Orthodontic Suite

MOS



Rx only

ME-UG-702K-US
Revision 9 (2026.10)
SW version 2.3.2

Progressive Orthodontics USA
135 Columbia #101, Aliso Viejo
California 92656, United States

Table of contents

Medit Orthodontic Suite

Symbols 5

Overview and General Information 6

Device Operation 6

Intended Use and Disclaimer 6

Indication of Use 7

Target Users 7

Warnings 7

Precautions 7

Contraindications 8

Impact on Manual Decisions 8

Off-the-shelf Software 8

AI/ML Use 8

Interoperability and Interfaces 9

Cybersecurity Safety 9

System Requirements 10

Hardware Requirements 10

Software Requirements 11

Installation Guide 11

Data Management 13

Input Data 13
Output Data 13
Preparing Case Data 13
3D Data Control 14
Saving Case 16
User Interface 17
Title Bar 18
Data Tree 19
Action Control Buttons 19
Toolboxes 20
Side Toolbar 22
View Cube 24
Coaching Request 25
Workflow
Workflow 27
Data Editing 29
Occlusal Table 34
Tooth Identification 36
Ceph Tracing 41
Ceph Overlay 43
Arch Form Selection 45
Bite Classification 47

Simulations Preview 49

Output Overview 57

Aligners 57

Brackets 71

Appendix

Appendix 73

Medit Aligners Design Service 74

Ordering & Exporting Aligners 79

Symbols

No.	Symbol	Description
1		Read the user guide
2		Consult the user guide
3		Caution
4		Warning
5		Prescription use (USA)
6		Software release date
7		Manufacturer
8		Tips

Overview and General Information

Device Operation

Medit Orthodontic Suite (previously known as Progressive Orthodontics) is an innovative app (prescription only consistent with FDA 21 CFR 801.109) that enables dental professionals to generate realistic and reproducible simulations for the most common orthodontic treatments in minutes. Utilizing an intraoral scan and optional cephalometric X-ray and identifying a few basic landmarks, the app will instantly display the anticipated outcome, encompassing 3 to 9 common treatment options for each case.

Note

For more details, please see the Data Management, User Interface, and Workflow chapters below.

Intended Use and Disclaimer

The software is meant to be used as a visual aid during patient consultations by utilizing the Data Validation Analysis method. The generated simulation results should not be used as the sole source of healthcare guidance. Medit does not take responsibility for any miscommunication or improper use of the software and is not liable to either the user or the patient for any decisions or actions taken in reliance on the information given by the software.

The user assumes full responsibility for the following:

- generated results and their further interpretation and communication to the patient;
- informing the patients that the results produced by the software may not be precise or reliable;
- actions and treatment decisions based on the generated results.

Caution

This software application does not modify the patient's anthropometric scan data, which remains accessible to health care professionals, as depicted through the Medit Scan software's 3D graphical representation tools.

> ⚠ **Caution**
>
> Medit Orthodontic Suite has integration with the SmileStream services (for coaching). Please note that Medit is not responsible for any issues related to the performance or quality of those services. For inquiries or problems, please contact the SmileStream support team.

Indication of Use

The Medit Orthodontic Suite app is indicated for use as a front-end software tool for the management of orthodontic models, systematic inspection, detailed analysis, treatment simulation, and virtual appliance design options, which may be used for sequential aligner trays or retainers. These applications are based on 3D scans of the patient's dentition before the start of an orthodontic treatment. It can also be applied during the treatment to inspect and analyze the progress of the treatment. It can be used at the end of the treatment to evaluate if the outcome is consistent with the planned/desired treatment objectives.

The use of the program requires the user to have the necessary training and domain knowledge in the practice of orthodontics, as well as to have dedicated training in the use of the software.

Target Users

The target user group for this software is dentists and dental professionals working in dental clinics practicing orthodontics.

Warnings

- Federal Law restricts the use of this software to dentists or licensed dental professionals.
- Orthodontic treatments can cause discomfort, especially after adjustments. Patients may experience sore teeth and gums.
- Long-term orthodontic treatment can lead to root resorption, where the roots of the teeth shorten.
- Braces can make it harder to maintain oral hygiene, increasing the risk of cavities, gum disease, and decalcification.
- Successful orthodontic treatment often requires patient compliance with wearing appliances and attending regular appointments.

Precautions

- The use of the Medit Orthodontic Suite app requires the user to have the necessary training and domain knowledge in orthodontics and to have received dedicated training in using the software.

- This is a software-only device. Physical outputs such as aligners are FDA-regulated medical devices and should be fabricated by manufacturers who have premarket clearance and are registered and listed with the FDA.
- Before utilizing the app, complete a medical history review to identify any conditions that might complicate treatment, such as bleeding disorders, heart conditions, or diabetes.
- Ensure that the patient has regular dental check-ups to monitor oral health throughout treatment.
- Ensure patients involved in contact sports use mouthguards to protect both their braces and teeth from injury.

Contraindications

The software should not be used to generate simulations for patients who have

- Active Disease: Orthodontic treatment is contraindicated in patients with active oral disease due to the risk of exacerbating the condition. Periodontal disease, dental caries, and endodontic/periapical diseases must be resolved before starting orthodontic treatment.
- Severe Bone Loss: Significant bone loss around the teeth can make orthodontic treatment unfeasible as it can compromise tooth stability.
- Severe TMJ Disorders: Severe temporomandibular joint (TMJ) disorders may worsen with orthodontic treatment and should be carefully evaluated.
- Certain Systemic Conditions: Conditions such as uncontrolled diabetes, certain heart conditions, and osteoporosis may contraindicate orthodontic treatment due to increased risks.
- Poor Oral Hygiene: Patients who are unable or unwilling to maintain proper oral hygiene may not be suitable candidates for orthodontic treatment due to the high risk of complications.

Impact on Manual Decisions

There is no impact on manual decisions, as the dentist makes all the decisions based on the information and options provided by the app.

Off-the-shelf Software

No off-the-shelf software is used.

AI/ML Use

The use of AI/ML is limited to identifying the points on the cephalometric x-ray. The related algorithms are locked to provide the same results each time the same input is applied to it and does not change with use.

Interoperability and Interfaces

Interoperability with a wide range of 3D software is achieved by supporting standard formats such as STL, OBJ, and PLY, as well as our own meditMesh format. The Medit Orthodontic Suite app is a separate and independent piece of software from the Medit scanner, and there is no direct user interface between the two. The app only receives path information for STL files using internally defined APIs via Medit Link and the Inter-Process Communication (IPC) protocol.

Cybersecurity Safety

Cybersecurity level: Level 3 (High)

The Medit Orthodontic Suite app employs robust cybersecurity measures to protect patient data confidentiality, integrity, and availability. It complies with industry standards and regulations, including HIPAA and GDPR. The application is downloaded from Medit Link and integrates with SmileStream services. Both the Medit Link software and SmileStream are hosted by AWS and use AWS Firewall Manager.

Instructions for Use

- User Authentication: Ensure that only authorized users access the Medit Orthodontic Suite app. Use your unique username and password credentials to log in. Contact your system administrator for assistance with account setup or password reset.
- Data Encryption: Medit Orthodontic Suite encrypts sensitive patient data both at rest and in transit. Ensure that you use secure internet connections when accessing the software and follow recommended security protocols.
- Secure Access: Access the Medit Orthodontic Suite app only from trusted devices and Medit Link. Avoid using public Wi-Fi or shared devices for accessing patient data to prevent unauthorized access or interception.
- Incident Reporting: Report any suspicious activities, security incidents, or potential data breaches immediately to your system administrator or IT security team. Follow established incident reporting procedures for prompt investigation and resolution.
- Regular Updates: Keep the Medit Orthodontic Suite app up to date with the latest security patches and updates. Regularly check for software updates and apply them promptly to address known vulnerabilities and enhance cybersecurity defenses. Back up your data regularly and make sure the “restore” function on your hardware is switched on.
- Security Awareness: Stay informed about cybersecurity best practices and threats relevant to orthodontic software. Participate in cybersecurity awareness training sessions and follow recommended guidelines for protecting patient data and maintaining system security.

Security Contact Information

	System Administrator	IT Security Team
Name	Derrick Sanchez	Diana Fernández
Email	derrick@posortho.com	diana@posortho.net
Phone	(714) 973-2266 #109	+34 946361097
Toll-Free Number	(800) 443-3106	(800) 443-3106

Compliance Statement

The Medit Orthodontic Suite app complies with relevant cybersecurity regulations and standards, including HIPAA, GDPR, and industry best practices. It is designed to safeguard patient data and ensure the highest standards of cybersecurity.

> ⚠ **Disclaimer**
>
> While the Medit Orthodontic Suite app employs robust cybersecurity measures, it is essential to follow recommended security practices and remain vigilant against potential threats. The software provider is not liable for damages resulting from user negligence or non-compliance with security instructions.

System Requirements

Hardware Requirements

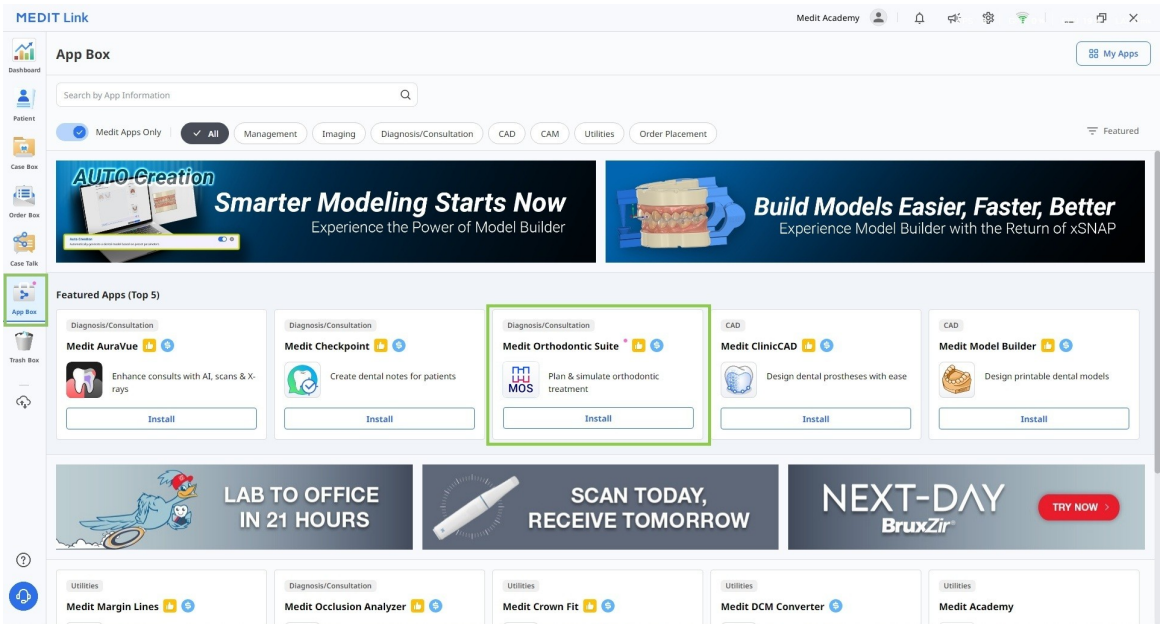
	Windows	macOS
CPU	Intel Core i5 2.6 GHz or higher	8-core or higher
Chip	-	M1/M2 or higher
RAM	16 GB or higher	16 GB or higher
Graphics Card	NVIDIA GeForce GTX 1060(2 GB) or higher	-

Software Requirements

	Windows	macOS
OS	Windows 10 64-bit, Windows 11 64-bit	Sonoma 14 or later

Installation Guide

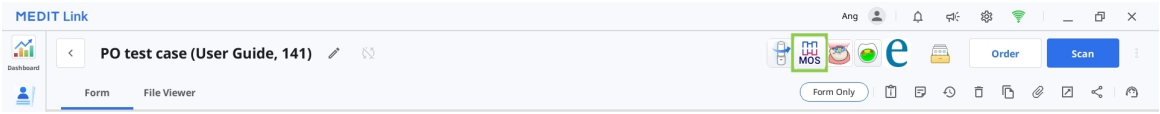
1. Log into your Medit Link account and go to the App Box on the left-hand menu.
2. Find the Medit Orthodontic Suite app and click “Install.“



3. The app will be downloaded and installed automatically. It may take several minutes to finish the installation process; do not turn off the PC or close Medit Link.

> ⚠ **Warning**
>
> Do not skip the CUDA installation, as it is required to enable the use of cephalometric data and related features. Without it, the functionality of the program will be limited.

4. 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.



5. To uninstall the program, open App Box and locate the Medit Orthodontic Suite app. Select the app card to open its details page, then click “Uninstall.”

Data Management

Input Data

Upon launching the application, the user must import the following data via the "Assign Data" dialog:

- 3D intraoral scan data (STL, OBJ, PLY, meditMesh)
- 2D facial and intraoral photos (BMP, JPG, JPEG, PNG)
- cephalometric and panoramic X-ray (BMP, JPG, JPEG, PNG)

Output Data

Upon completing work in the application, the user gets treatment simulation results that can be saved in STL, OBJ, PLY, meditMesh formats.

Preparing Case Data

Users must have the following data to utilize the program: maxilla scan, mandible scan, and cephalometric X-ray. The app can also be used without the cephalometric X-ray, but only if the simulations are generated as a visual aid for patient consultation, not for making treatment decisions. For reference purposes, users can also include other patient records, such as panoramic X-rays, facial photos, and intraoral photos.

Warning

Make sure to check the system requirements and install CUDA to be able to use the cephalometric X-ray and the related features.

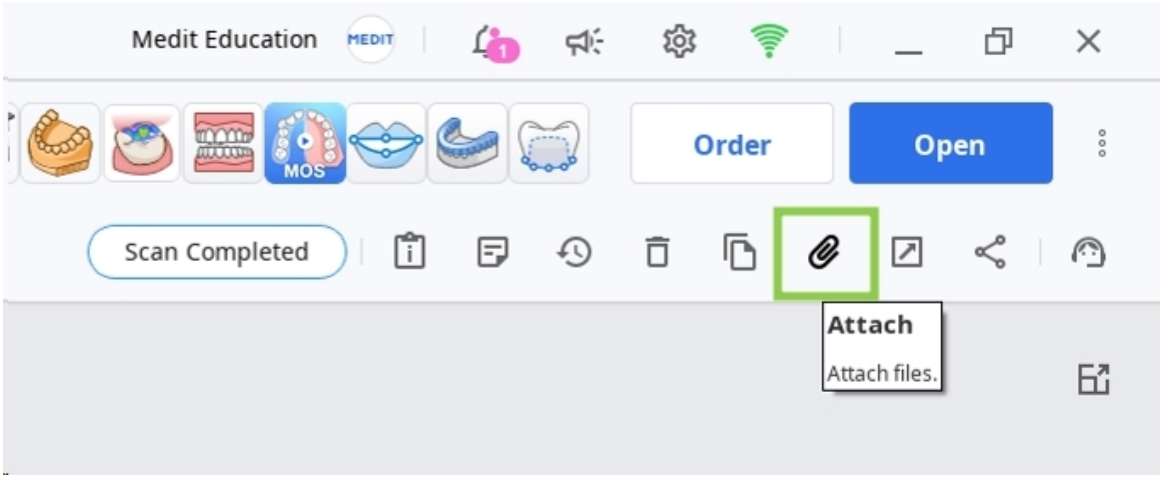
Caution

Note that without ceph data, the following limitations will apply:

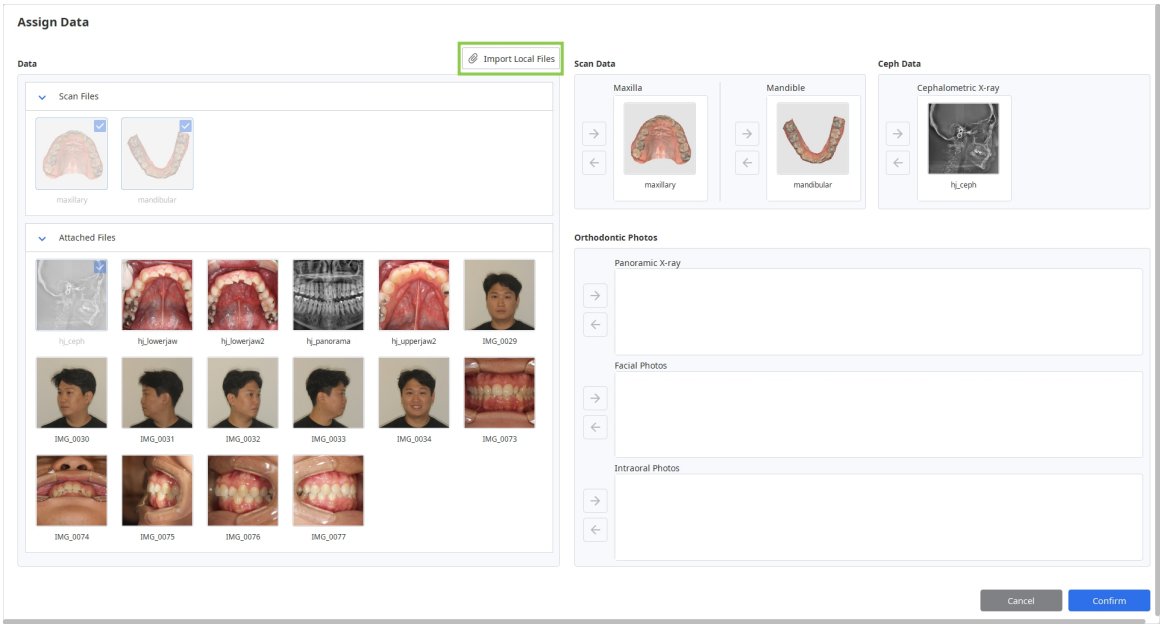
- Wits are automatically set to a range of -3 to +3.
- The patient's growth is not factored in.
- The Ceph Overlay feature is not available, so you can not visualize the final teeth position over the bone structure.

All available data must be collected in the same Medit Link case to be automatically imported into the program upon opening. Follow these steps to prepare your case for work:

1. Scan the maxilla and mandible in Medit Scan software.
2. Import other records (X-rays and orthodontic photos) from local files into the Medit Link case. Use the “Attach” feature in the Case Detail window.



3. Run the app and assign the data you will be using for this project. Locally stored data can also be imported at this step via the “Import Local Files” feature.



3D Data Control

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

3D data control using a mouse

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

3D data control using mouse and keyboard

	Windows	macOS
Zoom		
Rotate		
Pan		

Saving Case

There are two ways to save your case project: Complete and Save As.

Complete

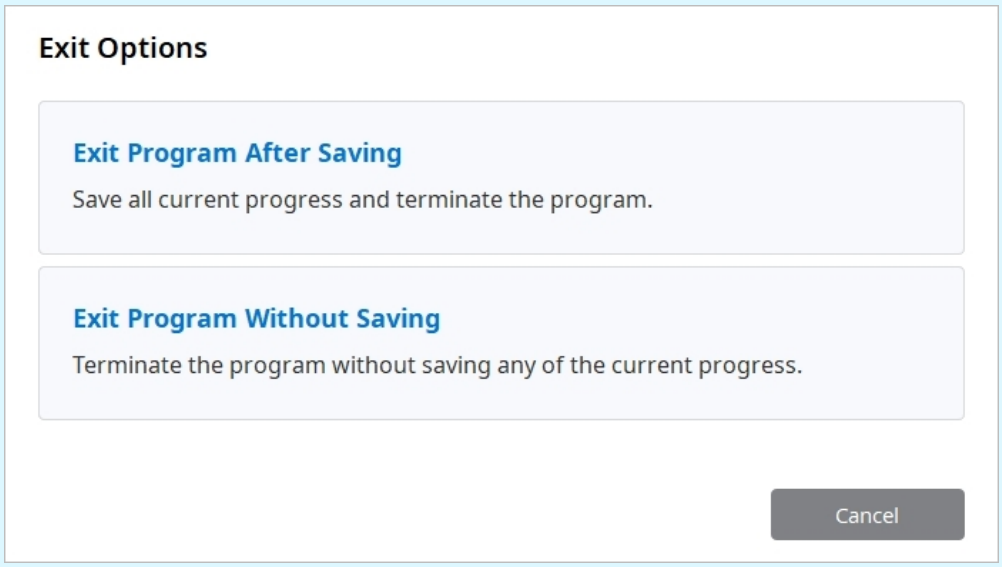
The “Complete” button is provided in the bottom right corner of the final workflow step. Click it to save your finished project to the current case in Medit Link and close the program.

Save As

This option allows you to save the unfinished project at any moment without losing your progress. Use it when you want to pause working on the case and resume later. To use it, go to the Menu in the Title Bar and choose “Save As.” The next time you run the program from the same case, you will be asked if you want to continue with the saved project.

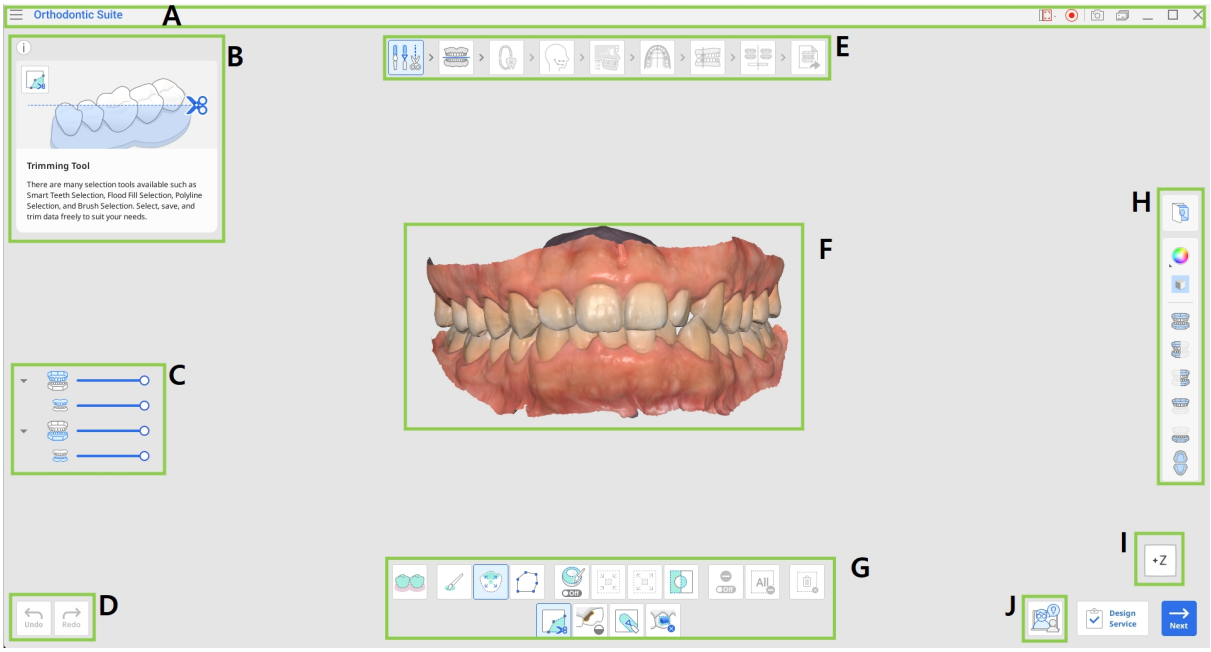
Note

You can still save your work even if you click “Exit.“



User Interface

User Interface at a Glance



A	Title Bar
B	Info Box
C	Data Tree
D	Action Control Buttons
E	Workflow
F	3D Data
G	Toolbox
H	Side Toolbar
I	View Cube
J	Coaching Request

Note

Please note that this is a general overview of the main elements. Some interface elements may vary slightly depending on the goal of each workflow step.

Title Bar

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

	Menu	Manage the opened project, access available assistance resources, and check app details.
	Help Center	Go to the Medit Help Center page dedicated to this app.
	Select Video Record Area	Specify which area shall be captured for video recording.
	Start Video Recording	Start and stop the video recording of the screen.
	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.
	Exit	Close the application.

Data Tree

Data Tree is located on the left side of the screen below Info Box and shows the data you use in groups. You can show or hide data by clicking its icon in the tree or change its transparency by moving the corresponding slider.



Note

Note that the presence and structure of the Data Tree depend on the objectives of each step.

Action Control Buttons

There are four buttons that control the overall work process. They are located in both bottom corners of the application window.

The “Complete” button will appear at the final step only.

Undo	Undo the previous action.
Redo	Redo the previous action.
Next	Apply changes and move to the next step.
Complete	Finish working on the case and save the results to Medit Link.
Done	Save changes made using current tool and return to previous workflow step (available in Tooth Orientation and Treatment Refinement).

Toolboxes

The Toolbox for each step provides the features necessary to complete the primary goal of that step. Below are explanations of the features found in the toolboxes across the entire workflow.

Data Editing

	Trimming Tool	Use the various selection tools to select and remove unnecessary data.
	Fill Holes	Fill empty spaces in the 3D mesh data.
	Sculpting	Sculpt data using tools to add, remove, morph, or smooth its parts.
	Attachment Removal	Detect attachment regions captured in scan data and remove them.

Occlusal Table / Ceph Overlay

	Delete Point	Delete the last added point.
	Detach Data	Reset alignment and move data to the initial position. Select points on the data to align it manually.

Tooth Identification

	Growing Patient Settings	Provide growing patient information, including gender(male/female), age, and dental maturity.

Ceph Tracing

	Edit	Modify the automatically generated tracing lines.
	Reset	Restore the results of automatic tracing.

Arch Form Selection

	Symmetry	Show perpendicular lines to assess the symmetry of the left and right arch sides in relation to the midline.

Simulations Preview

	Tooth Orientation	Review and adjust teeth orientation based on simulation 1.1. The sub-tools allows users to perform the following actions on teeth: Rotation, Angulation(Tip), Inclination(Torque).
	Dental Compensation	Adjust the anterior compensation angle to match the patient's skeletal type.

Output Overview

	Treatment Refinement	Improve the generated treatment results by fine-tuning teeth movement, arch form, IPR values, and default attachments.
	Treatment Plan	Check out the detailed treatment plan.

Side Toolbar

The Side Toolbar provides a set of tools for data control and visualization, as well as some step-specific tools. The structure of the Side Toolbar depends on the objectives of the current step.

Image Management

	Orthodontic Photos	Refer to photos and X-rays imported from the case.

Data Display Tools

	Data Display Mode	Change between different data display options. (Glossy/Matte/Matte with Edges/Monochrome/Monochrome with Edges)
	Show Grid (mm)	Show the grid overlaid onto the data.

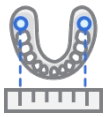
Viewing Tools

	Frontal View	Show the front side of the data.
	Right Lateral View	Show the right lateral side of the data.
	Left Lateral View	Show the left lateral side of the data.
	Frontal View (Maxilla)	Show the front side of only the maxilla.
	Frontal View (Mandible)	Show the front side of only the mandible.
	Occlusal Surface View	Show occlusal surfaces of the maxilla and mandible.

Visualization Tools (in Tooth Identification)

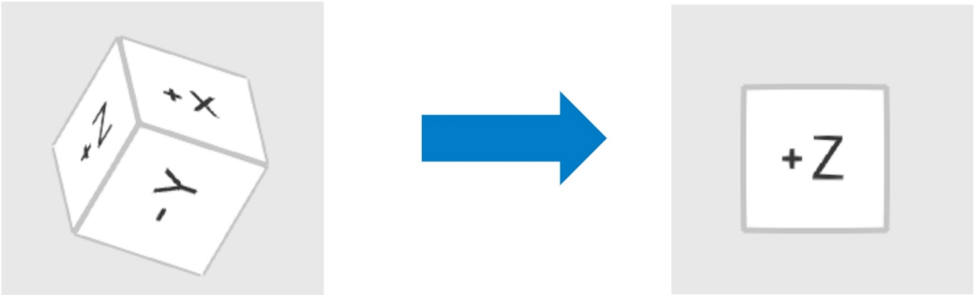
	Color Labeling	Color-code teeth according to their type.
	Zoom Fit	Zoom to fit data to the screen.

Simulation Review Tools (in Simulations Preview and Output Overview)

	Tooth Movement Data	Check how each tooth is planned to move during treatment, including shifts, tilts, and rotations.
	Bolton Analysis	Check the results table for the Bolton Analysis.
	Measurements	Measure and inspect spatial relationships across your data.
	Animation	View the animated simulations.
	Superimposition	Superimpose the original scan data and the simulation.
	Ceph Overlay Comparison	Align simulations to the cephalogram.
	Occlusal Relationship	Examine occlusal contact displayed through color.

View Cube

The View Cube shows the 3D view orientation; it rotates simultaneously with the 3D data to help understand data positioning within a three-dimensional space. You can click on the visible faces of the cube to rotate data and see it from a specific viewpoint.



Coaching Request

Users can access the Coaching Request feature from the bottom right corner of every step. When clicked, it redirects users to the SmileStream and shares all current case information to their account on the page with one of the experienced instructors of Progressive Orthodontic Seminars who are qualified dentists with long orthodontic training and software experience. The users can then choose what type of technical support service they want to use: consulting or mentoring. Check the general information on the available service types below.

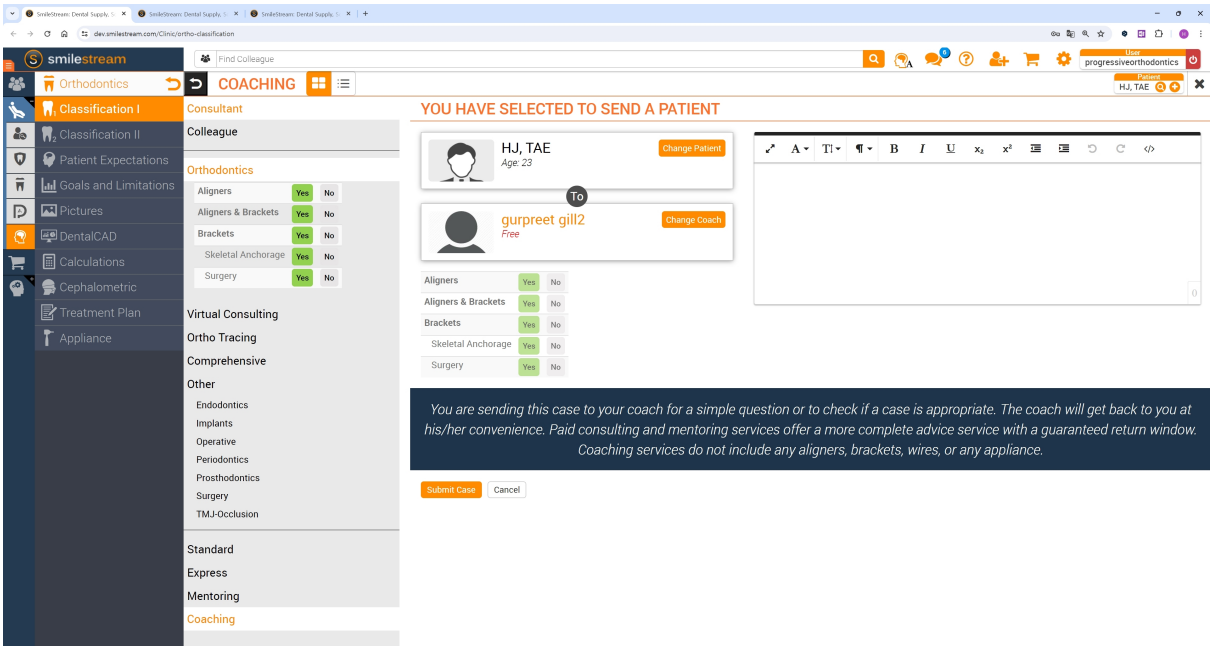
Note

Before submitting your request, verify that all relevant photos are included in the project. Complete case images help improve coaching quality and reduce potential delays.

Service Type	Average Cost	Duration	Description
Consulting	$300	1-2 hours	Offers technical support during the initial diagnosis.
Mentoring	$600	3-4 hours	Offers technical support during the initial diagnosis and provides continuous support.

Caution

This is a general introduction to SmileStream services; for more details or inquiries, please visit SmileStream or contact their support team for problems at support@posortho.net

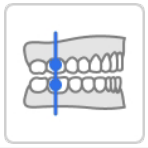

smilestream
Find Colleague
progressiveorthodontics
Orthodontics
COACHING
HJ, TAE
Classification I
Classification II
Patient Expectations
Goals and Limitations
Pictures
DentalCAD
Calculations
Cephalometric
Treatment Plan
Appliance
Consultant
Colleague
Orthodontics
Aligners Yes No
Aligners & Brackets Yes No
Brackets Yes No
Skeletal Anchorage Yes No
Surgery Yes No
Virtual Consulting
Ortho Tracing
Comprehensive
Other
Endodontics
Implants
Operative
Periodontics
Prosthodontics
Surgery
TMJ-Occlusion
Standard
Express
Mentoring
Coaching
YOU HAVE SELECTED TO SEND A PATIENT
HJ, TAE
Age: 23
Change Patient
To
gurpreet gill2
Free
Change Coach
Aligners Yes No
Aligners & Brackets Yes No
Brackets Yes No
Skeletal Anchorage Yes No
Surgery Yes No
You are sending this case to your coach for a simple question or to check if a case is appropriate. The coach will get back to you at his/her convenience. Paid consulting and mentoring services offer a more complete advice service with a guaranteed return window. Coaching services do not include any aligners, brackets, wires, or any appliance.
Submit Case
Cancel

Workflow

The complete workflow consists of 9 steps, guiding users from data editing to simulation generation and finally to reviewing and ordering the treatment appliance. Users must complete these steps in the given order.

Note

If the ceph data was not assigned in the beginning, the workflow will not include the Ceph Tracing and Ceph Overlay steps.

	Overview	Check your scan data.
	Data Editing	Edit and trim data using the wide array of functions provided.
	Occlusal Table	Align scan data to a plane to set the position of the occlusal table.
	Tooth Identification	Chart the patient's dentition.
	Ceph Tracing	Examine the automatically traced lateral cephalogram.
	Ceph Overlay	Align scan data to the cephalogram.
	Arch Form Selection	Select an arch form for the maxilla and mandible.
	Bite Classification	Classify the bite based on the relationship between the teeth.

	Simulations Preview	Examine the generated simulations to choose a treatment scenario.
	Output Overview	Review treatment details for the chosen scenario.

In addition to the manual workflow, the user can use Auto Design to automatically complete the treatment planning and simulation generation. When this toggle is enabled during the data assignment process, the user proceeds directly to the final workflow step to review the results.

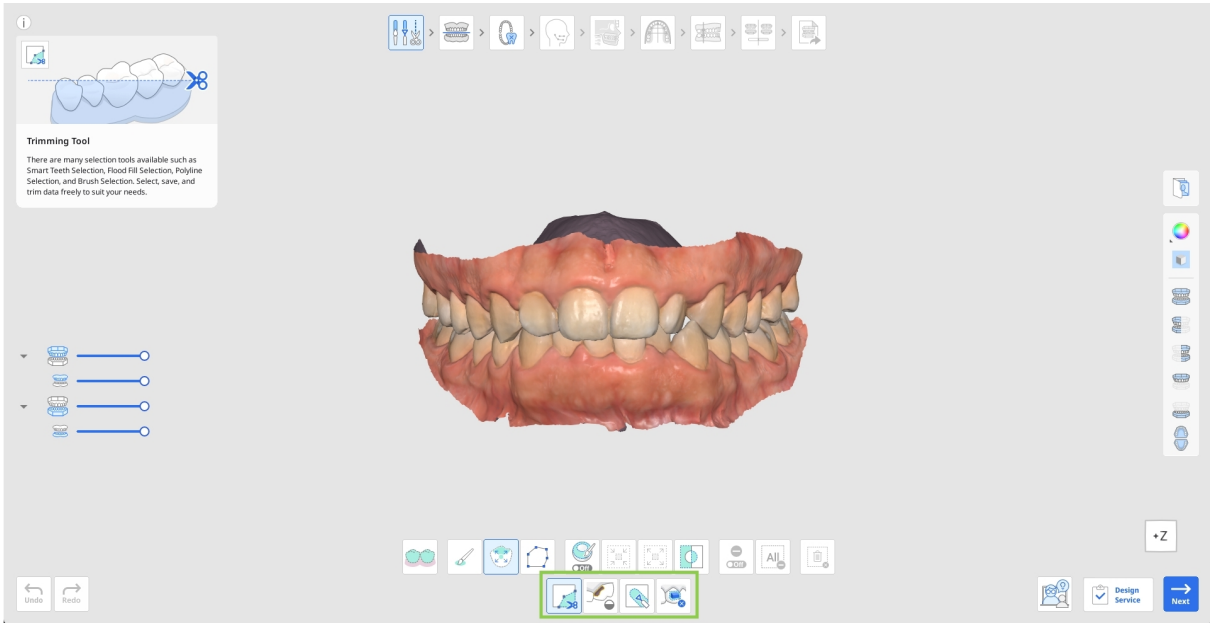
IMG

The user can also use the Retainer Only workflow for quick retainer creation. This workflow consists of only two steps and allows the user to proceed directly to Output Overview to review and export the retainer. For more information, see the appendix of this guide.

Data Editing

Upon data assignment, users proceed to the Data Editing step, where they can trim unnecessary parts, fill mesh holes, or sculpt data to optimize the simulation outcome.

Check data for any excessive gingiva data or missing tooth data and make any necessary modifications. If the scan data contains attachments captured during scanning, use the dedicated feature to remove them before proceeding. When done, click the next step icon at the top of the screen or the “Next” button in the bottom right corner.



How to Trim Data

1. Choose one of the selection tools to designate what part of the data you want to remove.

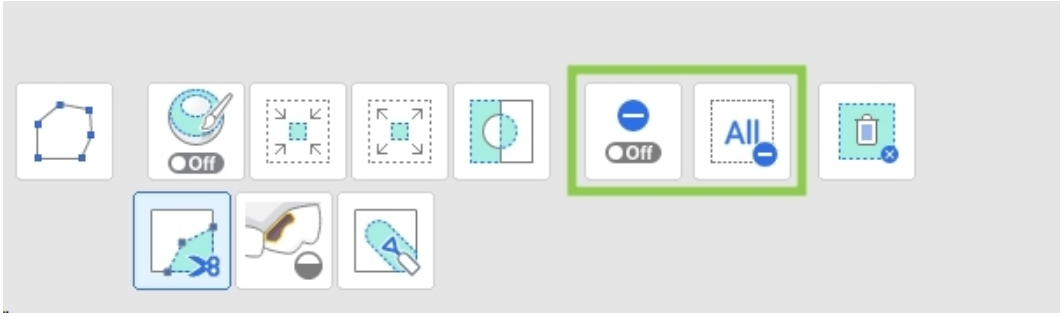
	Smart Teeth Selection	Automatically select all teeth of the arch, leaving out gingiva parts.
	Brush Selection	Select all entities on a freehand-drawn path on the screen. Only the front face is selected. The brush comes in three sizes.
	Smart Single Tooth Selection	Automatically select the area of a single tooth, leaving out gingiva parts. Click and drag the mouse on the tooth.

	Polyline Selection	Select all entities within a polyline shape drawn on the screen.

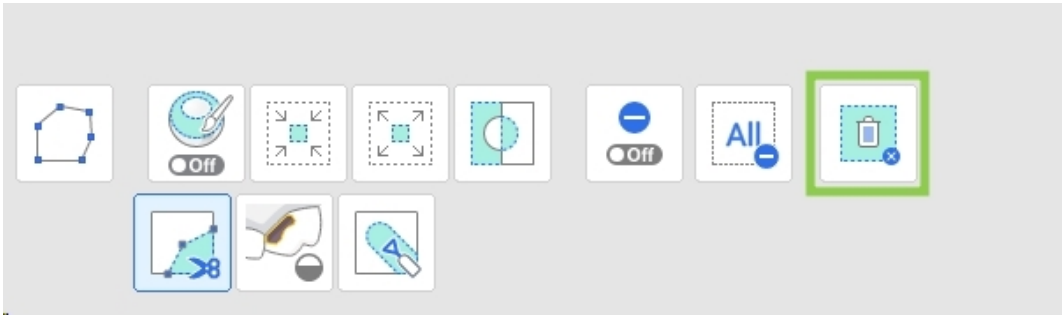
2. If needed, modify the selected area using the following tool options.

	Autofill Selected Area	Automatically fill in entities of the selected area.
	Shrink Selected Area	Reduce the selected area each time you press the button.
	Expand Selected Area	Expand the selected area each time you press the button.
	Invert Selected Area	Invert the selection.

- You can also turn on “Deselection Mode” to modify selection manually or use “Clear All Selection” to automatically deselect everything.

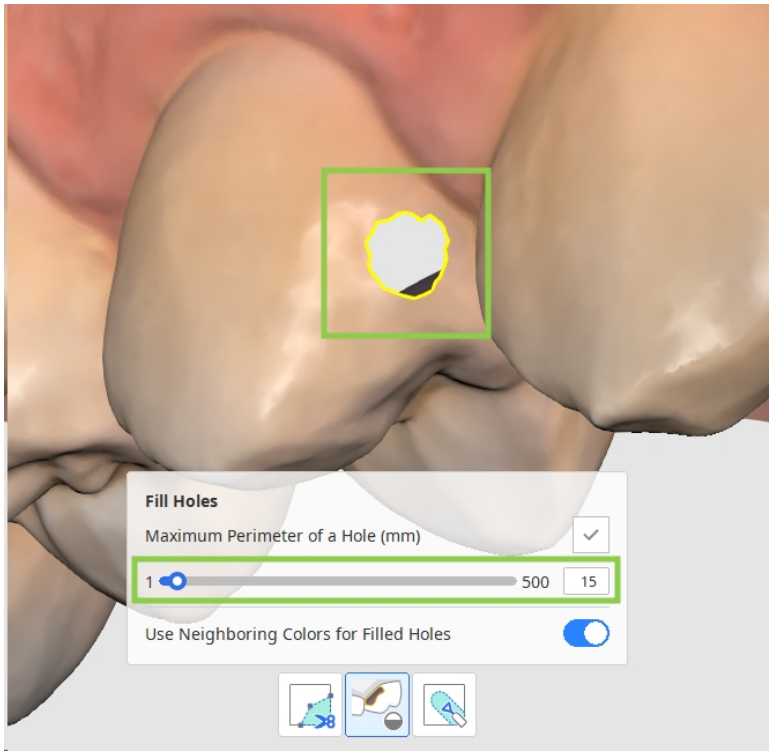


3. To complete the trim, click “Delete Selected Area.”



How to Fill Holes

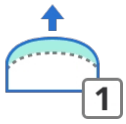
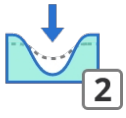
1. Locate any missing data areas and adjust the "Maximum Perimeter of a Hole." If the "Use Neighboring Colors for Filled Holes" option is on, the program will use the matching color palette to fill the area; otherwise, it is filled in grey.

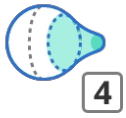


2. Click “Apply” to fill the hole with the new mesh.

How to Sculpt Data

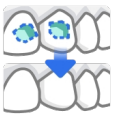
Find the area that needs modifications and, using the tools below, add, remove, smooth or morph its parts.

	Add	Use the mouse to add on part of the data. Hotkey: 1
	Remove	Use the mouse to remove parts of the data. Hotkey: 2
	Smooth	Use the mouse to smooth parts of the data. Hotkey: 3

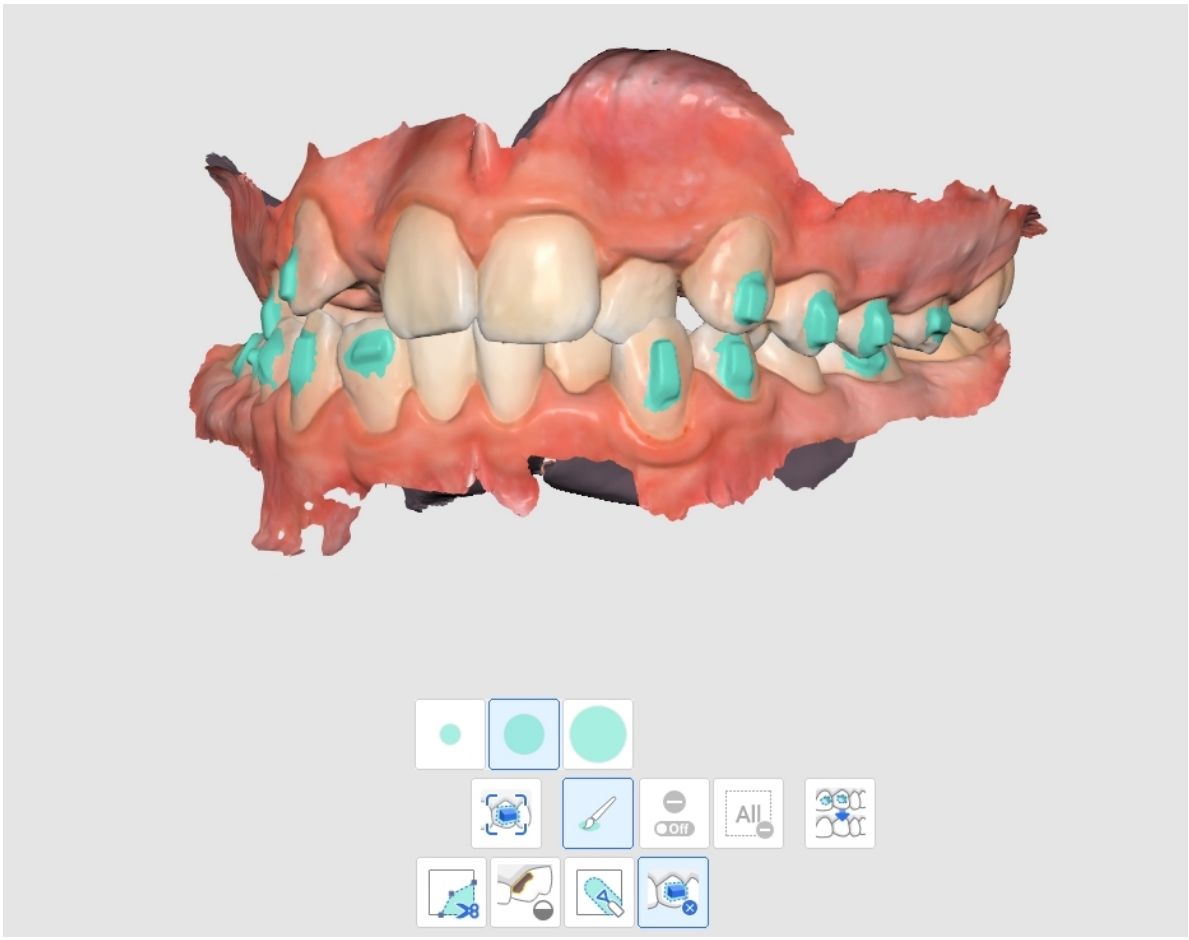
	Morph	Use the mouse to morph parts of the data. Hotkey: 4

How to Remove Attachments

If attachments or brackets are present in the scan data, they must be removed before treatment planning and simulation.

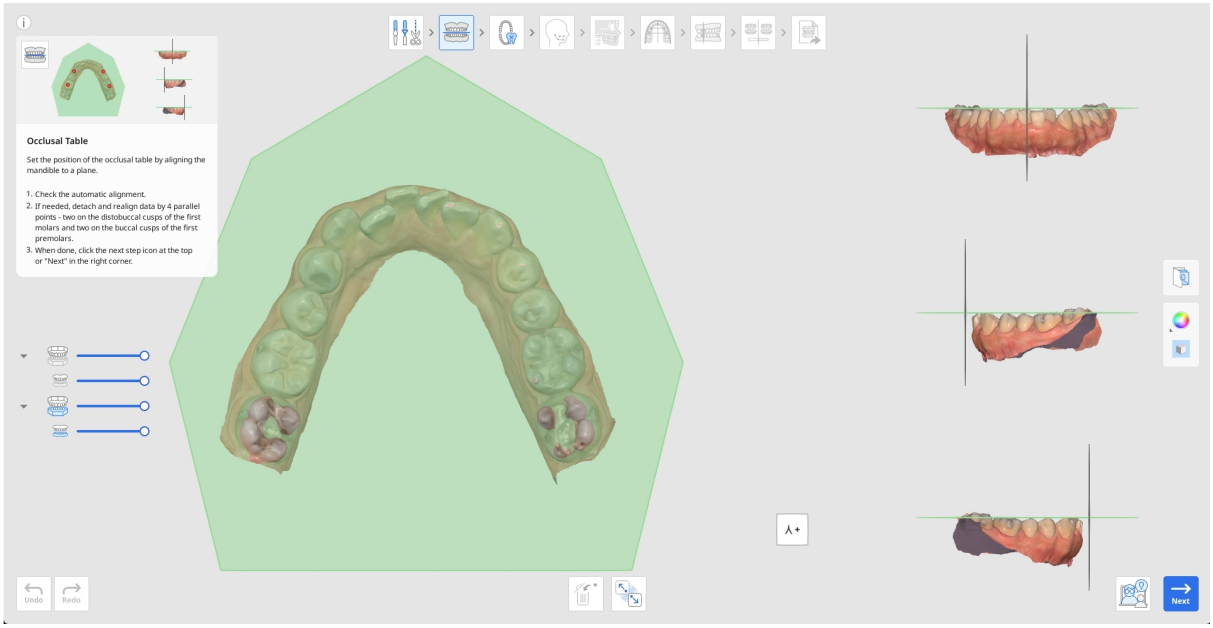
	Auto Detection	Automatically detect and select removable objects on the teeth.
	Brush Selection	Select all entities on a freehand-drawn path on the screen. Only the front face is selected. The brush comes in three sizes.
	Deselection Mode	When on, this function deselects the area using various tools.
	Clear All Selection	Clear all selections.
	Remove and Fill	Delete the selected areas and fill the resulting holes.

You can manually select scan data with the attachments or brackets using the provided selection tools, or use the “Auto Detection” to automatically detect and select removable objects on the teeth. Click "Remove and Fill" to remove the selected data and automatically repair any resulting gaps.

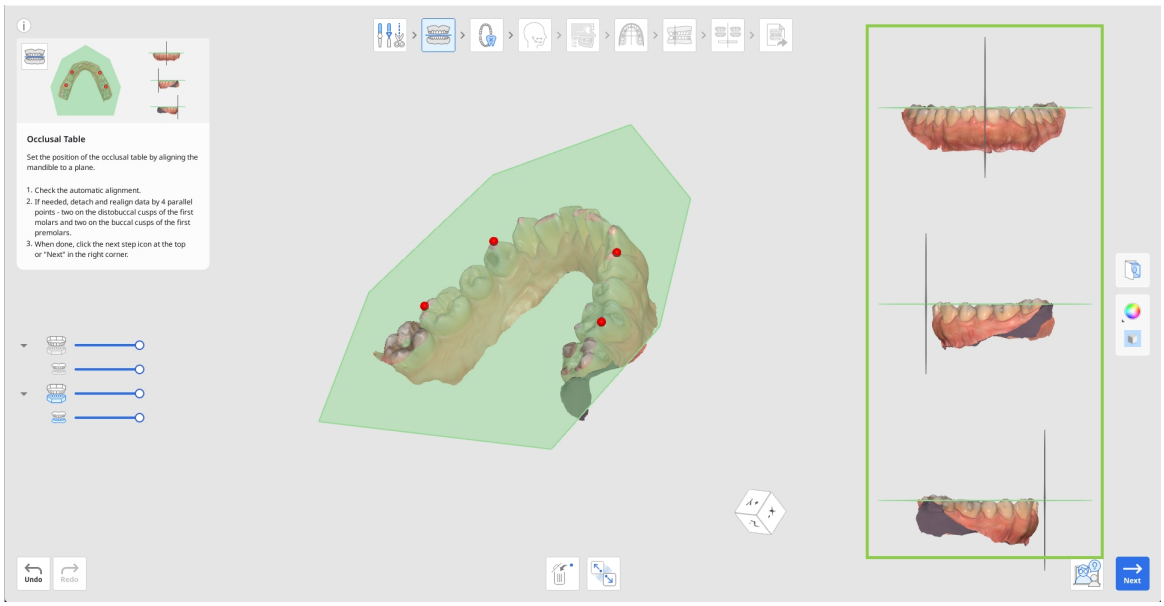

Off
All

Occlusal Table

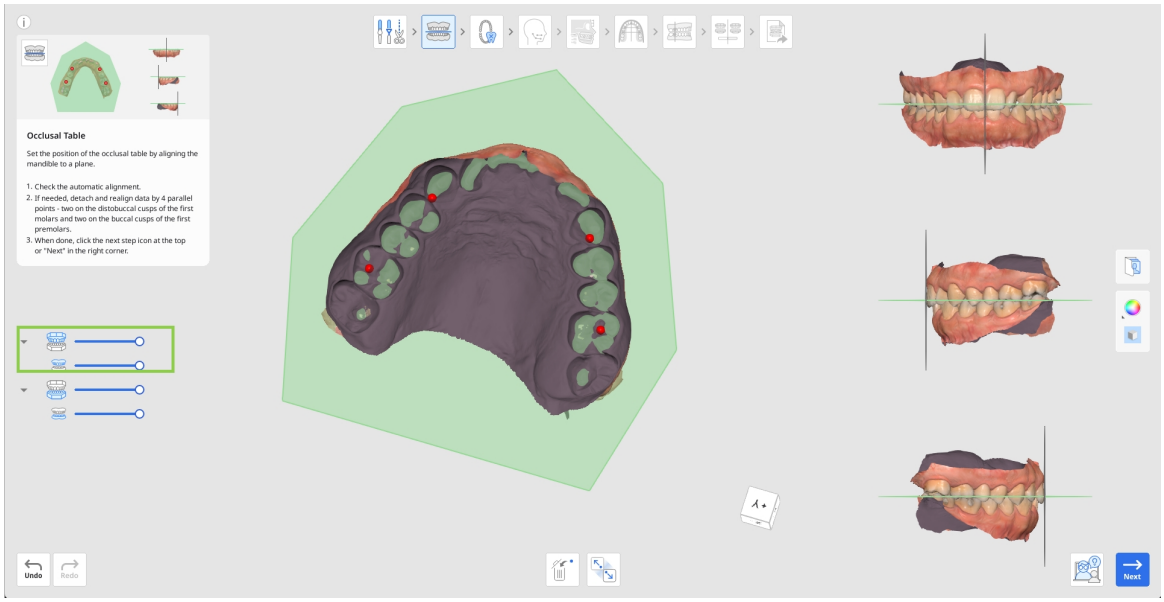
The second step of the workflow focuses on determining the position of the grinding surfaces based on the lower arch (the occlusal table). This involves aligning the mandible scan data to a plane using four specified points. By default, this alignment process is automated for the user's convenience.



1. First, check the automatic data alignment by viewing it on Multi-View or rotating it with the "View Cube."



2. If you want to check the occlusal relationship, click the maxilla icon in the Data Tree on the left to show it and view together with the mandible data.



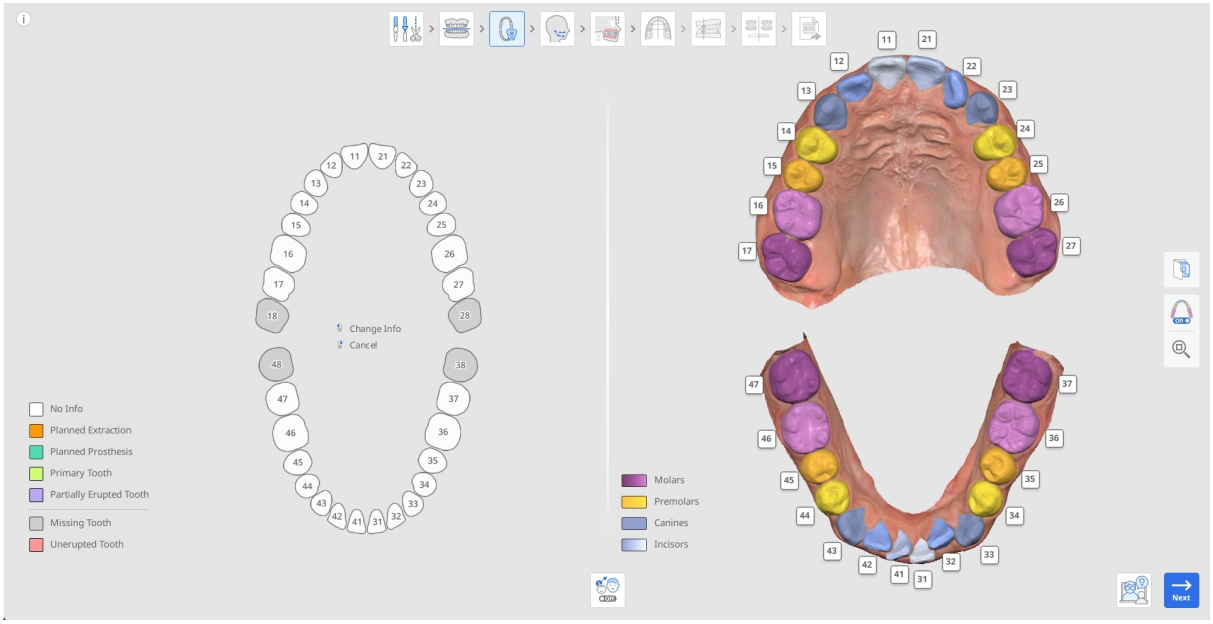
3. If realignment is necessary, click the “Detach Data” tool at the bottom and manually align data by setting 4 parallel points on the maxilla. As shown below, two are on the distobuccal cusps of the first molars, and two are on the buccal cusps of the first premolars.



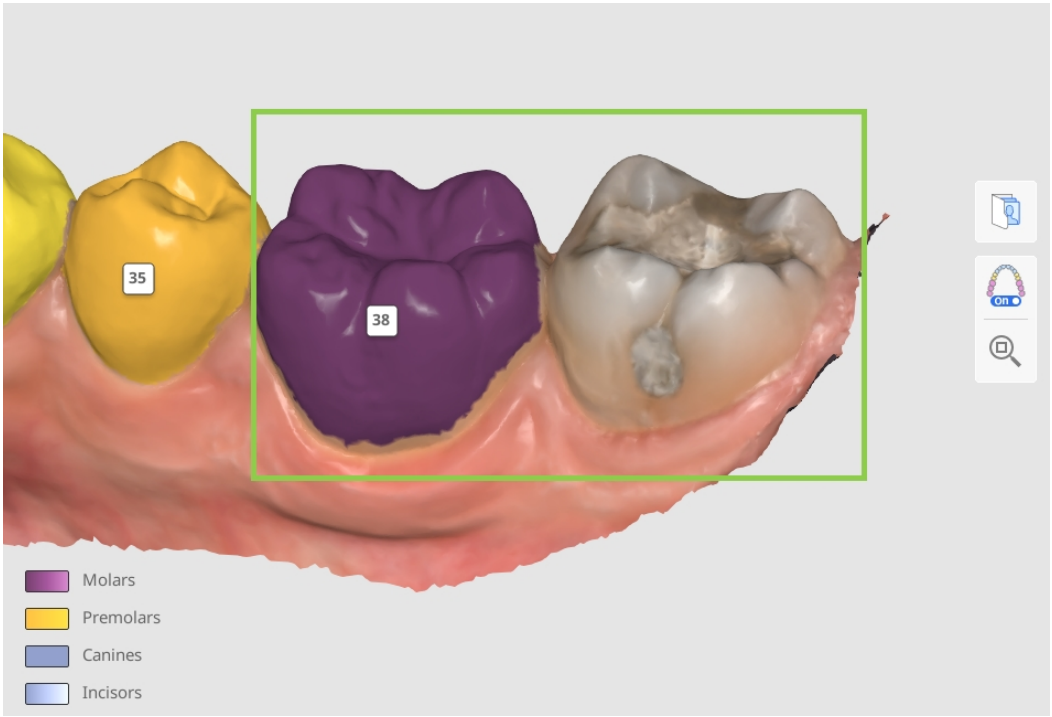
4. When done, click the next step icon at the top of the screen or the “Next” button in the bottom right corner.

Tooth Identification

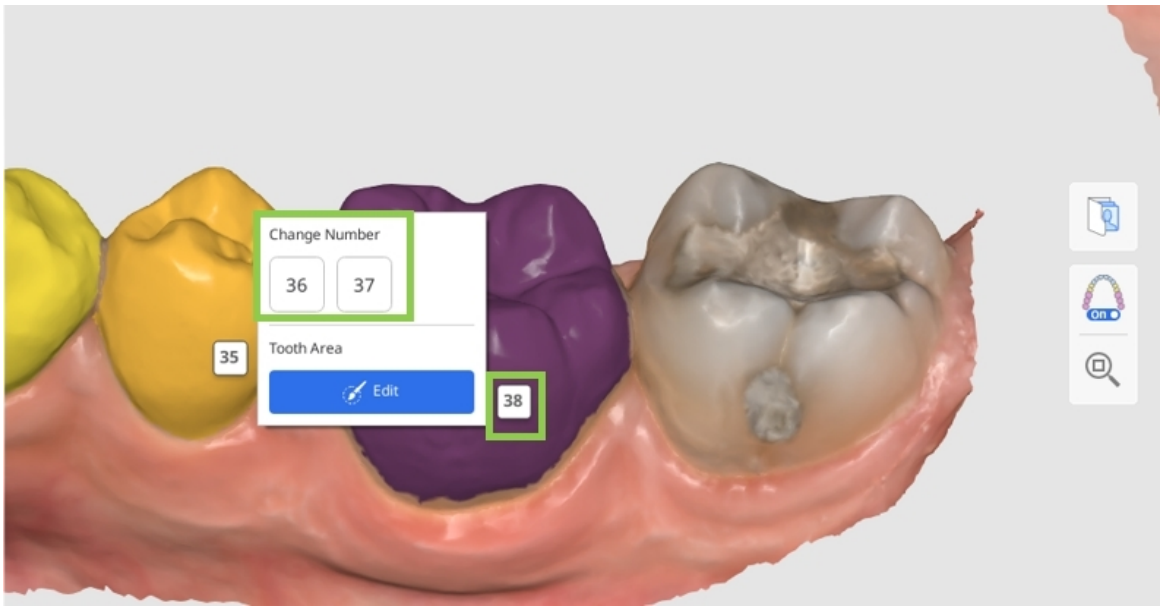
Tooth Identification is a step in which users create a detailed dental chart for the current project. Here, users need to verify tooth numbering on the right and record dentition details on the left. All provided details in this step will be considered when generating the teeth movement later on.



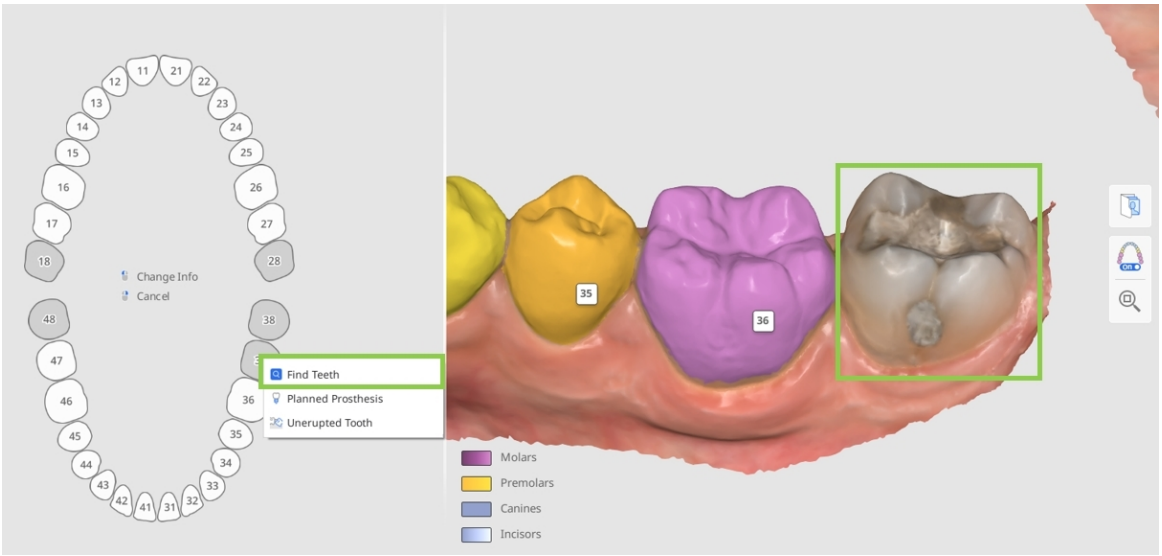
1. Start by checking the automatic tooth numbering on the right to ensure that all teeth were identified and numbered correctly.



- If the tooth numbering is incorrect, click on it to reassign.



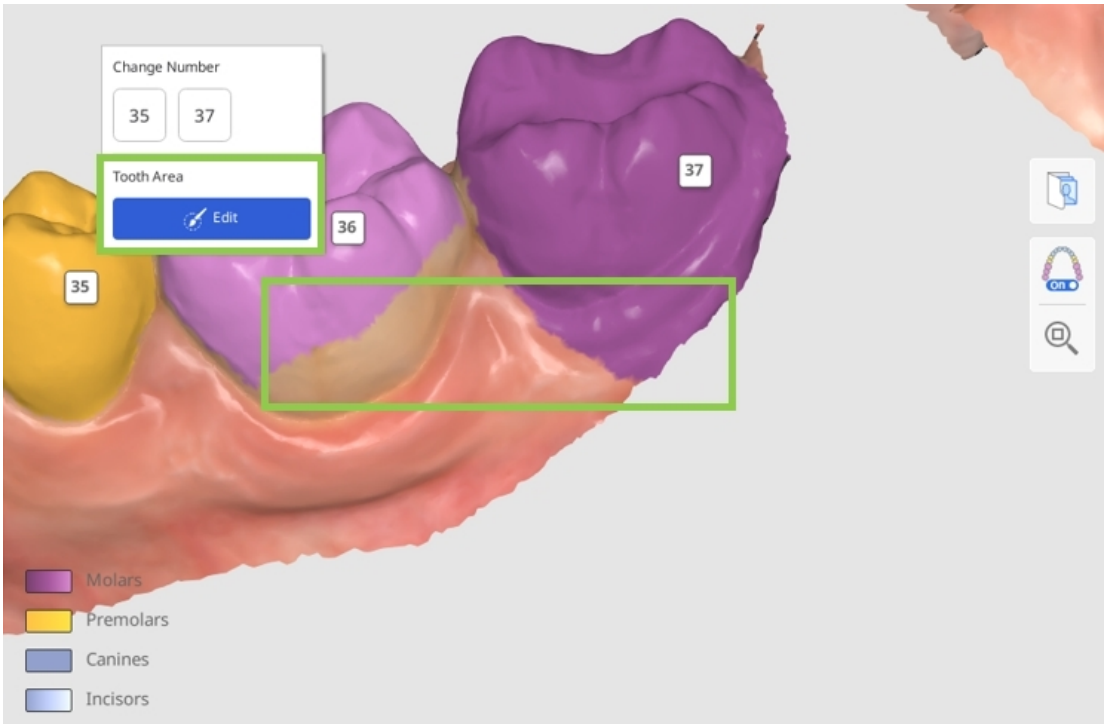
- If a tooth is not identified, it will appear as missing in the chart on the left (colored in grey). To manually identify it, click on it in the chart and choose the “Find Teeth” option. This will enable you to select the tooth data on the scan manually.



Tip

In complex cases, where it may be hard to identify the tooth number by its current position alone, use the Orthodontic Photos feature. Imported panoramic X-rays can be viewed to verify tooth numbering and data selection.

- Ensure that data for each tooth is selected accurately and precisely, covering the entire tooth without any gum data. This will ensure a higher level of detail in each tooth movement later on. To adjust or correct the selection, click the tooth number and choose “Edit.”



- Next, you have to document details about the patient’s current dentition or any planned treatment in the chart on the left. All added information will change the simulation according to the provided chart details. To add information for a specific tooth, click on it; to remove it - right-click.
  Below is the list of details and actions that are applicable to existing teeth (white) and missing teeth (grey).

Existing Tooth	Missing Tooth
Planned Extraction	Planned Prosthesis
Planned Prosthesis	Unerupted Tooth
Primary Tooth	Find Teeth
Partially Erupted Tooth	
Pin Tooth	

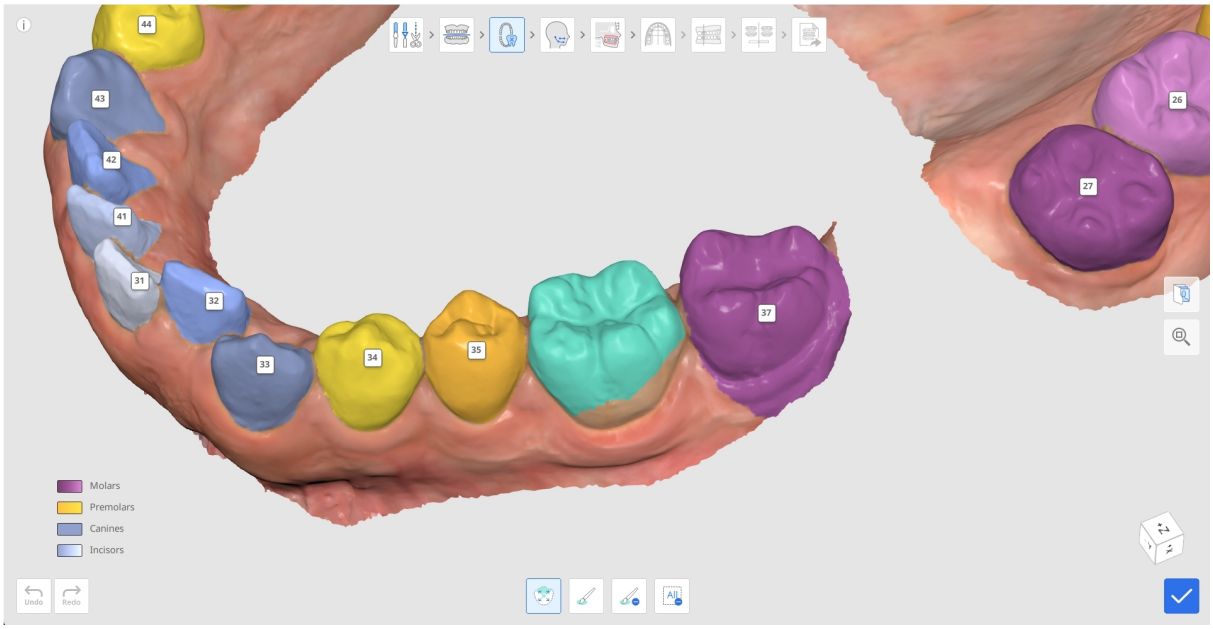
Tip

To prevent a tooth from moving during the simulation, ‘pin’ it in the chart.

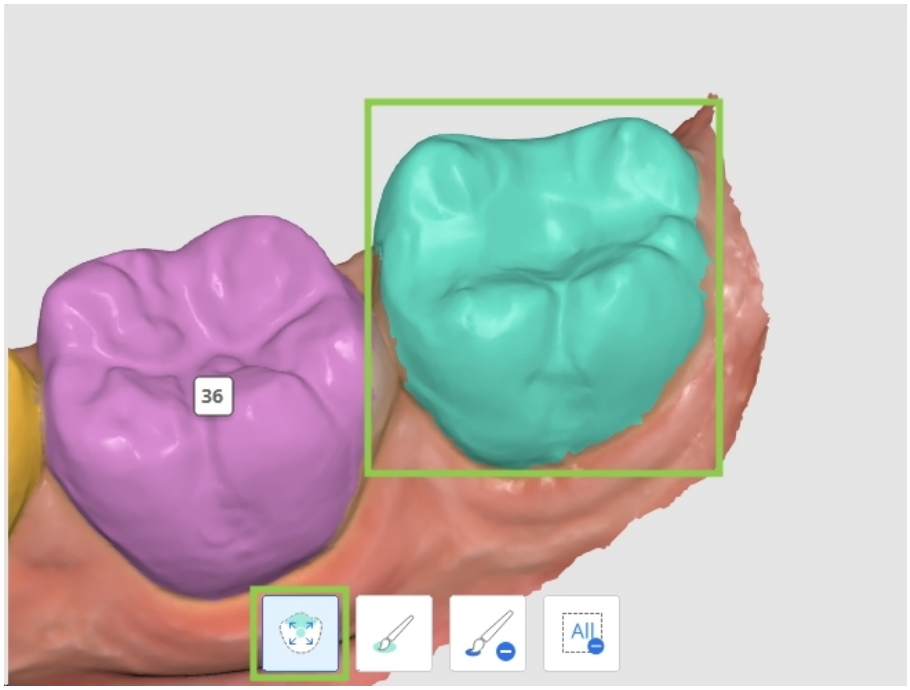
- When a tooth is set to Planned Prosthesis, the simulation will use data from the opposing tooth if available, or otherwise from the teeth library. If a tooth was originally marked as Missing Tooth and is then changed to Planned Prosthesis, the change takes effect at the final staging step shown in the Output Overview. If the tooth was marked as No Info and is changed to Planned Prosthesis, the change applies from the beginning of the aligner staging process.

How to Select Tooth Data

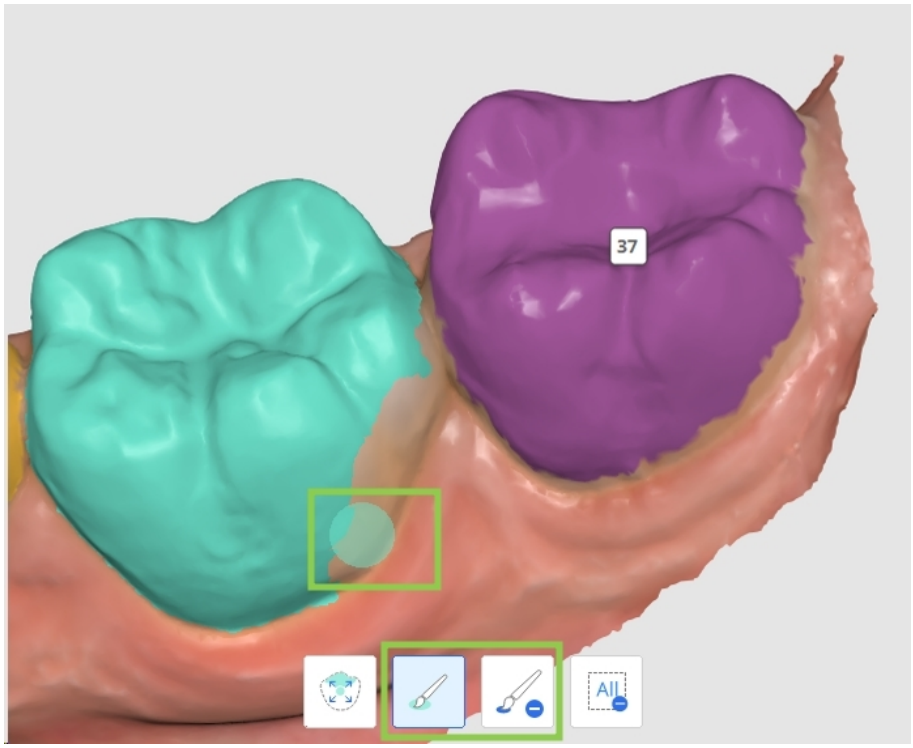
Selection editing mode is prompted if users need to manually select data for a non-identified tooth or correct the existing data selection.



1. Use the “Smart Tooth Selection” tool to automatically select an area of an entire tooth with a click and drag.

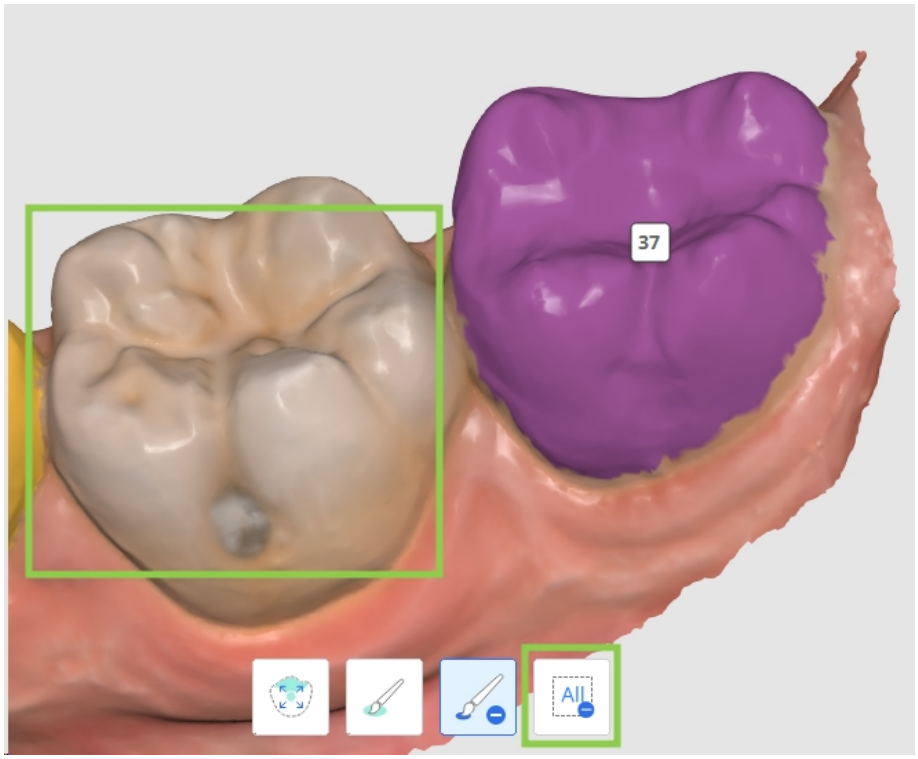


2. To make the data selection more precise, adjust it using “Brush Selection” or “Brush Deselection.”



> **Note**
>
> If multiple teeth need selection editing, click their number to switch the focus target.

3. To clear all selection and start over, use “Clear Selection.”

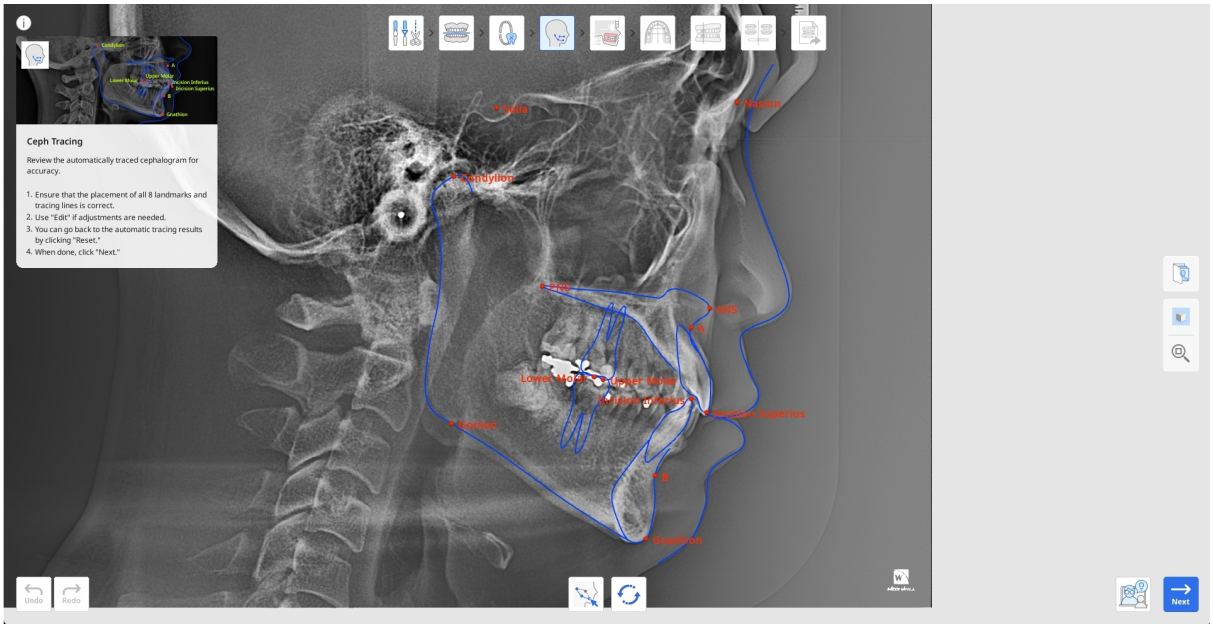


4. Click “Done” in the bottom right corner when done to save changes and return to charting.

Ceph Tracing

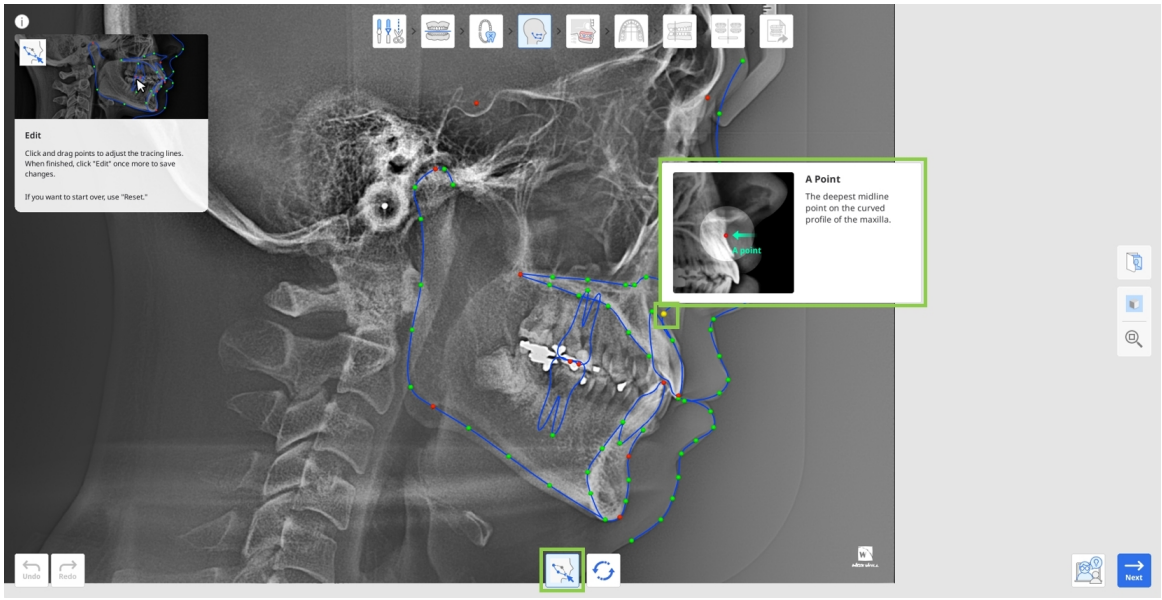
The Ceph Tracing step will be available only if ceph data was imported during the data assignment. Its goal is to create a digitally traced cephalogram. The program will automatically outline the bone and tissue structures on the imported X-ray and place some of the main landmarks.

> ⚠ **Caution**
>
> To make actionable treatment decisions, users must import the ceph data. If running the program without ceph data, it should only be used for exploring treatment options. Limitations of the program without ceph data include:
>
> - Wits are automatically set to a range of -3 to +3.
> - The patient's growth is not factored in.
> - The Ceph Overlay feature is not available, so you can not visualize the final teeth position over the bone structure.



1. First, examine the result of automatic tracing. Ensure that the outlines have no sharp angles and that all 13 key points are correctly placed.
   The app must identify the following points and landmarks: A Point, B Point, Gnathion (Gn), Condylion (Con), Upper Molar, Lower Molar, Incision Superius (Is), Incision Inferius (Ii), Nasion (N), Sella (S), Anterior Nasal Spine (ANS), Posterior Nasal Spine (PNS), and Gonion (Go).
2. If adjustments are needed, click “Edit” and drag the control points. Hover over the red points to see the guide on where the point must be placed.

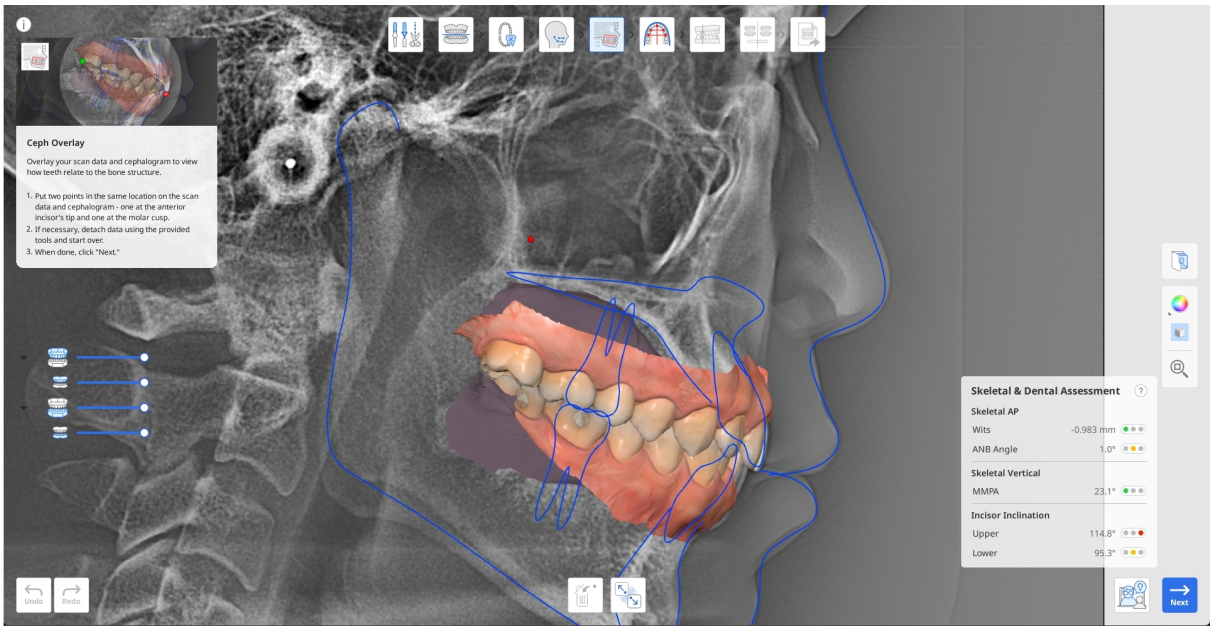
Click “Edit” again to save the made changes.



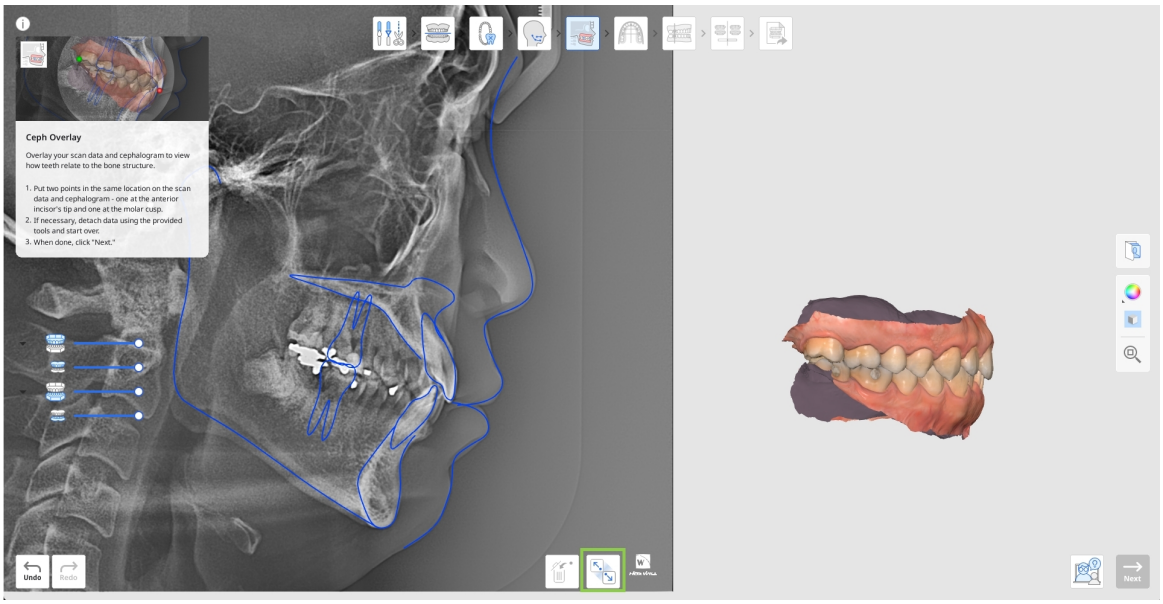
3. You can always restore the results of automatic tracing by clicking “Reset.”
4. When done, click “Next.“

Ceph Overlay

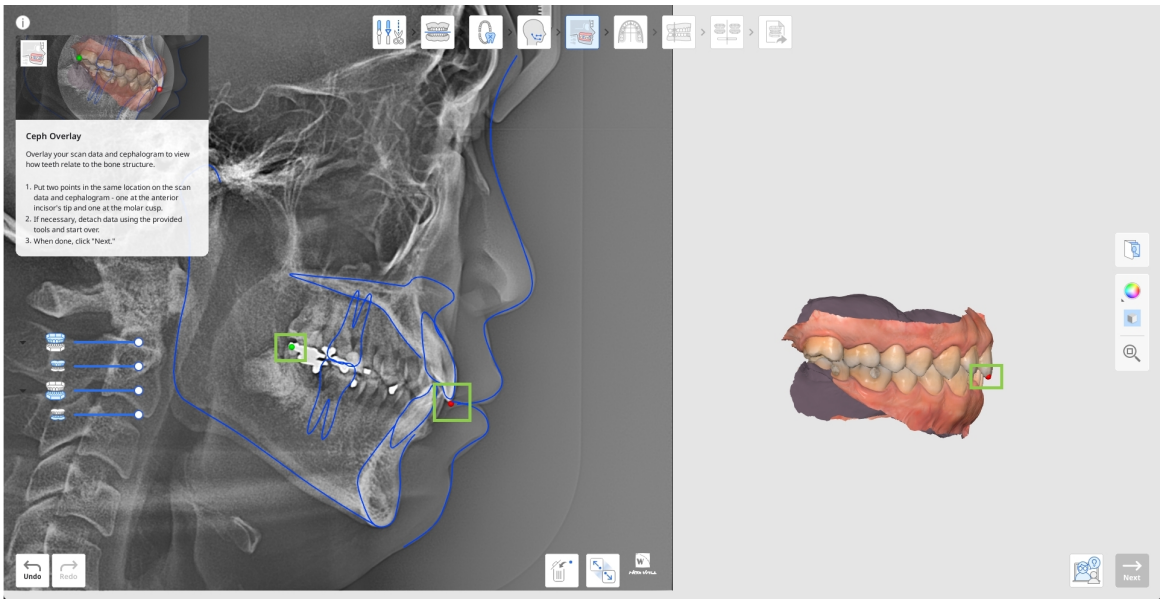
This step is only accessible if ceph data is included in the case. Here, the scan data is automatically aligned with the traced cephalogram, enabling users to examine the relationship between teeth and bone structures.



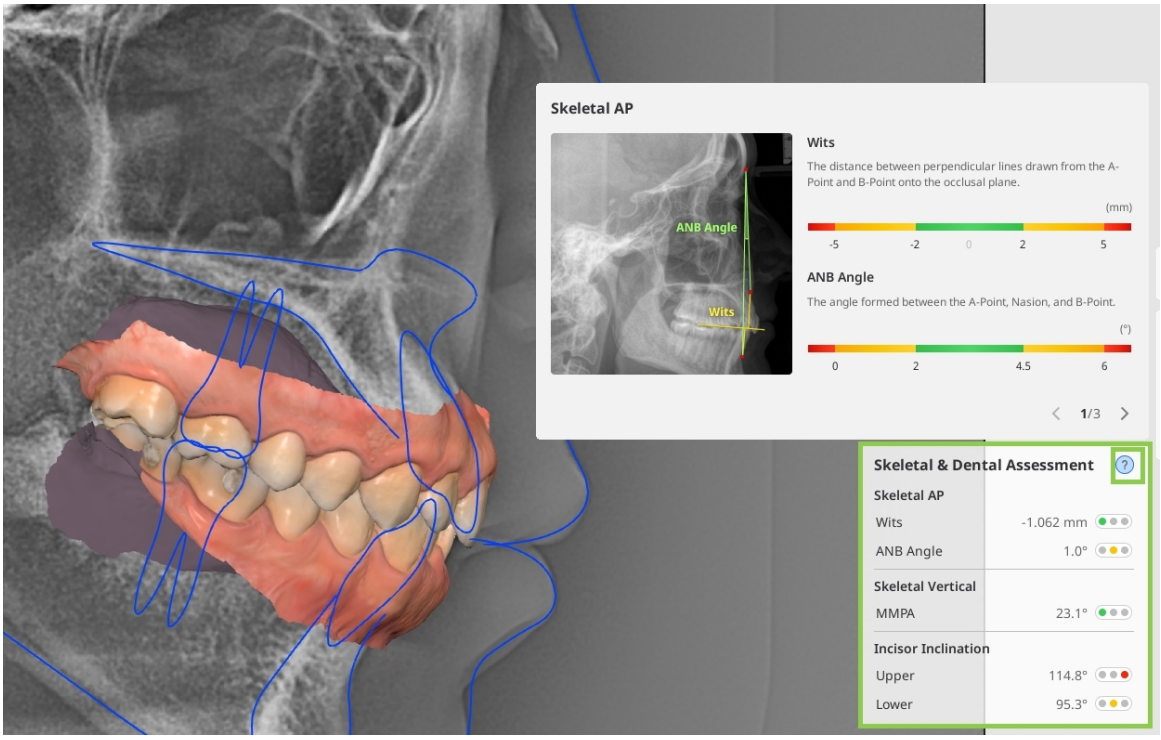
1. Check the automatic overlay results. If adjustments are necessary, detach the data from the cephalogram using the "Detach Data" option at the bottom.



2. To manually realign, place two points at the same spot on both the scan data and cephalogram: one at the tip of the front incisor and one at the molar cusp, as shown below.



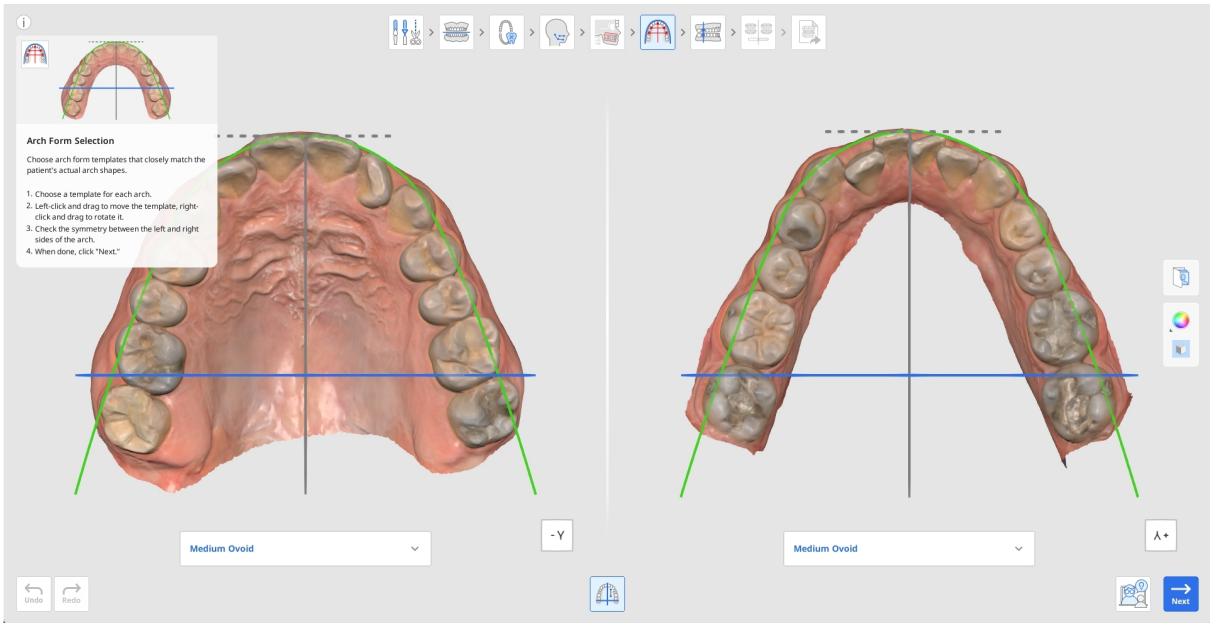
3. Then, check the results of skeletal and dental assessment across a number of criteria provided in the widget below. All values are automatically calculated and are displayed with a color-coded mark indicating the potential difficulty of treating the case. Click on the question mark in the box to view more details.



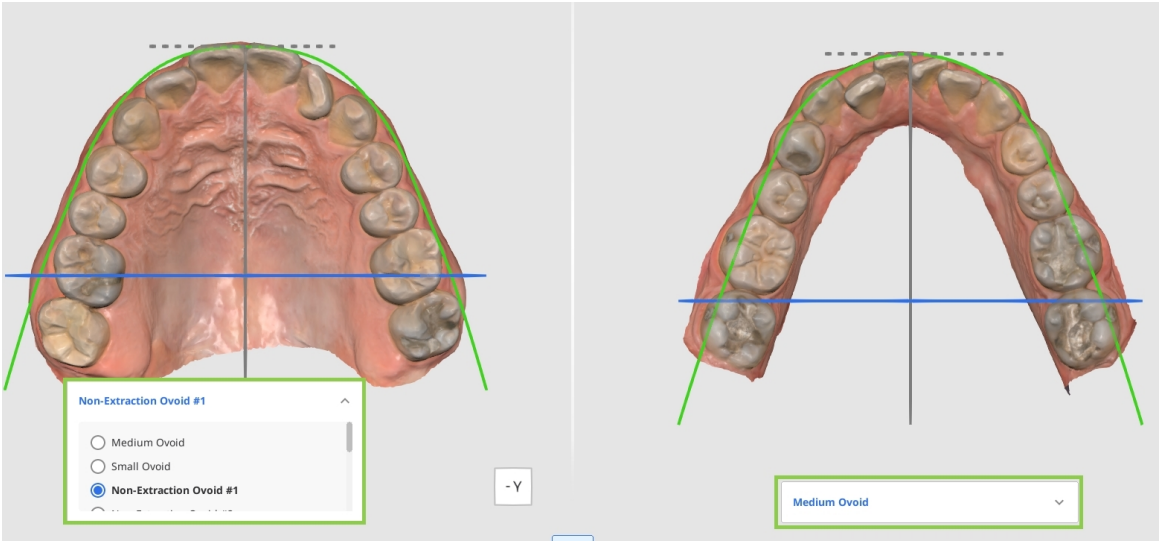
4. When done, click “Next.“

Arch Form Selection

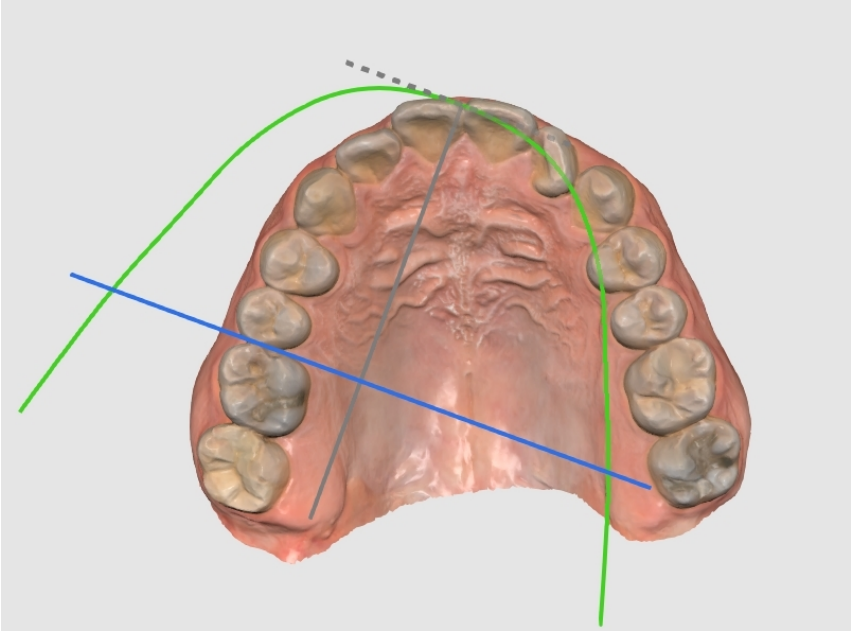
The next step is Arch Form Selection, which entails choosing an arch form template that closely matches the patient's actual arch shape and size.



1. Select a template for both the maxilla and mandible from the dropdown menus below each. Choose the one that closely matches the actual shape and size.

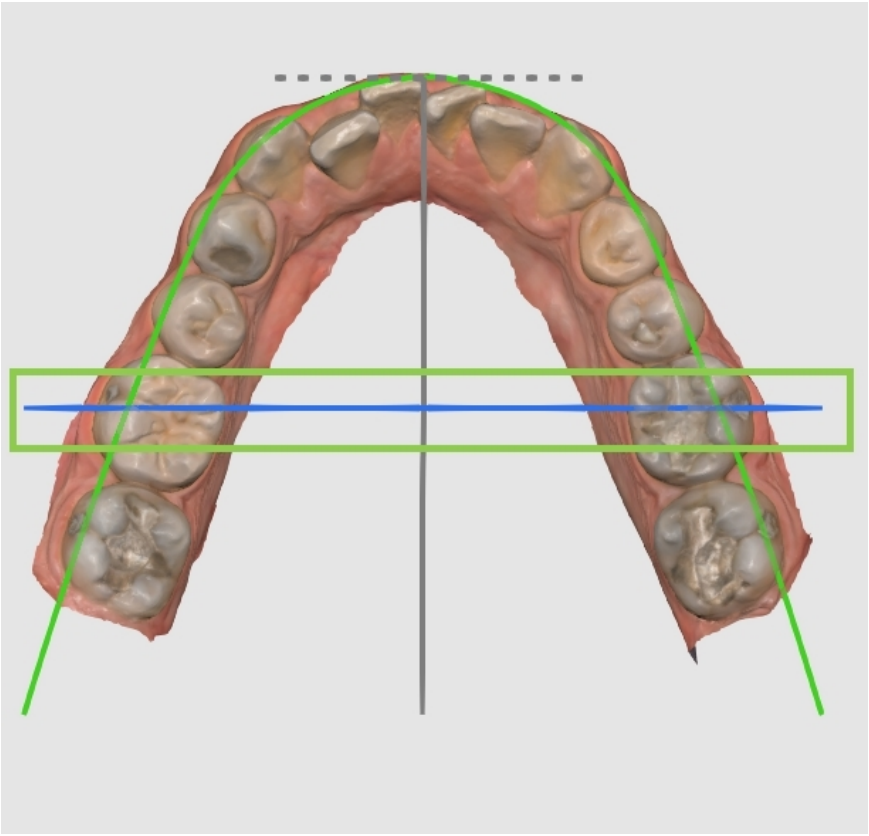


2. If needed, reposition the selected template using your mouse: left-click and drag to move, and right-click and drag to rotate.



> ⚠ **Caution**
>
> Please ensure that the arch form is not positioned unevenly or off-center. The position of the arch form will determine the direction of tooth movement.

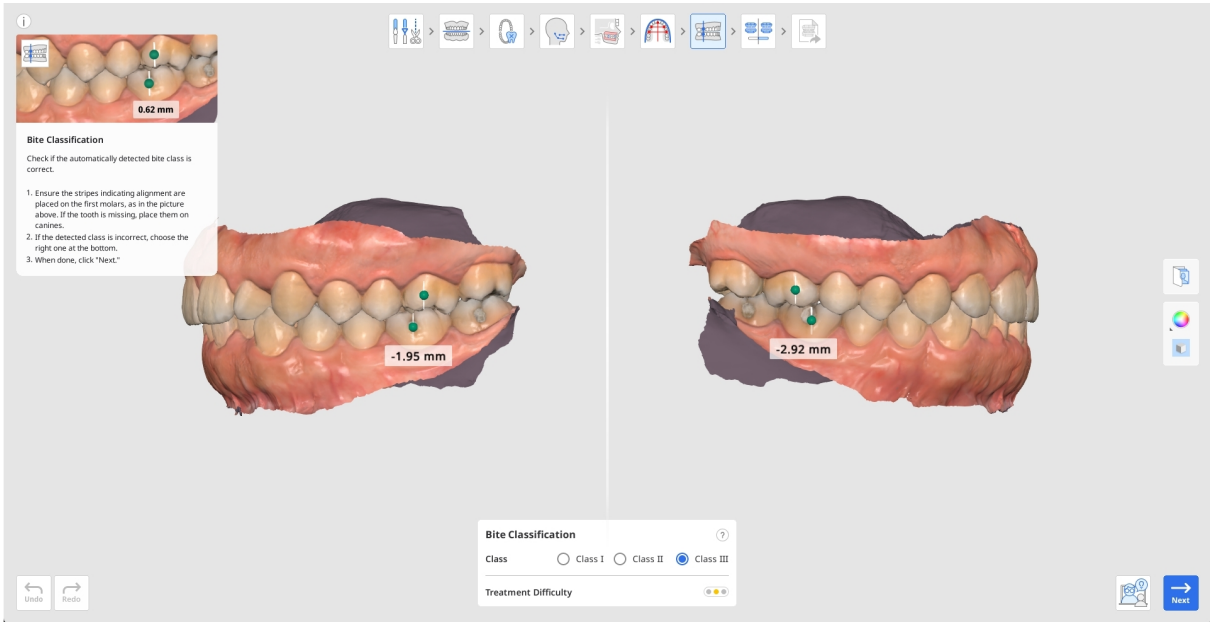
3. Make sure that the arch form is oriented symmetrically on the scan data. Use the perpendicular lines to assess the symmetry; the blue line can be moved with a mouse.



4. When done, click “Next.“

Bite Classification

Bite Classification is the final step before simulating teeth movement. Its primary objective is to determine the bite class based on the relationship of posterior teeth. This step is automatic, but users can adjust the detected class if needed or in case there are missing teeth.

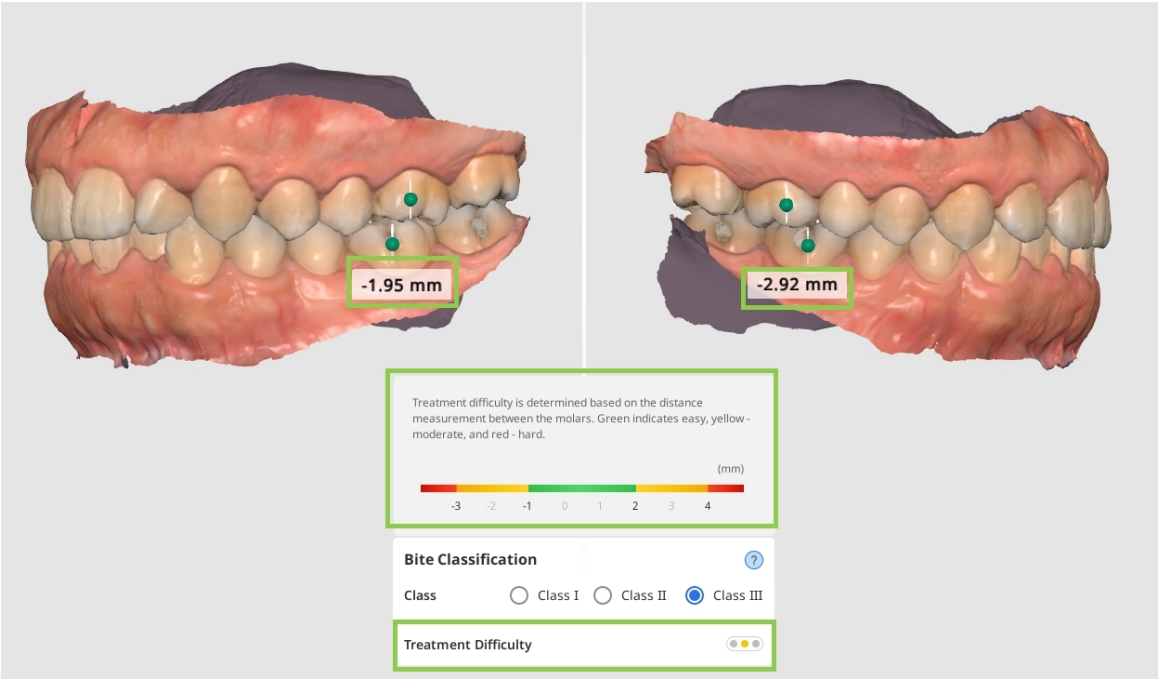


1. Verify that the alignment stripes were placed correctly: one on the mesiobuccal cusp tip of the upper 1st molar and the other on the buccal grooves of the lower 1st molar. If the 1st molars are missing, you can use canines instead.

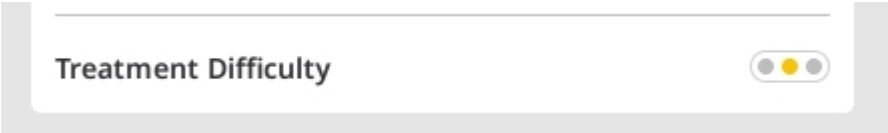
   If the automatically detected class is incorrect, choose the correct one from the options provided in the box at the bottom of the screen.



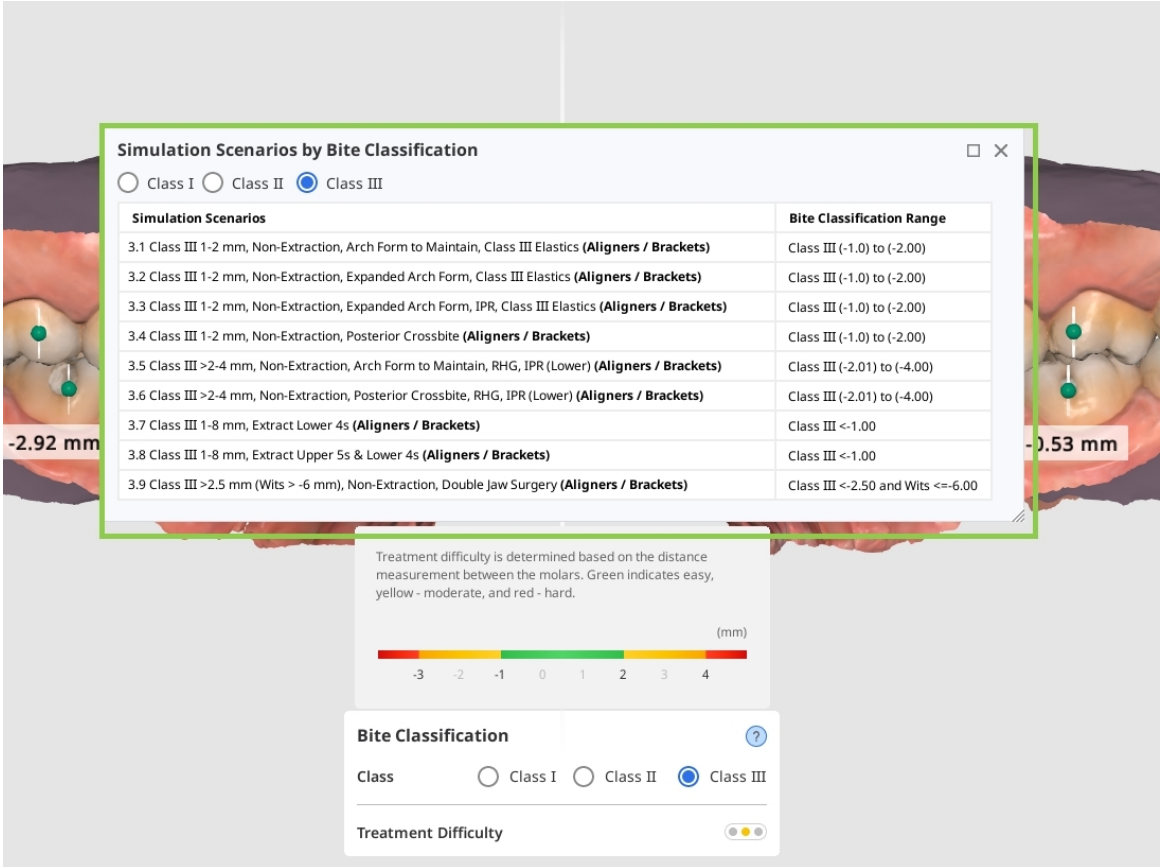
2. The distance between molars is measured automatically and used to estimate treatment difficulty.



3. The traffic light icon next to the Treatment Difficulty option displays different colors based on the level of difficulty. Green indicates easy, yellow represents moderate, and red signifies hard.



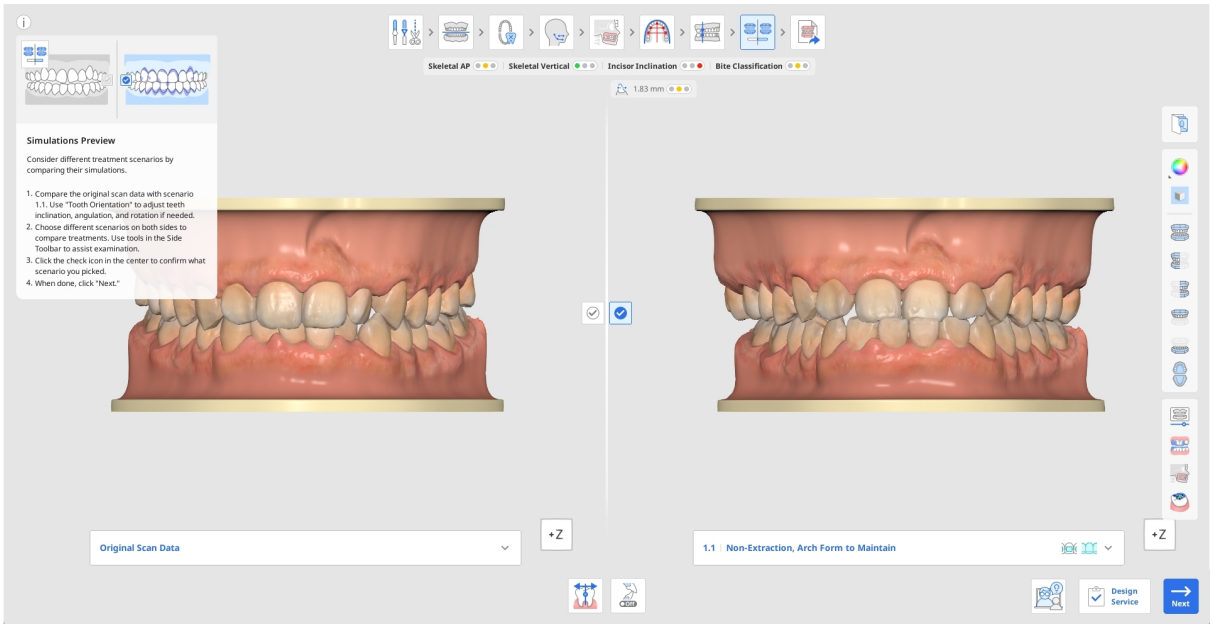
4. Use the table as a guide to explore what treatment scenarios will be considered for the currently selected bite classification.



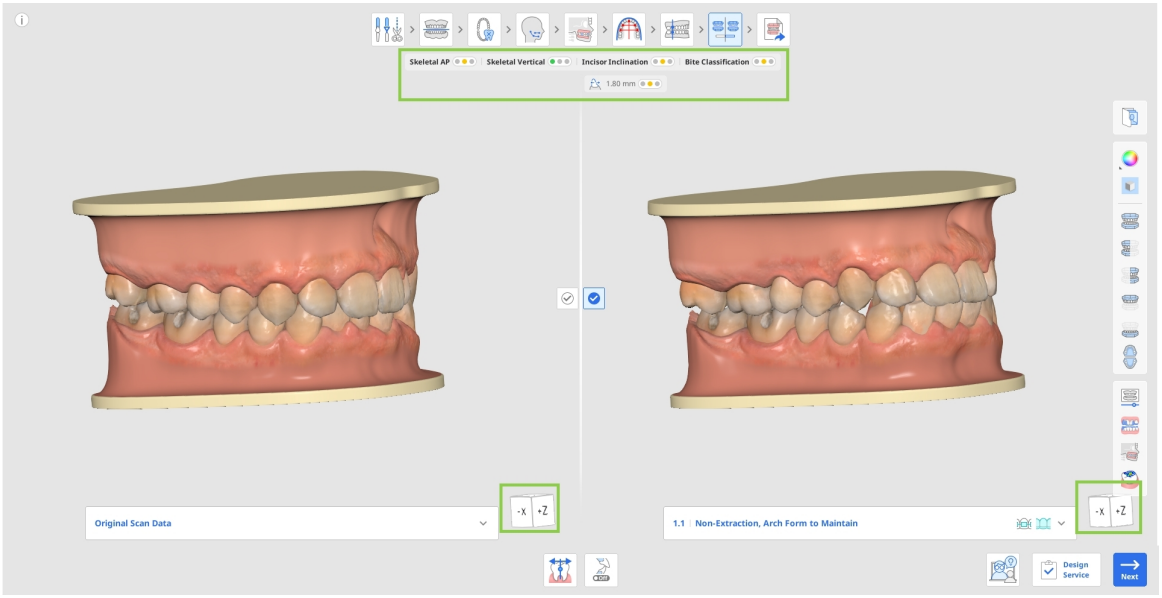
5. When finished, click “Next.“

Simulations Preview

The Simulations Preview step involves generating simulations of teeth movement based on the information provided in previous steps. The main goal here is to assess potential treatment scenarios and determine the best course of treatment. Additionally, these simulations can be employed during patient consultations to visually illustrate the treatment process and expected outcomes, thereby increasing the patient's understanding of future procedures.



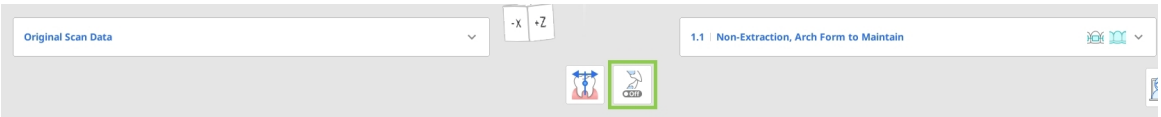
1. First, compare the original scan data and the simulation for scenario 1.1. Click the Info Box to hide it and use the View Cube or viewing tools in the Side Toolbar to help with the visual examination.



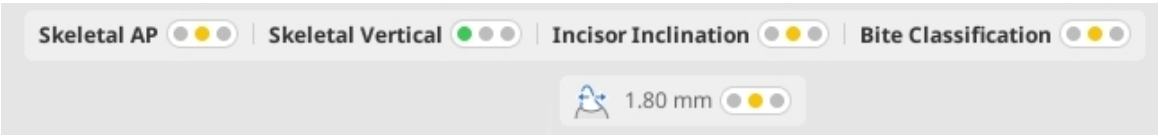
- Check for any poor teeth alignment in this simulation. If any is present, adjust it using the “Tooth Orientation” tool, where each tooth can be individually reoriented. Read more on how to use this tool at the end of the current chapter.



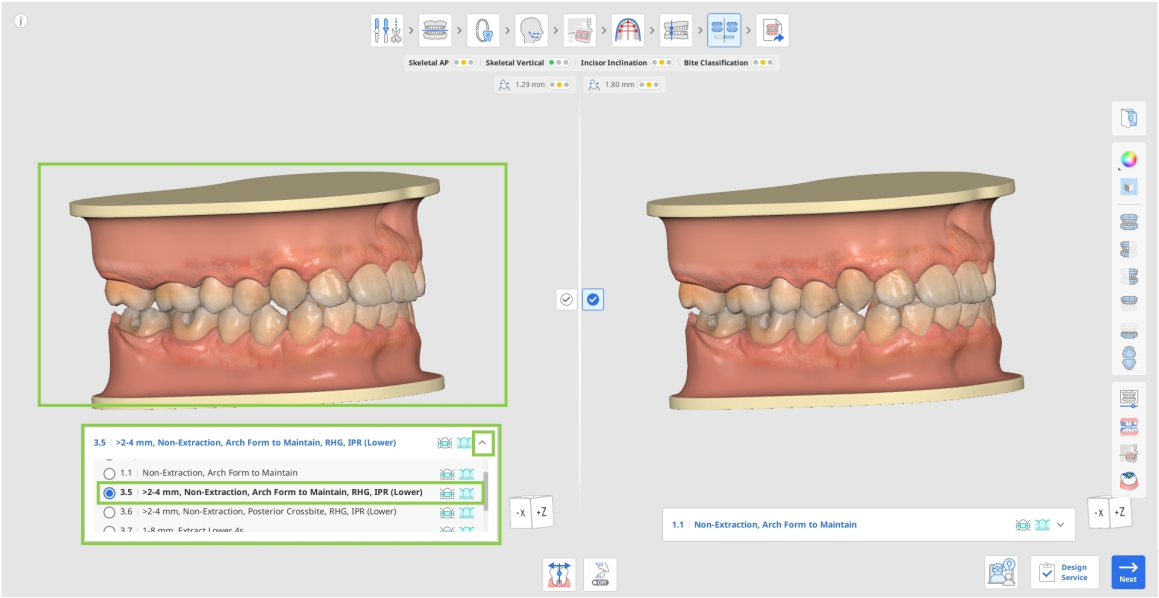
- If needed, you can select your desired compensation angle to adjust tooth inclination and alignment according to the patient’s skeletal type, enabling treatment planning even without cephalometric data. To do this, use the “Dental Compensation“ tool at the bottom.



- When comparing between scenarios, check the general summary for the case below the workflow steps. It presents overview of the treatment difficulty through traffic light colors. This summary provides a quick diagnostic summary of skeletal and dental relationships, showing categories like Skeletal AP, Vertical, Incisor Inclination, and Bite Classification.



2. To explore additional treatment options for the current case, open the scenario list under the original scan data or simulation 1.1. Click on any of the available scenarios to preview its simulation. Each scenario in the list also indicates what type of appliance options are possible for treatment.



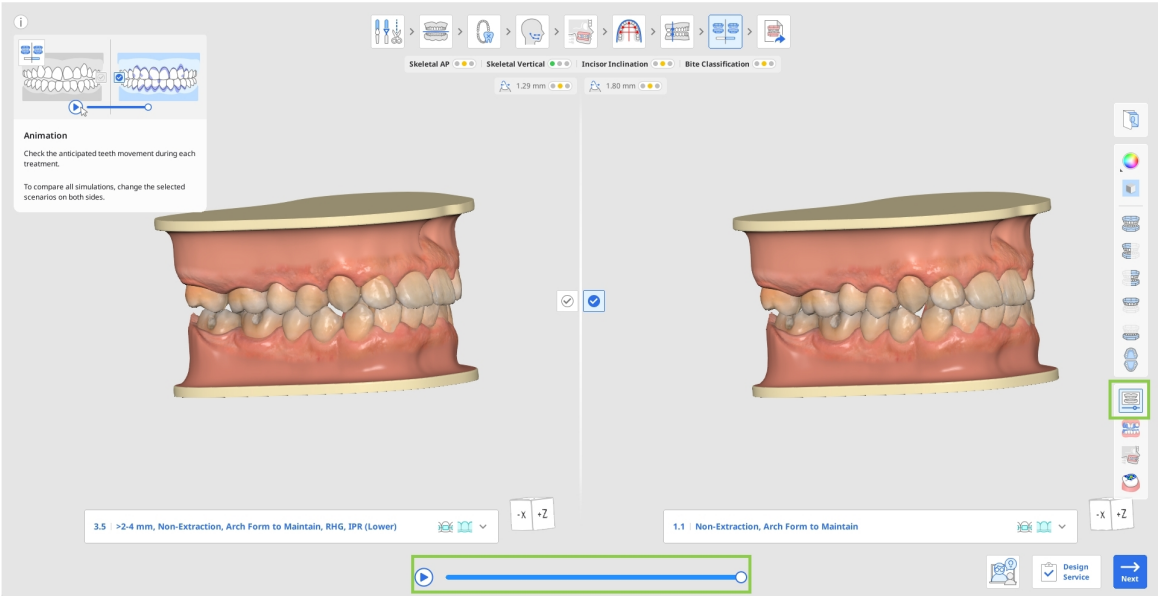
Tip

Use “Orthodontic Photos” in the Side Toolbar to check if the suggested protrusion is plausible in the current patient by referring to other imported imaging (X-rays, intraoral and facial photos).

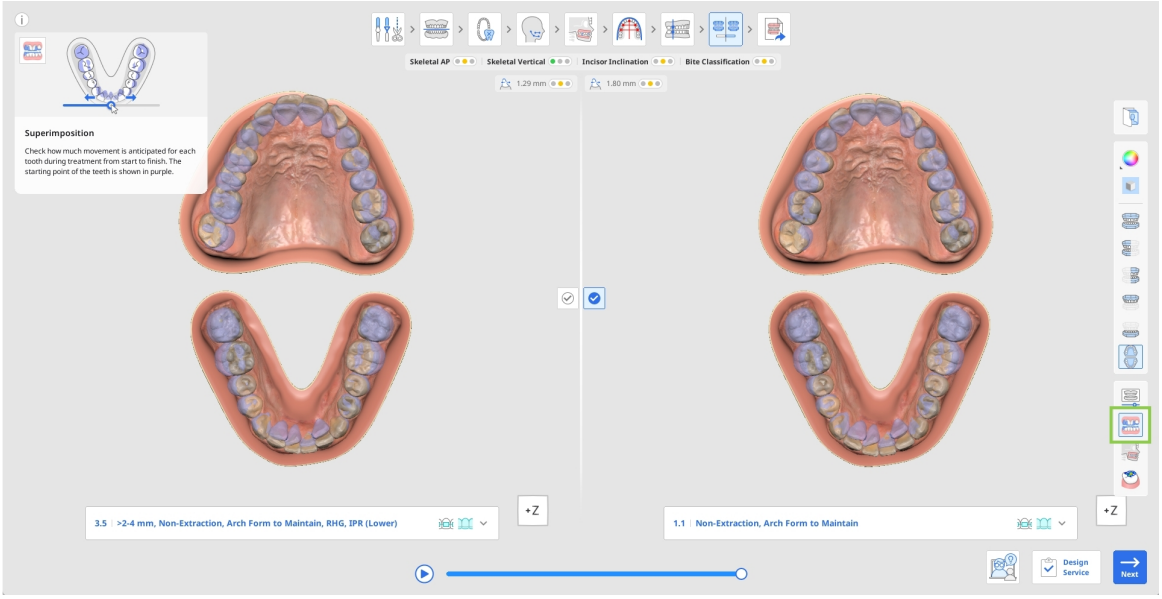
3. Change between scenarios on both sides of the screen to compare different treatment simulations side-by-side. Utilize the following tools in the Side Toolbar to assist you: Animation, Superimposition, Ceph Overlay Comparison, and Occlusal Relationship.



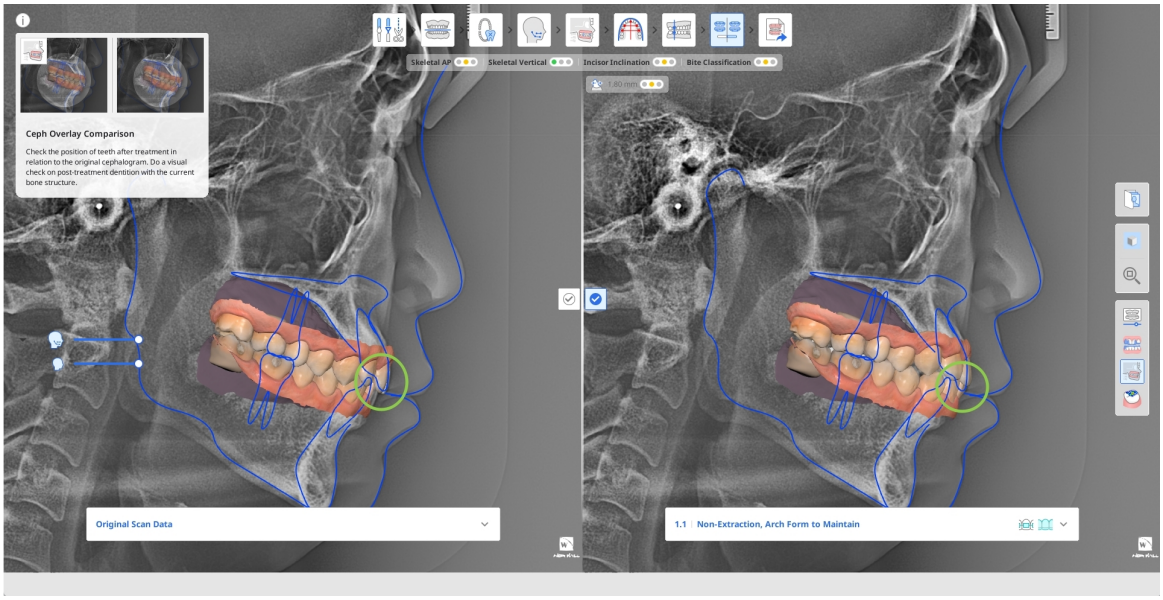
- Use "Animation" to visualize the movement of teeth for the selected scenario.



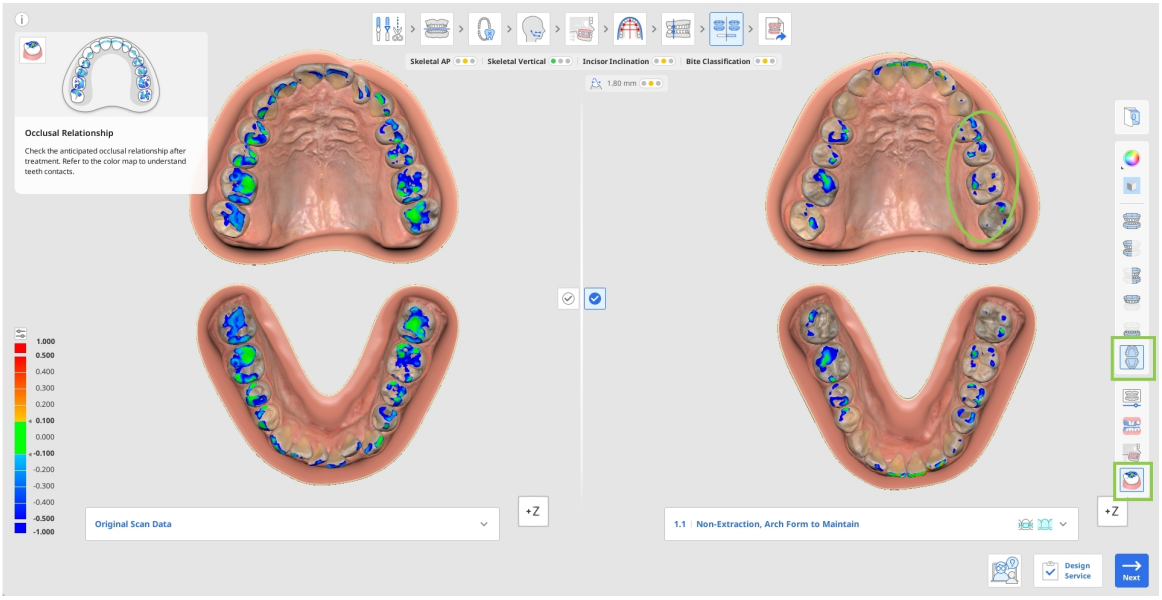
- Use "Superimposition" to assess the anticipated movement of each tooth from start to end, with the start point depicted in purple. Superimposed data is animated for your convenience.

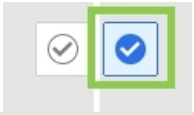


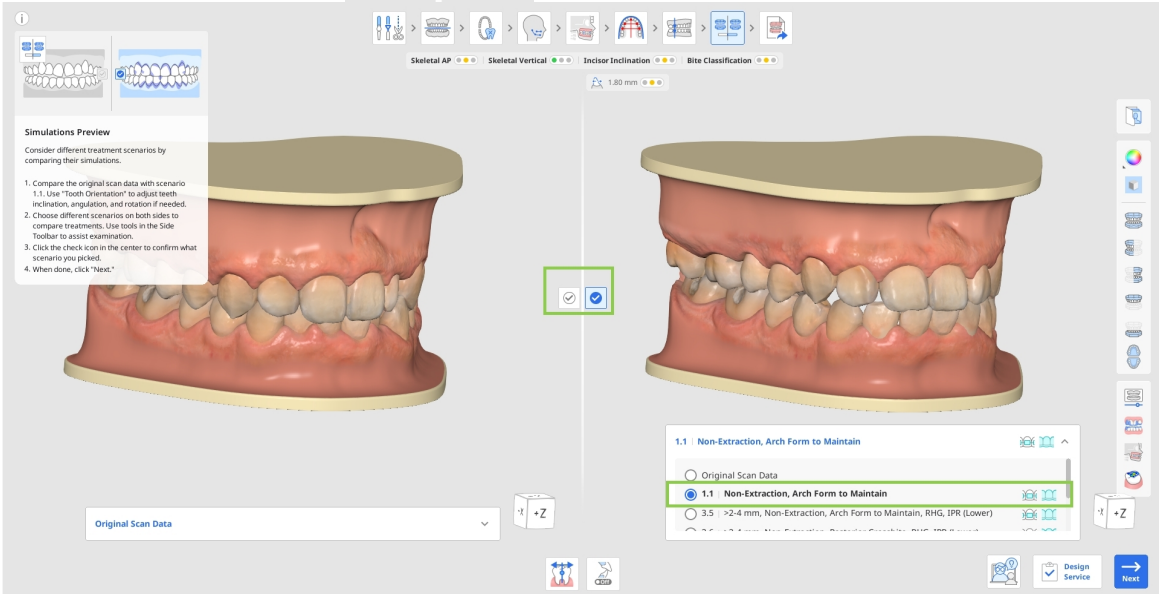
- Use “Ceph Overlay Comparison” to see the post-treatment dentition in relation to the bone structure. For example, by examining the area highlighted in the green circle in the image on the right and comparing it to the image on the left, you can easily see the movement of the teeth.



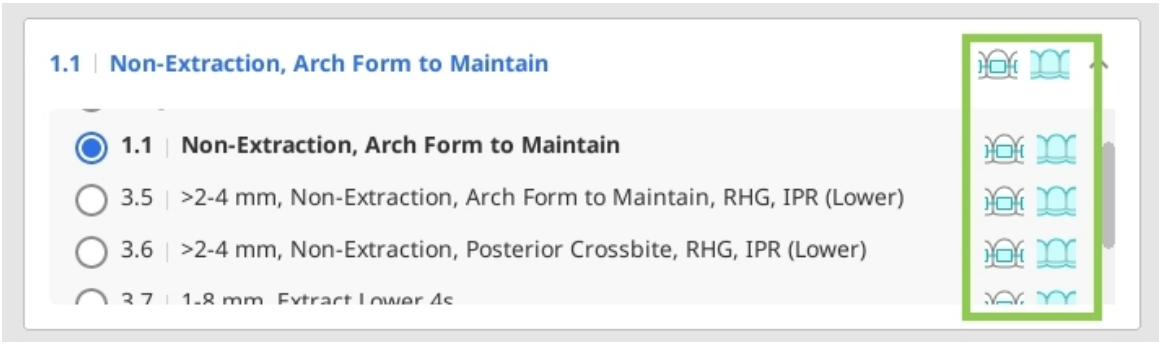
- Use “Occlusal Relationship” to analyze the occlusal contact for the post-treatment dentition, referring to the color bar on the left for color interpretations.



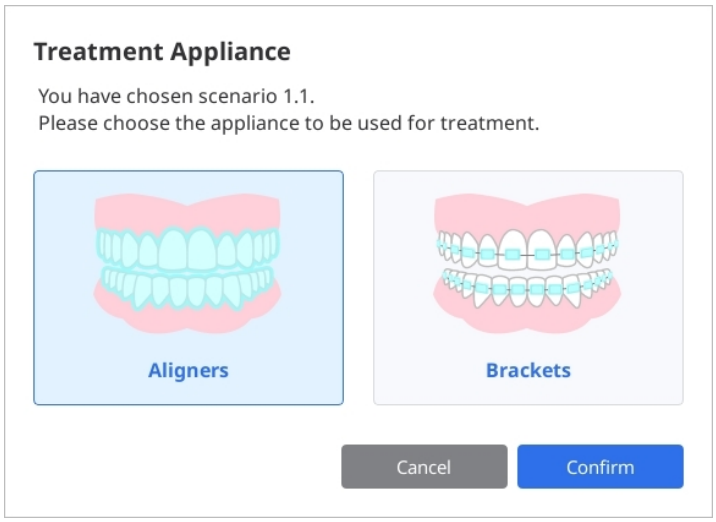
4. Once you have made a decision on the final treatment, confirm choosing your preferred treatment scenario by clicking its check  located in the center of the screen.



- Applicable treatment types (aligner, bracket) for each scenario are shown next to the scenario title in the list.



5. Click “Next” to go to the final step. If your chosen scenario can be treated using both aligners and brackets, you will be asked to choose one before proceeding to the final step. Note that you will not be able to move to the next step if the original scan data is marked as chosen.



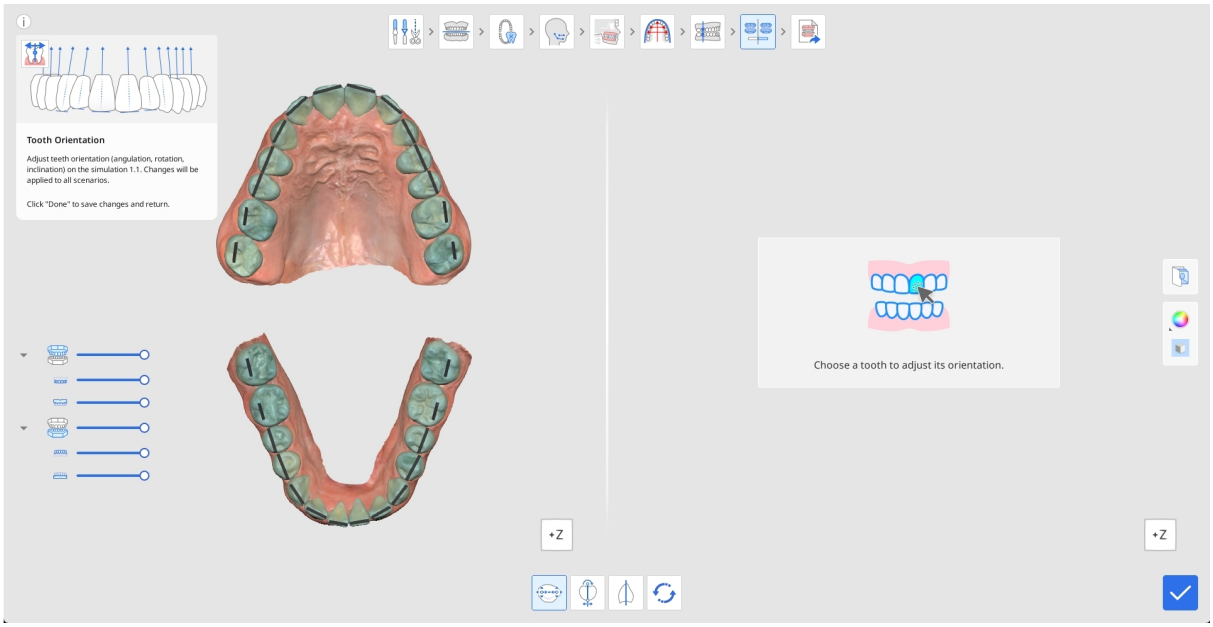
How to Use Tooth Orientation

Tooth Orientation is used to ensure that the software is accurately identifying the orientation of each tooth in the following planes:

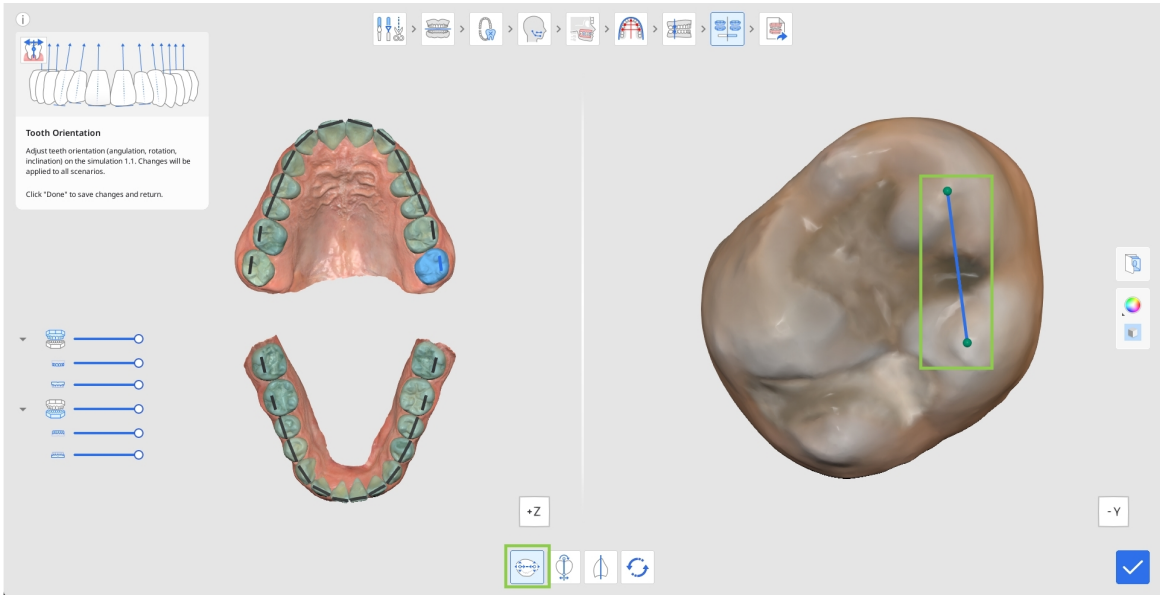
- Amount and direction of rotation relative to the chosen arch form to be maintained.
- Degree of angulation or tip from the occlusal table.
- Degree of inclination or torque from the occlusal table.

Errors in tooth orientation detection can be caused by misshapen teeth, teeth with worn or uneven edges, blocked-out or crowded teeth, poor scan quality, or other complications. These errors can be detected when reviewing simulation 1.1 in comparison to the original scan data by viewing any tooth that appears to not have been leveled, aligned, or out of position in some direction. This tool displays the orientation using simulation 1.1, which is after all teeth have been leveled and aligned to the chosen arch form.

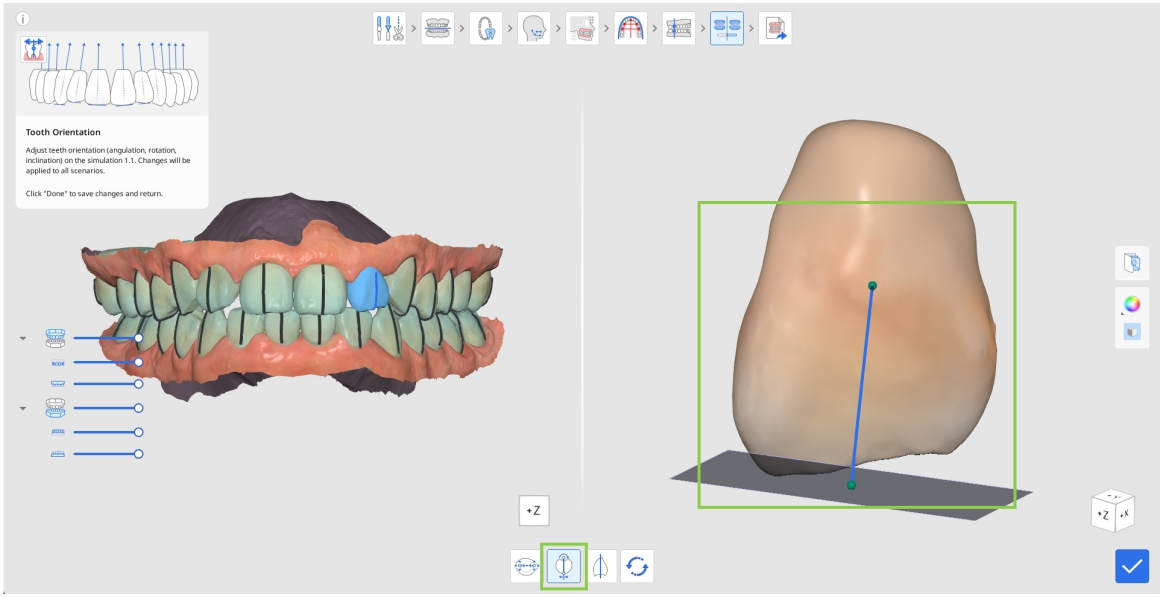
Changes made to orientation are applied to how the software identifies the current position of each tooth, and thus, changes will be applied to all scenarios automatically.



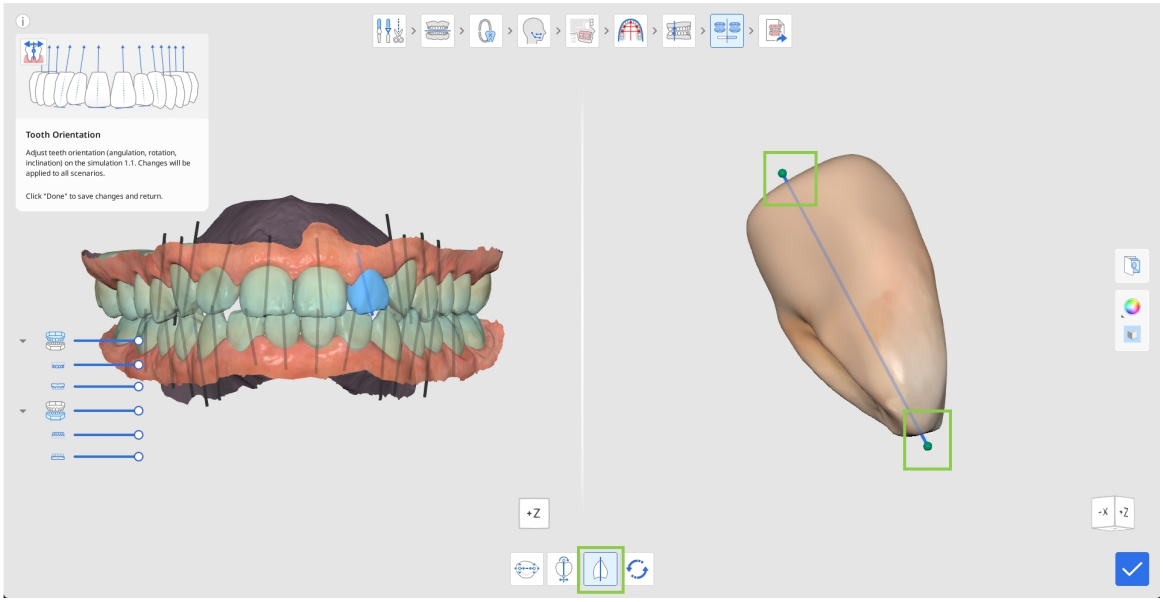
1. Click on any desired tooth to start adjusting its orientation; by default, the “Rotation” tool is activated first. The chosen tooth will be shown on the right, with the rotation defined by the blue line with green control points on each end. To adjust the rotation, drag by one of the points so that the blue line accurately identifies your perceived rotation of each tooth.



2. To edit the degree of angulation or tip from the occlusal table, click "Angulation (Tip)." Then, choose a tooth and start adjusting by dragging the control points to change positioning. The occlusal plane is displayed at the incisal edge of the blue line for your reference.



3. To edit the degree of inclination or torque from the occlusal table, click "Inclination (Torque)." Then, choose a tooth and start adjusting by dragging the control points.



4. If you want to reset back to the initially identified tooth orientation, click “Reset” in the toolbox below.



5. Click “Done” in the bottom right corner to return to the simulations preview and comparison.

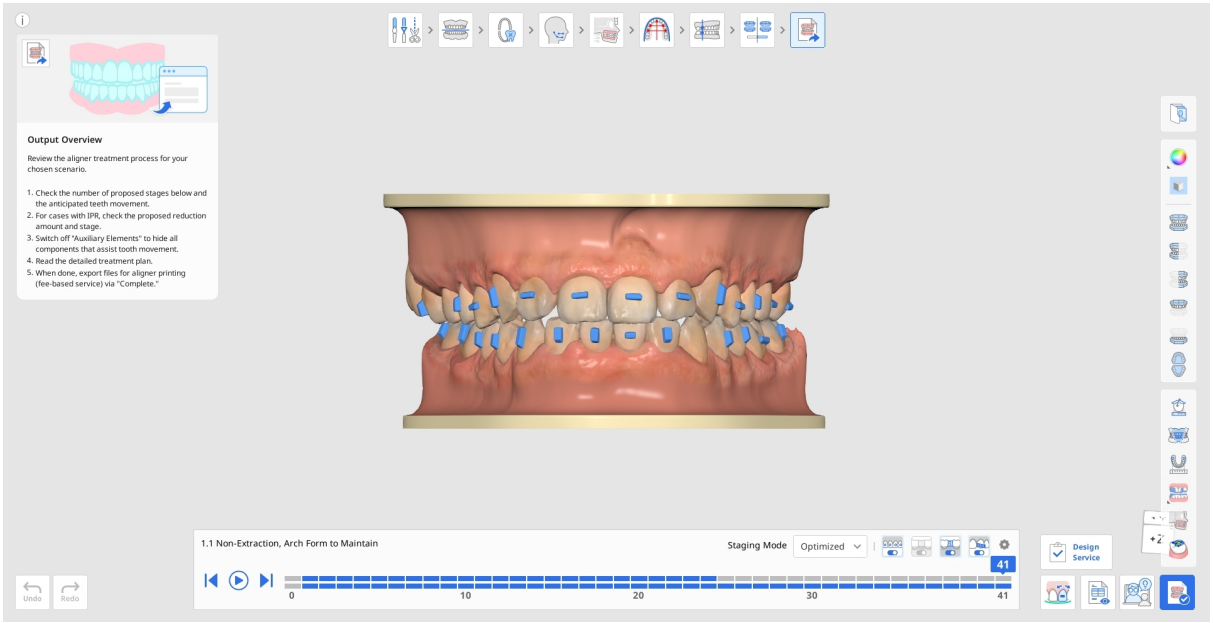


Output Overview

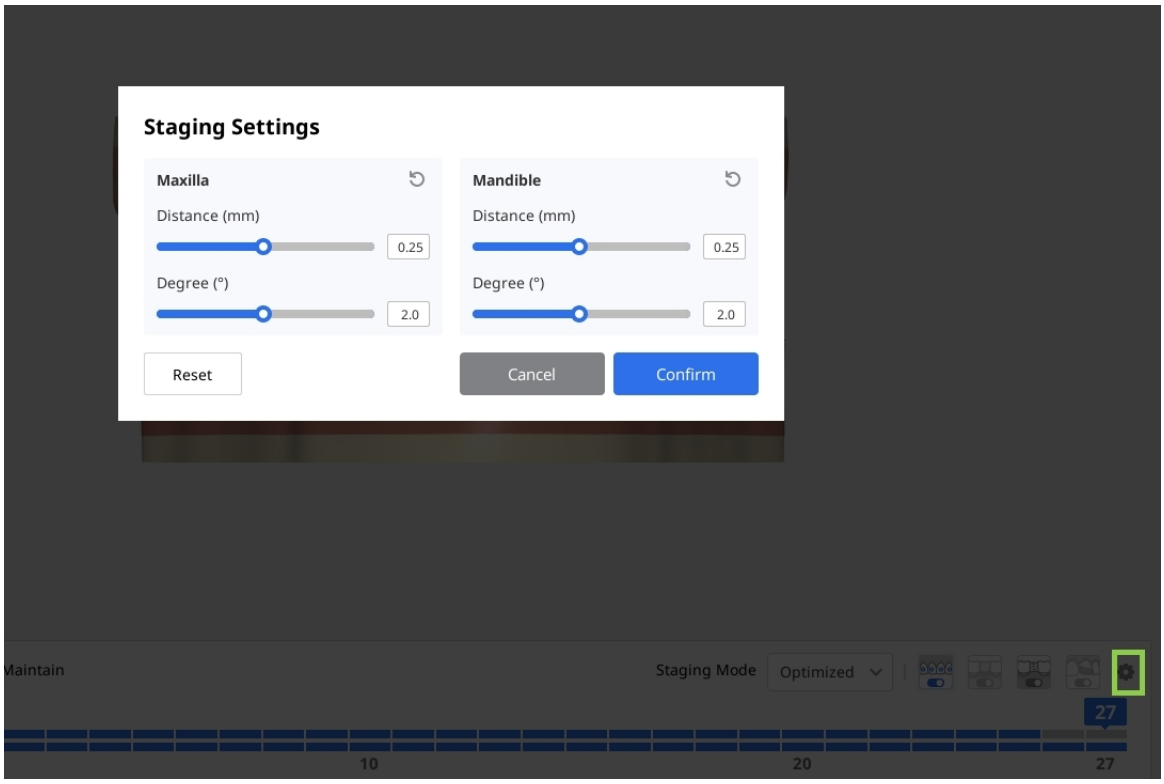
Output Overview is the last step in the workflow. Here, users can take a closer look at the selected treatment scenario before proceeding to appliance fabrication or ordering. The purpose and features of this step will vary based on the appliance option chosen earlier - aligners or brackets.

Aligners

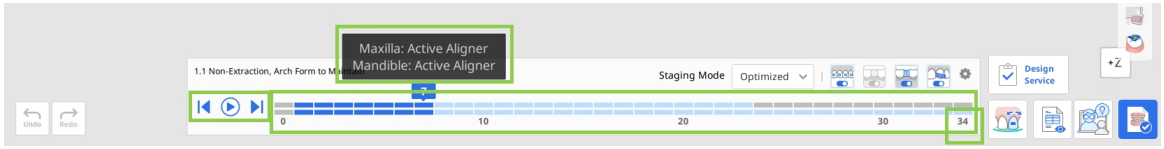
If the “Aligners“ option was chosen in the previous step, the user is presented with the model of the treatment simulation and features for its refinement, as well as the aligner staging set-up options.



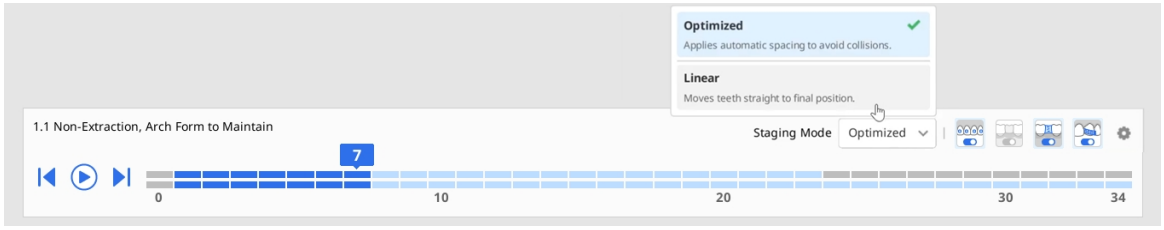
1. Upon entering you will be suggested to adjust the staging speed in “Staging Setting.” Make needed adjustments right away or return to them later using the gear icon in the top-right corner of the staging navigation box. The default staging speed is 0.25 mm / 2.0°.



2. Start by reviewing the suggested staging for aligner creation. In the staging navigation box at the bottom of the screen, you'll see how the software has divided the entire treatment into stages. The upper line represents the staging for the maxilla, and the bottom line for the mandible. Each stage corresponds to one aligner to be created.
   You can use the play button to animate the full treatment sequence, or click on any stage to review it in detail.



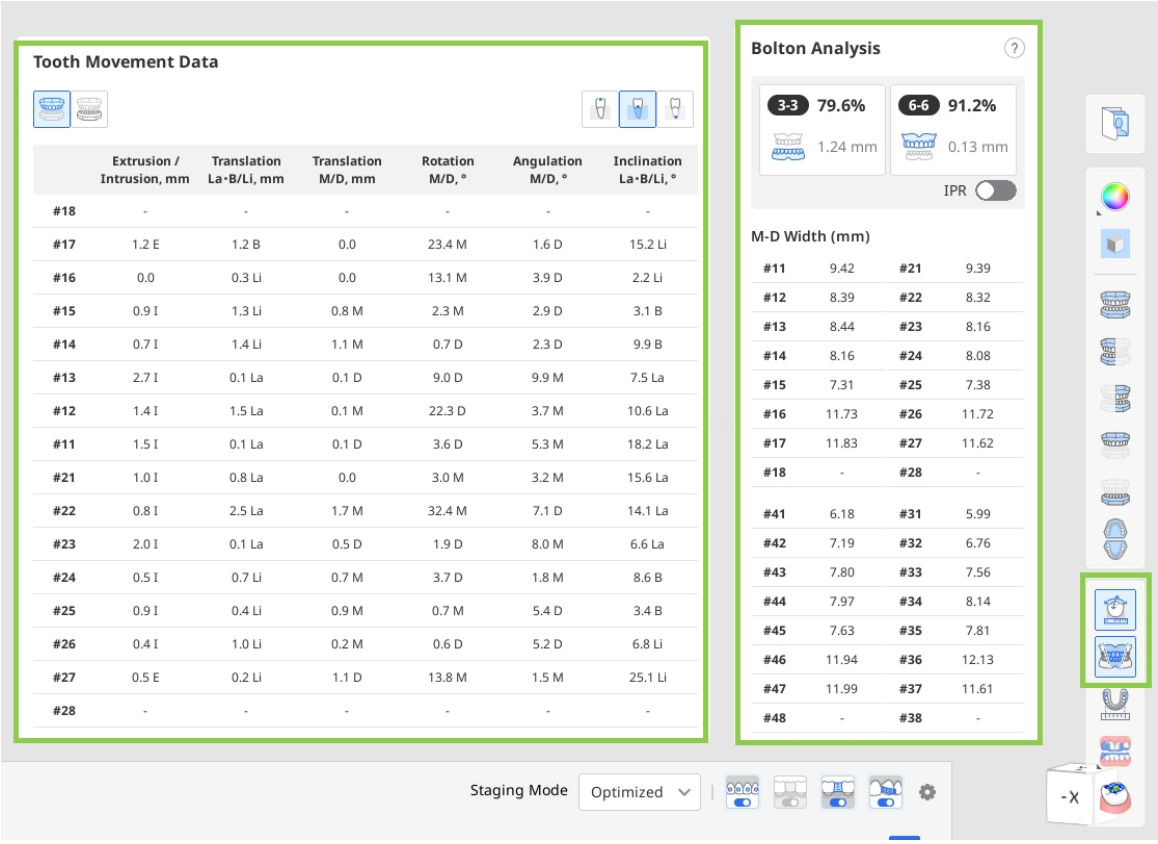
3. You can also control staging using "Staging Mode," which offers two options: Optimized and Linear. With Optimized, automatic spacing is applied to prevent collisions and allow teeth to move gradually. As a result, the total number of stages may be high. With Linear, teeth move along a more direct path to their final positions. This can reduce the total number of stages, especially in cases with minimal tooth movement.



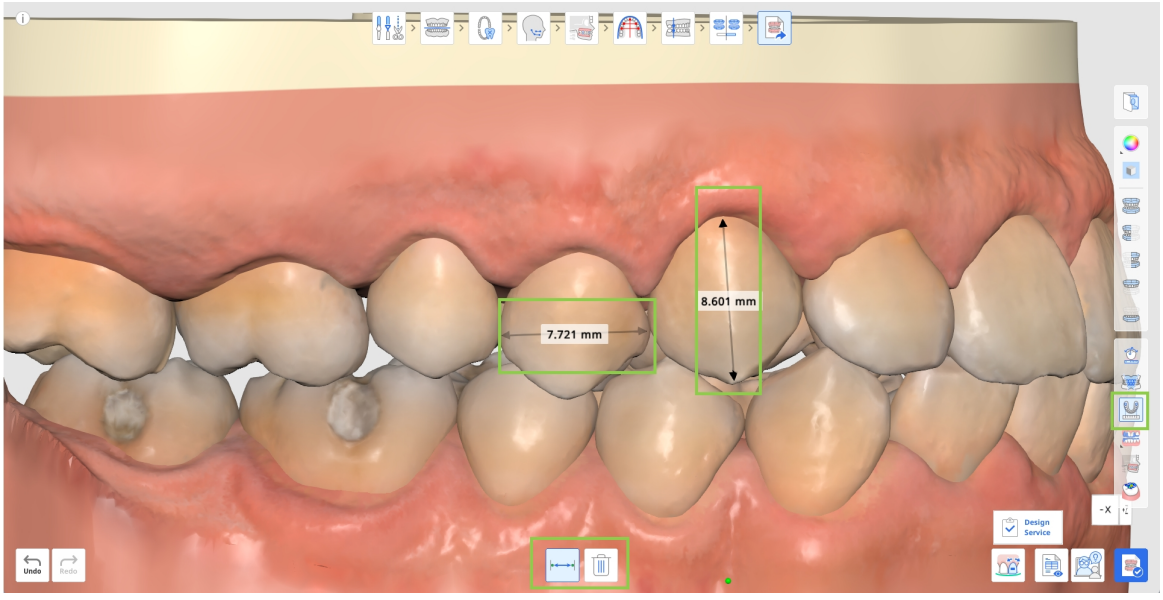
4. Use the display toggles in the navigation box to control the visibility of auxiliary tooth movement aids, pontics, interdental blocking, and IPR.



5. Use the tools in the Side Toolbar to view a detailed analysis of tooth movement and the Bolton ratio.

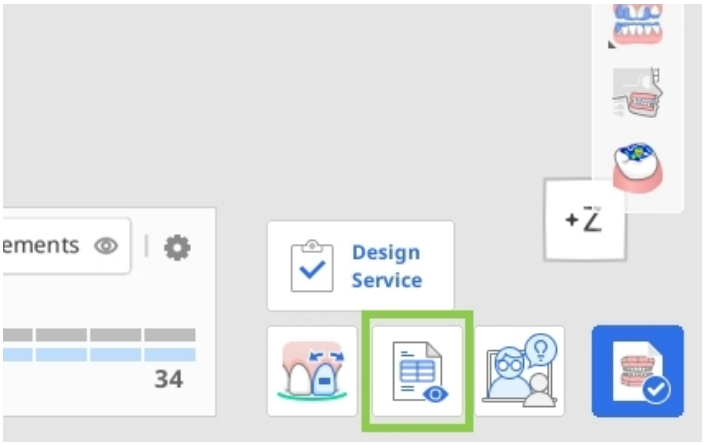


6. Use “Measurement” in the Side Toolbar to quickly measure distances between any two points. The measured distance is displayed as an annotation on the 3D model. Note that measurement results are displayed only while using this tool.

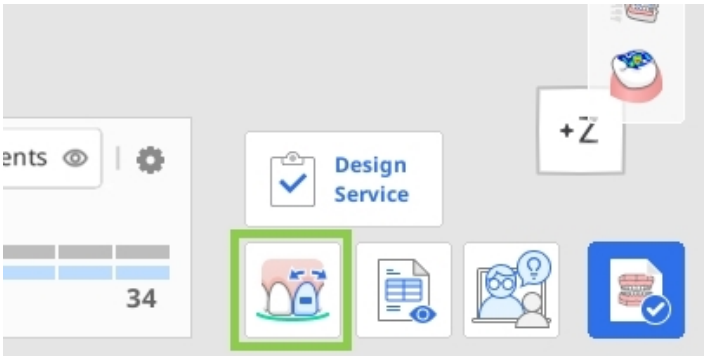


7. You can also open and read a step-by-step, detailed treatment plan provided for your treatment scenario.

> **Note**
>
> This feature is available only in the online environment.



8. If needed, you can improve the generated treatment simulation using the “Treatment Refinement” feature. You’ll find more details on how to use it later in this chapter.



9. When you're done, click the "Complete" button to either save the project, export aligner files for self-printing, or order Medit Aligners manufactured. Note that the latter two are paid options.

> **Paid Features**
>
> Note that the latter two options are paid features. Pricing may vary based on your scanner ownership status and location.
> For more details on paid file export, please click here; for more details on ordering Medit Aligners, please click here.

How to Use Treatment Refinement

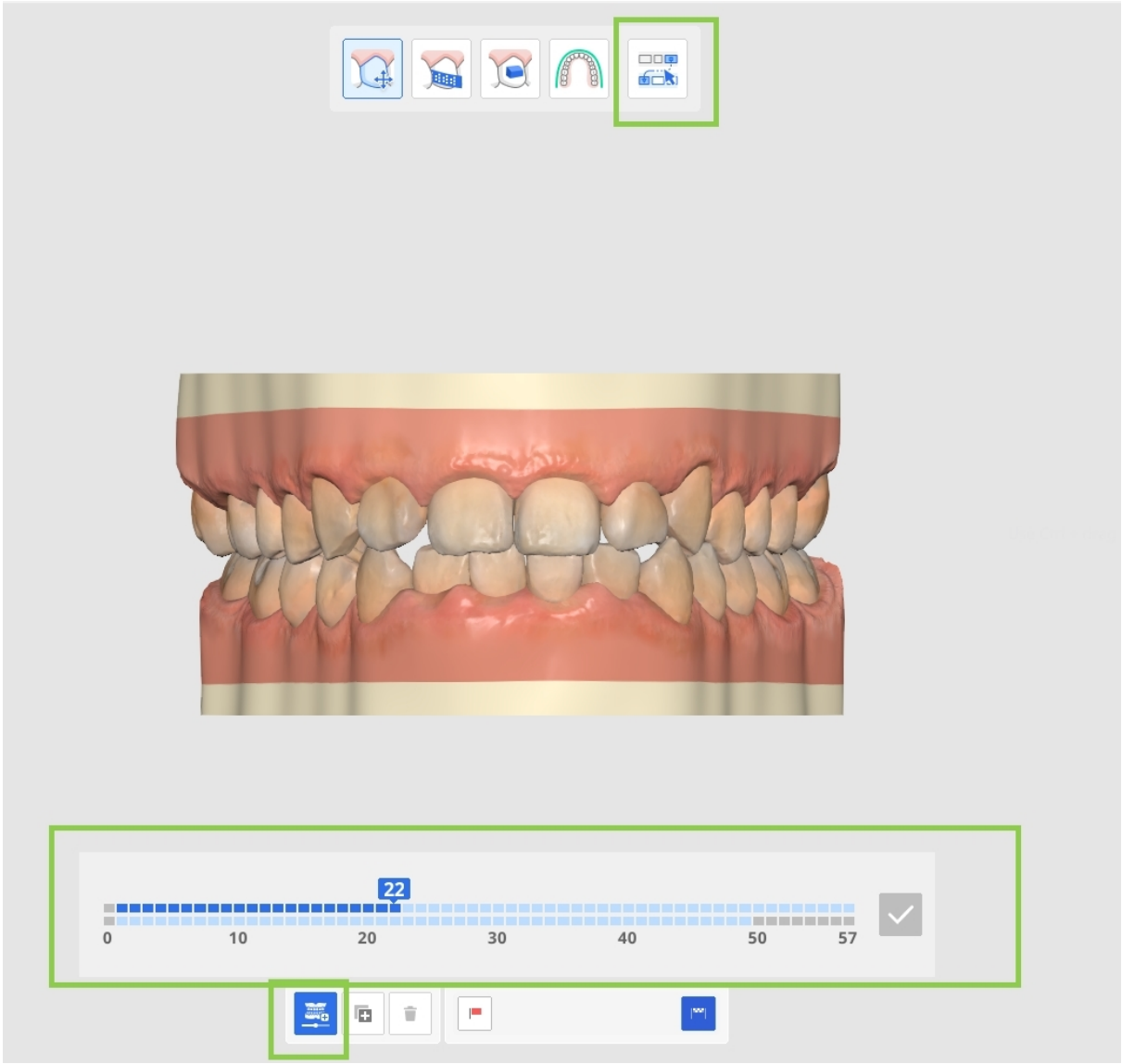
This feature allows users to enhance the generated treatment by manually adjusting tooth movements, arch form, IPR values, and auxiliary elements. When entering this mode, the tooth movement adjustment tool is selected by default.

	Move Teeth	Manually adjust each tooth's final position in the simulation.
	Edit IPR & Spacing	Adjust and manage interproximal reduction (IPR) and tooth spacing.
	Edit Auxiliaries	Change the type, size, and position of the auxiliary elements.
	Edit Arch Form	Adjust the shape of the arch form.
	Edit Layer	Add intermediate layers between automatically generated stages, and manually adjust both tooth positions and IPR settings for greater control over treatment progression.

Edit Layer

This feature allows you to add and edit intermediate layers between automatically generated stages, giving you greater control over tooth movement and treatment progression. You can adjust tooth positions and IPR settings independently for each layer.

Click "Add Layer" at the bottom of the screen and select the stage where the new layer should be inserted. Both maxillary and mandibular stages must be selected.

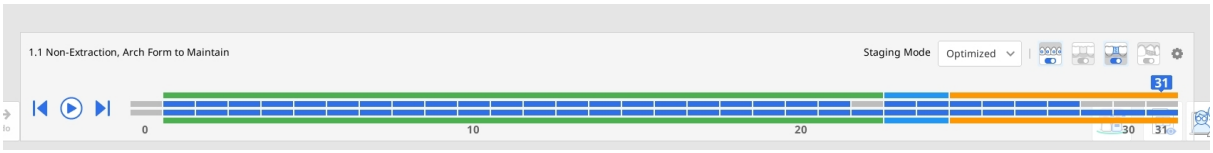


Then, adjust tooth positions and IPR values as needed for the selected layer.

To duplicate an existing layer, select it and click "Copy." A maximum of 10 layers, including the initial and final layers, can be created.
When all adjustments are complete, click "Done" to return to the main screen.



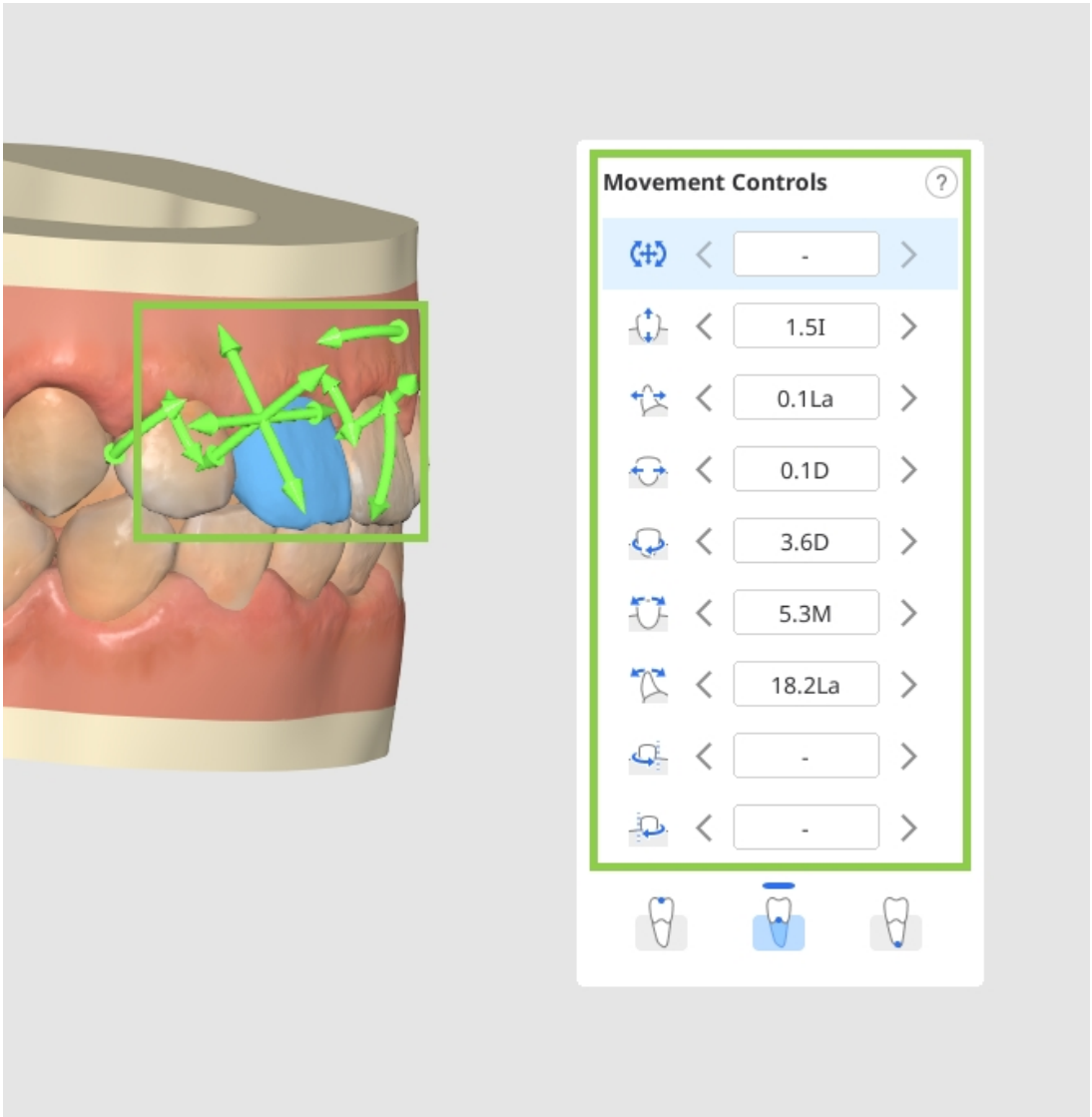
The created layers are displayed in color in the navigation box, making them easy to identify within the treatment sequence. If needed, use "Staging Settings" to synchronize the start points of the layers.



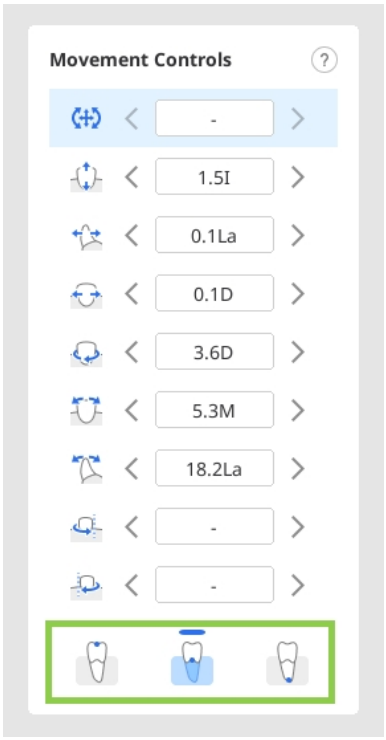
Move Teeth

Select a movement type from the "Movement Controls" panel or choose a target tooth. Then, adjust the tooth position using the green control arrows or the values in the "Movement Controls" panel.

> **Tip**
>
> Use Ctrl/Command with Free Move option to rotate data.

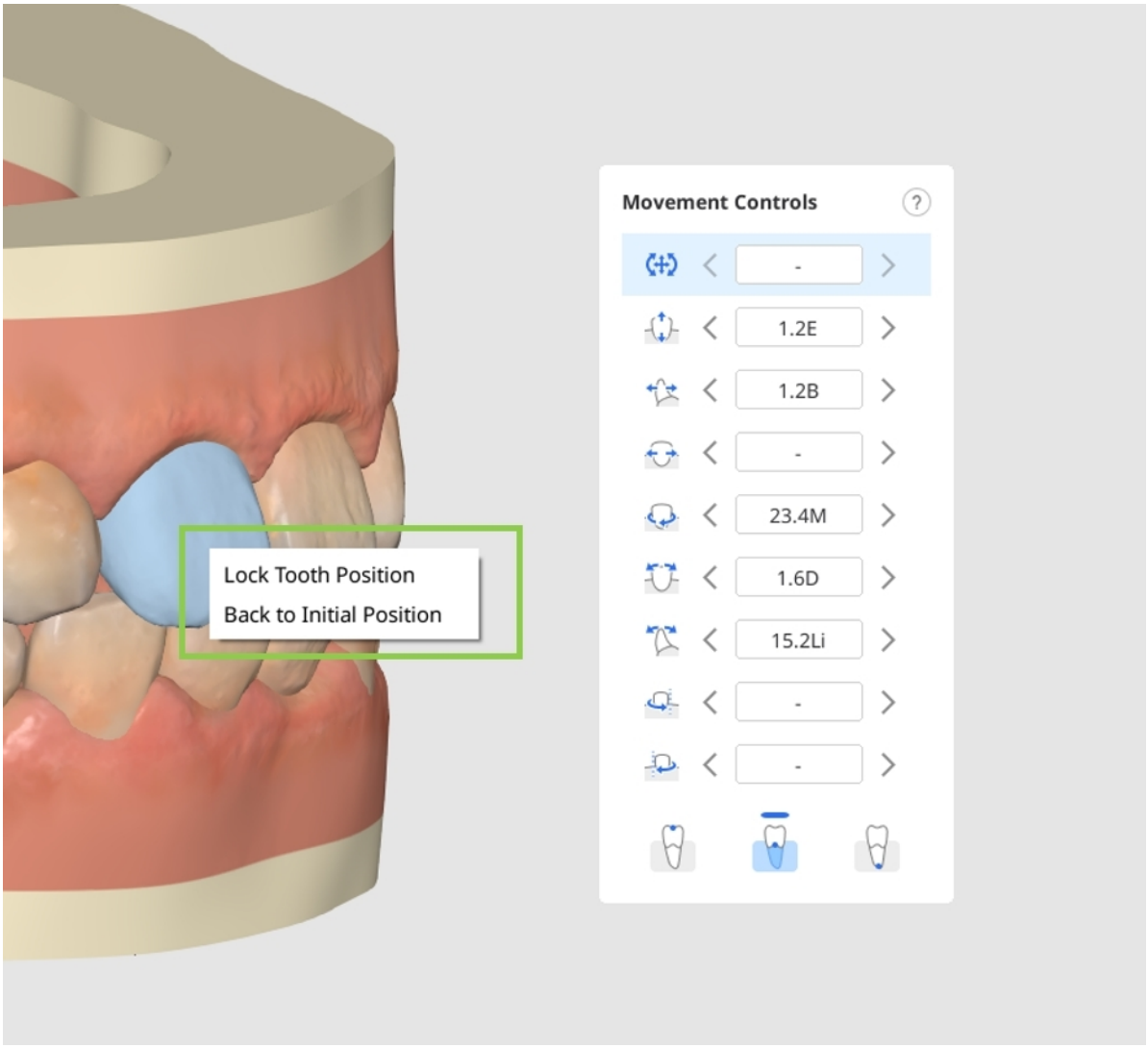


Tooth movement can be performed by the tooth crown, center of resistance, or root apex. Select desired in the Movement Controls widget.


Movement Controls
-
1.5I
0.1La
0.1D
3.6D
5.3M
18.2La
-
-

Any tooth in the simulation can be returned to the pre-treatment positioning with the “Back to Initial Position“ option. Right-click a tooth to use it.

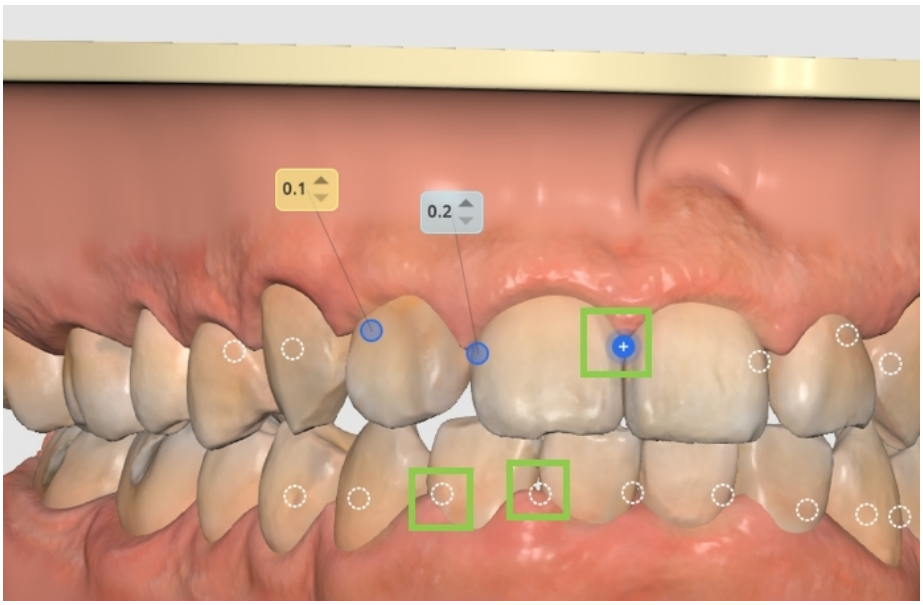
You can also lock tooth position with a right-click.



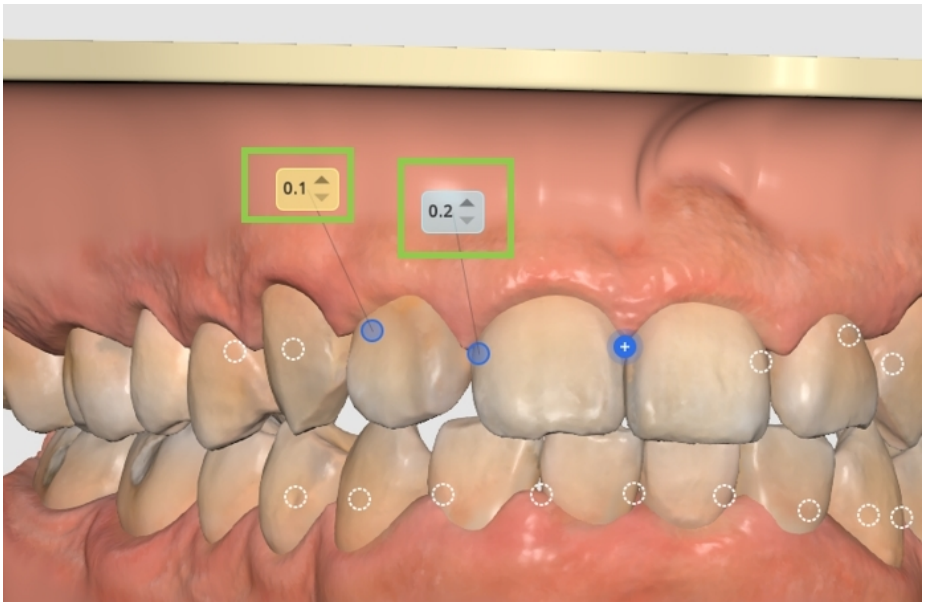
Edit IPR & Spacing

Click the circle located between the teeth where you want to add spacing or IPR.

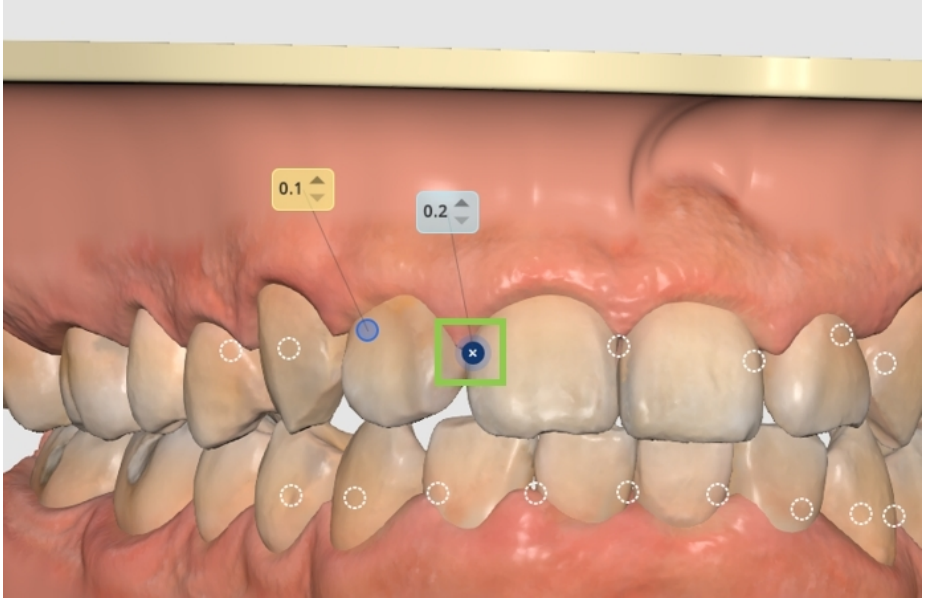
> ⚠ **Caution**
>
> Spacing cannot be added to simulations that contain layers.



Then, adjust the value as needed to set the desired amount of spacing or IPR—blue values represent IPR, while yellow values indicate spacing.



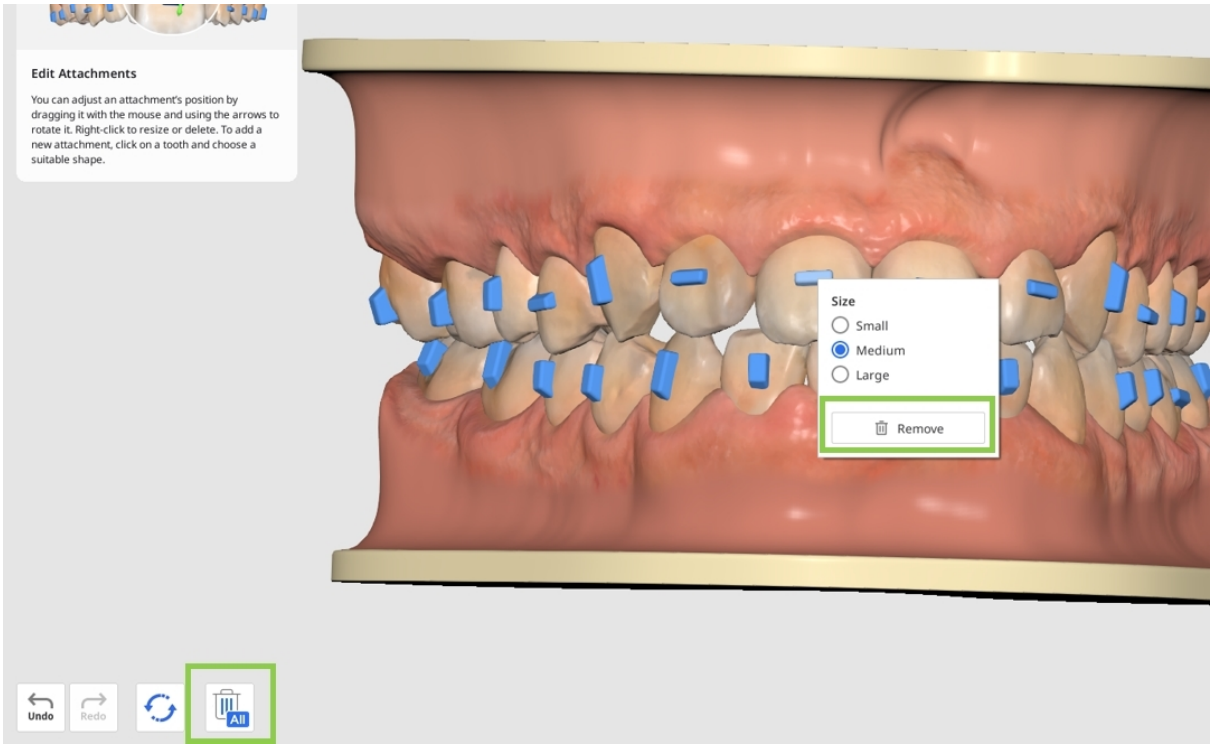
To remove the spacing/IPR, simply click the circle again. You can lock a tooth in place by right-clicking it.



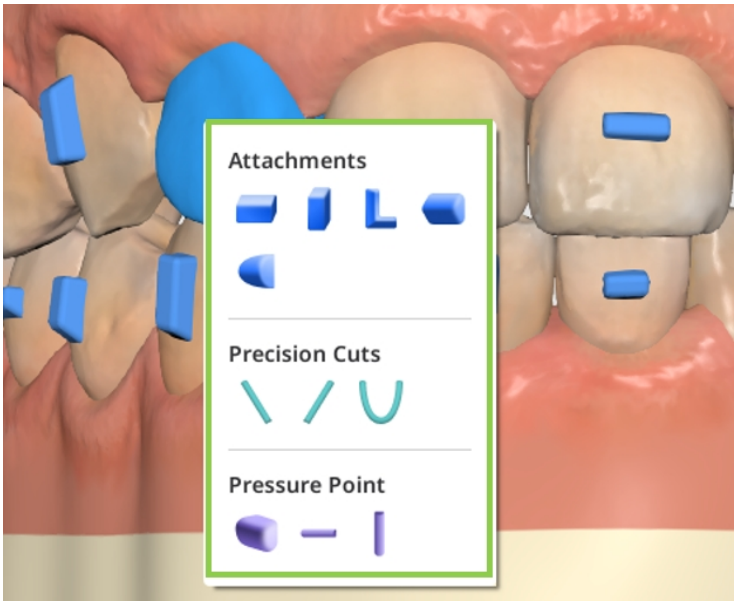
> ⚠ **Caution**
>
> If unresolved tooth overlap exceeds the allowable Interproximal Reduction (IPR) range, a notice is displayed identifying the affected teeth and treatment layer. The treatment plan must be adjusted before proceeding.

Edit Auxiliaries

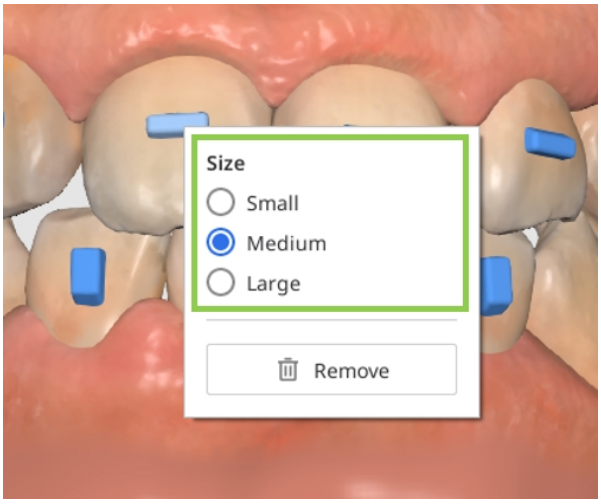
You can delete default attachments individually by right-clicking on them, or remove all at once using the “Remove Auxiliaries” option in the bottom-left corner.



Click on a tooth to change the default attachment or add a new auxiliary element. There are three types of elements available: basic-shape attachments (e.g. horizontal, vertical, elliptical, etc.), guidelines for precision cuts needed when using elastics, and pressure point elements.



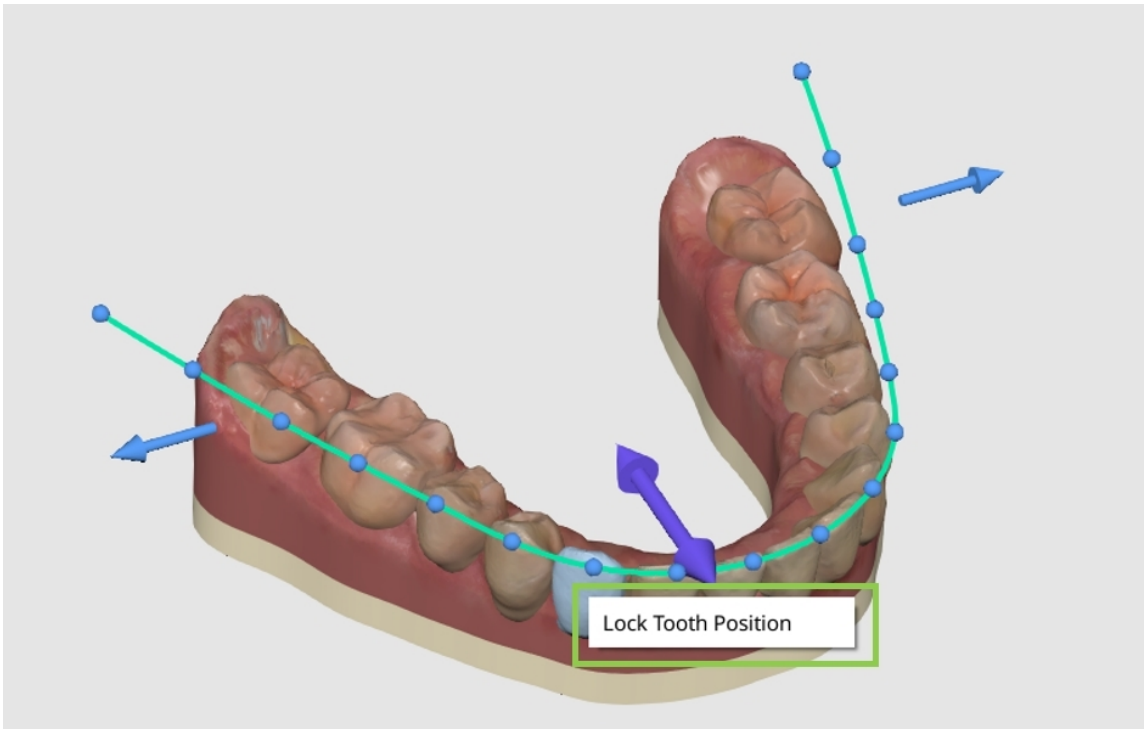
Right-click any element to adjust its size, and drag it with your mouse to reposition it freely.



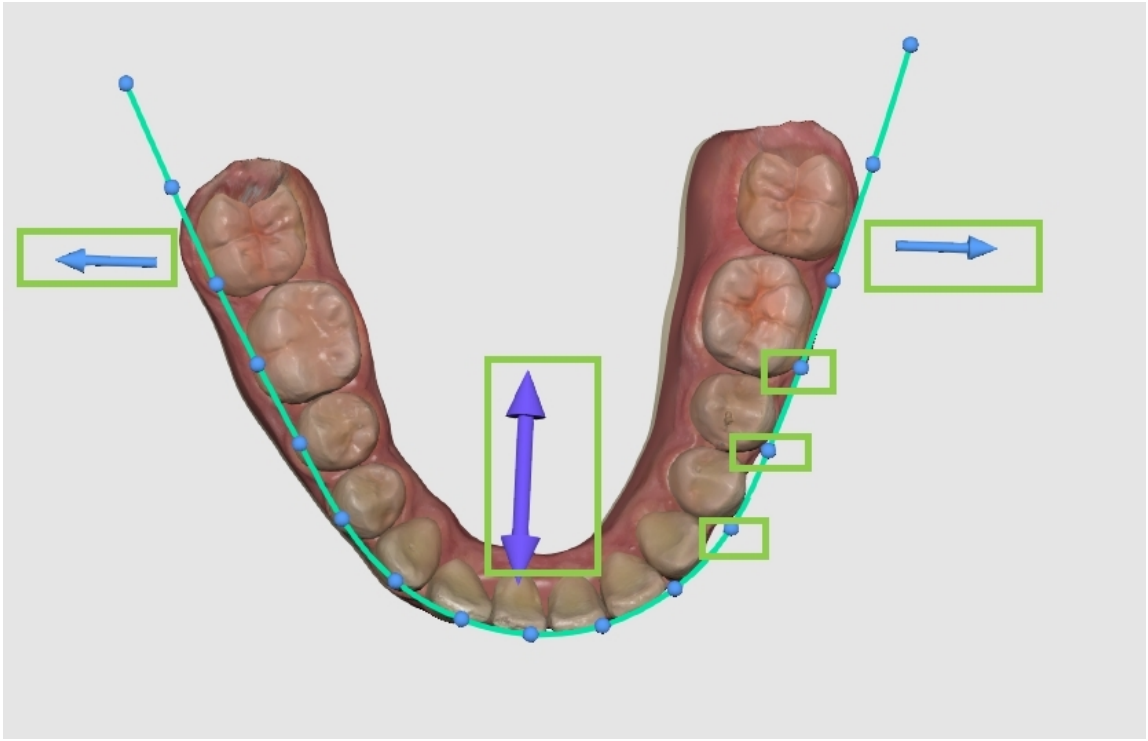
Edit Arch Form

> **Tip**
>
> Utilize the viewing options in the Side Toolbar for more comfort when using this feature.

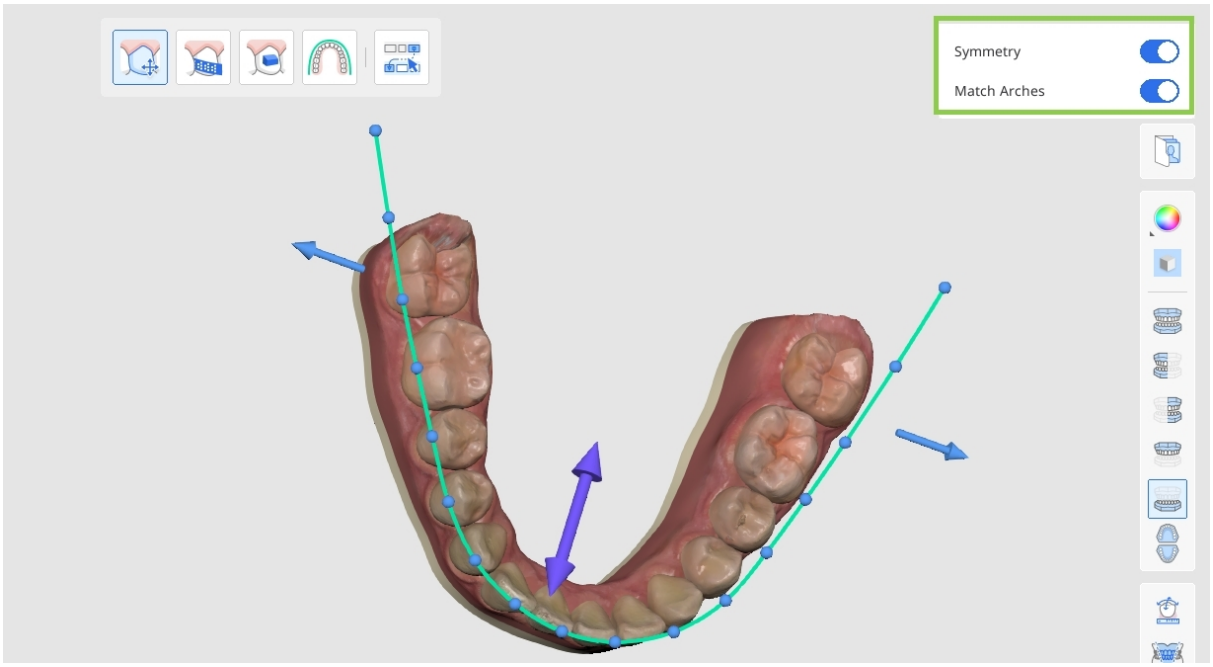
Note that adjusting the arch form will affect tooth movement. To prevent unwanted changes, you can lock a tooth's position by right-clicking on it before you begin.



Then, use the control arrows to modify the overall arch form, or use the control points to make smaller, more precise adjustments based on an individual tooth.

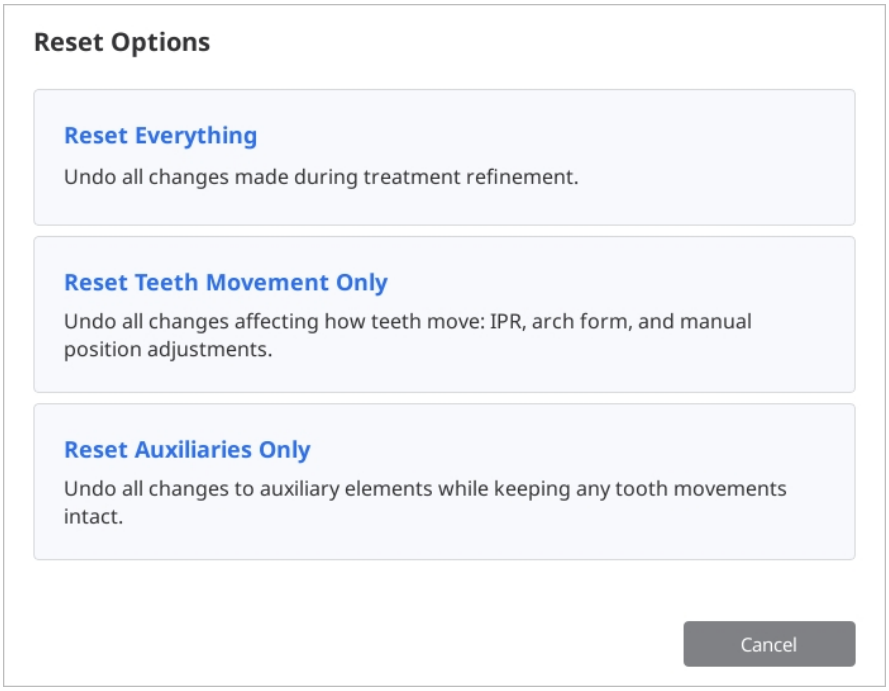


Use the upper-right toggles to mirror changes within an arch using "Symmetry" or between arches using "Match Arches."



Resetting Changes

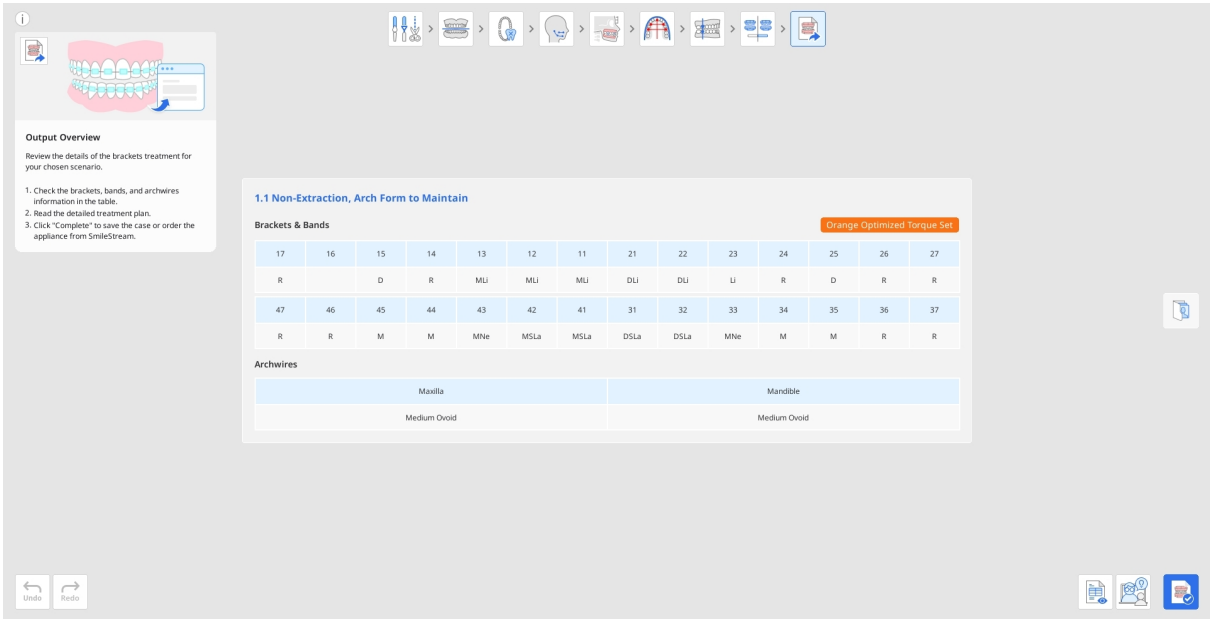
You can undo a recent change using the “Undo” button in the bottom-left corner, or use the “Reset” options to reverse multiple changes—either all treatment refinement changes, only auxiliary element changes, or all modifications related to tooth movement (IPR, spacing, manual teeth movement, and arch form adjustments).



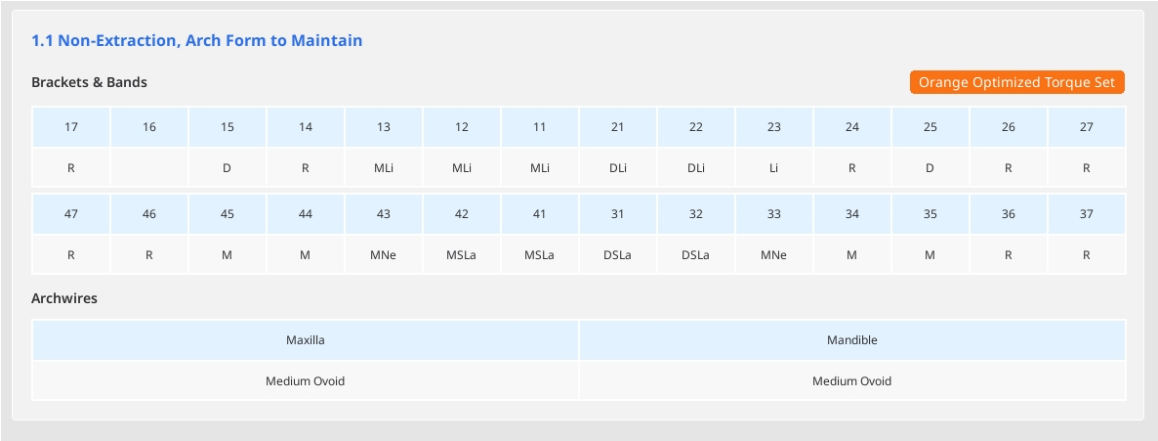
When finished, click “Done“ in the bottom right corner to save treatment refinements and return to Output Overview.

Brackets

If the “Brackets“ option was chosen in the previous step, the user is presented with a detailed table of the appliances that will be required for treatment.



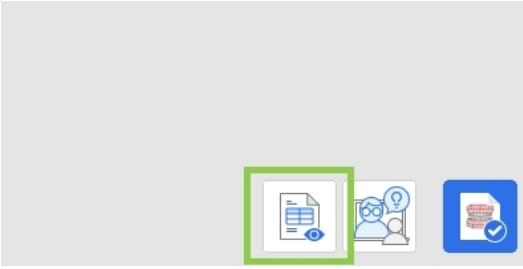
1. Check the generated brackets information, including archwires, bands, and torque prescription, as it will be further sent to SmileStream to complete the order process.



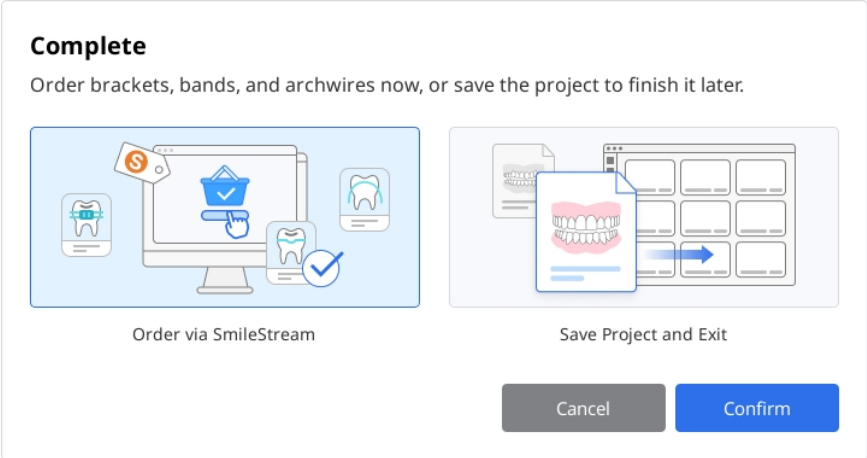
2. Open and read a step-by-step detailed treatment plan provided for your chosen scenario.

Note

This feature is available only in the online environment.

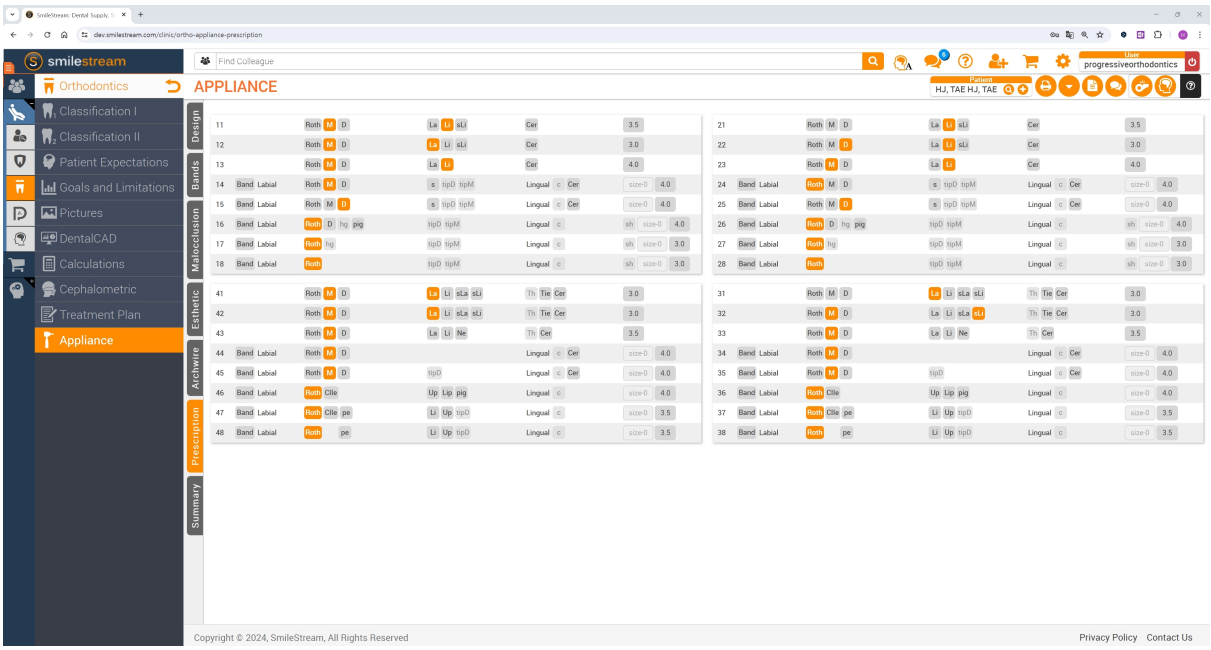


3. Once you're finished, click "Complete" in the bottom right corner to finalize and save your project. You have two choices: save the project and move to SmileStream to complete the order process, or close the program and save the case progress as a project file in Medit Link for ordering later.



4. If you choose to order the appliance immediately, all information required for the bracket order will be shared with SmileStream, and you will be redirected to the below page. Check the automatically filled information once again. All information can be changed right in the SmileStream before placing an order but it will not be updated in app.

> **Note**
>
> This feature is available only in the online environment.

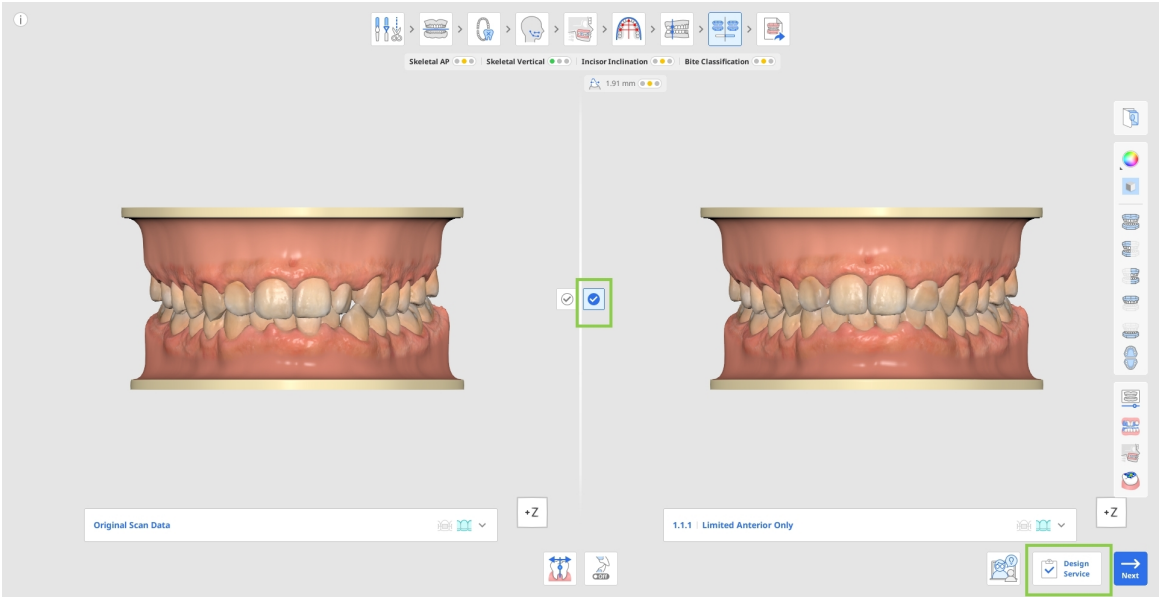


Appendix

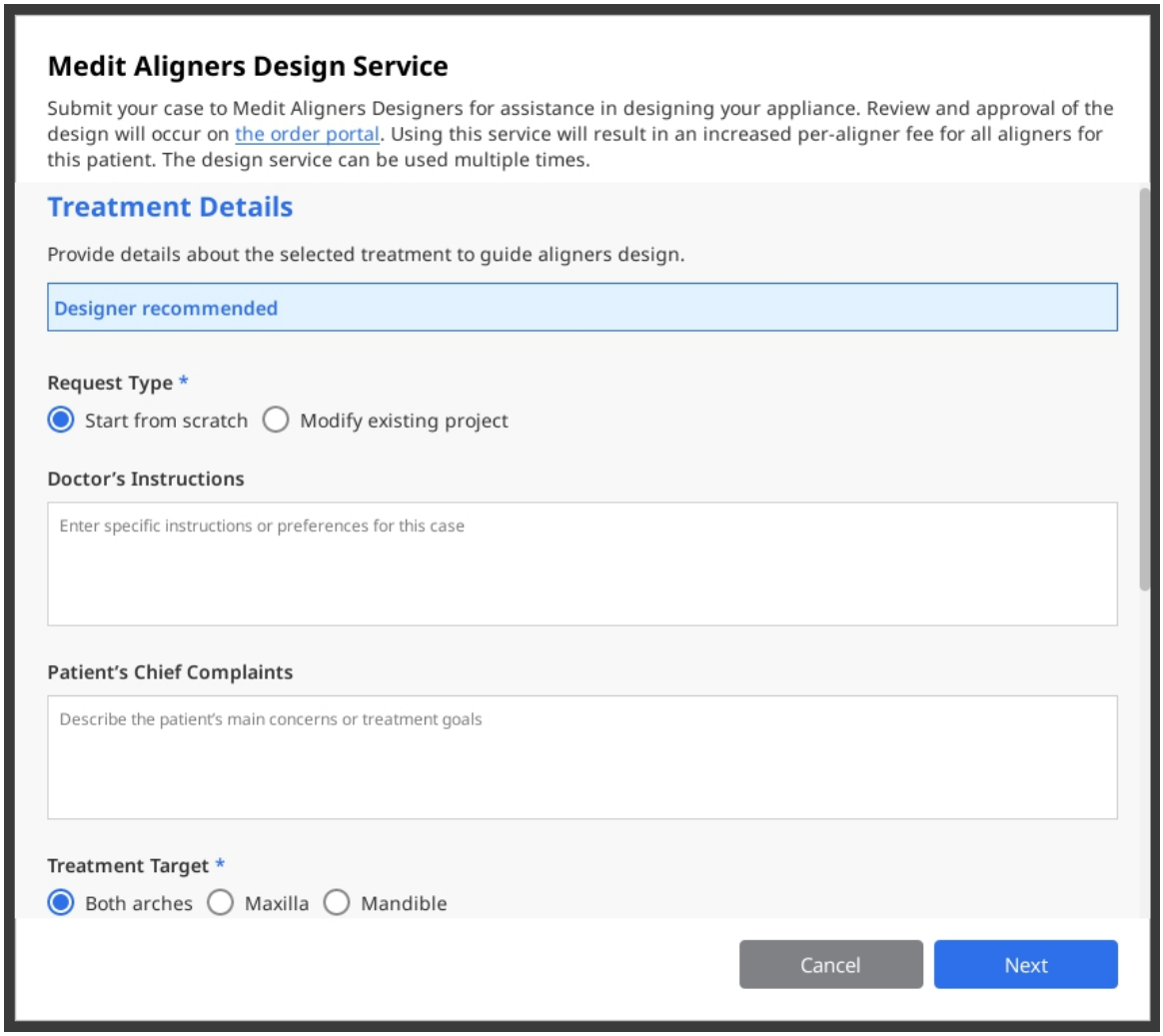
Medit Aligners Design Service

The Medit Aligner Design Service allows users to request both aligner design and aligner fabrication at once. You can access this service by clicking the "Design Service" button in the bottom-right corner of the "Simulation Preview" step.

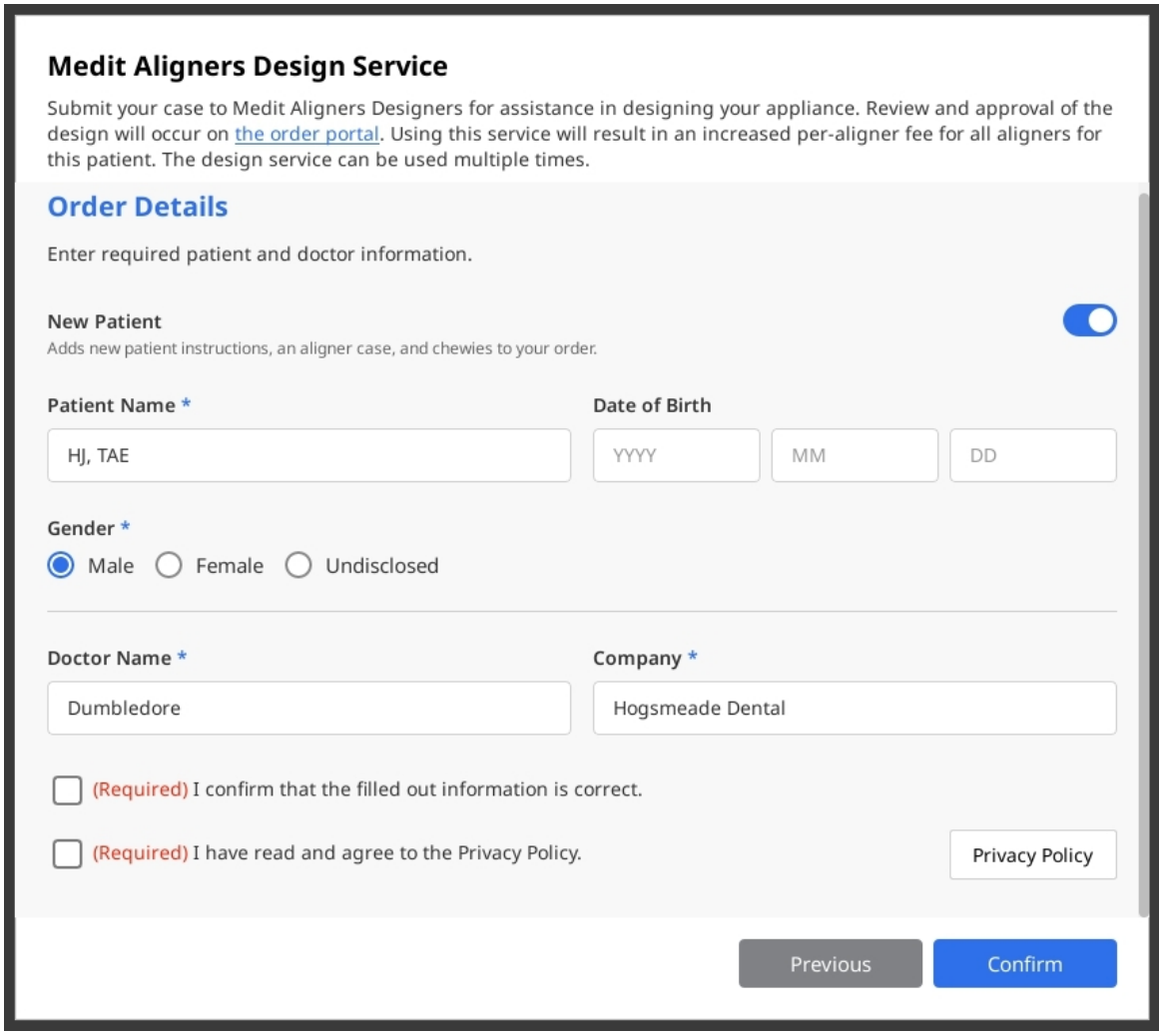
1. Select the preferred treatment simulation and click "Design Service".



2. Provide the required treatment and order information. Required fields are marked with an asterisk (*). To help the designer achieve the desired outcome and minimize revision requests, it is highly recommended to provide detailed doctor's instructions and the patient's chief complaint.

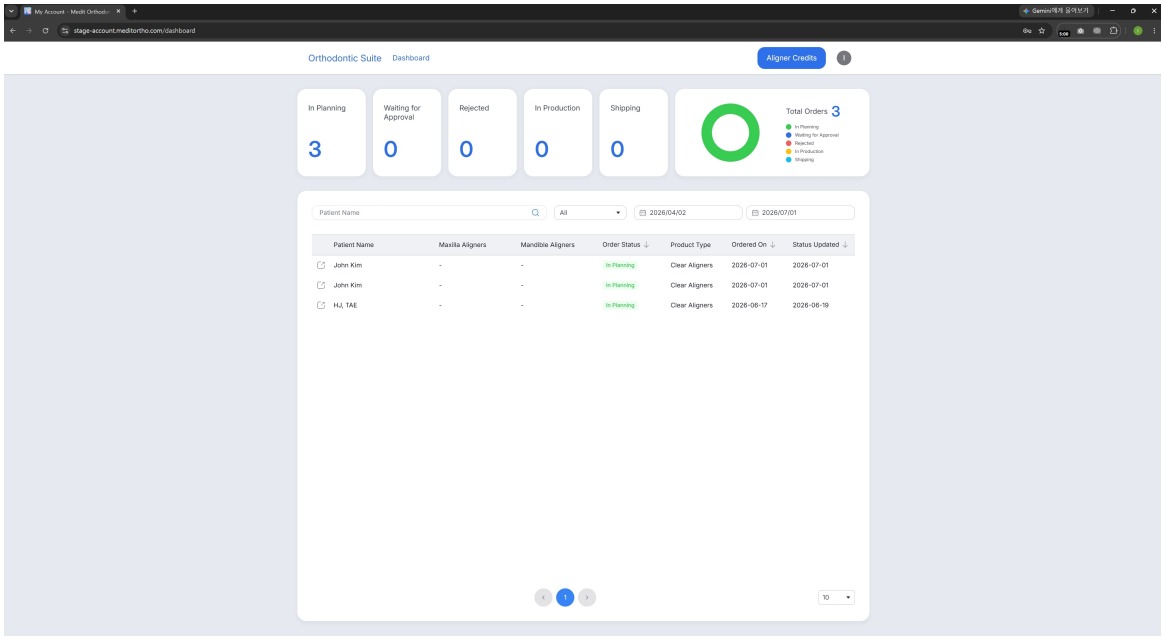


3. Check all the required boxes and then click "Confirm" to submit the order.



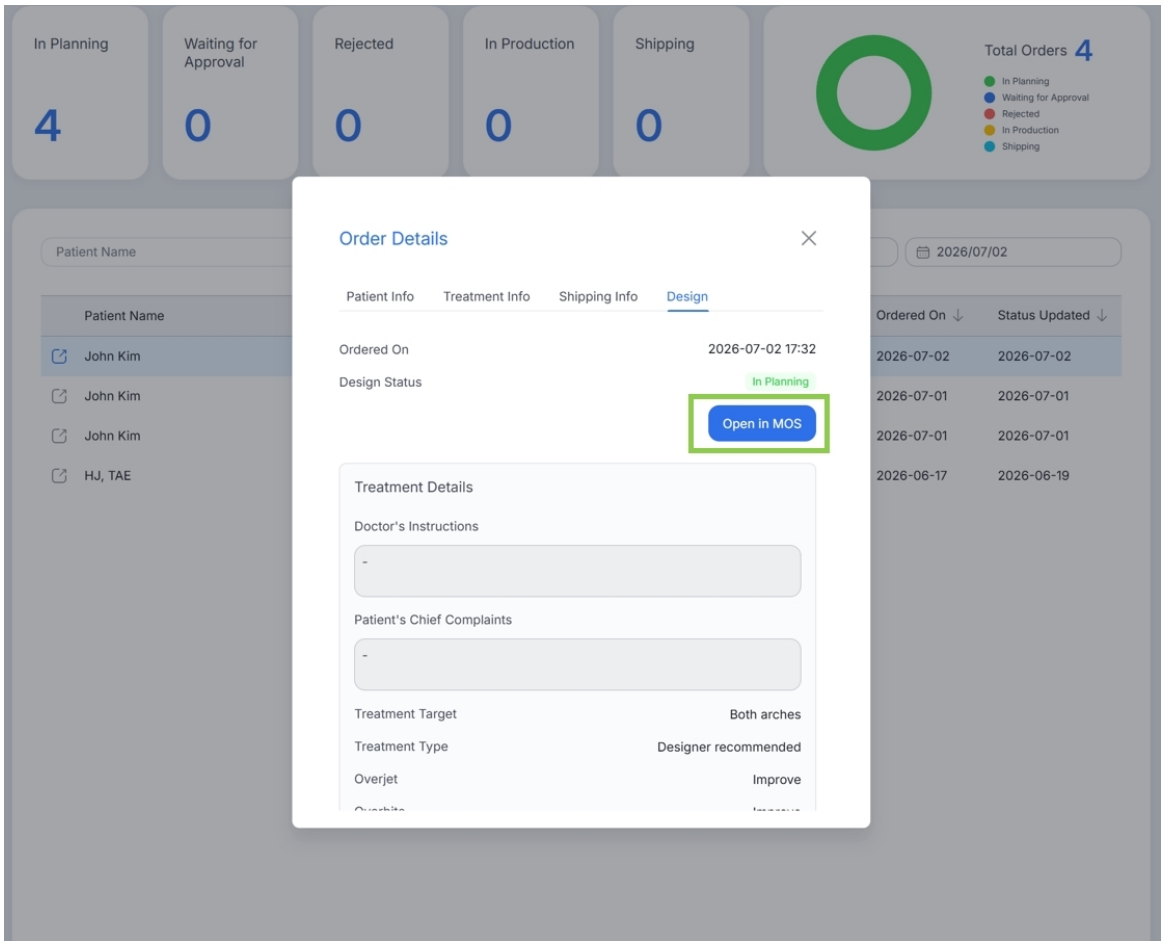
4. The planning, designing, and fabrication request is sent to the fabrication facility for processing.

   Order details and status updates can be viewed and tracked through the Order Portal.



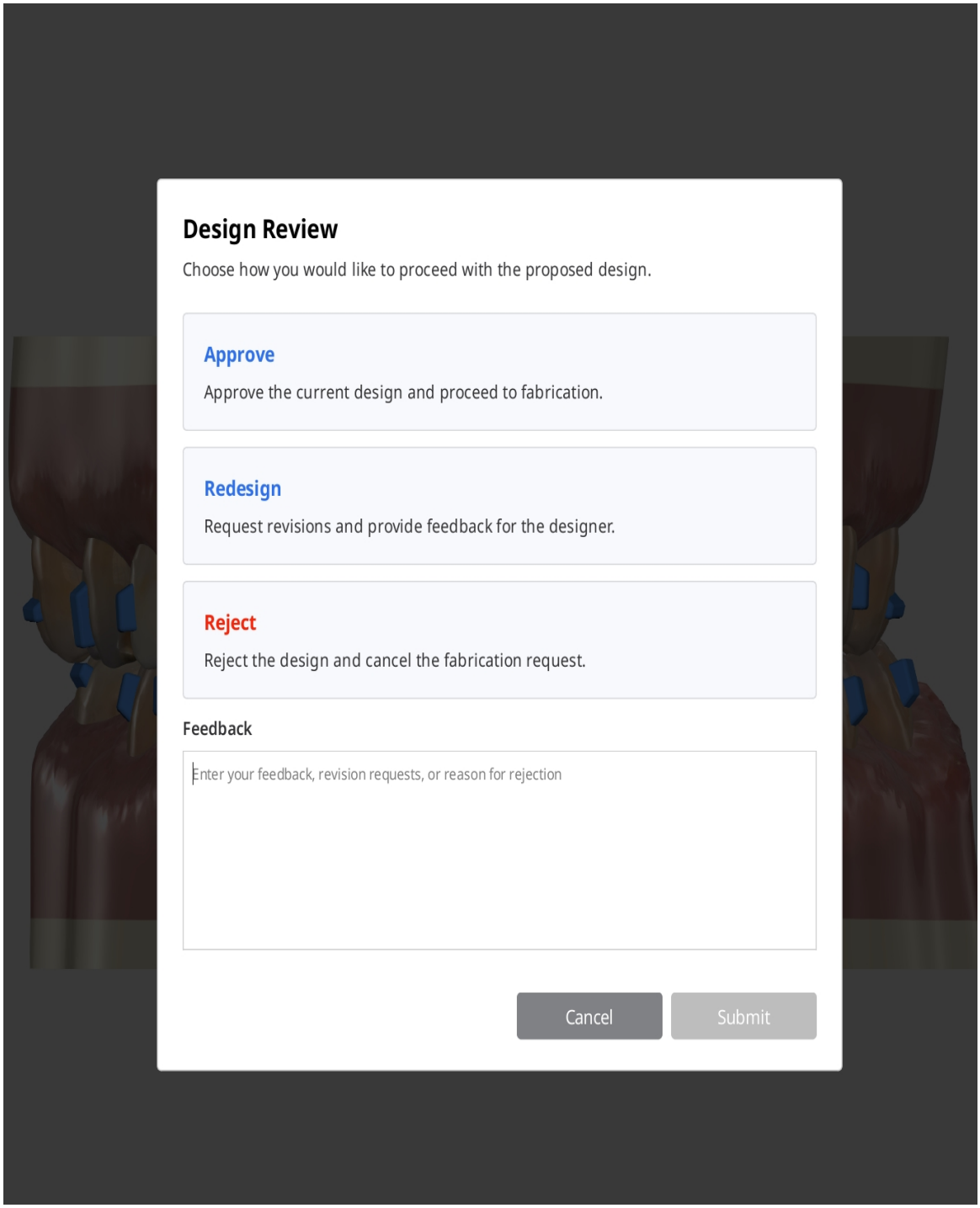
5. When the treatment planning is ready, you will receive a notification via email.

6. Open the case from the Order Portal and launch Medit Orthodontic Suite to review the planning results. Inspect the treatment outcome, staging sequence, and other planning and design details.



7. After review, choose one of the following actions: approve, redesign, reject. When requesting a redesign or rejecting a design, always provide feedback to help the designer address the required changes.

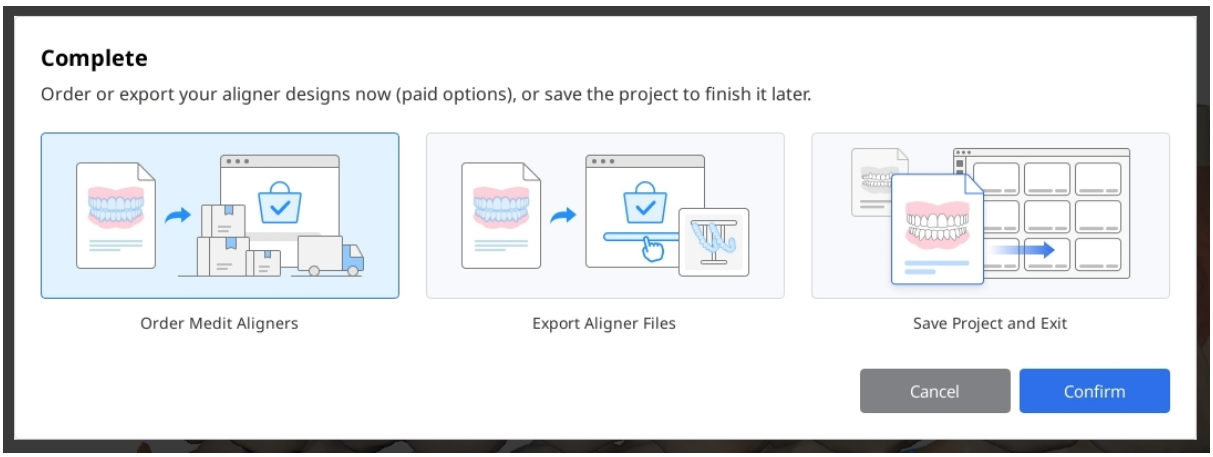
Note: Rejecting the design cancels both the design request and the associated fabrication order.



8. Once the design has been approved, aligner fabrication begins automatically. Production and delivery progress can be tracked through the Order Portal.

Ordering & Exporting Aligners

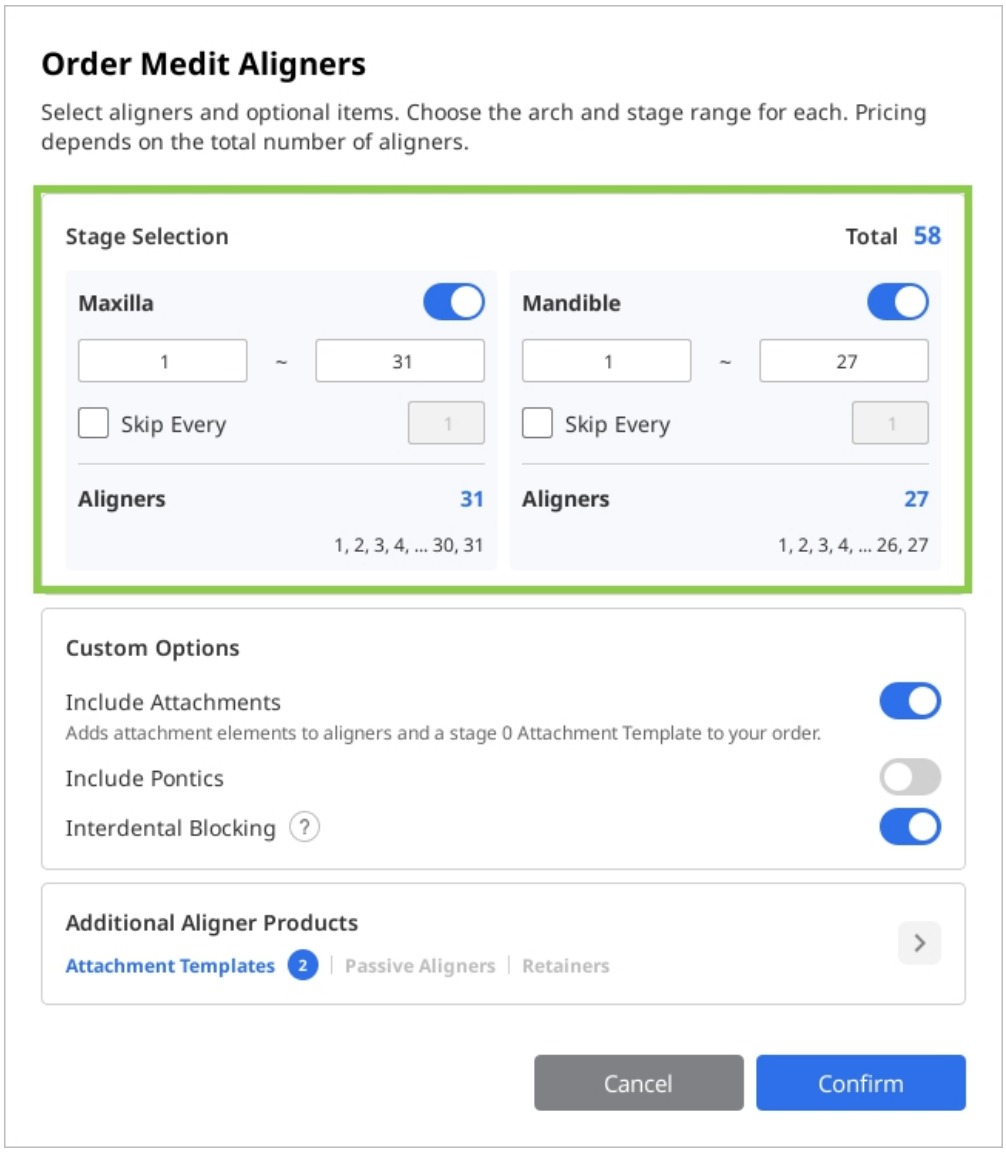
When users click "Complete" at the end of the aligner workflow, they can choose one of three options: order Medit Aligners, export the aligner files for in-house production, or save the current project without taking any further action. The first two options are paid features. Pricing information is available in the Medit Help Center.



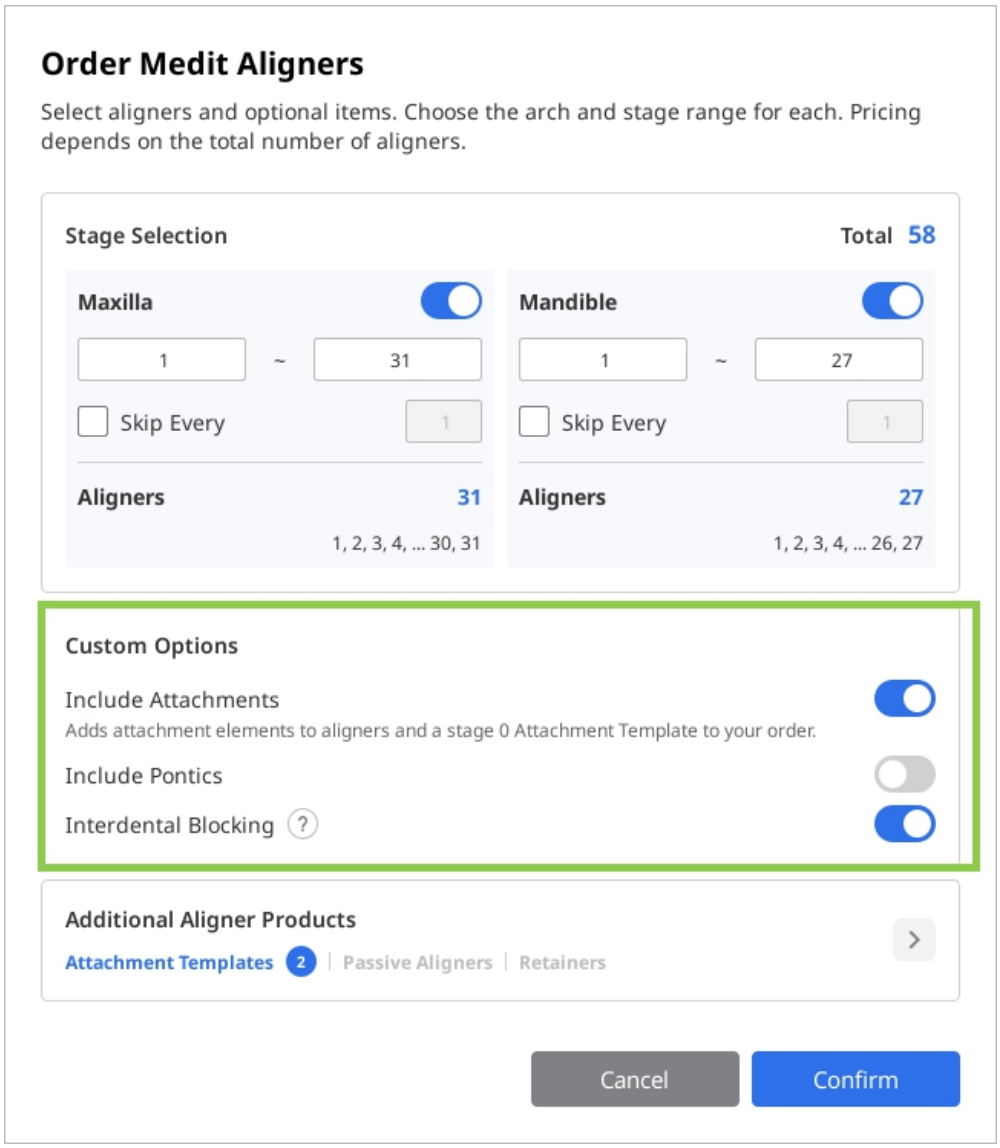
Ordering Medit Aligners

Choose this option to order fabrication of aligners based on your approved treatment plan and staging.

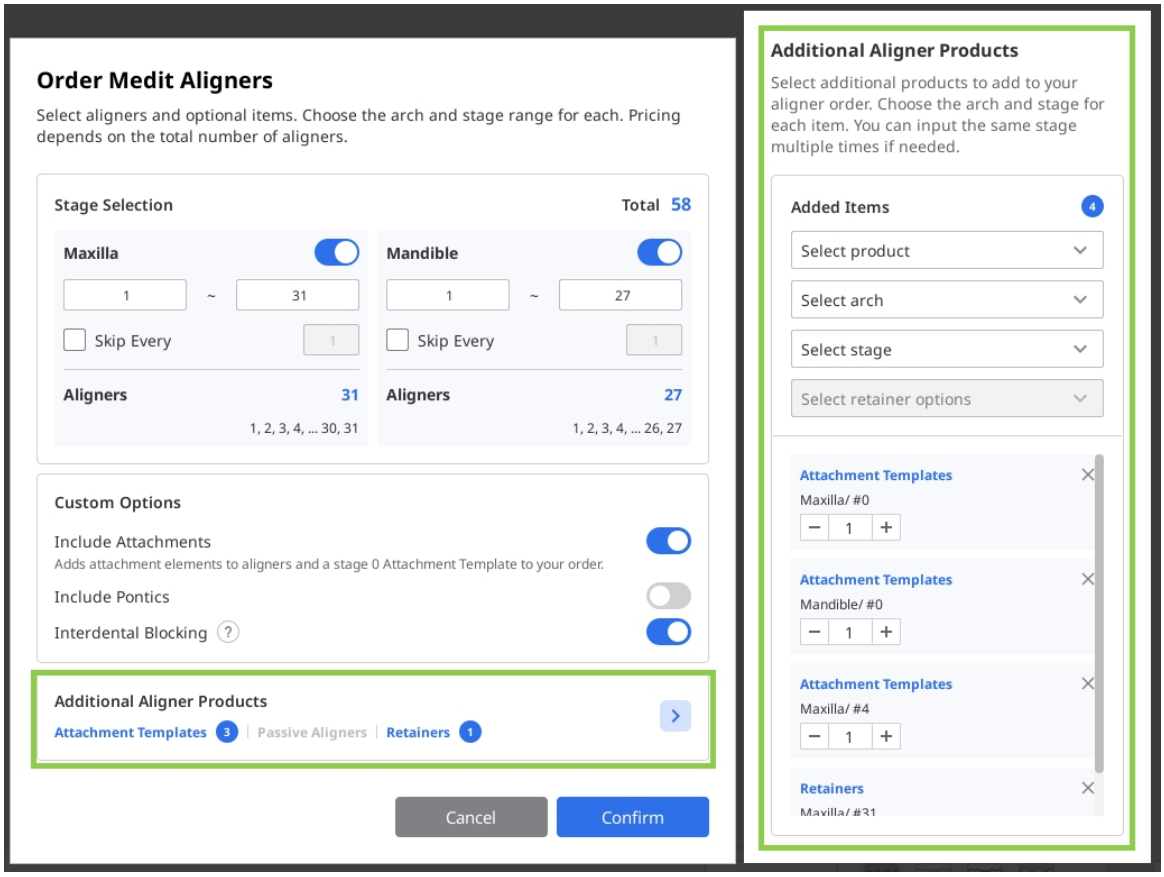
1. Start by selecting stages for which you want the aligners. You can enable or disable each arch using the toggle. Enter the first and last stage numbers to include in the order. If needed, enable “Skip Every” and enter the interval to fabricate aligners at regular intervals. Review the total number of aligners shown below. Note that pricing is determined by this number.



2. Then, configure custom options. You can choose to include or exclude pontics and attachments in the fabricated aligners.

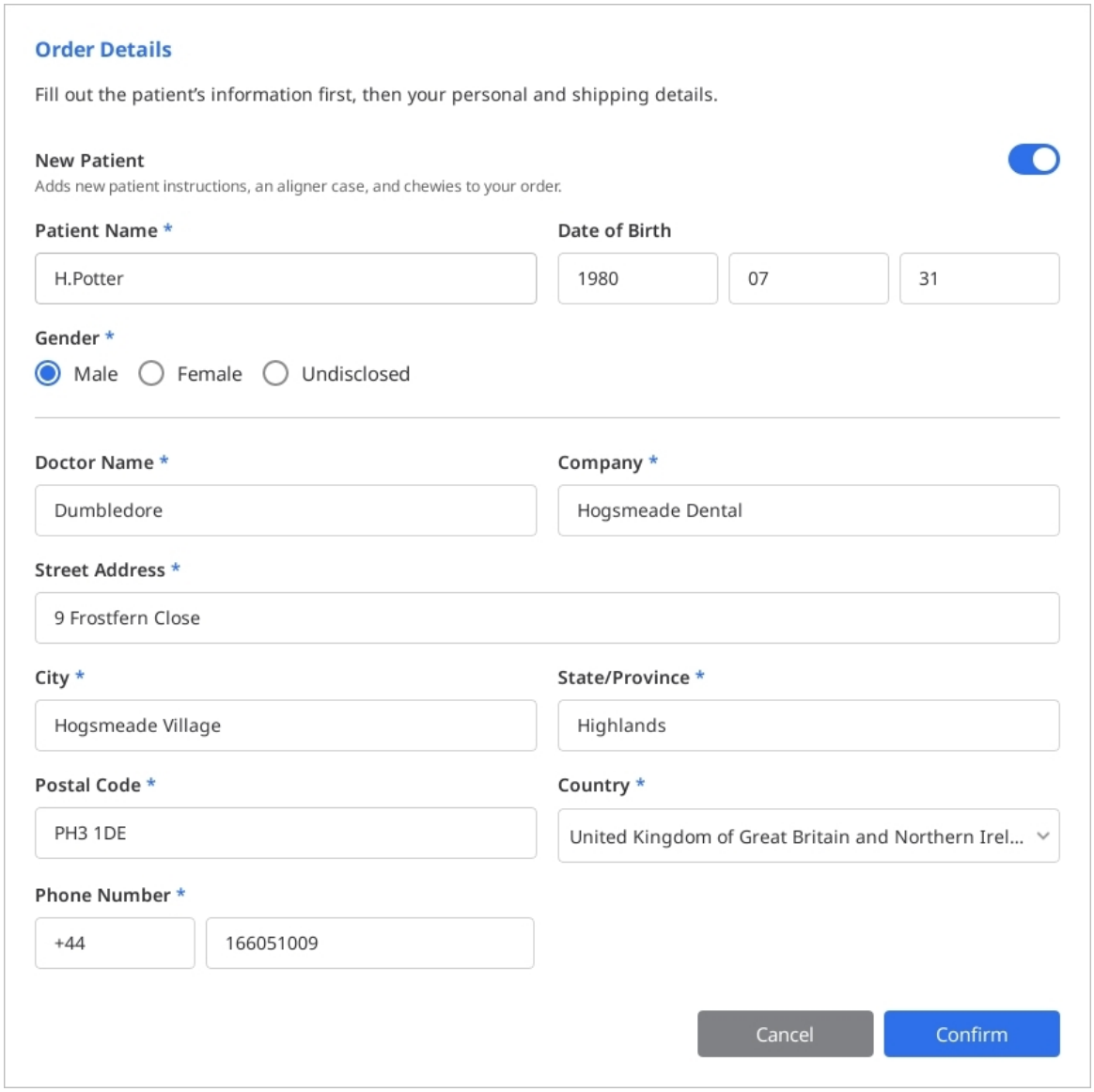


3. Open the Additional Aligner Products panel and select the what product, arch, and for what stages you want to add. All added items will appear in the Added Items list, where they can be removed if needed.

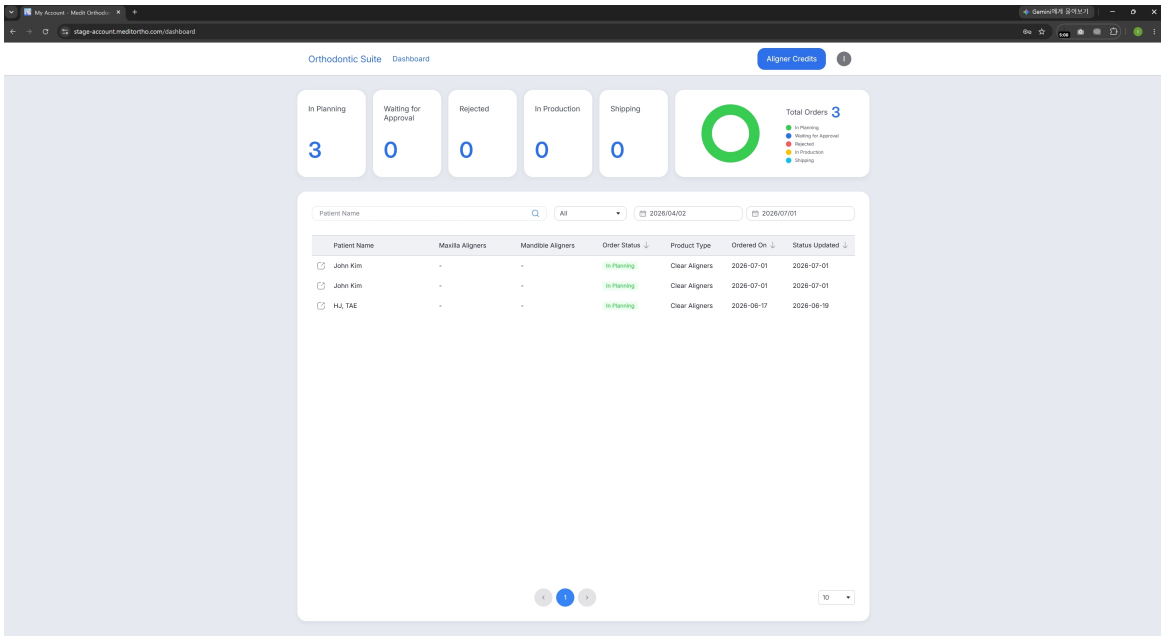


4. Review your selections, then click “Confirm.”

5. In the next dialog window, provide the patient and doctor information required to place the order. If this order is for a new patient, enable the corresponding toggle to include the aligner case, chewies, and instructions with the order.



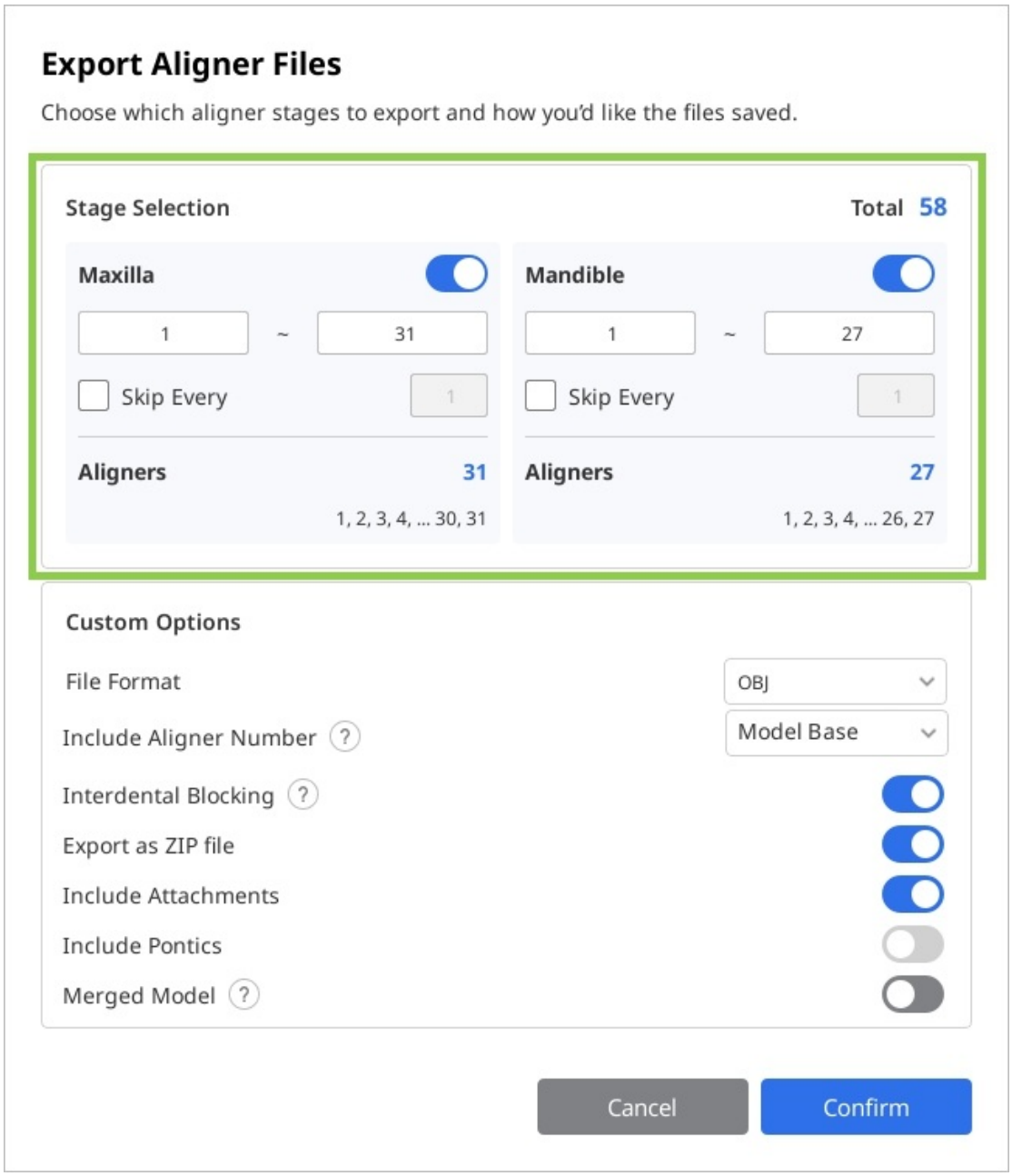
6. Once your order has been placed, you can track its status in the Order Portal. Access it from app's Menu > Order Portal or by visiting the Medit Ortho website at **https://www.meditortho.com.**



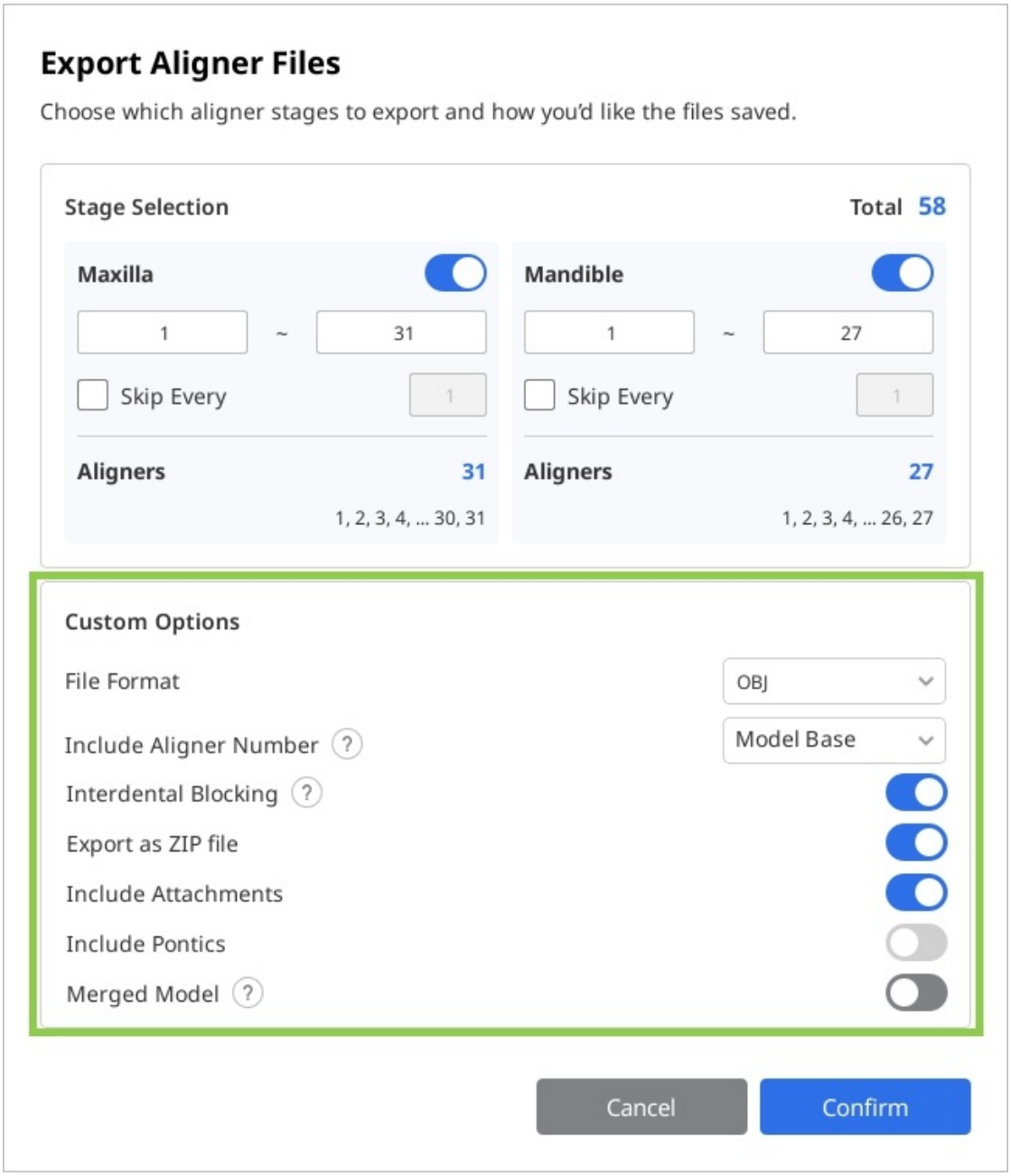
Exporting for in-house production

Choose this option to export the aligner files for in-house aligner production.

1. Start by selecting stages for which you want the aligners. You can enable or disable each arch using the toggle. Enter the first and last stage numbers to include in the export. If needed, enable “Skip Every” and enter the interval to export files for aligners at regular intervals. Review the total number of aligners shown below. Note that pricing is determined by this number.



2. Then, adjust the available export options for the final aligner files according to your preferences.



3. Review your selections, then click “Confirm.”
4. Once done, the exported files will be available to you in the Medit Link case.

Progressive Orthodontics USA
135 Columbia #101, Aliso Viejo
California 92656, United Sates

Developed by **Medit Corp.**

Contact for Product Support
Email: support@medit.com
Tel: +82-2-2193-9600

Powered by Document360