Margin Lines [™]



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Medit Margin Lines

Table of Contents

Overview and General Information1
Overview1
Intended Use and Disclaimer1
System Requirements 2
Installation Guide
Data Management 4
Preparing Data4
3D Data Control
Saving Margin Lines6
User Interface
Title Bar9
Data Tree
Action Control Buttons 10
Teeth Form 10
Side Toolbar
Margin Line Tools
How to Draw Margin Lines 13
Auto Creation
Manual Creation
Editing

Overview and General Information

Overview

Medit Margin Lines is an app designed to help users quickly create precise margins on already processed data from Medit Scan for Clinics. With this app, users no longer need to return to the scan acquisition program just to work on margin lines.

The app provides all necessary tools for manual and automatic margin line creation and editing of the existing ones. Once saved to the Medit Link case, they can be further used in any Medit software or exported to other CAD along with the scan data.



Medit Margin Lines only supports data captured in the Maxilla and Mandible stages and processed in Medit Scan for Clinics.

Intended Use and Disclaimer

Medit Margin Lines was not developed for medical or clinical use. As such, it cannot be used for the following purposes:

- diagnosing, treating, mitigating, or preventing diseases/injuries/disorders.
- inspecting, replacing, or transforming a structure or function.

The sole purpose of this software is to assist in the management of available 3D data. Medit does not take responsibility or liability for any improper use of the software or misunderstanding of the information and guidance given in the program.

System Requirements

Windows

CPU	Intel Core i5 2.6 GHz or higher	
RAM	16GB or higher	
Graphics NVIDIA GeForce GTX 1060 (2GB) or higher		
OS Windows 10 64-bit, Windows 11 64-bit		

macOS

Chip	M1/M2 or higher	
CPU	8-core or higher	
RAM	16GB or higher	
OS	Monterey 12	

Installation Guide

- ① Log into your Medit Link account and go to the App Box on the left-hand menu.
- ② In the Medit Apps tab, find the Medit Margin Lines app and click "Install."

All Medit Apps Downloaded				Search by App Information
All Management Imaging	Diagnosis/Consultation CAD CAM	Utilities Order Placement		
Smile design with 2D fecial images				
Install				
CAD				
Medit ClinicCAD	Medit Splints 🛄	Medit Model Builder 🛄	Medit Temporaries	
CAD solution for dental prostheses	Automatic splint creation	Design printable models for intraoral scans	Design tempotary cown & bridge	
Installed	Instatl	Install	Install	1 I
Utilities				
Medit Crown Fit	Medit Margin Lines	Medit DCM Converter	Medit Facebook User Group	Medit Academy
Digital cown fit testing	Margin creation and editing	Convert 3Stage DCM to Medit format	Medit Facebook user group	Medits online training platform
Update	Install	Install	Testalled	Tentall

③ Read the Software License Agreement and confirm app installation by clicking "Accept and Install."



④ The app will be downloaded and installed automatically. It may take several minutes to finish the process.

Do not turn off the PC or close Medit Link during the installation process.

5 Once the app is installed, you can run it from any case in Medit Link by clicking the app icon in the top right corner of the Case Detail window.

You can't add or change margin lines for cases that have already been ordered (cases with an order ID). To use that case in the app, clone it.



Data Management

Preparing Data

Medit Margin Lines only supports data processed in Medit Scan for Clinics.

Before running the app, make sure your scan data was acquired in the Maxilla or Mandible scan stages. Data from these stages will be titled "Base" in the File Viewer.



 $\mathbf{\hat{P}}^{-}$ The app does not support working with pre-op or attached data.

3D Data Control

You can control imported 3D data using a mouse alone or both mouse and keyboard.

Use	Description	Image
Zoom	Scroll the mouse wheel.	
Zoom Focus	Double-click on the data.	2×
Zoom Fit	Double-click on the background.	2×
Rotate	Right-click and drag.	
Pan	Hold both buttons (or wheel) and drag.	

3D data control using a mouse

3D data control using mouse and keyboard

Use	Windows	macOS
Zoom	Shift +	
Rotate	Alt +	x +
Pan	Ctrl +	# +

Saving Margin Lines

When you finish drawing or editing margin lines, save them to the Medit Link case by clicking "Complete."



The margin lines of each jaw will be added to the data list in the File Viewer tab.

Form	File Viewer	
E		
🖃 Maxilla		© 1
Base		© !
😑 Margin L	ine	© !
11		© :
12		© :
21		© :
22		0 :
— Mandible		© :
Base		© :
📃 Margin L	ine	© :
46		© :
47		© :

 $\dot{\nabla}$ If you terminate the program using "Exit," you will be asked whether or not to save the work in progress.

Exit Program	After Saving
Save all curren	t progress and terminate the program.
Exit Program	Without Saving
Terminate the	program without saving any of the current progress.

User Interface

≡ Margin Lines n 1.1.0 A	Medit Margin Line Sample (UD)	1910 © 5 _ 5 ×
B	<text><text><text></text></text></text>	G Arrgin Line A M A A A A A A M A A A A A A A A A A A A A A A A A A
C	F	c I

- A. Title Bar
- B. Data Tree
- $\textbf{C.} \ \text{Action Control Buttons}$
- **D.** Guide Message

- E. 3D Data
- F. Teeth Form
- G. Margin Line Tools
- H. Side Toolbar

Title Bar

The Title Bar is the ribbon at the top of the application window that contains basic controls on the right and the menu on the left. It also displays the app name and the opened case name.

	Menu	Access the available settings and assistance resources (user guide, tutorial page, help center), and check the details about the app.
	Help Center	Go to the Medit Help Center page dedicated to this app.
	Start/Stop Video Recording	Start and stop the video recording of the screen.
·0]	Screenshot	Take a screenshot. Capture the app with or without the title bar using automatic selection, or click and drag to capture only the desired area.
	Screenshot Manager	View, export, or delete the screenshots. Upon completion, all captured images will be saved to the case automatically.
	Minimize	Minimize the application window.
	Restore	Maximize or restore the application window.
\times	Exit	Close the application.

Data Tree

The Data Tree is located on the left side of the screen, showing the data you use for the current project in groups. You can control each data visibility by clicking its icon in the tree or change its transparency by moving its slider.



Action Control Buttons

There are three buttons that provide action control. They can be found in the bottom corners.

lcon	Tool	Description	
C Undo	Undo	Undo the previous action.	
Redo	Redo	Redo the previous action.	
	Complete	Finish working on margins and save result Medit Link.	

Teeth Form

The teeth form at the bottom of the screen shows case information that was entered in Medit Link.

Click on the maxilla or mandible icons to view the corresponding teeth list and work on margins for those teeth. The Medit Link logo means that the tooth was registered as a target tooth in the Medit Link form. To work on the next tooth, click its number in the form or use the arrow keys.



Use Expand/Collapse icon to see the full list of teeth for the selected arch.



Side Toolbar

The Side Toolbar is located on the right side of the screen; it offers a number of tools for data display and control.

Data Display

Data Display Mode	Change between different data display options. (Textured/Textured with Edges/ Monochrome/Monochrome with Edges)
Grid Settings (mm)	Show or hide the grid, and control its position in relation to the model (overlay on/off).

Touch Screen/Mouse Options

(±)	Zoom	Zoom in and out by click-and-drag.
	Zoom Fit	Zoom to fit data to the screen.
$\stackrel{\uparrow}{\longleftrightarrow}$	Pan	Move data by click-and-drag.
\bigcirc	Rotate	Rotate data by click-and-drag.

Margin Line Tools

Margin Line Tools contain useful instruments for margin line automatic and manual creation, editing and management of the margin lines.

Icon	Tool	Description
Log.	Manual Creation	Manually create a margin line based on the selected points.
	Edit	Add, move, or delete the control points to edit the margin line. Hold down the Ctrl key for freehand editing of the line.
	Auto Creation	Automatically create a closed margin line based on the selected point.
	Delete	Delete the margin line.
On •	Section View	Displays the section of the area where the mouse is located.
© Off	Curvature Display Mode	See the curvature of the data through Color Map.
	Dynamic View Change	Turn on Dynamic View Change to automatically rotate data according to the view direction.
		- Available only when using Manual Creation.

How to Draw Margin Lines

You can use Medit Margin Lines to create new margin lines automatically or manually, as well as to edit the existing ones. The app can also generate a margin for the prepared tooth registered in the Medit Link form automatically upon entering the app.

You can't add or change margin lines for cases that have already been ordered (cases with an order ID). To use that case in the app, clone it.

Auto Creation

① After opening the app, select your target arch in the Teeth Form below the data.



② Choose a tooth number for which you want to draw the margin. The selected number will be displayed in blue.



③ Select "Auto Creation" from the toolkit on the right and choose what type of margin you want to create - inlay or crown. Then, zoom in on the target tooth, and create a complete margin line with one click.



④ You can also turn on "Curvature Display Mode" to help you analyze the prepared data and draw a more precise margin line.



- (5) If you want to work on the other tooth, select it in the form at the bottom or use the arrow keys.
- 6 If you are ready to save created margins, click "Complete."

Manual Creation

① After opening the app, select your target arch in the Teeth Form below the data.



2 Choose a tooth number for which you want to draw the margin. The selected number will be displayed in blue.



Teeth that are registered in the form will have the Medit Link logo. If you want to draw margins for teeth not registered in the form, expand the teeth list. All created margins will be saved to the case after clicking "Complete."

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11 21 22

23 24 25 26 27 28 ≪



15 14 13

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18 17

③ Select "Manual Creation" from the toolkit on the right, zoom in on the target tooth, and start drawing the margin by adding control points.



If you accidentally add a control point in the wrong place, use Ctrl+Z/ Cmd+Z to delete the last added control point.



Turn on "Dynamic View Change," and the data will automatically rotate to your view while adding control points.

④ When "Section View" is on, you can adjust the control point along the section line with a long-click and drag.



5 You can also turn on "Curvature Display Mode" to help you analyze the prepared data and create a more precise margin line.



- If you want to work on the other tooth, select it in the form at the bottom or use the arrow keys.
- ⑦ If you want to save created margins, click "Complete."

Editing

① When you open the app from a case with margin lines or click a tooth number that has it, the "Edit" tool is automatically activated.



② Use the control points on the line to edit it.

Click to add a new point, click and drag to move the point, and right-click to delete the point.



• When the tool is on, you can also hold down the Ctrl/Command key and drag the mouse to make minor freehand corrections quickly.





③ When "Section View" is active, you can adjust the control point along the section line with a long-click and drag.



④ You can also turn on "Curvature Display Mode" to help you analyze data and create a more precise margin line.



- If you want to work on the other tooth, select it in the form at the bottom or use the arrow keys.
- 6 If you want to save edited margins, click "Complete," and margins in the case will be overwritten.