



Trio iDesign™ 2.0 USER GUIDE

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Part 1. Introduction



- Trio iDesign™ is an advanced web-based 3D simulation software transforming the way you view, modify, and approve TrioClear™ treatment plans. Experience our groundbreaking new features in Trio iDesign™ 2.0. It seamlessly integrates face scan and CBCT into the treatment plan. By incorporating scans from compatible scanners, our software offers a comprehensive and realistic treatment planning experience. Make informed decisions and tailor treatments for optimal results.
- In additional to this exciting new feature, "Trio iDesign™ 2.0" continues to deliver even more accurate 3D simulation results, delivered with an improved processing time. This efficiency allows you to optimize your valuable time and resources, enabling a streamlined treatment planning process.

Doctors may make changes or modifications via the Trio iDesignTM prior to approving the final TrioClearTM treatment plan.

The doctor's approval of the modified $TrioClear^{TM}$ treatment plan is considered a prescription and constitutes final authorization for $TrioClear^{TM}$ to manufacture the aligners.



Part 1. Introduction

Three major components in the work window:

- 3D View window
 - 2) Toolbar
- (3) Animation bar

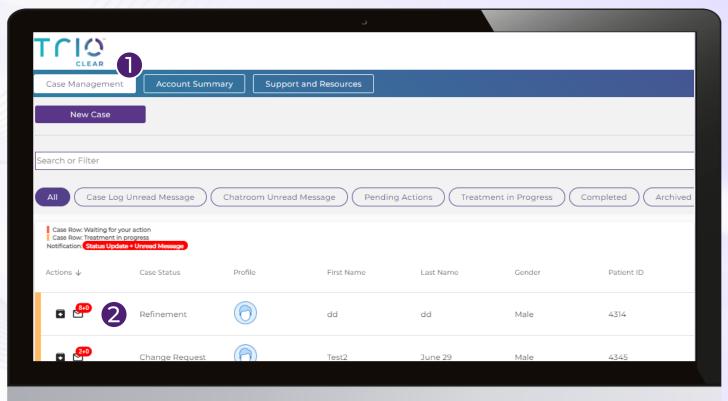






Part 2. Access to Trio iDesign™

- Once you sign in to the TrioClear™
 Doctor Submission Portal
 (http://pro.trioclear.com/) on your
 browser (preferably with Chrome). You will
 be directed to the TrioClear™ Case
 Management dashboard. If it is
 your first time using the
 Submission Portal, you may refer
 to the "TrioClear Submission Guide"
 for detailed instructions.
- To view a treatment plan, first click on the patient's profile.





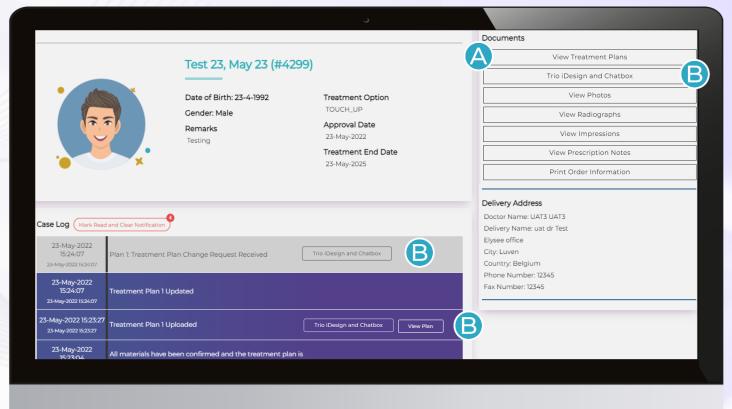
Part 2. Access to Trio iDesign™

- **3** Two options opening Trio iDesign™ :
- A <u>Without</u> chatbox: Under section of <u>Documents</u> > View Treatment Plans > Trio iDesign

B <u>With</u> chatbox: Under section of Documents > Trio iDesign and Chatbox

or

Under section of Case Log > Trio iDesign and Chatbox

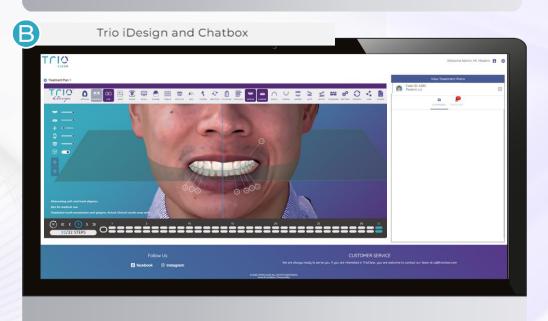


Part 2. Access to Trio iDesign™

- 4 Two options:
- A Upper screen shows the Trio iDesign™ work window without Chatbox
- B Lower screen shows the Trio iDesign™ work window with Chatbox
- Both screens have the same functions in Trio iDesign™ work window.







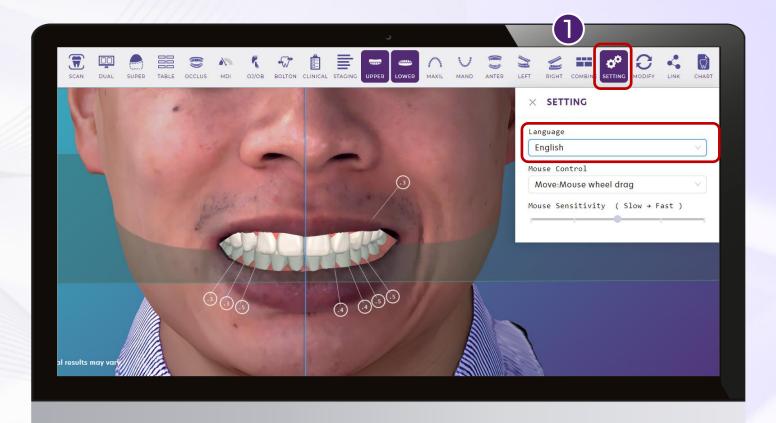


Part 3. Setting 3.1 Language



- 1 Settings > Language
 - Multiple languages available.
 More languages are upcoming!
 - Default language: English





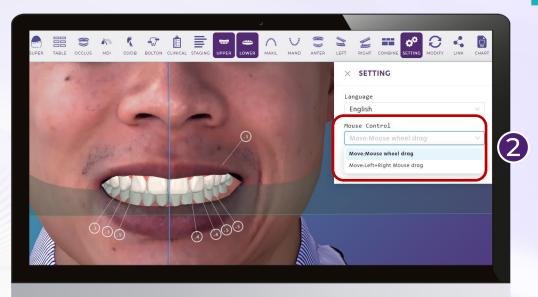
Part 3. Setting 3.2 Mouse Operation



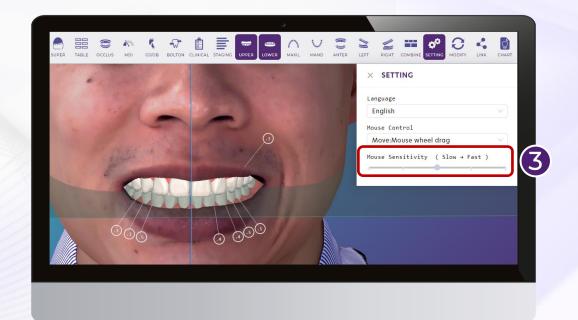
- 2 Mouse operation
 - ◆ **Zoom view**Scroll centre wheel
 - Rotate view
 Press right button and drag
 - Move (= Pan view)
 Default:
 - Mouse wheel drag

Other option:

- Press left and right mouse button and drag (compatible with mousepad)
- 3 Mouse sensitivity
 - ◆ Slow to Fast in 5 levels











Part 4. Work window 4.1. 3D view window

- 1 Patient's 3D model
- 2 Adjust view
 - A Upper / lower jaw Change the transparency level of the upper / lower jaw









B Median plane / Occlusal plane Change the transparency level of the plane





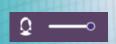




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Part 4. Work window 4.1. 3D view window

- 2 Adjust view
 - Change the transparency level of the face







Change the transparency level of the gum





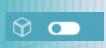




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Part 4. Work window 4.1. 3D view window

- 2 Adjust view
 - Orthographic / Perspective View







(F) Orientation in Occlusal Plane





© Orientation in FH Plane







T []

Part 4. Work window 4.1. 3D view window

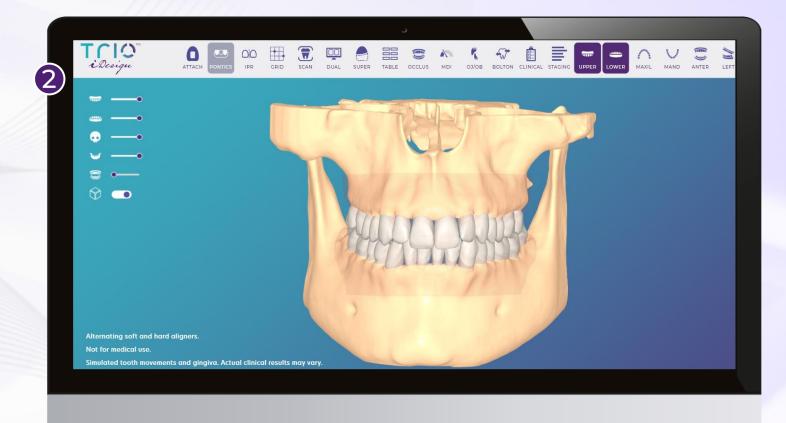


Upper Jaw Bone



(F) Lower Jaw Bone

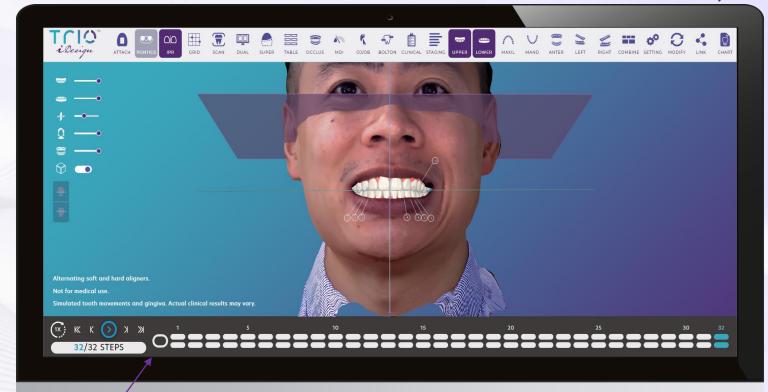


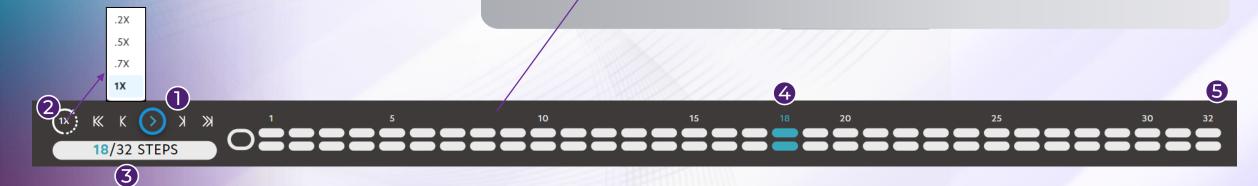




Part 4. Work window 4.2. Animation bar

- Play functions
- 2 Speed setting
 - 4 speed options
- 3 Current steps / total steps
- 4 Step locator
- **5** Total steps







4.3.1 Attachment

You can choose to display or hide the attachments during the treatment plan review. Put your mouse over any attachment to see the attachment type.







4.3.2 Pontics

It toggles between showing and hiding the pontics during the treatment plan simulation. The whole of the pontics—are displayed in yellow.







4.3.3

IPR

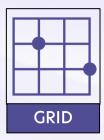
(Interproximal reduction instructions)

This tool controls the display of IPR values. When the mouse is over a circle, more detail will be displayed.

- Circle shaded in yellow
 Perform IPR at the current step
- Circle shaded in white IPR planned for the future steps
- Transparent circle
 IPR in the previous steps



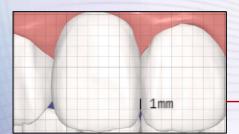




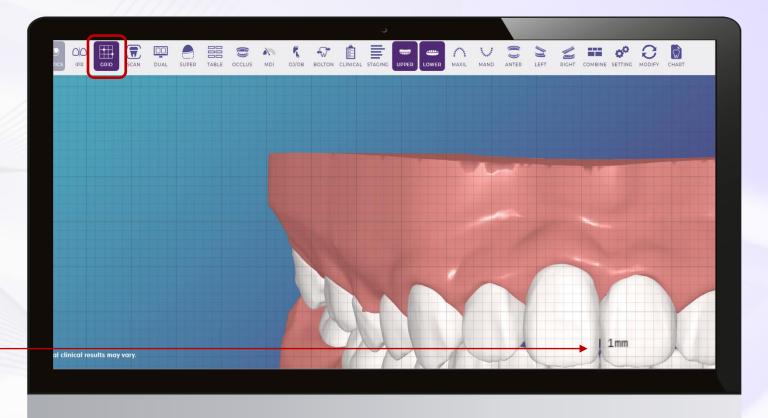
4.3.4

Grid view

The grid view toggles the display of a measurement grid. When the grid is on, the view is flattened (Perspective View) to facilitate accurate measurements.









4.3.5

Scan data

Display the original scan data submitted to TrioClear TM in beige color.







4.3.6 Dual window comparison

This tool provides a dual window comparison of a model among a specific step and the desired outcomes along the animation bar.





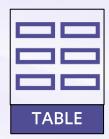


4.3.7 Superimposition tool

This tool allows you to visualize the relative movements of teeth from the initial (highlighted in dark blue color) or one step to another along the animation bar.







4.3.8

Tooth movement table

The tooth movement table displays the values of all the movement programmed for each tooth.

2 available views:

- Value of each step of aligners
- Accumulated values







4.3.9

Occlusal contacts tool

The red to blue indicators on the model during the treatment plan review along the animation bar implies the presence of heavy occlusal contacts.

You can use this tool with dual window comparison to check the difference of the initial and final stages about the occlusal contacts.







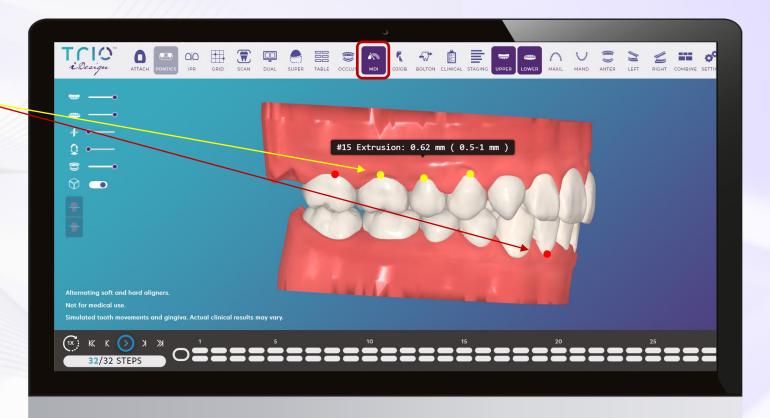
4.3.10

MDI (Movement Difficulty Indicators)

The Movement Difficulty Indicators display movements of extrusion, intrusion, rotation, root movement, and A-P correction, which are programmed in the TrioClear™ treatment plan.

The dot indicator(s) in yellow and red denote larger tooth movements, which may pose greater difficulty in achieving the desired treatment outcome.







4.3.10

MDI

(Movement Difficulty Indicators)

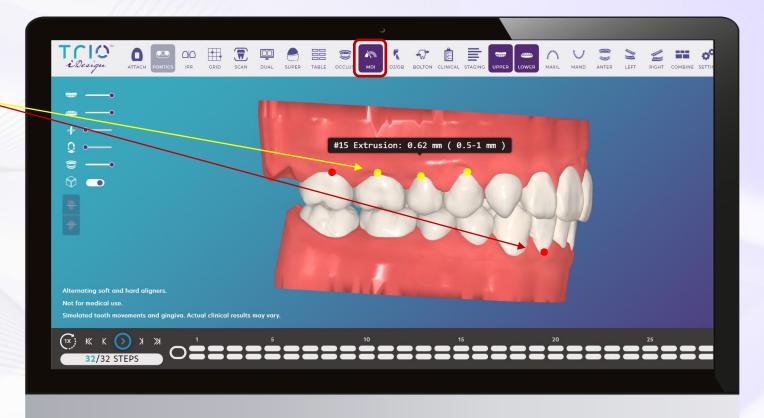
YELLOW - Moderate movements
The movements programmed have shown good results with the use of aligners and at times, benefit from additional techniques like the one noted to the right; closer monitoring is recommended.

Additional refinements <u>may be</u> <u>needed</u>.

The movements programmed have shown good results with the use of aligners, but often require additional orthodontic techniques as they are more challenging to achieve with the use of aligners alone; very close monitoring is recommended.

Additional refinements <u>likely needed</u>.







4.3.10

MDI

(Movement Difficulty Indicators)

These ranges are applied as a guideline to assess the extent of tooth movement in the TrioClear TM treatment plan.

NOTES:

If a doctor requests to remove or change a default attachment that has been automatically placed, the tooth / teeth will be identified as yellow or red and may require additional clinical skills and close monitoring.

The color of assessing the difficulty of a treatment are provided for the doctor's reference only, based on the TrioClear™ treatment plan. Each patient's situation is different. Doctor is solely responsible for evaluating whether TrioClear™ treatments are appropriate for use with each patient and waives any claims against TrioClear™ relating to the treatment or outcome.



Moderate Movement



Advanced Movement



EXTRUSION

Upper Central Incisors Upper Laterial Incisors Lower Incisors Upper & Lower Canines

Upper & Lower Premolars Upper & Lower Molars

INTRUSION

Upper Central Incisors Upper Laterial Incisors Lower Incisors Upper & Lower Canines

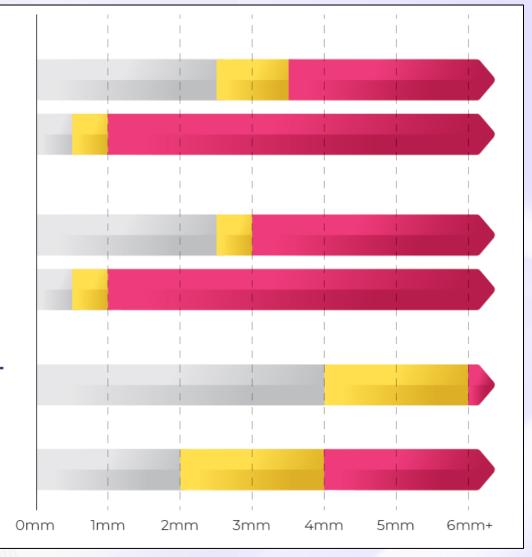
Upper & Lower Premolars Upper & Lower Molars

ROOT MOVEMENT

All Teeth Measured by displacement of root apex.

A-P CORRECTION

Per Quadrant





4.3.10

MDI

(Movement Difficulty Indicators)

These ranges are applied as a guideline to assess the extent of tooth movement in the TrioClearTM treatment plan.

NOTES:

If a doctor requests to remove or change a default attachment that has been automatically placed, the tooth / teeth will be identified as yellow or red and may require additional clinical skills and close monitoring.

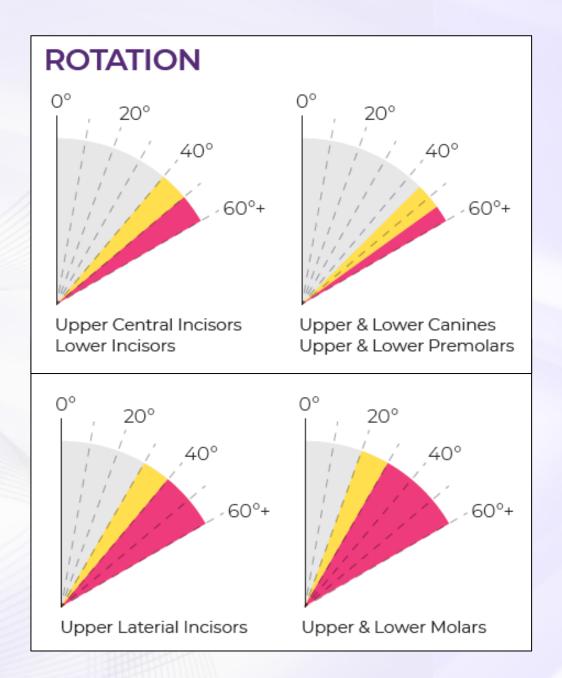
The color of assessing the difficulty of a treatment are provided for the doctor's reference only, based on the TrioClear™ treatment plan. Each patient's situation is different. Doctor is solely responsible for evaluating whether TrioClear™ treatments are appropriate for use with each patient and waives any claims against TrioClear™ relating to the treatment or outcome.



Moderate Movement



Advanced Movement







Value

difference

Original Plan Value difference

difference

Initial Original

Value

difference

Overjet / Overbite analysis 4.3.11

Contain the overjet and overbite values and the differences between the initial step and after treatment plan correction.





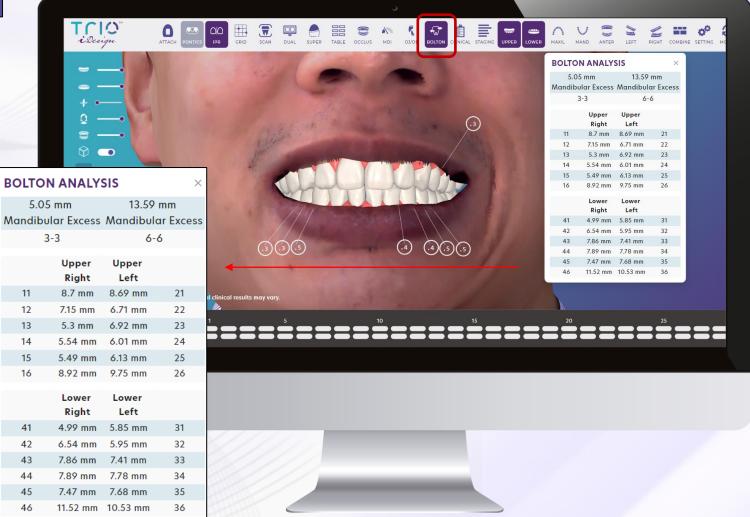


4.3.12 Bolton analysis

Bolton analysis provides reference information about tooth size discrepancy that is useful for planning how to address tooth interdigitation and arch coordination. The analysis is not automatically integrated into the treatment planning setup protocol but is provided for your assessment.

Bolton analysis provides information on the width of permanent and also provides the estimated width for missing permanent teeth.





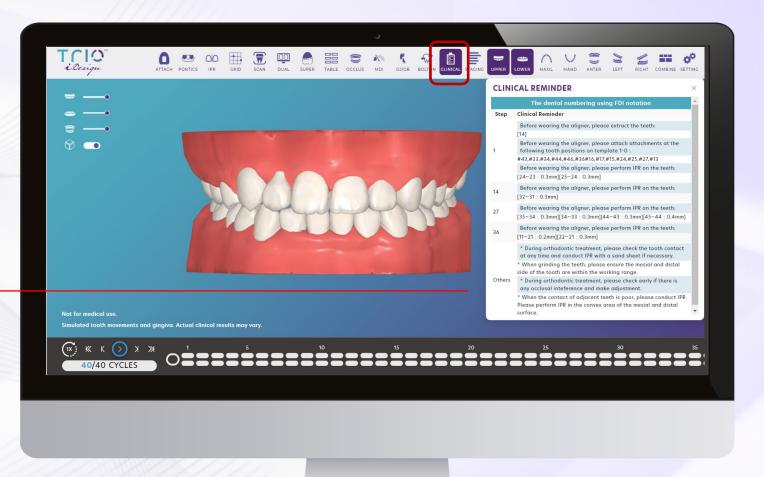


4.3.13 Clinical reminder

Contains a summary to doctors for the routine procedures of orthodontic treatment during certain steps of the clear aligner treatment.

CLINICAL REMINDER				
The dental numbering using FDI notation				
Step	Clinical Reminder			
	Before wearing the aligner, please extract the teeth: [14]			
1	Before wearing the aligner, please attach attachments at the following tooth positions on template 1-0:			
	#43,#33,#34,#44,#46,#36#16,#17,#15,#24,#25,#27,#13			
	Before wearing the aligner, please perform IPR on the teeth: [24~23:0.3mm][25~24:0.3mm]			
14	Before wearing the aligner, please perform IPR on the teeth: [32~31: 0.3mm]			
27	Before wearing the aligner, please perform IPR on the teeth: [35~34:0.3mm][34~33:0.3mm][44~43:0.3mm][45~44:0.4mm]			
36	Before wearing the aligner, please perform IPR on the teeth: [11~21 : 0.2mm][22~21 : 0.3mm]			
Others	* During orthodontic treatment, please check the tooth contact at any time and conduct IPR with a sand sheet if necessary.			
	* When grinding the teeth, please ensure the mesial and distal side of the tooth are within the working range.			
	* During orthodontic treatment, please check early if there is any occlusal inteference and make adjustment.			
	* When the contact of adjacent teeth is poor, please conduct IPR. Please perform IPR in the convex area of the mesial and distal surface.			





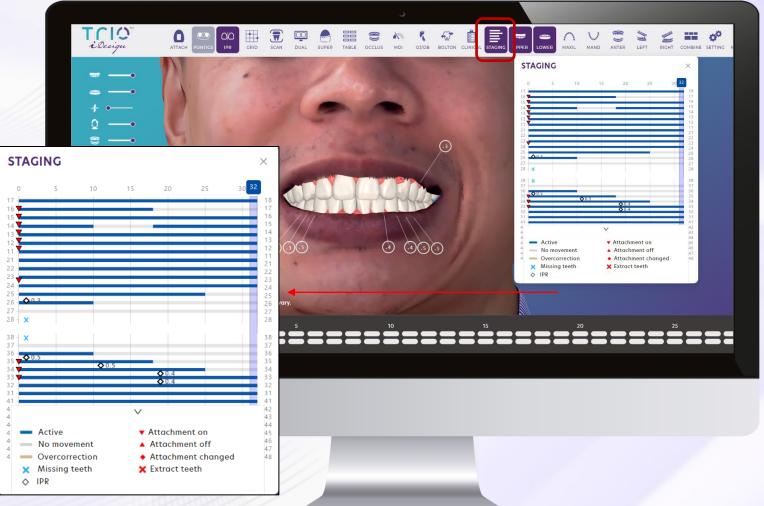


4.3.14 Staging overview

Displays the overview and treatment details of the movement for each tooth in every step.

Colors & symbols represent different scenarios and reminders of routine procedures at various stages.

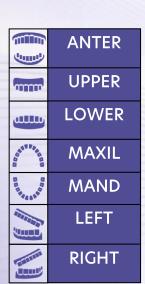




4.3.15 Viewing tools

Shortcut keys available in all views:

- Anterior
- 2 Upper jaw
- **3** Lower jaw
- 4 Maxillary
- **5** Mandibular
- 6 Left Buccal
- 7 Right Buccal





















4.3.16

Combination view

Now you can see the intraoral model in five different angles at the same time.







- 4.3.17 3D modification Adjust goal position
- Select "*Modify*" in the toolbar. Select "*Teeth*" in the "*Modify*" window.
- 2 Two sliders below represents the interval and the rotation degree for the teeth movement during the modification. You can drag the sliders to set the values for each arrow move.
- 3 Left-click to select a tooth to be modified. The selected tooth will be highlighted in white. Hold the (Ctrl) Control key to select multiple teeth, all of which will be modified at once.

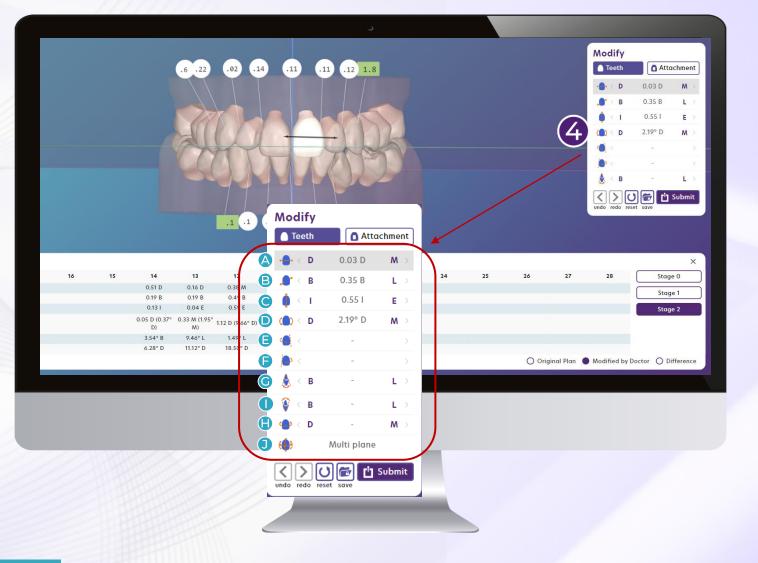






- 4.3.17 3D modification – Adjust goal position
- Click to select the movement type from the following:
- A Translation (Distal/ Mesial)
- B Translation (Buccal/Lingual)
- Intrusion/Extrusion
- Crown Tipping (Distal/ Mesial)
- E Mesial Hinge Rotation
- E Distal Hinge Rotation
- **(G)** Root Torquing (Buccal /Lingual)
- Crown Torquing (Buccal /Lingual)
- Rotation (Distal / Mesial)
- Multi plane







4.3.17 3D modification – Adjust goal position

Click or button to move. The value between the arrows is also shown on the movement table below.







4.3.17 3D modification – Adjust goal position

You can also click and hold on the handle → on the tooth. Drag the handle to make the desired changes.



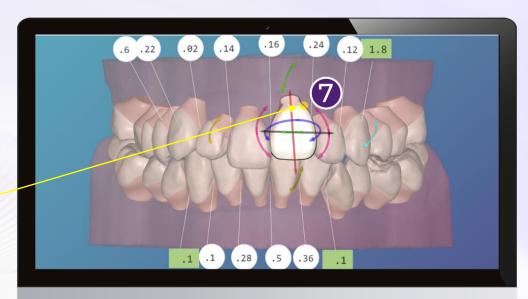




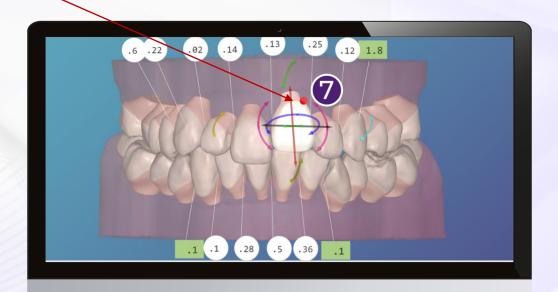
4.3.17 3D modification – Adjust goal position

Turn on the MDI function.

The yellow or red indicators will be displayed if it is a moderate or advanced tooth movement based on your treatment plan modification.



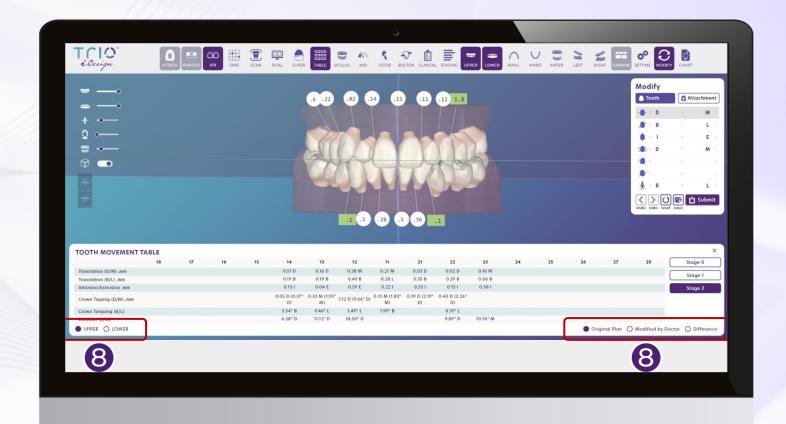






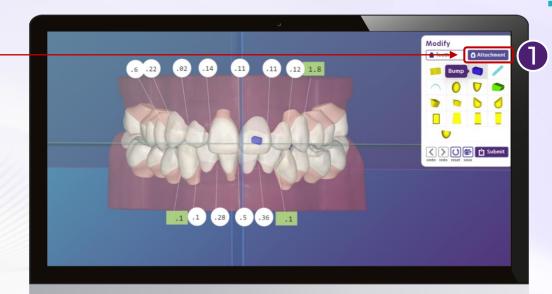
- 4.3.17 3D modification Adjust goal position
- There are 3 display options of all the movement values programmed for each tooth of upper or lower jaw in the movement table:
- Original plan
 Shows the original values in the treatment plan.
- Modified by Doctor
 Shows the values after
 modifications.
- Difference Shows the difference between the original values and the values after modifications.







- 4.3.17 3D modification Adjust attachments
- Select "Attachment" tab in the "Modify" window.
- 2 Drag the desired attachment to certain tooth, release to add and place the attachment.







4.3.17 3D modification – Adjust attachments

To move the attachment position:

3 Left-click to select the attachment to be adjusted. Hold down the left mouse button on the attachment and drag to the desired position.



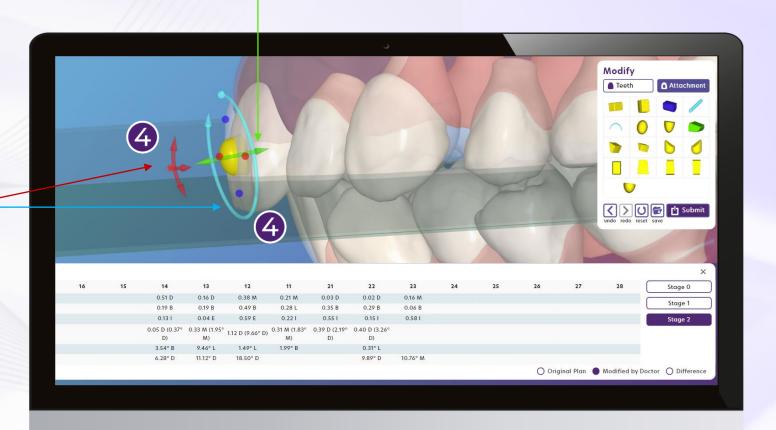




3D modification – 4.3.17 Adjust attachments

- Rotation
- Drag the Red and Blue arrows to rotate along X, Y, or Z axis respectively.
- Drag the Green arrow to adjust the thickness of the attachment placed on the tooth.









4.3.17

3D modification – Adjust attachments

6 Scale

Drag the Red, Blue spots to scale the attachment in the axis respectively.

- Red spots: Adjust the width
- Blue spots: Adjust the length







4.3.17

3D modification – Adjust attachments

- 6 Adjust single attachment
 - Right click on the attachment placed during your modification, you can find 2 specific functions:
- Reset: Reset the attachment back to the original state when it is first placed in the modification.
- Remove attachment: Totally remove that attachment placed in the modification.



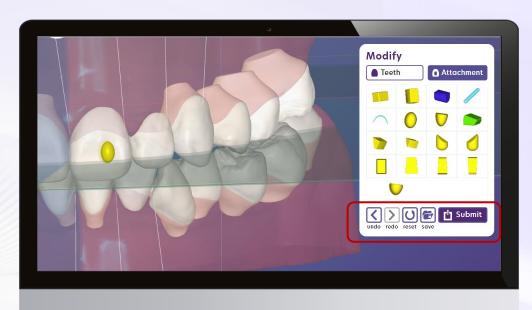




4.3.17 3D modification – Adjust attachments

You can also use 5 buttons at the bottom of the Modify window to help managing the modification:

- **Undo:** Reverse the previous action performed and restore an earlier version of your modification.
- Redo: Counterpart to "Undo". Reapply an action that was previously "undone" and restore changes that were previously reversed.
- **Reset all:** Reset all modification actions to the original state.
- **Save:** Store and preserve the modification of the treatment plan for reference in the future.
- Submit: Submit the modified treatment plan to TrioClear.



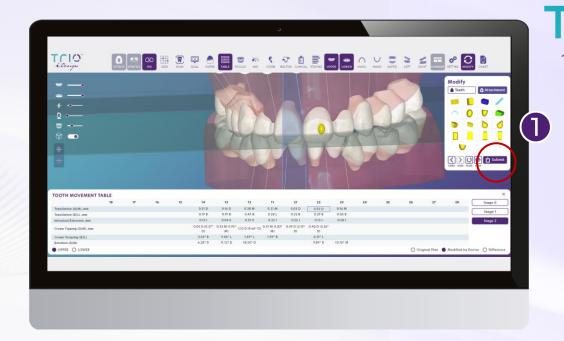


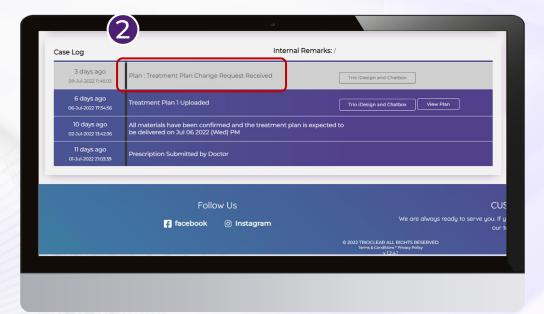


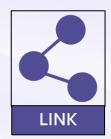


4.3.17 3D modification

- When you are satisfied with the modified treatment plan, please submit the changes using the "SUBMIT" button inside the Modify window.
- Then you will see a new status updated in the case log: "Plan: Treatment Plan Change Request Received".





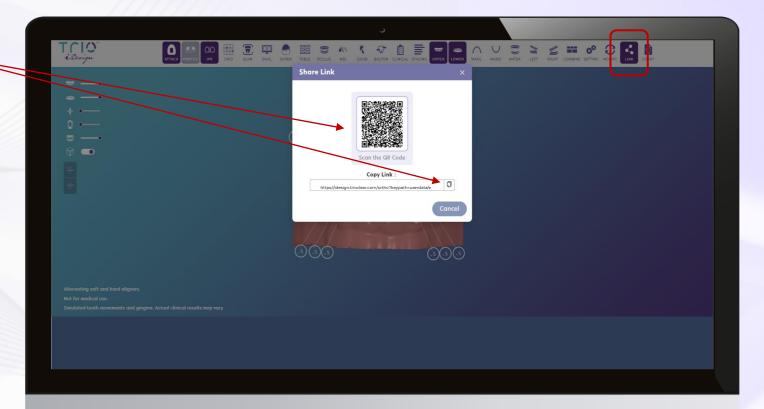


4.3.18 Sh

Share link

You can copy the link or the share the QR code to your patient about the treatment plan simulation.







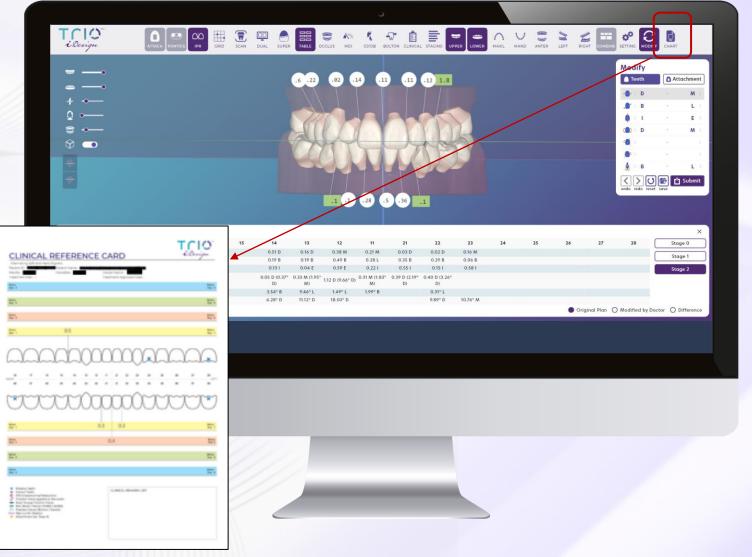
4.3.19 Clinical reference card

Based on the treatment plan, all necessary clinical procedures are listed on the clinical reference card. For example teeth extraction, IPR, button or attachment placement, etc.

You can download and review the clinical reference card in PDF format that help preparing to carry out these procedures accurately and efficiently.

You may need to install a PDF reader to view the clinical reference card.



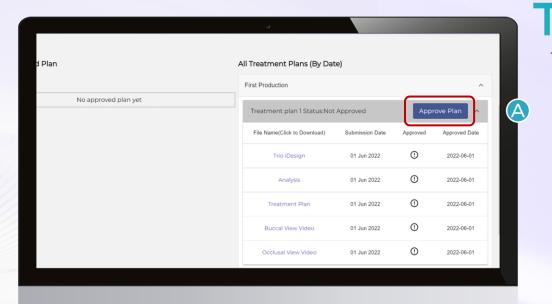


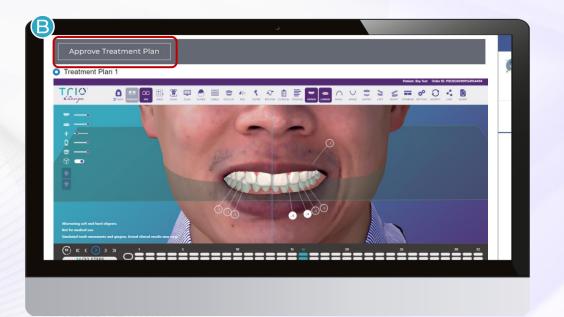


Part 5. Treatment plan approval

If the treatment plan needs no modifications, you can approve the treatment plan in one of the following pages:

- A "View Treatment Plans"
- (B) "Trio iDesign and Chatbox"







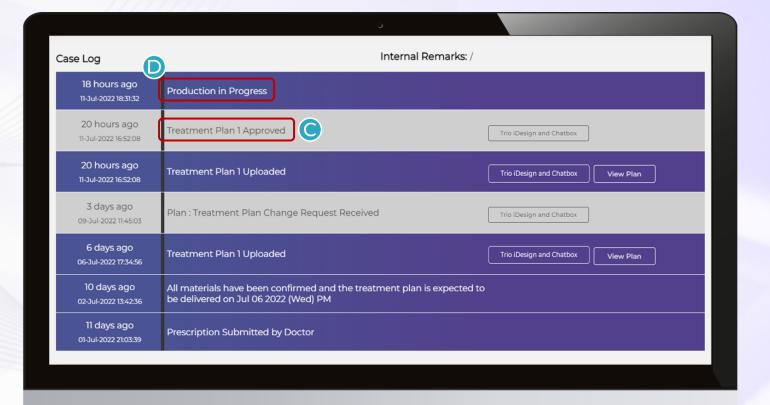
Part 5. Treatment plan approval

You will see a new status updated in the patient's case log:

"Treatment Plan x Approved"

The treatment plan will then undergo the production process and you will see a new status updated in case log:

"Production in Progress"





Part 6. Software operation – 6.1 Reminder of data security

TrioClear™ takes great care in protecting the integrity and confidentiality of data from the moment it is collected. The transmission of treatment plan files are encrypted. While it is the customer's responsibility to protect access to their computing device as well as install appropriate malware protections, TrioClear™ has the following recommendations for protecting devices/data:

- Lock the screen of the device during periods of inactivity.
- Sign out of your TrioClear™ doctor submission portal account when finished.
- Run up-to-date anti-virus software.
- Use Trio iDesign™ only on private, firewalled networks.
- Avoid the use of Trio iDesign™ on rooted or jailbroken devices (Note: rooting/jailbreaking describe the acquisition of complete administrator rights on the device, allowing third-party programs to perform operations that were not originally possible).
- Keep operating system patches up-to-date to address vulnerabilities.





To view Trio iDesign™ treatment plans and return feedback to TrioClear™, you must have Internet access and your computer should meet the minimum specifications below. If software loses functionality (e.g. specific Trio iDesign™ features are not displayed), please contact our Customer Care.

Minimum & recommended OS requirements for Windows PC:



	WindowsOS minimum requirements	WindowsOS recommended requirements (Especially for modification)				
Operating system	Windows 10, with latest update					
CPU / Video card / reference model	CPU: Intel® Core™ i5 Video Card: Intel HD Graphics 2000 with latest drivers	Video Card: AMD™ Radeon™ R5 340x or Intel® UHD Graphics 620 with latest drivers				
Memory	4 GB RAM	16 GB RAM				
Internet	2 Mb/s internet connection wireless and wired network connection.No satellite network connection support.	100 Mb/s internet connection wireless and wired network connection. No satellite network connection support.				
Input	Keyboard and mouse required. Other input devices are not supported.					
Resolution	1024 x 768 display resolution	1920 x 1080 display resolution				



Minimum and recommended MacOS requirements – Apple devices



	MacOS requirements					
Reference model	Optimal experience: MacBook Pro 16" (Retina, 8th generation, mid 2019) using latest MacOS Compatible MacOS system(s): Mac models released in 2017 and newer, with latest MacOS are fully compatible Mac models released in 2013 and newer, with the latest MacOS may be compatible Mac devices that cannot be upgraded to the latest MacOS may not be compatible					
Input	Hardware keyboard and mouse or touchpad required. Other touch input devices not supported.					
Memory	Minimum: 4 GB RAM	Recommended: 10 GB RAM				
Internet	Minimum: 2 Mb/s internet connection wireless and wired network connection. No satellite network connection support.	Recommended: 100 Mb/s internet connection wireless and wired network connection. No satellite network connection support.				
Resolution	Minimum: 1024 x 768 display resolution	Recommended: 1920 x 1080 display resolution				



Minimum and recommended tablet requirements – iPad / Android devices

Users can **only view** the treatment plan by using the tablets.





	System requirement (View only)				
	iPadOS	AndroidOS			
Reference model	Minimum: iPad devices released in 2017 and newer with latest iPadOS are fully compatible	Minimum: Android devices with Android OS 8 or above 4GB RAM Memory			
	iPad devices that cannot be upgraded to the latest iPadOS may not be compatible				
Input	Touch input shall be supported. Hardware keyboard, mouse and other input devices are not supported.				
Internet	Minimum: 2 Mb/s internet connection wireless. No satellite network connection support.				



Supported operating systems (OS) and internet browsers

Trio iDesign™ supports the following combinations of browsers and operating systems. Please make sure your browsers are up to date to ensure a good browsing experience.

Device	OS/ browser	Chrome	Firefox	Opera	Microsoft Edge	Safari
PC desktop / laptop	Windows 11	Yes	Yes	Yes	Yes	N/A
Мас	Ventura 13.5.2 or above	Yes	Yes	Yes	Yes	Yes
iPad / Android tablet	iOS 17.1 or above Android	Yes	Yes	Yes	Yes	Yes
(Modify unavailable)	OS 11 or above					

Adobe Acrobat Reader version 9 requirements

If your system does not have the latest version of Adobe Acrobat Reader, follow this procedure:

- Open a browser window
- 2 Go to <u>www.adobe.com/reader</u>
- 3 Download Acrobat Reader latest version



Anti-virus software requirements

You must configure your anti-virus software if it is installed on your computer to allow the Trio iDesign™ to communicate with the servers running TrioClear™ service.



For information about configuring your anti-virus software, kindly ask your computer support technician.





Customer support

For questions, please contact your local distributor. Contact details are available on your TrioClear™ doctor submission portal under the Support & Resources.

Please reference Instructions for Use (IFU) for warning, precautions and directions for use along with this user guide.

Terms & Conditions

https://www.trioclear.com/terms-and-conditions

Privacy Policy

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