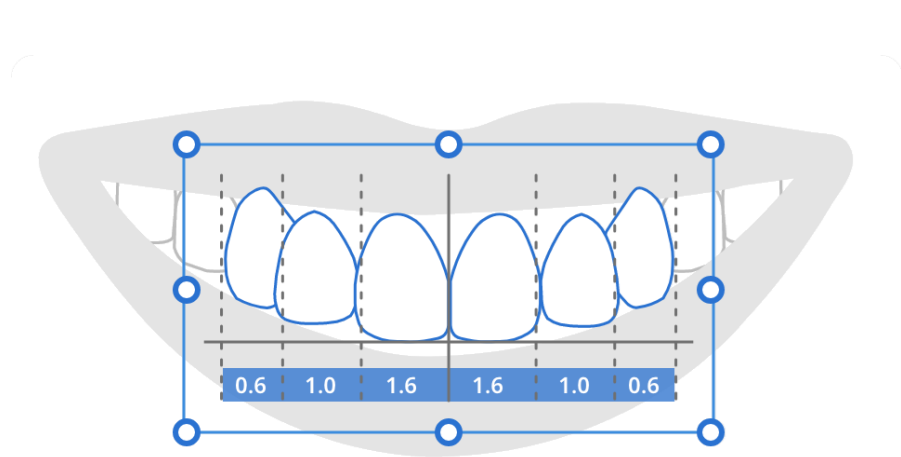


# Medit Smile Design



Revision Date: November 2020  
Revision No.: 1

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## Greetings

Thank you for using Medit Smile Design! You have made a great choice.

Medit offers high quality hard- and software solutions, including table top and intraoral scanners.

With Medit you can work efficiently with 3D data and use the software with minimal training. We work relentlessly to create user-friendly products that supplement digital dentistry workflow for clinic and lab users.

# Introduction and Overview

Medit Smile Design Overview

Intended Use and Disclaimer

System Requirements

Installation Guide

## Introduction and Overview

### 1.1 Medit Smile Design Overview

Medit Smile Design is a software allowing to perform smile design by working on 2D images. Users can use the pre-set teeth templates and customize them with a number of various tools for modifying their color, shape, position, and scale. Explicit explanations and guide messages are accompanying each stage on the left side of the window.

Medit Smile Design can be run from both Clinic and Lab Accounts in Medit Link.

### 1.2 Intended Use and Disclaimer

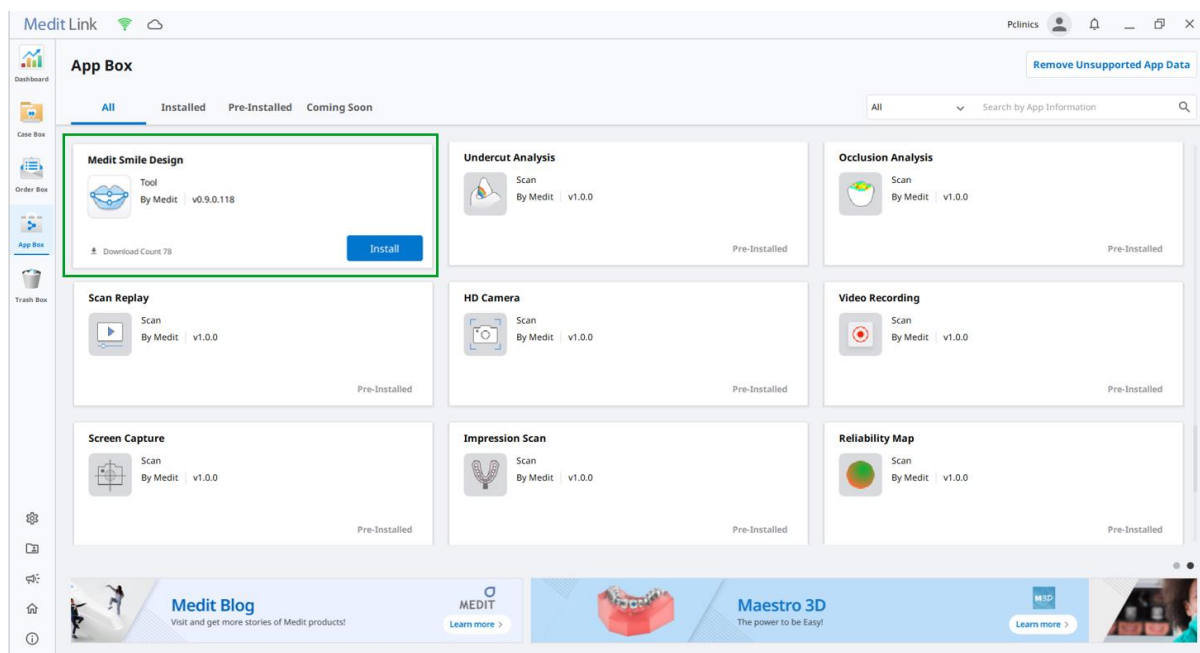
- ⚠ The user is entirely responsible for the smile design process and informing the patients that the smile design results generated by the application may not be precise or reliable; it should only be used for consultation or communication purposes. Medit does not take any responsibility or liability for any misunderstandings or miscommunications that might happen. The application is to be used solely for communication purposes.
- ⚠ Medit Smile Design is not developed for using in medical or clinical purposes.
- ⚠ The software may not be used for the following purposes:
  1. For the purposes of diagnosing, treating, mitigating, or preventing diseases.
  2. For the purposes of diagnosing, treating, mitigating, or preventing injuries or disorders.
  3. For the purposes of inspecting, replacing, or transforming a structure or function.

### 1.3 System Requirements

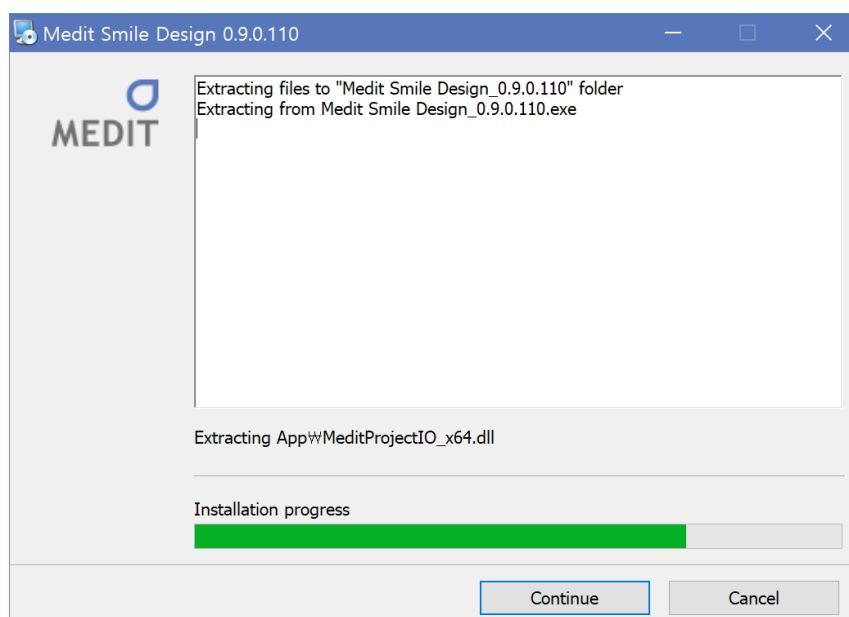
CPU	Intel Core i5 2.6GHz or higher
RAM	16 GB or higher
Graphic	NVIDIA GeForce GT 760 (2GB) or higher / or equivalent AMD video card
OS	Windows 8 64 Bit (unavailable in 32 Bit) or higher

### 1.4 Installation Guide

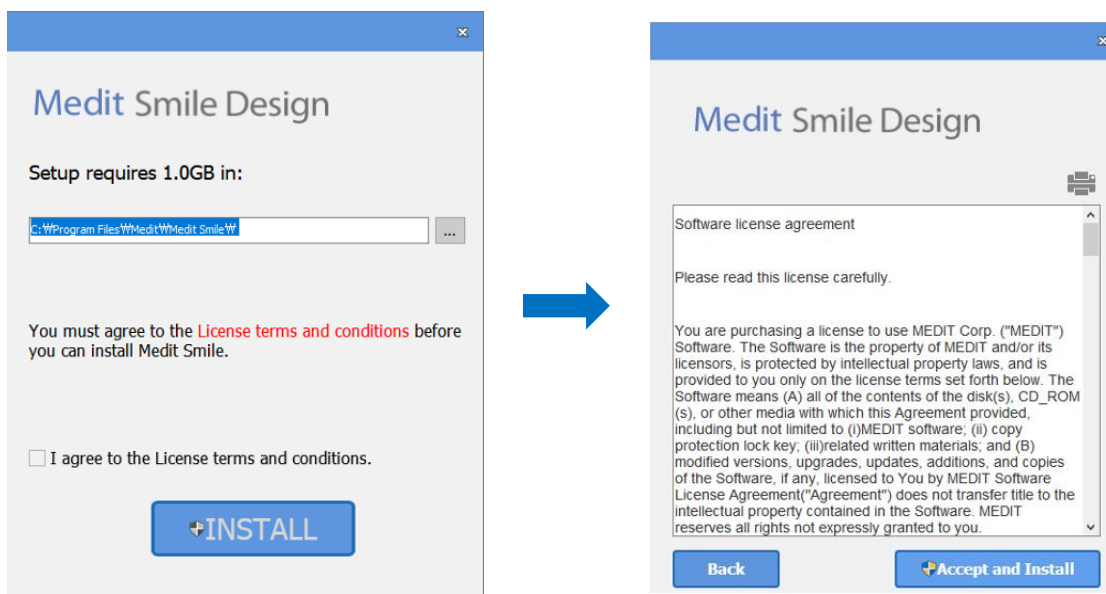
- Log in into your Medit Link account and go to the **App Box**.
- Find **“Medit Smile Design”** app and click on the **“Install”** button.



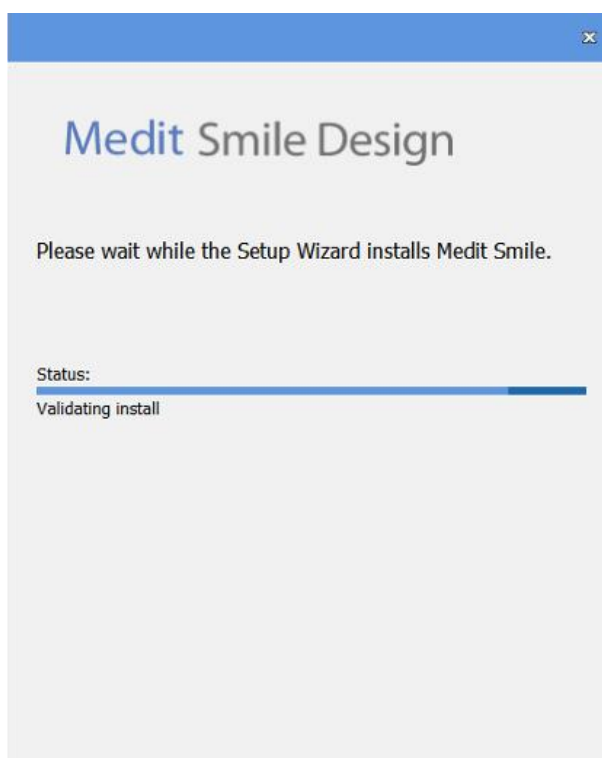
- Once the download is complete, Medit Smile Design installer will be run automatically.



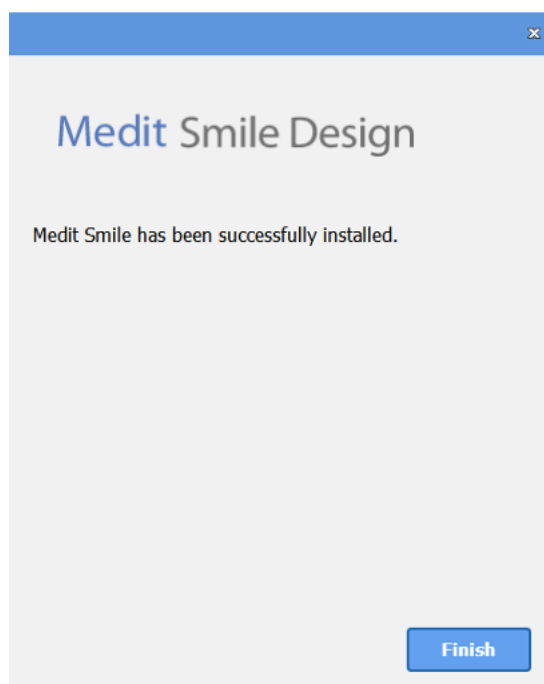
- Read and agree to the License Terms and Conditions.



- It may take up to several minutes to finish the installation process. Please do not turn off the PC until the installation is complete.



- Press **“Finish”** to complete the installation.



- Restart Medit Link.

# Data Management

Acquiring 3D Data

Running Medit Smile Design from Medit Link

## Data Management

### 2.1 Acquiring Data

Smile design is performed using 2D images.

- Supported file formats: .jpg, .jpeg, .png, .bmp

Medit Smile Design usually requires two images: a retracted mouth picture and a smile picture (see the examples below). Proceeding with one picture is possible but might not be sufficient to perform the design process as intended.

Smile image



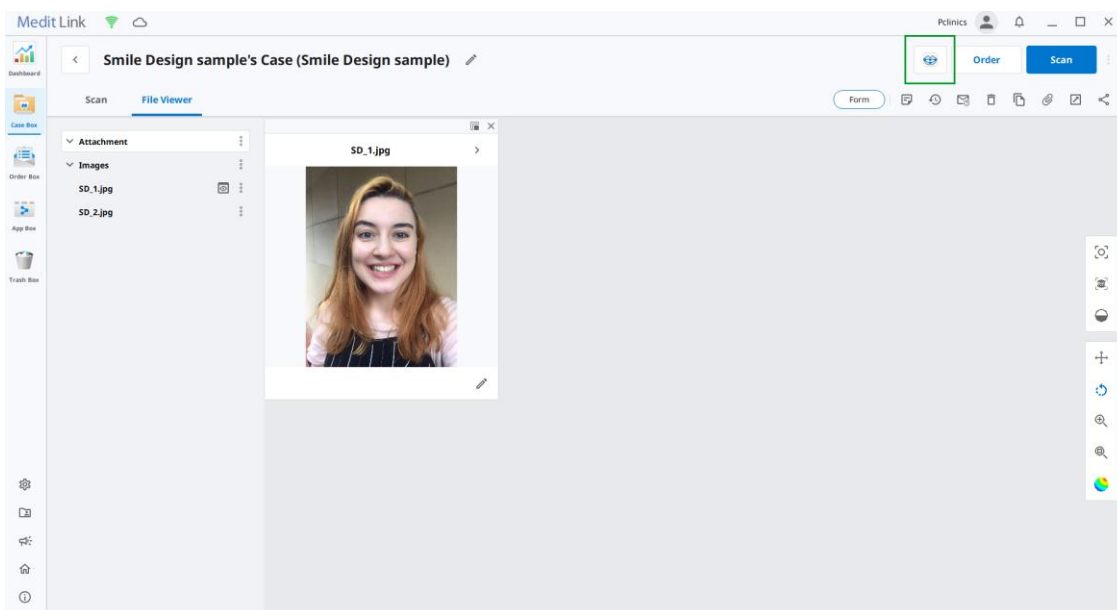
Retracted mouth image




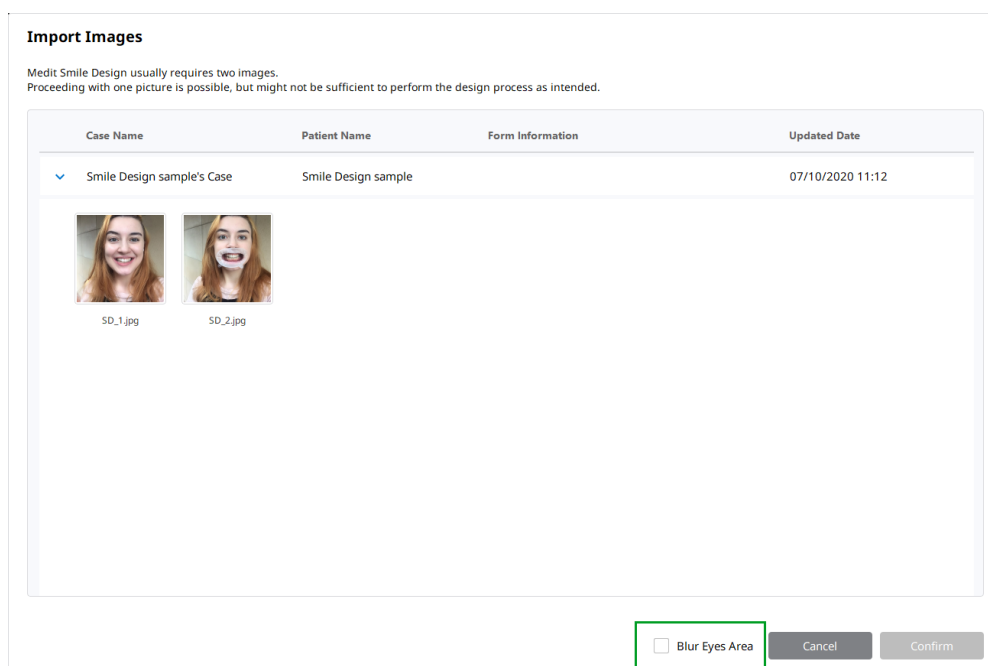
**IMPORTANT:** Make sure to take both pictures from the same angle to guarantee better alignment.

### 2.2 Running Medit Smile Design from Medit Link

- Go to the **Case Box** (Clinic account) or **Work Box** (Lab account) and choose the case you would like to work on. The case must have 2D images attached to it.



- Press the  icon in the right upper side of the Case Detail window in Medit Link.
- Once the app is launched, you will be asked to import the images from the case in Medit Link.
  - Note that you can choose to blur the eyes area on the picture to anonymize the person in the images.



# User Interface

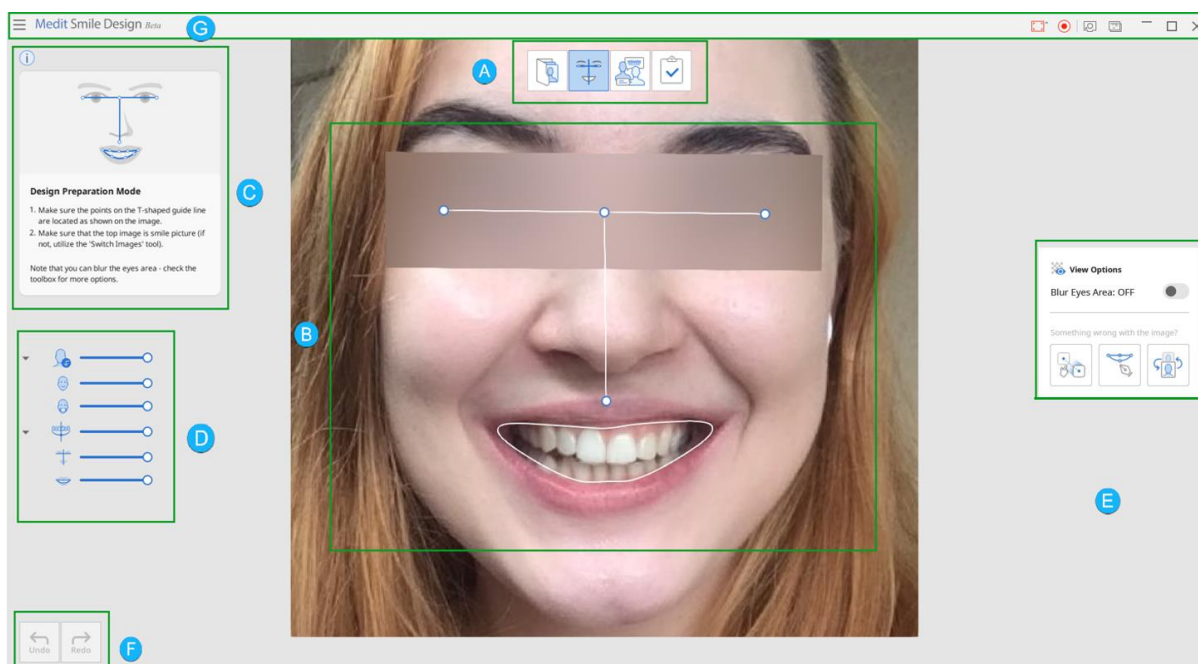
Title Bar

Tree View

Toolbox

Undo/Redo

## User Interface



- A. Modes
- B. Image View and Guide Lines
- C. Guide Message
- D. Data Tree
- E. Toolbox
- F. Undo/Redo
- G. Title Bar

### 3.1 Title Bar

The Title Bar consists of the following options:

Menu	The Menu includes tools to manage data display options and shows the details of application.
Start Video Recording	Starts the video capture.
Screenshot	Captures the screen.
Screen Capture Image Manager	Manages the captured screen images.
Minimize	Minimizes the application.
Maximize or Restore	Maximizes or restores the application.
Exit	Terminates the application.

### 3.2 Tree View

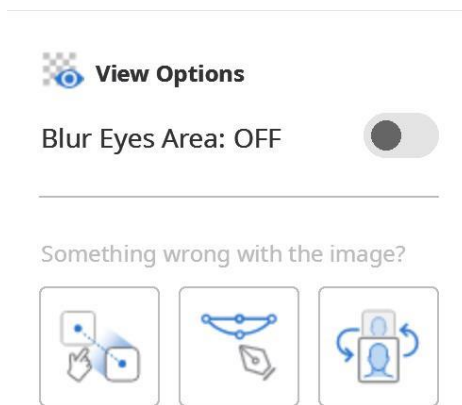
The Data Tree appears on the left side of the window.

- The tree shows the list of data used in Medit Smile Design: 1) images; 2) guide lines; 3) teeth templates.
- You can easily control data viewing options by hiding, showing, or changing its transparency one by one or as a group.

### 3.3 Toolbox



Toolboxes contain all major tools and are provided to control the smile design process.

- Turn the tools on and off using the toggles.



### 3.4 Undo/Redo

The undo/redo buttons are located at the bottom left corner of the window.

 Undo	Undo	Undoes previous action.
 Redo	Redo	Redoes previous action.

# Modes

Import Images

Design Preparation Mode

Consultation Mode





Complete

## Modes

Modes indicate the current step you are working on. They are subjected to a specific sequence.



If you import new images while working on the project, you will lose all current progress.

	Import Images	Imports new images from Medit Link.
	Design Preparation Mode	Allows to modify facial guide lines and lip line.
	Consultation Mode	Allows to edit the chosen template and show the smile design preview.
	Complete	Saves the current project and closes the program.



### 4.1 Import Images

This step allows to import images from the Medit Link case you are working with to use in Medit Smile Design.

**Import Images**

Medit Smile Design usually requires two images.  
Proceeding with one picture is possible, but might not be sufficient to perform the design process as intended.

Case Name	Patient Name	Form Information	Updated Date
Smile Design sample's Case	Smile Design sample		07/10/2020 11:12

50\_1.jpg      50\_2.jpg

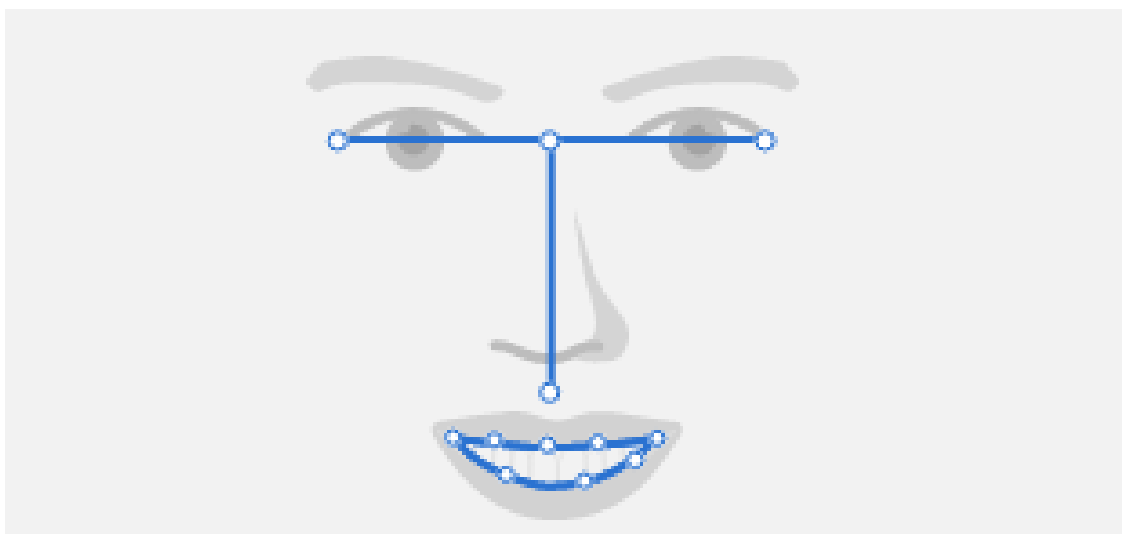
Blur Eyes Area

### 4.2 Design Preparation Mode

This mode helps to prepare for the smile design process by making sure that the necessary guide lines are defined correctly. You can modify them in case you would like to improve the detection results.

Check if:

- the points on the T-shaped guide line and lip line are located as shown on the image below.



- the top image at this point is smile picture.

If lip line and facial guide lines are defined correctly by the program, move to the **Consultation Mode**.

#### 4.2.1 When something is wrong with the images

In case the teeth within the lip line look blurry, as shown on the image below, align the two images manually by pressing the **“Manual Alignment”** button.



This might happen if you took the images from different angles.






Manual Alignment



Use the left button on the mouse or the arrow keys to drag and align the two images.




This function can be used only when two images are imported.

	<b>Modify Lip Line</b>	<p>If needed, modify the lip line by pressing the <b>“Modify Lip Line”</b> button.</p> <ol style="list-style-type: none"> <li>1. Use the left button on the mouse to add new points.</li> <li>2. Use the right button on the mouse to delete points.</li> </ol>
	<b>Switch Images</b>	<p>Smile design involves alignment of the two pictures that you imported from Medit Link. In case the top image at this stage is the retracted image, use the <b>“Switch Images”</b> tool to change their overlapping order.</p> <p> This function can be used only when two images are imported.</p>

### 4.3 Consultation Mode

This mode helps to customize teeth templates and show the preview of smile design.

#### Toolbox

 **View Options**


Template: ON

Blur Eyes Area: OFF

Check the view options – whether or not you want to

1. see the template outline.
2. blur the eyes area on the image.

---

 **Template Color**

Color: ON

Saturation


Highlights

Brightness

Shadow

To see the color of the template, turn the **“Color”** toggle on. Adjust saturation, highlights, brightness, and shadow.

---

 **Golden Proportion**

Visible: OFF


Shows the golden proportion guide lines.

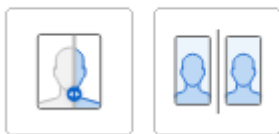
Make it visible and utilize it while adjusting the shape of the template.

---


**Whiten Teeth**

Use this toggle to whiten the original teeth.

 **Preview Options**



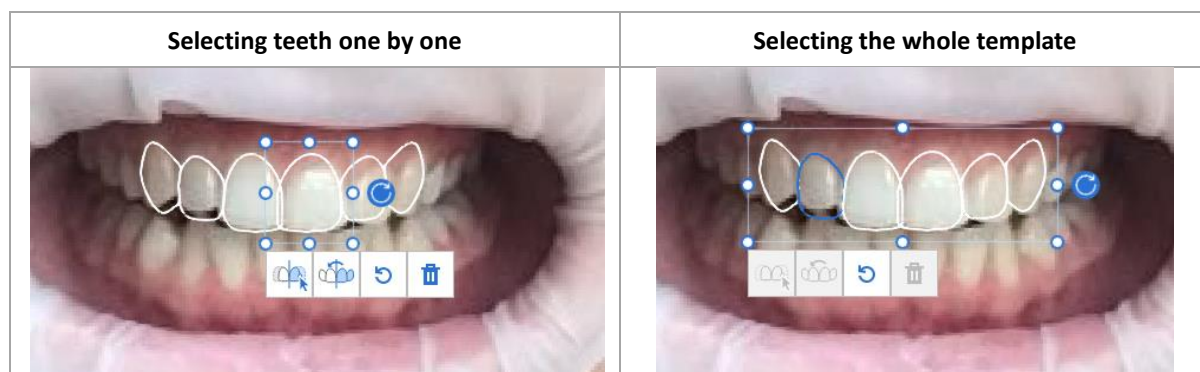
Use one of the preview options to compare the original image and the smile design preview.


 In case you imported both smile and a retracted mouth image, make sure that you are working with the retracted mouth image at this stage. If not, return to the **Design Preparation Mode** and use the **“Switch Images”** tool.

- Select one of the pre-set teeth templates. Use mouse or keyboard arrows to navigate.

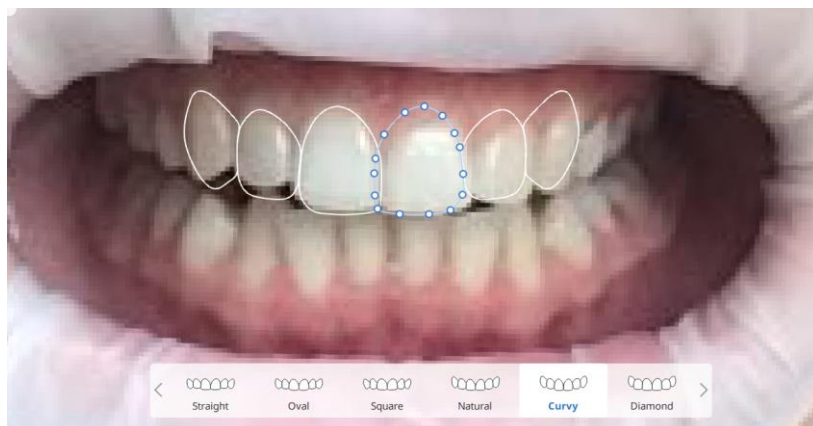


- Select each tooth one by one to modify its scale, size, and location or select the whole template at the same time with the mouse. You can also rotate it.



 The changes you make to the template while looking through the other ones are temporarily saved while working with this tool.

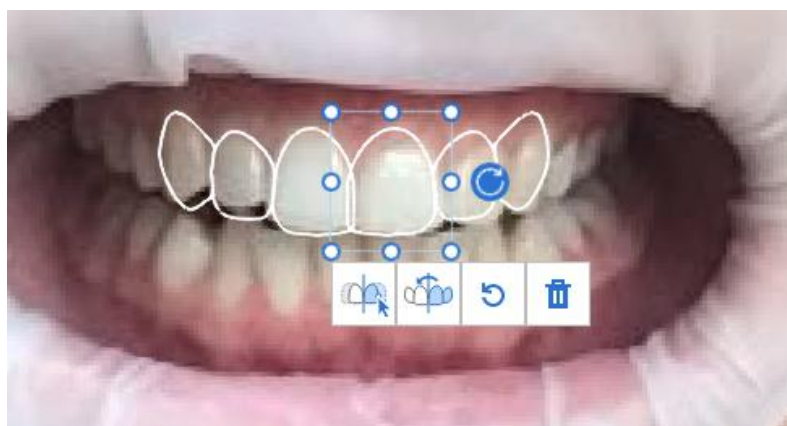
- **Double-click** on a tooth to modify its shape, if needed, using the points of the teeth line.
  - Use the left button on the mouse to add new points, and the right button to delete points.




#### 4.3.1 Modifying the template


##### ▷ Modifying template shape

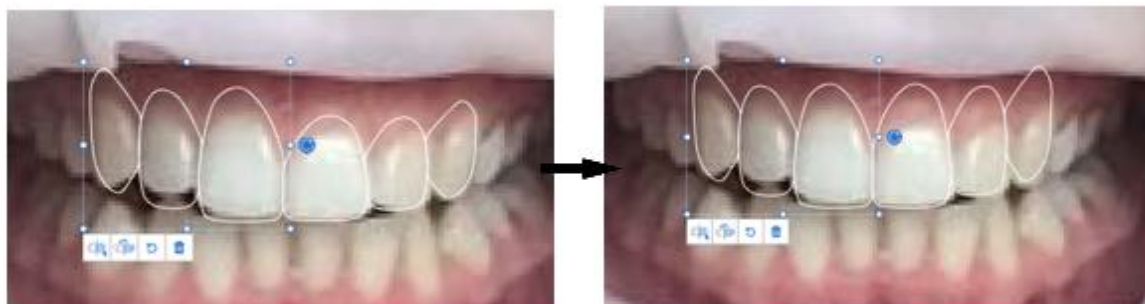
When selecting teeth of the template, you will see a box of tools which are designed to work with the template.




 **Simultaneous design:** Mirrors the editing process on to the other side. The design will be changed simultaneously on both sides after pressing the button.



 **Mirroring the design:** Copies editing to the opposite side. Select the teeth to be copied by dragging the mouse and press the button.





 **Reset:** Restores to default.

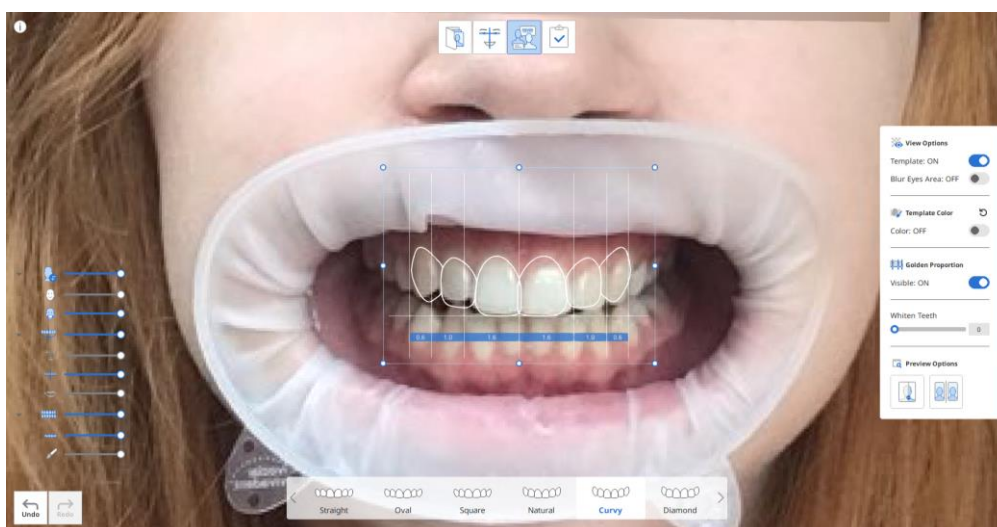
 To totally reset the template, use right mouse button on the name of the selected template in the bottom of the window.



 **Delete:** Deletes the selection.

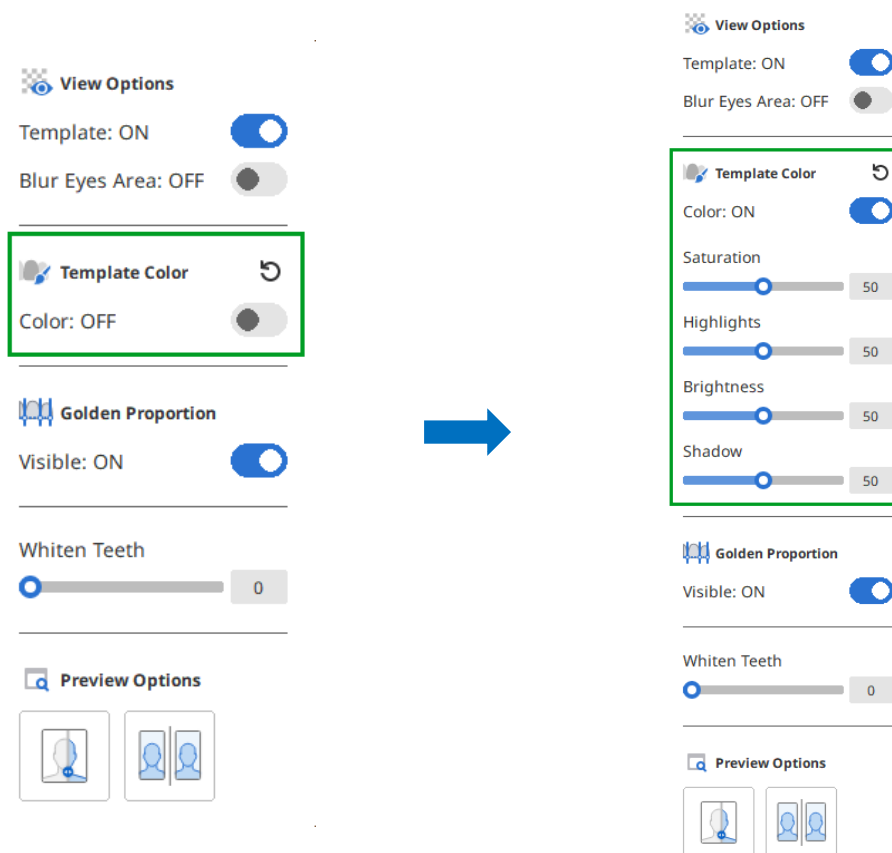
 While working with the template, you can choose to make the golden proportion guide lines on the toolbox on the right.

 Select the golden proportion guide lines by clicking on it to modify its position and scale.

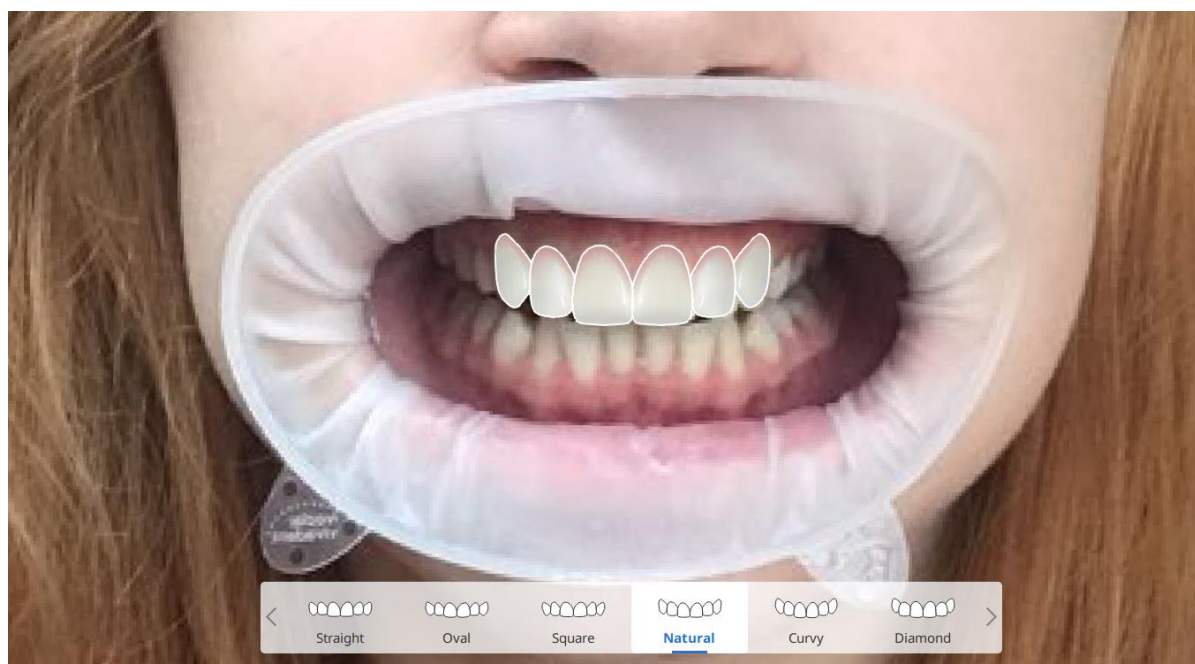


### ▷ Modifying template color

- To turn on the color, use the toggle located on toolbar on the right.



- Modify the shade by adjusting the sliders for saturation, highlights, brightness, shadow.



- 💡 After adjusting the shade, you still can modify the shape of each tooth.

### 4.3.2 Smile Design Preview and Consultation

After finishing the design, you can choose one of the preview options:



Use the handle to move in between the original and smile design image.



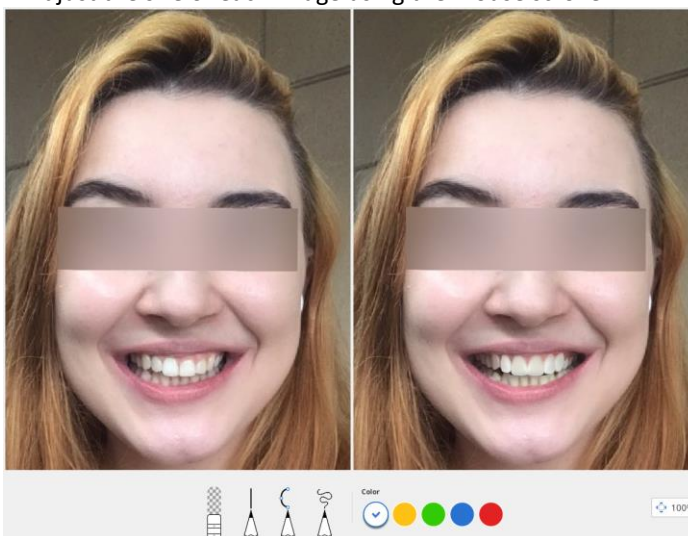
Compare the original and smile design images and use the drawing tools if needed – straight line, curved line, pencil and eraser.



Curved line is drawn by adding points on the image.




Adjust the size of each image using the mouse scroller.



Any changes you make will be reflected in both preview options.

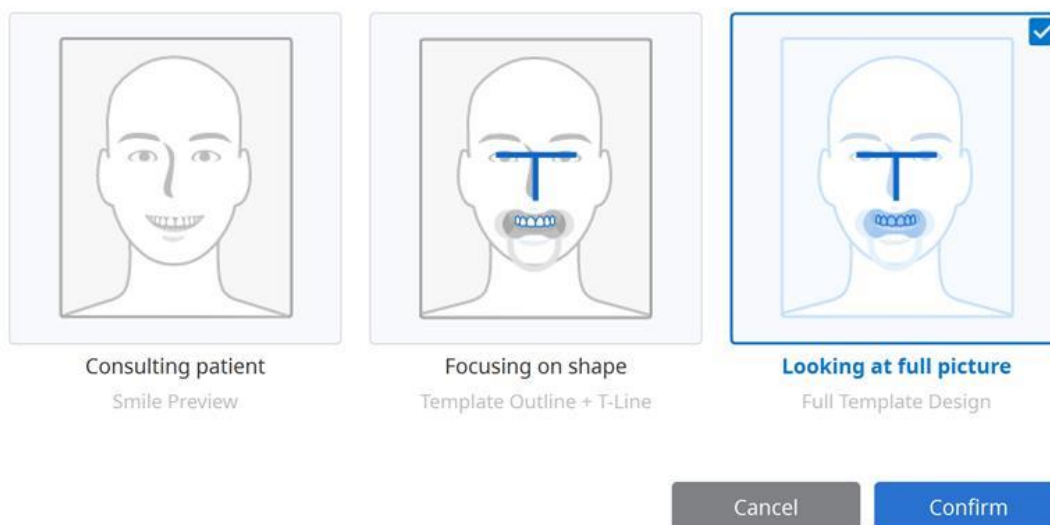
### 4.4 Complete

This step provides options to save the design as captured images.

- After finishing the design process, press **“Complete”**  .
- You can choose one or more captured images to be saved to the Medit Link case.

## Create Capture Images

Select one or more options for smile design capture images.  
The capture images will be saved in the Medit Link case.

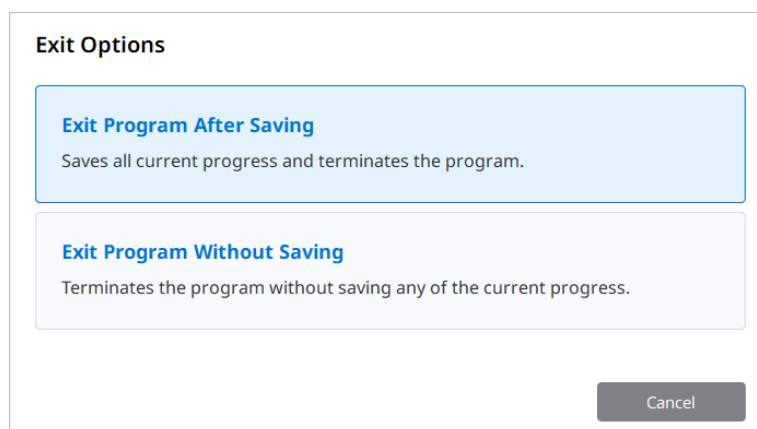


Consulting patient	Saves the before and after preview of smile design with a smile picture.
Focusing on shape	Saves the before and after images with the retracted picture. Only template outline and T-line are displayed. The template texture is not displayed.
Looking at the full picture	Saves the before and after images with the retracted picture. Template outline, T-line are displayed together with the template texture.



If you blurred the eyes during the smile design process, same settings will be applied to the capture images saved to Medit Link.

- The Smile Design Project file will be saved to the Medit Link Case upon completion alongside the smile design capture images.
- In case you exit the program before the design process is finished, you will have two options to select from: 1) exit the program after saving; 2) exit the program without saving.



- If you choose the first option, you can continue working on the project later by running the application from the same case.

- You will be asked if you would like to start a new project or continue working on the existing one when running the app again from Medit Link.

#### Project Options

##### Continue with an Existing Project

Opens and proceeds with a previously saved project file.

##### Start a New Project

Ignores previously saved project files and proceeds with data import.

Cancel