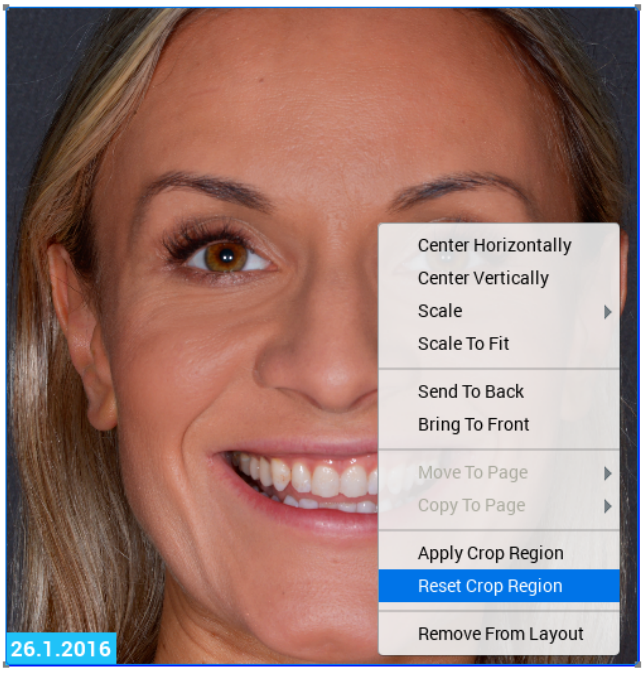
Crop images

Select the desired image and click **Adjust crop**.

Draw the crop region with mouse, right-click on the image and select *Apply Crop Region*.



To cancel cropping, right-click on the image and select *Reset Crop Region*.



Show/hide annotations

To show / hide annotations from the printout, click the **Show Annotations** button.

Fit image to view

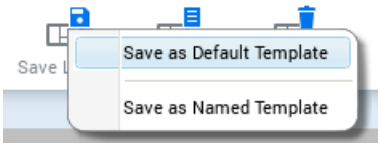
To fit the image to the view, click the **Zoom To Fit** button.

11.15.3 Save and adjust print layouts

To save layouts:

Click **Save Layout** and

select *Save as Default Template* or *Save as Named Template* option.

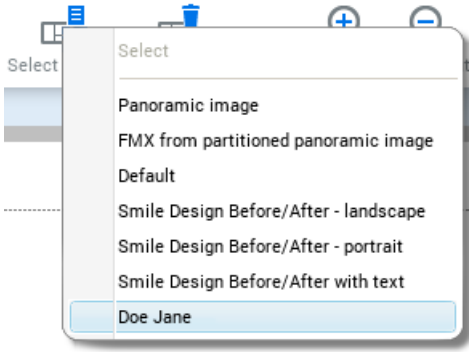


The default layout will open every time the Print editor is opened whereas the named layout can be restored from the layout list. The image is inserted into a template slot for the respective image type if existing in the layout.

To open a saved layout click the **Select Layout** button and select the layout from the list.

To add images into a template double-click the images from image browser.

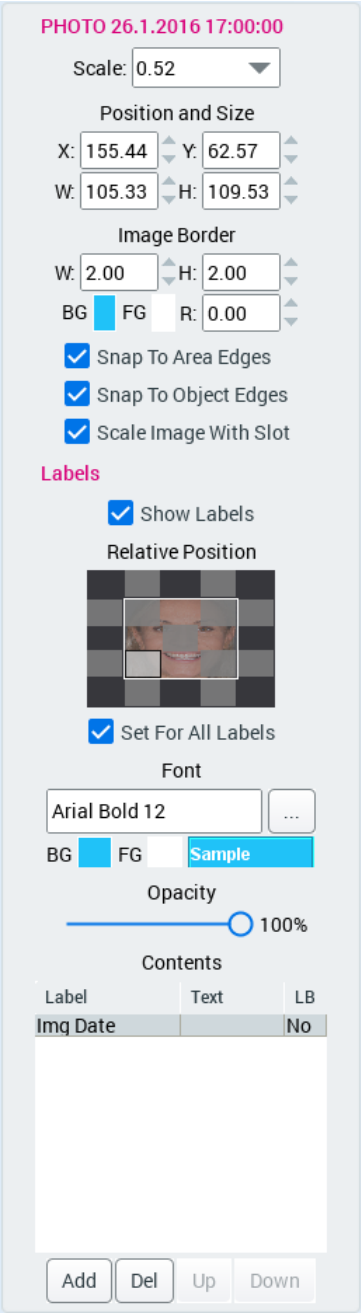
To delete a layout, click the **Delete layout** button and select the layout to be deleted from the list.



The print layout can be zoomed in and out by using the **Zoom In** and **Zoom Out** buttons.

11.15.3.1 Adjusting images on layout

The vertical toolbar can be used to adjust the size, position and labels of the images. As the adjustments in the vertical tool bar are image specific it only shows when an image is selected.



Scale

To scale the image select the appropriate scale value from the drop-down menu.

Position and size

To change the position of an image on the layout drag the image to a suitable position or type/select the desired location (X, Y) from the *Position and Size* menus.

Image border

Borders can be added to each image in the print layout.

To change the border size, type or select the desired width (W) and height (H).

To change the border fill colour click **BG** and select the desired colour. To change the border edge colour, click the **FG** field.

The borders can be rounded by typing / selecting the desired radius (R).

Moving images in layout

By selecting *Snap to area* / or *object edges* the image is attached to its nearest edges on the print area.

With *Scale image with slot* option the new image is automatically scaled with the slot.

Labels

The labels can be hidden by deselecting the *Show Labels* option.

Image labels can be added, edited and deleted from the *Contents* table. To add a label to a new label row click the **Add** button and select the label type from the drop-down menu.

The text field includes text that is added to the layout after the image property data of the selected label. I.e the text field of the label *Img Exp mA* adds the string “mA” after the image exposure mA, e.g. “10 mA”.

To add a line break after the label row, click the *LB* field on the label row. The line brakes can be used if several labels are added to the same area on the layout.

To delete a row select it and click **Del**.

To move a row up and down in the table select the row and click **Up** or **Down**.

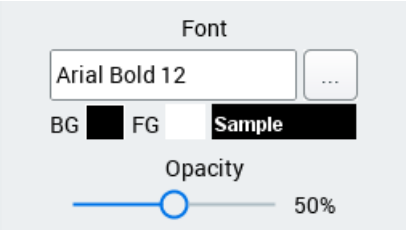
When the label is selected from the *Contents* table, its opacity, background (BG) and foreground colour (FG), text font and relative position in the layout can be defined.

To select the relative position in the layout click on the grey fields of the layout preview.

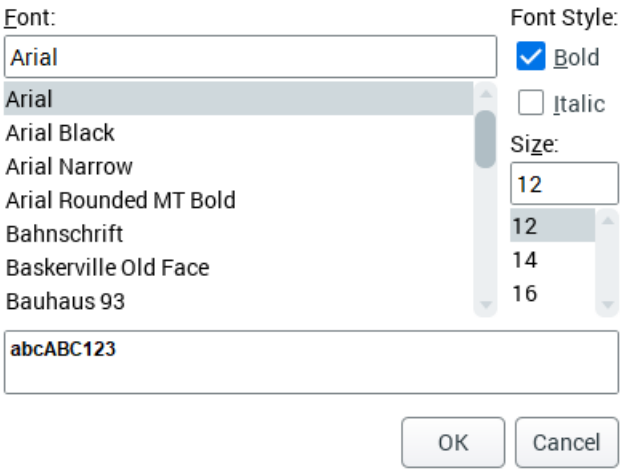
The changes in the labels show on the print editor layout.

Editing font

1. Click the square button next to the *Font* field.



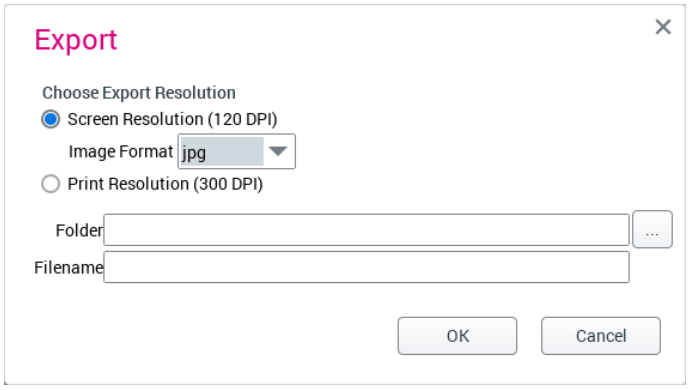
2. Select the suitable font, font style and size and click **OK**.



11.15.4 Exporting print pages

1. To export the layout as a regular image to the hard disk, click this button.

2. Select screen resolution, image format, print resolution and export folder and enter file name and click **OK**.



11.16 Exporting smile designs

1. Export current image by clicking **Export** button on the top toolbar.

2. Select export file type:
   - Processed images

     Export image(s) in 8 bit with enhancements applied. Select the image format from the drop-down menu.
   - **Original images**

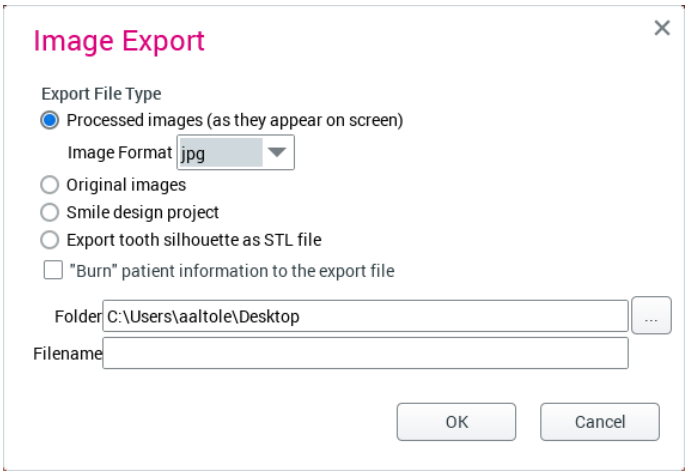
     Export image(s) in 8 or 16 bits depending on capturing mode.
   - **Smile design project**

     Export smile and retractor images with teeth design

     Create a zip-file, which can be imported to other Smile Design workstation
   - Export tooth silhouette as STL file

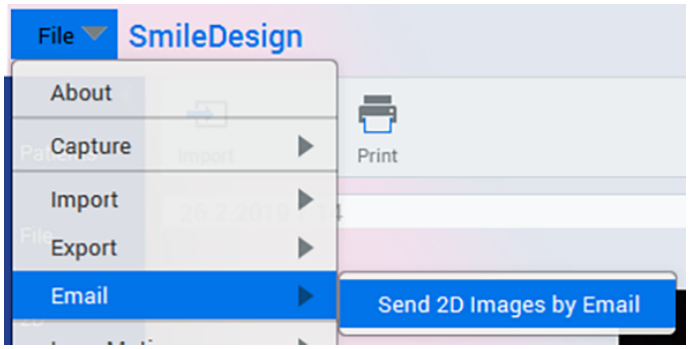
- "Burn" patient information to the export file

3. Click **OK**.



11.16.1 Send by email

To send the current image in email, select **Send 2D images by email** from the *File* menu.



11.16.2 CAD/CAM export

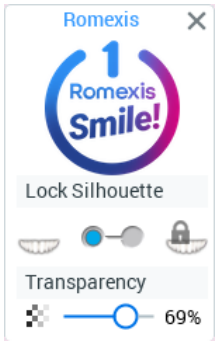
With CAD/CAM export the teeth silhouette can be exported on top of any image on any software.

1. Click **CAD/CAM Export**.
2. Open the dental model (e.g.intraoral scan) in CAD/CAM software.

Adjust the silhouette on top of the dental model or other image and use the following tools as necessary:

- Lock silhouette - the silhouette cannot be scaled, translated, rotated or edited.
- Adjust transparency of the silhouette with transparency slider.

When finished click the cross on the top right corner to close the dialog and the silhouette.

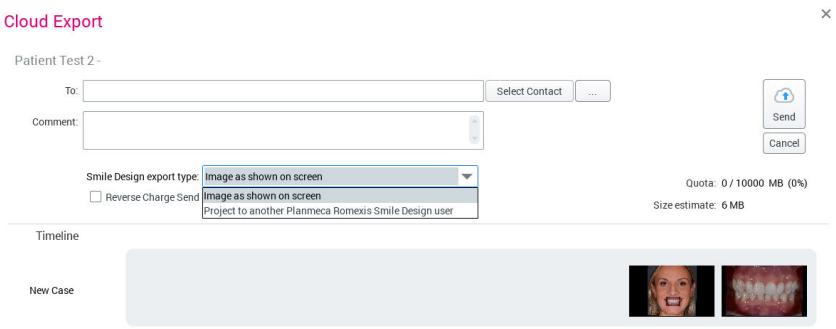


11.16.3 Cloud export

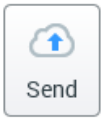
1. Open the image you want to export to Planmeca Romexis Cloud.
2. Click the **Cloud Export** button on the top toolbar.
3. Fill the *To* field with the recipient's e-mail address and add optional message to the *Comment* field.

   From the drop-down menu select Smile Design export type (*Image as shown on screen* or *Project to another Planmeca Romexis Smile Design user*).

   If the recipient has accepted the reverse charges sending option in the Planmeca Online account settings, the Reverse Charge Send option becomes active and the case to be sent is automatically counted towards the recipient's transfer quota instead of the sender's. Accepting reverse charges can be enabled on the Planmeca Online My Account management page at http://online.planmeca.com.



4. Click the **Send** button.



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