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Contact Us

**United States &
Canada**

1 888 672 6387

or

1 972 728 5902

**Europe, Australia,
New Zealand, Japan,
and South Korea**

+800 6655 1234

Note: We are currently rolling out this number on a country-by-country basis. If not yet available in your country, you can still call us by using our toll number below.

All other countries

+1 972 728 5902

Email

customercare@elemetrix.com

Frequently Used Forms

Click below to print the forms you need to offer feedback, to make requests and to provide the clinical data that enables us to make continual improvements to elemetrix.

[Location Change Request Form](#) - Use to add, remove or change addresses for a practice site.

[Therapeutic STL/PLY Activation Request](#) - Use to activate the elemetrix feature that allows you to send STL/PLY scans for elemetrix treatment. **Note:** Please check with your Align representative to ensure that your iOC/iTero system has the orthodontic version of their software installed.

[Treatment Discrepancy Request Form](#) - Use to report any clinical inconsistencies between a patient's setup and treatment results.

[Case Discount and Transfer Form](#) - Use to request a case discount or to transfer a patient to another elemetrix practice. **Applies only to customers in the United States, Canada, Australia and New Zealand.**

[Case Discount, Cancellation and Transfer Policies](#) - Up to date information about elemetrix's Case Discount Refund and Transfer policies. **Applies only to customers in the United States, Canada, Australia and New Zealand.**

[EU Case Discount and Transfer Form](#) - Use to request a case discount or to transfer a patient to another elemetrix practice. **Applies only to customers in the European Union.**

[EU Case Discount, Cancellation and Transfer Policies](#) - Up to date information about elemetrix's Case Discount Refund and Transfer policies. **Applies only to customers in the European Union.**



The files above are in PDF format and require Adobe Acrobat reader. If you do not have Adobe Acrobat reader, [download it here](#).

Useful Documents

Click the links below to open or save a PDF of a user guide, a scanning protocol, a job aid, or a Material Safety Data Sheet (MSDS).

In this Topic

- [Heading 2](#)

User Guides/Reference Manuals

[elemetrix Help](#) - PDF in book format of all topics in this elemetrix online help.

[orascanner 2 Hardware Manual](#) - reference guide of all safety, maintenance and operating instructions for the orascanner® 2 intraoral scanner and other associated equipment and requirements for use in a practice.

[IDB Trays User Guide](#) - clinical protocol and safety information.

[My Practice Guide](#) - User guide for monitoring your practice's performance using real time metrics.

System Requirements/Installation

[Technical Requirements Guide](#) - describes elemetrix system components and technical/physical requirements for installation and integration in a practice. Intended audience: Practice IT staff.

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Guides for Scanning with 3rd Party Scanners

[CEREC® Scanner with Omnicam](#) - includes the protocol and procedures for using the CEREC® scanner for elemetrix treatment.

[elemetrix protocol for iOC™ Scanner/iTero® Intraoral Orthodontic System](#) - includes the protocol and procedures for using the iOC® scanner for elemetrix treatment. Although informative for the doctor, the primary audience is the clinical assistant who performs iOC scans and enters elemetrix orders.

[elemetrix Protocol for 3Shape TRIOS® Intraoral Orthodontic System](#) - includes the protocol and procedures for using the TRIOS® scanner for elemetrix treatment. Although informative for the doctor, the primary audience is the clinical assistant who performs TRIOS® scans and enters elemetrix orders.

[SureSmile protocol for Carestream Intraoral Scanners](#) - detailed steps and procedures for taking an intraoral scan for a SureSmile patient using a CS 3500 or CS 3600 intraoral scanner.

[elemetrix protocol for 3M True Definition Intraoral Scanner](#) - detailed steps and procedures for taking a 3M True Definition intraoral scan for a elemetrix patient.

[Opaquer Requirements Job Aid - All Intraoral Scanners](#) - List of requirements and settings for all OraMetrix-approved intraoral scanners when applying opaquer to brackets.

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Job Aids

[elemetrix Protocol for Therapeutic Photographs](#) - checklist of best practices for taking the set of photos associated with the therapeutic scan.

[Patient selection checklist](#) - selection criteria for choosing ideal elemetrix patients for initial elemetrix implementation.

[elemetrix Products](#) - List of each elemetrix product, when it is required, its purpose, what scan type is needed , and which records are required.

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Material Safety Data Sheets

[SureWhite SDS: United States](#) - Safety Data Sheet (SDS) for SureWhite in English.

[SureWhite MSDS: European Union](#) - Material Safety Data Sheet (MSDS) for SureWhite in English.

[SureWhite MSDS: Germany](#) - Material Safety Data Sheet (MSDS) for SureWhite in German.



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Using Self Help

Here are step-by-step instructions for using our Self Help tutorials!

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/96649a60-7057-11...>]

Software Release Notes

Here is a comprehensive list of enhancements associated with elemetrix. In addition to the primary features listed, each release includes numerous refinements and fixes to existing features. Click the links for a PDF of the associated release notes for detailed information.

Is there a feature you would like to suggest? We welcome your input: customer.care@orametrix.com.

Primary Features by Release

Recent Releases (click link for PDF of release notes)	Enhancements
July 25, 2018 - 7.4 Release Notes Commercial Update 7	<ul style="list-style-type: none"> elemetrix practices can now cancel rejected scan products
June 12, 2018 - 7.4 Release Notes Commercial Update 6.2	<ul style="list-style-type: none"> elemetrix dental exam customer hold issue resolved
June 1, 2018 - 7.4 Release Notes Commercial Update 6	<ul style="list-style-type: none"> Elemetrix registration improved IDB training fee can now be paid with a credit balance Aligner order dialog box title simplified
April 6, 2018 - 7.4 Release Notes Commercial Update 5	<ul style="list-style-type: none"> sureclear™ branding for aligners Doctor/Patient Instructions “Select” and “Complete” pricing options for SureSmile and elemetrix aligners
October 6, 2017 - 7.4 Release Notes Commercial Update 4 October 6, 2017 - 7.4 Update 4 Customer Guide	<ul style="list-style-type: none"> New Patient ID numbering system improves patient privacy and shortens ID Converting pre-surgical simulation to post-surgical simulation is now simpler Warning message added for aligner constraints with missing movements Terminology updated in product notes for treatment simulations IDB tray label now on gingival side Alias™ lingual brackets now supported New rejection note
August 4, 2017 - 7.4 Release Notes Commercial Update 3 August 4, 2017 - elemetrix 7.4 Commercial Update 3 Guide	<ul style="list-style-type: none"> International Customer Support Simplified Undo feature expanded for staged models New bracket void report now available Staged Models Workflow streamlined Revert Modifications button now available for SureSmile Aligner case types and for elemetrix Full-service Aligner Staging packages New IPR Tracking tab for staged models Undo function now tracks movements of different attachments on the same tooth
June 21, 2017 - 7.4 Release Notes	

Commercial Update 2.1	<ul style="list-style-type: none"> Printed stages now shown in Order Staged Models dialog box Buttons on Order tab now stay active when you click in the Edit Notes box
June 2, 2017- 7.4 Release Notes Commercial Update 2 June 2, 2017 Commercial Update 2 Guide	<ul style="list-style-type: none"> Tool Tip for Bracket Sets in Preferences New Bracket Void features and tools for IDB DIY New Prompt Message on Order Tab Missing teeth now denoted on Wire tab Attachments no longer removed after staging updates Inter arch collisions for attachments now highlighted
April 21, 2017- 7.4 Release Notes Commercial Update 1	<ul style="list-style-type: none"> Export option for IDB trays now available worldwide Standardized pricing for advanced diagnostic models Attachments no longer removed when you recalculate stages
March 31, 2017- 7.4 Commercial Release Notes March 28, 2017 elemetrix Commercial Release - Upgrade Guide	<ul style="list-style-type: none"> Doctor and Staff access to Preferences for Aligner Constraints Preferences returned Attachments now only displayed on staged models Bite Scans No Longer Needed for STL Scans Single arch orders now permitted for Staged Models and Aligners Numbering of Staged Models after 7.4 Upgrade Create Simulation button added to diagnostic model workspace Lingual brackets once again available Multi-Group staging: Start / End options improved Automatic conflict solver runs after changing start or end in staged timeline
October 12, 2016 - 7.3 Commercial Update 4	<ul style="list-style-type: none"> IDB tray spline/tooth intersections now detected Correct bracket set now always shown in your IDB order Standard w/ IDB cases no longer show IDB tray simulations in the New menu Wire marking in SureSmile now matches the physical wire marks You can now change email addresses for credit cards on file
September 9, 2016 - 7.3 Commercial Update 3.1	<ul style="list-style-type: none"> Patient card timeline improvements Expanded timeline improvements
August 30, 2016 - 7.3 Commercial Update 3	<p>SureSmile and elemetrix</p> <ul style="list-style-type: none"> Self Help tutorials guide you as you work IDB bracket height set defaults simplified <p>SureSmile</p> <ul style="list-style-type: none"> IDB trays - Occlusal rests no longer automatically generated for partially erupted or unerupted teeth IDB Tray - Adjusted orientation in 3D window Terminology clarified on timeline

	<ul style="list-style-type: none"> • Wording simplified on the Export Staged Models dialog box • Resubmitting orascans or CBCT scans now easier • Ability to upload photos and x-rays on model order page for Aligner cases <p>elemetrix</p> <ul style="list-style-type: none"> • Multi-site practices can select site from elemetrix header • More options for selecting bracket height sets and bracket sets
July 28, 2016 - 7.3 Commercial Update 2.1	<p>elemetrix</p> <ul style="list-style-type: none"> • Modeling Notes text box added to Dental Examination for elemetrix customers • IDB package for elemetrix customers - Allow Bracket Set and Bracket Height selections to be blank when ordering diagnostic model
July 21, 2016 - 7.3 Commercial Update 2	<ul style="list-style-type: none"> • Staged models can be ordered for a single arch even if opposing arch does not have gingival modeling • elemetrix now supports multi-site practices • Bracket Placement tab improvements
July 6, 2016 - 7.3 Commercial Update 1	<p>suresscan</p> <ul style="list-style-type: none"> • All orders now submitted using SureSmile • New automatic IDB bracket check <p>elemetrix</p> <ul style="list-style-type: none"> • Treatment Card Upload button removed • Uploading of images now optional for IDB and DIY packages <p>SureSmile and elemetrix</p> <ul style="list-style-type: none"> • Improved Contact Us page
June 23, 2016 - 7.3 Commercial Release	<p>SureSmile</p> <ul style="list-style-type: none"> • Model ordering simplified • New automatic IDB bracket check <p>elemetrix</p> <ul style="list-style-type: none"> • User interface simplified • New Advanced Diagnostics package • New task reminders • Email notifications improved • Point-of-purchase credit card payment • Active case package shown at top of page • Terms and conditions available online <p>SureSmile and elemetrix</p> <ul style="list-style-type: none"> • MACROS and prescription forms easier to use

	<ul style="list-style-type: none"> • Redesigned prescription preferences • New FA Point tooth feature point added • New measurement options for bracket height sets • IDB trays -occlusal rests added for gaps • Gingival base thickened for staged models with gaps • Password reset message clarified
March 4, 2016 - 7.2 Commercial Update 6	<ul style="list-style-type: none"> • Enhanced bracket placement tools for IDB simulations • Different bracket height sets now possible for each arch • Gingiva model to IDB cap collision check/prevention added • New create staged models button added for IDB setups • IDB tray improvements
February 4, 2016 - 7.2 Commercial Update 5	<ul style="list-style-type: none"> • New standard case w/IDB Bundle • Two new enhancements to the IDB Tray Segments dialog box • IDB Tray simulation inter-arch coordination tools improved • IDB ray design software now resolves conflicts by slightly reducing cap size • IPR information added to patient bracket report for IDB setups
December 3, 2015 - 7.2 Commercial Update 4	<ul style="list-style-type: none"> • Better IDB straight wire simulations with new inter-arch controls • Extending aligner treatment now possible • Bracket Heights dialog box allows multi-cell selection • New reports for planed brackets and planned attachments • Gingival modeling now automatically included with premium therapeutic models • Lip trace tool improved
October 8, 2015 - 7.2 Commercial Update 3.1	<ul style="list-style-type: none"> • MACROS sections now open correctly from checklist
October 5, 2015 - 7.2 Commercial Update 3	<ul style="list-style-type: none"> • Aligner Prescription Form embedded in software interface • Approve Setup text box disabled for Aligner case types • Quickly add the same values to multiple model stages • Notes text box removed from Order tab for IDB trays and staged models • Unify Objects (for 3D printing) check box is now selected by default • Roots excluded from 3D model print orders • New conflict solver logic added to IDB tray design • New links to preferences • Now possible to resolve customer holds in the wire design workspace • Minor product and label name changes
August 20, 2015 - 7.2 Commercial Update 2	<ul style="list-style-type: none"> • Minimum required distance between IDB tray caps and other caps/teeth/brackets is now 0.1mm

	<ul style="list-style-type: none"> • IDB Order Button now disabled after the product is ordered • Automatic tray segmentation now included in IDB tray simulations • New bracket sets now recognized as IDB approved • Brackets now designated as “IDB approved” • New status name changes for IDB trays and staged models • IDB order tab updated • Auto-finish rules modified to allow 3D print orders for debonded patients • New check box lets you review staged models immediately after reviewing the setup • Aligner Design Prescription Form can now be downloaded from surescan • elemetrix practices can now create their own bracket sets • Order Confirmation window now lets you double-check your 3D print orders
July 29, 2015 - 7.2 Commercial Update 1.1	<ul style="list-style-type: none"> • Bug fix - Adjusting IPR values no longer causes unwanted movements in teeth
July 17, 2015 - 7.2 Commercial Update 1	<ul style="list-style-type: none"> • Printing and exporting staged models now easier • elemetrix setup and staged models review checklists improved • Order Trays button on the Order tab now disabled if interferences detected • New review checklists for aligners and staged models • Staged models with conflicts now highlighted in red • Enhanced level of service for Aligner case types • New Order prints button • New exception for standard and extended case types • Progress indicator bar added Viewing STL files via the Web • IDB tray generated from a treatment simulation now indicated at top of page • Email notification for tasks option now available
May 1, 2015 - 7.1 Commercial Update 3	<ul style="list-style-type: none"> • Return to last page link added to preferences page • Constraints dialog box now opens when you click Update Next Stage button • Order of OK and Cancel buttons reversed • Minor bug fixes
March 6, 2015 - 7.1 Commercial Update 2.3	Select Case Type task reminder removed
January 22, 2015 - 7.1 Commercial Update 2.1	Minor bug fixes
January 19, 2015 7.1 Commercial Update 2	<ul style="list-style-type: none"> • New Deliver with Brackets check box

- Provide Records task removed
- Insert Wire task preferences added
- Surgery On/Off check box reinstated on Global Registration tab
- Change Case Type button available after products canceled
- Cusp Tip displacement type now shows cusp tip feature points in 3D viewer

[December 2014 - 7.1 Commercial Update 1](#)

Commercial release of elemetrix 7.1

Major new features:

- New model types: unbonded therapeutic, premium model
- Standard and Aligner case types (to support aligner therapy)
- Wire order sequences
- Automated model design for aligners

Enhancements :

- "None" case type added
- Select Case Type button now disabled if Standard case in use
- Update scans no long listed for aligner patients
- Aligner models load gingiva by default
- Aligner treatment category added
- New Premium Model warning
- Shorted field name for staged model files
- Warning added when uploading treatment cards
- Ental exam color indicators simplified
- Upper/lower arch selectors easier to click
- Guide tools customizable
- Create Wire Sequence button wording changed
- Wire sequence order name simplified
- New warning for wire sequence order labial/lingual conflict
- New warning if wire not bendable

- Minor bug fixes

[October 2014 - 7.1 Beta Update 3](#)

- Case type wording simplified
- Removed purchase bundle from New Menu after patient has a bundle
- "None" case type listed under Select Case Type on Edit Profile page
- For aligner treatment Start date used instead of bond date
- Setup workflow tool improved
- Setup workflow tool Target Corridor heading renamed to Amt. to Target

	<ul style="list-style-type: none"> • Copy of simulation generated when making staged models • Status message displayed when creating staged model sequences • Currently selected model stage now shown on order tab • Now able to edit staging limits preferences • Comparison model now applied to all stages • Prefix wires with WS# rather than WireSeq# • 1-point bracket control duplicated in Jig tools menu • Full contact (3 point) bracket placement navigation capabilities added • Prebonded brackets now shown immediately • Approving models process now more consistent • Premium warning message for next segments • Bracket filter added • Links to launch elemetrix added to surescan • Minor bug fixes
September 2014 - 7.1 Beta Update 2	<ul style="list-style-type: none"> • Setup Workflow tool introduced • Labial default wire sequence added • Simulation generated for staged models now named appropriately • New confirmation dialog when deleting a staged model or a wire in a wire sequence • Change Case button renamed to Purchase Chase • New Warning for unbendable wires • Minor bug fixes
August 2014 -7.1 Beta Update 1	<ul style="list-style-type: none"> • New model types: unbonded therapeutic, premium model • Standard and Aligner case types (to support aligner therapy) • Wire order sequences • Automated model design for aligners
July 2014 - 7.0 Commercial Update 5	<ul style="list-style-type: none"> • New links added under Help button • Option to order OrthoCad removed from surescan • Release Hold button disabled until all issues are resolved
May 2014 - 7.0 Commercial Update 4	<ul style="list-style-type: none"> • Creating a surgical setup or simulation standardized • 3D model responds to MACROS inputs • Minor bug fixes
April 2014 - 7.0 Commercial Update 3	<ul style="list-style-type: none"> • Access improved for image tools on treatment planning workspace • Modify and Remove buttons returned to Bracket Set Selection dialog box • User prompt to change patient status added when uploading treatment card PDFs • Labial/lingual warning restored when changing bracket sets

	<ul style="list-style-type: none"> • Load All Patients button removed from surescan to reduce wait times
March 2014 - 7.0 Commercial Update 2	<ul style="list-style-type: none"> • sure u and Help Center menus added to Help button
February 2014 - 7.0 Commercial Update 1	<ul style="list-style-type: none"> • Commercial release of first cloud-based version of elemetrix!
December 2013 - 7.0 Beta Update 8	<ul style="list-style-type: none"> • List view now available under Patients tab • New features for creating and copying demo patients • Staff can now easily cancel unordered scans • Task search filter added to surescan • Administrator control of user access during off hours
November 2013 - 7.0 Beta Update 7	<ul style="list-style-type: none"> • Patient details now shown in surescan • Ability to rearrange Favorite Palette icons • 3D export • Access notes from anywhere in elemetrix • Upload multiple photos/x-rays • List of missing records • Select and filter patients from multiple sites • Overall improved performance • Browser tab labels • Product/model drop-down lists added
October 2013 - 7.0 Beta Update 6	<ul style="list-style-type: none"> • Direct access to photos with fewer clicks • Direct access to clinical notes • Tasks tab list view/card view preference added • 10 new preferences for task/patient filters and sorting added • Clear Search button added • Search by patient initials added • 3D navigation bounding box improved • Cell magnifier added • Multi-select adjustments shown on 3D model • Customizable MACROS form • Keyboard shortcuts added • Performance improvements • Timeline enhancements • Alphabetical file tabs added to surescan • Tasks tab reintroduced in surescan
September 2013 - 7.0 Beta Update 5	<ul style="list-style-type: none"> • Retain location last visited on patient overview page

	<ul style="list-style-type: none"> • Patient name on Demographics page now a link • surescan filter now consistent with elemetrix • Unique elemetrix page name shown in browser tab • Default logout time increased from 30 minutes to 4 hours
August 2013 - 7.0 Beta Update 4	<ul style="list-style-type: none"> • Image placeholder added to Bracket Selection window • Ability to select a tooth in the side window and display it in the main window • Wire order prompt added • 3D model shading tool returned to camera navigation • Model loading progress bar added • Entering wire insertion dates improve
August 2013 - 7.0 Beta Update 3	<ul style="list-style-type: none"> • elemetrix opens t last section viewed for each patient • Review and Submit changes task description simplified • Cancel button added to new patient page • Treatment cards anonymized • Clicking on customer hold for X-rays opens x-rays tab • Order process for STL/PLY update scans improved • User name now shown under Settings menu • Symbols for occlusal/gingival movements reversed between tabs • Tooth notes/TAD markers now available • Cancelled wire orders displayed in timeline • Wire tracking improved
August 2013 - 7.0 Beta Update 2	<ul style="list-style-type: none"> • Location/Site filter added to surescan • Bounding box preferences added • Actionable tasks shown only
July 2013 - 7.0 Beta Update 1	<ul style="list-style-type: none"> • Default view for side displays • Anonymous file names automatically generated when treatment cards uploaded • Password requirements made more robust

Reordering Consumable Supplies

You may reorder the following consumable supplies for your practice:

- SureWhite Tooth Preparation Kit
- Mirror Cleaning Cloths
- Touchscreen Stylus
- North America

Place your order on Marketplace at <https://shopSureSmile-com.3dcartstores.com/myaccount.asp> in your browser. Choose Clinical Materials on the left menu.

Important: Practices in Australia must go to <http://qnet.e-quantum2k.com/~barney/login/>

After you have placed your order, you will receive an email confirming that the order has been received. If you have questions about your order please contact elemetrix Customer Care at customercare@elemetrix.com. Go to the [Help Center](#) topic for a list of local customer care phone numbers.

Legal Notices

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DOC-500473-9

Last updated on September 5, 2018

Current through version 7.4 Update 5

breadcrumbs

elemetrix Video Library

IFrame [https://players.brightcove.net/645276483001/Skrn5asA_default/index.html?playlistId=5418204570001]

Getting Started with elemetrix

elemetrix is a digital treatment platform that provides the orthodontist with greater control and efficiency than traditional orthodontics by applying 3D diagnostic imaging and computer simulated treatment planning. elemetrix consists of three key components:

- **In-vivo scanning**, using a certified third-party optical scanner to capture 3D images of a patient's dentition and produce 3D (computer-aided design) models with individually movable teeth.
- **3D software** providing powerful visualization tools for precision diagnosis, treatment simulation, and customized appliance design. You can review digital setups with this software and use it to communicate with patients, colleagues, and lab technicians.
- A **Digital Laboratory** manned by highly skilled professionals using the latest technology to provide scan and setup processing for 3D diagnostic and therapeutic models for treatment planning and analysis; staged models for aligners; and IDB trays.

Important: OraMetric does not determine patient care. OraMetric provides therapeutics as directed by the doctor. The best possible results from the elemetrix process depend on the application of the doctor's diagnostic and clinical judgment.

Indications for Use

The Elemetrix System is used to provide a total orthodontic care solution to orthodontists with an image acquisition and viewing technology that delivers value throughout the entire care cycle; including record collection, treatment planning, treatment delivery, monitoring of care and patient communication.

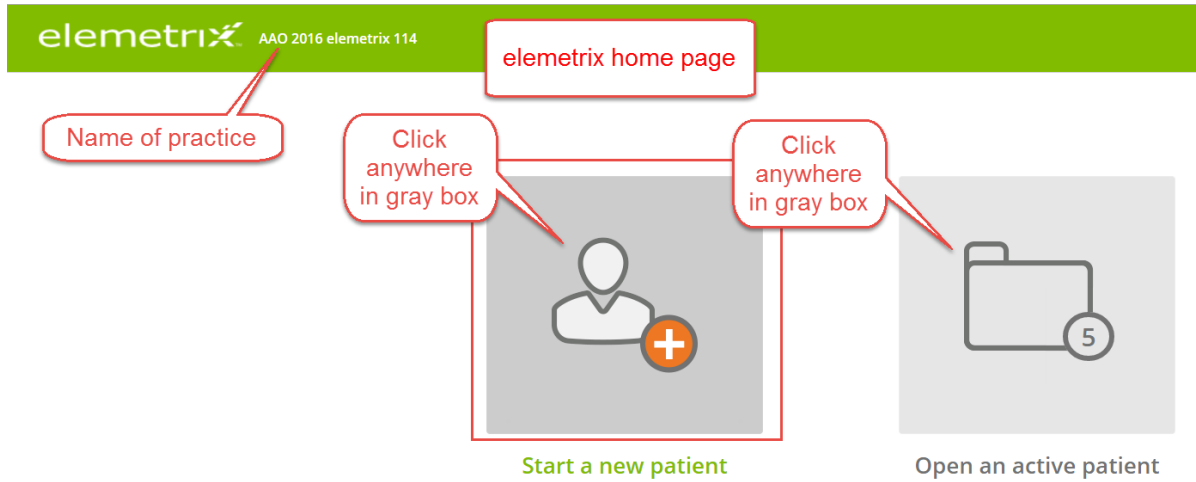
The treatment object is then used to design a custom appliance system, prescribed by the orthodontist, which is specific to each patient's needs. The result is a comprehensive care solution that addresses many problems that orthodontists face with patient care.

The OraScanner is not intended for use as an operative device and is not manufactured to be sterile.

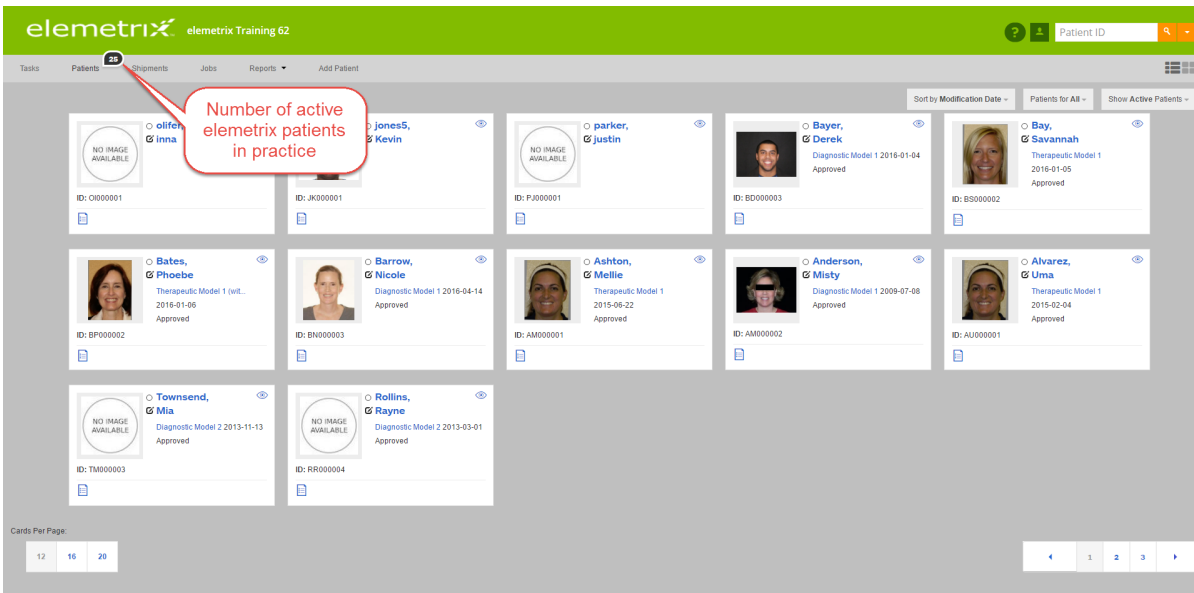
Navigate elemetrix

The elemetrix software has four primary workspaces:

- **Home page** - use to start a new patient or open an active patient



- **Clinic overview page** - view a list of:
 - all patients



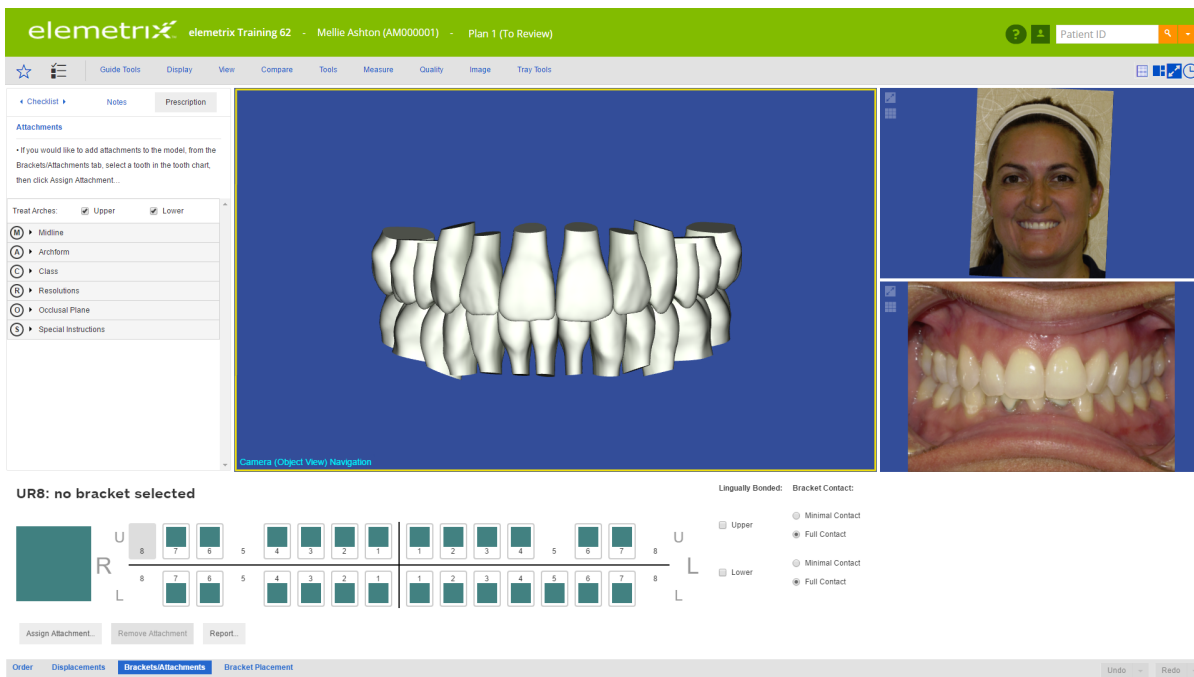
- list of pending tasks



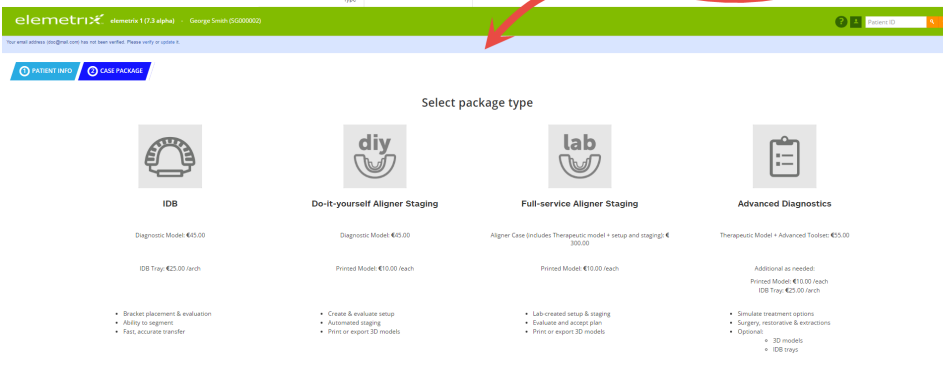
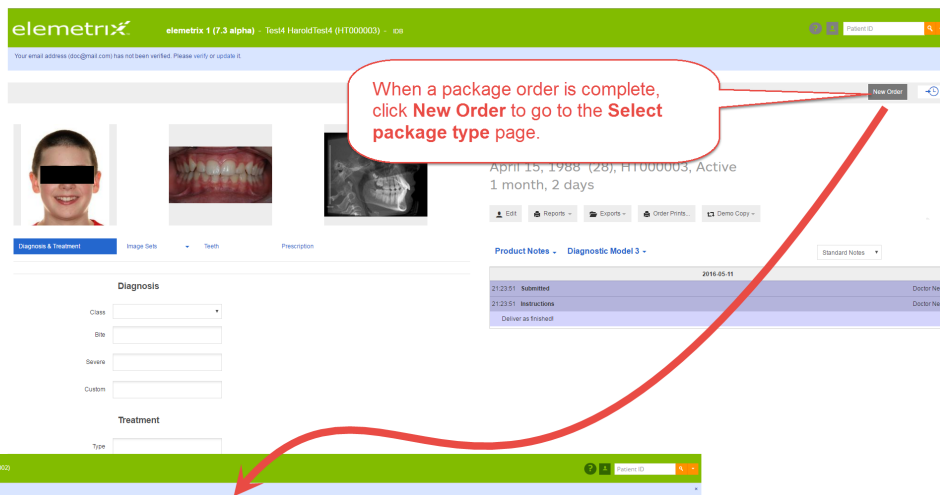
- **Patient overview page** - Provides access to all information about an individual patient.

[Image 2016-08-15_10-23-10 case package shown.png]

- **Treatment planning workspace** - allows you to work with images and 3D models.

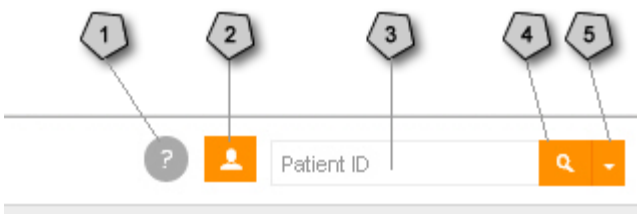


- **Open Orders** - When you are still working on any orders in a package, if you click the **Open Order** button, elemetrix takes you to the last workflow step you worked on.
- **New Orders** - When all of the orders in a package are complete, click **New Order** to go back to the Select package type page.



Help, Profile, and Search

The right side of the elemetrix bar on each page gives you access to online help, the settings menu, and search functions as shown below.



Online help button. Click to display:


- **Help Center** - Click to open the help center page within the elemetrix online help with links to more than 200 topics and resources designed to provide you information and guidance when using elemetrix.





- **sure u** - Click to go directly to elemetrix's online resource and education center.
- **Contact Us** - Click to go to the elemetrix customer support page with useful forms and a list of local customer care numbers.
- **Marketplace** - Click to go to Marketplace, where you can purchase consumables and marketing related items


- **Marketplace AUS** - Click to go to the Australian version of MarketPlace. For Australian customers only.
- **MyPractice** - Click to review analytics about elemetrix usage at your practice- such as average monthly number of case starts and finishes, average length of treatment, and so forth.

Settings menu

 Click this menu to access your profile. See [Change Your Profile](#). If you have permission, this menu also allows you to access preferences and administration tasks. See [Administration](#).

 Text area for entering search criteria. See Find Patient Information.

 Quick search button. See Find Patient Information.


 Advanced search button. See Find Patient Information.

Change your Profile

From the profile menu, you can change your language, time zone, and password.

Change your password

To change your password, follow these steps:

1. Click  on the upper-right side of any screen, and select your login name from the menu.
Result: Your profile page appears with your user name and email address.
2. Click the **Password** tab.
3. Type your current password and then enter a new password that has at least eight characters, including upper and lower case letters, a number, and at least one of the following special characters:
~ ! @ # \$ % ^ & * () _ - ' " ; : < > , . ? | [] \
4. Enter the password again, and then click **Update password**.

Reset a forgotten password


If you forgot your password, follow these steps to get a new password.

1. From the elemetrix home page, click **Login**.
2. On the Login screen, click **Forgot your password?**
3. On the next screen, enter your email address and click **Reset your password!**
Result: You will receive an email with a link to choose a new password.

Note: The link that you receive in the email is good for only 24 hours. After you reset your password using that link, your practice administrator must reactivate your account before you can access patient data. See [Manage Users](#) for more information.

Change your username

If you notice your username has been entered incorrectly or your name has changed, you may update your username at any time without any action needed by the Practice Administrator.

1. Click  on the upper-right side of any screen , and select your username from the menu.
2. Under the **General** tab, type a new username.
3. Click **Save Changes**.

Note: If your username does not update when you change to another elemetrix screen, refresh your browser.


Change your language and time zone

Video: Changing your language and time zone

ActiveX Contro...

When you log in to elemetrix for the first time, make sure that you set the correct time zone so that your product notes and other records have the correct time associated with them. You must set the time zone only once; on subsequent log ins, the correct time zone is set automatically.

To change your time zone and language, follow these steps:

1. Click  on the upper-right side of any screen, and select your user name from the menu.
Result: Your profile page appears with your user name and email address.
2. Click the **Language and Timezone** tab.
3. Select the appropriate values from the Language and Timezone menus.
4. Click **Save regional settings**.

[Return to elemetrix](#)

To return to elemetrix from your profile page, do one of the following:

- Click the back button on your browser until you get back to the home page.
OR
- Click the Home link at the top of the page, above **Your Profile**.

Comparison of elemetrix Case Packages

elemetrix's simple interface leads you step-by-step through the process of selecting and ordering a case package. This section of the help provides step by step procedures for selecting and ordering products with each case package.

Just follow at the workflow steps at the top of each page to guide you through the ordering process. Light blue or turquoise indicates completed steps. Dark blue indicates the step on which you are currently working.

Click anywhere in the image for a package to select it and proceed to the new step in the workflow.

Each elemetrix case package is made up of a standard set of elemetrix treatment models and products typically used in treatment. Each product in a elemetrix case is a component of the elemetrix treatment approach and is ordered at different phases of the patient's treatment.

Comparison of case packages:

IDB	Do-it-yourself Aligner Staging	Full-service Aligner Staging	Advanced Diagnostics
Use to create indirect bonding (IDB) trays based on a straight wire simulation.	Use if patient will be treated with aligners only and you do not need assistance from our Digital Lab.	Use for: <ul style="list-style-type: none"> patients who will receive aligners based on elemetrix models, but who will not be bonded nor receive wires. patients who will receive aligners based on elemetrix models after they have completed or are near completion of conventional treatment. 	Use to order a dynamic 3D CAD therapeutic model with 2D/3D linkage and full access to our advanced simulation toolset.
Create IDB trays based on a straight wire simulation from a diagnostic model. Use this simulation to order a set of IDB trays from OraMetrix.	Create a simulation based on a diagnostic model. Use this simulation as your target, create the staged model sequence and then export the 3D data files for fabricating your aligner trays.	Select Full-service Aligner Staging to benefit from the expertise of our Digital Lab technicians in setting up your target for aligner therapy, and then generating and adjusting your series of staged models.	Advanced diagnostics toolset enables you to: <ul style="list-style-type: none"> plan smile design, print physical 3D staged models for aligner therapy, design and order IDB trays plan treatment options

			for surgical, restorative or extraction cases.
<p>Services include:</p> <ul style="list-style-type: none"> • 1 diagnostic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners. • 1 set of printed IDB trays shipped to your practice with 10 business days of order. 	<p>Services include:</p> <ul style="list-style-type: none"> • 1 diagnostic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners. • printed staged models if requested (separate fee applies) shipped to your practice with 10 business days of order. 	<p>Services include:</p> <ul style="list-style-type: none"> • 1 unbonded therapeutic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners. • 1 setup, and any setup modifications as needed • 1 set of staged models, and any modifications as needed • Access to your Digital Lab technician to discuss your setup or staged models 	<p>Services include:</p> <ul style="list-style-type: none"> • 1 unbonded therapeutic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners. • Exclusive full access to Advanced diagnostics toolset
<p>Separate fees apply to:</p> <ul style="list-style-type: none"> • Each diagnostic model • IDB Trays - separate fee per arch 	<p>Separate fees apply to:</p> <ul style="list-style-type: none"> • Each diagnostic model • Printed models - separate fee per printed model per arch 	<p>Separate fees apply to:</p> <ul style="list-style-type: none"> • Aligner Case (includes Therapeutic model + setup and staging) • Printed models - separate fee per printed model per arch 	<p>Separate fees apply to:</p> <ul style="list-style-type: none"> • Therapeutic Model + Advanced Toolset • Printed models - separate fee per printed model per arch • IDB Trays - separate fee per arch
<ul style="list-style-type: none"> • Bracket placement & evaluation • Ability to segment • Fast, accurate transfer 	<ul style="list-style-type: none"> • Create & evaluate setup • Automated staging • Print or export 3D models 	<ul style="list-style-type: none"> • Lab-created setup & staging • Evaluate and accept plan • Print or export 3D models 	<ul style="list-style-type: none"> • Simulate treatment options • Surgery, restorative & extractions
<p>Provides 3D automation for rapid digital evaluation and adjustment of bracket placement. elematrix IDB trays achieve bracket placement with the accuracy of a jig, but with the chairside efficiency of a tray</p>	<p>Allows you to design and print a sequence of staged models to serve as the basis for your aligners.</p>	<p>Based on your instructions, elematrix technicians create the setup representing your desired final tooth alignment and the sequence of staged movement models. After you approve the Setup and staged models, you</p>	<p>Enables you to plan treatment options for surgical, restorative or extraction cases. Additionally you can plan smile design, print physical 3D staged models for aligner therapy, and design and order IDB trays. The package</p>

		order the sequence of printed models, the basis for your aligners.	provides you a dynamic 3D CAD therapeutic model with 2D/3D linkage with full access to our advanced simulation toolset.
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[Additional products available on a per-fee basis](#)

When a product is not included in a case type, it is considered an "a la carte" product and a separate fee is charged. Products that can be ordered "a la carte" include:

a la carte Product	Use
Diagnostic model	<ul style="list-style-type: none"> • diagnostic purposes • develop different simulations • aligner design • IDB tray design • marketing purposes
Additional therapeutic model based on a surface scan	<ul style="list-style-type: none"> • as basis of new setup if teeth are not moving as planned • best possible diagnostic model for aligner therapy (unbonded therapeutic model) • best possible diagnostic model for study/analysis (unbonded therapeutic model) • post-surgical planning • mixed treatment (aligner therapy on one arch and brackets on opposing arch)
Staged Models	<ul style="list-style-type: none"> • replacements for lost or broken trays • treatment extended • trays ordered at different times
IDB Trays	<ul style="list-style-type: none"> • replacements for lost or broken trays

[List of elemetrix Products](#)

The following table is a comprehensive list of each elemetrix product, when it is required, its purpose, what scan type is needed, which records are required, and which case type packages for which it is available.

[Printable PDF of table](#)

PRODUCT	REQUIRED	WHY USE	WHEN TO ORDER	SCAN REQUIRED?	WHAT TO SCAN	SCAN METHOD	RECORDS REQUIRED?	IDB TRAYS	INCLUDED IN: ALIGNER CASE
Diagnostic Model		<ul style="list-style-type: none"> - Diagnostic purposes - Develop different simulations - Aligner design - IDB tray design - Marketing purposes 	Before treatment.	YES	Plaster model	STL/PLY data from optical scanner.	Records not required but highly recommended as follows: - Current Photos - Current Pano - Ceph (can be taken anytime before order)		
					Patient	Intraoral: STL/PLY data from optical scanner.			
					Impression	STL/PLY file from 3rd party vendor.			
Therapeutic Model (without brackets)		<ul style="list-style-type: none"> - Best possible reference model, as DL sets feature points and registers smile photo. - Aligner design 		YES	Patient	Intraoral: STL/PLY data from optical scan of all teeth.	<ul style="list-style-type: none"> - Current Photos - Current Pano - Ceph (can be taken anytime before order) 		✓
Treatment Simulation	NO	<ul style="list-style-type: none"> - Explore various treatment alternatives before deciding on a setup prescription. - A la carte aligner design or staged models. 	N/A	NO	N/A	N/A	None		✓
Setup (also known as Plan)	NO	Plan treatment. Provides a 3D model and a set of detailed treatment planning instructions for achieving the desired treatment result.	N/A	NO	N/A	N/A	None		✓
Final Model	NO	<ul style="list-style-type: none"> - Comparison purposes - Retainers - Record keeping 	After treatment is complete	YES	Plaster model	STL/PLY data from optical scanner.	Records not required but highly recommended.		
					Patient	Intraoral: STL/PLY data from optical scanner.			
					Impression	STL/PLY file from 3rd party vendor.			

PRODUCT	REQUIRED	WHY USE	WHEN TO ORDER	SCAN REQUIRED?	WHAT TO SCAN	SCAN METHOD	RECORDS REQUIRED?	IDB TRAYS	ALIGNER CASE
Staged Models	YES	Use printed models to create your own aligners.	Immediately after you approve your setup or immediately after you create a treatment simulation you wish to use as your target.	YES Diagnostic model or unbonded therapeutic model required.	Patient	Intraoral: STL/PLY data from optical scanner.	N/A		✓
IDB Trays	YES	OraMetrix uses the elemetrix IDB tray simulation to fabricate your IDB trays.	Immediately after you create your IDB tray simulation.	YES Diagnostic model required.	Patient	Intraoral: STL/PLY data from optical scanner.	N/A	✓	

Frequently Asked Questions

In this Topic

- [Heading 1](#)
 - [Heading 2](#)

elemetrix Case Types

[What is the difference between a diagnostic model and a therapeutic model plus advanced toolset?](#)

A diagnostic model is a digital model of the malocclusion comprised of individual tooth models created from an in-vivo scan or a scan of a plaster cast. A 3D model created from a plaster cast or from an impression can be used for analysis. A 3D model created from an in-vivo scan can be used for analysis, labial or lingual bracket placement simulations, bracket placement simulation for IDB tray design, and aligner or wire therapy treatment simulations.

A therapeutic model is a dynamic 3D CAD digital model of the patient's individual tooth anatomy and bracket positions. It is created from an intraoral scan or an in-vivo CBCT scan. It is taken when the patient is ready for custom archwires or aligner therapy. In elemetrix therapeutic models are only offered as part of the Advanced Diagnostics package.

Use the Advanced Diagnostic case package to order a dynamic 3D CAD therapeutic model with 2D/3D linkage and full access to our advanced simulation toolset. This combination allows for more advanced treatment planning for more complex cases:

- Simulate treatment options
- Plan surgery, restorations and extractions
- Print physical 3D staged models for aligner therapy
- Design and order IDB trays

[Can I order a therapeutic model as an a la carte item? For example, to take advantage of the unbonded therapeutic model's smile linkage; then, proceed with aligner therapy?](#)

Yes. Choose the Advanced Diagnostics package.

[Some of my patient records are for storage or diagnostic purposes only. Do I choose a case type for these cases?](#)

There is no case fee in these situations. You will be charged on a fee-for-service basis. When a product is not

included in a case type, it is considered an "a la carte" product and a separate fee is charged. Go to [Additional products available on a per-fee basis](#) for a list of products that can be ordered on an "a la carte" basis.

[Oops, I chose the wrong case type. Now what do I do?](#)

If you have not yet ordered a diagnostic or therapeutic model, you can still change your case package. Click the **Open Order** button at the top right of any page to return to the last unfinished step in the order process, then click the Case Package step. Change your case type on this page and resume the order process.

If you have already ordered a diagnostic or therapeutic model, please contact [Customer Care](#).

[Oops, I ordered the wrong case type. Can you fix it for me on the back-end?](#)

Unfortunately, we can no longer fix these issues without your help since we have made some system changes to accommodate Case Type and a la carte pricing. An a la carte fee is incurred whenever you order the product. This means that our Digital Lab technicians cannot move data between different products (billing will be incorrect), so they will reject the order and provide instructions on what you can do to place the appropriate order.

[If I cancel a product or case, will I receive a refund?](#)

You can cancel a case, or a product in a case, as long as long as none of the products associated with the case have a status other than *Not Ordered*. The case type fee is incurred when you order the first model. However if a product has had a status for less than 24 hours, you can call customer care to see if production can be cancelled before any production costs are incurred. If so, you may be eligible for a refund.

Aligners and other Removable Appliances

[If I plan to create appliances for only one arch, do I need to scan both arches?](#)

Yes, you must scan both arches.

[Can I design vacuum-formed retainers?](#)

Yes. Take a scan for a diagnostic mode and use the Do-it-yourself Aligner Staging package to order a diagnostic model. You do not need to create a simulation. Order printed models from OraMetrix or export the digital files to print the models for the retainers in house or at your local lab.

Staged Models

[It looks like attachments are not contoured to fit the tooth surface—won't they break off of printed models?](#)

No, when preparing to print, OraMetrix fills in any gaps between the attachment and tooth.

[What are the differences between the Exports and Order Prints button on the Patient Overview page, the](#)

[Export Staged Models on the Order tab, and the Order Staged Models for staged models?](#)

- Use the **Order Prints** button on the Patient Overview page to order printed 3D models directly from OraMetrix. See [Ordering Printed Models from OraMetrix](#) for more information.
- Use the **Exports>Export 3D** button on the Patient Overview page to export the 3D files of models in STL format locally for printing in house or at a 3rd party lab. See [Exporting 3D Models for Lab Use](#) for more information.
- Use the **Order Staged Models** button on the Order tab for staged models to order printed 3D models of stages directly from OraMetrix.
- Use the **Export Staged Models** button on the Order tab to export the 3D digital files of your staged models for printing at your practice or at a 3rd party lab. The Export feature on the Staged Models page is specifically intended for exporting models for aligners. It is easier to work with for this purpose than trying to use the Export 3D button on the Patients Overview page.

[Can I continue to export models for my lab?](#)

Yes, but there are several advantages to ordering your printed models from OraMetrix if available in your country*:

- **Convenience/Efficiency** – eliminate steps of exporting models from elemetrix, then importing them into your lab's software
- **Reduced cost** – less labor to order, includes service to prepare file for printing (model objects are merged and “print ready”)
- **Easily identifiable** - All printed models have the patient ID and a serial number printed on the model, so they are easier to identify and store.

*Contact Customer Care to determine availability.

[Can I use the Exports>3D Export feature on the Patient Overview page to print my staged models?](#)

Yes. However the Export feature on the Staged Models page is specifically intended for exporting models for aligners and is easier to work with.

[Do you have instructions for making trays/aligners?](#)

The steps vary depending on the materials, equipment and process you plan to use. Please refer to your material suppliers and equipment manufacturers for instructions. Here are some common mistakes to avoid:

- Avoid dropping or chipping elemetrix printed models. In addition to the added expense, it is inconvenient to have to re-order and then wait for replacement models to be shipped.

- Remember to spray the model with a non-stick spray before forming the tray. Both the model and the tray material are made of plastic and will stick to each other, especially when warm. If you try to pry off the tray to try again, you will probably damage the model around cusps and incisal edges.

IDB Trays

Am I charged for the number of segments I create?

No, there is just one charge per arch.

Am I charged for shipping?

No, the IDB fee includes standard shipping.

Are lingual IDB trays available?

Not at this time.

Can I export IDB tray files and have trays produced myself?

Yes. You can export your IDB tray digital files and print your own IDB trays in-house or at your local lab. Just go to the Order tab of your IDB tray simulation and click the Export Trays button. There is a one-time charge per arch for this service, which varies by country/region. The system displays the price for your country or region on the Select package type page. Once you pay the fee, you can export the tray as many times as you wish.

I have created an IDB simulation, but it is missing the steps to generate trays. What is wrong?

Most likely you have selected at least one bracket that is not supported for IDB trays. Go to [SureSmile.com/brackets](https://www.suresmile.com/brackets) to check if your brackets are supported.

To assign the correct brackets:

1. Select the **Brackets** tab.
2. Click the **Assign Bracket Set** button.
3. Choose a supported bracket set

Tip: Check the slot size

4. Click **Apply**.

Can I display straight wires on my IDB tray simulation?

Not at this time.

Can I design and order IDB trays from the treatment simulation workspace?

Yes. Go to [Design and Order IDB Trays \(Treatment Simulation\)](#) for more information.

Using the Treatment Planning Workspace

Video: [Arranging the 3D Workspace](#)

ActiveX Contro...

elemetrix's treatment planning workspace contains powerful visualization tools for precision diagnosis, treatment simulation and customized appliance design.

Click a product on a patient card or on the patient's treatment timeline to display the product in the treatment planning workspace.

In this Topic

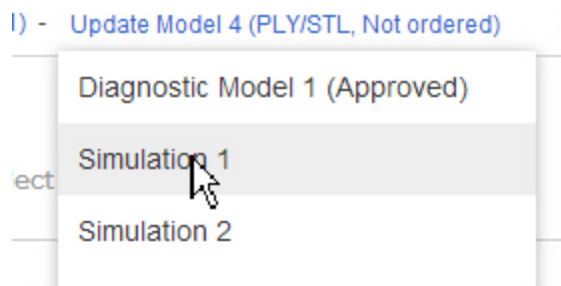
- [Heading 2](#)

Top of Window



At the very top of the window, to the right of the elemetrix logo, are a series of links that lets you backtrack:

- name of the practice
- number of tasks for the logged in user (gray) and for the practice (black),
- patient name and ID
- name and status of product displayed in main window

Tip: Click and hold product name to see a list of all products for patient. Slide down list and click the product you want to open.



Help, Profile, Search

To the right of the series of links is the help button . Clicking opens a drop-down menu where you can select the Help Center (this online help), sure u, Contact Us, News, and Marketplace. The settings icon  contains several menus for administering your own account. See [Change your Profile](#) for more information. To the right of the setting icon is a search box that allows to you to search across your entire patient database without closing the

current patient.

Favorites Palette

The star icon on the left of the middle, taupe colored ribbon display displays a list of your favorite icons, those that you use most frequently as you treat patients. This list is saved and is available each time you are logged on.

An option in the Appearance preferences allows you to specify that you want the Favorites Palette to open automatically when you are in the treatment workspace. In the Favorites Palette, you can also drag and drop icons to put in your preferred sequence. See [Appearance Preferences](#).

Checklist

The checklist icon toggles on/off the automated workflow guide for the product displayed. See the following topics for information about specific checklists:






- [Diagnostic Models and Treatment Planning](#)
- [Reviewing therapeutic models](#)
- Ordering Setup Prescriptions
- Using Simulations
- [Reviewing Setup Prescriptions](#)
- Evaluating and modifying archwires

Menu Bar

When you click any of the menus in the menu bar, the menu bar expands to display a row or palette of icons related to the menu. Place your cursor over each icon for a brief description of its function. Help topics provide a detailed description of each menu palette icon.

Window Display Controls

The controls on the right side of the menu bar control the display of the page:

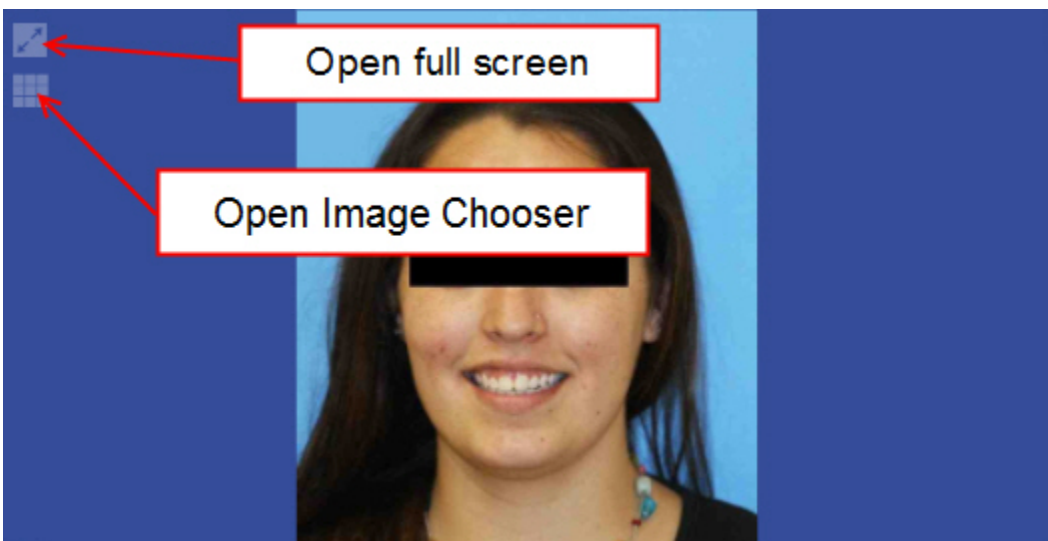
- Click  to open a window to view product notes, patient notes, and customer holds. Patient notes are displayed by default.
- When the row of icons is displayed for a menu, click  to toggle the labels on/off for each of the icons.
- Click  to toggle on/off the two side windows.
- Click  to expand the main window to fill the screen.
- Click  to toggle on/off a detailed view of the treatment timeline. Once open, click the black clock button to hide the timeline detail and keep the high level timeline view. Once the detail is hidden, click the gray clock icon on the menu bar to completely hide the timeline

Main Window

The large window with a center circle and a smaller circle and square inside is your main window. The circle with the smaller circle and square inside it are your camera navigation controls. Click in and around the circle and then drag to get an idea of how to use these controls to manipulate a 3D model. See the [Viewing the Model](#) for detailed instructions on how to use these controls.

Side Windows

Use these two side windows to assist you as you plan treatment, or rely on the images automatically displayed by the elementrix guides. In the top left corner of photos and X-rays in the side windows are two buttons as shown below:



- Click the top button to display the image full-screen in a separate browser window. You can drag this window to a second monitor if available. This window has tools for cropping or annotating the image or select other images. See [Edit Images](#) for more information.
- The bottom button opens the Image Selection window from which you can select another image for that position.

Treatment Planning Tabs

The bottom portion of the workspace contains a series of tabs. Each of these tabs contains detailed controls and functions for further manipulating the 3D model as you plan and prescribe patient treatment. The tabs shown will differ according to the product displayed in the main window.

Menu Bar

When you click any of the menus in the menu bar, the menu bar expands to display a row or palette of icons related to the menu. Place your cursor over each icon for a brief description of its function. Help topics provide a detailed description of each menu palette icon.

Please note that some of the icons may not be available according to the contents of the selected window. For example, if you have a 2D photograph displayed, the Bone icon will not be available.

Favorites Palette


[Video: Creating Your Favorites Palette](#)

ActiveX Contro...



The star on the menu bar is your favorites palette. Use to make your own palette of tools to keep on the left side of your workspace. The palette is associated with your login and is specific to you.

[To build your favorites palette](#)

1. Click the star  at the top left of the menu bar to open the favorites palette to the left of your workspace.
2. To add a menu icon to the palette, display the menu so that the icons are shown.
3. Place your mouse over the icon you wish to add. Do Not click. Look closely and you will see a small star in the top left corner of the icon. Click the star to add the icon to the favorites palette.
Result: A copy of the icon is placed in your favorites palette.

4. Drag and drop the icons in the favorites palette to rearrange them to best suit your working style.

[To remove an icon from the palette](#)

- Place your mouse on top of the icon in the favorites palette. Do not click. After a second or two, a dialog box opens. Click **Remove from Favorites**.
or
- Click the small star in the top left corner of the same icon in the menu ribbon.

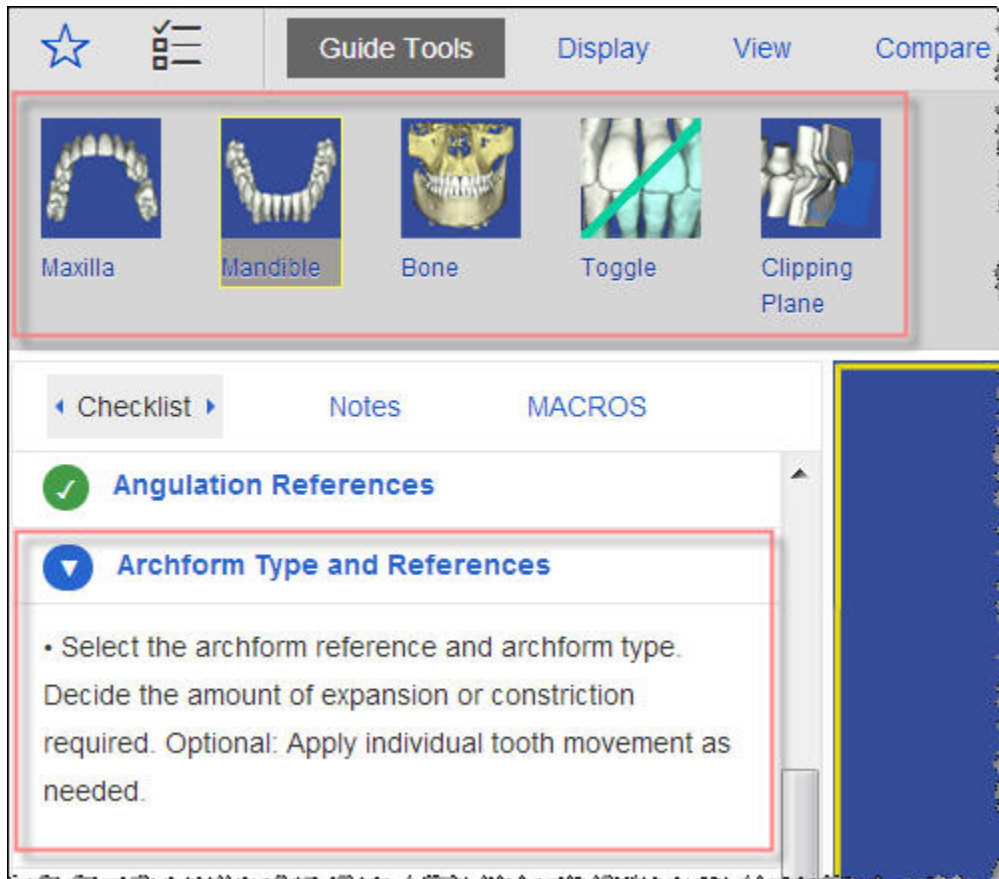
Note: The size of the palette is dependent on the size of your screen.

Tip: On the Preferences page under the Appearance tab, there is a *Show Favorite Tools* drop-down list. If you select:

- **Yes**, the Favorites Palette opens automatically when the treatment planning workspace is open.
- **No**, you have to click the **Open Palette** button to display your favorite icons.

Guide Tools

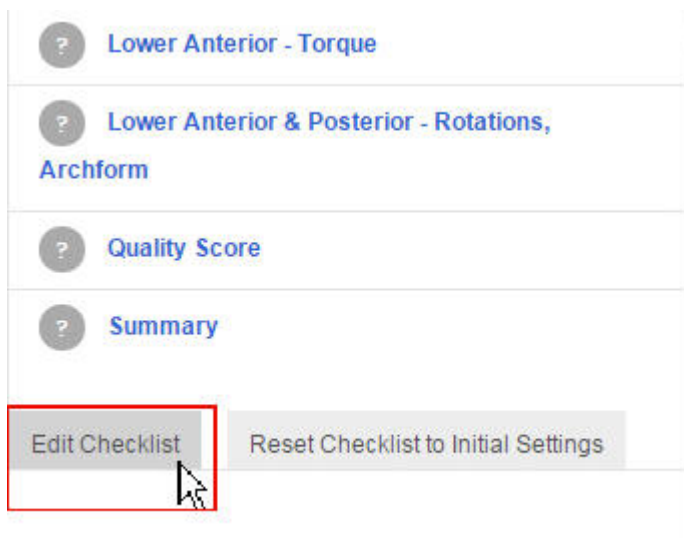
The Guide Tools palette contains icons used in the checklist for the step you are currently on. These icons change with each step to display the necessary icons for that step.



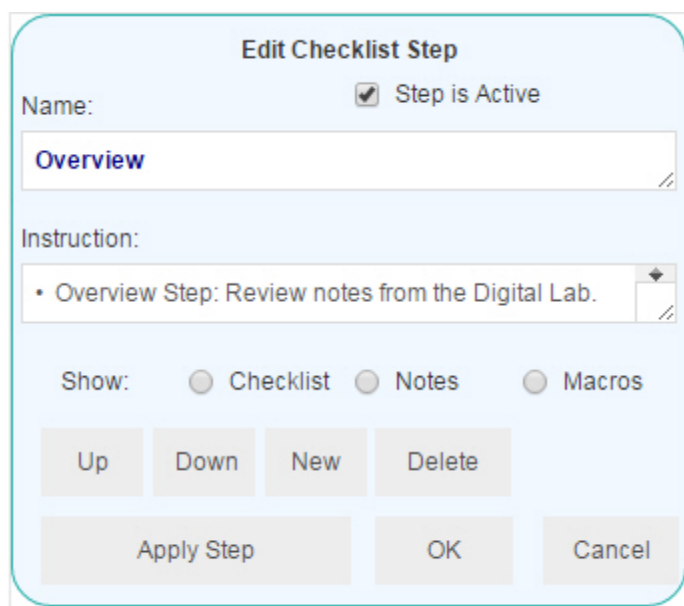
Customize Guide Tools

You can add specific tool icons to a step so that they appear on the Guide Tools palette for that step.

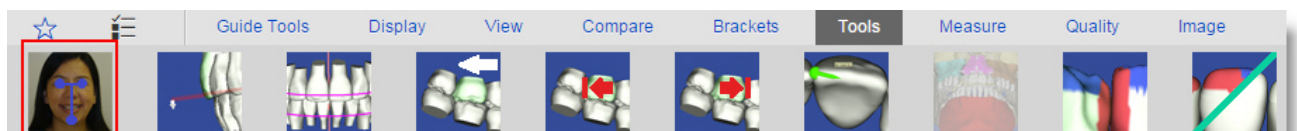
1. Scroll to the bottom of the checklist you wish to customize and click Edit Checklist.



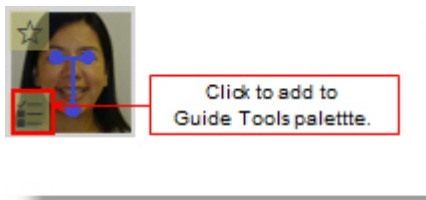
2. Click the step you wish to customize.



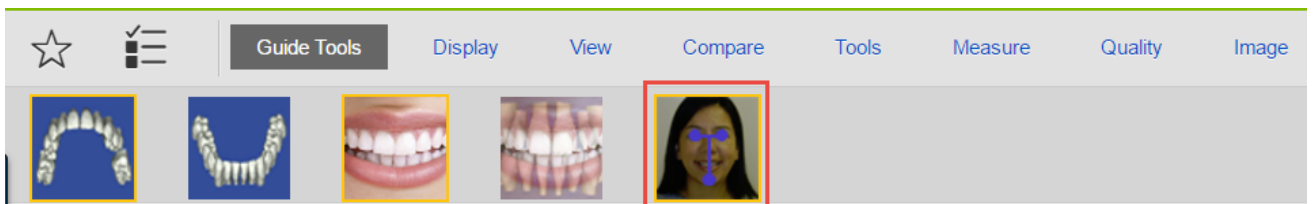
3. Go to the menu that has the tool that you want to add to your Guide Tools palette.



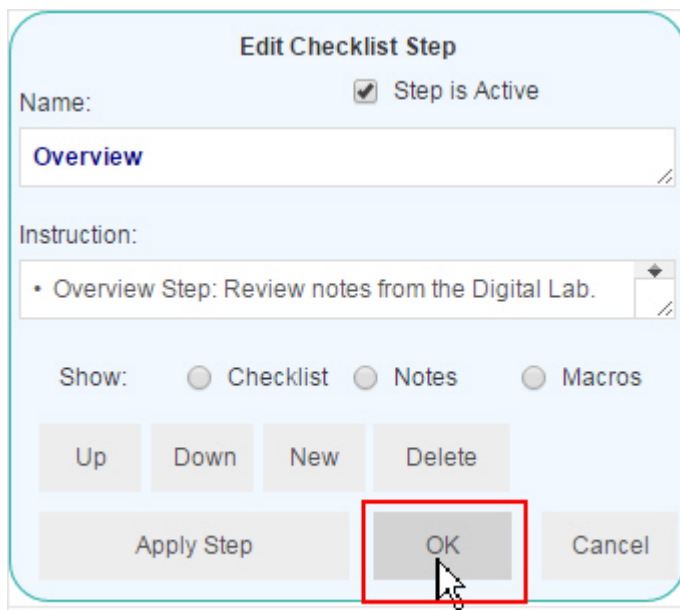
4. Place your mouse over the tool you wish to associate with the step and click on the small checklist toggle icon in the bottom left of the icon.



5. Go to Guide Tools to confirm that the tool icon has been added for the guide step.



6. When finished customizing the setup click OK.



Result: Each time you open this step in the checklist, the tools icon you just added will be displayed with the other tool icons already associated with this checklist step.

Checklists



Click to open or close the checklist associated with the displayed 3D model. Checklists guide you through a step-by-step standardized review of the model displayed in the main window of the treatment planning workspace.


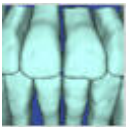

There are checklists for diagnostic models, therapeutic models, setup models, staged models, and IDB tray simulations. elemetrix allows you to customize each checklist to better match your treatment preferences.

[Customize guides to match your treatment preferences](#)

1. Open a product so that the treatment planning workspace is open
2. Click the **Checklist** icon in the menu bar.
3. Scroll to the bottom of the checklist and click **Edit Checklist**.
4. Click a step you want to edit.
5. Result: the **Edit Checklist Step** opens.
 - To change the order of the step, click the **Up** or **Down** button.
 - To create a new step, click the **New** button. Highlight the words *New Step* and type a new name.
 - To remove a step, click the **Delete** button.
 - Make other changes as indicated.
6. When finished, Click **OK** to save your changes.
7. Repeat for other steps in the checklist.

Display Palette

The Display palette provides tools for controlling what you want to show on the model.

 <p>Maxilla</p>	<p>To display the maxilla or mandible, click the appropriate icon. Click the icon again to deselect it and hide the arch. Display the selected elements of the respective arch including teeth, gingiva, brackets, and wires.</p>
 <p>Mandible</p>	
 <p>Active</p>	<p>Click to show the 3D active model, depicted with white teeth, that corresponds to the selected product. The active model is based on the reference model. It is the model you are currently manipulating for a treatment simulation or setup. Click the icon again to hide the model.</p>
 <p>Reference</p>	<p>Click to show the 3D reference model, depicted with blue teeth. The reference model is the latest model of tooth positions used for comparison in a treatment simulation and setup. The reference model is typically the most recent diagnostic model or therapeutic model. Click the button again to hide the model.</p>
 <p>Toggle</p>	<p>Click to toggle between the active and reference models.</p>
 <p>Gingiva</p>	<p>Click to show the patient's gingiva in the active model (i.e., a setup or a simulation). Click again to hide the gingiva.</p>
 <p>Comparison Gingiva</p>	<p>Click to show the patient's gingiva from the reference model (i.e., a diagnostic or therapeutic model based on the malocclusion). Click again to hide the gingiva.</p>
	<p>Click to toggle on/off the cephalometric view during your setups and simulations. The tooth model turns to a right buccal position and overlays the cephalometric view. This feature is particularly useful during surgical treatment planning when you are establishing the skeletal horizontal plane.</p> <p>Note: Unlike the other standard views available from the View menu, this is a toggle on/off view. When</p>



Lateral Ceph

toggled on, all other views are linked to and superimposed upon the lateral ceph view as shown below:

The Fade control is now active for the displayed, linked ceph. Use it to adjust the opacity of the ceph as shown below.

Adjust the Horizontal inclination and the Facial Axis inclination (make sure you display the Facial Axis tool) from the Global Registration tab or (if a surgical case) from the Surgery tab. The ceph will be adjusted to maintain a set parallel horizontal line.



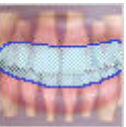
Smile Photo

Click to toggle on/off the smile photo superimposed on the 3D model



Fade

Click to display the fade control tool. This allows you to adjust the transparency of the smile photo to allow the 3D model to show through.



Lip Trace

Click to display a smile photo with the photo teeth removed with the lip trace tool superimposed on a model. See the Use the Lip Trace Tool topic for instructions on how to perform a lip trace.



Contacts

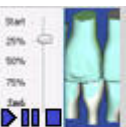
Click to visually evaluate contacts between the upper and lower teeth. Click again to hide the contacts.

In general, areas shaded in green are nearly in contact, yellow indicates ideal contact, while areas in red are heavy contacts. If a tooth is not shaded in any color, it is not close to contacting the opposing arch.

The green or red shading is determined by the distance between upper and lower teeth as follows:

Upper/Lower Distance	Color
Farther than 0.45 mm	No color (no contact)
0.45 mm to 0.15 mm	Green
0.15 mm to -0.2 mm	Yellow indicates contact
Deeper than -0.2 mm	Red indicates intersection that must be alleviated or equilibrated

Note: This feature does not address contact points within the same arch. See *Build Up/IPR Tab* for more information.



Animation

Click to observe the movements of both the teeth and the brackets. This allows you to analyze the planned movements occurring between your reference model and your setup. You can also use Automatic Tooth Animation to help inform a patient about their treatment plan.

To run animation:

1. Open a setup or any other model with a reference model available.
2. Click the **Animation** icon. The Animation window opens and begins running.
3. Allow the animation to play automatically, or click Stop and use the slider bar to manually advance movement.

Tip: Turn on brackets and the clipping plane, and then zoom in to watch how bracket slots move.

4. When you are finished, click the **Close** button (x in the corner) to close the animation control or click the icon in the tool bar again.







When Smile photo and 3D image are linked, switches between 2D (photo) and 3D image (model).

View Palette

The View palette icons allow you to show the model in a particular position or perspective. When you change standard views using the menu ribbon icons, the image is re-centered in the window but the zoom level is not changed. If you chose Object View mode in the last view by zooming in, the view mode changes back to the default Patient View mode when you select another standard view, or if you re-select the current standard view. See [Camera Navigation Models](#) for more information about Object View and Patient View modes

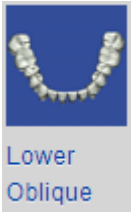
Note: When you change a view by going from one step to another in the guide, the image stays at the same zoom level as in the previous step. The image does not re-center, but stays in the same position as in the previous step. If you zoomed in and changed the default Patient View mode to Object View mode in the previous step, the Patient View mode returns when you change steps.

 <p>Labial</p>	<p>Orients the teeth in a labial view.</p>
 <p>Lingual</p>	<p>Orients the teeth in a lingual view.</p>
 <p>Right Buccal</p>	<p>Orients the teeth in a right buccal view.</p>
 <p>Left Buccal</p>	<p>Orients the teeth in a left buccal view.</p>
 <p>Lower Occlusal Upper Occlusal</p>	<p>Orients the teeth in an upper or lower occlusal view.</p> <p>To move a tooth interactively in an occlusal view:</p> <ol style="list-style-type: none"> 1. Click a tooth to select it. The selected tooth displays shaded in green encased in a white bounding box. 2. Click the Upper Occlusal View icon or Lower Occlusal View icon from the View menu palette as appropriate. 3. Point to a control arrow in the bounding box until it turns from white to another color, then press and drag to the tooth. 4. To make an in/out movement, drag from one of the two green arrows in the center of the tooth. 5. To rotate, drag clockwise or counter-clockwise from one of the four blue arrows at the corners of the bounding box. 6. To move mesially-distally, drag from one of the two red arrows in the center of the tooth.

You can also drag from other arrows to produce other types of movement in this view as illustrated below.



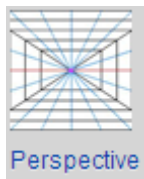
Orients the teeth in an upper oblique view.



Orients the teeth in a lower oblique view.



Resizes the model so that all of the teeth are visible in the window.



Allows you to change from the default orthogonal (parallel) projection for 3D models to a perspective projection.

This feature is useful for doctors who want to see a view of a 3D model that is consistent with a photograph, and who want a smoother transition from the Facial Smile view to a 3D view when using elemetrix's 2D/3D superimposition features in the Therapeutic Model Review Guide and Setup Prescription Guide.

After perspective is turned on, it remains on for all standard and custom 3D views for the current patient.

After perspective is turned off, the default orthogonal (parallel) projection will remain on for all 3D standard and custom views for the current patient EXCEPT when using the 2D/3D superimposition features, which require perspective projection.



Perspective On



Perspective Off

(Default Orthogonal Projection On)

The disadvantage of Perspective mode is that teeth are not displayed at their actual size. Teeth toward the front of the model appear larger than ones toward the back. In addition, measurements using grids are not accurate in Perspective Projection.

Displays the selected tooth and the opposing teeth but does not change the orientation of the view as you select additional teeth.

To navigate among teeth, follow these steps:



1. In the 3D viewer, click on the tooth you want to view.
2. Select Tooth View icon. The selected tooth is magnified in the current view. All of the other teeth in both arches except for the three closest teeth in the opposing arch. Notice these teeth are shaded in the Single Tooth View. switches automatically to Object view mode.
Tip: To view only the selected tooth, click Display Maxilla or Display Mandible to hide the opposing arch.
3. Select another tooth in the tooth chart. The selected tooth appears from the same view orientation. When you choose another view control or close the Single Tooth View window.



Displays a tooth interactively in a distal view:

1. In the 3D viewer click on the tooth you want to view.
2. Click the Tooth Distal icon. The selected tooth is magnified in a standard distal view. All teeth in both arches distal to the selected tooth are hidden. Mesial teeth are shown.
Tip: To view only the selected tooth, go to the Display menu and click Display Maxilla or Display Mandible to hide opposing arch.

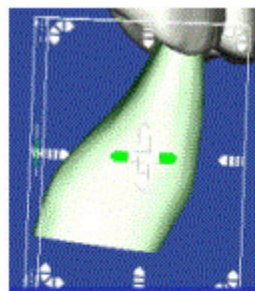


Moves a tooth interactively in a distal view:

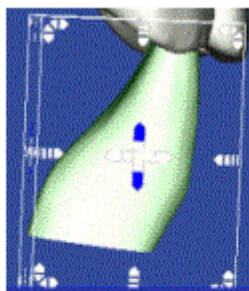
1. Click a tooth to select it. The selected tooth displays shaded in green encased in a white bounding box.
2. Select the Tooth Distal icon.
3. Point to a control arrow in the bounding box until it turns from gray to another color, then click and drag to reposition the tooth.
 - To torque, drag clockwise or counter-clockwise from one of the four red arrows at the corners of the bounding box.
 - To make an in/out movement, drag from one of the two green arrows in the center of the tooth.
 - To make a vertical movement, drag from one of the two blue arrows in the center of the bounding box.

You may also drag from other arrows to produce other types of movement in this view as shown below.

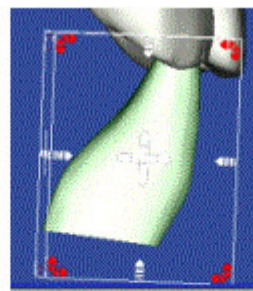
Tip: You can continue to make tooth adjustments in a magnified view. Use Camera Navigation to move the view to display the tooth on the screen requiring an adjustment. Once the tooth is visible, you can select it and continue following the steps to move the tooth.



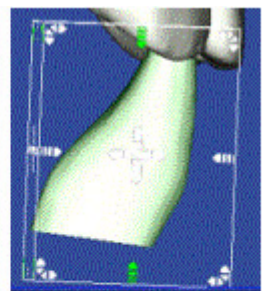
Torque or Buccal/Lingual (when Crown Torque Navigation is off)



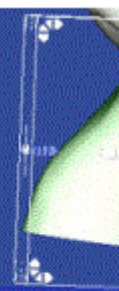
Occlusal/Gingival



Torque (must turn off Crown Torque Navigation)



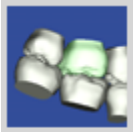
Angulation



Rotation

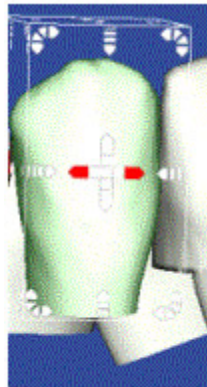
Moves a tooth interactively in a buccal view:

1. Click a tooth to select it. The selected tooth displays shaded in green encased in a white bounding box.
2. Click the Buccal View icon from the menu ribbon.



Buccal
View

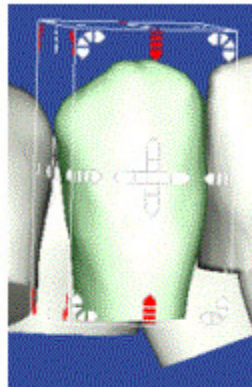
3. Click a control arrow in the bounding box until it turns from white to another color, then click and drag to position.
 - To make a vertical movement, drag from one of the two blue arrows in the center of the tooth.
 - To angulate, drag clockwise or counter-clockwise from one of the four green arrows at the corner of the bounding box.
 - To move mesially-distally, drag from one of the two red arrows in the center of the tooth.
 -
4. Release the mouse button when the tooth is in position.
5. Drag the other arrows to produce types of movement in this view as shown below.



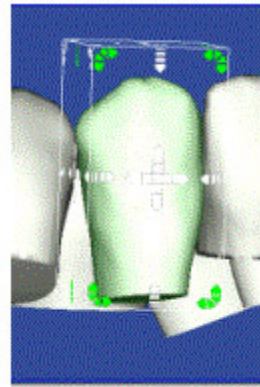
Mesial/Distal



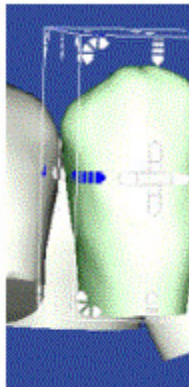
Occlusal/Gingival



Torque





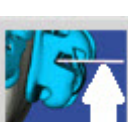
Angulation



Rotation

IDB Tools

When you start an IDB tray simulation, the following three menu tools become available in the guide tools. Use these tools as you work through the steps in the IDB tray simulation checklist.

 <p>IDB Trays</p>	<p>This tool appears when you select the third or fourth IDB checklist steps, Generate Upper/Lower Tray & Resolve Interferences. Use to display or hide the IDB tray on the model.</p>
 <p>Segments</p>	<p>This tool appears when you select the third or fourth IDB checklist steps, Generate Upper/Lower Tray & Resolve Interferences. Use to open or close the IDB Tray Segments dialog box to add or remove segments.</p>
 <p>Toggle Upper/Lower Arch</p>	<p>This tool appears when you select the last IDB checklist step, Order Trays. Use to toggle between the upper and lower arches as you review the tray simulations before placing your order.</p>
 <p>Planned Brackets</p>	<p>When you are simulating bracket placement, click this icon to display planned ("prebonded") brackets. These are prebonded brackets positioned relative to the teeth in the diagnostic model. When viewed on the 3D model, prebonded brackets are shaded green.</p>
 <p>Bracket Heights</p>	<p>Click to show or hide the Bracket heights dialog box. Use the tooth table on this dialog box to change the heights of the planned brackets. You can select multiple cells in the Bracket Heights dialog box and then adjust the values for all of them simultaneously. Click in the first cell in the range and then shift-click in the cell at the end of the range of cells. As soon as you do this, the Edit Selection control box appears. If you want to maintain the current range of values but just want to increment/decrement the values by 0.1 mm, click the second set of up/down arrows to the far right. If you want to apply the same values in all of the cells, click in the field and type the value you want to apply, then click the = sign. If you want to increment the value you've entered for all of the cells by 0.1 mm, click the up or down arrows immediately to the right of the field. You can now select multiple cells in the Bracket Heights dialog box and adjust the values for all of them simultaneously. Just click in the first cell in the range and then shift-click in the cell at the end of the range of cells. As soon as you do this, the Edit Selection control box appears. If you want to maintain the current range of values but just want to increment/decrement the values by 0.1 mm, click the second set of up/down arrows to the far right. If you want to apply the same values in all of the cells, click in the field and type the value you want to</p>

apply, then click the = sign. If you want to increment the value you've entered for all of the cells by 0.1 mm, click the up or down arrows immediately to the right of the field.

suressmile® 7.2 New SS for 2013 41 Tasks 200 - Holland Tunnel (TH000001) - IDB 1 (Not ordered)

Guide Tools Display View Compare Tools Measure Quality Image

Maxilla Mandible Labial Lingual Right Buccal Left Buccal Upper Occlusal Lower Occlusal Planned Brackets Bracket Heights

Checklist Notes MACROS

Bracket Heights

To add Then

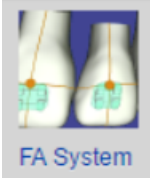
UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8
2.0	2.0	3.0	4.0	4.5	5.0	4.5	5.0	5.0	4.5	5.0	4.5	4.0	3.0	2.0	2.0
2.0	2.0	3.0	3.5	4.0	4.5	4.0	4.0	4.0	4.0	4.5	4.0	3.5	2.0	2.0	2.0
LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8

Interf

Edit Selection [] [] = [] []

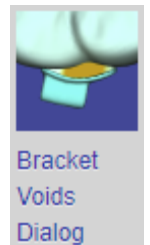
Multi-cell selection now possible.

Edit multiple cells at once.



Click to show or hide the Facial Axis (FA) tooth feature points. The system draws vertical and horizontal lines based on the axes to provide a reference for bracket placement.

The intersection of the lines is initially set to the FA Point of the tooth. The FA Point is the point on the facial axis that separates the gingival half of the clinical crown from the occlusal half. You can fine-tune the position of the lines as needed and the position of the bracket will adjust automatically if the bracket height set you select is based on FA points instead of bracket heights. This tool is included in the Guide Tools palette when you are working on an IDB Tray Simulation.



Click to open the Bracket Voids dialog. Brackets with bracket/tooth voids larger than 0.4 mm are highlighted on the tooth-cross in the Bracket voids tool. Review bracket/tooth voids by:

- clicking a highlighted tooth on the tooth-cross, or
- using the left-right arrows to move along the arch to the next bracket with a bracket/tooth void.



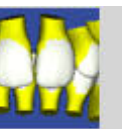

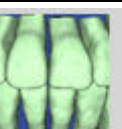
Clicking a tooth on the tooth-cross displays the corresponding bracket in the 3D main window from the occlusal view. You can review each bracket from other views (options are: occlusal, gingival, mesial, and distal) by clicking the arrows around the tooth in the dialog box.

Compare Palette

When a model, simulation, or setup is selected (regardless of order status), the Comparison palette menu icons become available. Use these icons to compare versions of setups to check your requested changes, or observe treatment progress by comparing any model taken throughout treatment to any other model.



When you click the Comparison icon, the reference model becomes the model selected from the list of Comparison Stages on the Displacements tab and the teeth are shaded in green.

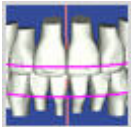
Tip: Use the Comparison brackets icon on the Brackets palette to view the brackets associated with the reference model.

 <p>Toggle</p>	<p>Toggle between the active model (white teeth) and the most recent previous model (blue teeth).</p>
 <p>Animation</p>	<p>Show the movements from the comparison model to the active model. A slider control allows you to adjust the speed of the animation.</p>
 <p>Scan/Template</p>	<p>Shows the areas of the teeth modeled from scan data as white. Areas that are modeled without scan data are highlighted in yellow.</p>
 <p>Gingiva at Malocclusion</p>	<p>Shows the patient's gingiva for the diagnostic model on the current active model. Note: This icon is appears only when the gingiva is already displayed.</p>
 <p>Comparison</p>	<p>Compares the active model (white teeth) with a comparison model (green teeth). Select the comparison model from the drop-down list on the Comparison Model dialog that appears when you click the Comparison menu icon.</p>

Tools Palette

Use the Tools palette icons to help you determine an ideal setup for the patient.

 <p>Facial Axis</p>	<h3>Show/Hide Horizontal and Vertical Axis</h3> <p>When you use the facial axis tool to change the rotation of the facial smile photograph or ceph, the adjustments are also shown in the side windows.</p> <h4>How does this feature work?</h4> <p>When you use the facial axis tool to change the rotation of the facial smile photograph, a confirmation box with an Apply button opens in the upper left portion of the main window. Clicking Apply saves the rotation by copying the rotation factor to the facial smile photograph or ceph. As a result, the changes are shown in the images in the side windows.</p> <p>Using the Facial Axis tool overwrites any previously saved rotation factors made to the photograph or ceph via the Keep View button.</p> <p>If you use the Keep View button to provide a new rotation factor for the facial smile photograph or ceph, then elemetrix retains that rotation factor in the image set just as in previous elemetrix releases.</p> <h4>When should I use this feature?</h4> <p>Use this feature anytime you are adjusting the rotation of the facial smile photograph or the ceph; for example when working on steps 2. and 3. of the therapeutic model Review Guide, or step 2. of the Setup Prescription Guide.</p> <p>Apply rotation using the facial axis tool</p> <p>The procedure for applying rotation using the facial axis tool usually occurs during model review.</p> <ol style="list-style-type: none"> 1. Proceed to Step 3 in the Model Review Guide. 2. Make an adjustment to the facial axis of the photograph in the main window. <p>Result: The change is made in the side window as well.</p> <p>Note: This change will overwrite any adjustments you made to the image rotation. However, adjustments you make in the side window will NOT update the main window.</p>
 <p>Occlusal Plane</p>	<h3>Show/Hide Occlusal Plane</h3> <p>The occlusal plane is a tool which helps to define the occlusal plane for the setup. It is set for the upper arch during the production of the model.</p> <ol style="list-style-type: none"> 1. From the View menu, click the Right Buccal or Left Buccal icon as to position the model. 2. From the View menu, click the Occlusal Plane icon. 3. To move the entire occlusal plane, click to select it. When selected, it displays in magenta and is surrounded by a bounding box with gray controls at the corners and edges. Click and drag to move the occlusal plane. <p>Note: This function is only available for treatment simulations and setups. It is not available for models produced from scans.</p>
	<h3>Display Slideline</h3> <p>Click to show the curve that is used when moving single teeth mesially or distally and in the archform simulation. The Slideline is a spline curve calculated from the vertical tooth axis, and projected to the labial surface (ideal bracket</p>



Slideline

positions). The shape of the slideline represents either the natural arch form of the patient, or a standard arch form selected from the Archform tab.

Note: This function is only available for treatment simulations and setups. It is not available for models produced from scans.



Group Navigation

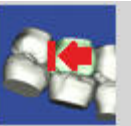
Distal Tooth Group Navigation

When one tooth is selected, click the Group Navigation icon to move all teeth distal to the selected tooth along the slideline when you move the selected tooth.

To use Distal Tooth Group Navigation:

1. Click a tooth to select it. The selected tooth displays shaded in green.
2. Select Distal Tooth group navigation in the Tooth Movement Controls drop-down list.
3. If needed, click the Distal Intersections or Mesial Intersections icon to prevent tooth intersections.
4. Use your mouse to position the selected tooth.

Note: This function is only available for treatment simulations and setups. It is not available for models produced from scans.



Distal Intersections

Prevent Distal or Mesial Tooth Intersections

Click the Distal Tooth Intersections or Mesial Tooth Intersections icon to prevent tooth intersections. When you select either of these icons the selected tooth can move into contact with the adjacent distal or mesial tooth but no further.

Note: This function is only available for treatment simulations and setups. It is not available for models produced from scans.



Mesial Intersections



Note/TAD

Set Tooth Pin Note or TAD Marker

Use the Notes/TAD icon to set a tooth note pin or a marker for Temporary Anchorage Devices (TADs). You can place the marker on bone or gingival surfaces on any model in any state. When you place it on gingiva or bone, it defaults to a 1.4. mm TAD.

IMPORTANT: You or your practice must set TAD markers yourselves. elemetrix Digital Lab technicians are not permitted to set the locations of TAD markers.

The Note/TAD marker feature is useful for:

- Providing a visual reminder to the Digital Lab technicians of the presence of a Note/TAD during setup.
- Offering a convenient place to quickly enter and retrieve information about a particular TAD when treating a patient.

NOTE: Whenever an actual TAD is present at the moment of taking a CBCT scan, the TAD will not be detected in the scan. Instead, a small hole in the gingival tissue or bone will appear.

To set a Note/TAD marker on gingiva or bone:

1. From the Tools menu palette, click and drag the Note/TAD icon to the spot on the gingiva or bone where you

want the TAD marker located. Release the mouse to place the TAD marker.

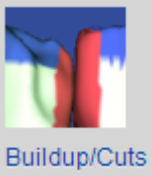
Result: A green Note/TAD marker with a label is attached to the model. To change the size of the TAD change it to a pin, add notes or remove the TAD, click the TAD label. After you make your changes, click the small x in the top right to close the box. Your changes are saved.

2. To move a Note/TAD after you place it, click on the marker in the main window until it changes from green to pink, and then drag it to a new location. Click anywhere in the main window off of the TAD so that it turns green again in its new position.



Show/Hide Surgical Segments

Click to turn on/off the surgical segments.



Colorize Buildups / Cuts

Use to turn on color shading for changed teeth. Blue shading indicates added tooth surface. Red indicates anatomy removed.

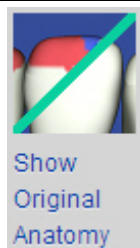
To turn on colorization to indicate restorative changes:

1. Open or start a setup plan or a Treatment Simulation.
Result: The Treatment Planning workspace opens with the 3D model displayed in the main window.
2. Select either the Buildup/IPR tab or the IPR Tracking tab.

Note: The Colorize Buildups/Cuts icon is inactive until you select the Buildup / IPR or IPR Tracking tab.

3. Show one or both arches, and make your restorative changes or plans as needed.
4. As you work, click the Buildup / Cuts icon to show or hide shading on the areas you change.

Important: After you finish your restorative work and before you save the case, make sure you click the Colorize Buildups/Cuts icon so that the restorations are colorized. The color shading serves as an important visual reminder to your practice and to the Digital Lab technicians that the restoration features are for visualization purposes only. Restorative modeling in elemetrix is primarily for space management purposes. It may not reflect the final tooth shape as determined by the restorative dentist.



Show Original Anatomy

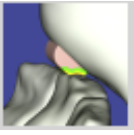
Use to hide restorative changes and view the original tooth anatomy.



Assign Attachments

Click to open the attachments panel.

Check the Intersections of Attachments



Click to turn on/off collision detection:

- tooth/attachment
- attachment/attachment
- attachment/tray
- includes inter-arch collisions

Measure Palette

Use the **Measure** palette tools to precisely gauge the parameters of your setup.



Clipping
Plane

Clipping Plane Tool

The Clipping Plane is a powerful diagnostic tool for examining cross-sections of a 3D model. The clipping plane opens automatically during certain review steps. You can also open it whenever you want by clicking the Clipping Plane icon on the Measure menu palette.

When the clipping plane is activated, the Clipping Plane Navigation tool opens and "floats" over your workspace. You can drag the tool anywhere on your workspace that you prefer as you work.

The Clipping Plane Navigation tool has several controls that allow you to manipulate the clipping plane and the 3D model to get exactly the cross section you need:

- A **drop-down menu** with a number of preset orientations related to the screen or the dentition, plus an Advanced mode for arbitrary control over the orientation.
- Two controls for position – **tooth cross** and **slider**. Tooth cross is available when the clipping plane is oriented to move along the arch or through a particular tooth (buccal/lingual). The slider is always available. The scale on the slider changes based on the orientation. Sometimes it is in millimeters, and sometimes it indicates teeth.
- A **Flip** check box allows you to flip the side of the clipping plane to see the opposite side of your model.
- A **Synchronize** check box, available in certain orientations, locks the clipping plane to the screen and allows you to move the model through the selected orientation.

Using the Clipping Plane

1. Click to open the Clipping Plane tool.

Note: Several steps in the review guides automatically open the Clipping Plane tool. If the Clipping Plane was started by a guide, you can skip the next optional step as the appropriate orientation is already selected.

2. (Optional) Select an appropriate model orientation from the View menu on the left side of the Clipping Plane Navigation tool.

Note: See the help topic [Clipping Plane Orientations](#) for descriptions of the clipping plane orientations and guidance on their usage.

3. Use the slider to move the clipping plane in a direction determined by the selected orientation. In some orientations, you may also use the tooth cross to move the clipping plane to the selected tooth.

Clipping Plane Tips

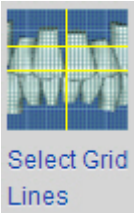
- Change the selected orientation at any time if you want to move the clipping plane in a different direction.
- Click the Flip check box to show the other side of the model (and hide the side being shown).
- Click the Synchronize check box, available in the Screen In/Out, Jaw - Mesial/Distal, and Jaw - Buccal/Lingual orientations, to lock the clipping plane with the screen and then move the model through the clipping plane.

Measurement Grid in Front/Behind

Click these icons to display the measurement grid in front of or behind the 3D model. The size of the grid remains



constant as you zoom in or out; however as you zoom in, more horizontal and vertical lines are added.



Select Grid Lines

To highlight grid lines

1. Turn on the grid by clicking the **Front Grid** (Measurement Grid in Front) icon or **Rear Grid** (Measurement Grid Behind) icon.
2. Click the **Select Grid Lines** (Grid Line Selection) icon to turn on cross hairs.
3. Point to a line or intersection you want to highlight and pause until the cross hairs turn red, then click. The line or intersecting lines turn yellow.
4. To hide highlighted lines, either:
 - Click the **Select Grid Lines** icon or
 - Hide the grid. The highlights are hidden, but are saved for future viewing.

To remove grid highlighting:

1. Point to a line or intersection that is highlighted. When you have positioned your pointer and no longer see the red cross hairs, click. The line turns red. the highlighting is removed as soon and you move you mouse away from the highlighted line.
2. When you are finished, and you want to turn off this feature, either:
 - Click the **Select Grid Lines** icon or
 - Click the **Front Grid** or **Rear Grid** icon to hide the grid.





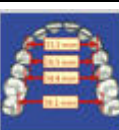



NOTE: Grid line highlighting is NOT retained when you switch models or close the patient record.



Graph Paper

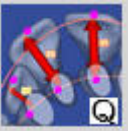

Click to display or hide graph paper against the 3D model. Click the graph paper and use the bounding box controls to adjust its orientation with the model.

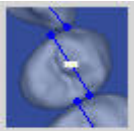
Note: If you reposition the graph paper as needed for a particular view, and then you hide the graph paper to make other adjustments, when you show the graph paper again for that view, the graph paper retains the position you set. Similarly, if you change views, and then return to the view where you repositioned the graph paper, the graph paper remains in the same position you set.

 <p>A/P Graph</p>	<p>Graph Paper from Anterior/Posterior</p> <p>Click to orient the graph paper vertically midway between the anterior and posterior teeth.</p>
 <p>L/R Graph</p>	<p>Graph Paper from Left/Right</p> <p>Click to orient the graph paper vertically between the upper and lower anterior centrals.</p>
 <p>U/L Graph</p>	<p>Graph Paper from Top/Bottom</p> <p>Click to orient the graph paper horizontally between the upper and lower arches.</p>
 <p>Arch Depth</p>	<p>Arch Depth</p> <p>Click to measure the arch depth from an average of the ideal bracket positions on both central incisors to the most posterior vertex position of the first molar models. (This measurement is not equivalent to intermolar width.)</p> <p>Note: Arch Depth lines cannot be moved.</p>
 <p>Arch Width</p>	<p>Arch Width</p> <p>Click to measure from lingual cusp to lingual cusp for the posterior teeth and labial cusp to labial cusp for the canines.</p>
 <p>Add Arrow</p>  <p>Remove Arrow</p>	<p>Add/Remove Measurement Arrow</p> <p>Click to use or remove the measurement arrow tool.</p> <p>To use this tool:</p> <ol style="list-style-type: none"> 1. Click the Add Arrow icon. <p>Result: A magenta arrow symbol appears in the center of the arch. </p> <ol style="list-style-type: none"> 2. Move your mouse over the beginning location on a tooth where you want to begin measuring from and click. 3. Move your mouse to the measurement end point and click. <p>Result: A two-headed arrow appears with the distance between the two points indicated..</p>

Quality Palette

Use the Quality palette icons to evaluate a treatment simulation or setup using several grading criteria.

 <p>Quality</p>	<h3>Quality Scores</h3> <ol style="list-style-type: none"> Click to open the quality scoring tool and perform a quality review. The Quality tab is displayed by default. Use the Discrepancy Index tab to measure the difficulty of a case based on the diagnostic model's tooth feature points. Select the feature points you want to evaluate: <table border="1"> <thead> <tr> <th>Placed by</th> <th>Purpose</th> <th>Characteristics</th> </tr> </thead> <tbody> <tr> <td>System</td> <td>Fixed points for consistent grading</td> <td>Points are created with model and cannot be moved</td> </tr> <tr> <td>Digital Lab</td> <td>Adjust system points to best reflect actual tooth anatomy</td> <td>Points are editable by Digital Lab only</td> </tr> <tr> <td>Practice</td> <td>Set points to aid simulations and grade based on doctor's clinical judgment</td> <td>Points are editable by Practice only</td> </tr> </tbody> </table> Choose a grading system from the drop-down list. The white teeth in the tooth chart shows which teeth are included in the grading criteria. Teeth not included are gray. The entire tooth may be considered in the criteria (the whole tooth will be white) or just the relationship between two teeth (each half tooth will be white). To reorient the 3D view to the area to be examined, click on a tooth in the tooth chart. The tooth turns red and the 3D view is reoriented so that the select tooth is in the center of the screen. Click the Labels check box to turn on/off the measurement labels in the 3D view Click the Ref. Arch check box to turn on/off the reference arch, which appears in the 3D viewer as a thin red line. To exclude the distal half of one or more upper molars in the Occlusal Contacts [Standard] grading system, click a tooth you want to exclude, then click the Exclude check box. The excluded tooth turns dark blue initially and remains shaded light blue when another tooth is selected. <p>Note: The Occlusal Contacts [Standard] is the only grading system that allows you to exclude teeth.</p> When you are finished reviewing the quality of a model, click the X in the upper-right corner to close the quality scoring tool. 	Placed by	Purpose	Characteristics	System	Fixed points for consistent grading	Points are created with model and cannot be moved	Digital Lab	Adjust system points to best reflect actual tooth anatomy	Points are editable by Digital Lab only	Practice	Set points to aid simulations and grade based on doctor's clinical judgment	Points are editable by Practice only
Placed by	Purpose	Characteristics											
System	Fixed points for consistent grading	Points are created with model and cannot be moved											
Digital Lab	Adjust system points to best reflect actual tooth anatomy	Points are editable by Digital Lab only											
Practice	Set points to aid simulations and grade based on doctor's clinical judgment	Points are editable by Practice only											
 <p>Contact Points</p>	<h3>Contact Points</h3> <p>Click to display the contact points marked in dark blue. To change the position of a contact point click on it. It changes from blue to magenta. Drag it to a new position and then release your mouse button. Your changes are saved.</p> <p>Note: Before moving markers, keep in mind that tooth features are used in the quality and measurement calculations.</p>												
	<h3>Tooth Widths</h3>												



Tooth Widths

Click to display the Tooth Width calculations on the model along with the contact points.

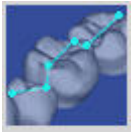
Note: The calculated tooth width is based on your feature points. Ensure the features points are accurate before using the tooth width measurements.



Cusp Tips

Cusp Tips

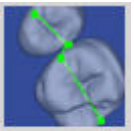
Click to display the cusp tips marked in yellow. Click on a cusp tip marker to adjust as needed. The marker changes from yellow to magenta. Drag it to a new position and then release your mouse button. Your changes are saved.



Marginal Ridges

Marginal Ridges

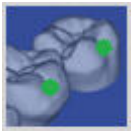
Click to display the marginal ridge contact points marked in light blue. Click on a point to adjust as needed. The marker changes from light blue to magenta. Drag it to a new position and then release your mouse button. Your changes are saved.



Central Grooves

Central Grooves (upper arch only)

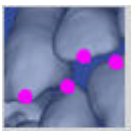
Click to display the central grooves marked in light green. Click on a point to adjust as needed. The point changes from light green to magenta. Drag it to a new position and then release your mouse button. Your changes are saved.



Buccal Grooves

Buccal Grooves (lower arch only)

Click to display the buccal grooves marked in dark green. Click on a point to adjust as needed. The point changes from dark green to magenta. Drag it to a new position and then release your mouse button. Your changes are saved.



Incisal Edges

Center of Incisal Edges

Click to display the incisal edges marked in magenta. Click on a point to adjust as needed. Drag it to a new position and then release your mouse button. Your changes are saved.



Tooth Axis

Vertical Tooth Axis

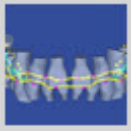
Click to display the long axis of the crown indicated by red posts extending from the root and buccal aspects. Click and drag the markers at each end of a post, to adjust a post as needed.

Hide Tooth Features

Click to hide all displayed tooth features. click again re-display all the features that were hidden.



Hide
Features



Manage
Features

Manage Tooth Feature Sets

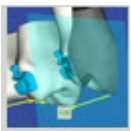
To manage the varying uses for feature points over the life cycle of a case, elemetrix keeps track of three sets of feature points for each model, setup and treatment simulation. The grade calculations are based on the feature point set selected with the Quality Tool. See Quality Scores above.

Note: The Manage Tooth Features icon is only available for models still being modified. Approved models are in a read only state and the tooth feature point set cannot be changed.

To change tooth feature sets:

1. Open a model in the treatment planning workspace, so that it is displayed in the 3D viewer.
2. From the Quality menu, click the Manage Tooth Feature Sets icon to open the Manage Feature Points dialog box.
3. If you prefer the features in the System Set, click **Reset to System Set**. The Practice Set is updated to match the System Set.
or
If you have made changes but now prefer the Digital Lab set to your own choices, click **Reset to Digital Lab Set**. The Practice Set is updated to match the Digital Lab Set, which is always your starting point when a model is delivered to your practice.
4. Close the dialog box and edit the tooth features as appropriate, using the tools described in this topic.
5. When you are finished making changes. Click the Manage Tooth Feature Sets icon to reopen the Manage Feature Points dialog box.
6. Click **Lock** to store your new feature point positions and prevent accidental changes and then close the dialog box.

Note: The Practice feature points are unlocked with the initial delivery of a model or a setup, but are locked by default after a modification is submitted.



Clipping
Plane

Show/Hide Clipping Plane

1. Click to open the Clipping Plane Navigation tool.
Note: Several guide steps automatically open the Clipping Plane for you.
2. (Optional) Select an appropriate model orientation from the View menu on the left side of the Clipping Plane Navigation tool. See the help topic *Clipping Plane Orientations* for descriptions of the clipping plane orientations and guidance on their usage.
Note: If the Clipping Plane was started by a guide, you can skip this step as the appropriate orientation is already selected.
3. Use the slider to move the clipping plane in a direction determined by the selected orientation. In some orientations, you may also use the tooth cross to move the clipping plane to the selected

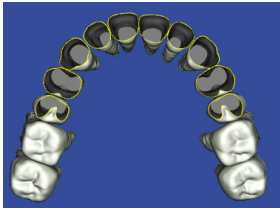
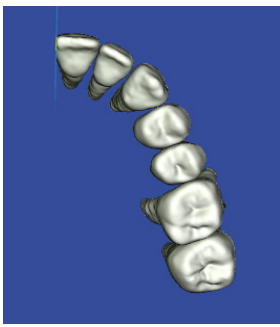
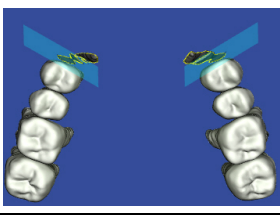

tooth.

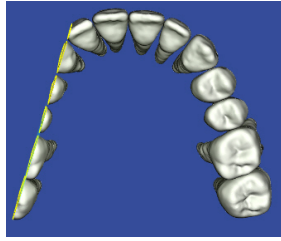
Clipping Plane Tips

- Change the selected orientation at any time if you want move the clipping plane in a different direction.
- Click the Flip check box to show the other side of the model (and hide the side being shown).
- Click the Synchronize check box, available in the Screen In/Out, Jaw - Mesial/Distal, and Jaw - Buccal/Lingual orientations, to lock the clipping plane with the screen and then move the model through the clipping plane.

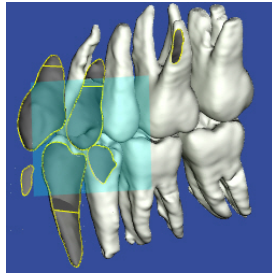
Clipping Plane Orientations

Use this table as a guide when selecting a clipping plane orientation.

Menu Choices	Orientation	Movement Rules	Primary Purpose
Screen – In/Out		Moves forward/backward from the perspective of the window regardless of model position	Easily move plane through model after positioning it
Jaw – Mesial/Distal		Plane moves mesial/distal along the archform	Dissect occlusion
Jaw – Mesial/Distal (Dual)		Two planes move along archform in opposite directions	Compare sides
Jaw – Occlusal/Gingival		Plane moves in occlusal or gingival direction	Examine cusps/contacts
Jaw – Buccal/Lingual		Plane moves in buccal or lingual direction	Examine posterior occlusion



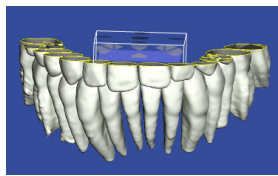
Jaw – Transverse



Plane moves transversely

Dissect contacts

Advanced

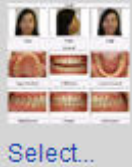


Displays bounding box

Freely navigate clipping plane (press the SHIFT key for Camera Navigation)

Image Palette

Use the Image palette icons to edit 2D images in the main window of the treatment planning workspace.



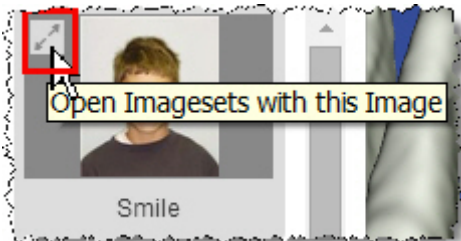
Select Images


Click to access a patient's photos or x-rays. The Image Selection window opens showing a collage of photographs from the most image set that is currently displayed. Use this icon to change an image in the main window or in one of the side windows in the 3D viewer as follows:

1. Click anywhere on the image that you want to change in the 3D main viewer or side windows.
Result: A yellow border appears around the image
2. Click the Image menu to expand the menu ribbon.
3. Click the Select Images icon to open the Image Selection window.
4. Click the image you want to use to replace the image in the 3D main viewer.
Result: The image is replaced and the Image Selection window closes.

To open an image on the Image Selection window in a separate window:

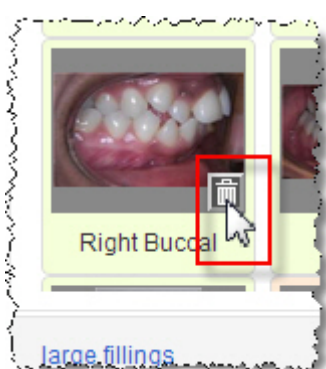
1. Click the Image menu
2. Click the **Select Images** icon.
3. The **Image Selection** window opens. Click to highlight the image you want to open in a separate window, and then click the small icon in the top left corner.



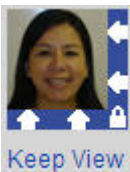
4. The image opens in a new window about $\frac{1}{4}$ the size of your computer screen. The camera navigation controls on top of the image allow you to move, rotate, spin or zoom the image as needed. Click and drag a corner of the window to make it larger or smaller. Click the small black arrowhead  in the top right of the window to display the image menu icons.
5. To keep the image or images displayed as you work on the case, click and drag the image to your secondary monitor.
6. Repeat steps 3 and 4 to display additional images.

To delete an image from the Image Selection window:

Click the small trash can icon in the bottom right corner of the image.

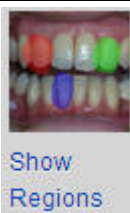


IMPORTANT: If you are using elemetrix with a single monitor only, when you click off the image and back onto the main elemetrix page, the main elemetrix page comes to the forefront and the image is hidden behind it. To retrieve the image, press **Alt+Tab** on your computer keyboard repeatedly until the image you want appears on your screen.



Keep View

Click to save your changes to an image.



Show Regions

Click to show any regions added with the region markup tool.

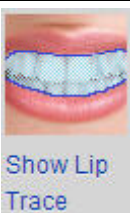


Regions Tool

Click to open the regions tool to add, modify or delete a region to an image.

The region tool allows you to mark up to three areas of concern on a photograph or x-rays with a color shaded area or region. You can then refer to the area in your notes to the Digital Lab so that the technician knows exactly the area you want to refer to regarding a particular matter.

[See Also](#)



Show Lip Trace

Click to turn on/off a lip trace cutout.

[See Also](#)

Lip Trace Tools

Click to open/close the lip trace tools. The lip trace tools allows you to cut out the portion of a photograph corresponding to the area inside the lips. The 3D model is then completely visible when overlaid with the facial photograph. This tool is available in the side windows and on the Photos page. Use this feature to superimpose the



Lip Trace

patient photo over the model to see how much intrusion or extrusion is needed to design the smile line.

[See Also](#)



Grid

Grid

Click any image in the 3D workspace to display the grid in front of the image. The size of the grid remains constant as you zoom in or out; however as you zoom in, more horizontal and vertical lines are added.



Tools...

Image Tools Menu

Click to open the Image Tools controls to adjust image brightness and contrast.

1. Click anywhere on the image you want to adjust.
2. To decrease/increase the brightness of the image, drag the slider to the right or enter a number between -50 and 50.
3. To decrease/increase the contrast of the image, drag the slider to the right or enter a number between -50 and 50.
4. Click Restore View to return the image to its orientation the last time you selected the Keep View option.
5. Click Reset View to return the image to its original settings.



3D/2D

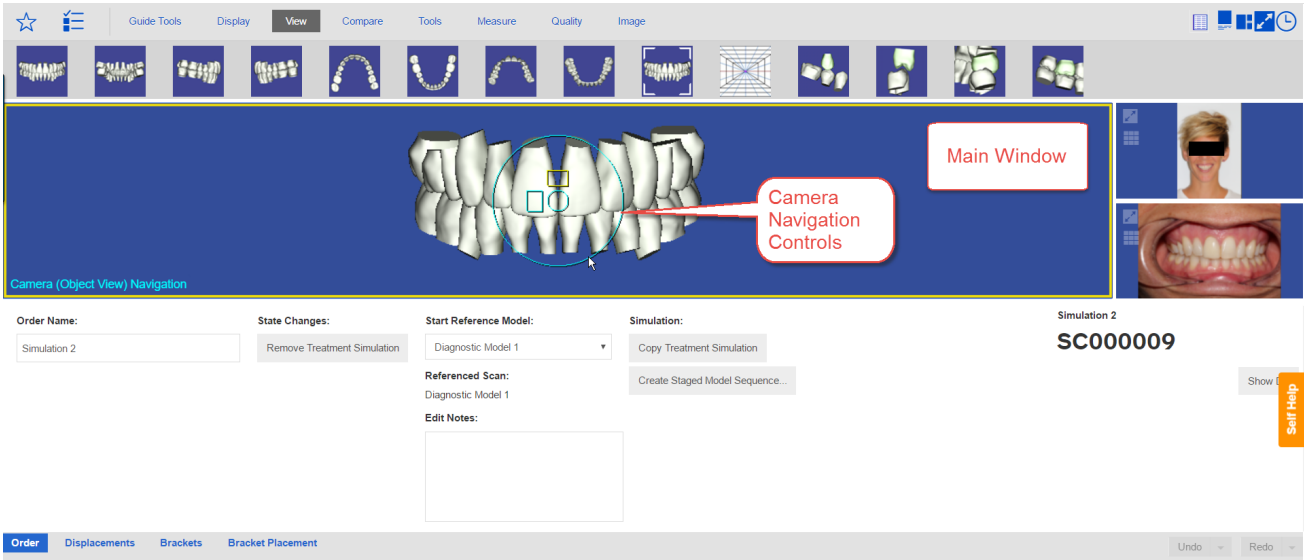
3D/2D Switch

Click to toggle between the 3D model and the 2D image.

Note: This icon is unavailable if the 3D model and the 2D image have not been linked by the Digital Lab.

Main Window

The large window with a center circle and a smaller circle and square inside is your main window. The circle with the smaller circle and square inside it are your camera navigation controls. Click in on and around the circle and then drag to get an idea of how to use these controls to manipulate a 3D model. See the *Viewing the Model* for detailed instructions on how to use these controls.



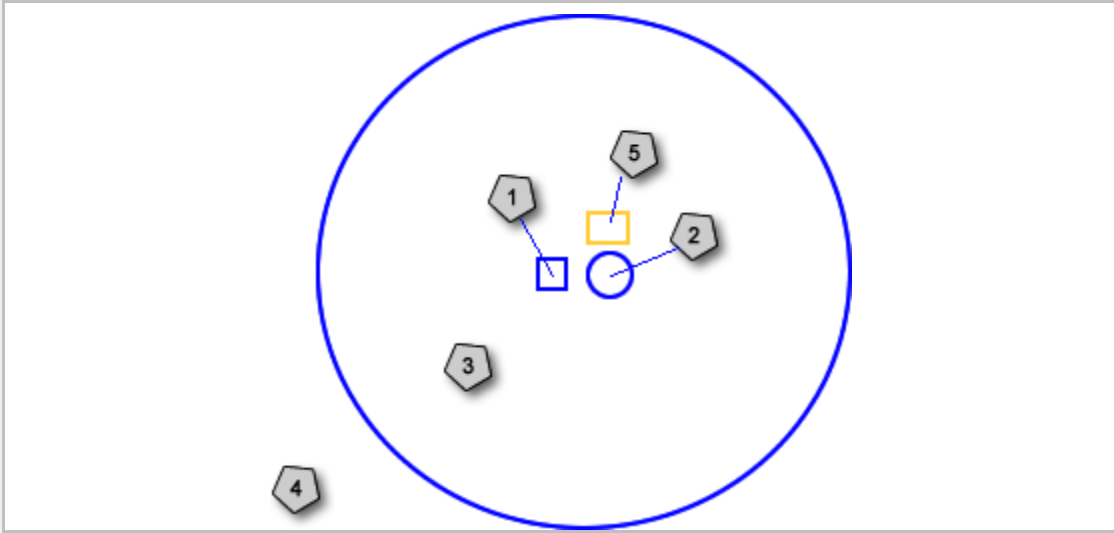
Viewing the Model

When you first come to the main window in the treatment planning workspace, the text in the lower-left corner shows *Camera (Patient View) Navigation*. When you point to the image, the camera-navigation controls appear as a large blue circle with a small circle and square in the center of the image.

The idea behind the camera navigation controls is that when using them, you should feel like you are looking through the lens of a camera than move in any direction horizontally and vertically in space 360 degrees around the model, so that you can look down on the model from above, up at the model from below, or straight at the model from any angle.

To Use Camera Navigation:

- To use camera navigation, point and click anywhere inside the large circle.
Result: The camera navigation controls display. The text in the lower-left corner changes to *Camera (Object View) Navigation*.
- Point to a control, then press and drag to change the view of the model according to the following illustration.



1	To zoom out from the model/image, click inside the square and drag the mouse up.
	To zoom into the model/image, click inside the square and drag the mouse down.
2	To move the model up/down or right/left, click inside the small circle, and drag the mouse in any direction.
3	To rotate a 3D model in three dimensions from a fixed central axis in the center of the viewing window, click inside the large circle, and drag the mouse in any direction. Imagine that the circle represents a sphere or a globe that you can spin in any direction.
4	To rotate an image/model clockwise or counter-clockwise, click outside the large circle and drag the mouse up/down or right/left.
	The shading tool allows you to apply a virtual single point of light source on the model to provide

5

shading and a better sense of dimensionality when viewing the model.

Camera Navigation Modes

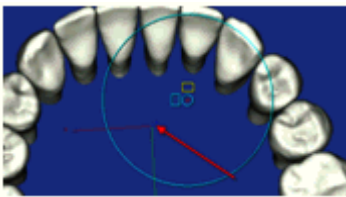
elemetrix has two camera navigation modes:

- Camera (Patient View) Navigation
- Camera (Object View) Navigation

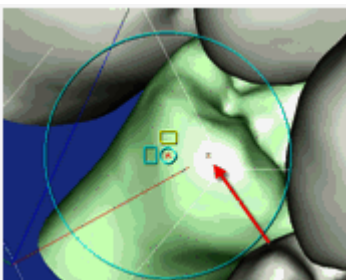
The Camera Navigation indicator in the lower left hand corner of the screen shows which mode is operational.



In Patient View mode, the center of rotation is the center of the model. Patient View is the default camera navigation mode for all views. It is best for viewing the entire model at a glance. To return to the Patient View mode from the Object View mode, click any of the standard view icons under the **View** menu.



In Object View mode, the center of rotation is a point on the surface of the object at the center of the screen. Object view mode is automatically selected when you zoom in. Object view is appropriate for looking at the details of an object without losing orientation when moving the model.



Note: When you move a 3D object in the main window, the camera navigation controls are hidden. The controls reappear as soon as you release your mouse button.

Performing Manual Tooth Movements

You have the ability to make manual adjustments to individual teeth or multiple teeth at one time. If you are viewing a 3D model in a side window, if you click at tooth, the tooth will be highlighted on the tooth model in the main window as well. There are four options for moving a tooth:

Option 1

Click once on a tooth model. It will turn green and a bounding box will appear around it, with arrows around the bounding box. Click on the arrow pointing in the direction you would like to move the tooth. Notice that the movements you make will be displayed as values on the Displacements tab table.



The controls appear as arrows that are color and location coded for the type of movement as follows:

- Mesial/Distal— **Red** arrows in the center of the bounding box
- Buccal/Lingual— **Green** arrows in the center of the bounding box
- Occlusal/Gingival— **Blue** arrows in the center of the bounding box
- Torque Facial/Lingual— **Red** arrows at the outside edge of the bounding box
- Angulation Mesial/Distal— **Green** arrows at the outside edge of the bounding box
- Rotation Mesial/Distal— **Blue** arrows at the outside edge of the bounding box

All outside handles on the bounding box are displayed in front of 3D objects. As you move the tooth, note that the bounding box disappears to avoid obstructing your view.

Note: There are two options for displaying the bounding box controls. The default option displays the controls when you click a tooth. Press the Shift key to hide the controls. You can change this option so that the bounding box controls are only displayed when you shift-click the tooth. To change the current option, click the settings icon and select the **Preferences** menu. On the Preferences page, click the **Appearance** tab and then change the **Object Navigation with SHIFT** option according to your preference by selecting either *Yes* or *No* from the drop-down list.

Option 2

Go to the Displacements tab and click in a cell for the tooth and movement you want to display. Use the arrows at

the bottom right corner to increase/decrease the values.

Option 3

Go to the Displacements tab and click in the cell for the tooth movement you want to display. Use the controls at the bottom right (the arrows) in the box to increase/decrease the value of a single tooth or range of teeth, then click the = button. Use the + or – buttons to increase/decrease the values for the selected teeth by the amount shown in the box. You can also manually type a value into a cell, and then adjust the value as necessary using the controls previously described.

Option 4

Go to the Displacements tab and click in the box for the tooth and movement you would like to see. Enter a value into the box press the Enter key on your keyboard, or click anywhere on the blue workspace to apply the value you entered.

To move multiple teeth at once:

Go to the Displacements tab and click in the box for the tooth and movement you want displayed. Hold the shift key then click on the last tooth to highlight the teeth to be moved. For example, if you want to extrude UR2-UL2, click in the UR2 Occlusal/Gingival box, hold your shift key, and then click in the Occlusal/Gingival box for the UL2. Enter the amount of movement you want in the box at the bottom right, then click the = button.

Tip: When moving teeth, spaces and intersections will be created and shown in the Mesial Gap/IPR row. To clear these spaces and intersections all at once, click the Clear All Spacings/Inters. button at the bottom of the screen. In elemetrix, spaces are closed mesially and intersections are removed distally.

Keyboard Shortcuts

Use the following keyboard shortcuts to move the 3D models and 2D images in the treatment planning workspace without having to rely on your mouse. The arrow keys on your keyboard control the direction of rotation of the model. You can also select a window containing a 2D image and use the arrow keys to move it.

To Toggle to/from Camera (Object View) Navigation to Camera (Patient View) Navigation

- Press the **Control + period keys** to toggle from **Camera (Object View) Navigation** to **Camera (Patient View) Navigation**.
- Press the **period key** to toggle from **Camera (Patient View) Navigation** to **Camera (Object View) Navigation**.

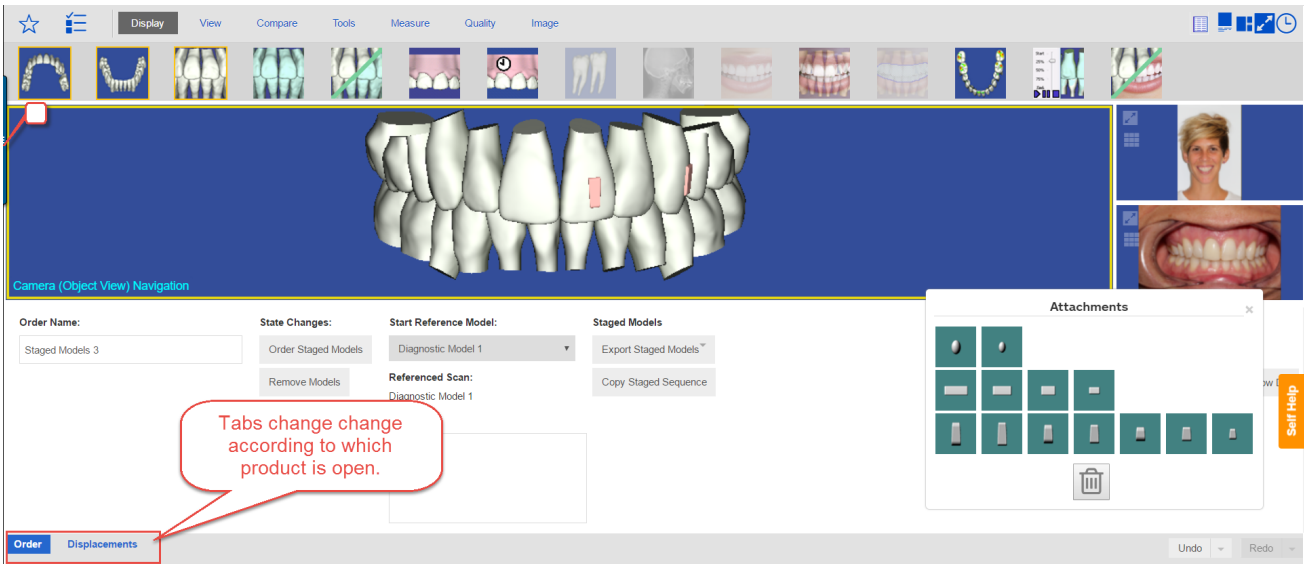
When you choose **Camera (Patient View) Navigation**, the model rotates around a center point. When you choose **Camera (Object View) Navigation**, select an object (such as a tooth) and it becomes the center point.

Keyboard Shortcuts

Keyboard Arrow Key	3D Function	2D Function
UP	Rotate model upward	Translate image upward
DOWN	Rotate model downward	Translate image downward
LEFT	Rotate model towards left	Translate image towards left
RIGHT	Rotate model towards right	Translate image towards right
Ctrl+UP	Translate model upward	Translate image upward
Ctrl+DOWN	Translate model downward	Translate image downward
Ctrl +LEFT	Translate model towards left	Translate image towards left
Ctrl + RIGHT	Translate model towards right	Translate image towards right
Ctrl +. (period key)	Switch from Camera (Object View) Navigation to Camera (Patient View) Navigation	
Period key only	Switch from Camera (Patient View) Navigation to Camera (Object View) Navigation .	

Treatment Planning Tabs

The bottom portion of the workspace contains a series of tabs. Each of these tabs contains detailed controls and functions for further manipulating the 3D model as you plan and prescribe patient treatment. The tabs shown will differ according to the product displayed in the main window.



The following table indicates which tabs appear on each product page.

Tab/Model	Diagnostic	Therapeutic	Staged Models	Setup	Treatment Simulation	IDB Tray Simulation	Final
Order	X	X	X	X	X		X
Displacements	X	X	X	X	X		X
Global Registration	X	X					X
Measurements	X	X					X
Bracket Placement					X	X	
Brackets					X	X	

Order Tab

Use the Order tab to submit or remove orders. See the following table for more information:

Field	Information/Action Required															
Order Name	Click in box and type over default name with a name for the product. For example you may want to include the patient's name or today's date.															
State Changes:	<p>Click one of the buttons to change the state, or status, for the order. The buttons displayed depend on the current state of the product as shown in following table:</p> <table border="1"> <thead> <tr> <th>If the Current State is</th> <th>And you click</th> <th>...this is the Result</th> </tr> </thead> <tbody> <tr> <td>To Review</td> <td>Approve</td> <td>State changes to Approved. You are now able to proceed in the treatment plan with the next step, such as a setup or wire order.</td> </tr> <tr> <td>Not ordered</td> <td>Submit</td> <td>State changes to Ordered. You cannot modify the product until it is returned from Digital Lab in a To Review state.</td> </tr> <tr> <td>Not ordered</td> <td>Remove Order</td> <td>Order is deleted.</td> </tr> <tr> <td>Not ordered</td> <td>Revert Modifications</td> <td>Removes all modifications made to product in <i>Review</i> state.</td> </tr> </tbody> </table>	If the Current State is	And you click	...this is the Result	To Review	Approve	State changes to Approved. You are now able to proceed in the treatment plan with the next step, such as a setup or wire order.	Not ordered	Submit	State changes to Ordered. You cannot modify the product until it is returned from Digital Lab in a To Review state.	Not ordered	Remove Order	Order is deleted.	Not ordered	Revert Modifications	Removes all modifications made to product in <i>Review</i> state.
If the Current State is	And you click	...this is the Result														
To Review	Approve	State changes to Approved. You are now able to proceed in the treatment plan with the next step, such as a setup or wire order.														
Not ordered	Submit	State changes to Ordered. You cannot modify the product until it is returned from Digital Lab in a To Review state.														
Not ordered	Remove Order	Order is deleted.														
Not ordered	Revert Modifications	Removes all modifications made to product in <i>Review</i> state.														
Attach Simulation (setups only)	Choose embedded simulation to reference the simulation shown in the main window, or choose a previously created simulation as the reference for the setup.															
Start reference model	Chose from the drop-down list the model from which the product is based. For example, if the therapeutic model references an earlier diagnostic model, choose that diagnostic model as the reference model. Another example: if the setup is based on the therapeutic model, choose the therapeutic model as the reference model. Another example: If the 2nd setup (plan 2) is derived from the first setup (plan 1), choose plan 1 as the reference model.															
Referenced Scan	Indicates which scan was used for the reference model.															
Simulation:	<ul style="list-style-type: none"> Click Copy Treatment Simulation to copy and rename the currently displayed simulation. This allows you to keep the current simulation, and use a copy as a basis for a new simulation. Click Remove Treatment Simulation to permanently delete the currently displayed simulation. Click Create Staged Model Sequence to create a sequence of staged models with the current simulation as the target and the referenced scan as the reference model. 															
IDB Simulation	<ul style="list-style-type: none"> Click Export Models with Brackets to export 3D digital data files of the trays and bracket seats for printing at your local lab. 															

- Click **Copy** to copy the IDB tray, for example to segment the tray differently.

Edit Notes

Enter any specific notes here about the order that you wish to communicate to the Digital Lab technician. The Submit button becomes available after you enter notes, or if you make any other modifications.

[Product order information and functions](#)

Just beneath the Undo and Redo buttons on the right side of the order tab for all products, contains the information and functions as illustrated below.

	1	Patient ID
	2	Product name
	3	Click this button to open the error log.

[Show DE](#)

Click the **Show DE** button on the Order tab to view the dental exam associated with the model displayed.

Displacements Tab

The Displacements tab displays a table showing each tooth's movement in all dimensions in degrees or millimeters relative to its original position in the most recently captured model of tooth positions. The bottom table row, separated from the others by two heavy horizontal lines, shows the amount of intersection or gap between teeth. As you enter or change values in any of the table cells, the model teeth move correspondingly in the treatment planning main window directly above the table. Similarly, if you move the teeth using your cursor in the main window by clicking on a tooth and using its bounding box control, the values in the corresponding cells in the table are updated.

Note: The Palmer Notation system is used to identify teeth: teeth in each quadrant are numbered 1-8 (central incisor to third molar).

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Change displacement value in a single cell

To enter a displacement value, follow these steps:

1. Click **Upper** or **Lower** to select the arch you wish to view or adjust.

TIP: You do not have to pinpoint the small button with your cursor. Just click **Upper** or **Lower** to make your selection.

2. Locate the cell of the table that intersects the tooth number with the type of movement needed.
3. Double click in the cell to highlight the value, and then type a new value in an increment of .1mm or 1 degree. Enter a negative sign in front of the number if appropriate.

OR

Click in the cell and use the up and down arrows to change the value.

Animation Player


Use the animation player to view the movements in the 3D model. It is available on the Displacements tab.

The animation player runs an animation of the entire treatment plan, showing tooth movement from the initial state to the final tooth position.

Controls:

> Click forward stage by stage

< Click backward stage by stage

 Run animation through all stages

◀ Pause the animation at a particular stage

Do-it-yourself Aligner Staging Users

Use the Update Previous Stages button to recalculate previous stages after you update a value on the Displacements tab in the Staged Models workspace for Do-it-yourself Aligner Staging.

Clicking the Update Previous Stages button and the Update Next Stages button opens the Aligner Constraints dialog so you can set new aligner constraints if desired.

Stage number tabs with movements that exceed your aligner constraints are highlighted in yellow.

Note: Using these buttons does NOT affect your target setup. Movements in all stages are adjusted so that your target setup is not affected.

Warning! Clicking the Update Previous Stages button or the Update Next Stages button will remove all attachments from all stages.

Video: Modifying a Staged Sequence

IFrame [https://players.brightcove.net/645276483001/default_default/index.html?videoId=5373849270001]

Comparison Stage:

To compare tooth displacements at different stages of the treatment plans, follow these steps:

1. In the **Comparison Stage** drop-down menu, select another model, such as the previous simulation.
2. Click the **Compare** menu to open the palette and click the Comparison icon.

Note: If you are comparing to the reference model, which is typically the therapeutic model, the comparison teeth are blue. If you are comparing to any other model, the comparison teeth are green. If you choose the same model in the Comparison Mode list as was already selected in the list of products, you will not see a comparison in the treatment planning workspace main window.

Naming Conventions for Setups

Each generation of a setup model is called a stage. Each stage corresponds to a version of a setup submitted to elemetrix or saved by the Digital Lab. A naming convention is applied to each stage.

For example, the name **Plan 2 [1.2 Digital Lab] [Small OverJet]** indicates that the doctor has submitted a setup called Plan 2", and the Digital Lab has returned the model for review with a short description. The name Plan 1 [2.2 Digital Lab] [] indicates that the doctor has submitted a Setup modification and received a modified Setup from the Digital Lab.

The key below explains the naming convention for this example in greater detail.

Part of the Setup Name	Meaning
Plan Name Plan 2 [1.2 Digital Lab] [Small OverJet]	The Setup name begins with the name of the setup prescription. Plans are named "Plan #" by default, where # is incremented for each additional plan created following "Plan 1". The doctor may also rename a plan.
Practice Stage Counter Plan 2 [1.2 Digital Lab] [Small OverJet]	The Practice Stage Counter is the model number of the setup started by the doctor when the setup is submitted to OraMetrix. The first value will be "1." Each time the doctor modifies the

	model, this number will be incremented to 2, 3, etc.
Digital Lab Stage Counter Plan 2 [1.2 Digital Lab] [Small OverJet]	The Digital Lab Stage Counter is the revision number of the Setup that corresponds to changes made by the Digital Lab per the doctor's instructions. The Digital Lab may save multiple revisions to depict various scenarios. The first value will be "1." Each time the Digital Lab saves a stage, this number will be incremented to 2, 3, etc.
Creator of Stage Plan 2 [1.2 Digital Lab] [Small OverJet]	One of three values are possible for the Creator of Stage: Practice - the stage was created at the practice (in other words, by the doctor) Digital Lab - the stage was inserted automatically by elemetrix for use by the Digital Lab. Digital Lab Manual - the stage was inserted manually by a Digital Lab Technician, usually to allow the technician to try a different approach while preserving the previous version
Description entered by Digital Lab Plan 2 [1.2 Digital Lab] [Small OverJet]	If the doctor submits multiple setup prescriptions (e.g. Plan 2), the Digital Lab will type a description to help distinguish plans

Displacement Type:

- Click the **Tooth** option to calculate movements from the center of each crown. A positive number indicates mesial, buccal/facial or occlusal movement of the crown. A negative number indicates the opposite movements. When moving teeth by entering values in the Displacements tab table, the center of the crown is the point of reference.
- Click the **Bracket** option to calculate movements from the center of each bracket slot.
- Click the **Cusp Tip** option to navigate about the cusp tips axis. When you click this option the cusp tips tooth feature points display. This tool is designed to:1) align teeth without bonded brackets, or2) teeth that have compromised anatomy. This option is also helpful when aligning the torque to the anteriors while maintaining the arch form. It is also useful for applying buccal torque together while maintaining the occlusal plane.

Malocclusion Includes Max. / Mand. Alignment Adjustments

Checked by default in the Displacements tab, because you are focusing on tooth movements. Toggling the check box toggles the tooth displacements just between tooth movements, or tooth movements plus global movements.

Edit Selection:

To apply a displacement value to multiple cells:

1. Locate the cell of the table that intersects the tooth number with the type of movement needed.
2. Click the cell to highlight.
3. Press and hold the **Shift** key, and click in another cell. For example, select another cell on the same row to achieve the same movement for multiple teeth.
4. In the Edit Selection box below the chart, type a new value.
OR
Click the small up and down arrows (first set) to change to the number required.
5. Click the equal button to apply the typed value to the highlighted cells.
OR
Click the up large up arrow (second set) to increase the typed value in each of the highlighted cells.

OR

Click the large down arrow to decrease the typed value in each of the highlighted cells.

Functions:

- To clear all Gaps or intersections in the setup or simulation, click **Clear Spaces**. All values in the **Gap (+) / Intersection (-)** row of the table are removed.
- To permanently remove all displacement values of your setup or simulation so that you can completely start over, click **Reset**.

Warning! Use the **Reset** function as a last resort only. Once you remove these displacement values, they cannot be retrieved. You will have to start your setup or simulation from the beginning.

Keyboard shortcuts

Use the following keyboard shortcuts to help you work faster when on the Displacements tab

- **Arrow Up** or **Down** increment or decrease cell values by:
 - 0.1 mm
 - 1 degree
- **CTRL+arrow** moves the cursor from one cell in all four directions to another cell.
- **Tab** selects the cell to the right. If you are in the last cell of a row, cursor jumps down to next row.
- **SHIFT+Tab** selects the cell to the left. If you are in the last cell of a row, cursor jumps up to next row.
- **Pg Up** selects the cell above.
- **Pg Dn** selects the cell below.

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Brackets Tab

This tab is shown for setups, treatment simulations for diagnostic models, and IDB tray simulations. Use this tab to assign different brackets or bracket sets in your simulation. Keep in mind however, that the Dental Examination page is not updated by any bracket selections you make here.

The tab lists a description and illustration for each bracket or attachment (aligner treatment only) you assigned to the patient. Any brackets already assigned in the bracket set appear in the bracket placement simulation.

Each bracket is shown on the tooth chart. Click a bracket in the chart to see its description and a moveable 3D model of it in the thumbnail at the left of the tab. Click the large image of the bracket on the left to rotate and view the bracket from different angles.

As on the Dental Examination page, click **Apply bracket** to assign a specific bracket. Click **Apply bracket sets** to assign a bracket set. Alternatively, click **Remove bracket** to remove a bracket.

Buttons on Brackets Tab

Button name	Use to:
Assign Bracket	select and assign specific brackets to teeth.
Remove Bracket/Attachment	remove bracket from specific teeth, one at a time. First click to highlight the tooth in the tooth chart on the tab or in the 3D model, then click the this button.
Apply Bracket Set (menu) >	(Click arrow on button to display menu options)
> Re-initialize Selected Bracket	reset the selected bracket to its default position
> Re-Initialize Upper Brackets -	reset all of the brackets on the upper arch to their default position
> Re-Initialize Lower Bracket	reset all of the brackets on the lower arch to their default position
> Assign Bracket Set	assign a predefined bracket set. See Bracket Set Preferences for more information.
Select Bracket Heights	select a bracket height set. See Bracket Height Sets for more information.
Align on Bracket Plane	align the slot of the brackets to the bracket plane.
Init Bracket Plane	reset the bracket plane to its default position
Vertical Reference	<p>When you are adjusting the height of the brackets in a bracket set from the Brackets/Attachments tab you can toggle between:</p> <ul style="list-style-type: none"> • Jig Height - indicates the height of a bracket in millimeters as measured from the middle of a bracket slot to the: <ul style="list-style-type: none"> • incisal edges for central incisors and laterals

- buccal cusp for canines and premolars
- most prominent buccal cusp for posterior teeth

Distance to the slot is expressed as a positive number.

- **FA Point** - shows the height of the bracket relative to the FA (Facial Axis) point. The system expresses movements in an occlusal direction relative to the FA point as positive numbers. Movements in a gingival direction relative to the FA point are expressed in negative numbers.

Use the **Lingually Bonded** check boxes to indicate if one or both arches will be lingually bonded. If you have brackets bonded labially, all the brackets on the arch will be moved to the lingual aspect.

Select the **Bracket Contact** options to indicate whether you want **Minimal Contact** (1-point contact, typically used for a flat wire treatment approach) or **Full Contact** (3-point contact, typically used for a bent wire treatment approach).

Bracket Placement Tab

Use the tools on the Bracket Placement tab to plan bracket placement. The Bracket Placement tab has controls for three movement types:

- occlusal (+) / gingival (-)
- mesial (+) / distal (-)
- angulation crown mesial (+) / distal (-)

Both the Upper and the Lower tooth charts are shown together on the tab.

For an IDB tray simulation the reference points for the initial values in the table cells are as follows:

- occlusal (+) / gingival (-) values correspond to those in the Bracket Height sets you applied when you started the simulation
- mesial (+) / distal (-) all initial values are set to 0
- angulation crown mesial (+) / distal (-) all initial values are set to 0

These values change from their initial starting values as you adjust bracket positions.

Multiple ways to adjust bracket positions

There are several ways to adjust bracket positions:

- Use the up/down arrows next to each table cell
- Use the up/down arrows on your keyboard
- Move the bracket on the 3D model
- Type directly in the tooth chart on the tab
- Select multiple table cells and change several cells at once

Up/Down arrows in each table cell - Select a bracket on the 3D model or in the tooth chart in the Bracket Placement tab. Place your cursor over the movement type cell on the tab and then click the up or down arrow next to the cell to reposition the bracket in increments of 0.1 mm (horizontal or vertical) or 1 deg.(angulation).

Tip: Click the **Undo** button to reverse your changes incrementally.

Changes to position are shown in table on Bracket Placement tab.

Use the bracket's bounding box controls to adjust its position.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
occlusal / gingival	2.9	3.6	3.1	3.3	3.8	2.6	2.9	3.0	2.5	3.4	4.8	5.7	4.9	3.5		occlusal / gingival	
mesial (+) / distal (-)		0.2		-0.2			-0.2	-0.1	-0.1	0.1			0.3			mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)	2	-3	1	-3	-6	14	-6		17	-3	-7	-8	-12	-4		Angulation mesial (+) / distal (-)	
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3		occlusal / gingival	
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1			-0.2	0.1	0.1	0.8		mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)	-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2		Angulation mesial (+) / distal (-)	
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

Type directly into the tooth chart - Enter a value for a movement type directly into the appropriate cell on the Bracket Placement tab.

Tip: Click the Undo button to revert the cell to its previous value.

Bracket is highlighted when you click in cell.

Type changes directly into table cell.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
occlusal / gingival	2.9	3.6	3.1	3.3	3.8	2.6	2.9	3.0	2.5	3.4	4.8	5.7	4.9	3.5		occlusal / gingival	
mesial (+) / distal (-)		0.2		-0.2			-0.2	-0.1	-0.1	0.1			0.3			mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)	2	-3	1	-3	-6	14	-6		17	-3	-7	-8	-12	-4		Angulation mesial (+) / distal (-)	
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3		occlusal / gingival	
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1			-0.2	0.1	0.1	0.8		mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)	-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2		Angulation mesial (+) / distal (-)	
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

To move multiple brackets occlusally / gingivally at once:

1. Locate the cell of the table at the intersection of the tooth number column and the occlusal / gingival movement row.
2. Click the cell to highlight.
3. Press and hold the **Shift** key, and click in another cell in the same row to achieve the same movement for multiple teeth.
4. Under the Edit Selection controls to the right of the chart, type a new value.
OR
Click the small up and down arrows (first set) to change to the number required.
5. Click the equal button to apply the typed value to the highlighted cells.
OR
Click the large up arrow (second set) to increase the typed value in each of the highlighted cells.
OR
Click the large down arrow (second set) to decrease the typed value in each of the highlighted cells.

Click in first cell of series, then shift+click in last cell of series to highlight a range of cells.

Use Edit Selection controls to enter multiple values at once.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	
occlusal / gingival	2.9	3.6	3.1	3.3	3.1	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3	occlusal / gingival
mesial (+) / distal (-)			0.2	-0.2				-0.1	-0.1	-0.1	0.1					0.3	mesial (+) / distal (-)
Angulation mesial (+) / distal (-)			2	-3	1	-3	-6	14	-5		17	-3	-7	-6	-12	-4	Angulation mesial (+) / distal (-)
occlusal / gingival			3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3	occlusal / gingival
mesial (+) / distal (-)			0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1			-0.2	0.1	0.1	0.6	mesial (+) / distal (-)
Angulation mesial (+) / distal (-)			-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-3	Angulation mesial (+) / distal (-)
	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

Keyboard shortcuts

Use the following keyboard shortcuts to help you work faster when on the Bracket Placement tab

- **Arrow Up** or **Down** increment or decrease cell values by:
 - 0.1 mm
 - 1 degree

- **CTRL+arrow** moves the cursor from one cell in all four directions to another cell.
- **Tab** selects the cell to the right. If you are in the last cell of a row, cursor jumps down to next row.
- **SHIFT+Tab** selects the cell to the left. If you are in the last cell of a row, cursor jumps up to next row.
- **Pg Up** selects the cell above.
- **Pg Dn** selects the cell below.

Auto-adjust view

The Auto-Adjust View check box on the Bracket Placement tab automatically repositions the model when you select a cell in the Bracket Placement tab.

This check box works as follows:

- If you are adjusting mesial/distal bracket movements, an occlusal view of the arch is displayed and the selected tooth is shown in the center of the screen.
- If you are adjusting angulation or occlusal (+) / gingival (-) movements, a labial view of the arch is displayed for the anteriors, a buccal view is displayed for the posteriors, and the selected tooth is in the center of the screen.
- If you uncheck the check box and then check it again, it remembers the last tooth previously selected and returns to that position.

Global Registration Tab

Use the Global Registration tab to adjust the position of the upper and lower arch models relative to the 3D space.

You can also use this tab to simulate movements from mechanics used, such as elastics.

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Translation [mm] / Rotation [deg] Controls

Click in the table cell to adjust translation and rotational movements for the upper and lower jaws.

Note: Global movements for surgical cases can only be made from the Surgery tab. The table cells are unavailable for any arch which has been marked surgical in the Special Instructions of the MACROS form.

Use Common Rotation Axis

Default is checked. Uncheck if you do not want both arches to use a common axis of rotation.

Note: Using the common axis in the center of the model does not change the bite, as both jaws are moved together.

When checked, the whole model with both jaws uses a common coordinate system with the xyz axis always in the middle of the model.

When unchecked, each arch moves independently on its own axis.

Note: Global and surgical movements can only be made using the common rotation axis.

Demonstration: Common Rotation Axis

If you want to experience the difference between the common and single rotation axis, perform the following exercise:

1. Open a Plan in production without tooth movements.
2. Go to the **Global Registration** tab.
3. Display the **Lower Occlusal** view.
4. Show the upper/lower contacts.
5. Check the **Use Common Rotation Axis** check box.
6. Type **20°** into the upper and lower cell for rotation around the sagittal axis.

7. Observe the location of the contacts.
8. Click **Reset**. The location of the contact areas is exactly the same.
9. Click **Redo** to verify that the location of the contacts is always the same when using the Common Rotation Axis feature.
10. Now uncheck the **Use Common Rotation Axis** check box.
11. Repeat steps 2-9.
12. Note that this time the location of the upper/lower contacts change, because each jaw uses its own rotation axis.

[Sync U/L](#)

Check to synchronize both the upper and lower arches together when making global adjustments.

[Use Condyle Axis](#)

Check to simulate the natural movement of the lower jaw rotating around the condyle axis. When you rotate the bone segment, the axis of rotation is relative to the condyle.

When checked, all other cells are grayed out. Clearing the check box adds movements to the other cells, such as anterior/posterior or vertical movement. This is due to the different rotation axis.

[Malocclusion Includes Max. / Mand. Alignment Adjustments](#)

When checked, the therapeutic model includes planned global movements. In the Global Registration Tab the default is unchecked, because typically you want to see the global movements back and forth between white and blue teeth.

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[Horizontal incl. AP](#)

Use the controls or enter values directly to rotate the model anteriorly /posteriorly to adjust its position with the ceph.

[Facial axis inclination](#)

Use the controls or enter values directly to rotate the model left or right to adjust the cant.


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Articulation

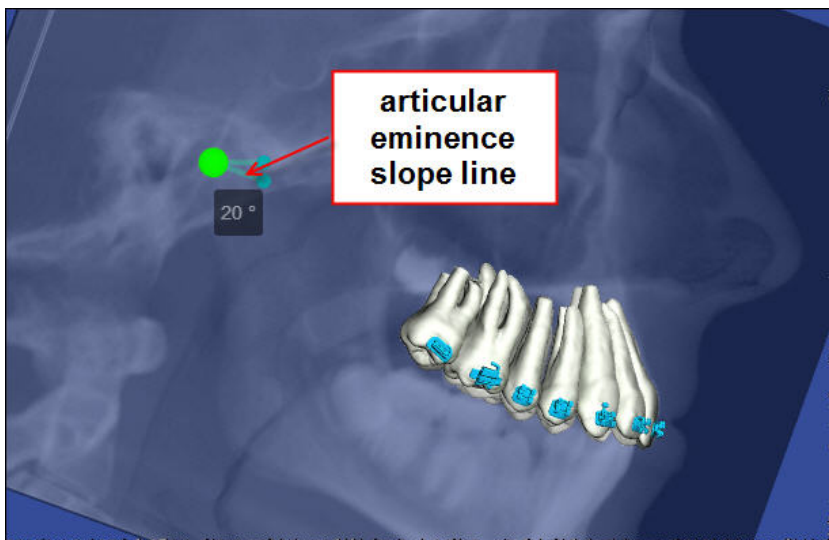
Check to open the Articulation window. Use the Articulation tool to check if there are any tooth collisions or other problems during chewing, and to adjust the angle of the articular eminence as necessary. You can also adjust the angle of the articular eminence to more accurately display the patient's chewing motion.

Tip: You can use the Articulation tool anytime, but a good point in your workflow would be during therapeutic model review.

To adjust the angle of the articular eminence during the therapeutic model review:

1. Click the Checklist icon  in the menu bar and click the Ceph Review step.

Result: The articular eminence slope line is shown by default in the ceph view, as this is the recommended view for setting the articular eminence slope.

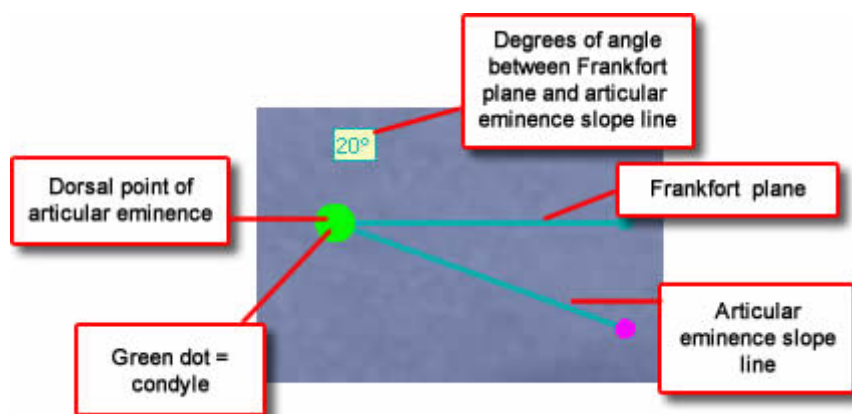


Tip: Zoom the model out to reduce the view so that you can see the condyle.

The anatomical points display in a default position—the top line is the horizontal plane, which is parallel to the Frankfort plane. The left most point is initially set by the Digital Lab to mark the dorsal point of the articular eminence. The other point is the handle for changing the slope of articular eminence. It is set to a default angle of 20 degrees.

Note: In some CBCT scans, the condyle may appear less clear than expected. This is due to the condyle being less dense than the surrounding bone mass.

2. Select the slope line handle by clicking on it. It turns pink when selected. Drag it up or down to define the slope of articular eminence relative to the horizontal (Frankfort) plane. Drag anteriorly or posteriorly to shorten or lengthen the line. Notice that the angular value (in degrees) changes as you move the point. The slope of the articular eminence determines how the mandible slides forward and moves excursively as it opens. The length of the line of articular eminence determines how wide the bite will open in the chewing simulation.



The large green dot corresponds to the condyle. It moves along the line of articular eminence when you run an articulation animation.

Note: The horizontal plane is defined on the Ceph. Adjust as needed using the Horizontal Inclination control under the **Global Registration** tab.

3. Click **Apply** in the articular eminence slope confirmation box to save your changes

or

Click **Undo** to discard your changes.

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[View and Test the Articular Eminence Slope](#)

Use the Articulation tool to check if there are any tooth collisions or other problems during chewing.

Note: It is not necessary to view articulation when you set the articular eminence slope, but the feature is available if needed.

1. Under the **Global Registration** tab, click **Articulation**.

Result: The **Articulation** window opens.

In the side windows, view the upper and lower 3D models occlusally with contacts on.

2. On the **Animation** control box:

- Click the upper **Run Animation** button to run the articulation simulation

or

- Click and drag the slider control to manually operate the animation.

Result: The jaws open and close. Notice that the green condyle indicator moves along the line of articular eminence.

3. In the side windows, check for any collisions.

4. On the **Animation** control box:

- Click the lower **Run Animation** button to run the excursive simulation.
OR

- Click and drag the slider control to manually operate the animation.

Result: The left-to-right movement (lateral excursion) is animated.

Note: Because the virtual articulator does not consider cuspid rise, multiple tooth collisions will be seen.

5. In the side windows, check for any collisions.

6. Click either **Run Animation** button a second time to stop the animation.

[Surgery On/Off check box](#)

The Surgery On / Off check box allows doctors who have an approved surgical setup to create a new non-surgical setup or simulation. This check box becomes visible on the Global Registration tab for a setup or simulation in work if the previous setup for the case is a finished surgical setup.

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Measurements Tab

Use the Measurements tab to view a snapshot of key measurements of the 3D model in the main window.

Bolton Analysis

The Measurements tab includes a Bolton analysis. The sum of the mesial-distal tooth measurements is listed from the first molars (6-6) and from the canines (3-3). The **Bolton Ratio**, expressed as a percentage, is calculated for both the first molars (6-6) and the canines (3-3) by dividing the Mandible sum by the Maxilla sum.

elemetrix compares the actual measurements to an ideal and lists a **surplus amount**.

elemetrix uses the "ideal" upper/lower width relation **0.913 with a tolerance +/- 0.0026** for the overall ratio (6-6) and **0.772 with a tolerance +/- 0.0022** for the anterior ratio (3-3). If the Bolton Ratio exceeds this constant value (plus the tolerance) a **mandible surplus** will be listed. Conversely, if the ratio is less than the constant value (minus the tolerance) a **maxilla surplus** will be listed. If the ratio is within the tolerance there is **no surplus**.

Here is an example:

	6...6	3...3	Calculation
Bolton Ratio	92.1	76.6	Mandible sum/Maxilla sum 87.6/95.1 = 92.1% 36.9/48.1 = 76.6%
Maxilla Sum	95.1	48.1	Sum of tooth widths in the Maxilla
Mandible Sum	87.6	36.9	Sum of tooth widths in the Mandible
Mandible Surplus	.8mm		The actual overall ratio is .921 Ideal = 95.1 *0.913 which is 86.8 The surplus is 87.6 - 86.8 = .8
Maxilla Surplus		.4mm	The actual anterior ratio is .766 Ideal = 36.9/ 0.772 which is 47.7 The surplus is 48.1- 47.7 = .4

Arch Length Discrepancy

Positive numbers indicate excess space, and negative numbers indicate inadequate space. These measurements are updated whenever you make changes to the 3D Model.

Working with Patient Information

After you log into elemetrix, the welcome screen lists all of the practices that you can access.

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Announcement Bar

At the top of the clinic overview page, you may see an announcement bar that contains information about software and bracket library updates, upcoming training classes, and other information of specific interest to elemetrix users. To close the announcements bar after reading the messages, click the small x in the top right corner. The announcements bar reappears when you receive a new announcement.

Tabs

At the top left of the clinic overview page are five tabs.

Tab	Description
Tasks	Click to list pending tasks for patients. The badge in the upper right corner of the Tasks tab indicates the number of pending tasks in the filtered set. Display tasks as either a list or on individual task cards by clicking the small icons   in the top left of the list area.
Patients	Click to show patient records. The badge in the upper right corner of the Patients tab indicates the total number of patients in the filtered set. Display patients in a list or on individual patient cards by clicking the small icons   in the top left of the list area.
Shipments	Click to view list of all shipped printed models and IDB trays. See Tracking Shipments .
Reports	Click to select and view practice-level reports in a separate browser tab. See Reports .
Add Patient	Click to enter demographics for a new patient. See Add Patient.


Sorting and Filtering

On the right side of the page just below the elemetrix bar are menus for sorting and filtering the information shown under each tab. If you have more patient records that meet the current filter criteria on either tab, page numbers appear at the bottom of the window so that you can move to another screen of patients.



Note: When you log out, elemetrix remembers which tab you were using on the Clinic Overview and takes you to that same location when you log in the next time.



Task List

1. Click the **Tasks** tab.

2. Click  in the top left corner to display all due tasks in a list with the following columns. Click the blue column headings to sort data. Sortable columns are indicated in the following table.

Tip: Set your default display preferences for both tasks and patients. See [Appearance Preferences](#).

Column	Description/Purpose
Flag (sortable)	<p>Click <input type="radio"/> to set a flag that you can use to mark a task for special attention. For more information see Add and Clear Flags.</p> <p>Sorts in "rainbow" order:</p> <ol style="list-style-type: none"> 1. red 2. orange 3. yellow 4. green 5. blue 6. violet
Card	Click  to provide quick view of patient's timeline.
Last name	Patient's last name
First name	Patient's first name
Patient ID (sortable)	<p>Patient identification number. Automatically generated by elemetrix when patient added to elemetrix as a new patient. See Add Patient.</p> <p>(Sorts in alphabetical order.)</p>
Owner	The person in the practice assigned to this type of task. See Task Ownership Preferences .
Item	The elemetrix product associated with the task.
Task (sortable)	<p>The standard name for the required action to be performed. For a list of standard tasks in elemetrix, see Sort and Filter Patient Information.</p> <p>Click the small Defer Task icon  next to the task to defer the task a specific number of days. the new due date is shown in the Deferred To column.</p> <p>When visible, click the Complete Task check box <input checked="" type="checkbox"/> to hide a task on the task list. To redisplay the hidden task, use the Show ___ Tasks filter, and select <i>Completed</i>. Click the check box to clear it and redisplay the task in the task list</p> <p>(Sorts in order of priority. Follows same order shown on Show...Tasks menu: Provide Information, Review Order, Submit Order, Create Order, Reminder)</p>


Due Date (sortable)	Due Date for task, typically automatically calculated by elemetrix, but can be edited in patient timeline. See Treatment Time Preferences . If the patient record row is shaded pink/salmon, this means the task is overdue. (Sorts in order by date with oldest date first)
Notes	Click  to view, edit, or add notes. See Add (and Edit) Patient Notes .
Setup Approval Date	Calculated from your treatment time preferences on the treatment timeline. See Using the Treatment Timeline .
Wire Insertion Date (sortable)	Manually entered whenever last wire was inserted for patient. (Sorts in order by date with oldest date first)
Status	Manually set on the Patient Profile page, Can be either <i>Active</i> , <i>Quit</i> , or <i>Cancelled</i> .
Deferred to	Date task was deferred, or postponed by clicking  next to task name in the Task column.

Task Cards

1. Click the **Tasks** tab.
2. Click the blue column headings to sort data. Sortable columns are indicated in the following table. Click




in the top left corner to display all due tasks as individual cards.




Bersky,
Ann


Therapeutic Model 2


2014-07-25




Provide records 




ID: BA000001




- Click the patients name or photo to open the patient overview page.
- Click to set a flag that you can use to mark a task for special attention. For more information see [Add and Clear Flags](#).
- Click  to provide quick view of patient's timeline.


- Click  to open the patient's profile.
- If a product or item, e.g., [therapeutic model 2](#), is associated with a task, click to open and complete the task.
- The date shown is date task is due. Click  to postpone the task a specific number of days. The due date on the card changes to the new date.
- When visible, click the **Complete Task** check box to hide a task on the task list. To redisplay the hidden task, use the Show __ Tasks filter, and select *Completed*. Click the check box to clear it and redisplay the task in the task list
- The name of the task. e.g., **Provide records**, is below the date. Text in red indicates an overdue task.
- The patient ID cannot be changed.
- Click  to view the product notes or add a patient note.

Patient List


1. Click the **Patients** tab.
2. Click  in the top left corner to display all patients in a list with the following columns.

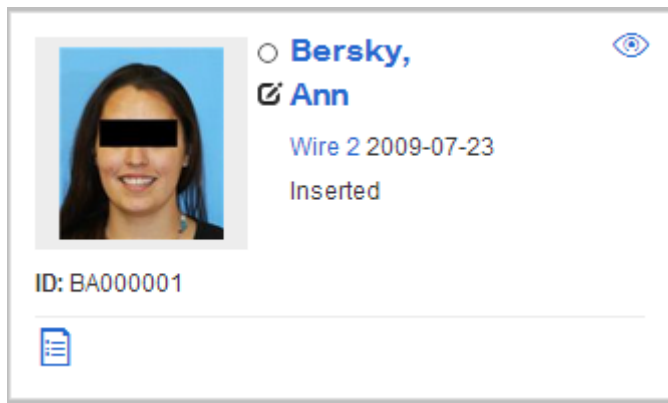
Tip: Set your default display preferences for both tasks and patients. See [Appearance Preferences](#).




Column	Description/Purpose
Flag (sortable)	Click <input type="checkbox"/> to set a flag that you can use to mark a task for special attention. For more information see Add and Clear Flags . Sorts in "rainbow" order: <ol style="list-style-type: none"> 1. red 2. orange 3. yellow 4. green 5. blue 6. violet
Card	Click  to provide quick view of patient's timeline.
Last name	Patient's last name
First name	Patient's first name


Patient ID (sortable)	Patient identification number. Automatically generated by elemetrix when patient added to elemetrix as a new patient. See Add Patient. (Sorts in alphabetical order.)
Doctor	The orthodontist assigned to the patient in the patient's profile.
Item	The most recently approved or finished product.
Date (sortable)	Date Item was last changed. (Sorts in order by date with oldest date first)
Note	Click  to view, edit, or add notes. See Add (and Edit) Patient Notes .
Setup Approval Date	Calculated from your treatment time preferences on the treatment timeline. See Using the Treatment Timeline .
Wire Insertion Date (sortable)	Manually entered whenever last wire was inserted for patient. (Sorts in order by date with oldest date first)
Status	Manually set on the Patient Profile page, Can be either <i>Active</i> , <i>Quit</i> , or <i>Cancelled</i> .

Patient Cards


1. Click the **Patients** tab.
2. Click  in the top left corner to display patient information on individual cards.




- Click the patients name or photo to open the patient overview page.
- Click  to set a flag that you can use to mark a task for special attention. For more information see [Add and Clear Flags](#).
- Click  to provide quick view of patient's timeline.
- Click  to open the patient's profile.

- The most recently finished product is shown, e.g., [Wire 2.](#) , followed by the date the product was finished. Click the product name to open.
- Below the product name is the status of the product. this is typically *Approved* for models or plans, and *Inserted* for wires.
- The patient **ID** cannot be changed.
- Click  to view, edit, or add notes. See [Add \(and Edit\) Patient Notes.](#)


Quick View of Patient's Timeline

When you click  to view a patient's timeline, the following window opens. See below for features. For more information about using the patient timeline, see [Using the Treatment Timeline.](#)



Owen, Denis










Plan 2 2014-08-11


Submit order 



ID: OD000001

Recent Notes Edit Note

Patient Timeline

	Bond Date	2011-12-15
	Therapeutic Model 1	Approved: 2011-12-15
	Plan 1	Approved: 2012-01-04
	Wire 1	Ordered: 2012-01-09
	Wire 2	Ordered: 2012-01-09
	Plan 2	Ordered: 2014-08-11
	Plan 3	Not ordered: 2014-08-18
	Simulation 1	2014-08-18
	Debond Date	2014-12-03

- Click the patient's name or photo to open the patient overview page.
- Click  to set a flag that you can use to mark a task for special attention. For more information see [Add and Clear Flags.](#)

- Click  to open the patient's profile.
- Click the product name, e.g., [therapeutic model 2](#), to open the product.
- (Tasks only) The date shown to the right of the product name is when the last task was completed.
- (Tasks only) The name of the task, e.g., **Submit order**, is below the date. Text in red indicates an overdue task.
- (Tasks only) Click the small Defer Task icon  next to the task to defer the task a specific number of days. The new due date is shown in the **Deferred To** column in the Tasks list view.
- (Tasks only) When visible, click the **Complete Task** check box to hide a task on the task list. To redisplay the hidden task, use the Show ___ Tasks filter, and select *Completed*. Click the check box to clear it and redisplay the task in the task list.
- The patient **ID** cannot be changed.
- Click **Edit Note** to create a new note or edit an existing one. See [Add \(and Edit\) Patient Notes](#).
- For more information about the patient timeline, see [Using the Treatment Timeline](#).

See also ...

Using the Patient Overview Page to Manage Treatment

Tip: Click the expand view button  to see the full screen.


IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&closeable=false#!/a5547390-6eb5-11e6-a47d-040...>]

Using the Tasks Tab in Card View

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/3c2a5b90-4f6c-11e...>]

Patients Tab in Card View

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/2aacc4d0-4f5c-11e...>]

Using the List View on the Tasks Tab

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&closeable=false#!/289b2420-4eb2-11e6-ad93-448...>]

Patients Tab in List View

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&closeable=false#!/2aacc4d0-4f5c-11e6-ad93-448a...>]

Updating a Patient's Demographics

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&closeable=false#!/317b4940-4eb1-11e6-ad93-448...>]

Using the Treatment Timeline

When you go to a patient overview page, the treatment timeline at the top of the page shows five core events in the patient's elemetrix treatment process. The status of each event is shown under the event.

The treatment timeline is dynamically reconfigured as you treat the patient.

Click the clock icon to the right of the timeline to display a list of all current and past products associated with this patient. Use the drop-down lists in the status column to change the status of tasks. Click on the date links in the Date column to change dates.

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Timeline Events and Products

The following milestones and products are captured by the elemetrix software.

Standard Timeline Milestone	Aligner Timeline Milestones
Bond date	Therapeutic Scan date
Therapeutic Scan Date	Setup Approval Date
Setup Approval Date	Treatment Start (date of appointment when patient receives first set of aligners)

Important! All estimated dates in the timeline are set by your practice, either manually or by setting estimated date parameters under your treatment preferences (see [Treatment Time Preferences](#)). Estimated dates are NOT changed or updated by the elemetrix system, the Digital Lab technicians or OraMetrix manufacturing.

Products

- diagnostic model*
- 3D prints*
- bond date**
- therapeutic model**
- treatment simulations
- setup model**

* These items are displayed only if they are used in the case.

** These items are shown in the treatment timeline at the top of the Patient Overview workspace. Only the most recent item appears if there is more than one of the same item for a patient.

Products Shown on Timelines

These items are shown in the treatment timeline. Only the most recent item appears if there is more than one of the same item for a patient:

- therapeutic model
- setup model
- diagnostic models
- 3D prints
- treatment simulations

Product States

The product states in the timeline are labeled as follows:

- Not Ordered
- Ordered
- On Hold
- Reviewing
- Approved
- Finished

Notes: A wire may also have a state of "Inserted" or "Not used." Staged models only have a status of *Not Ordered* or *Approved*.

Timeline Dates Calculated from Left to Right

After the patient record is initially created, date calculation occurs in a forward direction. When you change a date, all future estimated dates are moved forward or backward by an equal amount. For example...






- If you move the setup approval date forward by one week, the estimated wire insertion date and the estimated debond date are also moved forward a week.
- If you move the estimated, scheduled, or actual scan date, then any future estimated setup approval dates, wire insertion dates, and the debond date are rescheduled.

Note: *elemetrix* does not automatically change any scheduled dates.

suressmile calculates the estimated wire insertion date for three weeks from the date you ordered the wire instead of from the setup approval date.

Color Coding on the Timeline

On the timeline, the colored circles identify the status of the product or milestone as listed in the table below.

Color code	Description
	The item is complete.
	The item is in work but nothing is required of you at this time.
	The item is in work and you have a task to complete.
	The item is overdue.
	The item is not due soon.

Updating the Treatment Timeline

The treatment timeline is visible on patient cards in the clinic overview, and on the patient overview by clicking the clock icon to display the timeline.

To update a date and its status in the timeline, follow these steps:

1. Choose one of the following:

If ..	Then ..
You are on the clinic overview with patient cards ...	Click the eye in the upper right corner of the patient card to display the timeline.
You are on the patient overview ...	Use the timeline at the top of the page or the full treatment timeline displayed after you click the clock icon.

2. To change a date:
From the expanded timeline on the clinic overview, click the down arrow to the right of the date that you want to change.
OR
From the timeline at the top of the patient overview, click the eye on the right side of the date or product where you want to make the change.
Result: The event or product expands. Some dates have a date and a status menu.
3. Type over the date in the date field.
OR
Click the calendar icon on the right side of the date field and select the date from the calendar.
4. To change the status, click the down arrow and select the appropriate value from the drop-down menu.

Note: Changes are saved immediately.

Opening a Product from the Treatment Timeline

To open a product from the timeline, follow these steps:

1. Choose one of the following:

If ..	Then ..
You are on the clinic overview with patient cards ...	Click the eye in the upper right corner of the patient card to display the timeline.
You are on the patient overview ...	Use the timeline at the top of the page or the full treatment timeline displayed after you click the clock icon.

2. From the treatment timeline, click the name of the product.

Result: You are taken directly to the product in the treatment planning workspace, and you can start working on it.

Note: Some products cannot be directly accessed from the timeline because they are at the Digital Lab or do not yet exist. Names in blue underlined text indicate a product that you can work on.

3. Complete your order as usual.

Using timelines to manage staged models, IDB trays and printed models

If there are IDB trays, staged models, printed models or wires associated with a digital model, simulation or plan, these are shown when you first open the timeline and remain displayed until you choose to hide them.

Additional detailed information about each item, (i.e., upper and lower wires showing status and dates, or which trays or models are ordered) is initially hidden. Click the small arrow to the right of each item to show or hide additional information.

3D Prints

- 3D prints denotes physical staged models or physical 3D study models.
- 3D prints can be expanded on the timeline to show a list of individual items in the order, e.g. U (upper) 3D Prints and L (lower) 3D Prints.
- The series of all printed models included in the order is listed between brackets, e.g. L Printed Models [1-15]

IDB trays

- After trays are ordered, the IDB simulation can be expanded to open individual items included in this order, e.g. U Tray and/or L Tray
- The IDB simulation that was used as the base for designing trays will be listed between brackets, e.g., U Printed Tray for [IDB 1] 1

Patient Card Timeline

Patient Timeline

- Bond Date 2016-06-06
- Therapeutic Model 1 Approved: 2016-06-06
- Printed Models for [Ther... Ordered: 2016-07-06
- Plan 1 Approved: 2016-06-06
- Printed Models for [Plan... Ordered: 2016-07-06
- Wire 1 Ordered: 2016-08-11
 - U Estimated 2016-08-25
 - L Estimated 2016-08-25
- Wire 2 Ordered: 2016-08-11
- Simulation 1 2016-06-28
- Plan 3 Not ordered: 2016-06-28
- Diagnostic Model 1 Not ordered: 2016-06-30
- Plan 2 Needs information: 2016-07-13
- WS 1 [1] Finished: 2016-06-06
- WS 1 Finished: 2016-06-06
- Debond Date 2017-01-12

Items associated with a model, simulation or plan shown when you open a patient card timeline

Click to show or hide details

Update status and dates

Click blue link to open item

Expanded Timeline on Patient Overview page

Task	Status	Date
Bond Date	Completed	2016-06-06
Therapeutic Model 1	Approved	2016-06-06
Printed Models for [Therapeutic Model 1]	Ordered	2016-07-06
Plan 1	Approved	2016-06-06
Printed Models for [Plan 1] 1	Ordered	2016-07-06
Wire 1	Ordered	2016-08-11
U: Cu/NiTi / NiTi .017x.025	Estimated	2016-08-25
L: Cu/NiTi / NiTi .017x.025	Estimated	2016-08-25
Wire 2	Ordered	2016-08-11
Simulation 1		2016-06-28
Plan 3	Not ordered	2016-06-28
Diagnostic Model 1	Not ordered	2016-06-30
Plan 2	Needs information	2016-07-13
WS 1 [1]	Finished	2016-06-06
WS 1	Finished	2016-06-06
Debond Date	Estimated	2017-01-12

Click blue link to open item

Items associated with a model, simulation or plan are shown when you open the expanded timeline

Update status and date

Click to show or hide details

Add Diagnosis and Treatment Information

The patient overview has a tab for adding patient diagnosis and treatment information.

elemetrix automatically completes some of the diagnostic or treatment information for you. For example...

- Patient Class based on first model submitted.
- If the doctor makes selections during treatment planning to indicate surgical, lingual and extraction treatment, this information is shown here as well..

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Add Diagnostic Information

The Diagnosis section has one drop-down menu for the Angle's class which allows only one selection. The other three categories provide drop-down lists from which you can click multiple items until you have all of the selections that describe this diagnosis.

Note: All selections are saved immediately.

The information categories in the Diagnosis section are listed below:

Category	Notes
Class: (drop-down list for Angle's class): <ul style="list-style-type: none"> • Class I • Class I/Class II • Class II • Class III • Other 	<ul style="list-style-type: none"> • If you leave this field blank, it may be auto-populated based on an automatic elemetrix analysis of an approved diagnostic or initial therapeutic model. • If you manually select the class, then elemetrix does not automatically update it.
Bite:	<ul style="list-style-type: none"> • Bite types are defined under the Search tab in the Preferences window. • You can make multiple selections by clicking in the field after the previously selected item appears. • If you select Normal, no other items are available.
Severe: <ul style="list-style-type: none"> • Asymmetry • Crowding • Impaction • Overjet • Spacing 	<ul style="list-style-type: none"> • You can make multiple selections by clicking in the field after the previously selected item appears.

<ul style="list-style-type: none"> • TMJ 	
Custom:	<ul style="list-style-type: none"> • Custom diagnosis items are defined under the Search tab in the Preferences window. • You can make multiple selections by clicking in the field after the previously selected item appears.

Add Treatment Information

The treatment section contains drop-down menus for each category.

Category	Content Parameters
Types: <ul style="list-style-type: none"> • Aligner • Diagnostic/analysis • IDB Trays 	
Custom:	<ul style="list-style-type: none"> • Custom treatment items are defined under the Search tab in the Preferences window. • You can make multiple selections by clicking in the field after the previously selected item appears.

Remove a Selection from any Category

To remove a selection from a drop-down menu, click the blank space at the top of the list.

To remove a selection that was not automatically input from a drop-down list, click the x to the right of the selected name.

Add (and Edit) Patient Notes

Patient notes are an internal communication tool to help your team manage this patient's treatment. These notes can be entered and accessed from multiple places:

- The card on the Patient and Task tabs
- Icon in the Patient and Task lists
- Patient overview
- Treatment planning page

On the patient overview, the notes default to the most recent product unless the product is on customer hold or has been rejected, in which case, the customer hold or reject notes appears instead. All notes are listed in reverse chronological order with the most recent notes first.

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Add patient notes from the patient overview


To add a patient note from the patient overview, follow these steps:

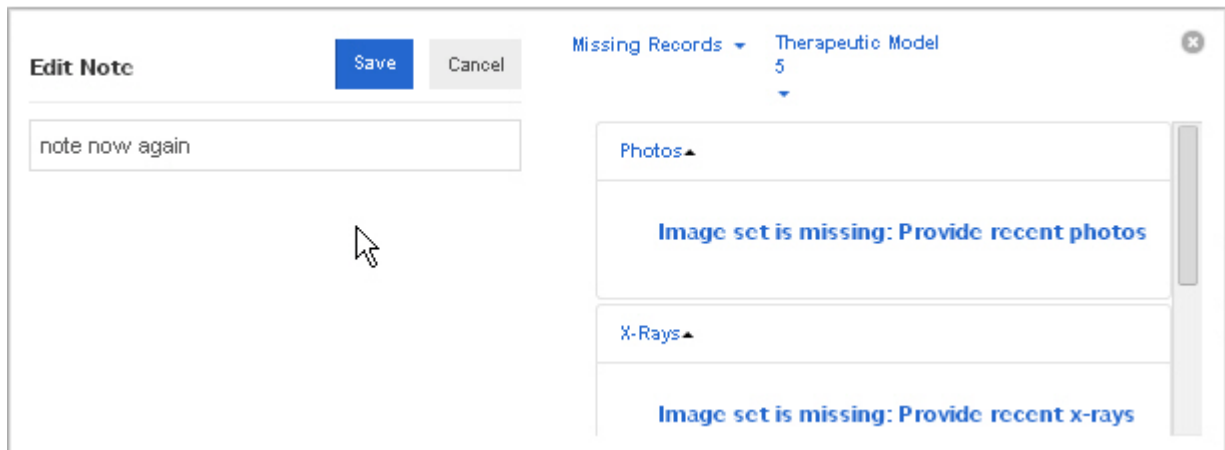
1. If **Patient Notes** label is not visible on the right-side of the page, click the blue drop-down, and select **Patient Notes** from that menu.
2. Click in the text box that shows "Add note here...," and type your notes.
3. When you finish the note, click the **Add Text** button on the right side of the text box.
Result: The note appears in the shaded portion above the text box where you added the note.

Add patient notes from the notes icon

If you are on the clinic overview or task list, you can add patient notes there.

To add a note from the clinic overview, follow these steps:

1. Click the notepad icon  in the lower left corner of the patient card or in the list.
Result: The card expands with the existing notes on the right side.



2. Click in the text box and type your note,
3. Click the **Save** button.
Result: The new notes appears on the right only after you close this window.
4. To close the expanded card, click the **x** in the upper-right corner of the card.

Important: The patient notes entered from and displayed on the clinic overview are not encrypted. Do NOT include the patient's name or other identifying information in these notes.

Update Patient Status

When a patient is no longer in treatment, follow these steps to update the patient status:

1. Go to the patient overview and click the **Edit** button under the elapsed treatment time.
Result: The **Edit Patient Information** opens.
2. Click the Status drop-down menu and select the appropriate item:

Status	Use this when ...	Comments
Active	Patient is currently under your care.	Active is the default status for a new-patient record.
Finished	Patient is no longer under your care; treatment has been completed.	You cannot delete a patient record; however, you can request help from Customer Care if you need to clean out files. The debond date defaults to the date entered on the timeline. If this is not correct, enter the actual debond date.
Quit	Patient is no longer under your care; treatment stopped before completion.	
Transferred	Patient is no longer under your care; the patient transferred to another clinic, which may or may not be a elemetrix clinic.	Contact OraMetrix regarding billing. After a patient is transferred, you cannot return the record to an active state from the Status menu on the demographics page.
Cancelled	Patient is no longer under your care or the patient never initiated elemetrix therapeutics.	This status stops further billing if it is selected within 24 months of submitting the Diagnostic Model and before the therapeutic model is submitted. After a patient is cancelled, you cannot return the record to an active state from the Status menu on the demographics page.
MD (Marked for Deletion)	This is an extraneous record.	After you select and save this option, the record opens only if you use the Show All Patients filter option. You cannot delete a patient record; however, you can request help from Customer Care if you need to clean out files.

Note: For current information about elemetrix's cancellation and transfer policies, see the [Case Discount, Cancellation and Transfer Policies](#),

Enter Dental Exam for Teeth

When you start a new order, the Dental Examination page opens first. Information that you enter on the teeth tab is used by the Digital Lab in combination with a scan to create models. Any additional information you can provide from your observations of the patient helps to improve tooth modeling.

It is critical to Digital Lab processes that the patient's record is updated for missing teeth. The Dental Examination tooth chart is also displayed whenever you order subsequent products after the initial scan. Make changes as needed to keep the chart up-to-date with the patient's current characteristics.

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Add information from dental exam

To complete the patient's tooth exam as part of an order, follow these steps from the Dental Examination page:

1. In the tooth chart, click a tooth that you want to change.
2. Select the appropriate tooth option from the list on the left side of the screen: **present**, **missing**, **Unerupted**, or **impacted**.
Note: If a tooth is missing because it is impacted, choose the impacted option.
3. Just below the option list, click to check additional properties as appropriate: **Partially Erupted**, **Primary**, or **Supernumerary Tooth**.
4. If the patient's selected tooth has no visible contact to the adjacent mesial tooth, click the contact bar between teeth on the tooth chart to remove the bar.
Note: To remove all contacts click [Clear all contacts](#).

or

If the patient's selected tooth is in contact with the adjacent mesial tooth, click the space between the teeth on the tooth chart to add the bar.

Note: To set all contacts at once click [Set all contacts](#).

5. Under Miscellaneous, click the appropriate option.

Dental Examination Color Indicators

The color in the dental exam tooth chart indicates the following:

- **White background** = unbonded, no bracket
- **Green background** = labial bonded
- **Blue background** = lingual bonded
- **Red line** = bonded upside down

- **Red base** =customer hold
- **Yellow base** = customer hold is resolved



For example, in the above set of teeth:

- 5 = customer hold is resolved, unbonded, no bracket
- 4 = customer hold is resolved, labial
- 3 = customer hold, labial
- 2 = lingual bonded, upside down, customer hold is resolved
- 1 = unbonded with bracket, customer hold is resolved

Reset Tooth/Reset Teeth

In the Inter-proximal Properties section of the Dental Examination page, follow these steps to reset one or more teeth.

- To remove the properties of a single tooth, select it and click **Reset Tooth**.
OR
- To remove the properties of all teeth, click **Reset Teeth**.

For information about the modeling of unerupted teeth with a CBCT scan, see the online help in the surescan desktop application.

Ordering Printed Models from OraMetrix

The Order Prints button gives your practice the ability to order 3D physical models from OraMetrix of any printable product for the patient even up to 90 days after the patient has been debonded. These models can be used to fabricate appliances such as retainers or surgical splints. A fee is associated with each arch in a print order. Please contact your Account Manager or customer care for fee details and estimated shipping times. This function is distinct from the Exports button, which allows you to export STL files of models for printing in house or by your lab.

Caution: Models must have gingiva include to be printed. CBCT scans with just roots, bone and teeth but without gingiva cannot be printed at this time.

To order prints of 3D models from OraMetrix

1. Open the patient record and go to the patient overview page.
2. Click the **Order Prints** button. The **Print 3D Models** dialog box opens.

Object	Upper	Lower
<input type="checkbox"/> Simulation 5	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Simulation 3 (Post-Surgery)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Simulation 2 (Therap CBCT) (Post-Surgery)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Simulation 1 (Post-Surgery)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Simulation 4 (Post-Surgery)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Plan 1	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Diagnostic Model 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Therapeutic Model 1	<input type="checkbox"/>	<input type="checkbox"/>

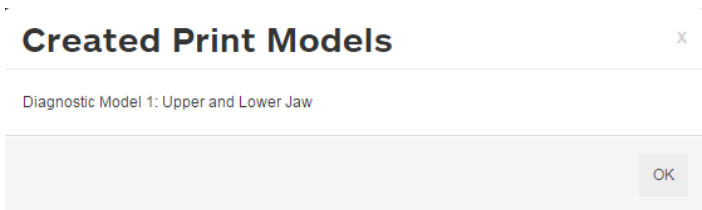
Print (\$) Cancel

3. Use the check boxes to select the models and arches you wish to print.
4. Click the **Print(\$)** button.
5. After a moment an Order Confirmation dialog box appears showing a summary of what you ordered. Click **OK** to confirm your order.
6. If you click **OK** a progress bar shows that the models are being created.

Creating Print Models...



- When the system finishes processing the models, the Created Print Models box dialog box appears. You are billed by the system for the models at this time.



- Click **OK** to close this dialog box.

Note: Models are billed by the arch. Please contact your Account Manager or Customer Care to determine your fee for printed physical models.

Exporting 3D Model Files for Lab Use

Use elemetrix's export 3D model feature to create 3D models for printing or study by your lab for a variety of purposes. The exported 3D models can be printed by your lab's 3D printer to create diagnostic, final or study models as well.

To export one or more 3D models

1. From the patient overview, click the **Exports** button, and select **Export 3D**.
2. Click the check box under the model that you want to export.
3. Select or clear the check boxes for additional model objects as needed.
4. Select the appropriate file format. (Check with your lab to determine the format they require.)

Format (Extension)	Description
SLA Interface File 1mm (*.STL)	Standard format for 3D data exchange. Values in millimeters. (default selection)
SLA Interface File– 1m (*.STL)	Standard format for 3D data exchange. Values in meters.
Binary Point Cloud File (*.SYP)	OraMetrix proprietary format.
Object File (*.OBJ)	Graphic format.
Polygon File (*.PLY)	Standard format for 3D data exchange.

5. (Optional) Select or clear the Unify Objects (for 3d-Printing) check box.

Note: If your practice has been enabled by SureSmile customer care for 3D printing optimization, the Unify Objects (for 3d-Printing) check box is shown on the Export 3D Models dialog box and the check box is selected by default. This option combines all of the objects for each model into a single printable object, this allows for more accurate and efficient printing with most 3D printers. If you are interested in this option, please contact SureSmile Customer Care.

6. Click **Export**.

Result: A zip file containing the compressed files is downloaded to your computer. The location depends on your web browser. Check your browser support to determine location. (Check with your lab to determine the best way to send them the zip file.) The following file format is used for .STL files:

- Upper arch: HRID<name of sim>U.stl

or

- Lower arch: HRID<name of sim>L.stl

Example: *LT000003StagedModles1U.stl*

Note: When you export a Maxilla or Mandible arch model, **Up** (upper) is appended to the Maxilla .stl file name and or **Lw** (lower) is appended to the Mandible .stl file name. Tooth roots from CBCT scans or tooth templates are excluded from 3D model print orders.

Jobs

Use the **Jobs** tab on the clinic overview page to view a list of all current downloads (jobs) for exported staged models ordered by clicking the **Export Staged Models** button on the **Order** tab as the last step of aligner therapy design.

This list shows jobs that:

- are still being downloaded (*Running*)
- have not yet started downloading (*Queued*)
- did not successfully download (*Failed*)
- have completed downloading (*Succeeded*)

All columns are sortable except for Action. To download a job, click the *Download...* link under the **Actions** column to download a Zip file of the exported models in STL format. The location depends on the type of web browser you are using. Check your browser's help to determine or change the download location.

Use the **Show** drop-down list to filter the list of jobs by:

- Running
- Queued
- Failed
- Succeeded

Reports

Generate a Clinic Report

From the clinic overview, you can print or save the following types of reports:

- **Practice Tasks:** identifies all upcoming tasks.
- **Attention Needed Report:** identifies tasks needing immediate attention.
- **Bracket Template:** use to double-check the brackets you selected for a bracket set or document the templates approved in your office.

To generate a clinic report:

1. On the clinic overview, click **Reports**.
2. From the drop-down menu, select the report you want to view.
Result: A filter dialog box opens.
3. Complete the filter information, and then click **Apply**.
Result: The report, PDF format, opens in a new web browser tab or (depending on your Web browser and its settings) is available in your Downloads directory.
4. When you have finished working with the report, click the **x** in the tab to close the report page.

Generate a Patient Report

The patient overview has a **Reports** drop-down menu on the right-half of the page under the elapsed treatment time. Click to display a list of reports available for the patient. The list of reports varies according to the case type selected for the patient. The below table lists all patient reports, what is included in each report, and the typical uses for each report.

To generate a patient report:

1. Open the patient record for which you want to run the report
2. From the patient overview, click **Reports** and then select the report you want to generate.
3. If a filter dialog opens, complete the information and then click **Apply**.
Result: The report, PDF format, opens in a new web browser tab or (depending on your Web browser and its settings) is available in your Downloads directory.

List of Patient Reports

Patient Report	What's Included	Typical Use
Patient Initial Report	<ul style="list-style-type: none"> • Initial photos • Initial models 	<ul style="list-style-type: none"> • Archival - patient file

Patient Progress Report	<ul style="list-style-type: none"> • Most recent photos, x-rays, and models • Previous models 	<ul style="list-style-type: none"> • GP progress update • Specialist referral • Archival - patient file
Patient Final Report	<ul style="list-style-type: none"> • Final photos • Diagnostic or therapeutic model • Final models 	<ul style="list-style-type: none"> • GP progress update • Specialist referral • Archival - patient file
Patient Treatment Timeline Report	<ul style="list-style-type: none"> • List of treatment timeline events showing: <ul style="list-style-type: none"> • Event (i.e., bonding appt., therapeutic scan, setup approval, debond appointment, etc.) • Current type (actual or estimated) • Due date • Overdue (yes or no) • Most recent models • Previous models 	<ul style="list-style-type: none"> • GP progress update • Archival - patient file • Research • Case studies / presentations
Patient X-Ray Report	<ul style="list-style-type: none"> • All available x-rays (choose the image set you want for the report) 	<ul style="list-style-type: none"> • Specialist referral
Patient Photo Report	<ul style="list-style-type: none"> • All available photos (choose the image set you want for the report) 	<ul style="list-style-type: none"> • Specialist referral
Patient Photo / X-ray Report	<ul style="list-style-type: none"> • All available photos & x-rays (choose the image set you want for the report) 	<ul style="list-style-type: none"> • Specialist referral
Patient Bracket Report	<ul style="list-style-type: none"> • Listed by arch: <ul style="list-style-type: none"> • Bracket description • CBCT approved (Y/N) • Slot size different from other brackets 	<ul style="list-style-type: none"> • Archival - patient file • Research • Patient transfers
Patient Referring Clinician Report	<ul style="list-style-type: none"> • Most recent photos • Most recent x-rays 	<ul style="list-style-type: none"> • GP or specialist progress update

	<ul style="list-style-type: none"> • Diagnostic or therapeutic model • List of treatment timeline events showing: <ul style="list-style-type: none"> • Name of Event (i.e., bonding apt, therapeutic scan, setup approval, debond appointment, etc.) • Current type (actual or estimated) • Due date • Overdue (yes or no) 	
Patient Referring Clinician II Report	<ul style="list-style-type: none"> • Most recent photos • Diagnostic or therapeutic model • Final model 	<ul style="list-style-type: none"> • GP or specialist progress update
Patient IPR Report	<ul style="list-style-type: none"> • Tooth chart showing which teeth have attachments and where IPR is applied • Wire history <ul style="list-style-type: none"> • Wire name • Type • Order date • Received date • Date inserted 	<ul style="list-style-type: none"> • Chairside aid when performing IPR or inserting wires
Patient Study Model Report	<ul style="list-style-type: none"> • Study models 	<ul style="list-style-type: none"> • Archival - patient file • Research
Patient Pre-Bonded Bracket with IPR Report	<ul style="list-style-type: none"> • Tooth Chart with pre-bonded (simulated) brackets shown • Interproximal reduction table for current plan showing only pre-bonded brackets and IPR after the IDB was ordered or model exported 	<ul style="list-style-type: none"> • Chairside aid when bonding brackets (DB or IDB)
Patient Bracket Voids Report	<ul style="list-style-type: none"> • Lists all brackets with large (> 0.4 mm) voids under pads 	<ul style="list-style-type: none"> • Chairside aid when loading IDB trays

Demo Copy

Click the Demo Copy on the Patient Overview page to create a demo copy of an existing patient record. When you create a demo patient, elemetrix generates a unique HRID and appends "Demo" to the number. For example, for demo patient John Smith, the HRID would be SJ0008Demo.

Patient records classified as Demo are not processed by the elemetrix Digital Lab.

Tracking Shipments

Use the Shipments tab of the elemetrix clinic overview page to check the status of shipped IDB trays and staged models. Once you place an order, it is listed under the Shipments tab so that you can track its status.

elemetrix lists shipment orders on the Shipments page as soon as you submit the order.

Simulations for IDB trays and printed models listed on the timeline do not reflect production or shipping status for actual printed trays or models. The resulting orders are listed in the Shipments area only.

Order Status

Because you are ordering a physical product that will be manufactured by OraMetrix and shipped to you, the statuses for IDB trays, aligners, and 3D printed models are standardized. Once the order status for one of these products is (Finished), you can go the Shipments tab and view the shipping status of the item. Here are the statuses for each physical product:

State	IDB Trays	Aligners	3D Prints
While designing or creating physical products the status is:	(Not ordered)	(Not ordered)	(Not ordered)*
After ordering physical products the status changes to:	(Ordered)	(Ordered)	(Ordered)
After physical products are shipped the status changes to:	(Finished)	(Finished)	(Finished)

* does not apply to Aligner case types as staged models are created in the Digital Lab.

elemetrix automatically removes order information from the Shipments tab if:

- A shipment is for a patient whose status has been set to "Finished"
- The shipment was shipped 2 or more years ago.

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Searching for Shipments

1. Use the Filters to narrow your search:
2. Under the "Show" filter choose the appropriate criteria:
 - **Show All Shipments** - show all orders regardless of status
 - **Show Shipments Received** – the box has been marked as received using elemetrix’s tracking features. After 90 days, shipments received by not checked in are indicated as received by

“Automatic.”

- **Show Shipments in Transit** – the order has been produced and shipped, but not marked as received. To track your order with FedEx, click the link to the Tracking Number.
- **Pending shipments** – the order is in production

3. Under the "Of" filter, choose the appropriate item type:

- All types
- Aligners
- 3D Prints
- Physical IDB Trays

4. To filter for cases assigned to you, click the **For All** filter and click your name.

5. If your practice is a multi-site practice, use the filter at the top left to narrow your search to items only being shipped to a specific site.

Estimated Delivery Times

Aligner models and IDB trays are shipped as soon as they are manufactured. Please contact your Account Manager for more information.

Check-in Shipments with a Bar Code Scanner

For the most efficient and error-free method of checking-in shipments, scan the FedEx label using a bar code scanner. Each item in the box will be updated in the shipment tracking list.

Caution: If you do not check-in your shipments after 90 days, the shipments are automatically transferred from the **Shipments In Transit** list to the **Shipments Received** list. **Automatic** will be listed instead of a user's name in the **Received By** column.

Tip: You do not need to contact elemetrix Customer Care to set up your bar code scanner with elemetrix. Any Windows-compatible bar code scanner will work immediately after it is installed.

1. Make sure you are logged into elemetrix using your own username and password.
2. From the clinic overview page, click the **Shipments** tab.
3. In the *Show* filter, select either **Shipments In Transit** or **All Shipments**.
4. If you have multiple offices, select the location for the appointments associated with the items. See [Select Destination Site](#) below.
5. Insert your cursor in the box to the left of the **Receive** button.
6. Use your bar code scanner to scan the bar code on the FedEx label. If you received multiple items in a box, scanning the barcode on the outside of the box captures the information for all of the contents.
7. Click **Receive**.
8. To see the shipments you just received, select **Shipments Received** in the **Show** filter.

Tip: You can click the column headers to sort the list on the columns. For example:

- Click **Patient ID** to sort the list alphabetically by patient ID, starting with AA. Click the column header again to reverse

the order to start with Z names.

- Click **Shipped Date** to sort the list by the date the shipments were sent to you, starting with the oldest shipments. Click the column header again to reverse sorting and list the most recent dates first.

If you have multiple pages of shipments, click the page numbers to move through the entire list.

Manually check-in shipments

If you do not have a bar code scanner, copy and paste the tracking number from the Tracking Number column into the box next to the **Receive** button to receive the shipment. There is no need to type the number.

1. From the clinic overview page, click the **Shipments** tab.
2. In the *Show* filter, select **Shipments in Transit** to display a list of all of your orders that have been shipped but not yet received.
3. Click the **Tracking Number** column header to sort by most recent tracking number. Scroll down to find the number that matches the package label. Drag your mouse across the number to highlight it. Right-click and choose **Copy**.
4. Insert your cursor in the box to the left of the **Receive** button. Right click and select **Paste**.
5. Click **Receive**.

Tip: To see the shipment you just received, select **Shipments Received** in the filter.

Check in a single item manually

If you are checking-in one shipment package, copy and paste the Product ID.

1. From the clinic overview click the **Shipments** tab.
2. Use the quick search feature to filter for the patient ID.
3. If you have multiple offices, select the location for this patient's appointment. (Or you can enter this information later - see [Select Destination Site.](#))
4. Find the item order that matches the prescription package.

Tip: Click the Product ID column header to sort in ascending order, and then click it again to reverse sort.

5. Drag your mouse across the Product ID number to highlight it. Right-click and choose **Copy**.
6. Click in the box next to the **Receive** button to insert your cursor. Right-click and choose **Paste**.
7. Click **Receive**.

Tip: To see the shipments you just received, select Show Shipments Received in the filter.

[Select destination site for a shipment \(multi-site practices only\)](#)

If you have multiple offices, OraMetrix ships to the office where you created the patient record. To request that all of your shipments go to a single address only, contact Customer Care. If a patient's appointment is scheduled in a different office than the one that received the package, you will need to transport the items needed for his/her appointment yourself. To help you track moved items, elemetrix allows you to indicate the site location on the **Shipments** page.

1. From the clinic overview page click the **Shipments** tab.
2. Enter the patient ID in the quick search or filter as needed to find the items you are transporting.
3. Use the site drop-down menu to select the location for the item.

Note: You cannot select a different site for the item until after it ships.

Print Shipment Tracking Information

You can print the page you are viewing using your browser's print function. Follow your browser's procedure for printing a page.

The screenshot shows a web browser window displaying the Suresmile application. The browser's address bar shows the URL: https://82014.suresmile.com/practices/00d61662-e446-46ba-af1a-b159db2f198d/wire_trackings. The application interface includes a navigation bar with tabs for 'Tasks', 'Patients', 'Shipments', 'Jobs', and 'Reports', along with an 'Add Patient' button. A search bar is present with a 'First Site' dropdown and a 'Receive' button. Below this is a table of shipment records.

Last Name	First Name	Patient ID	Product ID	Product Name	Upper/Lower	Tracking Number	Order Date	Shipped Date	Received Date	Received By
TestAE-01	Navision2013	TN000001	7000072	Tray for [IDB 1] 1		794645181516	2015-08-06	2015-08-06	2015-08-06	doc@mail.com
TestAE-01	Navision2013	TN000001	7000075	Tray for [IDB 2] 1		794645181516	2015-08-06	2015-08-06	2015-08-06	doc@mail.com
TestAE-01	Navision2013	TN000001	7000079	Model Print for [Diagnostic Model 1] 1		794645181516	2015-08-06	2015-08-06	2015-08-06	doc@mail.com
TestAF-01	Navision2013	TN000003	7000088	Staged Models for [Staged Models 2] 1		794645354687	2015-08-10	2015-08-10	2015-08-10	doc@mail.com
Sonata	Moonlight	SM000001		Model Print for [Diagnostic Model 1] 5			2015-08-04			
TestAF-01	Navision2013	TN000003		Model Print for [Therapeutic Model 1] 1			2015-08-11			
Sonata	Moonlight	SM000001		Model Print for [Diagnostic Model 1] 2						
Sonata	Moonlight	SM000001		Model Print for [Diagnostic Model 1] 4						
Sonata	Moonlight	SM000001		Model Print for [Diagnostic Model 1] 3						
TestAE-01	Navision2013	TN000001		Tray for [IDB 4] 1						
TestAF-01	Navision2013	TN000003		Staged Models for [Staged Models 3] 1						

A browser print menu is open over the table, showing options: Back, Forward, Reload, Save as..., **Print...**, Translate to English, View page source, View page info, and Inspect element. The 'Print...' option is highlighted.

Find missing shipments

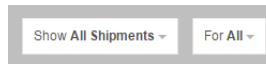
If you are preparing for a patient appointment but you do not have the wires, aligners or IDB trays on hand, use

the shipments page to determine:

- If the patient’s items were ordered.
- If the items shipped.
- When the items are due to arrive
- If they were moved to a satellite office.

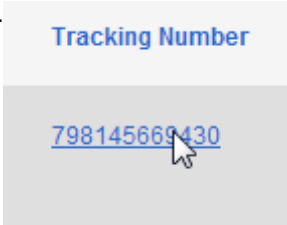
1. From the clinic overview, click the **Shipments** tab.

2. In the filters, choose **Show All Shipments** and **For All**.



3. Use the quick search feature to filter for a patient ID, if looking for a specific patient.

4. Refer to the table to find your shipped items:

Check...	... and then do this:
If there are any items listed for this patient. If no items are listed, they were probably not ordered.	Go to the Patient’s record and view the full timeline. Check if items were ordered. Tip: Items are removed from the Shipments tracking list when the patient record status is changed to <i>finished</i> or the shipment timeline status is changed to <i>inserted</i> .
The Received By column and Site (if applicable). If the item was received, the user who was logged on when the item was received is listed in the Received By column.	Look in the location indicated in the Site box and speak to the person who received the item in elemetrix.
The Shipped Date column. If this area is blank, the shipments have not yet shipped.	Contact elemetrix Customer Care for your options.
The Shipped Date column. If it shows a date, the item was shipped.	Click the tracking number link to show the FedEx web page. Use this page to determine delivery status. 

Transfer Items (multi-site practices only)

To mark an item as transferred to another office location, follow these steps:

1. From the clinic overview click the **Shipments** tab to display a list of all of your shipped orders.

2. Click the Show filter drop-down list at the top right and choose **Shipments Received**. The shipment must be received *before* it can be transferred.
3. Under the **Site** column, use the drop-down menu to select a different location for each shipment.
4. To see the list of shipments marked as transferred, click the **Show** filter drop-down list at the top right and choose **All Shipments Tracked**.

Automatic purging of shipments list

Shipment orders are removed automatically from the shipments list if:

- The status of the patient record is changed to *finished*.
- The wire, IDB tray or staged models status is updated to *inserted* or *finished*.
- After 730 days (two years), neither of these state changes occur, the software automatically removes shipment orders from the shipment tracking list.

See also...

Sorting and Filtering Patient Information

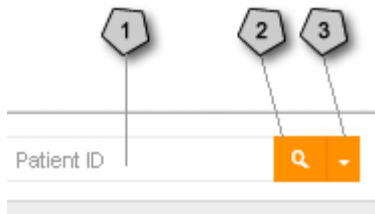
elemetrix offers several features to help your office to organize patient records in elemetrix treatment:

- You can sort and filter the patients from either the tasks tab or the patients tab.
- You can add a color-coded flag to mark specific patient records.
- You can write notes for your team or doctor.
- You can search for patients based on diagnosis and treatment characteristics as well as timeline information.

Tip: elemetrix remembers where you were on patient overview the last time you viewed it, so that you can return to the last place you were viewing when working on the case. For example, if you are viewing an image set for a patient on the patient overview, and you close the patient case, when you return later to the Patient Overview page for the patient you return to the image set you last viewed instead of simply seeing the default view of the Diagnosis and Treatment section.

Using Search

On the upper right side of most pages are a text field and buttons for performing searches as shown below.



- 1** Quick search box
- 2** Quick search button
Use the quick search to find patients by entering the last and first initials of a patient's name.
- 3** Advanced search button
Use the advanced search to find patients by additional information.

Using the Quick Search box

Use the Quick Search box to search for the following:

- **Patient ID** - For example if patient ID is *K9M7*, Entering "K9M7", "k9", "M7", "9M", "9m" "k9m7", "k9M", or "9m7" will return the patient associated with the patient ID K9M7.

Note: All patients added before 7.4 Update 4 (October 4, 2017) will keep their old patient ID in the background indefinitely. It will not be visible in the software, but you can search for the patient using their old Patient HRID. For example, for patient SB000003, enter SB000003 in the search box. Please note that you now must enter all of the zeros in the old patient ID. You cannot just enter "SB03" as before.

- **Patient's Initials** - For example, for patient *Amy Brown*, enter "BA" or "ba" in the search box. (Make sure you put the initial for the last name first.)
- **Patient's first or last name** - For example, for patient *Harold Bishop*, you can search for "Harold", "Bishop", "Har", "Bis", or Bish" etc. (You must enter at least three letters.)
- **Full text search** of patient record (word searches must be full word, for example, "vacation" not "vac"). Patient Notes are included in full-text searches. Product Notes are not included.

Note: Searches are NOT case sensitive. For example if you input "sm", either "SM" or "sm" could be returned. For queries within the Patient HRID and the patient External Link ID databases, two characters followed by 1 to 6 digits will not be concatenated in the search. The two leading characters will be searched at the beginning of the string, and the subsequent digits will be searched at the end of the content of the field.

Search governed by any filters you've applied


Search results are returned on the tab you have open. Any filters (except the Task Owners filter) that you've selected on the Tasks or Patients tabs are used in conjunction with the search field. For example, if on the Tasks tab you have applied the filter *Show Review Order Tasks* and 20 patients were returned, and you then search for "wn" in the Patient ID field, only those 20 patients will be searched. Even if there is a patient record containing the

initials “wn,” that record is not found if it is not one of the 20 review order tasks. The Task Owner filter is overwritten and disabled during any quick searches because elemetrix assumes that you want to search all tasks.

Tip: To quickly search of all your patients, go to the **Patients** tab and select the *Show All* filter.

To use the quick search from any page, follow these steps:

1. Type what you want to search for (patient ID, the patient's last and first initials, or a word or a phrase) in the quick search box in the upper-right corner of the screen. If you have used this term or a similar search term in the past, the term appears in a drop-down list as soon as you start typing, so you do not have to type the entire word.

2. Press the **Enter** key, or click the quick search button .

Result: Your search results appear in the currently selected tab. Select a different tab (Tasks or Patients) to see the results filtered according to the filter set for that tab.

Clear a Search

After you create a search, the quick search button changes as shown:



- The white number on the black background indicates the number of search parameters in the current search.
- If there is more than one search parameter, and you wish to view them, click **Details**.
- To clear all parameters from the search criteria, click **Clear**.

Result: The search box is empty and you see only the magnifying glass and drop-down arrow.



Use Advanced Search

Video: [Performing an Advanced Search](#)

ActiveX Contro...

[More video tips](#)

To use the advanced search

1. Click the down arrow  next to the magnifying glass.

Result: The Advanced Search window opens with the **Diagnosis /Treatment** tab displayed by default.

The **Diagnosis/Treatment** tab contains the same elements available on the **Diagnosis & Treatment** tab on the patient overview. Each category has a drop-down list from which you can make multiple selections. For example, if you choose to search for **Diagnosis Class: Class I** and **Treatment Type: Extraction**, the search returns only Class I cases with extractions. It does not return all

Class I cases nor all cases with extractions.

Note: Your selections remain when you switch to a different tab.

2. Click the **Demographics** tab. Select one or more of the following criteria as needed:

- Referring Doctor
- Gender
- A range of age at bond date
- A range of treatment time in months.

For example, you can search for patients with the following characteristics:

- Between 13 and 15 years of age at bonding, or
- At least 13 years of age at bonding. (Leave second box blank.) and
- In treatment for not more than 18 months. (Leave first box blank.)

3. Click **Search** at the bottom of the Advanced Search window.

Result: Your search results are displayed in the tab from which you initiated the search.

Note: Your search results are further reduced by any filter already set on the **Tasks** or **Patient** tab, unless there is a direct conflict between a filter set on these tabs and a filter set on the **Advanced Search** page. In this case, the filter set on the **Advanced Search** page overrides the filter set on the **Tasks** or **Patients** tab.

4. To reset the advanced search criteria, click **Clear Filters** at the bottom of the Advanced Search window.

5. Close the Advanced Search window by clicking the x in the upper-right corner.

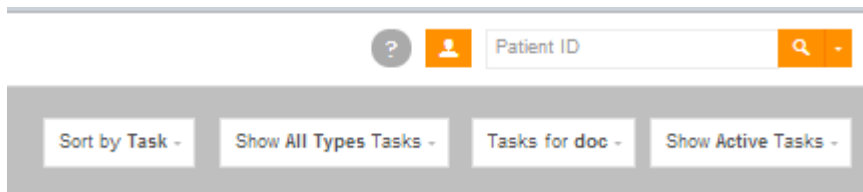
Sort and Filter Tasks

From the clinic overview, you can sort and filter tasks and patient cards using the menus on the top right side of the Tasks tab.

Sort and filter tasks

When you first come to the clinic overview, the active tab is the one you selected in your preferences.

To sort and filter tasks, select from the menu buttons on the top right side of the page:



The following table lists each menu with its options for sorting and filtering on the Tasks tab.

- The default options when you first come to this page are shown in italics unless you have changed the Appearance defaults in your preferences.
- As soon as you make any menu selection, the page changes to narrow the items shown. If you leave and later return to this page, your selections are still in place.

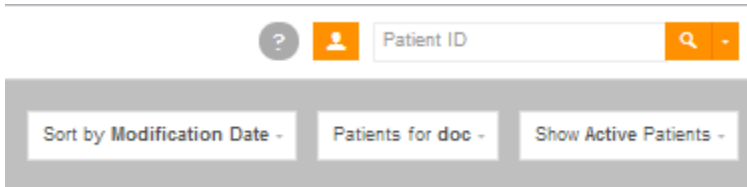
Menu	Options
Sort by ...	<i>Task</i> Due Date Flag Patient Report
Show ... Tasks	All Types shows all tasks. Provide Information shows items on hold, rejected, and those needing additional information. The filter shows these tasks: Resolve Hold, Provide Information . Review Order shows items needing review. The filter shows these tasks: Review Order and Review Changes . Submit Order shows items to be submitted. This filter shows only Submit Order tasks. Create Order shows items that are due to be started according to the timeline date. This filter shows tasks such as Scan & Order therapeutic model, Order Setup , and so forth. Reminder shows all patients with past-due actions required by the clinic. The filter shows these tasks: Provide treatment card, Bond patient, Complete IPR, and Order appliance or analyze records .
Tasks for ...	<i>Currently logged in user *</i> All Doctors (followed by login name of each doctor) All Staff (followed by login name of each staff member) All * <i>If the currently logged in user has no assigned patients, then all patients are shown.</i>
Show ... Tasks	<i>Active</i>

Expired
Deferred
Completed
All

See also...

Sort and Filter Patients

From the clinic overview, you can sort and filter tasks and patient cards using the menus on the top right side of the Patients tab.



The menus and options on this tab are in the following table.

Menu	Options
Sort by ...	Modification Date (default) Patient ID Flag
Patients for ...	Currently logged in user* (default) All Doctors (followed by login name of each doctor) All Staff (followed by login name of each staff member) All * If the currently logged in user has no assigned patients, then all patients are shown.
Show ... Patients	Active (default) Finished Quit Transferred Cancelled MD (Marked for Deletion) Demo All

Sorting Priority

As you sort tasks, the cards are listed according to their priority. Tasks with milestones are created at the time of patient creation (except for the IPR reminder), but these tasks become active only during the time leading up to the planned date as indicated in the table below.

Priority	Task	Notes
1	Resolve hold	Appears as soon as hold occurs
1	Provide information	Appears as soon as information is requested
2	Review changes	Second and later reviews
2	Review order	First review
3	Submit order	
3	Scan and order therapeutic model	Appears in timeline 2 weeks before the scan date.
3	Order setup	Appears in timeline 3 weeks before the setup approval date.
4	Provide treatment card	Appears in timeline 1 week before the debonding date.

Add and Clear Flags

The elemetrix software provides a method for flagging patient records to indicate special attention for the patient. These flags are identified by their color so that you can define within your own clinic the meaning of each color.

You can add only one flag per patient; however, that flag is shown on both the tasks tab and the patients tab.

On the clinic overview, a small circle appears to the right of the patient's photo or in the first column of the list. The default is a blank circle, but elemetrix includes six colored circles that you can use to flag tasks or patient records. For example:

- On the Tasks tab, you might flag a patient with an urgent task for the doctor to complete with a high priority.
- On the Patients tab, you might flag a patient record that has an important finish due date, such as an upcoming wedding.
- You might want to add an orange flag to a patient record to indicate that the wires for an upcoming appointment have been received.

To add a flag, follow these steps:

1. From the **Tasks** view or from the **Patients** view, click the task flag next to the patient's photo or from the first column in the list view.
2. Select a colored circle.

To clear a flag, follow these steps:

1. From the Tasks view tab or the **Patients** view, click the **task flag**.
2. Select the blank circle from the menu.

Working with Photos and X-rays

Photos and x-rays are required to optimize 3D modeling accuracy and should be taken at the patient's scan appointment.

Tip: If you cannot take records at the scan appointment as recommended, make sure you take them no more than 4 weeks before the scan or no longer than 2 weeks after the scan. Any delay beyond 2 weeks after the scan will extend overall treatment time.

A standard photo set consists of:

- Extraoral
 - Shows the natural jaw position.
 - Shows the patients' natural smile line; needed for global registration.

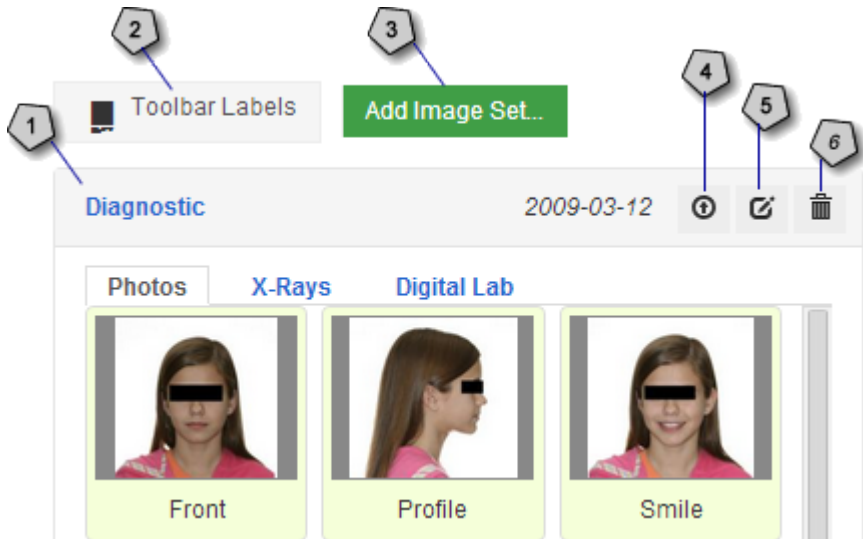
- Intraoral
 - Used for tooth anatomy
 - Bite registration
 - Bracket placement

Specific requirements for elementrix records are listed below.

	Photos	X-Rays
Initial Records		
Strongly recommended	Five standard intraoral, three facial Full mouth intraoral photo	Panorex, ceph
Progress Records		
Required for a therapeutic model	Five standard intraoral + three facial	Panorex + initial or current ceph
Strongly recommended	Full mouth + overjet	
Final Records		
Strongly recommended	Five standard intraoral, three facial + full mouth	Panorex, ceph

Manage Image Sets

The right panel in the image editor allows you to add and view images. Shown below is the top part of that panel:



Name of image set. Date of image set is in italics to the right. Click to expand or collapse view of images in the set.



Upload images icon



Toggle the toolbar labels in the left panel on and off.



Edit image set icon



Use this button to add a new image set from this page.



Trash can icon to remove the selected image set.

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Heading 2

Create a new image set

1. On the patient overview, click **Image Sets** and then select **Add Image Set...**
OR
In the image editor, click the green button at the top of the panel on the right side of the page.
Result: The New Image Set page opens.
2. Enter the name for the image set.
3. If you need to change the date, type the date or click the calendar icon and select the date that the records were taken.
4. Click **Save**.

[Video: Creating an Image Set](#)


ActiveX Contro...

[Video: Editing an Image Set](#)

ActiveX Contro...

[Change the image-set name and date](#)

To change the name and/or date of an image set, follow these steps:

1. From the patient overview, click **Image Sets** and then select the image set for which you want to change the name or date.
2. Click the edit button to the right of the image set name.
3. Click the edit icon , and select the name of the set that you want to change.
4. Change the name and/or date.
5. Click **Save**.


[Add images to the image set](#)

When you click edit for an image set on the patient overview, you go to the image set page, which has a large pane on the left for viewing an image and a pane on the right for adding and showing images.

The pane on the right has three tabs:

1. **Photos** where you can add nine pre-labeled images plus 15 additional photos.
2. **X-Rays** where you can add six pre-labeled images plus 15 additional x-rays.
3. **Digital Lab** where nine images can be added by the Digital Lab.

To add images to an image set, follow these steps:

1. From the patient overview, click **Image Sets** and then select the image set into which you want to add photos or x-rays.
2. Click the Edit button to the right of the image set name.
Result: The image set page opens.
3. On the right pane of the screen, click the appropriate tab for the images you want to add: **Photos** or **X-Rays Rays**.
4. Click the upload icon  on the thumbnail view that you want to add.
Result: The New Image box opens.
5. Enter a title.

Note: The type and image set are default values that you cannot change.

6. Click **+ Add Files...**; select the image from the dialog window, and then click **Open**.

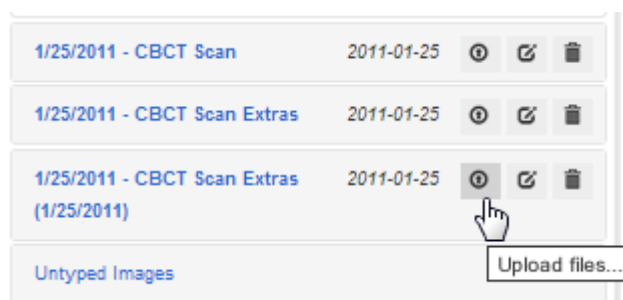
Result: As soon as you click Open, the image is added to the set in the place that you selected in Step 4.

7. Repeat steps 4 through 7 until you have added all of the images for this set.

Upload multiple images

To add multiple photos or x-rays at one time, follow these steps:

1. Click the **Upload Files** button for the image set.




2. Select multiple image files from the Open dialog, and click **Open**.
Result: The selected files appear in the Untyped Images area below the montage.
3. Drag and drop the image into their correct position in the montage.

Move an image in the image set

To move an image to another location in the image set, follow these steps:

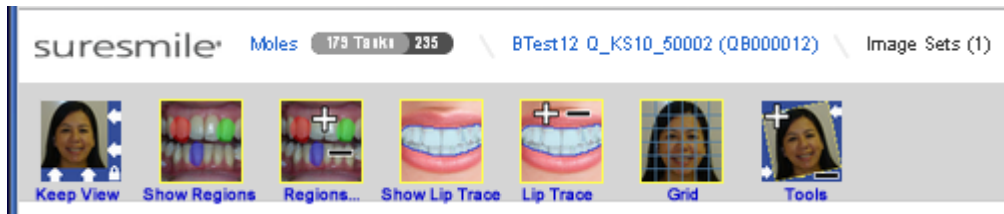
1. Click and hold down the mouse button on the image that you want to move.
2. Drag the image to the new location in the set.
Result: The image in the original location disappears and then appears in the new location. If an image was already in the new location, it exchanges places with the image that you moved.

Delete an image set

1. From the patient overview, click **Image Sets** and then select the image set that you want to remove.
2. Click the Edit button to the right of the image set name.
3. Click the trash can icon  to the right of the set that you want to delete.
4. Click **OK** or **Cancel** at the "Are you sure?" prompt.
Result: If you click OK, the image set name disappears from the list.

Edit Images

The photos and X-rays pages both have the same image editing tools. The image editor has icons at the top of the page just above the large image area as shown below:



In this Topic

- [Heading 2](#)


Change the size of the image

To change the zoom factor on an image, follow these steps from the image editor page:

1. Click on an image in the pane on the right side of the screen.
A preview image appears in the Image Editor on the left side of the screen.
2. Put your mouse cursor over the square in the middle of the image.
3. Hold down the left mouse button and do one of the following:
 - Move the cursor up to zoom out and reduce the image size.
OR
 - Move the cursor down to zoom in and increase the image size.

♦ [top of page](#)

Turn on the grid

1. Click on an image in the pane on the right side of the screen.
Result: A preview image appears in the Image Editor on the left side of the screen.
2. Click the **Grid** icon  to toggle the grid on and off.

♦ [top of page](#)


Change the photo quality

The tools menu (last icon on the right) provides options for you to do the following:

- Change brightness

- Change contrast
- Restore view
- Reset view
- Mirror (flip) the view horizontally

To make changes to your image, follow these steps:

1. Click on an image in the pane on the right side of the screen.
Result: A preview image appears in the Image Editor on the left side of the screen.
2. Click on the image tools icon .
Result: The Image Tools window dialog box appears.
3. Choose from the options listed below to change the image:

If you want to ...	Do this ...
Increase the brightness ...	Drag the Brightness slider bar to the right or enter a number between 1 and 99.
Decrease the brightness	Drag the Brightness slider bar to the left or enter a negative number between -1 and -99.
Increase the contrast	Drag the Contrast slider bar to the right or enter a number between 1 and 99.
Decrease the contrast	Drag the Contrast slider bar to the left or enter a negative number between -1 and -99.
Restore the view to its last state	Click the Restore View button.
Reset the view to the original image	Click the Reset View button.
Flip the image horizontally	Click the Mirror Horizontally button.

4. When you have made all of your changes, click the gray x in the upper right corner of the Image Tools dialog to close that window.
Result: Your changes are saved automatically.

◆ [top of page](#)

Rotate the image

To rotate the image, follow these steps:

1. Click outside the circle.
2. Press the left mouse button and then drag the mouse in a circular pattern to rotate the image.

Move an image

To move an images, follow these steps:

1. Click inside the circle.
2. Press the left mouse button and then drag the mouse change the position of the image in the editing area.

Save a view

After you make changes to an image, you can retain the changes to the view.

To save changes to your image, click the **Keep View**  icon above the large image area.

Delete an image

To delete an image, follow these steps:

1. In the right panel, place your cursor over the thumbnail image that you want to delete.
2. Click the trash can icon in the thumbnail to delete the image.


◆ [top of page](#)

Region Markup Tool

The region tool allows you to create a shaded region around three areas of concern on a photograph or x-ray. You can then refer to the region in your notes to the Digital Lab so that the technician knows which area you want to reference for a particular matter.

Use the Region Tool to Add an Area

To mark a region on a photograph or x-ray, follow these steps:

1. Navigate to the photograph or x-ray that you want to mark.
2. Click the **Regions...**  icon.
A drop down list appears to the left of the large image.
2. Click **Region #1 (red)**, **Region #2 (green)**, or **Region #3 (blue)**, and then click **Add Region Area**.
Result: The pointer turns into a cross hair.
4. Click and drag the pointer around the area you want to highlight. When finished, release the mouse button.
Result: As you trace, a shape masks the area in the photograph or x-ray in the color you selected.
5. To save your changes, click the **Keep View** icon in the toolbar at the top of the large image window.

Use the Subtract Region Area Tool to Modify an Area

Follow the steps below to remove a region on a photograph or x-ray.

1. Open a model and in the menu bar, click Image.
2. Click the Select... icon, and click the image on which you want to change a region.
3. Click **Region #1 (red)**, **Region #2 (green)**, or **Region #3 (blue)**.
4. Click **Subtract Region Area**.
Result: The pointer turns into a cross hair.
5. Click and drag the cross hair to subtract or remove a portion of the colored area. When finished, release the mouse button.
Result: A portion of the area is erased.
6. When finished, click **Keep View** icon to save your changes.

Export 2D Images

Video: Exporting 2D Images of Models or X-rays

ActiveX Contro...

To export a single image

1. From the patient overview, click the **Exports** button on the right side of the screen, and select Export 2D or Export 3D.
2. Click the down arrow next to the image that you want to export and select the appropriate file format.
Result: The file is downloaded immediately to the download directory on your computer.
3. Repeat step 2 for other images that you want to export.

To export the entire image set

1. Click the down area next to the **Download Group** button at the top of the page.
2. Select the appropriate format from the menu.
Result: elemetrix downloads a zip file to the download directory on your computer.
3. Move or save the zip file to a more appropriate location.

IDB Cases

Use the IDB Case Package to create indirect bonding (IDB) trays based on a straight wire simulation.

Create IDB trays based on a straight wire simulation from a diagnostic model. Use this simulation to order a set of IDB trays from OraMetrix.

This package type provides 3D automation for rapid digital evaluation and adjustment of bracket placement. elemetrix IDB trays achieve bracket placement with the accuracy of a jig, but with the chairside efficiency of a tray.

Important: in-person IDB training by a trained elemetrix field representative is required for all elemetrix customers. Until your practice purchases and schedules this training, the ability to order IDB packages is not available.

Note: At this time, elemetrix only offers IDB trays for labially bonded bracket treatment.

Features & Benefits

- Bracket placement & evaluation
- Ability to segment
- Fast, accurate transfer
- Malocclusion simulation to view and adjust brackets on a diagnostic model.
- Straight-wire simulation to visualize the effects of tooth/bracket movements, including inter-arch effects.
- Upper and/or lower labial IDB trays manufactured by OraMetrix and shipped to your practice.

Services include:

- 1 diagnostic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners. (Separate fee applies per diagnostic model.)
- 1 set of printed IDB trays shipped to your practice . (Separate fee applies per arch.)
- Ability to export the IDB tray digital files and print your own IDB trays in-house or at a local lab. (One-time charge per arch.)

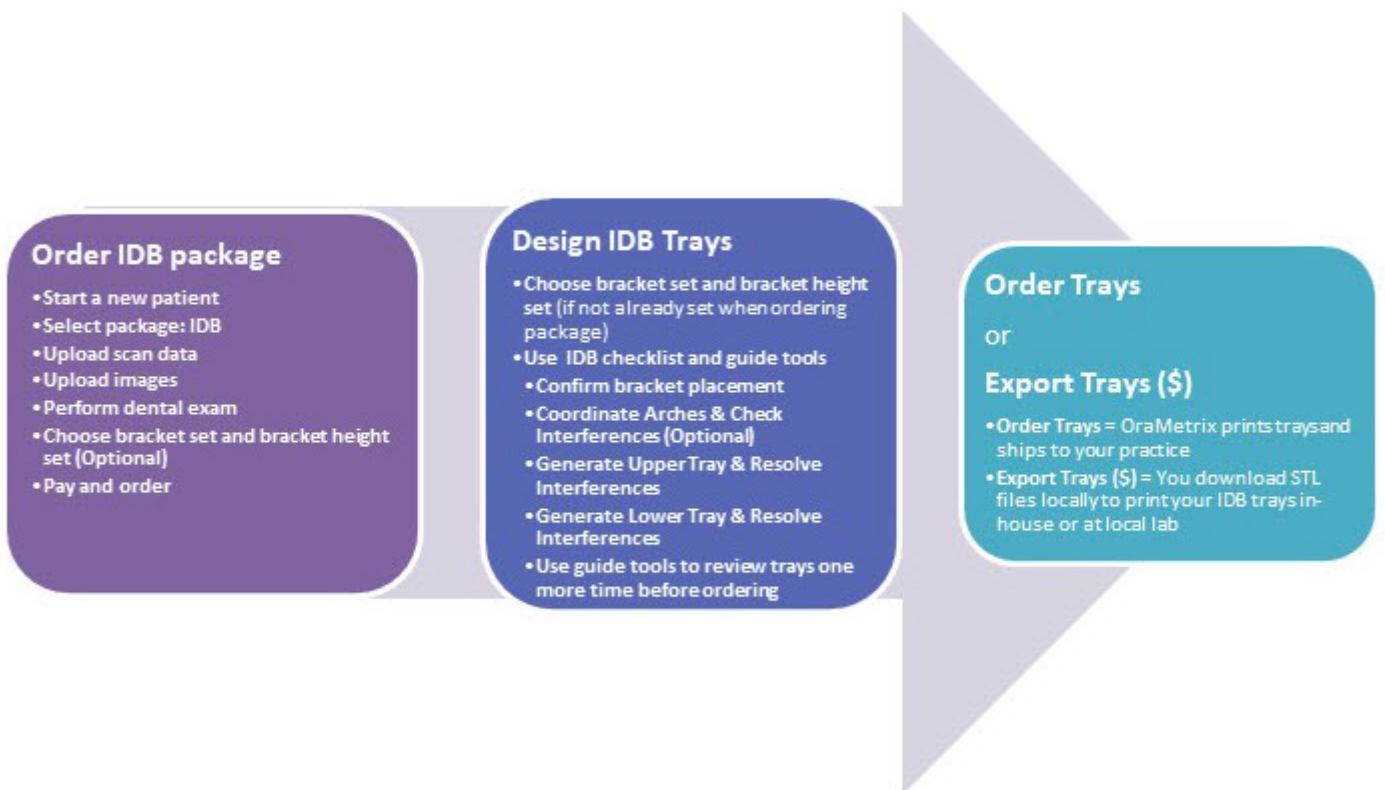
High-level Process Flow: IDB Package



* Scanning Options:

- Intraoral scan using 3rd party scanner
- Desktop scan of plaster (not recommended)

Detailed Task Workflow: IDB Package



For detailed step-by-step instructions and videos, click the following links:

[Ordering an IDB Package](#)

[Beginning an IDB Simulation from an Approved Diagnostic Model](#)

[Designing and Ordering IDB trays from an IDB Tray Simulation](#)

[Using the FA Point When Placing Brackets](#)

[Identifying Bracket Voids](#)

[Segmenting Trays](#)

[Measurement Options for Bracket Sets](#)

[Using the Bracket Placement Tab](#)

[Exporting 3D Models for Lab Use](#)

Ordering an IDB Package

Important: in-person IDB training by a trained elemetrix field representative is required for all elemetrix customers. Until your practice purchases and schedules this training, the ability to order IDB packages is not available.

To obtain access to the IDB Trays package, you must first add a new patient. After filling out the patient information, the Select Package Type page appears as shown.

If you or your practice has not yet paid for in-person IDB training, the IDB Trays package is not enabled. It appears dimmed on the Select package type page.

To enable the IDB Trays package

1. Click the **Training: \$1250.00 *** button. The **Enable IDB Trays Package** dialog box opens.
2. Enter your credit card information and click **Purchase**. You or your practice will receive a confirmation of payment e-mail, and another e-mail explaining next training steps.
3. The IDB package is activated and pricing for the IDB trays, exported IDB files and optional IDB trays is now visible. You can now start ordering your IDB packages as described below.

Sideshow: Ordering an IDB Package

Here are step-by-step instructions for ordering an IDB case package after you have started a new patient and you have purchased the special In-person IDB training.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/a4588cb0-439a-11...>]

Beginning an IDB Simulation from an Approved Diagnostic Model

Here are step-by-step instructions

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/df640090-694d-11...>]

Design & Order IDB Trays

Once the digital model has been processed, you are ready to design and order your IDB trays. You will receive an email for this task, *Design & order trays*, containing a link that takes you directly to the treatment planning workspace where you will design and order the IDB trays from the IDB tray simulation. Alternatively, you can also find this *Design & order trays* task for the patient in your task list in elemetrix.

1. Click the *Design and order trays* task link to go directly to the IDB tray simulation.

Select bracket set and assign bracket height sets

If you chose not to select a bracket set when ordering the case package, the Create IDB Simulation dialog box opens and you are prompted to select a bracket set when you begin the IDB tray simulation.

1. From the **Select Bracket Set** menu, select a bracket set supported by elemetrix for use with IDB trays. If you defined just the bracket height set in the elemetrix workflow but not the actual bracket set, the system pre-selects the bracket height set in the Create IDB Simulation dialog box. If during the elemetrix workflow you defined just the bracket set but not the bracket height set, the Create IDB Simulation dialog box does not open. Instead, the system creates the IDB tray simulation using the pre-selected bracket set with your default bracket height set. If you applied a bracket set in an IDB Tray Simulation, if you click the Assign Bracket Set button on the Brackets tab, this same currently assigned bracket set is now shown on the Bracket Set Selection dialog box under Select a bracket set.

Tip: To quickly determine if a bracket is IDB approved, hover your mouse over the bracket in the tooth chart to display a pop-up box with details about the bracket.

2. Select a bracket height set for the Upper, then for the Lower. You will be able to modify bracket heights on the model later as well.

UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8
2.0	2.0	3.0	4.0	4.5	5.0	4.5	5.0	5.0	4.5	5.0	4.5	4.0	3.0	2.0	2.0
2.0	2.0	3.0	3.5	4.0	4.5	4.0	4.0	4.0	4.0	4.5	4.0	3.5	3.0	2.0	2.0
LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8

3. Click **Ok**. A progress bar appears while the system creates the IDB Tray simulation.

Note: elemetrix measures the bracket height from the middle of the bracket slot to the:

- incisal edges for central incisors and laterals

- buccal cusp for canines and premolars
- most prominent buccal cusp for posterior teeth

Designing and Ordering IDB trays from an IDB Tray Simulation

Tip: Click the expand view button  to see the full screen.

IFrame [https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/22105800-661d-11...

The IDB workspace opens with its own checklist and icons in the Guide Tools palette. These tools offer options for changing an individual bracket or assigning a different bracket set.

In this Topic


- [Heading 2](#)
 - [Heading 3](#)

Confirm Bracket Placement

1. Click the first step in the IDB checklist: **Confirm Bracket Placement**. (If the checklist is not shown on the left side of the workspace click the Open Checklist button.) The Bracket Placement tab is selected.
2. Take a moment to review the bracket placement on each tooth. Adjust brackets as needed in the bracket placement tab (see below) or by clicking the bracket in the main window to activate the navigation controls

for the bracket and then clicking and dragging the bracket to adjust its location.

Note: Brackets maintain a three-point contact with teeth in IDB simulations.

3. (Optional) View the straight-wire simulation (active model) to position brackets to achieve treatment goals. (NOTE: There is no Displacements tab since the straight-wire simulation is an estimate for visualization purposes only.)
4. (Optional) Use the Toggle Active/Reference model tool  to view the reference model to check that brackets do not impinge on the gingiva or interfere with other brackets or teeth.

Use the Planned Bracket tool to toggle the planned brackets on or off. Use the tooth chart on the Brackets tab in conjunction with the four buttons on the tab to add or remove brackets and adjust bracket heights as follows:

Button	How to Use
Assign Bracket	Click to open the Bracket Selection dialog box to change brackets for one or more teeth. Use only brackets that are indicated as "IDB approved". Failure to do so will prevent the IDB trays from being generated. Only IDB approved brackets are listed by default.
Remove Bracket	Click a tooth in the 3D model or in the tooth chart to remove a bracket.
Assign Bracket Set	Click to open the Bracket Set Selection dialog box to change brackets for one or more teeth.
Select Bracket Heights	Click to open the Bracket Height Set Selection dialog box to modify individual bracket heights.
Report	(Optional) Click the Report button on the Brackets/Attachment tab to create a printable PDF of the list of planned brackets and a table showing the planned, applied and completed IPR for the IDB simulation.
Bracket Voids	(Optional) Click to create a printable PDF list of those brackets where additional adhesive is needed to fill voids between the bracket base and the tooth surface.

Tip: Remember, if you change a bracket by mistake, just click the **Undo** button in the lower right corner to bring the bracket back.

Note: If you select a bracket set that includes brackets that are not yet available for use with elemetrix IDB trays, you will receive a notification that the bracket set is not supported and the system will not allow you to generate the upper or lower trays. The same is true if you select a non-supported single bracket while in the IDB tray simulation. If a bracket or set of brackets you use is not in the bracket library, please send an email to brackets@orametrix.com.

Use the tooth table on the Bracket Placement tab to adjust the heights of the planned brackets. You can select multiple cells in the tooth table and then adjust the values for all of them simultaneously.

To apply a displacement value to multiple cells:

1. Click the first cell in the range to highlight.
2. Press and hold the **Shift** key, and click in the last cell in the range.


3. Under the Edit Selection controls to the right of the chart, type a new value.
OR
Click the small up and down arrows (first set) to change to the number required.
4. Click the equal button to apply the typed value to the highlighted cells.
OR
Click the large up arrow (second set) to increase the typed value in each of the highlighted cells.
OR
Click the large down arrow (second set) to decrease the typed value in each of the highlighted cells.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8
occlusal / gingival						0.5	0.5	0.5	0.5	0.5	0.5					
mesial (+) / distal (-)																
Angulation mesial (+) / distal (-)																
occlusal / gingival				-0.1												
mesial (+) / distal (-)																
Angulation mesial (+) / distal (-)																
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8

Optional steps:

- Click the Auto Adjust View check box so that when you click on a cell in the table, the 3D model automatically reorients so that the selected tooth is in the center of the screen in the correct view.

- Under Vertical Reference, choose Jig Height to show the bracket height in millimeters, or choose FA Point to show the position of the bracket height relative to the facial axis point.

- Click the Toggle icon  to view the straight-wire simulation (active model) to position brackets to achieve treatment goals. (NOTE: There is no Displacements tab since the straight-wire simulation is an estimate for visualization purposes only.)

- Ensure that brackets do not impinge on the gingiva or interfere with other brackets or teeth.

Optional: Coordinate Arches and Check for Interferences

Use this optional step to help you identify potential inter-arch interferences and determine if treatment mechanics are needed. Clicking the new step displays a set of controls on the Brackets tab. These controls allow you to view and manipulate both arches to identify potential bracket or tooth inter-arch interferences. You can now see color shading where there are interferences on the active model (white teeth). Previously you could only see the interferences on the reference model (blue teeth).

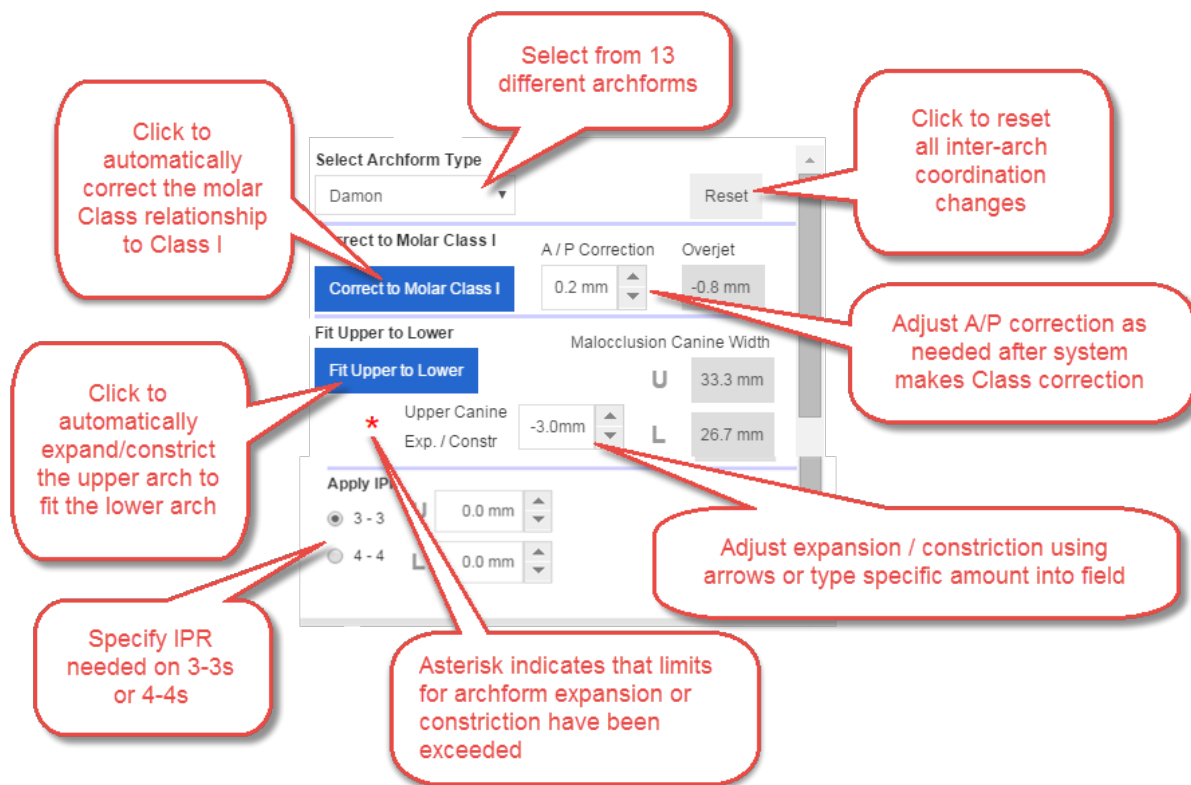
Use the inter-arch controls on the Brackets tab to:

- select different archforms
- adjust position of the lower to upper arch to achieve approximation of a molar Class I relationship
- automatically adjust the upper arch width to fit the lower arch
- set and view IPR on the 3D model



How to use the inter-arch controls


Use the controls on the Brackets tab as shown. Each control is described in detail below.



Here is more information about the inter-arch controls and how to use them:

Select a different archform

Specify the desired archform from a selection of 13 predefined archforms. The selected archform applies to both the upper and lower arches and is automatically scaled according to the canine arch-width of the malocclusion. The default archform type shown is either Brader or an archform type you specified under Setup preferences

Use the Slideline tool  in the Tools menu palette during IDB tray simulations to help select the best archform for the patient.

Reset


Click **Reset** to remove all of your inter-arch coordination changes.

Correct to Molar Class I


Click the **Correct to Molar Class I** button to use an algorithm to correct the Anterior/Posterior relationship of the lower arch so that the upper mesial labial cusp tip of the first molar matches the buccal groove feature point of the lower first molar. This algorithm complies with the ABO Class measure standard. The movement is applied as global movement to the lower arch. The corrective movement is split between the right and left sides of the arch. For example, if there is a tooth size discrepancy between both sides of the arch, one side will be off a little mesially, the other side will be off a little distally. elemetrix then displays the amount of the A/P correction in millimeters. Click in the box or use the up/down arrows to further adjust the correction. elemetrix also displays the amount of current overjet. When you apply class correction, the amount of overjet is updated. If, after making other adjustments, you select a different archform, the system resets the overjet to the malocclusion.

Fit Upper to Lower

Click this button to fit the upper arch to the lower arch in occlusion based on the feature points. The system does this by calculating the amount of expansion/constriction required for the upper arch to fit the lower arch. The amount of expansion or constriction shown is the change in the upper canine width from the reference (malocclusion) model. If you need to adjust the amount of the upper canine width, type values directly into the editable field or click the up/down arrows next to the Upper Canine Exp. / Const. field to change the width in 0.1 mm increments. The field has built-in safeguards. The minimal and maximal expansion is controlled by the lingual and labial expansion of the arches so that upper-lower contact is ensured. The value you enter can never cause the arch to expand more than 120% of its original width or less than 80% of its original width. If you enter a value that would cause the value to exceed these limits, a red asterisk appears as a warning and then the value reverts to the original value previously displayed.

The Arch Width tool  in the Guide Tools shows the arch width distance on both the simulation (white teeth) and reference model (blue teeth).



Apply IPR

Use the options and controls in this section to specify the amount of interproximal reduction (IPR) to apply as needed to the 3-3s or 4-4s. Click the Buildup/Cuts tool  in the Guide Tools to toggle the color shading on or off. Red indicates surfaces where anatomy was removed in the model. This IPR information is automatically added to a table with planned, applied and completed IPR for your IDB simulation at the bottom of the *Patient Bracket/Attachment with IPR Report*. Click the **Report** button on the **Brackets** tab to generate this report. You can also view the IPR portion of this report from the Patient Overview page. Click Reports > Patient IPR Report.

Zoom synchronized in upper and lower side windows

When working in step 2, the zooming of the upper and lower side windows is synchronized. When you use the zoom navigation control (small rectangular box) to zoom in or out in either the upper or lower side window, the zoom is applied to both windows. The position or display of the model in the other window does not change. Only the zoom level changes.

Generate Upper Tray & Resolve Interferences

Click the third checklist step **Generate Upper Tray & Resolve Interferences** to generate a model of the upper IDB tray in the main window. Two additional icons also appear in the Guide Tools: **Show/Hide IDB trays**  and **Create Tray Segments** .

Automatic Tray Segmentation and Conflict Solver Logic

When the IDB tray simulation is created for the first time and you click the *Generate Upper/Lower Tray & Resolve Interferences* steps in the checklist, the system applies automatic segmentation and automatic conflict solver logic, and the IDB Trays Segments dialog box opens showing the results. Brackets with conflicts are excluded and are shaded yellow. See [Segmenting Trays](#) for more information.

Generate Lower Tray & Resolve Interferences

Open the fourth checklist step **Generate Lower Tray & Resolve Interferences**. Follow the same instructions as for the upper arch.

Identify and fix bracket voids

Identify those brackets where additional adhesive is needed to fill voids between the bracket base and the tooth surface. See [Identifying Bracket Voids](#) for more information.

Order Trays

The fifth and last checklist step, **Order Tray**, is for final review before ordering. Click through the guide tools menu icons and carefully review the trays one last time before ordering. Choosing this step displays the Order tab and also another menu icon: *Toggle Upper/Lower Arch*. Click to switch between views of the arches.

After you finish your review and are ready to submit the order, follow these steps:

1. (Optional) Select the order name and rename it if you wish.
2. Click the **Order Trays** button or the **Export Trays** button on the Order tab. A confirmation message appears.

FYI: What's the difference between **Order Trays** and **Export Trays**?

- Clicking **Order Trays** sends the digital files to OraMetrix for processing and printing. One set of printed IDB trays is shipped to your practice. (A separate fee applies to each arch.)
- Clicking **Export Trays** downloads the IDB tray digital files locally so you can print your own IDB trays in-house or at a local lab. (One-time charge per arch.)

Note: If there are any interferences, the **Order Trays** and **Export Trays** buttons are disabled until you resolve the interferences.

3. Click **OK** to complete the order. elemetrix puts the IDB tray simulation into an Ordered state and it becomes read only. An Order Submitted confirmation message opens.
4. Click OK to acknowledge that the order was successfully created and submitted to OraMetrix for processing. The Order Trays button is now disabled. To reorder trays, click **Copy** under IDB Tray Simulation and reorder the trays.

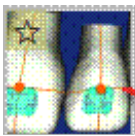
Note: To help prevent accidental breakage on models with gaps due to missing or unerupted teeth, the minimum thickness of the gingival base to about 5 mm.

Using the FA Point when Placing Brackets

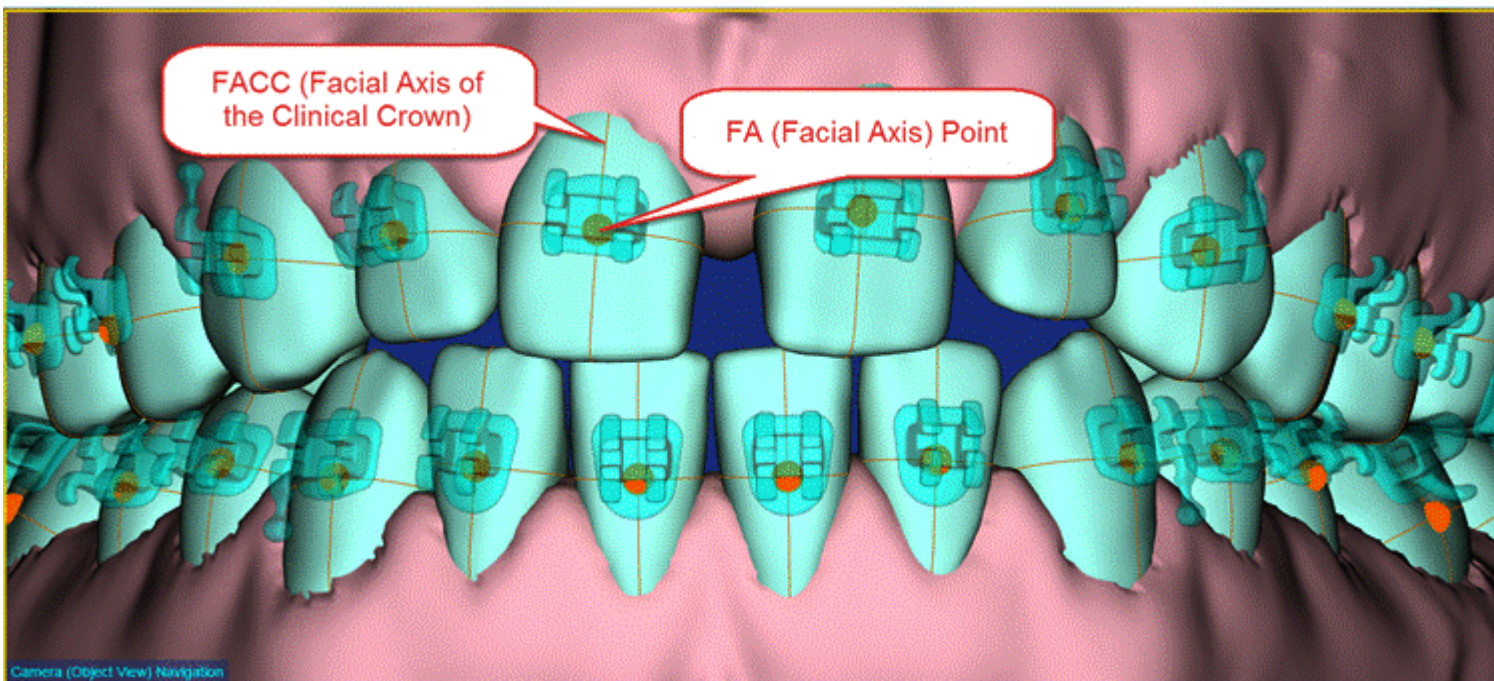
When designing IDB trays using the IDB Tray Simulation, you have a tooth feature point – the facial axis (FA) Point. The system draws vertical and horizontal lines based on the axes to provide a reference for bracket placement.

The intersection of the lines is initially set to the FA Point of the tooth. The FA Point is the point on the facial axis that separates the gingival half of the clinical crown from the occlusal half. You can fine-tune the position of the lines as needed and the position of the bracket will adjust automatically if the bracket height set you select is based on FA points instead of bracket heights.

Use the Facial Axis System icon in the guide tools to toggle the FA Point on or off.



Facial Axis System
Icon added to Guide
Tools for IDB
Simulations



Note: If you apply a bracket height set based on FA points, when you open the Bracket Placement tab, instead of seeing only zero in the Occlusal/Gingival row, you may occasionally see some small values instead. These small values each represent a deviation from the absolute value of zero for the FA point. The system creates these deviations as it seeks a secure 3-point contact for each bracket. Slight deviations may be caused if the curvature in the labial surface changes the distance of the bracket from the FA point for the tooth.

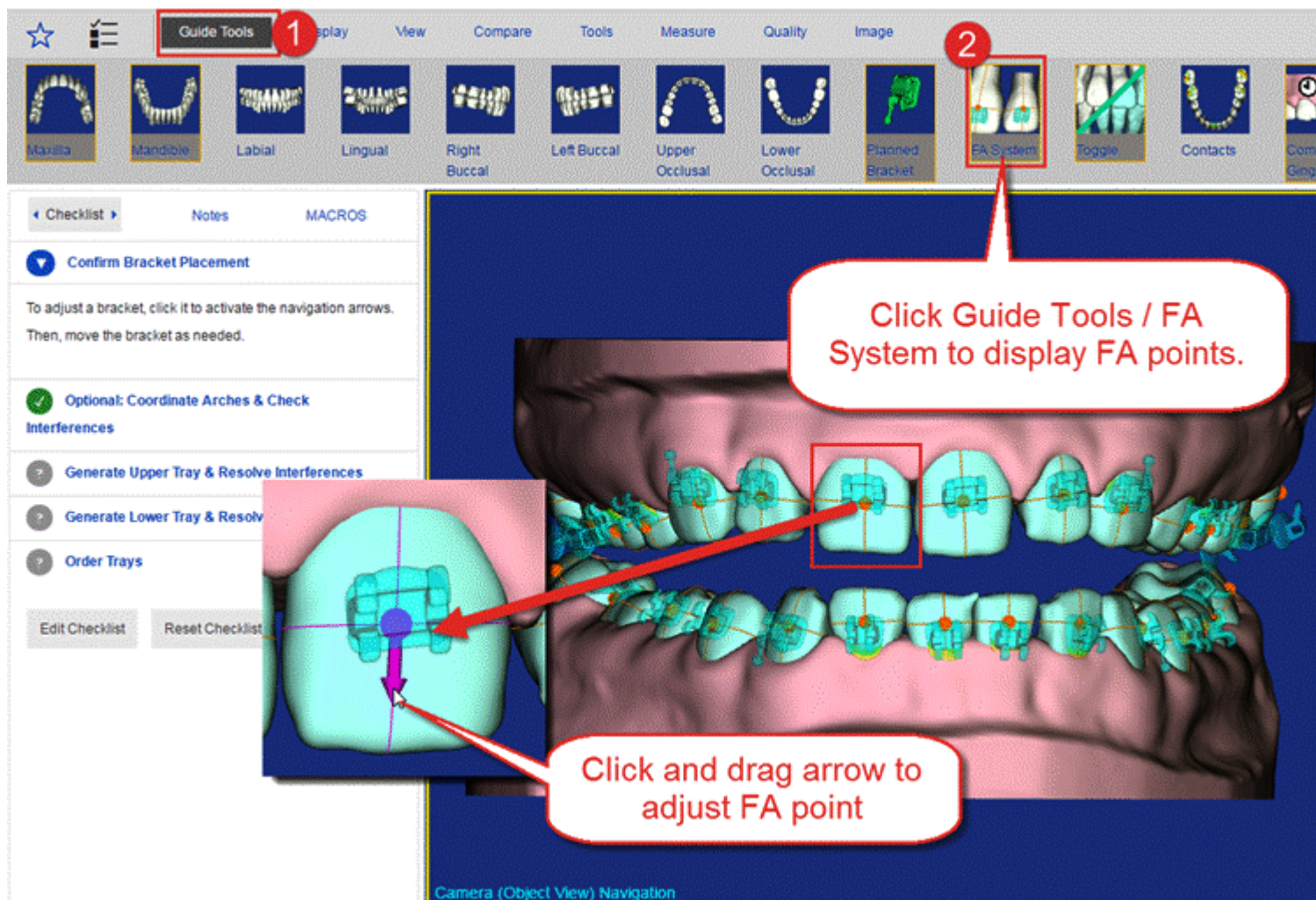
Similarly, when relying on FA points to place brackets, results may be unsatisfactory if:

- the FA Point is manually moved from its ideal position, or
- the tooth surface is not smooth.

How to use the FA Points

Here is a typical use case for using this new feature during an IDB tray simulation

1. Go to the Confirm Bracket Placement step in the IDB checklist.
2. Click the Guide Tools menu and click the FA System tool to display the FA Points on the teeth in the 3D window.
3. In the 3D window, click and drag the FA points/orientation lines as needed. After you move the FA point, the bracket automatically snaps to the new FA point position.
4. Make minor adjustments to fine-tune the bracket positions as needed



Identifying Bracket Voids

Use the Bracket Voids tool and the Bracket Voids report during IDB design and during the bonding appointment to identify those brackets where additional adhesive is needed to fill voids between the bracket base and the tooth surface.

Using the Bracket Voids tool

- **During IDB design**, click the icon on the Guide Tools to display the Bracket Voids tool.
- **During the bonding appointment**, click the Bonding Appointment step in the checklist to display the Bracket Voids dialog box. This step becomes visible after the IDB is ordered.

Brackets with bracket/tooth voids larger than 0.4 mm are highlighted on the tooth-cross in the Bracket voids tool. Review bracket/tooth voids by:

- clicking a highlighted tooth on the tooth-cross, or
- using the left-right arrows to move along the arch to the next bracket with a bracket/tooth void.

Clicking a tooth on the tooth-cross displays the corresponding bracket in the 3D main window from the occlusal view. You can review each bracket from other views (options are: occlusal, gingival, mesial, and distal) by clicking the arrows around the tooth in the dialog box.

Viewing the Bracket Voids Report

Click the **Bracket Voids** button on the Brackets tab to display the Bracket Voids report as a PDF in a new tab in your browser. Print the report to use chairside as a guide when applying adhesive to the brackets.

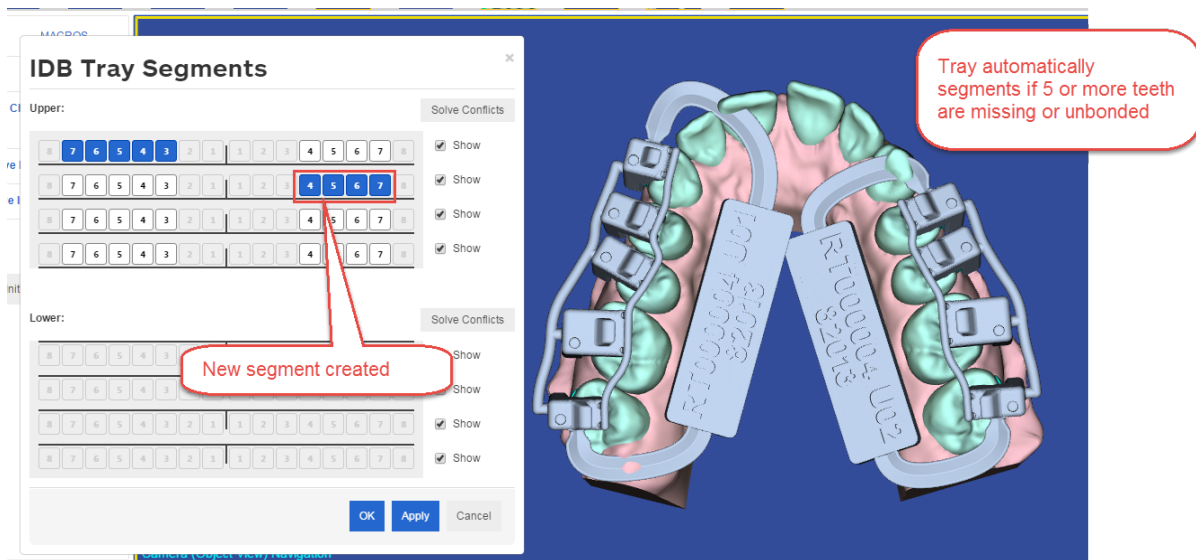
Segmenting Trays

Automatic Tray Segmentation and Conflict Solver Logic

When the IDB tray simulation is created for the first time and you click the *Generate Upper/Lower Tray & Resolve Interferences* steps in the checklist, the system applies automatic segmentation and automatic conflict solver logic, and the IDB Trays Segments dialog box opens showing the results. Brackets with conflicts are excluded and are shaded yellow. See [Segmenting Trays](#) for more information.

Since some conflicts in an IDB tray design can be solved if the cap size is reduced, elemetrix automatically reduces cap size whenever feasible. The system restricts these reductions so that the reduced caps remain stable. After reducing cap size the system also ensures the caps can still be removed from the bracket without being blocked by other caps or teeth.

If there is a gap of five or more adjacent teeth in an arch the system generates a warning recommending that you create two segments to eliminate the gap.



elemetrix automatically segments a tray if:

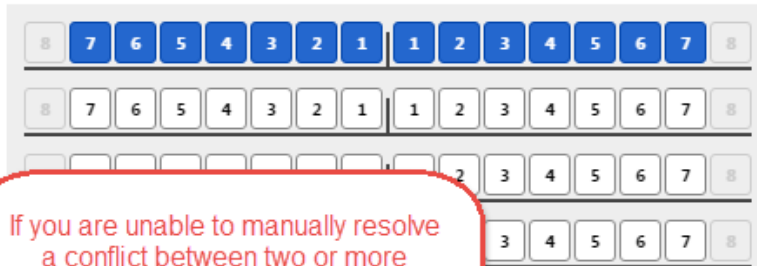
- neighboring IDB tray caps or brackets impinge on other IDB tray caps, brackets, teeth or gingiva,
- a group of five or more adjacent brackets are excluded from a tray, or
- there are issues with how the tray spline will be constructed.

elemetrix creates a maximum of two segments per arch. If you need more than two segments you must segment the arch manually. See [Segmenting Trays Manually](#) below. Brackets or caps with conflicts are excluded and are shaded yellow as shown.

IDB Tray Segments

Upper:

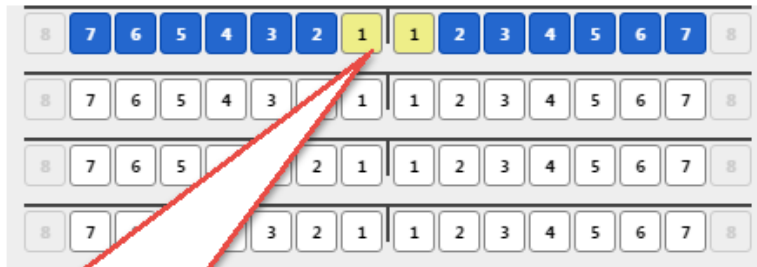
Solve Conflicts



- Show
- Show
- Show
- Show

If you are unable to manually resolve a conflict between two or more teeth, click **Solve Conflicts** to automatically segment tray.

Solve Conflicts



- Show
- Show
- Show
- Show

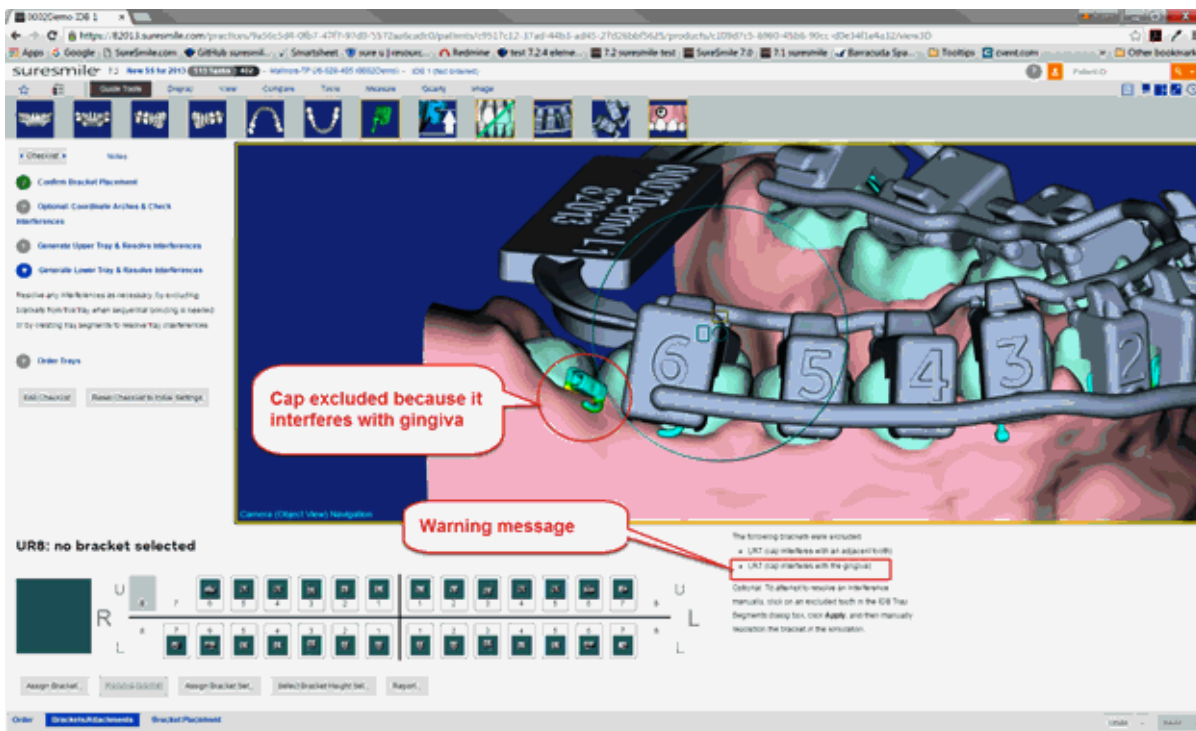
Excluded brackets are shaded in yellow. Click to return to the tray, click **Apply**, and then manually reposition the brackets in the 3D simulation.

OK

Apply

Cancel

Click **Cancel** to close the dialog box and remove all changes not yet applied.



You can choose to order the trays with the segmentation and brackets excluded as indicated in the IDB Tray Segments dialog box, or you can:

- Attempt to resolve the conflicts yourself in the software by making adjustments in the 3D model or on the Bracket Placement tab.
- Click the **Solve Conflicts** button on the IDB Tray Segments dialog box to exclude the tooth from the tray.
- Ignore the warning and order the IDB trays as designed.

Occlusal Rests

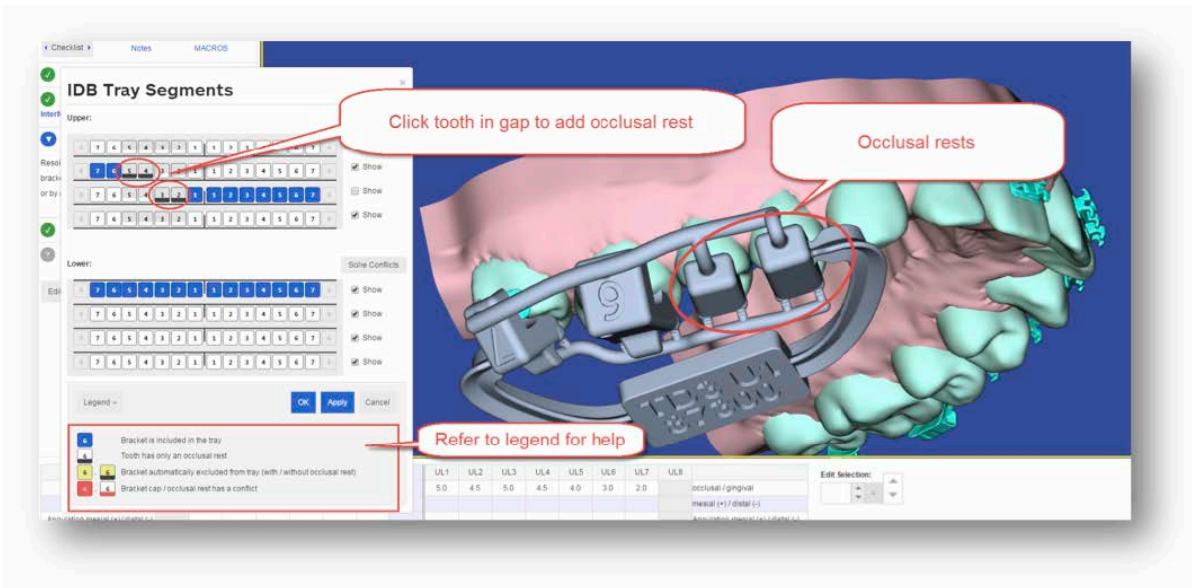
When segmenting a tray, the system will display a message asking you if you want to automatically add occlusal rests for unbonded or excluded teeth. These rests provide more stability and increase the structural integrity of the tray. This results in more precise placement and lower rebond rates. Add the occlusal rests as needed when you are generating each tray. When the IDB Tray Segments dialog box opens, click the unbonded or excluded teeth for which you want to add occlusal rests. Click each tooth repeatedly until the tooth displays the appropriate symbol code to indicate an occlusal rest. Expand the legend at the bottom of the dialog box to help you until you become familiar with the symbols.

Note: Occlusal rests are not added for partially erupted teeth.

IDB Tray design

Do you want to automatically add occlusal rests?

Yes No Cancel



More on Automatic Tray Segmentation

You can use these segments or you can choose to override them and segment the trays on your own. The system tries to devise segments that avoid as many conflicts as possible. The automatic segmentation and conflict solver logic works to resolve intersection of neighboring caps with each other or with the gingiva, and problems with spline-construction.

You can order the trays with the segmentation and brackets excluded as indicated in the dialog box, or you can choose to override the automatic segmentation or conflict solver logic and attempt to resolve the conflict or conflicts manually yourself.

To resolve conflicts manually:

1. Click on an excluded bracket in the 3D window and reposition it to eliminate any conflicts.
2. Click on the excluded bracket (shaded yellow) in the IDB Tray Segments dialog box to return it to the IDB tray. (To open the IDB Tray Segments dialog box, click the Guide Tools menu and click the Create IDB Tray Segments tool.) Shading will change to blue to indicate the bracket is back in the tray. Change the segmentation at this time if this helps resolve the conflict.
3. Click **Apply** to save your changes and have them reflected in the 3D simulation.
4. Click in the simulation and manually reposition the brackets in the simulation.
5. Click back in the IDB Trays Segments dialog box and make any further changes as needed.
6. If you are still unable to solve all of the conflicts, click the **Solve Conflicts** button for each arch with conflicts. This applies automatic segmentation and the conflict solver logic to the arch. This will not be the same solution as when you started because now those brackets for which the conflicts were resolved are included.

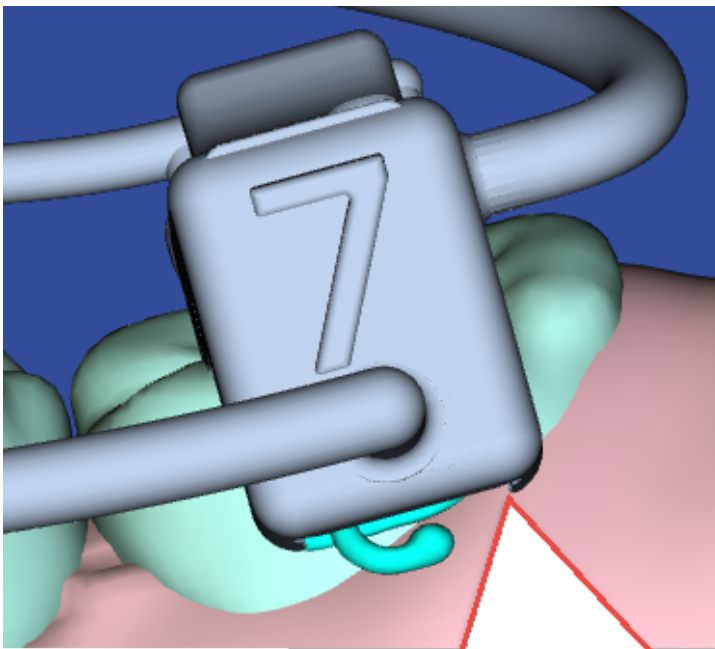
When there are bracket/teeth interferences, the Order Trays button is not disabled, but the following message appears:

Resolve any bracket / tooth interferences as necessary, by excluding brackets from this tray design when sequential bonding is needed.

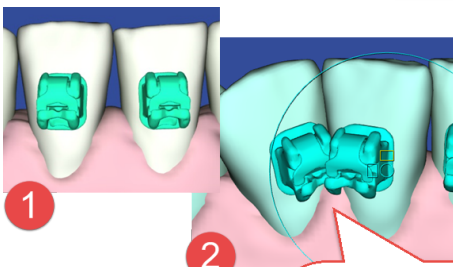
The minimal required distance between IDB tray caps and other IDB tray caps, teeth, or brackets is 0.1 mm.

The interferences are color-coded as follows:

- Overlapping caps are shaded in green.
- IDB tray caps, IDB tray lingual spline, or brackets impinging on other IDB tray caps, brackets, teeth or gingiva are shaded in green/yellow/red to indicate the severity of the intersection:
 - Red when distance is less than 0.1 mm
 - Yellow when distance is between 0.1 and 0.25 mm
 - Green when distance between 0.25 and 0.50 mm



As you design the tray check for any caps that impinge on the gingiva. This issue will prevent the tray from being seated completely.



After making adjustments in the straight-wire simulation (1), check the malocclusion (2) as a last step to make sure brackets do not interfere.

Tip: To avoid unnecessary delays, please resolve all interferences and design issues before placing your order.

You have several options for resolving interferences:

- Rely on the automatic segmentation provided by elemetrix, as described earlier in this topic.
- Segment the tray manually. (See [Segmenting Trays Manually](#) in this help topic.)
- Exclude a tooth by leaving the tooth unselected in the Segment dialog box.
- Adjust bracket positions and re-generate the trays by clicking the Confirm Upper Bracket Placement step in the checklist again.

You can use these segments or you can choose to override them and segment the trays on your own. The system tries to devise segments that avoid as many conflicts as possible. The automatic segmentation and conflict solver logic works to resolve intersection of neighboring caps with each other or with the gingiva, and problems with spline-construction.

You can order the trays with the segmentation and brackets excluded as indicated in the dialog box, or you can choose to override the automatic segmentation or conflict solver logic and attempt to resolve the conflict or conflicts manually yourself.

To resolve conflicts manually:

1. Click on an excluded bracket in the 3D window and reposition it to eliminate any conflicts.
2. Click on the excluded bracket (shaded yellow) in the IDB Tray Segments dialog box to return it to the IDB tray. (To open the IDB Tray Segments dialog box, click the Guide Tools menu and click the Create IDB Tray Segments tool.) Shading will change to blue to indicate the bracket is back in the tray. Change the segmentation at this time if this helps resolve the conflict.
3. Click **Apply** to save your changes and have them reflected in the 3D simulation.
4. Click in the simulation and manually reposition the brackets in the simulation.
5. Click back in the IDB Trays Segments dialog box and make any further changes as needed.
6. If you are still unable to solve all of the conflicts, click the **Solve Conflicts** button for each arch with conflicts. This applies automatic segmentation and the conflict solver logic to the arch. This will not be the same solution as when you started because now those brackets for which the conflicts were resolved are included.

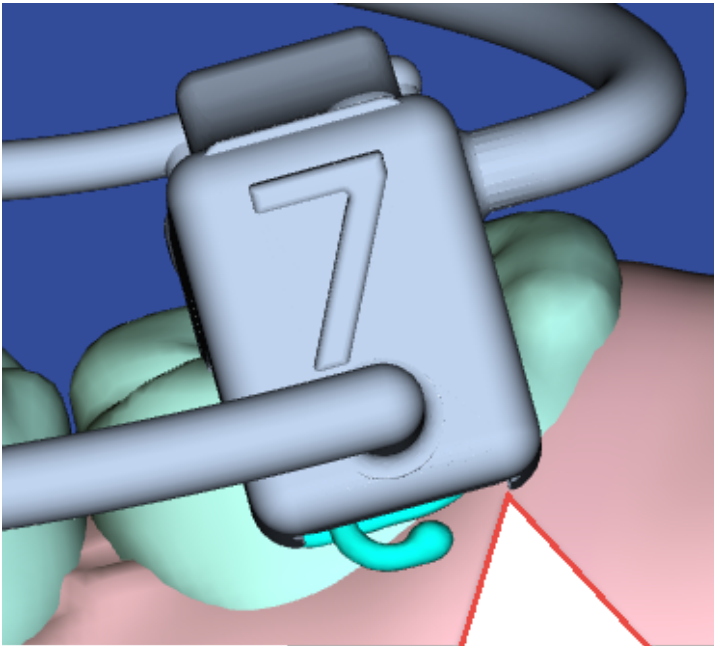
When there are bracket/teeth interferences, the Order Trays button is not disabled, but the following message appears:

Resolve any bracket / tooth interferences as necessary, by excluding brackets from this tray design when sequential bonding is needed.

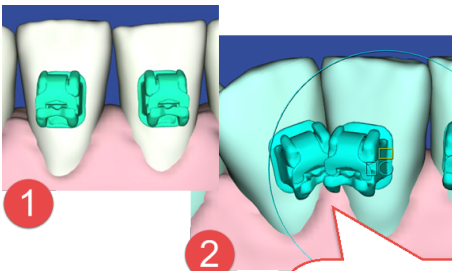
The minimal required distance between IDB tray caps and other IDB tray caps, teeth, or brackets is 0.1 mm.

The interferences are color-coded as follows:

- Overlapping caps are shaded in green.
- IDB tray caps, IDB tray lingual spline, or brackets impinging on other IDB tray caps, brackets, teeth or gingiva are shaded in green/yellow/red to indicate the severity of the intersection:
 - Red when distance is less than 0.1 mm
 - Yellow when distance is between 0.1 and 0.25 mm
 - Green when distance between 0.25 and 0.50 mm



As you design the tray check for any caps that impinge on the gingiva. This issue will prevent the tray from being seated completely.



After making adjustments in the straight-wire simulation (1), check the malocclusion (2) as a last step to make sure brackets do not interfere.

Tip: To avoid unnecessary delays, please resolve all interferences and design issues before placing your order.

You have several options for resolving interferences:


- Rely on the automatic segmentation provided by elemetrix, as described earlier in this topic.
- Segment the tray manually. (See [Segmenting Trays Manually](#) in this help topic.)
- Exclude a tooth by leaving the tooth unselected in the Segment dialog box.
- Adjust bracket positions and re-generate the trays by clicking the Confirm Upper Bracket Placement step in the checklist again.

Segmenting Trays Manually *(Click to expand section)*

You may need to manually segment a tray to:

- avoid an interference between adjacent teeth as indicated by red color coding in the **IDB Tray Segments** dialog box.
- bond the arch in separate segments for stability, bond strength or similar reasons.

To create tray segments manually:

1. Click the Guide Tool **Create IDB Tray Segments** . The **IDB Tray Segments** dialog opens with tooth charts to allow you to create up to four separate segments per arch.
2. In the second tooth chart or an arch, select the teeth to be included in this tray segment. These teeth are automatically deselected in the first tooth chart. If you choose non-adjacent teeth in an arch, they will be connected by a spline.
3. Click the *Show* check box for every segment you want to display in the main window. (When there are interferences between segments, you may want to uncheck one of the segments to get a clearer view.)
4. Repeat for a third or fourth tray segment if necessary.
5. Click **Apply** to view a 3D model of your segments or click **Cancel** to close the dialog box and remove all changes not yet applied.
6. (Optional) If you wish to abandon your manual segmentation of the trays for an arch and revert to elemetrix's automated segment, click the **Automatically Segment** button for that arch.
7. After you are finished designing your segments, click **OK**.

Note: Although the software allows you to make a single segment or a “jig” for one tooth, the segment will be more stable with a minimum of three teeth in the segment.

Tip: When you create new segments, click **Show/Hide IDB trays**  to show the all the new segments so than any conflicts are apparent.

Measurement Options for Bracket Sets

When you are adjusting the height of the brackets in a bracket set from the Brackets tab you can toggle between:

- **Jig Height** - indicates the height of a bracket in millimeters as measured from the middle of a bracket slot to the:
 - incisal edges for central incisors and laterals
 - buccal cusp for canines and premolars
 - most prominent buccal cusp for posterior teeth

Distance to the slot is expressed as a positive number.

- **FA Point** - shows the height of the bracket relative to the FA (Facial Axis) point. The system expresses movements in an occlusal direction relative to the FA point as positive numbers. Movements in a gingival direction relative to the FA point are expressed in negative numbers.

Display the height of each bracket in the bracket height set two ways...

...choose **Jig Height** to show the actual jig height in millimeters

...choose **FA Point** to show the position of the brackets relative to the FA point on each tooth.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
occlusal / gingival	3.4	3.0	2.1			0.9	2.5	1.6	1.0	2.8	1.3		2.5	3.1	2.0	occlusal / gingival	
mesial (+) / distal (-)	1.7	0.1	-0.2			-1.2	0.4	-0.9									mesial (+) / distal (-)
Angulation mesial (+) / distal (-)	-14	-4	3					2									Angulation mesial (+) / distal (-)
occlusal / gingival	2.5	1.3	0.8			2.4	1.8	1.3	-0.4	-0.3	-0.3		-0.9	-0.4	0.0	occlusal / gingival	
mesial (+) / distal (-)	2.1	-0.7	-0.8			-0.2	-0.1										mesial (+) / distal (-)
Angulation mesial (+) / distal (-)	4	1				1	4	2	2	9	-4				1		Angulation mesial (+) / distal (-)
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

Order Brackets/Attachments **Bracket Placement**

Edit Selection: [Up] [Down] [Reset]

Auto Adjust View [Checked]

Vertical Reference: [Jig Height] [FA Point]

For bracket height sets based on a jig height vertical reference, only bracket heights greater than or equal to 0.5 mm can be applied. If a bracket height set has one or more bracket heights that are less than 0.5 mm, the system will automatically increase these heights to 0.5 mm.

Tip: If you change a bracket height set, refresh the screen to update the Vertical Height Reference indicator.

Using the Bracket Placement Tab to Adjust Bracket Positions

The Bracket Placement tab has three rows, each for a movement type:

- occlusal (+) / gingival (-)
- mesial (+) / distal (-)
- angulation crown mesial (+) / distal (-)

Both the Upper and the Lower tooth charts are shown on the tab.

For an IDB tray simulation the reference points for the initial values in the table cells are as follows:

- occlusal (+) / gingival (-) values correspond to those in the Bracket Height sets you applied when you started the simulation
- mesial (+) / distal (-) all initial values are set to 0
- angulation crown mesial (+) / distal (-) all initial values are set to 0

These values change from their initial starting values as you adjust bracket positions.

Note: To prevent erroneous values that can distort your IDB straight wire simulation, we've added restrictions to the values you can enter for each tooth. Translation cannot exceed 10 millimeters per tooth. Angulation cannot exceed 90 degrees per tooth.

Multiple ways to adjust bracket positions

Up/down arrows in each table cell or up/down arrows on your keyboard - Select a bracket on the 3D model or in the tooth chart in the Bracket Placement tab. Place your cursor over the movement type cell on the tab and then click the up or down arrow next to the cell or on your keyboard to reposition the bracket in increments of 0.1 mm (horizontal or vertical) or 1 deg.(angulation).

Tip: Click the **Undo** button to reverse your changes incrementally.

Click the arrows to reposition the bracket in increments of:
 * 0.1 mm for occlusal / gingival or mesial / distal movements
 * 1.0 degree of angulation

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2
occlusal / gingival	2.9	4.6	5.3	4.9	3.6	2.5	2.9	3.5	2.4	
mesial (+) / distal (-)	0.3	0.1					-0.1	-0.1		
Angulation mesial (+) / distal (-)	2	-3			-2	-6	14	-5	17	
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1		
Angulation mesial (+) / distal (-)	-11	-3	2	-9	-1	-2	6	1	5	-3

Use the 3D model - Use the controls on the bounding box for a bracket to adjust its position. The values for the three movement types in the tooth table on the Bracket Placement tab change accordingly.

Tip: Click the Undo button to move the bracket back to its previous position.

Checklist

- Confirm Setup Alignment and Bracket Placement
- Confirm Upper Tray Design
- Confirm Lower Tray Design
- Select Initial Wires
- Order Trays and Initial Wires

Changes to position are shown in table on Bracket Placement tab.

Use the bracket's bounding box controls to adjust its position.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
occlusal / gingival	2.9	3.6	3.1	3.3	3.8	2.6	2.9	3.0	2.5	3.4	4.8	5.7	4.9	3.5		occlusal / gingival	
mesial (+) / distal (-)		0.2		-0.2				-0.1	-0.1	0.1			0.3			mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)		2	-3	1	-3	-6	14	-6	17	-3	-7	-8	-12	-4		Angulation mesial (+) / distal (-)	
occlusal / gingival		3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3	occlusal / gingival	
mesial (+) / distal (-)		0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1		-0.2	0.1	0.1	0.8		mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)		-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2	Angulation mesial (+) / distal (-)	
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

Type directly into the tooth chart - Enter a value for a movement type directly into the appropriate cell on the Bracket Placement tab.

Tip: Click the Undo button to revert the cell to its previous value.



To move multiple brackets occlusally / gingivally at once:

1. Locate the cell of the table at the intersection of the tooth number column with the row for occlusal / gingival movement.
2. Click the cell to highlight.
3. Press and hold the **Shift** key, and click in another cell in the same row to achieve the same movement for multiple teeth.
4. Under the Edit Selection controls to the right of the chart, type a new value.
OR
Click the small up and down arrows (first set) to change to the number required.
5. Click the equal button to apply the typed value to the highlighted cells.
OR
Click the large up arrow (second set) to increase the typed value in each of the highlighted cells.
OR
Click the large down arrow (second set) to decrease the typed value in each of the highlighted cells.

Click in first cell of series, then shift+click in last cell of series to highlight a range of cells.

Use **Edit Selection** controls to enter multiple values at once.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8
occlusal / gingival	2.8	3.6	3.1	3.3	2.9	2.8	2.9	3.0	2.5	2.4	4.8	5.7	4.9	3.5					
mesial (+) / distal (-)			0.2	-0.2															
Angulation mesial (+) / distal (-)			2	-3	1	-3	-6	14	-5										
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3					
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1											
Angulation mesial (+) / distal (-)			-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2			

Measurement options for bracket height sets

When you are adjusting the height of the brackets in a bracket set from the Brackets/Attachments tab you can toggle between:

- **Jig Height** - indicates the height of a bracket in millimeters as measured from the middle of a bracket slot to the:
 - incisal edges for central incisors and laterals
 - buccal cusp for canines and premolars
 - most prominent buccal cusp for posterior teeth

Distance to the slot is expressed as a positive number.

- **FA Point** - shows the height of the bracket relative to the FA (Facial Axis) point. The system expresses movements in an occlusal direction relative to the FA point as positive numbers. Movements in a gingival direction relative to the FA point are expressed in negative numbers.

Display the height of each bracket in the bracket height set two ways...

...choose **Jig Height** to show the actual jig height in millimeters

...choose **FA Point** to show the position of the brackets relative to the FA point on each tooth.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	occlusal / gingival
occlusal / gingival	3.4	3.0	2.1			0.9	2.5	1.6	1.0	2.8	1.3		2.5	3.1	2.0		occlusal / gingival
mesial (+) / distal (-)	1.7	0.1	-0.2			-1.2	0.4	-0.9									mesial (+) / distal (-)
Angulation mesial (+) / distal (-)	-14	-4	3					2									Angulation mesial (+) / distal (-)
occlusal / gingival	2.5	1.3	0.8			2.4	1.8	1.3									occlusal / gingival
mesial (+) / distal (-)	2.1	-0.7	-0.8			-0.2	-0.1		-0.4	-0.3	-0.3		-0.3	-0.4	0.0		mesial (+) / distal (-)
Angulation mesial (+) / distal (-)	4	1				1	4	2	2	9	-4				1		Angulation mesial (+) / distal (-)
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

Keyboard shortcuts

Use the following keyboard shortcuts to help you work faster when on the Bracket Placement tab

- **Arrow Up** or **Down** increment or decrease cell values by:
 - 0.1 mm
 - 1 degree
- **CTRL+arrow** moves the cursor from one cell in all four directions to another cell.
- **Tab** selects the cell to the right. If you are in the last cell of a row, cursor jumps down to next row.
- **SHIFT+Tab** selects the cell to the left. If you are in the last cell of a row, cursor jumps up to next row.
- **Pg Up** selects the cell above.
- **Pg Dn** selects the cell below.

Auto-adjust view

The Auto-Adjust View check box on the Bracket Placement tab automatically repositions the model when you select a cell in the Bracket Placement tab.

This check box works as follows:

- If you are adjusting mesial/distal bracket movements, an occlusal view of the arch is displayed and the selected tooth is shown in the center of the screen.
- If you are adjusting angulation or occlusal (+) / gingival (-) movements, a labial view of the arch is displayed for the anteriors, a buccal view is displayed for the posteriors, and the selected tooth is in the center of the screen.
- If you uncheck the check box, and then check it again, it remembers the last tooth previously selected and returns to that position.

Do-it-yourself Aligner Staging Case Overview

In this Topic

- [Heading 2](#)

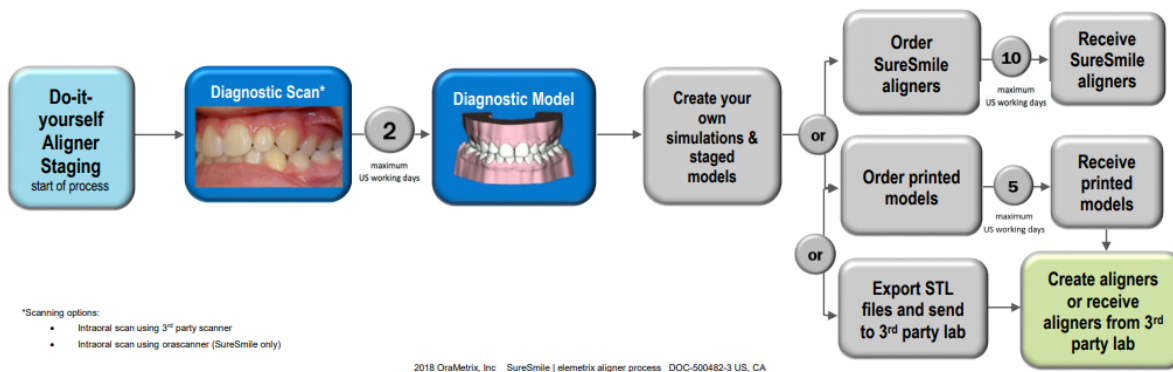
If the patient will be treated with aligners only and you do not need our Digital Lab to create the setup and staged models for you, choose the **Do-it-yourself Aligner Staging** package to just create a simulation based on a diagnostic model. Using this simulation as your target, create the staged model sequence. Next either:

- Order your aligners directly from OraMetric. Your aligners are boxed and shipped to your practice.
- Order your 3D prints (physical models) for each stage in the series. Use these models to fabricate your own aligners, at your in-house or local lab.
- Export the 3D data files for the staged models to your in-house or local lab. No fee is assessed. Your only cost is the fee for the diagnostic model.

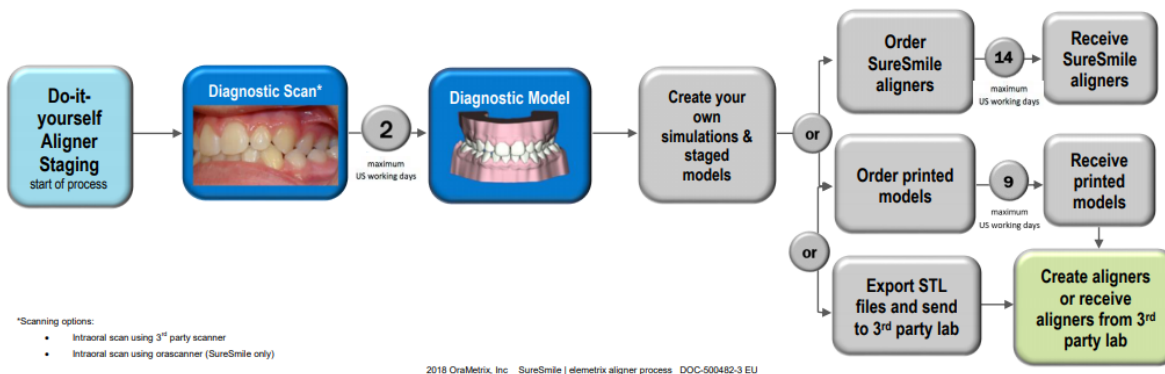
Process Overview by Region

Here is an overview of the DIY process for each region.

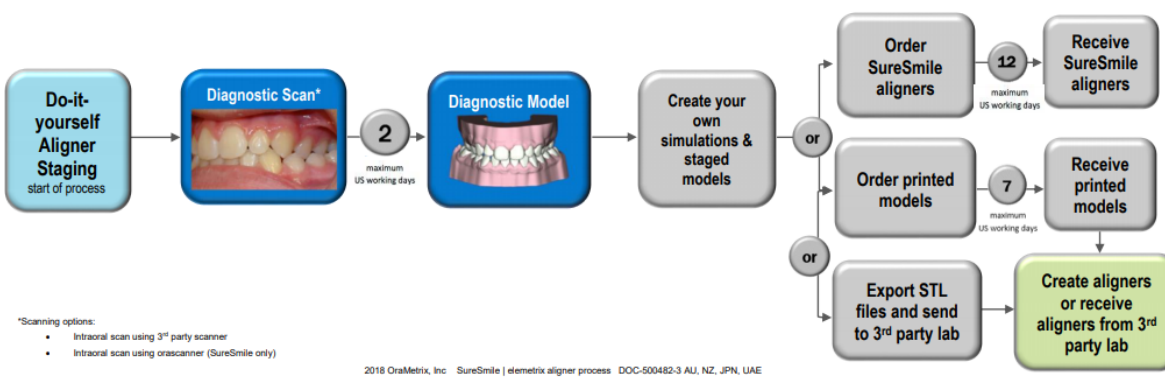
DIY Aligner Process for United States and Canada



DIY Aligner Process for Europe



DIY Aligner Process for Australia, New Zealand, Japan and United Arab Emirates



Features & Benefits

- Create your own simulation and setup
- Use elemetrix's automated staging tools
- Order aligners directly from OraMetrix
- Order 3D printed model of each aligner stage from OraMetrix
- Export 3D data of stage models to your in-house or local lab for aligner fabrication

Services include:

- **1 diagnostic model.** Scan patient at beginning of treatment using a third party scanner that can provide surface data in .STL format, such as a CEREC Omnicam, iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanner. Our Digital Lab technicians will use this data to create a 3D digital CAD/CAM image of the current malocclusion to serve as your diagnostic model.
- **printed aligners or 3D prints of each aligner stage,** boxed and shipped to your practice.

[Aligner Pricing Options](#)

Aligners are offered with two different pricing options:

- *Select* (per piece)
- *Complete* (per patient)

When ordering aligners, you must choose the *Select* or *Complete* appliance pricing option *after* you approve the model, setup and staging, but *before* ordering aligners.

Here is a table that shows the differences between the *Select* and *Complete* pricing options. Please note that prices shown vary from region to region and are subject to change.

	Select	Complete
Aligners	\$30 each*	Unlimited for 3 years
Refinements (Aligner Cases Only)	\$110 each*	Unlimited for 3 years
Replacement Aligners	\$30 each*	Unlimited for 3 years

* US dollars shown for illustrative purposes only. Please contact your account manager for pricing details.

Here is additional information about each pricing option.

Select Pricing Option

- Aligners can be purchased in any quantity up to the total number of planned stages. Aligners are priced on a per-aligner basis. Aligners are boxed and shipped to your practice in the quantity ordered.
- You can purchase 3D printed physical models for each stage, including stages previously purchased as aligners.
- You can export staged models when ordering this package. The minimum order size is one stage (single aligner or a pair of aligners).
- You cannot combine SureSmile wires with this offering for concurrent mixed treatment (such as one arch treated with aligners, one arch treated with archwires).

Complete Pricing Option

- Single fixed price for a particular patient.
- All aligners are boxed and shipped to your practice at once.
- Includes an unlimited number of refinements within a 3-year period, beginning with the first order.

Aligner Therapy Treatment Steps - Do-it-yourself Aligner Staging Package

In this Topic

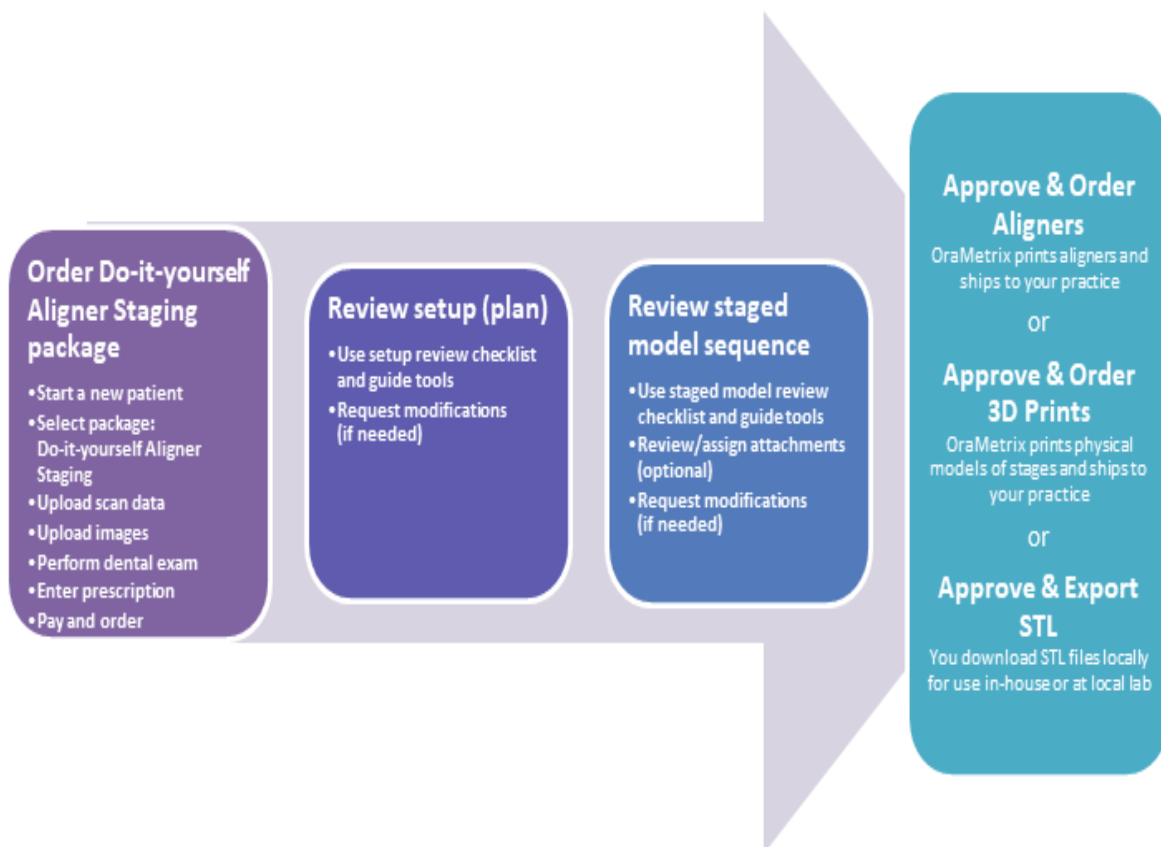
- [Heading 2](#)

If the patient will be treated with aligners only and you do not need assistance from the OraMetric Digital Lab, select the Do-it-yourself Aligner Staging Package and just create a simulation based on a diagnostic model. Using this simulation as your target, create the staged model sequence and then either:

- **order aligners** or **staged models** directly from OraMetric.
- **export** the 3D data files for the staged models to your in-house or local lab.

Here is an overview of the DIY process, following below by detailed procedures for each step.

Task Overview: Do-it-yourself Aligner Staging package



Step 1. Start the patient record and select the Do-it-yourself Aligner Staging package type

1. Start the elementrix patient record.

2. Select the **Do-it-yourself Aligner Staging package**.

Note: The case fee is incurred as soon as you select the package.

Step 2. Scan dentition & gingiva

1. At the scan appointment, use an OraMetrix-certified 3rd party optical scanner intraorally to capture the patient's dentition with gingiva. OraMetrix is frequently certifying new scanners as they come to market. The scan for the reference model must be intraoral, which means the patient is present and you are using an optical scan technology. The following OraMetrix-certified 3rd party scanners can be used:

- CEREC Omnicam
- iOC™ Scanner/iTero® Intraoral Orthodontic System
- 3Shape TRIOS® Intraoral Orthodontic System
- CS 3500 Intraoral Scanner
- 3M True Definition Intraoral Scanner

Please contact elemetrix [customer care](#) if your scanner is not listed.

2. Optional: Submit the following recommended standard set of photos and x-rays:

Photos	X-Rays
5 standard intraoral + 3 facial Full mouth + overjet	Panorex + initial or current cep

Step 3. Submit diagnostic model order

1. Submit the diagnostic model. If you want to include roots and bone from a CBCT scan, submit the CBCT scan AFTER you submit the intraoral scan. The CBCT and intraoral optical scans must be taken on the same day.
2. Check the **Delivered as Finished** check box. When the diagnostic model is returned to you, it will have the **Order appliance or analyze records** task reminder.

Flag	Card	Last name	First name	Patient ID	Owner	Item	Task	Due Date	Notes
○	👁️	Brown	ForRober	BF000001	71272 staff		Order appliance or analyze records ⌵	2015-03-20	📄
○	👁️	Brown	ForRober	BF000001	71272 staff		Provide treatment card ⌵	2016-06-20	📄
○	👁️	Brown	ForRober	BF000001	71272 staff		Scan & order final model ⌵	2016-06-20	📄
○	👁️	Brown	ForRober	BF000001	71272 staff		Scan & order therapeutic model ⌵	2015-11-08	📄
○	👁️	Brown	ForRober	BF000001	71272 staff	Diagnostic Model 1	Submit order ⌵	2015-03-20	📄

3. Click the **Order appliance or analyze records** task link for your diagnostic. The **Select an action** dialog box opens.



4. Click **Begin simulation for aligners next**. The treatment planning workspace opens with a treatment simulation with the approved diagnostic model as the reference model.

[More about the Order appliance or analyze records task link](#)

You may still order your diagnostic models to be returned in a *Review Order* state. However, when you select the *Deliver as Finished* check box in your order, the model will be delivered in an *Approved* state with a new workflow task called, *Order appliance or analyze records*. The task links to next steps for diagnostic models, which may be used for several purposes. The options are:

- **Analyze diagnostic model next** - equivalent to using the review order task
- **Begin bracket placement simulation (for IDB tray) next** - this workflow step opens the IDB bracket simulation workspace
- **Begin simulation for aligners next** – this workflow step sends you to a simulation referencing the diagnostic model
- **Dismiss task** – marks the task as completed and removes it from the task list

The workflow task disappears under these conditions:

- When you select Analyze diagnostic model next, the task disappears without any further action.
- When you begin an IDB tray simulation and apply the brackets, the task disappears after you click the Apply button.
- When you begin a simulation for aligners and create a staged model sequence, the task disappears after you click the Create Staged Model Sequence button.

Step 4. Create a target model for your staged model sequence

A treatment simulation in elemetrix is a 3D model of the patient's treatment objective representing a specific treatment approach. This simulation will represent the target occlusion.

Create a simulation of your treatment target for aligner therapy, just as you would for a case with fixed appliances.

Tips:

You can move the teeth individually on the model. See [Performing Manual Tooth Movements](#).

Make sure you choose your preferred [displacement type](#).

Don't forget to [apply IPR](#).

To save time, use the [setup workflow tool](#) to create your treatment simulation.

Step 5. Create the staged model sequence

Once you are satisfied that your treatment simulation is suitable for use as the target model, you are ready to create a series of staged models that start with the reference diagnostic model and finish with your treatment target model.

1. Go to the **Order** tab of the treatment simulation you just created.
2. Click the **Create Staged Model Sequence...** button. The **Constraints for Staged Models** window opens. Use this window to set parameters for your model series, such as the number of stages used, limited or excluded movement types, and fixed (non-movable) teeth. The maximum translation and rotation settings are pulled from your Staging Limit Preferences. See the separate topic Setting Aligner Constraints for DIY Staged Models.
3. Click **Automatically Create Sequence** if you would like the software to calculate the number of models needed.

OR

Select the **Create Sequence of** option and enter the number of models.

4. If you do not want elemetrix to automatically resolve conflicts in the staged model sequence, uncheck the **Solve Intersections** check box.
If you leave the Solve Intersections check box selected, when you create a staged model sequence, instead

of showing yellow intersections in the Gap/Intersection row on the Displacements tab to indicate conflicts, elemetrix finds and removes all mesial/distal intersections exceeding the IPR planned in the setup. Whenever possible, this amount of intersection is distributed to the gaps between teeth mesial and distal of the tooth with a conflict. If solving conflicts leads to movements exceeding staging thresholds, then elemetrix automatically inserts stages to comply with the staging constraints. elemetrix does not change the target, but only changes intermediate stages as needed.

5. In the middle section, you can allow the system to move all teeth to achieve the target,
OR

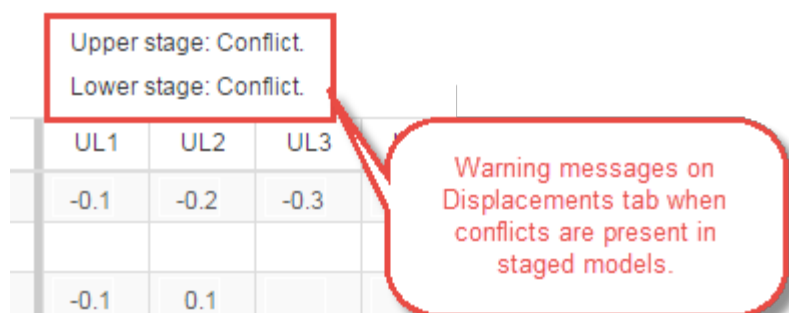
You can select teeth not allowed to move.

6. In the lower section, select:
Move in all directions to permit all movements

OR

Move in selected directions to limit specific movements. Choosing this option lets you uncheck the types of movements you wish to restrict.

7. Click **Create Models**. If there are conflicts present in an arch a warning message appears on the Displacements tab above the table of displacements.



The screenshot shows a table with columns labeled UL1, UL2, and UL3. The first row contains values -0.1, -0.2, and -0.3. The second row contains values -0.1 and 0.1. A red box highlights the text 'Upper stage: Conflict' and 'Lower stage: Conflict'. A red callout bubble points to the table with the text 'Warning messages on Displacements tab when conflicts are present in staged models.'

	UL1	UL2	UL3
	-0.1	-0.2	-0.3
	-0.1	0.1	

Note: If you are using a simulation as your target and decide it needs updating, it can be edited. However, your staged models will not update accordingly. You can make manual adjustments to each staged model or start over.

Changing constraints within a staged model series

When you are creating staged models for aligners, you have the ability to change the constraints at any point in the sequence of staged models.

For example, if you want to constrain certain types of movement in stages 1 through 3, but you want to lift that constraint for stages 4 and 5, perform the following steps:

1. Select stage 3 on the **Displacements** tab and click the **Update Next Stages** button. The Constraints for Current Staged Models Sequence dialog box opens.
2. Select the Move in all directions option and click **Apply Changes**. The movements of stages 4 through 5 will be recalculated to include all movements.

You can also use this feature to change maximum/minimum translation and rotation, and select/unselect fixed teeth.

If you just want to change values in one stage and update the following stages but do not want to change any of the constraints, click the **Apply Changes** button without editing the dialog box.

After you click **Apply Changes**, if you have changed the displacement values or the constraints, the tab for the last stage with the old conditions now has an asterisk shown to indicate that the changed conditions begin with the next stage.



If the number of stages generated is insufficient to achieve the target, a conflicts warning appears on the Displacements tab. Values in a stage that conflict with the constraints you set are shown in yellow on the displacements tab for that stage. Stages with conflicts are shown in red on the Order Staged Models dialog box.

Adjusting Staging

You have several buttons to help you adjust staging:

Clicking any of these buttons opens the Aligner Constraints dialog so you can select new aligner constraints if desired.

All three buttons are available on the **Displacements** tab in the Staged Models workspace for elementrix DIY aligners.

- **Recalculate Staging:** Click to recalculate all stages, using the current aligner constraints.
- **Update Previous Stages:** Use to recalculate previous stages after you update a value in the Displacements tab.
- **Update Next Stages:** Use to recalculate next stages after you update a value in the Displacements tab.

Using these buttons does NOT affect your target setup. Movements in all stages are adjusted so that your target setup is not affected. When you recalculate stages, only the selected (i.e., upper or lower) arch is affected.

Tip: if you want to cancel your changes after clicking one of these three buttons, click the Undo button in the bottom right corner of your screen.

When you recalculate stages by clicking the **Recalculate Staging**, **Update Previous Stages**, or **Update Next Stages** buttons, the system performs distinct actions based on the following conditions:

- If any of the original attachments started after stage 1: The system removes all such attachments.

Attachments added in stage 1 are retained. The system displays the following message and confirmation before recalculating the stages and removing the attachments, “Warning: Any attachments beginning with stage 2 or later will be removed. Are you sure you want to proceed? Continue / Cancel”

- If any of the original attachments started at stage 1 and were removed before the end of treatment: The system extends the attachments to the end of the new sequence and displays the following message afterwards, “Warning: Attachments have been extended to all stages. Remove any unneeded attachments.”
- If both conditions are satisfied, both warnings will be shown (assuming you opt to continue after the first warning).
- If the number of stages increases, the attachments placed on the stage immediately preceding the new stages are applied to the new stages as well. If you have used multi-group staging, a warning appears if the attachments are restored to stages that now belong to a different group.

Video: Modifying a Staged Model Sequence

IFrame [https://players.brightcove.net/645276483001/Skrn5asA_default/index.html?v...]

Step 6: Optional: Add attachments

Attachments allow greater control of tooth movement during aligner therapy. You can custom place attachments on the labial and/or lingual surface. Add attachments after the staging has been calculated. You can apply attachments to all stages or just a subset of stages. Go to [Selecting and Adding Attachments for DIY Cases](#) for more information.

Step 7: Review staged models

Staged Model Review Checklist

Once the staged model sequence has been generated, you will need to verify that the sequence is feasible and meets your treatment objectives.

The checklist used to review a staged model is comprised of 2 automated workflow steps that help you to systematically review your staged model sequence and check for any inaccuracies.

◀ Checklist ▶
Notes
Prescription

▼ Review Stages

- Review movements. Add attachments and make adjustments as needed

? Order Printed Stages or Export Models

Follow the steps listed in the checklist to review the staged models.

Go to the **Displacements** tab and verify that the series is feasible and meets your treatment objectives.

Review the staged model sequence

Go to the Displacements tab and verify that the sequence is feasible and meets your treatment objectives.

Select Model: < ▶ ◀ ▶ ▶ 1 2 3 4 5 6 7 8 **9**

Single Stage Add Stage Copy Stage Remove Stage Update Previous Stages Update Next Stages

Multi-Stage

Upper	Lower	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
mesial (+) / distal (-)				0.1	0.6	0.5	0.1	0.1			-0.3	-0.1	-0.1	0.3	-0.3	0.4		mesial (+) / distal (-)
buccal (+) / lingual (-)								0.7			0.6	0.2	0.2	0.1				buccal (+) / lingual (-)
occlusal (+) / gingival (-)							0.8	0.2	0.9	0.8	0.4	1.0						occlusal (+) / gingival (-)
Torque facial (+) / lingual (-)					6	7							6	5				Torque facial (+) / lingual (-)
Ang. mesial (+) / distal (-)				8							6	1			9			Ang. mesial (+) / distal (-)
Rot. mesial (+) / distal (-)										4			8					Rot. mesial (+) / distal (-)
Gap (+) / Intersection (-)										Gap (+) / Intersection (-)								
Fixed <input type="checkbox"/>										Fixed <input type="checkbox"/>								

Comparison Stage:

Displacement Type:
 Tooth %
 Malocclusion Includes Max. / Mand. Alignment Adjustments

Cumulative
 Cumulative Incremental

Edit Selection:

Order Displacements

The stages are automatically numbered 1, 2, 3, etc. and are listed across the top left as small tabs within the Displacements tab. When this area first appears, the displacement values are displayed as cumulative amounts and the last stage is selected. It contains the total displacements. You have many options for viewing displacements to ensure that the values are appropriate.

Cells highlighted in yellow indicate the following:

- If you removed stages and/or modified any of the movements, any values that exceed your constraints are highlighted in yellow.
- As the teeth move linearly to the next stage, interferences can occur. Values that represent an interference are highlighted in yellow in the Gap (+)/Intersection(-) tab. You can resolve these interferences by:

- Adjusting movements in the previous or next stages
- Adding stages as needed

Depending on the constraints you selected, you may see the following messages:

- *Upper (or lower) stage: Conflict* – indicates that the values in that stage exceed the initial constraints that were set.
- *Upper (or lower) stage: No movement* – indicates that the selected stage is not needed since it is a duplicate of the previous stage (allowed movements have been achieved).

Step 8: Approve and Order

Under the checklist step **Order**, follow the steps in this table:

If you....	Then...
<p><i>did not make</i> any modifications to the setup or staged models</p>	<p>The system assigns an (Ordered) status to the plan and the staged models. The Approve & Order Aligners, the Approve & Order 3D Prints and the Approve & Export STL buttons become active.</p> <ul style="list-style-type: none"> • To order aligners directly from OraMetrix, click Approve & Order Aligners. • To order 3D prints of staged models directly from OraMetrix, click Approve & Order 3D Prints. • To export the staged models for printing in-house or by a 3rd party lab, click Approve & Export STL.
<p><i>did make</i> modifications to the setup or the staged models</p>	<ul style="list-style-type: none"> • Click in the Edit Notes box and type a short note indicating what you have changed. After you do this, the Submit and Revert with Modifications buttons become active. • Click Submit. The Submit Setup dialog box opens. click Submit again. The system assigns an (Ordered) status to the plan. When the plan is returned with a <i>Review Order</i> task associated with it, repeat Steps 5, 6 and 7.

To order aligners from OraMetrix:

Decide on the *Complete* or the *Select* pricing option for this aligner order. For more information about the Select and Complete aligner pricing options, please go to [Aligner Pricing Options](#).

Choosing the *Complete* pricing option for your aligner order

1. After you click the **Approve & Order Aligners** button on the Order tab, the Select Pricing dialog box opens.
2. Click the **Complete** Pricing Option, then click **OK**. Your order is processed immediately. All aligners are produced and shipped together.

Note: The system only prompts you to choose between Select and Complete the first time you order aligners for a patient. This choice applies to future orders for aligners for this patient.

TIP: You can view how many Therapeutic Models and Setups are currently available for a patient with *Complete* pricing by going to the Patient Profile page, just as would for a SureSmile Standard "Extended" case.

Choosing the *Select* pricing option for your aligner order:

1. From the Order tab, click the **Approve & Order Aligners** button on the Order tab. The **Select Pricing** dialog box opens.
2. Click the **Select** Pricing Option, then click **OK**. The **Order Aligners** dialog box opens.
3. The Order Aligners dialog box indicates which aligners have been printed, which have no movement, and which contain conflicts. By default, all arches and aligners with movement are selected for printing. Uncheck **Upper** or **Lower** if you do not want to print an arch. If you unselect all aligners, the arch is unchecked automatically. Unprinted aligners are highlighted in dark blue. Click the icon for any aligner that you do not want to print. This removes the dark blue highlighting, but retains a blue outline. Arches and aligners without movement are not selected. Template ("T") aligners with attachments but no movement are selected by default for printing. Aligners already ordered are white and show a small printer symbol.

TIP: Click the Legend check box to display the legend for the color coding of the models.

Note: There are no additional reminders/tasks for ordering remaining unordered aligners.

4. Click **OK**. A confirmation dialog box opens. Click **OK** to confirm your order. This step incurs the service fee. Another dialog box that specifies the items in your order opens. Click **OK** after verifying this is what you want to order. The product state is updated from (Not Ordered) to (Ordered). All aligners are produced by OraMetrix in Richardson, Texas. Once orders are printed, packaged and shipped, the product order state in the timeline changes to *Finished*. After the initial order, an Order Aligners button becomes available on the Order tab so you can order or reorder additional aligners as the case progresses.

Estimated Delivery Times by Region - Aligners

Region	Aligners delivered within...
US, Canada	10 working days

Australia, New Zealand, Japan, United Arab Emirates	12 working days
Europe	14 working days

To order physical 3D prints of staged models from OraMetrix to ship to your lab for appliance production:

1. From the **Order** tab, click the **Approve & Order 3D Prints** button. The **Order 3D Prints** dialog box opens. The dialog box indicates which stages have been printed, which have no movement, and which contain conflicts. By default, all arches and stages with movement are selected for printing. Uncheck **Upper** or **Lower** if you do not want to print an arch. If you unselect all stages, the arch is unchecked automatically. Unprinted staged models are highlighted in dark blue. Click the icon for any stage that you do not want to print. This removes the dark blue highlighting, but retains a blue outline. Arches and stages without movement are not selected. Template "T" stages with attachments but no movement are selected by default for printing. 3D prints already ordered are white and show a small printer symbol.

TIP: Click the Legend check box to display the legend for the color coding of the models.

2. Click **OK**. An **Order Submitted** confirmation dialog box opens. Click **OK**. Your models will be shipped to your practice or designated lab.

Note: To help prevent accidental breakage on models with gaps due to missing or unerupted teeth, the system maintains a 5 mm gingival base.

Estimated Delivery Times by Region - 3D Prints

Region	3D prints delivered within...
US, Canada	5 working days
Australia, New Zealand, Japan, United Arab Emirates	7 working days
Europe	9 working days

To export digital files of your 3D models to your lab for appliance production:

1. From the **Order** tab, click the **Approve & Export STL** and select *Create new export...* The **Export Staged Models** dialog box opens. The dialog box indicates which stages have been exported, which have no movement, and which contain conflicts. By default, all arches and stages with movement are selected for exporting. Uncheck **Upper** or **Lower** if you do not want to export an arch. If you unselect all stages, the arch is unchecked automatically. Unexported staged models are highlighted in dark blue. Click the icon for any stage that you do not want to export. This removes the dark blue highlighting, but retains a blue outline. Arches and stages without movement are not selected. Template ("T") stages with attachments but no movement are selected by default for exporting. Staged models already exported are white and show a small printer symbol.

TIP: Click the Legend check box to display the legend for the color coding of the models.

2. Click **OK**. A confirmation dialog box opens. Click **OK**.

3. A waiting indicator is shown for as long as the job is queued or running.
4. When the in-progress status indicator disappears, click the drop-down arrow on the **Approve & Export STL** drop-down button and click the job you wish to download. A Zip file of the models is downloaded to your computer. The location depends on the type of web browser you are using. There is no limit to the number of jobs that can be listed, but jobs will be automatically removed from this list after seven days.
5. You can also go to the Jobs tab on the Clinic Overview page and download the job from there.

User	Patient	Product	Name	State	Created	Updated	Actions
doc@mail.com	AS000002	Staged Models 1	Export Staged Models	Succeeded	2015-08-25 at 07:47:43PM	2015-08-25 at 07:48:52PM	Download: 82013_AS000002_Staged_...
Harold Schmucker	TN000005	Staged Models 1	Export Staged Models	Succeeded	2015-08-21 at 07:55:27PM	2015-08-21 at 07:57:45PM	Download: 82013_TN000005_Staged_...
doc@mail.com	TN000005	Staged Models 1	Export Staged Models	Succeeded	2015-08-21 at 07:20:41PM	2015-08-21 at 07:28:31PM	Download: 82013_TN000005_Staged_...
doc@mail.com	FL000001	Staged Models 1	Export Staged Models	Succeeded	2015-08-18 at 10:21:55PM	2015-08-18 at 10:23:03PM	Download: 82013_FL000001_Staged_...
doc@mail.com	BP000001	Staged Models 1	Export Staged Models	Succeeded	2015-08-18 at 03:18:41PM	2015-08-18 at 03:19:33PM	Download: 82013_BP000001_Staged_...
doc@mail.com	TN000004	Staged Models 1	Export Staged Models	Succeeded	2015-08-11 at 10:46:28PM	2015-08-11 at 10:47:43PM	Download: 82013_TN000004_Staged_...
doc@mail.com	BF000001	Staged Models 1	Export Staged Models	Succeeded	2015-08-05 at 03:43:40PM	2015-08-05 at 03:45:24PM	Download: 82013_BF000001_Staged_...

6. Send the Zip file to your lab of choice to print the 3D models and fabricate the aligners.

Best practices when exporting models

To help better manage the load on the OraMetrix servers when exporting staged models, a message appears on the Export Staged Models dialog box reminding you not to select more than 20 staged models at once. Also, as a safeguard, if you select more than 20 models the OK button becomes unavailable to prevent you from submitting the job. To double-check your exported files before sending them to your lab, check the folder properties or file details—all of your exported models should have a similar file size. You can also use a free 3D viewer utility, such as MeshLab, to view the contents of each file. MeshLab is available as a free download from: www.meshlab.sourceforge.net. If you want to rename files that are already zipped, use a free tool such as WinZip. Finally, do not delete your exported files while the patient is active. You might need them again in case appliances are lost or broken.

Order a Do-it-yourself Aligner Staging Package

Here are step-by-step instructions for ordering a Do-it-yourself Aligner Staging Package. The steps for designing and ordering your aligner staged models follow.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/4992a690-4939-11...>]

Create a Diagnostic Simulation for a DIY Aligner Case

Once you are satisfied that your treatment simulation is suitable for use as the target model, you are ready to create a series of staged models that start with the reference diagnostic model and finish with your treatment simulation.

Here are step-by-step instructions for Creating a Diagnostic Simulation for a DIY Aligner Case.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/4992a690-4939-11...>]

Create a Staged Model Sequence

Once the digital model has been processed, you are ready to design and order your aligner staged models. You will receive an email for this task, *Create & order staged models*, which containing a link that takes you directly to the treatment planning workspace where you will design and order the staged models from a treatment simulation. Alternatively, you can also find this *Create & order staged models* task for the patient in your task list in elemetrix.

Here are step-by-step instructions for creating a staged model sequence for a DIY Aligner Case.

Tip: Click the expand view button  to see the full screen.



IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/a99369b0-14a1-11...>]

Animation Player

Use the animation player to view the movements in the 3D model. It is available on the Displacements and Staged Timeline tabs.

The animation player runs an animation of the entire treatment plan, showing tooth movement from the initial state to the final tooth position.

Controls:

- > Click forward stage by stage
- < Click backward stage by stage
-  Run animation through all stages
-  Pause the animation at a particular stage

Selecting and Adding Attachments for Do-it-yourself Aligner Staging Cases

For Do-it-yourself Aligner Staging cases, add attachments after you calculate the staging and generate the staged models. You can apply attachments to all stages or just a subset of stages.

In this Topic

- [Heading 2](#)

Here are step-by-step instructions for adding attachments to staged models.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/78c0dd90-2f55-11e...>]

[Video: Applying and removing attachments / new template staging](#)

IFrame [https://players.brightcove.net/645276483001/Skrn5asA_default/index.html?v...]

Attachments Panel

Place attachments by selecting them from the Attachments panel and placing them on a single tooth. The Attachments panel initially appears when the Displacements tab is opened. It can be moved anywhere on the screen. You can also display the panel by clicking the Assign Attachments icon on the Tools palette. Attachments are displayed from largest to smallest left to right:

- **Row 1:** Ellipsoid attachments
- **Row 2:** Rectangular beveled attachments
- **Row 3:** Rectangular attachments
- **Row 4:** Trash can for deleting attachments

To place an attachment, click to select it and then click a tooth to add the attachment. After you place the attachment, select the attachment on the 3D model and use the arrows on the bounding box to move it to its exact desired position.

To remove the attachment, click the attachment on the tooth to select it and then click the trash can.

Placing Attachments

While adding or removing attachments in the Single Stage view, refer to the values on the Displacements tab to decide which attachment to use and where to place it on the tooth surface.

You can place multiple attachments on a tooth, and you can place attachments on labial and lingual surface of the same tooth.

When you select and place your attachments, take into consideration the amount and direction of movement desired.

You can apply or remove attachments to or from a tooth at different stages. You can choose at which stage to place an attachment and at which stage to remove an attachment. To undo a particular movement just made, click the **Undo** button at the bottom right of your screen.

Note: Attachments are only displayed on staged models. They are not visible on setups or simulations.

Attachment Template Stages

The system automatically generates a template stage for the placement of attachments before any stage with newly added attachments. The teeth remain in the same position as the prior stage and the new attachments are added to the stage. Any previously placed attachments are also included.

Each template stage is designated by a "T" and the number of the next stage; e.g., "T2" would be placed before stage 2.

The software automatically removes the attachment(s) at the end of the sequence and places a minus “-” in front of the last stage in the sequence. This last stage with a minus sign is a passive copy of the previous stage but without attachments. Because it doesn’t have movements or attachments, it can be printed for use as a retainer.

When you do not have attachments, the last stage still can be used as a retainer since it is the last stage with the last set of movements.

An attachment that is colored black indicates that this is the last stage for this attachment.

A minus sign is shown on the next stage tab to remind you that the attachment was removed. For instance, if prior to stage 9 (after stage 8) the attachment was removed, the tab for stage 9 will show "-9".

Attachments are automatically removed from the last stage and a minus sign is shown before the stage number tab to indicate that the attachment has been removed.

Attachment Colors

Attachments are colored in the 3D model to indicate the following:

- **Blue** means the attachment is the first stage including this attachment. This is the template stage, as denoted with a T and the number of the subsequent stage.
- **Pink** means the attachment is an active attachment in the current stage.
- **Black** means that the attachment is on its last stage. Remove the attachment after this stage.

Adjusting Staging

You have several buttons to help you adjust staging:

Clicking any of these buttons opens the Aligner Constraints dialog so you can select new aligner constraints if desired.

All three buttons are available on the **Displacements** tab in the Staged Models workspace for elemetrix DIY aligners.

- **Recalculate Staging:** Click to recalculate all stages, using the current aligner constraints.
- **Update Previous Stages:** Use to recalculate previous stages after you update a value in the Displacements tab.
- **Update Next Stages:** Use to recalculate next stages after you update a value in the Displacements tab.

Using these buttons does NOT affect your target setup. Movements in all stages are adjusted so that your target

setup is not affected. When you recalculate stages, only the selected (i.e., upper or lower) arch is affected.

When you recalculate stages by clicking the **Recalculate Staging**, **Update Previous Stages**, or **Update Next Stages** buttons, the system performs distinct actions based on the following conditions:

- If any of the original attachments started after stage 1: The system removes all attachments. The system displays the following message & confirmation before recalculating the stages and removing the attachments, "Warning: Any attachments beginning with stage 2 or later will be removed. Are you sure you want to proceed? Continue / Cancel"
- If any of the original attachments started at stage 1 and were removed before the end of treatment: The system extends the attachments to the end of the new sequence and displays the following message afterwards, "Warning: Attachments have been extended to all stages. Remove any unneeded attachments."
- If both conditions are satisfied, both warnings will be shown (assuming you opts to continue after the first warning).
- If the number of stages increases, the attachments placed on the stage immediately preceding the new stages are applied to the new stages as well. If you have used multi-group staging, a warning appears if the attachments are restored to stages that now belong to a different group.

Setting Aligner Constraints for DIY Staged Models

When you create a sequence of staged models for a Do-it-yourself Aligner Staging case, chose either SureSmile's default staging group or define you own staging group.

You can edit these from this Aligner Constraints dialog for the current case, or you can edit and set your default from the new Aligner Constraints tab under preferences. These preferences are set only for the doctor that is logged in. They are not set at the practice level.

Note: The Aligner Constraints tab replaced the Staging Limits tab starting in release 7.4.

Video: Setting Aligner Constraints

IFrame [http://players.brightcove.net/645276483001/Skm5asA_default/index.html?vi...]

The pre-defined maximum rates of movement per stage are now listed and you can now modify these rates of movements as desired. You can also select teeth you do not want to be moved at all under Select Fixed Teeth.

You can edit these from this Aligner Constraints dialog for the current case or you can edit and set your default from the new Aligner Constraints tab under Preferences.

Warning Message if Movement Types are Missing

Since it is possible to set aligner constraints that do not include all movement types, elemetrix will display a warning message when you try to save an aligner constraint set with one or more movement types missing, just in case you've done this in error. You can ignore the warning and save the aligner constraints set as is, or you can return to the aligner constraints set and add the missing movement types. If you do not include all movement types, you may see a step up or jump in the last stage of a staged model series as the stage conforms to the target setup.

Reviewing a Sequence of Staged Models


Once the staged model series has been generated, use the checklist to verify that the series is feasible and meets your treatment objectives.

Here is an overview of how to review a sequence of staged models before you submit your order.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/5c0e36c0-4f67-11e...>]

Review the Staged Models

1. When you are satisfied with the setup, go to the last step of the setup review checklist (**Summary**) and click the **Staged Models** link to open the staged models.
2. Click the Checklist tool  in the top left of the page to open the review checklist for the staged models.

Note: If you added attachments as described in Step 6 above, a stage 0 is shown and all subsequent

stages have the attachments on them. Stage 0 has no movement in it. It is only used to allow you to place the attachments on the teeth.

3. Follow the checklist instructions to make adjustments as needed to the models.

Click the **Notes** tab in the guide to review standard or user notes. You can also type a note for the Digital Lab in the text box.

Click the **Prescription** tab to make any changes to the Aligner Prescription. These changes will be shown on the Aligner Prescription on the Patient Overview as well.

Go to the **Displacements** tab and verify that the series is feasible and meets your treatment objectives.

The models are automatically named 1, 2, 3 etc. and are listed across the top left as small tabs within the Displacements tab. When this area first appears, the last model is selected and the cumulative total displacement values for the series are shown.

Cells highlighted in yellow indicate the following:

- If you entered the number of stages to be generated, any values that exceed your constraints are highlighted in yellow.
- As the teeth move linearly to the next stage, an interference can occur. Values that represent an interference are highlighted in yellow. You can resolve these interferences by:
 - Adjusting movements in the previous or next stages.
 - Adding stages as needed.

Note: To help prevent accidental breakage on models with gaps due to missing or unerupted teeth, the minimum thickness of the gingival base to about 5 mm.

Modifying a Sequence of Staged Models

Here are step-by-step instructions for modifying a staged model sequence for a DIY Aligner Case.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/7a0c8650-14a5-11...>]

Video: Modifying a Staged Model Sequence

IFrame [https://players.brightcove.net/645276483001/Skrn5asA_default/index.html?v...]

Ordering Aligners or 3D Prints, or exporting digital files of 3D models

From the staged models workspace, you have three options:

- Order aligners directly from OraMetrix
- Order 3D prints of staged models directly from OraMetrix
- Export the staged models locally for printing in-house or by a 3rd party lab

When you order prints or export the staged models, any stage that conflicts with the constraints you set will be red in the Order Staged Models dialog box.

Note: To help prevent accidental breakage on models with gaps due to missing or unerupted teeth, the minimum thickness of the gingival base to about 5 mm.

Approval and Ordering Process

Under the checklist step **Order**, follow the steps in this table:

If you....	Then...
<p>did not make any modifications to the setup or staged models</p>	<p>The system assigns an (Ordered) status to the plan and the staged models. The Approve & Order Aligners, the Approve & Order 3D Prints and the Approve & Export STL buttons become active.</p> <ul style="list-style-type: none"> • To order aligners directly from OraMetrix, click Approve & Order Aligners. • To order 3D prints of staged models directly from OraMetrix, click Approve & Order 3D Prints. • To export the staged models for printing in-house or by a 3rd party lab, click Approve & Export STL.
<p>did make modifications to the setup or the staged models</p>	<ul style="list-style-type: none"> • Click in the Edit Notes box and type a short note indicating what you have changed. After you do this, the Submit and Revert with Modifications buttons become active. • Click Submit. The Submit Setup dialog box opens. click Submit again. The system assigns an (Ordered) status to

the plan. When the plan is returned with a *Review Order* task associated with it, repeat Steps 5, 6 and 7.

Decide if you will use the [Complete](#) or the [Select](#) pricing option for this aligner order

For more information about the Select and Complete aligner pricing options, please go to [Aligner Pricing Options](#).

Choosing the [Complete](#) pricing option for your aligner order

1. After you click the **Approve & Order Aligners** button on the Order tab, the Select Pricing dialog box opens.
2. Click the **Complete** Pricing Option, then click **OK**. Your order is processed immediately. All aligners are produced and shipped together.

Note: The system only prompts you to choose between [Select](#) and [Complete](#) the first time you order aligners for a patient. This choice applies to future orders for aligners for this patient.

TIP: You can view how many Therapeutic Models and Setups are currently available for a patient with [Complete](#) pricing by going to the Patient Profile page, just as would for a SureSmile Standard "Extended" case.

Choosing the [Select](#) pricing option for your aligner order:

1. From the Order tab, click the **Approve & Order Aligners** button on the Order tab. The **Select Pricing** dialog box opens.
2. Click the **Select** Pricing Option, then click **OK**. The **Order Aligners** dialog box opens.
3. The Order Aligners dialog box indicates which aligners have been printed, which have no movement, and which contain conflicts. By default, all arches and aligners with movement are selected for printing. Uncheck **Upper** or **Lower** if you do not want to print an arch. If you unselect all aligners, the arch is unchecked automatically. Unprinted aligners are highlighted in dark blue. Click the icon for any aligner that you do not want to print. This removes the dark blue highlighting, but retains a blue outline. Arches and aligners without movement are not selected. Template ("T") aligners with attachments but no movement are selected by default for printing. Aligners already ordered are white and show a small printer symbol.

TIP: Click the [Legend](#) check box to display the legend for the color coding of the models.

Note: There are no additional reminders/tasks for ordering remaining unordered aligners.

4. Click **OK**. A confirmation dialog box opens. Click **OK** to confirm your order. This step incurs the service fee. Another dialog box that specifies the items in your order opens. Click **OK** after verifying this is what you want to order. The product state is updated from (Not Ordered) to (Ordered). All aligners are produced by OraMetrix in Richardson, Texas. Once orders are printed, packaged and shipped, the product order state in the timeline changes to *Finished*. After the initial order, an Order Aligners button becomes available on the Order tab so you can order or reorder additional aligners as the case progresses.

Estimated Delivery Times by Region - Aligners

Region	Aligners delivered within...
US, Canada	10 working days
Australia, New Zealand, Japan, United Arab Emirates	12 working days
Europe	14 working days

To order physical 3D prints of staged models from OraMetrix to ship to your lab for appliance production:

1. From the **Order** tab, click the **Approve & Order 3D Prints** button. The **Order 3D Prints** dialog box opens. The dialog box indicates which stages have been printed, which have no movement, and which contain conflicts. By default, all arches and stages with movement are selected for printing. Uncheck **Upper** or **Lower** if you do not want to print an arch. If you unselect all stages, the arch is unchecked automatically. Unprinted staged models are highlighted in dark blue. Click the icon for any stage that you do not want to print. This removes the dark blue highlighting, but retains a blue outline. Arches and stages without movement are not selected. Template "T" stages with attachments but no movement are selected by default for printing. 3D prints already ordered are white and show a small printer symbol.

TIP: Click the Legend check box to display the legend for the color coding of the models.

2. Click **OK**. An **Order Submitted** confirmation dialog box opens. Click **OK**. Your models will be shipped to your practice or designated lab.

Note: To help prevent accidental breakage on models with gaps due to missing or unerupted teeth, the system maintains a 5 mm gingival base.

Estimated Delivery Times by Region - 3D Prints

Region	3D prints delivered within...
US, Canada	5 working days
Australia, New Zealand, Japan, United Arab Emirates	7 working days
Europe	9 working days

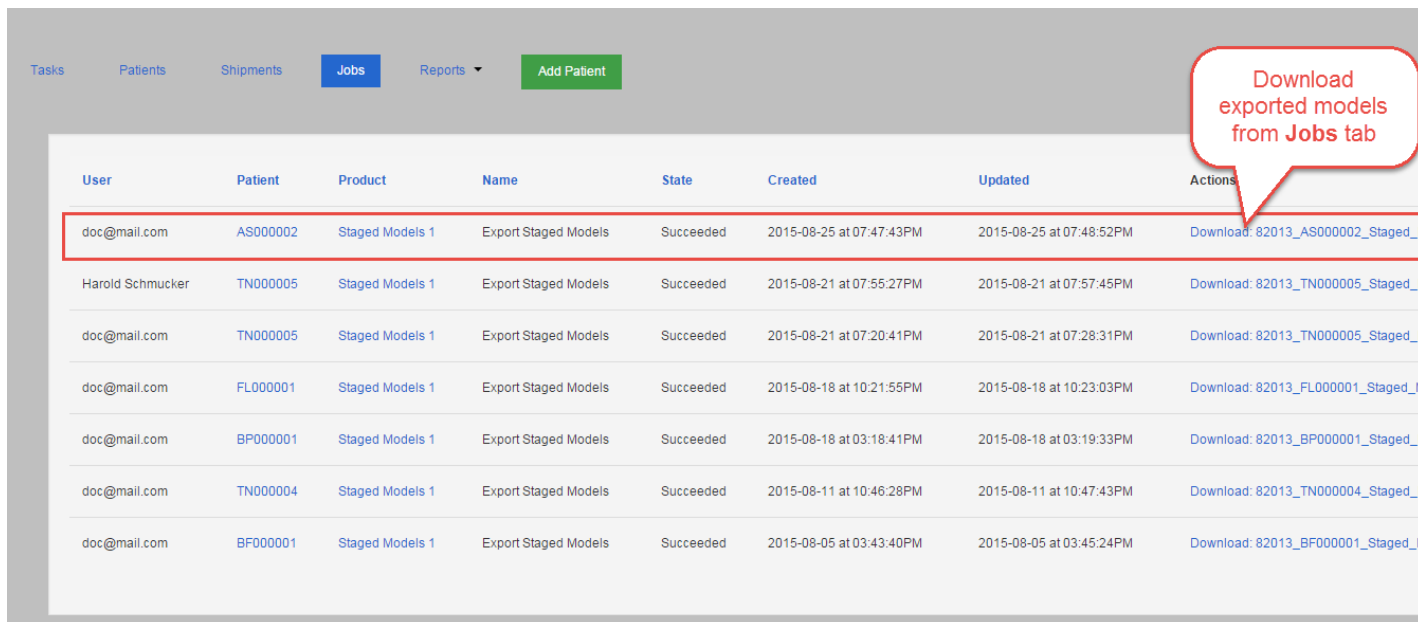
To export digital files of your 3D models to your lab for appliance production:

1. From the **Order** tab, click the **Approve & Export STL** and select *Create new export...* The **Export Staged Models** dialog box opens. The dialog box indicates which stages have been exported, which have no movement, and which contain conflicts. By default, all arches and stages with movement are selected for exporting. Uncheck **Upper** or **Lower** if you do not want to export an arch. If you unselect all stages, the arch is unchecked automatically. Unexported staged models are highlighted in dark blue. Click the icon for any stage that you do not want to export. This removes the dark blue highlighting, but retains a blue outline. Arches and stages without movement are not selected. Template ("T") stages with attachments but no movement are selected by default for exporting. Staged models already exported are white and show a

small printer symbol.

TIP: Click the Legend check box to display the legend for the color coding of the models.

2. Click **OK**. A confirmation dialog box opens. Click **OK**.
3. A waiting indicator is shown for as long as the job is queued or running.
4. When the in-progress status indicator disappears, click the drop-down arrow on the **Approve & Export STL** drop-down button and click the job you wish to download. A Zip file of the models is downloaded to your computer. The location depends on the type of web browser you are using. There is no limit to the number of jobs that can be listed, but jobs will be automatically removed from this list after seven days.
5. You can also go to the Jobs tab on the Clinic Overview page and download the job from there.



User	Patient	Product	Name	State	Created	Updated	Actions
doc@mail.com	AS000002	Staged Models 1	Export Staged Models	Succeeded	2015-08-25 at 07:47:43PM	2015-08-25 at 07:48:52PM	Download: 82013_AS000002_Staged_...
Harold Schmucker	TN000005	Staged Models 1	Export Staged Models	Succeeded	2015-08-21 at 07:55:27PM	2015-08-21 at 07:57:45PM	Download: 82013_TN000005_Staged_...
doc@mail.com	TN000005	Staged Models 1	Export Staged Models	Succeeded	2015-08-21 at 07:20:41PM	2015-08-21 at 07:28:31PM	Download: 82013_TN000005_Staged_...
doc@mail.com	FL000001	Staged Models 1	Export Staged Models	Succeeded	2015-08-18 at 10:21:55PM	2015-08-18 at 10:23:03PM	Download: 82013_FL000001_Staged_...
doc@mail.com	BP000001	Staged Models 1	Export Staged Models	Succeeded	2015-08-18 at 03:18:41PM	2015-08-18 at 03:19:33PM	Download: 82013_BP000001_Staged_...
doc@mail.com	TN000004	Staged Models 1	Export Staged Models	Succeeded	2015-08-11 at 10:46:28PM	2015-08-11 at 10:47:43PM	Download: 82013_TN000004_Staged_...
doc@mail.com	BF000001	Staged Models 1	Export Staged Models	Succeeded	2015-08-05 at 03:43:40PM	2015-08-05 at 03:45:24PM	Download: 82013_BF000001_Staged_...

6. Send the Zip file to your lab of choice to print the 3D models and fabricate the aligners.

Best practices when exporting models

To help better manage the load on the OraMetrix servers when exporting staged models, a message appears on the Export Staged Models dialog box reminding you not to select more than 20 staged models at once. As a safeguard, if you select more than 20 models the OK button becomes unavailable to prevent you from submitting the job. To double-check your exported files before sending them to your lab, check the folder properties or file details—all of your exported models should have a similar file size. You can also use a free 3D viewer utility, such as MeshLab, to view the contents of each file. MeshLab is available as a free download from: www.meshlab.sourceforge.net. If you want to rename files that are already zipped, use a free tool such as WinZip. Finally, do not delete your exported files while the patient is active. You might need them again in case appliances are lost or broken.

Extending aligner treatment

If all the aligners based on the staged model sequence have been used but you want to make additional corrections before finishing treatment, you can use the last model stage as a new starting point.

Here is an overview of how to extend aligner therapy.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/2b83e930-2f16-11e...>]

Full-service Aligner Staging Case Overview

In this Topic

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Select the **Full-service Aligner Staging** case package to benefit from the expertise of our Digital Lab technicians in setting up your target for aligner therapy, and then generating and adjusting your series of aligners or staged models. Use for:

- Patients who will receive aligners based on elemetrix models, but who will not be bonded nor receive wires.
- Patients who will receive aligners based on elemetrix models after they have completed or are near completion of conventional treatment.

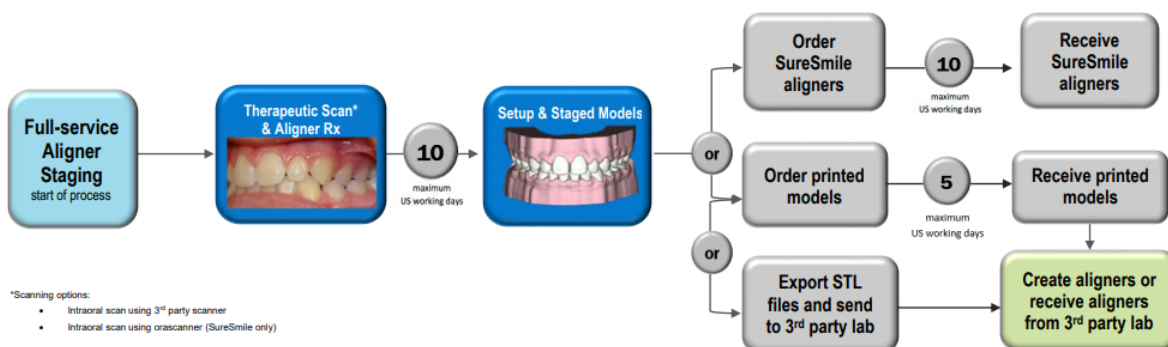
Based on your instructions, elemetrix technicians create the setup representing your desired final tooth alignment and the sequence of staged movement models. After you approve the setup and staged models, you can either:

- Order your aligners directly from OraMetric. Your aligners are boxed and shipped to your practice.
- Order your 3D prints (physical models) for each stage in the series. Use these models to fabricate your own aligners, at your in-house or local lab.
- Export the 3D data files for the staged models to your in-house or local lab. No fee is assessed. Your only cost is the fee for the diagnostic model.

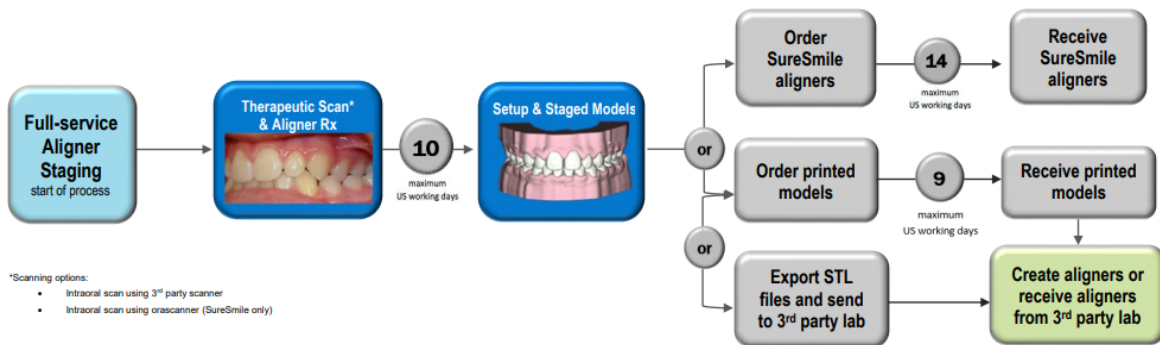
Process Overview by Region

Here is an overview of the Full-Service process for each region.

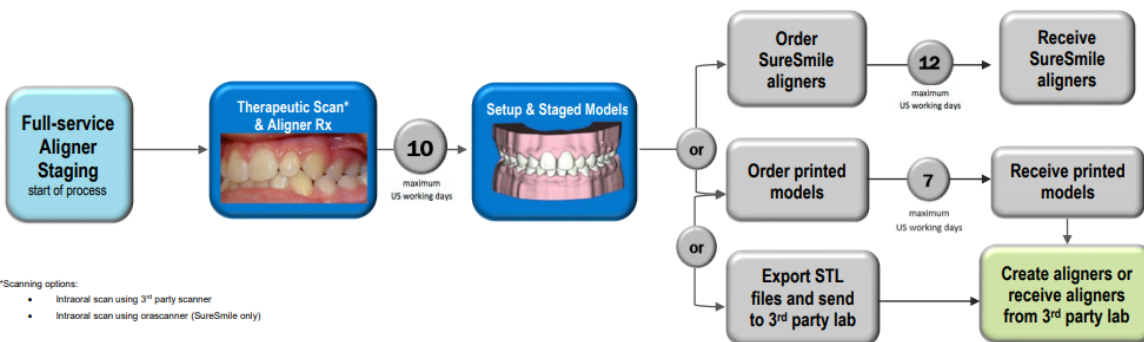
Full-Service Aligner Process for United States and Canada



Full-Service Aligner Process for Europe



Full-Service Aligner Process for Australia, New Zealand, Japan and United Arab Emirates



Features & Benefits

- OraMetrix Digital Lab Technicians assist with setup and staging
- Doctor evaluates plan and staged models and modifies as needed
- Doctor has option to:
 - order aligners directly from OraMetrix
 - order 3D printed (physical) staged models from OraMetrix
 - download STL files and print models in house or at local lab

Full-service Aligner Staging Case includes:

- 1 unbonded therapeutic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as CEREC Omnicam, iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners.

- 1 setup, and any setup modifications as needed.
- 1 set of virtual staged models with attachments as needed (optional per doctor preferences), and any modifications as needed
- Access to a Digital Lab Technician to discuss your setup or staged models
- printed staged models shipped directly to you from OraMetrix, inc. (separate fee applies per printed model per arch)
- downloadable .stl digital files for printing in house at your practice or at a local lab

Aligner Pricing Options

Aligners produced are offered with two different pricing options:

- Select (per piece)
- Complete (per patient)

When ordering a Full-Service Aligner case, choose the *Select* or *Complete* appliance pricing option *after* the customer approves the model, setup and staging, but *before* ordering aligners.

Here is a table that shows the differences between the Select and Complete pricing options. Please note that any prices shown vary from region to region and are subject to change.

	Select	Complete
Aligners	\$30 each*	Unlimited for 3 years
Refinements (Aligner Cases Only)	\$110 each*	Unlimited for 3 years
Replacement Aligners	\$30 each*	Unlimited for 3 years

* US dollars shown for illustrative purposes only. Please contact your account manager for pricing details.

Here is some additional information about each pricing option.

Select Pricing Option

- Aligners can be purchased in any quantity up to the total number of planned stages. Aligners are priced on a per-aligner basis. Aligners are boxed and shipped to your practice in the quantity ordered.
- You can purchase 3D printed physical models for each stage, including stages previously purchased as aligners.
- You can export staged models when ordering this package. The minimum order size is one stage (single aligner or a pair of aligners).
- You cannot combine SureSmile wires with this offering for concurrent mixed treatment (such as one arch

treated with aligners, one arch treated with archwires).

Complete Pricing Option

- Single fixed price for a particular patient.
- All aligners are boxed and shipped to your practice at once.
- Includes an unlimited number of refinements within a 3-year period, beginning with the first order.

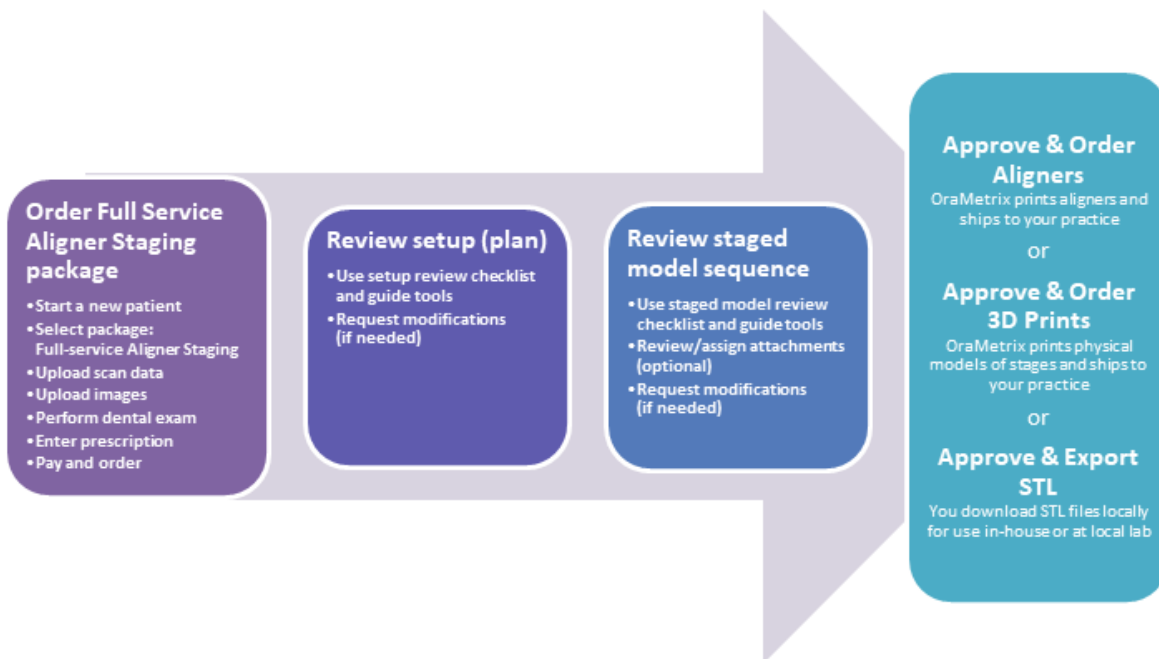
Ordering a Full-service Aligner Staging case package

In this Topic

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Task Overview: Full-Service Aligner Case

Here is a task overview of the Full-Service Aligner Case followed below with step-by-step instructions.



Here are step-by-step instructions for ordering a **Full-service Aligner Staging** case package.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/128a3250-4e91-11...>]

Reviewing an Aligner Setup/Plan

After the Digital Lab returns the finished therapeutic model to the practice and elemetrix generates the task reminder *Review setup & staged models*, elemetrix sends an email task reminder to your practice. Click the link in the email takes you to the first step (Overview) of the Setup review/approve checklist for the patient.

Here are step-by-step instructions for reviewing an aligner setup/plan.

Tip: Click the expand view button  to see the full screen.


IFrame [<https://whatfix.com/SureSmile.com/□□deck.html?nolive=1&start=2&suggest=1&closeable=false#!/13cae420-4e9b...>]

Video: [Approving/modifying a full service aligner case](#)

IFrame [https://players.brightcove.net/645276483001/Skrn5asA_default/index.html?v...]

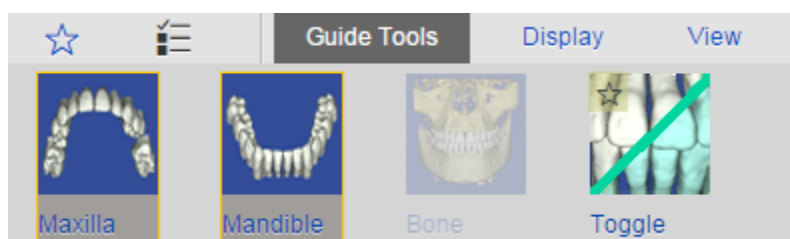
After the Digital Lab returns the finished therapeutic model to the practice and elemetrix generates the task reminder *Review setup & staged models*, elemetrix sends an email task reminder to the practice. A link in the email takes you to the first step (Overview) of the Setup review/approve checklist.

Alternatively, you can also find this *Review setup & staged models* task for the patient in your task list in elemetrix:

1. From the **Tasks** tab , find the *Review setup & staged models* task for the patient's plan.
2. Click the *Plan* link under the Item column to open the plan.
3. Click the Checklist tool  in the top left of the page to open the review checklist for the **setup**. Follow the instructions in the setup review checklist to carefully review the setup. Each step includes a description of the step's purpose. Each time you select a step in the checklist, the 3D model in the main screen reorients to the ideal position for the step. the photos and x-rays in the two smaller side panes change as well.
4. Click the **Notes** tab in the guide to review standard or user notes. You can also type a note for the Digital Lab in the text box. If during your review, you wish to start over and discard your notes, click the **Revert Modifications** button on the order tab.
5. Click the **Prescription** tab to make any changes to the Aligner Prescription. These changes will be shown on the Aligner Prescription on the Patient Overview as well.

Using the Guide Tools

The Guide Tools palette in the menu bar contains tools needed for the step you are currently on. the palette changes to display the necessary tools for each step. click the corresponding tool to turn them on or off as needed.



Review IPR in the Setup

elemetrix does not determine when IPR should be applied. IPR is performed at the doctor's discretion. To review or update the IPR in the setup, go to the Displacements tab and check the amount of space needed to achieve the setup. If IPR is needed, the system displays a negative value for each affected tooth in the **Intersection (-) / Gap (+)** row in the displacements tab table. The IPR shown is always for the mesial of the affected tooth.

Guidelines for Reviewing Staged Models

You have many options for viewing displacements to ensure that the values are appropriate. This topic contains best practice guidelines and procedures to help you conduct a quick, efficient and thorough review.

Before Starting: Choose a Displacement Type

- **Tooth** - Click the **Tooth** option to calculate movements from the center of each crown. A positive number indicates mesial, buccal/facial or occlusal movement of the crown. A negative number indicates the opposite movements. When moving teeth by entering values in the Displacements tab table, the center of the crown is the point of reference.
- **Cusp Tip** - Choose the **Cusp Tip** option to move teeth relative to the cusp. When you click this option the cusp tips tooth feature points are shown. This tool is designed to: 1) align teeth without bonded brackets, or 2) align teeth that have compromised anatomy. This option is also helpful when aligning the torque to the anteriors while maintaining the archform. It is also useful for applying torque while maintaining the occlusal plane.
- **%** - Choose this option to see displacements calculated as a percentage of movement, with the target represented as 100%.

Note: the Bracket option is not displayed for aligner cases.

Choose whether to view values cumulatively or incrementally:

- **Cumulative** – The displacements of each stage are added to show all movement achieved up to the current stage.
- **Incremental** – The displacements of each stage show the amount of movement achieved between the previous stage and the current stage.

Check model movements in Single Stage view:

1. Select the **Displacements** tab.
2. Select the **Upper** or **Lower** arch.
3. Display and view the 3D model as needed so that you can watch the model as it changes from stage to stage.
4. Select the **Single Stage** view. Click the model numbers in the small tabs (or use the left/right arrows on the screen). The displacements are shown for each model in the series.
5. Examine the displacement values. If needed, adjust the numbers using the table.
6. Repeat for the opposing arch.

Add stages as needed:

1. Select the **Upper** or **Lower** arch.
2. Select a model number to follow the new stage you are adding.

3. Click the **Add Stage** button to insert a new stage. The displacements for the new stage are set to a midpoint between the preceding stage and the following stage.

Remove stages as needed:

1. Select the **Upper** or **Lower** arch.

Caution: Even though you select the upper or lower arch, the models for both arches will be removed.

2. Select a model number.
3. Click the **Remove Stage** button.

NOTE: If you remove a stage, the displacements for the subsequent stages are adjusted to include the movements which took place in the removed stage.

Adjust displacements manually:

Use this procedure when there is too much overlap (more space is needed than what is available) and the automated staging tool cannot resolve the conflicts with a biologically feasible set of stages.

1. Select the **Cumulative** or **Incremental** option as needed.
2. Enter new values according to your clinical judgment.
3. If you have manually changed values in stages that will affect later stages, click the **Update Next Stages** button to recalculate the values in the subsequent stages.

When you manually change displacement values in a stage, only the tooth positions in that stage are affected. Tooth positions in previous and subsequent stages remain unchanged. If your changes in a stage create a large step between the prior or next stages, use the **Update Previous Stages** or **Update Next Stages** buttons to spread out the movements or add the required stages.

For example, if there are five intermediate stages between a reference model and a target model, and you change the displacement values for the second stage, if you click the **Update Next Stages** button, the displacement values for staged models 3, 4, and 5 are recalculated. Note that the number of stages does not change, so that your displacement limits may be exceeded for one or more recalculated stages, and a warning may appear.

Note: If you make changes in the last stage in the staged model series, the **Update Next Stages** button is unavailable since no subsequent stages are affected.

Re-check movement with multi-stage view

Now examine the movements per tooth through the stages.

1. Select the **Multi-Stage** view.
2. Select the **Upper** or **Lower** arch.
3. Select the tabs as needed to view types of movements (Mesial/Distal, etc.).
4. Repeat these steps for the opposing arch.

Adjust displacements manually:

1. Select the **Upper** or **Lower** arch.
2. Select the **Cumulative** or **Incremental** option as needed.
3. Enter new values according to your clinical judgment.
4. Repeat for the opposing arch.
5. If you have manually changed values that affect later stages, click the **Update Next Stages** button to adjust the numbers.

Add the same values to multiple model stages

You can quickly add multiple values in the multi-stage views as shown. This is the same functionality you're used to on the Displacements tab.

Select Value to Compare: Mesial / Distal Buccal / Lingual Occlusal / Gingival Torque facial / Lingual Angulation Mesial / Distal Rotation Mesial / Distal Gap / IPI

Single Stage
Multi-Stage

Add Stage Remove Stage Update Next Stages

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL8	UL7	UL6	UL5	UL4	UL3	UL2	UL1
Upper																
Mesial / Distal	1		0.2	0.2	0.2											
	2		0.2	0.2	0.2											
	3	0.3	0.2	0.2	0.2											
	4	0.3														

Comparison Stage: Reference Stage: Therapeutic

Displacement Type: Tooth %
 Malocclusion Includes Max. / Mand. Alignment Adjustments

Cumulative Cumulative Incremental

Edit Selection: 0.2 =

Functions: Clear Spaces Reset Midline Offset

Add stages if needed:

1. Select the **Upper** or **Lower** arch.
2. Select a model number (click inside the row) to follow the new stage you are adding.
3. Click the **Add Stage** button to insert a new stage. The displacements for the new stage are set to a midpoint between the preceding stage and the following stage.

Remove stages if needed:

1. Select the **Upper** or **Lower** arch.
2. Select a model number (click inside the row).
3. Click the **Remove Stage** button.

Check Space

On the **Displacements** tab, check the amount of space needed to achieve the target simulation or setup. If more space is needed, the system displays a negative value for each affected tooth in the **Intersection (-) / Gap (+)** row in the **Displacements** tab table. Although you can see the space needed per stage by clicking the tab for each stage, most SureSmile doctors typically apply the IPR needed at the first appliance appointment.

NOTE: If the space needed on any stage is more than the amount in the setup, the conflict must be resolved by staging the movements differently. The additional IPR should not be applied.

TIP: The system generates the arches independently. If needed, use the **Contacts** tool on the **Display** menu to determine if there are any interferences with the opposing arch.

Selecting and Adding Attachments for a Full-Service Aligner Staging Case

For Full-service Aligner Staging cases, the DL technician will select and place attachments on the staged models as needed per our protocols. You can modify the placement of attachments, remove them, or place new attachments during your review of the setup and staged models. You can apply attachments to all stages or to just a subset of stages.

In this Topic

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[Video: Applying and removing attachments / new template staging](#)

IFrame [https://players.brightcove.net/645276483001/Skrn5asA_default/index.html?v...

: Here is an overview of how to add attachments.

Tip: Click the expand view button  to see the full screen.

IFrame [https://whatfix.com/SureSmile.com/deck.html?□□nolive=1&start=2&suggest=1&closeable=false#!/78c0dd90-2f55...

Attachments Panel

Place attachments by selecting them from the Attachments panel and placing them on a single tooth. The Attachments panel initially appears when the Displacements tab is opened. It can be moved anywhere on the screen. You can also display the panel by clicking the Assign Attachments icon on the Tools palette. Attachments are displayed left-right from largest to smallest:

- **Row 1:** Ellipsoid attachments
- **Row 2:** Rectangular beveled attachments
- **Row 3:** Rectangular attachments
- **Row 4:** Trash can for deleting attachments

To place an attachment, click to select it and then click a tooth to add the attachment. After you place the attachment, select the attachment on the 3D model and use the arrows on the bounding box to move it to its exact desired position.

To remove the attachment, click the attachment on the tooth to select it and then click the trash can.

Placing Attachments

While adding or removing attachments in the Single Stage view, refer to the values on the Displacements tab to decide which attachment to use and where to place it on the tooth surface.

You can place multiple attachments on a tooth, and you can place attachments on the labial and lingual surface of the same tooth.

When you select and place your attachments, take into consideration the amount and direction of movement desired.

You can apply or remove attachments to or from a tooth at different stages. You can choose at which stage to place an attachment and at which stage to remove an attachment. To undo a particular movement just made, click the **Undo** button at the bottom right of your screen.

Note: Attachments are only displayed on staged models. They are not visible on setups or simulations.

Attachment Template Stages

The system automatically generates a template stage for the placement of attachments before any stage with newly added attachments. The teeth remain in the same position as the prior stage and the new attachments are added to the stage. Any previously placed attachments are also included.

Each template stage is designated by a "T" and the number of the next stage; e.g., "T2" would be placed before stage 2.

The software automatically removes the attachment(s) at the end of the sequence and places a minus "-" in front of the last stage in the sequence. This last stage with a minus sign is a passive copy of the previous stage but without attachments. Because it doesn't have movements or attachments, it can be printed for use as a retainer.

When you do not have attachments, the last stage still can be used as a retainer since it is the last stage with the last set of movements.

An attachment that is colored black indicates that this is the last stage for this attachment.

A minus sign is shown on the next stage tab to remind you that the attachment was removed. For instance, if prior to stage 9 (after stage 8) the attachment was removed, the tab for stage 9 will show "-9".

Attachments are automatically removed from the last stage and a minus sign is shown before the stage number tab to indicate that the attachment has been removed.

Attachment Colors

Attachments are colored in the 3D model to indicate the following:

- **Blue** means the attachment is the first stage including this attachment. This is the template stage, as denoted with a T and the number of the subsequent stage.
- **Pink** means the attachment is an active attachment in the current stage.
- **Black** means that the attachment is on its last stage. Remove the attachment after this stage.

Adjusting Staging

You have several buttons to help you adjust staging:

Clicking any of these buttons opens the Aligner Constraints dialog so you can select new aligner constraints if desired.

All three buttons are available on the **Displacements** tab in the Staged Models workspace for elementrix DIY aligners.

- **Recalculate Staging:** Click to recalculate all stages, using the current aligner constraints.
- **Update Previous Stages:** Use to recalculate previous stages after you update a value in the Displacements tab.
- **Update Next Stages:** Use to recalculate next stages after you update a value in the Displacements tab.

Using these buttons does NOT affect your target setup. Movements in all stages are adjusted so that your target setup is not affected. When you recalculate stages, only the selected (i.e., upper or lower) arch is affected.

When you recalculate stages by clicking the **Recalculate Staging**, **Update Previous Stages**, or **Update Next Stages** buttons, the system performs distinct actions based on the following conditions:

- If any of the original attachments started after stage 1: The system removes all such attachments. Attachments added in stage 1 are retained. The system displays the following message & confirmation before recalculating the stages and removing the attachments, "Warning: Any attachments beginning with stage 2 or later will be removed. Are you sure you want to proceed? Continue / Cancel"

- If any of the original attachments started at stage 1 and were removed before the end of treatment: The system extends the attachments to the end of the new sequence and displays the following message afterwards, "Warning: Attachments have been extended to all stages. Remove any unneeded attachments."
- If both conditions are satisfied, both warnings will be shown (assuming you opt to continue after the first warning).
- If the number of stages increases, the attachments placed on the stage immediately preceding the new stages are applied to the new stages as well. If you have used multi-group staging, a warning appears if the attachments are restored to stages that now belong to a different group

Ordering Aligner Refinements

If aligners are not tracking well, you can request an aligner refinement. You must submit a scan of the current malocclusion. The DL will create a new therapeutic model and then create a new setup and staging. Once approved, OraMetrix will produce the needed aligners to finish the case.

The following functionality is available to you when ordering an aligner refinement:

- Add Stage
- Copy Stage
- Remove Stage
- Update Previous stages
- Update Next Stages

After the initial aligner order is placed, the “Order Refinement” button becomes active on the Staged Models Order tab.

From the Staged Models Order tab:

After initial aligner order is placed, the “Order Refinement” button becomes active on the Staged Models Order tab.

From the Staged Models Order tab:

1. Click the **Order Refinement** button. The Scan Data page opens.
2. **SCAN DATA** - Upload a scan of the current malocclusion.
3. **PHOTOS/XRAYs** - Upload current records. (Current records are required in elemetrix; order will not be processed without them.)
4. **DENTAL EXAM** - Update exam if needed.
5. Fill out the **Special/Refinement Instructions** section of the MACROS.

Notes: The name of this step changed from **Special Instructions** to **Special/Refinement Instructions** after the setup has been approved and the aligners/staged models ordered. Even though the other MACROS instructions are pre-populated from the current plan, you must enter instructions in this “Special/Refinement Instructions” section before the system can process the order.

6. The last order step varies according to the package selected:
 - If the Complete package was selected, the Confirmation step is shown. (no fee is incurred)
 - If the Select package was selected Payment step is shown. A specified refinement fee is incurred.

From the **New Order** button

You can also order refinements by clicking the “New Order” button:

1. Click the **New Order** button on the Patient Overview. The Select Package page opens.
2. Note that the **Full-service Aligner Staging** package name has changed to **Aligner Refinement**.
3. Click the **Aligner Refinement** lab icon. The Upload Scan Data page opens. All of the tabs are in the same order as in the initial order and must be filled out.
4. **SCAN DATA** - Upload a scan of the current malocclusion.
5. **PHOTOS/XRAYs** - Upload current records.
6. **DENTAL EXAM** - Update exam if needed
7. **PRESCRIPTION** - Fill out the **Special/Refinement Instructions** section of the MACROS.

Notes: The name of this step changed from **Special Instructions** to **Special/Refinement Instructions** after the setup has been approved and the aligners/staged models ordered. Even though the other MACROS instructions are pre-populated from the current plan, you must enter instructions in this “Special/Refinement Instructions” section before the system can process the order.

8. **PAYMENT** – Place Order. For the *Complete* pricing option, the Aligner Refinement package shows a \$0.00 price if you are still within three years of the initial order. After three years a separate fee for each refinement applies. Contact your Account Manager or Customer Care for details.
9. The last order step varies according to the package selected:
 - If the *Complete* package was selected, the Confirmation step is shown. (no fee is incurred)
 - If the *Select* package was selected Payment step is shown (a specified refinement fee is incurred).

Note: To redisplay the “Full-service Aligner Staging” package, you need to add a new patient.

Reordering Lost or Damaged Aligners

You can order replacement aligners, 3D prints or STL exports through separate sureclear Aligner orders. After you first order aligners or export any printed models or STLs, the Approve & Order buttons change:

From...	„to
Approve & Order Aligners	Order Aligners
Approve & Order 3D Prints	Order 3D Prints
Approve &Export STL	Export STL

This button label change indicates that you can re-order any of these items for the patient without having to resubmit a scan or updated records.

Advanced Diagnostics Cases

Select the Advanced Diagnostic case package to order a dynamic 3D CAD therapeutic model with 2D/3D linkage and full access to our advanced simulation toolset.

Services include:

- Advanced Diagnostics case package (separate fee includes the following items):
 - 1 unbonded therapeutic model. Capture this scan at a patient appointment using a third party scanner that can provide surface data in .STL format, such as iOC™ Scanner/iTero®, 3Shape TRIOS®, CS 3500, or 3M True Definition scanners. (Separate fee applies.)
 - Exclusive full access to Advanced diagnostics toolset
- As needed:
 - printed staged models (separate fee applies per printed model per arch)
 - printed IDB trays (separate fee applies per tray per arch)

Features & Benefits

- simulate treatment options
- plan smile design
- print physical 3D staged models for aligner therapy
- design and order IDB trays
- plan treatment options for surgical, restorative or extraction cases

In this Topic

- [Heading 2](#)

Perform Advanced Diagnostics

After the Digital Lab returns the finished therapeutic model to the practice and elemetrix generates the task reminder *Analyze records*, elemetrix sends an email task reminder to the practice. A link in the email takes you to the simulation checklist where you can perform a surgical simulation, an automated dental simulation using the Setup Workflow tool, or fine-tune simulations with individual tooth movements.

Alternatively, you can also find this *Analyze records* task for the patient in your task list in elemetrix:

1. From the **Tasks** tab , find the *Analyze records* task for the patient.
2. Click the *Therapeutic Model* link under the **Item** column to open the model in the treatment planning workspace.
3. Use the treatment planning workspace tools to:
 - [Review a therapeutic model](#)
 - [Create treatment simulations](#)
 - [Design and order IDB trays from a treatment simulation](#)
 - [Order Printed Models from OraMetrix](#)
 - [Export digital files of your staged models for printing inhouse or at a local lab](#)
 - Plan treatment options for [surgical](#), [restorative](#) or [extraction](#) cases.

Ordering an Advanced Diagnostics case package

Here are step-by-step instructions for ordering an **Advanced Diagnostics** case package. The steps for reviewing your model and performing other tasks follow.

Tip: Click the expand view button  to see the full screen.

IFrame [https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/82289e20-4ea1-11...

Review therapeutic model


The treatment planning workspace provides a checklist that you can use to review a therapeutic model for accuracy and completeness before submitting the model. This checklist guides you through a step-by-step standardized review of the therapeutic model displayed in the main window of the treatment planning workspace. This 12-step checklist has associated views and tools that you can use to methodically evaluate the therapeutic model.

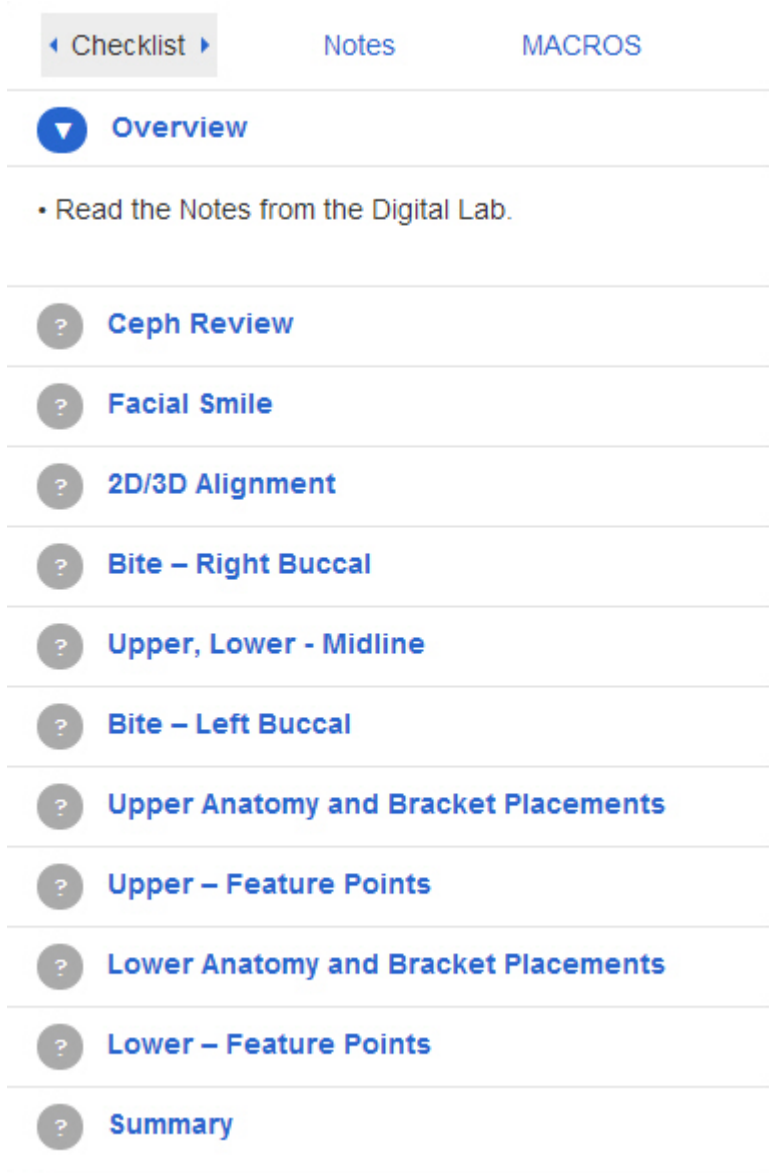
Video: Reviewing a Therapeutic Model

ActiveX Contro...

More video tips

To Review a therapeutic model

1. From the clinic overview, identify a patient with a therapeutic model that needs review and open that patient's record.
2. In the upper-left corner of the treatment planning workspace, click the checklist icon  on the menu bar to open the checklist for the therapeutic model.
3. Click the **Checklist** button.
Result: The 12 steps are displayed with a question mark icon next to each.



4. Click the question mark or the text of the step to expand the step.
Result: The instructions for the step are displayed, and the appropriate images are displayed in the main window and the two side window.
5. Follow the instructions for the step.
6. When finished, use your cursor to click on the next step. Note that the question mark icon on the preceding step changes color from gray to green and the question mark is replaced by a check mark.



7. Repeat steps 4 and 5 until you complete the guide. See the help topic *Approve or Modify a therapeutic model* for next steps.

Creating a Treatment Simulation for an Advanced Diagnostics Case

Here are step-by-step instructions for creating a treatment simulation for an **Advanced Diagnostics** case.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/16625c10-3d7d-11...>]

Designing and Ordering IDB Trays from a Treatment Simulation

To create labial (3-point contact, typically used for a labial approach) IDB trays based on a treatment simulation, access the IDB tools as follows:

1. Start a new treatment simulation. Align teeth using the setup workflow tool. See [Using the Setup Workflow Tool to Create a Simulation](#). We recommend this because placing brackets in a Treatment Simulations is best done by using the bracket plane on aligned teeth.
2. Click the **Brackets** tab. Click the **Apply Bracket Set** button and click the *Assign Bracket Set...* option. The Bracket Set/Attachments Selection dialog box opens. Select a bracket set from the list. The list is automatically filtered to list only bracket sets supported by elemetrix for use with IDB bonding trays. elemetrix default bracket sets approved for IDB use have "For IDB" in their description. Ormco IDB approved bracket sets have just "IDB " in their description.
3. Use a previously determined set of bracket heights to quickly position all brackets in an arch. From the Brackets/Attachments tab, click the **Select Bracket Height Set** button. The Bracket Height Set Selection dialog box opens with a drop-down list for each arch. The default bracket height set is pre-selected separately for the upper and lower arches in the drop-down lists. Leave the default bracket height sets as selected, or select one of your own custom bracket height sets. See [Bracket Height Sets](#) for more information about creating your own bracket height sets. The software applies the bracket heights in the bracket height set to the brackets selected for each arch. If a bracket height set defines heights for both arches, the software updates the current selection for both drop-down lists.



4. Click **Apply**. A progress bar appears while the system creates the IDB Tray simulation. After a moment the

IDB workspace opens with the Bracket Placement tab selected.

Note: elemetrix measures the bracket height from the middle of the bracket slot to the:

- incisal edges for central incisors and laterals
- buccal cusp for canines and premolars
- most prominent buccal cusp for posterior teeth

5. (Optional) Click the **Assign Bracket** button on the Brackets/Attachments tab and to replace single brackets in a bracket set as necessary. Brackets approved for IDB use are indicated in the bracket list on the Bracket Selection dialog box. Make sure you only select IDB approved brackets. Otherwise you will not be able to generate the IDB trays.
6. (Optional) Use the tools on the Bracket Placement tab to adjust the position of the brackets and use the Bracket Plane and Align Brackets tools to align the brackets with the bracket plane.

[Using the Bracket Placement tab to adjust bracket positions \(Click to expand section\)](#)

The Bracket Placement tab has three rows, each for a movement type:

- occlusal (+) / gingival (-)
- mesial (+) / distal (-)
- angulation crown mesial (+) / distal (-)

Both the Upper and the Lower tooth charts are shown on the tab.

For an IDB tray simulation the reference points for the initial values in the table cells are as follows:

- occlusal (+) / gingival (-) values correspond to those in the Bracket Height sets you applied when you started the simulation
- mesial (+) / distal (-) all initial values are set to 0
- angulation crown mesial (+) / distal (-) all initial values are set to 0

These values change from their initial starting values as you adjust bracket positions.

Note: To prevent erroneous values that can distort your IDB straight wire simulation, we've added restrictions to the values you can enter for each tooth. Translation cannot exceed 10 millimeters per tooth. Angulation cannot exceed 90 degrees per tooth.

[Multiple ways to adjust bracket positions](#)

Up/down arrows in each table cell or up/down arrows on your keyboard - Select a bracket on the 3D model or in the tooth chart in the Bracket Placement tab. Place your cursor over the movement type cell on the tab and then click the up or down arrow next to the cell or on your keyboard to reposition the bracket in increments of 0.1 mm

(horizontal or vertical) or 1 deg.(angulation).

Tip: Click the **Undo** button to reverse your changes incrementally.

Click the arrows to reposition the bracket in increments of:
* 0.1 mm for occlusal / gingival or mesial / distal movements
* 1.0 degree of angulation

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2						
occlusal / gingival	2.9	4.6	5.3	4.9	3.8	2.5	2.9	3.5	2.5							
mesial (+) / distal (-)		0.3	0.1				-0.1	-0.1								
Angulation mesial (+) / distal (-)	2	-3		-2	-6	14	-5		17							
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5							
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1		-0.2	0.1	0.1	0.8	mesial (+) / distal (-)		
Angulation mesial (+) / distal (-)	-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2	Angulation mesial (+) / distal (-)	
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8

Use the 3D model - Use the controls on the bounding box for a bracket to adjust its position. The values for the three movement types in the tooth table on the Bracket Placement tab change accordingly.

Tip: Click the **Undo** button to move the bracket back to its previous position.

Checklist

- Confirm Setup Alignment and Bracket Placement
- Confirm Upper Tray Design
- Confirm Lower Tray Design
- Select Initial Wires
- Order Trays and Initial Wires

Edit Checklist Reset Checklist to Initial Settings

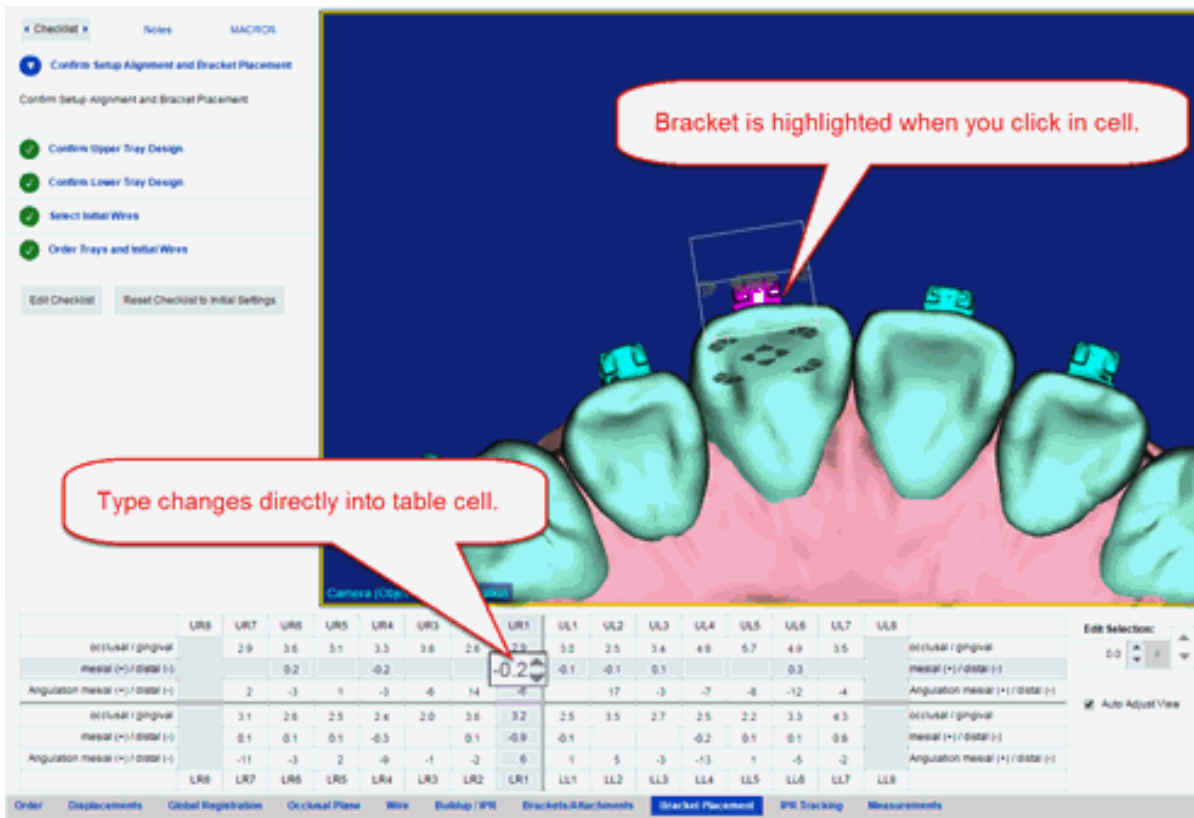
Use the bracket's bounding box controls to adjust its position.

Changes to position are shown in table on Bracket Placement tab.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8	
occlusal / gingival	2.9	3.6	3.1	3.3	3.8	2.6	2.9	3.0	3.0	2.5	3.4	4.8	5.7	4.9	3.5		occlusal / gingival
mesial (+) / distal (-)		0.2		-0.2			-0.2	-0.1	-0.1	-0.1	0.1		0.3			mesial (+) / distal (-)	
Angulation mesial (+) / distal (-)	2	-3	1	-3	-6	14	-6	17	-3	-7	-8	-12	-4			Angulation mesial (+) / distal (-)	
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3		occlusal / gingival	
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1	-0.2	0.1	0.1	0.8			mesial (+) / distal (-)		
Angulation mesial (+) / distal (-)	-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2		Angulation mesial (+) / distal (-)	
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	

Type directly into the tooth chart - Enter a value for a movement type directly into the appropriate cell on the Bracket Placement tab.

Tip: Click the Undo button to revert the cell to its previous value.



To move multiple brackets occlusally / gingivally at once:

1. Locate the cell of the table at the intersection of the tooth number column with the row for occlusal / gingival movement.
2. Click the cell to highlight.
3. Press and hold the **Shift** key, and click in another cell in the same row to achieve the same movement for multiple teeth.
4. Under the Edit Selection controls to the right of the chart, type a new value.
OR
Click the small up and down arrows (first set) to change to the number required.
5. Click the equal button to apply the typed value to the highlighted cells.
OR
Click the large up arrow (second set) to increase the typed value in each of the highlighted cells.
OR
Click the large down arrow (second set) to decrease the typed value in each of the highlighted cells.

Click in first cell of series, then shift+click in last cell of series to highlight a range of cells.

Use **Edit Selection** controls to enter multiple values at once.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8
occlusal / gingival	2.8	3.6	3.1	3.3	2.9	2.6	2.9	3.0	2.5	2.7	2.5	2.2	3.3	4.3	4.8	5.7	4.9	3.5	
mesial (+) / distal (-)			0.2		-0.2				-0.1	-0.1	-0.1	0.1						0.3	
Angulation mesial (+) / distal (-)			2	-3	1	-3	-6	14	-5			17	-3	-7	-8	-12	-4		
occlusal / gingival	3.1	2.6	2.5	2.4	2.0	3.6	3.2	2.5	3.5	2.7	2.5	2.2	3.3	4.3					
mesial (+) / distal (-)	0.1	0.1	0.1	-0.3		0.1	-0.9	-0.1				-0.2	0.1	0.1	0.8				
Angulation mesial (+) / distal (-)	-11	-3	2	-9	-1	-2	6	1	5	-3	-13	1	-5	-2					

Keyboard shortcuts

Use the following keyboard shortcuts to help you work faster when on the Bracket Placement tab

- **Arrow Up** or **Down** increment or decrease cell values by:
 - 0.1 mm
 - 1 degree
- **CTRL+arrow** moves the cursor from one cell in all four directions to another cell.
- **Tab** selects the cell to the right. If you are in the last cell of a row, cursor jumps down to next row.
- **SHIFT+Tab** selects the cell to the left. If you are in the last cell of a row, cursor jumps up to next row.
- **Pg Up** selects the cell above.
- **Pg Dn** selects the cell below.

Auto-adjust view

The Auto-Adjust View check box on the Bracket Placement tab automatically repositions the model when you select a cell in the Bracket Placement tab.

This check box works as follows:

- If you are adjusting mesial/distal bracket movements, an occlusal view of the arch is displayed and the selected tooth is shown in the center of the screen.
 - If you are adjusting angulation or occlusal (+) / gingival (-) movements, a labial view of the arch is displayed for the anteriors, a buccal view is displayed for the posteriors, and the selected tooth is in the center of the screen.
 - If you uncheck the check box, and then check it again, it remembers the last tooth previously selected and returns to that position.
7. (Optional) click the **Report** button on the Brackets/Attachment tab to create a printable PDF of the list of planned brackets along with a table showing planned, applied and completed IPR.
 8. Click the **Tray Tools** menu in the menu bar. Use the icons to generate trays/segments as needed. Once the IDB Tray simulation is generated, the name of the simulation in the elementrix bar now includes the text:[Name of simulation] (Tray for [name of simulation] <identifier for tray>)
 9. When finished, click the **Order** tab and click the **Order Trays** button. A confirmation message appears.

Note: If there are any interferences, the Order Trays button is disabled until you resolve the interferences.

10. Click **OK** to complete the order. elementrix puts the IDB tray simulation into an (Ordered) state and it becomes read only. The Order Trays button is now disabled. To reorder trays, click the **Copy** button under Straight Wire Simulation and reorder the trays.

Note: The Order Trays button remains available after you submit your order so you can reorder the trays in case of breakage or loss.

Combination Therapy

When treating a patient with combination therapy, that is using conventional therapy for one arch and aligner therapy for the other, do NOT create a separate patient record for this model. Instead order a new a la carte therapeutic model following the steps below.

To produce the staged models for one arch only while treating the other arch conventionally:

1. Select the Advanced Diagnostics case type.
2. Order a new therapeutic model.
Note: Once you order this new therapeutic model, you will not be able to order custom archwires referencing this model unless you first order a new setup.
3. Use an intraoral scan with an elementrix certified optical scanner (e.g., OraScanner, Itero^(R), 3M True Definition or TRIOSTM) for the a la carte therapeutic model.
4. Update the dental exam for the unbonded arch to correspond to the scan data.
5. Include current photos to support tooth modeling. You can use x-rays from the previous therapeutic scan appointment, but if you do this, type a note to the Digital Lab such as "Please use the previous Thx records for reference per the doctor."
6. Once the a la carte therapeutic model is approved, proceed to create a setup or simulation and generate your series of staged models as usual, and adding the attachments to the model as needed.

See also ...

Creating Treatment Simulations

A treatment simulation allows you to explore treatment alternatives before deciding on a specific setup prescription. The end result of a treatment simulation is a 3D model of the patient's treatment objective representing a specific treatment approach. You can create and store numerous treatment simulations for a patient before deciding on a specific treatment plan.

In order to begin a treatment simulation, there must be a model in a *Finished by Doctor* or *Finished by OraMetric* state.

You can create treatment simulations based on diagnostic or therapeutic models. When you create a simulation based on a diagnostic model, keep in mind that you must be more aware of the clinical feasibility of the tooth movements, since unlike a therapeutic model, a diagnostic model is not the basis for the elemetric wire.

Design the Smile Line with the Lip Trace Tool

The lip trace tool allows you to cut out the area inside the lips on a facial smile photo and then superimpose the patient photo over the model to see how much intrusion or extrusion is needed to design the smile line.

Use this tool during the therapeutic model review to get the image ready before you start the setup. You can also use this tool during setup or treatment simulation.

Slide Show: Here are step-by-step instructions for using the lip trace tool with a therapeutic model.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/01d88fd0-492b-11...>]

In this Topic

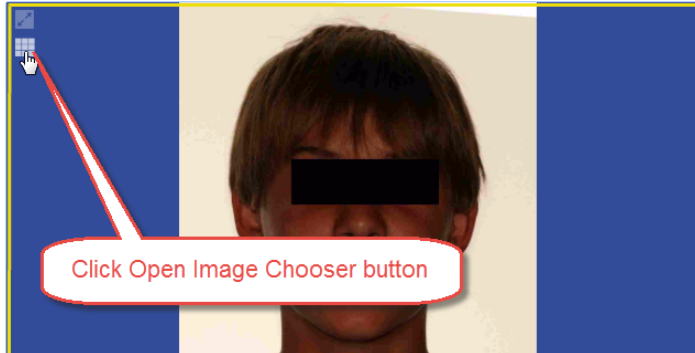
- [Heading 2](#)

To use the lip trace tools:

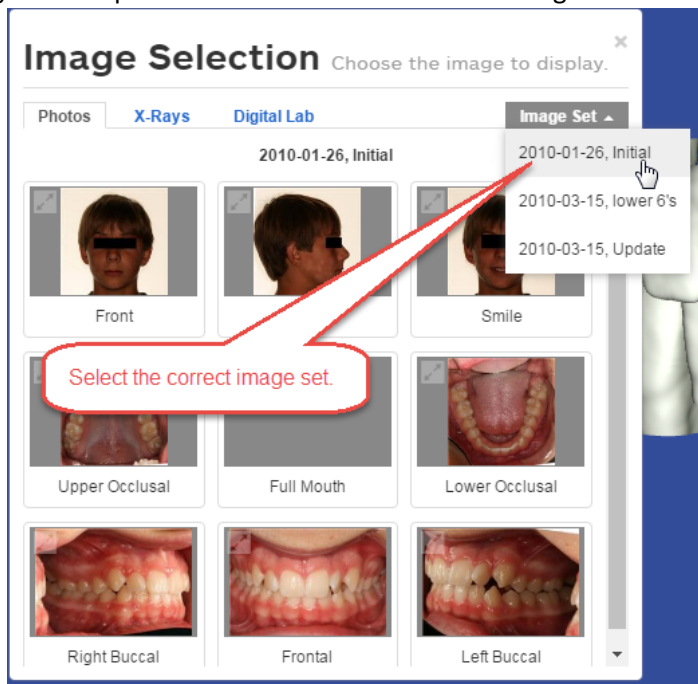
1. Open the model or treatment simulation you want to work with. Make sure the smile photo from the correct image set on which you want to perform the lip trace cutout is displayed in one of the side windows. [How do I do this?](#) Click in the side window to make it active. (Yellow frame indicates

window is active.)

1. Click the Open Image Chooser button in the top or bottom side window where you want to display the smile photo.




2. The Image Selection dialog box opens. Make sure the correct image set is selected by clicking the Image Set drop-down list arrow. If the correct image set is not already select, select the correct one



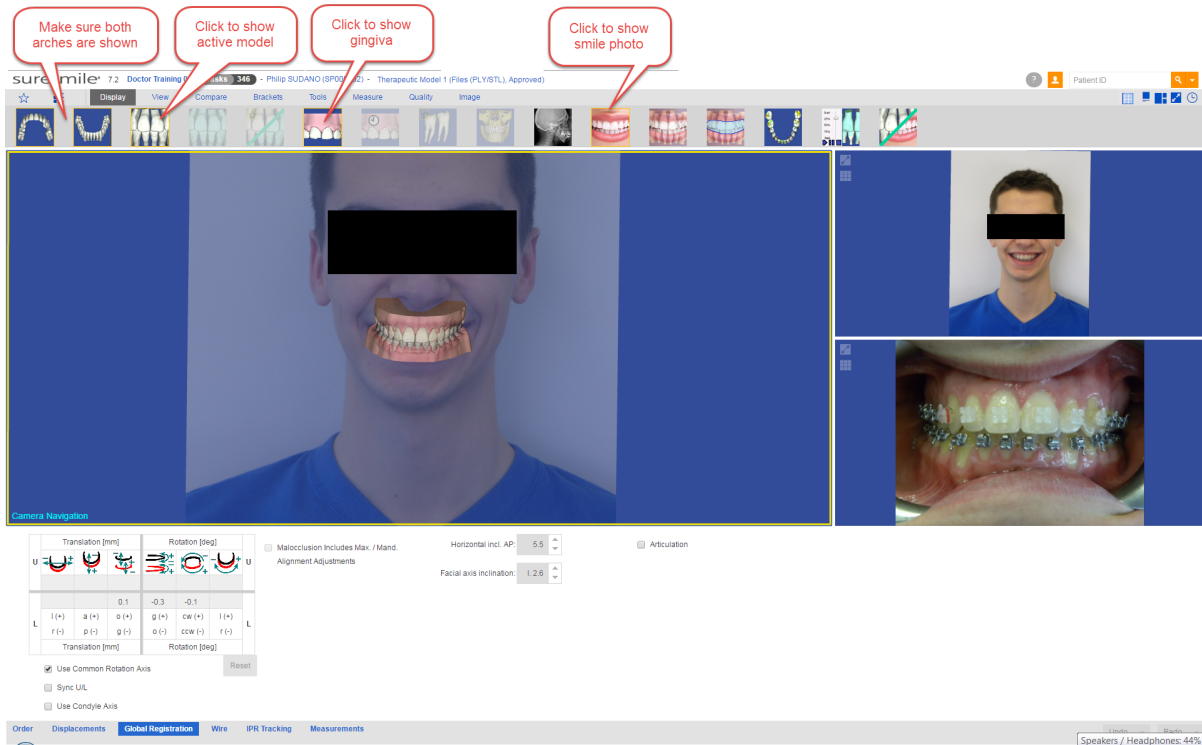
now.

3. Once the correct image set is displayed in the Image Selection dialog box, click on the thumbnail of the photo you want to display in the side window of the treatment planning workspace. This will cause the Image Selection dialog box to close and the photo you clicked on will appear in the side window.


2. Click the **Image** menu to display the image tools, and click the **Lip Trace Tools**  icon.

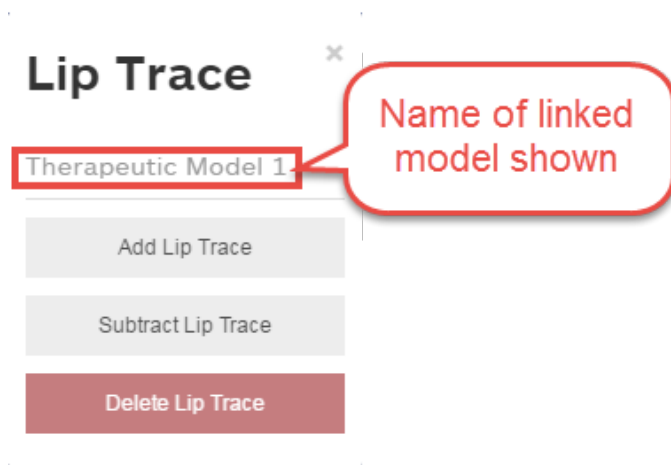
3. In the menu bar, click **Display**. Toggle the tools as listed and shown below:

Click Display Menu tools....	...to show
Maxilla and Mandible	both arches in main window
Toggle Active /Reference Model	Active or Reference Model in main window
Gingiva	Gingiva for more lifelike appearance
Smile Photo	Smile photo in main window



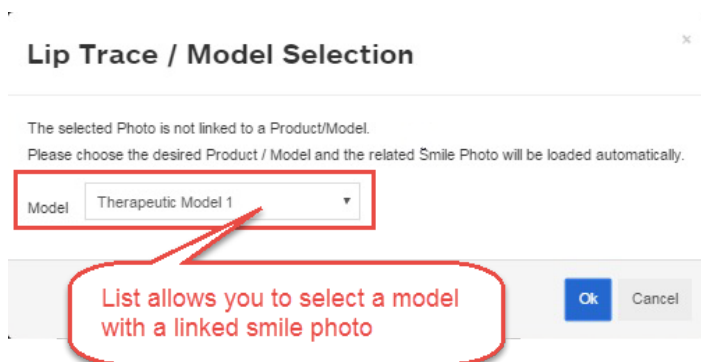
Creating a lip trace cutout on a linked facial smile photo:

1. Click the **Image** menu in the treatment planning workspace or in the menu bar on the Image Management page and then click the **Lip Trace Tools**  icon. The software checks for a linked model. If the photo shown is linked to a model, the lip trace control panel appears to the left of the photo. Note the name of the linked model is shown.



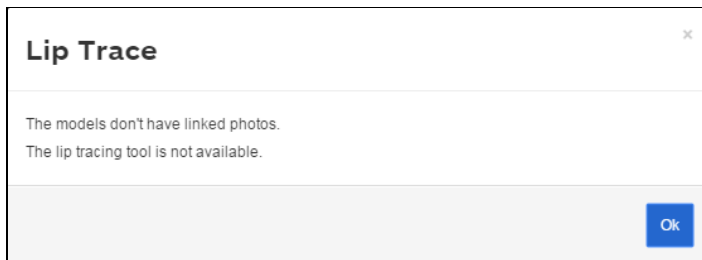
[What happens if the photo is not linked to a model?](#)

- If there is one model with a linked smile photo other than the one shown, then the smile photo linked to that model replaces the photo on the image management page and the lip tracing tools are activated.
- If there are multiple models with linked smile photos other than the smile photo shown, the software displays a message box with the option to choose one of the models with a linked smile photo. If you select one of the models in the list, the smile photo linked to that model replaces the photo shown and the lip tracing tools are activated.



- If there are no models with linked images, the software displays a message indicating this and stating that the lip tracing tool is not available. If you want to link an image with a model, do one of the following
 - If the **therapeutic or setup model is in a review status**, add a note in the **Edit Notes** text box on the **Order** tab indicating which photo should be linked to the model, and submit the model with modifications.
 - If the **therapeutic or setup model is already approved**, please contact elemetrix Customer Care. Be prepared to tell them which image set the smile photo belongs to and which model you want linked.
 - For **treatment simulations**, please contact Customer Care. Be prepared to tell them which

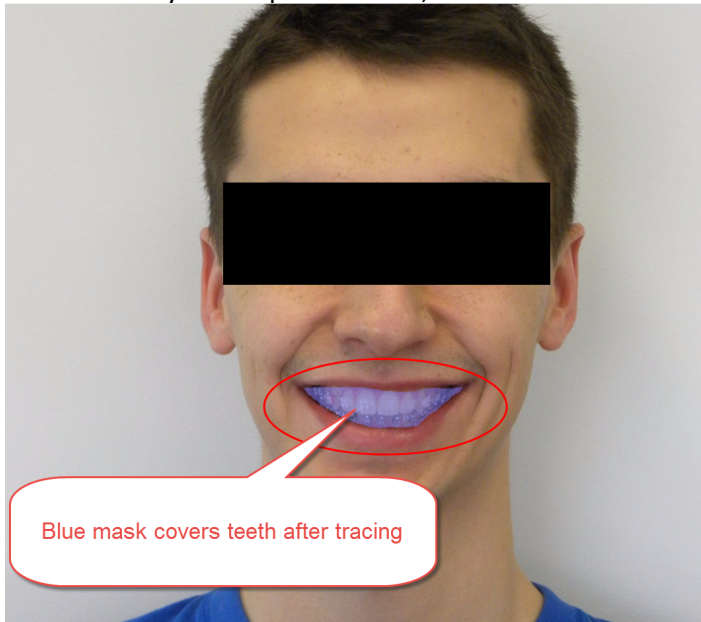
image set the smile photo belongs to and which reference model you want linked.



2. If the smile photo is linked to a model and the Lip Trace control panel is available, then you are ready to begin the lip trace. Click one of the three buttons as appropriate on the Lip Trace Control panel:

- **Add Lip Trace** - Use this tool to draw the lip trace cutout or add cutout areas to a lip trace cutout. Click and drag your mouse to trace the lip line. Your cursor turns into a cross-hair X to help your accuracy.
- **Subtract Lip Trace** - Move the mouse to erase a portion of the lip trace. Useful when you are fine-tuning a lip trace cut out.
- **Delete Lip Trace** - Completely removes the lip trace. Use when you want to remove the lip trace and start over.

Result: After you complete a trace, a blue mask covers the teeth in the photograph.



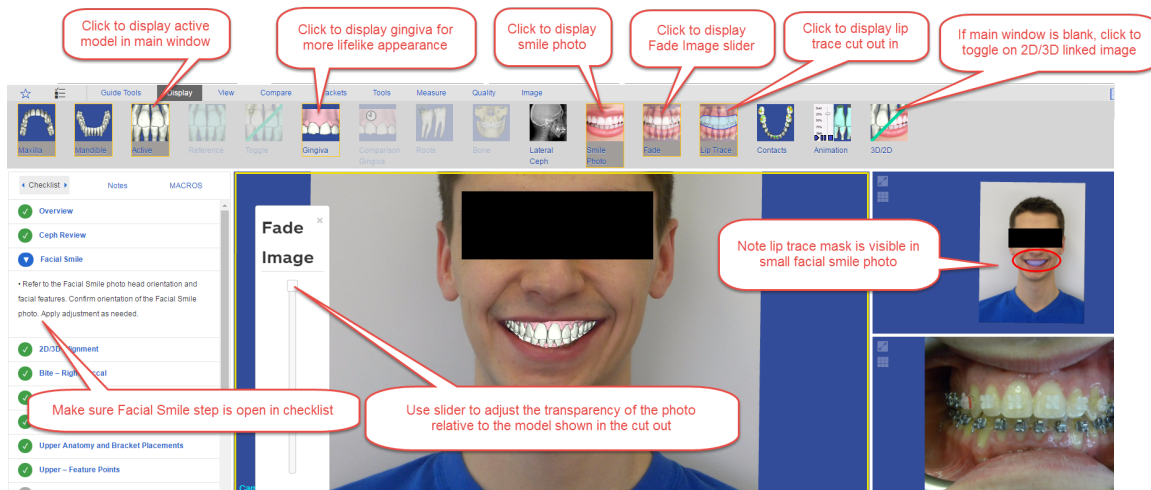
The teeth in the smile photograph in the main window are simultaneously cut out so that the model behind the photo shows through.

View the Lip Trace Cutout

Follow the steps below to overlay the facial smile photograph on top of the 3D model in the main window so that the teeth of the model appear in the cut out area of the photo.

1. Open the model you wish to view with the smile photo superimposed.
2. Click the checklist icon and select the **Facial Smile** step.
3. Make sure the facial smile photograph with the cutout is displayed in the main window or in one of the side windows.
4. In the menu bar, click **Display**. Toggle the tools as listed and shown below:

Click Display Menu tools....	...to show
Active	Active model in main window
Toggle Active /Reference Model	Active or Reference Model in main window
Gingiva	Gingiva for more lifelike appearance
Smile Photo	Smile Photo in Main window
Fade	Fade Image slider control - adjust transparency of photo
Lip Trace	Lip trace on or off
3D/2D	Linked smile photo on or off



5. When finished, click the next step in the checklist to continue your review.

Using the Setup Workflow Tool for Simulations or Setups

The Setup Workflow tool enables you to rapidly simulate treatment outcomes that approach the quality of a high-fidelity setup. The tool uses an integrated workflow with automatic tools for basic alignment for all movements except torque. It provides an intuitive and workflow guided toolset for setups and simulations. Instead of moving teeth manually, you can set several teeth in each arch as reference teeth, and then allow the software to quickly build a treatment simulation for the entire arch based on the position of these reference teeth. You still maintain complete control of the simulation or setup. The automation features allow you to save substantial time, while the integrated workflow ensures a consistent approach to simulate treatment options. Use the Setup Workflow tool to quickly:

- Develop simulations from diagnostic models for aligners.
- Develop multiple simulations to explore treatment options.
- Create an embedded simulation in your setup.

Here are step-by-step instructions for using the setup workflow tools with a simulation or a plan in a "Not Ordered" state.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/e4905fa0-6fa6-11e...>]

To use the Setup Workflow tool

Start the Setup Workflow tool from the Displacements tab for any new or unordered setup or treatment simulation. Each time you click a step in the Setup Workflow, the corresponding row in the tooth table on the Displacements tab is highlighted in blue, and the corresponding view in the 3D viewer is shown. The necessary treatment planning tools for processing that step are activated. At any time during the setup workflow, you can still make manual movements of any other teeth in the tooth table or in the 3D viewer.

Caution: If move teeth that are NOT reference teeth, moving the slider will override the position of all manually repositioned teeth, except for fixed teeth.

1. Start a new setup or simulation, or open an existing setup if it is not yet ordered.
2. Go to the **Displacements** tab and click the **Show Setup Workflow** button in the lower right of the tab.

Show Setup Workflow



The **Setup Workflow** checklist opens.

3. Start with whichever arch is your reference arch as determined by the patient's MACROS instructions.
4. Click the first setup work step, **Buccolingual**. The buccal/lingual row in the tooth table is highlighted in blue and the Occlusal view of the arch is displayed with the slideline in the 3D viewer.
 - a. **Choose the appropriate archform.** The Natural archform with the **Symm.** (Symmetrical) option is selected by default. If you keep the default Natural archform, you can choose the **Asymm.**

(Asymmetrical) option if you wish. As all other standard archforms are symmetrical, these two options are unavailable (dimmed) for any other arch choice. Click the **Arch form** list to see all available archforms.

- b. **Choose the reference teeth** for your buccolingual movements under **Archform References**. Choose any teeth you do not want to move buccolingually under **Buccolingual Fixed**. When you select a tooth as a reference tooth, it is also automatically selected as a fixed tooth. However, when you select a fixed tooth, it is *not* automatically selected as a reference tooth.
- c. **Move the reference teeth** buccally or lingually as needed to adjust the archform and then click the **Initialize Archform** button.
- d. **Go to the Amt. to Target slider** (right side of tooth table) for the highlighted buccal/lingual row and adjust the slider as appropriate. If you leave the slider in its default position at the right, this means that you do not want any additional movement besides that already shown in the tooth chart for this type of movement. Moving the slider to the left moves all of the teeth in the arch closer to the same relative position as your archform reference teeth. As you move the slider to the left, note that larger movements in the row are made first, smaller movements made later. This is in accordance with general orthodontic practice.

Note: Millimeters are used for Mesial/Distal, Buccal/Lingual, Occlusal/Gingival movements. Degrees are used for Angulation and Rotation movements. Values closer to zero indicate the amount of movement is closer to the selected reference tooth, or to the tooth feature points if no reference tooth or teeth are selected.

Caution: If you are at a specific step in the work flow, and you wish to restore the reference or fixed teeth to their defaults, **DO NOT** click the **Defaults** button. Clicking this button restores the default reference and fixed teeth for **ALL** of the steps in the Setup Workflow. Instead, to reset a fixed or reference tooth position for this step only, use the **Undo** feature in the lower right of your screen.

Key to the colors of the teeth in the small tooth crosses:

Color Meaning

Pink A reference or rotation symmetric tooth

White

- **Reference tooth cross:** Unselected teeth that are available for selection as reference teeth. When you pick another reference tooth, the previous reference tooth turns from pink to white.
- **Fixed tooth cross:** Unselected teeth that are available for selection as fixed teeth.

Dark red

A fixed tooth that is also a reference tooth

Bright red

A fixed tooth

Gray

Gray indicates:

- Teeth in the inactive arch
- Teeth in the active arch that cannot be used as reference or fixed teeth for this kind of movement
- Teeth that are missing

Green

Green indicates teeth that are not available for angulation movements. Green is only used in the Angulation I and Angulation II steps to distinguish these steps from the other steps.

Teal

- Reference teeth in the inactive arch, or



- Reference teeth in one angulation step that are consequently unavailable in the other angulation step

Purple A fixed tooth in the inactive arch

- Click the **Rotation** step. The **Rot. mesial/distal** row in the tooth table is highlighted in blue. The Occlusal view of the arch is displayed in the 3D viewer. There are no preselected reference teeth. If you do not select any reference teeth, the software will define the alignment by the tooth feature points.
 - (Optional) Choose reference teeth under **Rotation Symmetric**. Pick teeth in good rotational alignment so that when you click the **Symmetrize Rotation** button, the rotation of the respective tooth in the other quadrant rotates into the same position relative to the slideline. Click **Symmetrize Rotation** to mirror rotation.
 - Choose any teeth you do not want to rotate under **Rotation Fixed**.
 - Go to the **Amt. to Target** slider for the **Rot. mesial/distal** row and adjust as needed. Moving the slider aligns rotation along the slide line using the tooth axis (5-5), marginal ridges (lower molars) and central grooves (upper molars).
- Click the **Angulation I** step. The **Ang. mesial/distal** row in the tooth table is highlighted in blue. The Right Buccal view of the arch with marginal ridges is displayed in the 3D viewer. If the model was derived from CBCT scan data, roots are displayed.
 - (Optional) Choose your reference teeth under **Angulation references**. The 5s are the defaults. If no tooth is in proper alignment yet, angulate your favorite tooth to the desired position and select it as a reference tooth. Choose any teeth you do not want to angulate under **Angulation Fixed**. The 1s (centrals) are disabled (green) for this step as they will be adjusted in the next workflow step.
 - Go to the angulation **Amt. to Target** slider and adjust the slider as needed. Movement for angulation is indicated by degrees of mesial or distal deviation from the tooth long axis. Positive values indicate mesial angulation, negative values indicate distal angulation.
- Click the **Angulation II** step to adjust the 1s (centrals). The **Ang. mesial/distal** row in the tooth table remains highlighted in blue and the Labial view of the arch is displayed in the 3D viewer. If the model was derived from CBCT scan data, roots are displayed. Note that in the small tooth cross, only the 1s are available as indicated by their white color.
 - Choose your reference teeth under **Angulation references**. If no tooth is in proper alignment yet, angulate your favorite tooth to the desired position and select it as a reference tooth.

Note: There are no default reference teeth for this step.
 - Go to the angulation **Amt. to Target** slider and adjust the slider as needed.
- Click the **Vertical** step. The **occlusal/gingiva** row in the tooth table is highlighted in blue. The Right Buccal view of the arch with the occlusal plane is displayed in the 3D viewer.
 - Choose your reference teeth under **Occlusal Plane References**. The reference tooth cross allows three reference teeth per arch. The default reference teeth are the R1 and the 6s. Check the labial view to make sure the Occlusal Plane is horizontally level before and after making changes to the reference teeth.

- b. (Optional) If you choose another reference tooth and reset the occlusal plane, click the new reference tooth in the tooth cross, click the cell for the reference tooth in the occlusal/gingival row of the tooth table and then intrude or extrude the tooth as needed. Click the **Initialize Occlusal Plane** button to reset the occlusal plane to the tooth you just moved.
- c. Go to the occlusal/gingival **Amt. to Target** slider and adjust the slider as needed. Dragging the slider to the left moves the teeth toward the occlusal plane.

Note: Occlusal offsets (overbite) are considered by the software when the Occlusal Plane is recalculated. The Curve of Spee can be levelled by selecting two molar teeth. The software immediately calculates a balanced position for the Occlusal Plane, maintaining the reference teeth and levels the Curve of Spee by a combination of intrusion and extrusion.

9. To clear any spaces in the **Gap/Intersection** row, click the **None** workflow step, then:

- Click the **Clear Spaces** button,
or
- Go to the Gap/Intersection **Amt. to Target** slider and move the slider completely to the left.

Either method functions correctly.

10. Go to the opposite arch and repeat the **Setup Workflow** steps for that arch.

Copying a Treatment Simulation

This feature allows you to keep the current simulation and use a copy as a basis for a new simulation.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/471b8280-492d-11...>]

Exporting Staged Models

Here is an overview of how to export the 3D data for staged model and printing the staged models in house or at a 3rd party lab of your choice.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/debae990-4933-11...>]

Best practices when exporting models

To help better manage the load on the OraMetrix servers when exporting staged models, a message appears on the Export Staged Models dialog box reminding you not to select more than 20 staged models at once. Also, as a safeguard, if you select more than 20 models the OK button becomes unavailable to prevent you from submitting the job. To double-check your exported files before sending them to your lab, check the folder properties or file details—all of your exported models should have a similar file size. You can also use a free 3D viewer utility, such as MeshLab, to view the contents of each file. MeshLab is available as a free download from: www.meshlab.sourceforge.net. If you want to rename files that are already zipped, use a free tool such as WinZip. Finally, do not delete your exported files while the patient is active. You might need them again in case appliances are lost or broken.

Ordering Aligners or Printed Models from OraMetrix

Here is an overview of how to order aligners or printed models from OraMetrix .

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/f6a83a30-6f6c-11e...>]

Treatment Planning for Restorations

Although not required for every case, it can be helpful to add restorations to the 3D model to:

- Provide you with a rough idea of what restored or reshaped teeth will look like so you can more easily plan care that includes restorations
- Provide the consulting/referring doctor or patient with a visual image of the final result of his/her orthodontic treatment combined with a dentist's restorative work.

In this Topic

- [Heading 2](#)

How do the restorative features work?

When you open a setup or simulation, the **Buildup / IPR** tab contains the restoration and IPR features. These features are available regardless of the state of the product.

Use the Buildup / IPR tab tooth chart to adjust tooth shape by manually entering values, or use the tab's automatic features to calculate several types of changes.

Change tooth shapes to simulate:


- Restorations such as implants, crowns, and buildups.
- Orthodontic procedures such as polish, equilibration, and IPR.

A tooth chart on the Buildup / IPR tab has rows for each of the restorative functions as described in the help topic *Restorative Functions on the Buildup / IPR Tab*. These rows represent the amount of buildup or reduction applied to a tooth.

- Positive numbers indicate buildup.
- Negative numbers indicate reduction.

Buildup can be used to represent planned composite enhancements or other restorations adding material to a tooth. Reductions can be used to represent planned removal of tooth structure (IPR), polishing or equilibration, and other similar techniques. Changes to each tooth model are made in increments of 0.1. mm.

- A positive number indicates mesial, distal, buccal, lingual, or vertical buildup of the tooth model.
- A negative number indicates mesial or distal IPR, lingual or buccal polishing (usually prior to receiving veneers), or vertical polishing.

To depict buildups in blue and IPR and other reductions in red, click the **Colorize Buildups/Cuts** icon  on the **View** menu palette..

When should I use the restorative features?

You can use the restorative features in a simulation submitted with the setup prescription to help with the visualization of space requirements. By using the features at this time, the Digital Lab can deliver a complete setup that is ready for approval.

Important: Remember to toggle on the colorization of buildups and cuts during the setup review to remind you which tooth shapes are simulated.

You can also use these features to improve communication with the dentist and patient. You can order the setup and then add the restorations during the setup review/modification cycle.

Notes:

- The restoration values are not editable in finished models.
- The Digital Lab will not simulate changes in tooth anatomy based on planned restorations.
- These restorative modeling enhancements are intended for orthodontic treatment planning only, and should not be used for the actual modeling of restorations. It is better to think of elemetrix's restorative models as space holders than as precise renderings of restorations. Confine your use of these elemetrix restorative modeling enhancements to space planning only.

◆ [top of page](#)

Overview of the Buildup/IPR Tab

When you open a setup or simulation, the **Buildup / IPR** tab contains the restoration and IPR features. these features are available regardless of the state of the product.

Use the Buildup / IPR tab tooth chart to adjust tooth shape by manually entering values, or use the tab's automatic features to calculate several types of changes.

Here is a step-by-step overview of this tab:.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/fb731690-494a-11e...>]

Restorative Functions on Buildup / IPR Tab

The following table describes the restorative functions in the tooth charts on the Buildup / IPR tab.

Function	Description
IPR (-) /Buildup (+)	Scales a tooth model mesially or distally according to the value you enter. The minimum increment allowed is 0.1. mm. A negative number denotes IPR and is depicted in red on the tooth model. A positive number denotes buildup and is depicted in blue on the model.
Auto m/d Size	<p>When you select the mesial/distal check box for a tooth, this feature automatically fills spaces or removes intersections as needed to close gaps with adjacent teeth.</p> <p>Keep in mind, however, that by enabling this function subsequent changes in the interproximal gaps will cause the software to recalculate the buildup or IPR for all teeth selected for automatic mesial/distal sizing.</p> <p>You can prevent recalculation by entering a fixed, defined IPR or buildup value for a tooth or set of teeth in the IPR (-)/Buildup (+) row. This value will not change, even if the automatic IPR or build up is applied to the rest of the arch.</p>
Intersection (-) / Gap(+)	This read-only row shows the mesial/distal overlap or gap between teeth. The amount of overlap is indicated by a negative number. The amount of gap is indicated by a positive number.
Vertical Offset	Use this feature to add or remove crown length to a single tooth. The amount of reduction or buildup in millimeters for each tooth is measured from the occlusal plane. Except for the incisors (2-2), which can be reduced/built-up distally or mesially, the vertical reduction/buildup is applied to the entire tooth. The minimum increment allowed is 0.1 mm. A negative number denotes polishing/reduction and is depicted in red on the tooth model. A positive number denotes buildup and is depicted in blue on the model.
Auto Vertical Buildup	<p>Use this feature to automatically add length to multiple teeth, using the occlusal plane as the boundary condition.</p> <p>When you select a check box in this row, this feature automatically levels the tooth to the occlusal plane, building up or reducing the tooth as necessary.</p> <p>Keep in mind however, that by enabling this function, subsequent changes in the occlusal plane will cause the auto-vertical buildup/reduction function to recalculate the height of all teeth selected for automatic vertical buildup/reduction.</p> <p>You can prevent this recalculation by entering a fixed, defined offset or buildup value for a tooth or set of teeth in the Vertical Offset row. This value will not change even if the automatic vertical buildup/reduction function is applied to the rest of the arch.</p>
Labial Offset/Lingual Offset (two rows)	<p>The amount of labial or lingual reduction anticipated by polishing is denoted by a negative number. The amount of buildup anticipated by veneers is denoted by a positive number.</p> <p>Although lingual and labial reductions or buildups can help to improve the aesthetic alignment, keep in mind that the position of the brackets does not move with the built-up or reduced surfaces.</p> <p>The buildup or reduction is calculated from the point of maximum buccolingual convexity of the tooth, and then tapers gradually to the gingival and incisor edges. The gingival edge is estimated for each tooth even if the gingival tissue is modeled. In cases where the gingival tissue is modeled, the buildup will at times butt into the gingival edge if the actual gingival edge is more occlusal than the computer estimate of the gingival edge.</p> <p>An extra buildup or reduction of 0.1 mm is added to any value entered to provide a visual "buffer zone" and soften any sharp angles.</p>

	When setting labial or lingual reduction values, keep in mind that any model reduction cannot go beyond the central axis of the tooth.
Change Model	Allows you to replace a modeled tooth with a template, or repair an asymmetric tooth by mirroring it with the mesial or distal side tooth. See Changing Models below for more information.
Reset / Set All buttons	The Reset button removes all the values in a row and resets the model accordingly. The Set All button selects all of the check boxes in a row.

Enter Restorative Values

Perform the following steps to enter a restorative value:

1. Open or start a setup plan or a Treatment Simulation.
Result: The Treatment Planning page opens with the 3D model displayed in the main window.
2. Select the **Buildup / IPR** tab.
3. Locate the cell for the tooth number in the row for the type of restoration you want to apply. The following restoration features are provided:
 - IPR (-)/Buildup (+)
 - Auto m/d Size
 - Intersection (-) / Gap(+)
 - Vertical Offset
 - Auto Vertical Buildup
 - Labial Offset
 - Lingual Offset
 - Change Model

A detailed explanation of each of these features is provided in the *Restorative Functions on Buildup / IPR Tab* help topic.

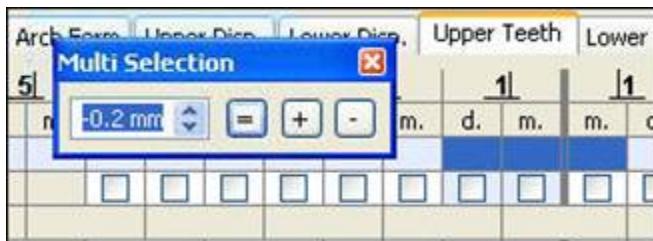
4. Click in the cell. The current value becomes highlighted.
Note: Cell highlighting helps you see where you are in the chart.
5. Type a new value in an increment of 0.1 mm. Enter a negative sign in front of the number as appropriate. Values are saved as soon as you enter them.
6. Use following options to modify your changes.

Option	Result
Click the Undo button.	Returns a cell to its previous value.
Check boxes in Auto m/d Size row for each tooth as appropriate	Automatically calculates the mesial/distal gap or the vertical buildup in the appropriate rows
Click the Set all button	Selects all check boxes for the Auto m/d Size or Auto Vertical Buildup rows.
Click the Reset button	Clears all values in a row.

Apply Restorative Values to Multiple Cells

Perform the following steps to apply a restorative value to multiple cells:

1. Open or start a setup plan or a treatment simulation.
Result: The **Treatment Planning** page opens with the 3D model displayed in the main window.
2. Select the **Buildup / IPR** tab.
3. Locate the cell for the tooth number in the row for the type of restoration you want to apply.
4. Click in the cell to highlight it.
5. Press and hold the **Shift** key, and click in another cell. For example, select another cell on the same row to achieve the same movement for multiple teeth.
The **Multi Selection** window opens.



6. Enter the value you want for all of the highlighted cells by typing the new value or clicking the up or down arrows.
7. Click the equal button to apply the typed value to the highlighted cells
OR
Click the plus button to add the typed value to the current value in each cell
OR
Click the minus button to subtract the typed value from each current value in the highlighted cells

Simulate an Extraction

Video: Extracting a Tooth

ActiveX Contro...

More video tips

You can remove a tooth from the model to simulate an extraction.

Note: You can also simulate extractions from the **Archform** tab when you have control over planned space closure.

Perform the following steps to remove a tooth from the model.

1. Open or start a setup plan or a Treatment Simulation.
Result: The Treatment Planning workspace opens with the 3D model displayed in the main window.
2. Select the **Buildup / IPR** tab.
3. Locate the cell for the tooth you want to remove in the **Change Model** row.
4. Click on the model icon and select **Remove Model**.
Result: The tooth is removed from the model.

Simulate a Missing Tooth

Use this feature to simulate a new tooth for space planning purposes if a patient is missing a tooth and will receive a replacement tooth such as an implant.

You can simulate a model tooth that matches the opposite side, or you can choose from elemetrix's tooth templates.

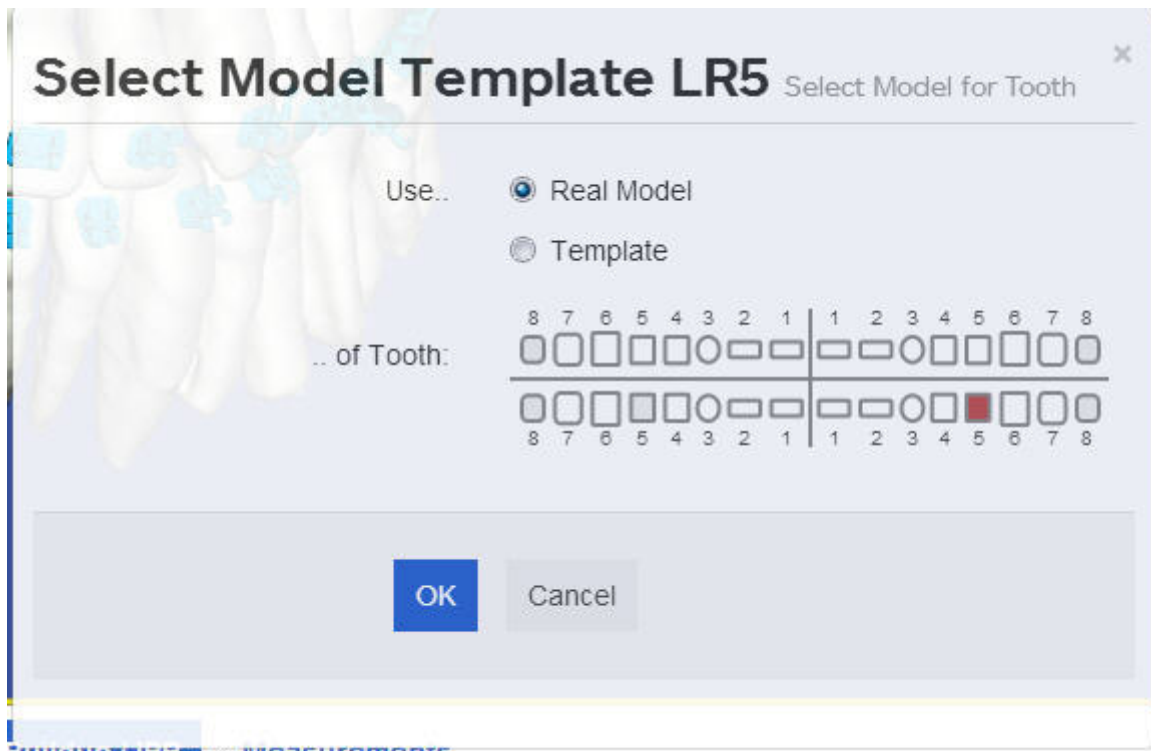
Perform the following steps to replace the model for a specific tooth.

1. Open or start a setup plan or a Treatment Simulation.

Result: The Treatment Planning workspace opens with the 3D model displayed in the main window.

2. Select the **Buildup / IPR** tab.
3. In the **Change Model** row, locate the cell for the missing tooth.
4. Click the blank cell and choose the **Select Template Tooth...** option.

Result: The **Select Model Template** window opens.



5. Select the **Real Model** option to create a tooth template from one of the modeled teeth.
OR

Select the **Template** option to create a tooth template from one of the standard templates displayed in the **Change Model** row.

6. Choose the tooth you want to use as a model from the **Use Tooth** drop-down list, and click **OK**.

Replace removed tooth

You can replace a tooth you previously removed from a model.

1. Open or start a setup plan or a Treatment Simulation.
Result: The Treatment Planning workspace opens with the 3D model displayed in the main window.
2. Select the **Buildup / IPR** tab.
3. Locate the cell for the tooth you want to remove in the **Change Model** row.
4. Click on the model icon and select **Regular Model**.
Result: The previously removed tooth is returned to the model.

Use Buildup to Restore a Worn or Damaged Tooth

If a tooth is very worn or damaged and the basic buildup reduction tools are not able to simulate the fully restored tooth, you can use the **Make Symmetric** or **Restore Crown** tools to simulate the restorations. Use the Change Model menu option that provides the best fit for your plan.

Perform the following steps to change the model for a specific tooth.

1. Open or start a setup or a treatment simulation.

Result: The treatment planning workspace opens with the 3D model displayed in the main window.

2. Select the **Buildup / IPR** tab.
3. Locate the cell for the tooth number in the **Change Model** row.
4. Click on the model icon to view several menu options:
 - **Make Symmetric, Use Mesial Side** - Makes the distal side of the tooth symmetrical to its mesial side.
 - **Make Symmetric, Use Distal Side** - Makes the mesial side of the tooth symmetrical to its distal side.
 - **Restore Crown** - (Only available for the anterior (2-2) teeth.) This function should be your first choice when the incisal area of a crown is damaged, uneven or asymmetric, and just mirroring or replacing a tooth with a model from its opposing quadrant is unsatisfactory.

Calculate IPR

Use the table on the Buildup /IPR tab to automatically or manually calculate IPR. Keep in mind that there is only one value per pair of teeth. This value represents the combined IPR on the mesial side of the tooth and the distal side of its mesial neighbor. The only exception to this are the centrals, for which the value represents the IPR of the mesial side of each tooth.

Note: As you plan for IPR, keep in mind that since this is a simulation only, the system does not limit the amount of IPR you can apply.

Automatically Calculate IPR for a Tooth

Use the Auto m/d Size row on the Buildup / IPR tab to automatically calculate needed IPR. Clicking a distal (d.) or mesial (m.) check box for the intersection of two teeth on the Auto m/d Size row equally divides any IPR or buildup needed between the teeth and enters the resultant values in the distal (d.) and/or Mesial (m.) cells of the **IPR (-) / Buildup(+)** row for each tooth.

1. From the Treatment Planning workspace, select the **Buildup / IPR** tab.
2. In the **Auto m/d Size** row, select adjacent mesial (m.) and distal (d.) check boxes to automatically determine the amount of IPR needed between the two teeth.

Manually Calculate IPR for a Tooth

Use the IPR (-)/Buildup(+) row to manually enter needed IPR.


1. From the Treatment Planning workspace, select the **Buildup / IPR** tab.
2. In the **IPR (-)/Buildup(+)** row of the table:

- Enter a value for the mesial or distal side of a tooth.

OR

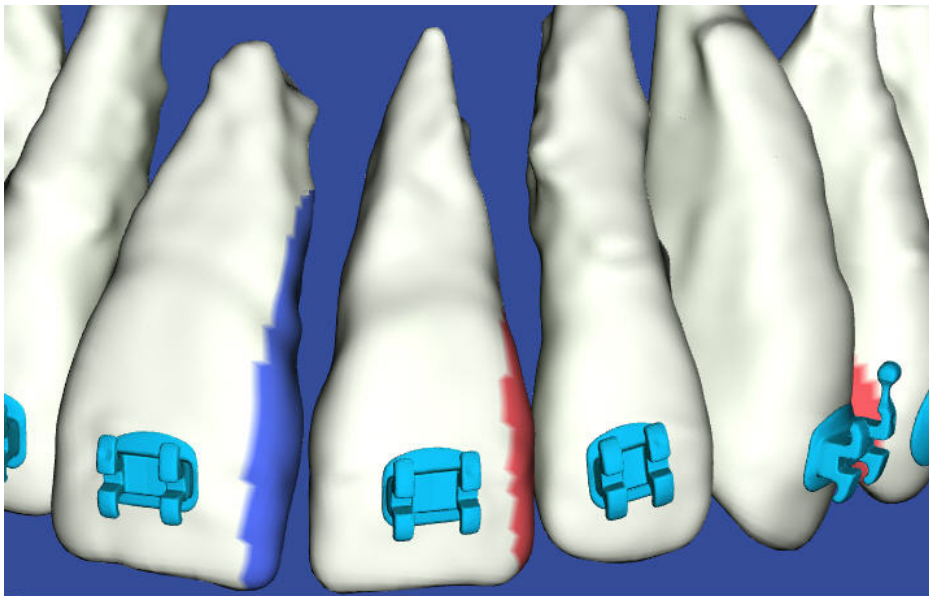
- Shift + click and drag to highlight a series of cells in the tooth chart. Use the **Edit Selection** box to enter the values.

Colorize Buildups / Cuts

Use the **Colorize Buildups / Cuts** icon  on the View menu palette to turn on color shading for changed teeth. Blue shading indicates added tooth surface. Red indicates anatomy removed.

To turn on colorization to indicate restorative changes:

1. Open or start a setup plan or a Treatment Simulation.
Result: The Treatment Planning workspace opens with the 3D model displayed in the main window.
2. Select the **Buildup/IPR** tab.
Note: The Colorize Buildups/Cuts icon is inactive until you select the **Buildup / IPR** or **IPR Tracking** tab.
3. Show one or both arches, and make your restorative changes or plans as needed.
4. As you work, click the **Buildup / Cuts** icon to show or hide shading on the areas you change.
5. After you finish your restorative work and before you save the case, make sure you click the **Colorize Buildups/Cuts** icon so that the restorations are colorized. The color shading serves as an important visual reminder to your practice and to the Digital Lab technicians that the restoration features are for visualization purposes only. Restorative modeling in elemetrix is primarily for space management purposes. It may not reflect the final tooth shape as determined by the restorative dentist.



Remove Lingual or Labial Surfaces

If you need to simulate the polishing of a tooth's surface or the use of laminates to build up a tooth's surface, use the **Labial Offset** or **Lingual Offset** rows on the **Buildup / IPR** tab. A negative number removes tooth surface from the 3D model. A positive number builds up tooth surface on the 3D model.

1. Open or start a setup plan or a Treatment Simulation.

Result: The treatment planning workspace opens with the 3D model displayed in the main window.

2. Select the **Buildup / IPR** tab.

3. Click the View menu in the treatment workspace menu bar to display the View menu palette. Click the



Upper Occlusal or **Lower Occlusal** icon as appropriate to display the model in an occlusal view.



4. Click the View menu and click the **Buildups / Cuts** icon so you can see your tooth buildups/reductions on the model.

5. In the **Lingual** or **Labial Offset** row:

- To **remove surface** enter a negative number preceded by a minus sign (i.e., -0.3. mm)
- To **build up surface**, enter a positive number (i.e., .03.) and press the <Enter> key.

6. Press the <Enter> key.

Result: the surface is built up (shaded in blue) or reduced (shaded in red).

Treatment Planning for Surgical Cases

elemetrix is an orthodontic treatment planning system and is not intended to be used to plan surgery. The surgical case planning features described in this section allow you to capture planned surgical movements and use them in conjunction with orthodontic treatment planning. A best practice is to consult with the patient's oral surgeon throughout this process.

Typically you use the elemetrix surgical case planning features to create two simulations--a post-surgical simulation and a pre-surgical simulation.

- First, you create a **post-surgical** simulation to plan the patient's results, including both dental and skeletal movements. elemetrix gives you the ability to indicate the number and placement of cuts and to indicate the skeletal corrections interactively in 3D or by entering "global" displacement values for each bone segment independently. elemetrix automatically constructs a new archform based on the planned bone position, from which you can plan the post-surgical dental simulation. After you approve the post-surgical simulation, elemetrix automatically calculates the starting point for a pre-surgical simulation by removing all bone segment movements while retaining all dental corrections from the post-surgical simulation.
- Next, you create a **pre-surgical** simulation, at which time you can then adjust the tooth positions to allow room for the osteotomy cuts or to accommodate other considerations. Since the pre-surgical simulation automatically incorporates all dental movement from the post-surgical simulation minus the skeletal movement of the surgical segments, you do not have to manually deduct movement. You can model all of the movements planned for a multi-piece surgery.

The suggested workflow in the table below is described in detail in the topics in this section.

Step	Procedure
1	Open the approved therapeutic model
2	Create post-surgery simulation(s) <ol style="list-style-type: none">1. Select Surgery On / Off check box on the Global Registration tab.2. Use the Surgery tab for skeletal movements.3. Use the simulation to specify the planned dental movements.
3	Review/approve the Post-Surgery simulation with oral surgeon if possible.
4	Create pre-surgical simulation(s) and adjust as needed for osteotomy cuts or interferences.

Create Post-Surgery Treatment Simulation(s)

Create one or more treatment simulations in elemetrix that represent different treatment scenarios. This simulation should include the number of surgical segments for each arch, placement of the surgical cuts, and the amount of movement agreed upon with the oral surgeon. Review these on your own or with the oral surgeon associated with the case.

To create one or more post-surgical simulations to display and compare surgical scenarios:

1. Start a treatment simulation based on your approved therapeutic model.
Result: The simulation opens.
2. Open the Global Registration tab and check the **Surgery On / Off** check box. The **Surgery** tab is now activated and is displayed to the right of the Global Registration tab.
3. Open the Surgery tab. The upper and lower surgical segments default to 1 segment. Use the drop-down arrow to change the number of segments.
4. A tab is shown for each new segment you create
5. Click and drag the surgical cut indicators on the tooth diagram to mark the cuts.
6. Use the controls at the left to adjust translation and rotation for each segment.
7. Uncheck the **Malocclusion includes surgical adjustments** check box to compare the planned surgical movements to the initial therapeutic model position.
8. (Optional) If you want to create an additional post-surgical treatment simulation to compare different treatment scenarios, open the Order tab and click **Copy Treatment Simulation**.

Create Pre-Surgery Simulation(s)

The main purpose of pre-surgical simulations is to plan any changes you need to occur before surgery, such as creating space for osteotomy cuts or interferences.

Create a pre-surgical simulation

To create a pre-surgical simulation, follow these steps:

1. Open the patient's post surgery treatment simulation.
2. Open the Order tab. Click the **Copy Treatment Simulation** button
3. Once the new copied treatment simulation opens, open the Global Registration tab and uncheck the **Surgery On / Off** check box.

Result: elementrix removes the surgical movements so that the bone segments are in their pre-surgical position, but retains the teeth in their final position.

Using the IPR Tracking Tab with Aligner Therapy

The IPR Tracking tab on the treatment planning workspace allows doctors and staff to see the amount of planned and completed IPR. These IPR values can be viewed throughout treatment planning, staged model design and modification, and during aligner therapy.

To help you quickly find patients with incomplete IPR, a task reminder "Complete IPR" is shown on a patient card on the **Tasks** tab in the Patient Overview page. You can control who sees this reminder in the **Preferences** window under the **Task Owner** tab. The reminder appears after you order your staged models if all planned IPR is not marked completed.

When should I use the IPR Tracking tab?

This tab will be most useful after you have received your elemetrix staged models and you want to check how much IPR has been completed compared to the amount of IPR originally planned for the patient in the elemetrix setup. This tab allows you to enter newly performed IPR at each patient visits so that you can track completed IPR as therapy progresses.

How Does the IPR Tracking Tab Work with Aligners?

A tooth chart on the **IPR Tracking** tab allows you to track and update a patient's IPR. The tooth chart has three rows each for the upper and lower arches. The rows are Planned, Applied, and Completed. Here is a brief description each row.

- **Planned** – The cells in this row contain read-only values in millimeters. These values represent the amount of planned IPR based on the setup plan and starting from the reference model (usually the diagnostic or therapeutic model) of the staged model. The cells in this row are read-only. These planned values are entered on the Displacements tab in the Mesial Gap(+) IPR (-) [mm] row on the tooth chart, or from the IPR (-)/Buildup (+) row on the Buildup/IPR tab. If a staged model is displayed, the value comes from the setup associated with the staged model.
- **Applied** – Use the cells in this row to indicate how much IPR has actually been applied. A set of controls at the bottom right of the tooth chart allows you to quickly increment the value of a cell in the Applied row higher or lower by .1 mm, up to the amount of planned IPR. If the amount of completed IPR is equal to or higher than the planned amount, you can also manually type a value in a cell.
- **Completed** – You cannot directly enter values into cells in the Completed row. An empty check box is displayed for a tooth in the Completed row if you enter values into the Planned cell for the tooth. Check the **Completed** check box to indicate all IPR has been completed. If no value has been entered in the **Applied** row for the tooth when you check the check box, the value in the **Planned** row is copied into the **Applied** row.

Note:

If you:

1. perform IPR on a patient based on a setup and track it using the IPR Tracking tab;
 2. indicate that all planned IPR has been completed by checking one or more of the Completed check boxes;
 3. subsequently create another setup (or a treatment simulation) that has a greater amount of Planned IPR than you have already Applied; then
 4. SureSmile will clear the Completed check boxes where additional IPR is required (but does not change the amount of Applied IPR).
- In this example, the **IPR Tracking** tab of a setup shows the planned IPR:

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7
Planned															
Applied															
Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applied															
Planned				0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2		
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7

Edit Selection: =

Order Displacements Global Registration Wire **IPR Tracking**

Below, the user has checked the Completed check box for all teeth with planned IPR. If less or more IPR was applied than originally planned, enter the values in the Applied row. For example in the UL3 shown below, 0.2 mm IPR was planned, but 0.3 was actually applied.

	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1	UL1	UL2	UL3	UL4	UL5	UL6	UL7
Planned															
Applied															
Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applied															
Planned				0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	LL1	LL2	LL3	LL4	LL5	LL6	LL7

Check the Completed check boxes to apply the planned value. (Applied cell stays blank.)

Manually enter applied value if greater than planned.

Important: If you leave a tooth in the Applied row blank, when you check the Completed check box for this tooth, SureSmile will automatically transfer the planned value into the applied value.

Check IPR for Aligner Therapy

Follow the steps below to determine how much IPR has been done on a patient:

- Open the patient's finished staged model
- Select the **IPR Tracking** tab
- Review the tooth chart
- Choose one of the options below:

If ...	Then ...
You want to enter additional completed IPR (can be equal to, less than, or more than planned)	Manually enter the values for each tooth in the Applied row. OR Use the Edit Selection controls at the bottom tooth chart to enter the values.
Mark IPR as done for a tooth Select the check box for the tooth in the Done row.	Mark IPR as done for a tooth Select the check box for the tooth in the Done row.

Find Aligner Therapy Orders with Incomplete IPR

Follow the steps below to find order with IPR not completed:

1. From the clinic overview page, select the **Tasks** tab.
2. From the **Show All Types Tasks** menu, select **Reminder**.
3. Patient cards are sorted by the reminder type, so all that all cards with a *Complete IPR* reminder will be sorted together.
4. Open each case as needed and complete IPR.

Entering IPR Values for Aligner Therapy

Follow the steps below to use the controls at the bottom of the tooth chart to enter IPR.

- Select the **IPR Tracking** tab and locate the cell of the tooth chart for which you want to enter a value.
- Click in the cell.
Result: The cell is framed by a dotted line.
- Press and hold the **Shift** key, and click in another cell. For example, select another cell on the same row to add the same IPR value for multiple teeth.
Result: All selected cells are highlighted.
- Enter the value you want for all of the highlighted cells by typing the new value or using the Edit Selection controls at the bottom of the tooth chart.

Order	Displacements		Global Registration			Occlusal Plane			Archform	Wire	Buildup / IPR				IPR Tracking				Measurements								
	UR8	UR7	UR6	UR5	UR4	UR3	UR2	UR1		UL1	UL2	UL3	UL4	UL5	UL6	UL7	UL8		LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8	
Planned						0.2	0.2	0.2		0.2	0.2	0.2															
Applied						0.1	0.1	1.0				0.3															
Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Applied																											
Planned																											
	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1		LL1	LL2	LL3	LL4	LL5	LL6	LL7	LL8										

Edit Selection: 0.0 =


Use the Edit Selection controls to enter values

- Highlight a cell or range of cells in the tooth chart.
- Click in the Edit Selection box and type a value or use the up down arrows to change a value already in the box to a greater or lesser value.
- Choose one of the options below:

If you want to ...	Then ...
Apply the typed value to one or more highlighted cells.	<div style="text-align: center;"><input type="button" value="="/></div> Click the equal button.
Increment or reduce a cell value by 0.1 mm	<div style="text-align: center;"><input type="button" value="▲"/> <input type="button" value="▼"/></div> Click the up/down arrows.

Set Complete IPR Reminder

Follow the steps below to set preferences for who is shown the *Complete IPR* reminder:

1. Click  and select **Preferences**.
 2. Select the **Task Owner** tab.
 3. Find the **Complete IPR Reminder** settings towards the bottom of the page..
 4. Select one of the options:
 - Doctor
 - Staff
 - Both
 - None
 5. Click **Save Changes**.
- Result:** When a patient record has wires marked as inserted, but IPR is not yet complete, a reminder, *Complete IPR appears* on the Patient card under the Tasks tab.

Tip: From the **Show All Types Tasks** menu, select **Reminder** to display all patients with task reminders.

Troubleshooting Orders

In some cases, you may need to return to orders that have issues with missing, incomplete, or incorrect information.

Every product order has requirements that must be met in order to process it. If the Digital Lab does not receive all of the required information, they stop working on the order and put it on hold. The system creates a task to remind you to provide the required information. Respond to holds as quickly as possible to get the patient's care back on track.

Types of Holds

The most common hold types are problems with records or brackets.

- Standard hold messages for photos:

- Provide recent photos
- Provide missing photos
- Bite shift photos
- Bite scan
- Wrong patient's photos/models

Tip: If you cannot take records at the scan appointment as recommended, make sure you take them no more than 4 weeks before the scan or no longer than 2 weeks after the scan. Any delay beyond 2 weeks after the scan will extend overall treatment time.

- Standard hold messages for brackets:

- Complete DE and mark all missing teeth
- Apply brackets for all bonded teeth
- Verify and correct brackets: the selected brackets appear to be included
- Verify and correct brackets II

- Standard hold messages for x-rays:

- Provide recent x-rays
- Provide missing x-rays

Reviewing Product Notes

Review the product notes for a patient to find out detailed information about an order. Product notes are color coded and can be sorted by type:

- Practice-side notes are purple.
- OraMetrix-side notes (including messages from Digital Lab technicians) are green.

To review product notes for a patient

1. From the patient overview page under Product Notes, select **Product Notes**.
2. Filter the notes to view:
 - **Standard Notes** - Shows only Notes automatically generated by the elemetrix software and messages from the Digital Lab technicians.
 - **User Notes Only** - Manually typed notes between the practice and the Digital Lab
 - **All Notes** - shows a chronological list of all notes

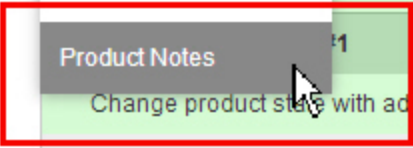
○ Paul Kelley

May 6, 1994 (20), KP000001, Active
4 years, 11 months, 9 days

 Edit  Reports ▾  Exports ▾  Demo Copy ▾

Product Notes **Therapeutic Model 2 ▾**

Customer Holds	2010-04-09
Missing Records	
Patient Notes	with admin tools.
Product Notes	1
Change product state with admin tools.	
	2010-01-29
16:55:04 Changes in DL	




Provide Information or Resolve Hold

When you select the Tasks tab on the Clinical Overview page, and you apply the *Show Provide Information Tasks* filter, all patients with a *Provide information* or *Resolve hold* task are shown. A patient's order cannot be processed until you resolve these issues.

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Resolve a Customer Hold

1. **Open the clinic overview, and select the Tasks tab.**
2. To show tasks for patients with orders that are on hold, rejected, or that require additional information, apply the **Show...Tasks** filter. Select **Provide Information**.
3. To view information about the customer hold:
 - click the **Notes** icon  in the Notes column to display the product notes.
 - or
 - go directly to the page that needs resolution and click the product.
4. To go to the appropriate page to resolve the hold, click the blue name on the link for the customer hold in the list.
For example, if the hold is **LR3: Verify and correct brackets**, you will be taken to the Brackets/Attachments tab on the Dental Examination page.

Note: If your rejected scan is a rejected CBCT scan, you can cancel the order without having to go to surescan.

5. Enter the missing information and return to the Patient Overview page.
Result: The Done box is checked automatically after you supply the missing information. If you need to redisplay the customer hold task, uncheck the Done box.
6. (Optional) Click **Respond** to type a note to the Digital Lab technician.
7. When finished resolving all issues, click the **Release Hold** button at the top of the customer hold list on the patient overview.

Note: The **Release Hold** button is disabled (dimmed) until all issues are resolved.

Result: The *Provide Information* task no longer appears under the Tasks tab on the Clinic Overview page.

Tip: You can also resolve a customer hold starting from the Patients tab on the Clinic Overview page. Just click the name on the patient card with a **Provide information** message in red. When the patient overview opens, continue with step 4 above.

Canceling a Rejected Scan

There are multiple scenarios when a scan can get rejected by the Digital Lab. The most common reasons are:

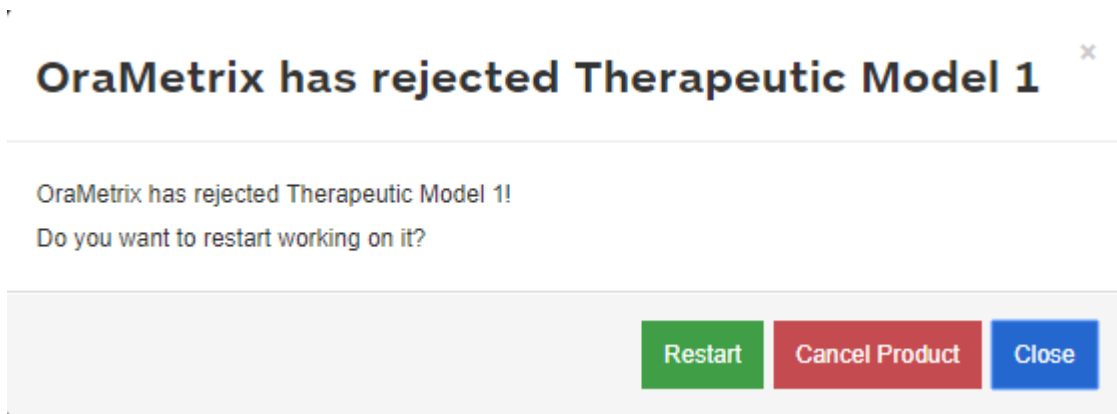
- Incorrect patient scan submitted
- Bad scan data received
- Same arch in both segments
- Wires present in the scan
- Practice requests that a scan be canceled

Depending on circumstances, you may need to:

- Fix the issue and resubmit the scan product order back to the Digital Lab
- Cancel the product/case completely
- Allow the product to be placed in a rejected state until the practice can determine the right course of action.


To cancel a rejected scan

Click the link for a scan that has been rejected. A dialog box opens as shown.



Click...	To...
Restart	moves the product back to a “not yet ordered” state that allows the practice to make the necessary changes to the product to resubmit it to the Digital Lab.
Cancel Product	cancel the scan. The system reverses the charges to your credit card, and generates a receipt for your reference. See View Receipts .
Close	keep the scan in a “rejected” state and close this dialog box.

Setting your Personal and Practice Preferences

To define preferences for the practice and for your tasks, click  in the elemetrix title bar, and select **Preferences** from the menu.

Tip: After setting a preference, if you want to return to the last page you were working on in elemetrix, click the [Return to previous page](#) link in the elemetrix bar. The preferences you just set or changed are immediately applied.


Links to the appropriate Preferences tab are placed throughout the software. For example, when selecting a wire sequence for a wire order, you can click a link to go directly to the Wires tab on the Preferences page to modify or create a wire sequence template.

The preferences page has the following tabs for setting preferences:

Tab	Which roles can access these tabs	Applies to ..
Appearance	Doctors Staff Administrators	Each user's profile (login) only
Prescription	Doctors Staff Administrators	Entire Practice
Bracket Sets		
Bracket Height Sets		
Aligner Constraints		
Task Owner	Administrators	Entire Practice
Treatment		
Flag Labels		
Search		

Editing Your Checklists

Here's how to customize your checklists to you own individual preferences.

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/1e6e6840-6f14-11e...>]

Setting Practice and Individual Preferences

Here is an overview of Practice and Individual Preference Settings


Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/ad28f730-6f87-11e...>]

Appearance Preferences

The options on the Appearances tab allow you to select your personal preferences for the appearance of elemetrix pages in your browser.

To set these preferences:

1. Click  and select **Preferences**.
2. Click the **Appearance** tab at the top of the page.
3. Make changes to the defaults, which are listed in the table below.

Appearance setting	Possible values
Default Site Selection	Sites to which the user has access
Default Practice Page	Tasks Patients Wire Trackings
Skip User Filters when Searching	No Yes
Display Tasks as	List Cards
Default Tasks Sorting	Task Due Date Debond Date Bond Date Flag Wire Insertion Date Patient Report
Default Task User Filter	<i>your user name</i> All Doctors All Staff All
Default Task Type Filter	All types Provide Information Review Order Submit Order Create Order Reminder
Default Task Status Filter	Active Expired Deferred Completed All
Display Patients as	List Cards
Default Patient Sorting	Modification Date Patient Id Debond Date Bond Date

	Flag Wire Insertion Date
Default Patient User Filter	<i>your user name</i> All Doctors All Staff All
Default Patient Status Filter	Active Finished Quit Transferred Cancelled MD [Marked for Deletion] Demo All
Object Navigation with SHIFT	No (keeps translucent bounding box) Yes (requires using Shift key to show bounding box)
Show Favorite Tools	No Yes
Show Checklist	No (hides model checklists as a default) Yes (displays model checklists as a default)


See also...

Prescription Preferences

Use the Prescription tab to set default treatment preferences for your setup prescription or your aligner prescription. Once set, these are your personal defaults for all new patients. Although you can change these as needed for a particular patient, setting defaults globally saves you time since you do not have to reset them each time for a new patient.

When you create a new setup prescription or aligner prescription, elemetrix checks who the treating doctor is for that patient and uses that doctor's preferences to pre-populate the form.

To set preferences for setup or aligner prescriptions:

1. Click  and select **Preferences**.
2. Click the **Prescription** tab at the top of the page.
3. Select your defaults for each MACROS section.
4. Click **Save Changes**.

Bracket-Set Preferences


The Bracket Sets tab in the Preferences section allows you to add, edit, or delete a bracket set.

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Access bracket sets preferences

To access your bracket set preferences, follow these steps:

1. Click  and select **Preferences**.
2. Click the **Bracket Sets** tab at the top of the page.
3. To view, edit, or delete a bracket set, do one of the following as illustrated below.



1. Click the name to open the Edit Bracket Set window and make changes.
2. Click the pencil to open the Edit Bracket Set window and make changes.
3. Click the trash can to delete bracket set.

Add a bracket set

To add a new bracket set, follow these steps from the Bracket Sets tab:

1. Click the **New Bracket Set** button.
Result: The New Bracket Set window opens.
2. Enter a name for the Bracket set.
3. Click the tooth on which you want to assign a bracket.
Result: The Bracket Selection window opens with the target tooth identified at the top of the screen.
4. To narrow the list of available brackets, select a vendor, family, a slot width, a quadrant, and/or a tooth from the drop-down menus.

Note: You can also enter a part number in the Part No. field to further narrow the list.

5. For additional filters:

- Click **More** and make selections from the Additional Filters window.
- Click **Close** when you have completed these filters.
- Click **Clear** to remove the additional filters.

Note: As you add filters, the available list in the Bracket Selection window changes immediately.

6. Click an available bracket from the list, and then click **OK**.

OR

Click **Apply & Next**, and then click the left or right arrow in the Target Tooth box at the top of the window, to select and assign a bracket to another tooth.

Note: To remove the current filter, locate the **Use bracket preference filter box** at the bottom of the window, and click in the check box to remove this filtering option.

7. To remove a bracket from the set, click and hold the left mouse button and drag the bracket to the **Drop bracket here** button.
8. After you have made all of your selections, click **Close**.
9. Click **Save Bracket Set**.

Duplicate a bracket set

To duplicate a bracket set, follow these steps from the Bracket Sets tab.

1. Click the name of the bracket set that you want to duplicate.

OR

Click the pencil to the right of the name.

Result: The Edit Bracket Set window opens.

2. Click the green **Duplicate** button that is below the tooth chart.

Result: The Bracket Sets tab reopens.

3. Scroll down the list until you find the name of the bracket with (copy) at the end of the name.

Note: If you want to rename the copy, follow the directions in the next section, [Rename a bracket set](#).

Rename a bracket set

1. In the list of bracket sets, locate the one that you want to rename.

2. Click the name of the bracket set.

OR

Click the pencil to the right of the name.

Result: The Edit Bracket Set window appears.

3. In the text box at the top of the Edit Bracket Set window, change the name.

4. Click **Save Bracket Set**.

Creating Bracket Sets

Tip: Click the expand view button  to see the full screen.

IFrame [<https://whatfix.com/SureSmile.com/deck.html?nolive=1&start=2&suggest=1&closeable=false#!/e83d3f50-8410-11e...>]

Bracket Height Sets

As indicated by the location of the Bracket Height Sets tab in the middle section of Preferences, any user role can create and then edit sets. The bracket height set preferences allow you to designate a bracket height set as your default set. This default bracket height set will automatically be selected by the system anytime you create a set of planned brackets when designing IDB Trays. Bracket height sets save you time as all bracket heights are entered at once.

The system provides two initial bracket height sets based on:


- **FA Point** - shows the positions of the brackets as relative to the FA point. In this set the position of all the brackets are indicated as zero because the bracket position is matched by the system to the FA point of each tooth. However, if you wish, you can change one or more of the default zero values to a positive or negative value if you wish to regularly offset certain teeth.
- **Jig height** - indicates the height of a bracket in millimeters as measured from the middle of a bracket slot to the:
 - incisal edges for central incisors and laterals
 - buccal cusp for canines and premolars
 - most prominent buccal cusp for posterior teeth

Use this tab to:

- designate one of the two bracket height sets provided for your default bracket height set for use as is
- copy and rename a default bracket height set and customize it, or
- create a new bracket height set from scratch.


This default bracket height set can be copied but not edited. To use this set as a basis for your own customized set, just copy and rename it. Bracket Height Sets are visible practice-wide. Like bracket sets, in the tooth chart the tooth numbers count the teeth from 1 to 8. A default bracket height is listed below each tooth number. Use the arrows to copy and mirror the same values to the adjacent quadrant.

Designate one of the two bracket height sets provided for your default bracket height set for use as is

1. Click  in the SureSmile title bar, and select **Preferences** from the menu.
2. From the **Bracket Height Sets** tab, click the arrow next to the bracket height set you want to make your default.
3. Click the **Default** check box.


Important: If you previously selected two default bracket set heights before the 7.3 Commercial Update 3 version, the system displays a dialog box requiring you to select just one default bracket height set. This only happens the first time you select a bracket height set. Ignore this note if you are a new user.

Customize the default bracket height set

1. Click  in the elemetrix title bar, and select **Preferences** from the menu.
2. From the **Bracket Height Sets** tab, make sure the elemetrix Defaults - Labial bracket height set is displayed by clicking the arrow to the left of the name so that the arrow points downward.
3. Click **Copy**.
4. Enter a new set name.
5. For each tooth in a quadrant, type or scroll to enter new values as needed.
6. To copy and mirror these values into the adjacent quadrant, click one of the arrows.
7. Repeat these steps to complete all quadrants.
8. (Optional) Use the upper and lower check boxes to create a bracket height set for a single arch.
9. Click **Save**.
10. After saving, notice the actions available for your new set: Copy, Edit, Delete.

Tip: If you do not see all three of these options, try refreshing your browser.

Create a new bracket height set

1. Click  in the elemetrix title bar, and select **Preferences** from the menu.
2. From the **Bracket Height Sets** tab, click the green **New** button. A new set appears with values copied from the default set. Notice the Actions available: Copy, Edit and Delete.
3. Enter a new set name.
4. For each tooth in a quadrant, type or scroll to enter new values as needed.
5. To copy and mirror these values into the adjacent quadrant, click one of the arrows.
6. Repeat these steps to complete all quadrants.
7. Click **Save**.
8. After saving, notice the actions available for your new set: Copy, Edit, Delete.

Tip: If you do not see all three of these options, try refreshing your browser.

Aligner Constraints

This preference setting is visible to all users.

Use these settings to set the maximum rate of movement for each stage. All movement types are applied to all of the Staged Models simultaneously.

The pre-defined maximum rates of movement per stage are listed, and you can modify these rates of movements as desired. You can also select teeth you do not want to be moved at all under Select Fixed Teeth.

Note: The Aligner Constraints tab replaces the Staging Limits tab.

[Video: Setting Your Aligner Constraints](#)


ActiveX Contro...

Task Ownership Preferences

Use the Task Owner tab under preferences to set which roles in your practice are responsible for common tasks. Setting these task owner preferences determines who will be assigned tasks.

Note: Roles are assigned by the elemetrix administrator. For more information, see [Manage Users](#).

Set task ownership:

1. Click  and select **Preferences**.

Result: The page defaults to the Task Owner tab.

2. Make changes in these areas:

- **Products:** For each product listed, assign the role responsible for ordering the product and the role responsible for reviewing and approving an order. You may want to have the same role perform both functions, or you may want to delegate some of these tasks. For example, you may want staff to order a therapeutic model, but you want only doctors to review and approve therapeutic models.

Note: If you select none for the Review/Approve assignment for diagnostic models, elemetrix automatically sets the *Deliver as Finished* check box on order pages.

- **Tasks:** Use the drop-down lists under **Task Assignments** to determine who will be assigned patient tasks. For example, if you choose **Staff** for all of these items, the task will be assigned to a staff member.
 - If a particular staff person is assigned to a patient on the **Patient Profile** page, then all staff tasks for that patient are assigned to that staff member.
 - If no staff person is assigned to the patient, then staff tasks for this patient are automatically assigned to the first staff member listed on the **Staff** tab under **Users** in the Administration workspace of elemetrix.

Note: When you change the owner of a task, the owner for all active tasks of this type is changed.

- **Task Assignment Email Notification:** This option is helpful for practices that do not habitually keep the elemetrix Tasks page open and want to be alerted when new tasks appear. It initially defaults to “Both” for elemetrix customers and “None” for elemetrix customers. Email task alerts are sent via the doctor’s and staff member’s email address associated with the user account. You can change this setting at any time. (Administrator access required.) To turn this feature off, select the “None” setting.

Caution: Enabling this feature means that email alerts for all tasks assigned to the doctor for each of his/her patients will be sent to the doctor’s email. The same holds true for a staff member assigned to a patient. Email alerts for all tasks assigned to the staff person for each of his/her patients will be sent to the staff person’s email. For mid- to large-size practices, the volume of daily emails could be considerable.

- **Next Step Reminder** - Default is Staff. Other options are *Doctor*, *Both*, or *None*. Use this setting to determine who will be reminded when a diagnostic model is delivered as finished. This reminder offers you four options:
 - Analyze diagnostic model next
 - Begin bracket placement simulation (for IDB tray) next
 - Begin simulation for aligners next
 - Dismiss task
- **Shipment Email Notification** - Choose this option to receive an email as soon as we ship your orders. This allows you to better track orders and more efficiently schedule your patients. The default setting is for both the Doctor and Staff assigned to a patient to receive an email notification when OraMetrix ships a product you ordered.


3. When finished, click **Save Changes**.

See also...

Treatment Time Preferences

Treatment preferences control the operation of the treatment timeline, task reminders, and the calculation of elapsed treatment time.

Set the treatment time and case type preferences:

1. Click  and select Preferences.
2. Click the **Treatment** tab at the top of the page.
3. Enter time values for the following items:
 - Reminder expiration time (weeks)
 - Estimated scan to setup time (weeks)
 - Estimated setup to wire time (weeks)
 - Estimated wire to final time (months)
 - Standard case estimated treatment time (months)
 - Aligner case estimated treatment time (months)
 - Default case type ((none), Aligner)
4. Click **Save Changes**.

See also...


Define Flag Labels

Use this tab to create labels for your task flags. After you create your labels, when you place your cursor on the a flag the labels appear as tool tips to remind you what each flag represents.

Custom Search Term Preferences

In addition to the elemetrix built-in search criteria, you can define custom search terms that appear in the menus in the Treatment and Diagnosis sections on the Patient Overview.

Define custom search terms:

1. Click  and select **Preferences**.
2. Click **Search** at the top of the page.
3. To define a term in any of the four areas, make sure that the drop down shows <add new>, and then type the term in the empty box below the menu.
4. Click **Add**.

Rename a term:

1. Select the term to be renamed from the drop-down menu.
2. In the box below the drop-down menu, change the name of the term.
3. Click **Rename**.

Remove a term:

1. Select the term to be removed from the drop-down menu.
2. Click **Remove**.

See also...


Administration

From profile menu, you can access the Practice Settings page which contains the following general information about the practice:

- [Users](#) - manage users, roles, and access rights.
- [Logo](#) - upload your logo so that it appears on reports.
- [Access Schedules](#) - restrict the hours that users can log into elemetrix.
- [Access History](#) - view user logon activity for the last 90 days.
- [Custom Reports](#) - show, edit, and generate practice reports.
- [Credit Card](#) - store or edit your practice's credit card information
- [Receipts](#) - view your practice's prepaid receipts.
- [About](#) - information about the software version, the database, and the geometry engine.

[Access the Practice Settings page](#)

To access the practice settings, follow these steps:

1. Click  and select **Administration**.
Results: The Practice Settings page appears.
2. To access any of the practice-settings pages, click the name of the page.

Manage Users


You must be an administrator to manage user accounts. Each user must register (or be registered by an administrator) before a new account can be created.

Steps: [Add a new user in elemetrix:](#)

1. Go to <https://login.elemetrix.com/login>.
2. From the home page, click the **Register** button in the upper-right corner.
OR
From the login page, click **Create new account?**
3. Enter a username and email address.
4. Create a password with at least eight characters, including upper and lower case letters, a number, and at least one of the following special characters:
~ ! @ # \$ % ^ & * () _ - ' " ; : < > , . ? | [] \
5. Click **Submit**.

[Access the user administration page](#)

To access the page for managing users, follow these steps:

1. Click the  icon on the upper-right side of any screen, and select **Administration** from the menu.
Result: The Practice Settings page appears.
2. Click **Users**.
Result: The Users page appears with a tab for each elemetrix role:
 - Doctors
 - Staff
 - Administrators

[Add a new user to the practice database and assign roles](#)

To add a new user to your practice database and to assign them a role or roles, follow these steps:



1. From the Users page, click the **Add User** button on the right side of the screen.
Result: The **Add User** dialog appears.
2. Enter the new user's email address.
3. Select the appropriate role for this user.
4. Click **Apply**.
Result: The user's email appears on the tab for the assigned role.

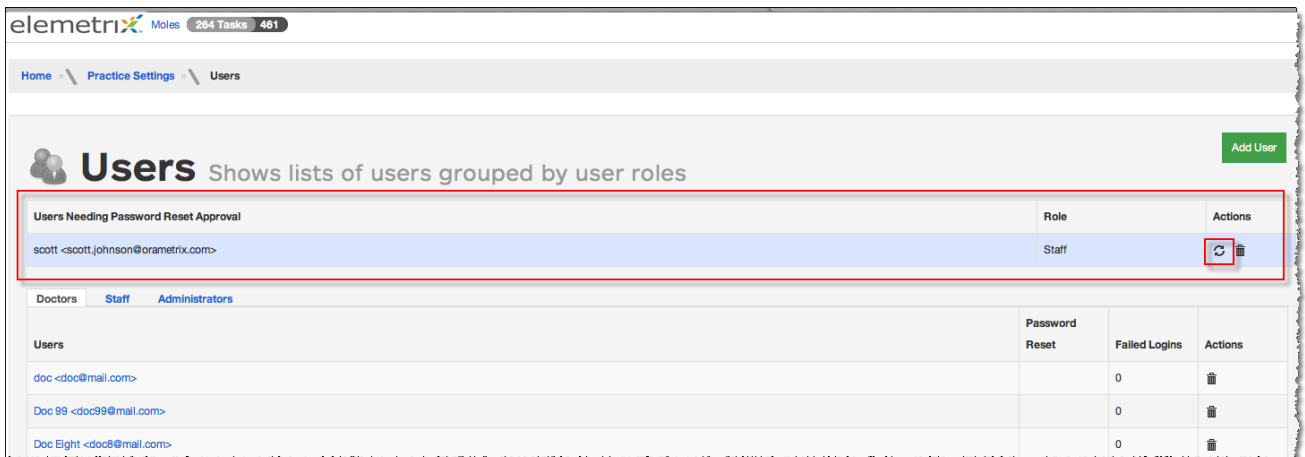
Note: A user can be assigned to more than one role. Repeat the above steps, selecting the new role.

Important: Users assigned only to an Administrator role cannot create orders. They must also be assigned to a Doctor or Staff role to create orders.

[To reactive a user's account](#)

When a user resets their password, their user roles are suspended. The practice administrator must reactive the user's roles.

1. Click the orange settings icon  and select **Administration**.
2. Under Practice Settings, select **Users**. (This option is available to Administrators only.)
3. Any user who has reset their password is listed at the top of the page as shown.
4. Click the small refresh button  to approve the user's password reset and allow them access to the practice database.



5. The user will now be able to access the practice database with the same role or roles they were assigned previously.

[Delete a user from a role](#)

To delete a user from a role, follow these steps:

1. Go to the tab from which you want to remove the user.
2. Click the trash can on the right side of the screen opposite the user that you want to remove.
Result: A notice appears at the top of the users page with an Undo button, which you can click to restore the user to the role if you removed the user inadvertently.

Manage Your Logo

Use this page to upload your logo, which will appear on your reports.

To upload your logo

1. Click the **Choose File** button and navigate to the file you want to upload.
2. Click **Upload**.

An image of your logo should be displayed.

Whenever you generate a standard or custom report, your logo will be displayed on the report


Define Access Schedules

You can allow your users 24/7 access to the practice database or you can restrict the hours they have access by defining a schedule.

In this Topic

- [Heading 2](#)

Create a schedule with restricted access to elemetrix

1. Click the settings icon  on the upper-right side of any screen, and select **Administration** from the menu.
Result: The Practice Settings page appears.
2. Click **Access Schedules**.
3. Click the **New** button.
4. Enter a name for this schedule and select a time zone.
5. For each day of the week, select start and end hours when users are allowed to login to elemetrix.
6. Click **Save** at the bottom of the page.

Note: If you have users in multiple time zones, you can create a schedule for each time zone.

Assign access schedules to users

1. From the administration page, click **Users**.
2. Select an access schedule from the drop down menu for each user.
3. Select None to provide a user unrestricted access.

Review Access History

Use this page to view user logon activity for the last 90 days.

You must be assigned an Administrator role in the elemetrix software to access this area.

To access the Access History area

1. Log onto elemetrix using your administrator username and password.
2. Click the orange settings icon and select **Administration**.
3. Select **Access History**.
4. If there are more entries than can fit on a single computer screen, click **Next/Previous** buttons on your web browser to move between pages.
5. Use the **Search** field to find a particular user.

Custom Reports

In elemetrix, you can create templates for special reports for your practice.

When you create the template, you can choose to include the following information about a patient:

- Name
- ID
- Date of birth
- Age

You can also add sections for the following information:

- Quality score
- Marginal ridge measurement
- Time treatment

For each of these, you can include images and or models.


The report template automatically contains the assigned orthodontist and the practice logo if it has been added in the practice profile.

In this Topic

- [Heading 2](#)

Create a report template

To create a new report template, follow these steps:

1. Click  and select **Administration**.
2. Click **Custom Reports** from the Practice Settings page.
3. Click **New Report**.
4. In the box at the top of the page, enter a name for the template.

Tip: Use a short description of the purpose of the template to remind you later.

5. Uncheck any items you do not want to include.
6. If you do not want to add any sections, click **Save**.
OR
If you want to add sections, go to the next topic.

Add Sections

To add sections to your template, follow these steps:

1. Check the type of section you want to include (Quality score, Marginal ridge measurement, or Time in Treatment).
2. Click **Add Section**.
Result: The section page appears.
3. In the box at the top of the page, enter a name for this section.
4. From the drop down menu, select the appropriate value.
5. To include an image in the report, click **Add Image**.
OR
To include a model in the report, click **Add Model**.
6. Make your selections, and then click **Save**.
Result: The list of images or models appears and you can continue to add images and models.
7. To return to the report template and add additional sections, click the name of the template at the top of the window.
8. To add more sections, uncheck the last section you entered and check the next one that you want to add.
9. When you have finished adding sections, click **Save** on the main template page.
Result: When you go the patient home page and click Reports, the drop-down list now includes the new template that you created.

Reorder Sections


After you add more than one section, the main template page includes an Order Sections button which takes you to another page that lists all of the sections that you added to the report.

To reorder sections, follow these steps:

1. From the main template page, click **Order Sections**.
Result: The list of sections appears.
2. Click the up and down arrows in the sequence column to arrange the sections in the order that you want.
Note: From the page, you can also edit or delete sections using the pencil and trash can icons on the right.
3. When you have finished the reordering, click the name of the report at the top of the page.
4. At the bottom of the main template page, click **Save**.
Result: The list of custom reports appears.


Edit Custom Report Templates

To edit an existing template, follow these steps:

1. Click  and select **Administration**.
2. Click **Custom Reports** from the Practice Settings page.
3. Click the pencil icon to the right on the line for the report that you want to edit.
Result: The report screen appears.
4. Make changes as needed using the same instructions for creating a new report.
5. When you have made all of your changes, click **Save**.

Delete a Custom Template

To delete an existing template, follow these steps:


1. Click  and select **Administration**.
2. Click **Custom Reports** from the Practice Settings page.
3. Click the trash can icon to the right on the line for the report that you want to delete.
4. At the **Are you sure?** prompt, click **OK** or **Cancel**.

Store Credit Card Info

Use this page to keep credit cards on file for future use when purchasing elemetrix products or services. All major credit cards or debit cards are accepted.


Note: You must have an [Administrator](#) or [Doctor](#) role to use this feature. Otherwise, the [Credit Card](#) tab is not visible.

To add a new credit card to the list


1. Click  and select **Administration**.
2. Scroll down the Practice Setting page and click **Credit Card**
3. Scroll to the bottom of the page.
4. Under Credit Card Information, fill out all of the fields
5. Click **Submit Credit Card Information**.
6. The information is submitted to Stripe, our credit card processing partner. Once the credit card is verified the credit card is added to the top of the list and a check mark appears in the Verified column. Only the last four digits of the credit card number is stored in elemetrix. If you want this card to be the first in the **Charge this card:** list when processing a payment, click the **Mark as default** button.

Note: For more information about Stripe and its privacy and security protections, please visit the Stripe website at stripe.com.


To edit a credit card on the list

1. Click  and select **Administration**.
2. Scroll down the Practice Setting page and click **Credit Card**
3. Find the card in the list and click **Remove**.
4. Scroll to the bottom of the page and reenter the card information on **Credit Card Information**.

To remove a credit card on the list

1. Click  and select Administration.
2. Scroll down the Practice Setting page and click **Credit Card**
3. Find the card in the list and click **Remove**.

To change an email address for a credit card on the list



1. Click  and select Administration.
2. Scroll down the Practice Setting page and click **Credit Card**
3. Find the card in the list and click the small edit icon.

4. Make your changes and click **Save**.

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Your email address (doc@mail.com) has not been verified. Please verify or update it.

Home > Practice Settings > Credit Cards : On File


Currency	Name	Last 4	Brand	Type	Expiration	Email			
USD	Tam Phan	0005	American Express	credit	08 / 2018	tam.phan@orametrix.com 	✓	Mark as default (Card ending 0005)	Remove (Card ending 0005)
USD	Tam Phan	4242	Visa	credit	08 / 2019	tam.phan@orametrix.com 	✓	Mark as default (Card ending 4242)	Remove (Card ending 4242)

Note: A red callout box points to the edit icon in the first row with the text "Click to edit email address".

View Receipts

Use this page to view your practice's order history.

[To add a new credit card to the list](#)


1. Click  and select **Administration**.
2. Scroll down the Practice Setting page and click **Receipts**.
3. Purchases are listed in order of date and time of purchase from newest to oldest.
4. Click *Download PDF* under Action column to print a copy of the receipt.

Identify Software Information

The About page provides information concerning the software version, the copyright, the database, and the geometry engine. The More button at the bottom lists recent actions or errors.

When you report issues to OraMetrix, this information can help the support staff troubleshoot your problem.

To find information about the software:

1. Click the  icon on the upper-right side of any screen, and select **Administration** from the menu.
Result: The Practice Settings page appears.
2. Click **About**.
Result: The About page opens to show the software version and copyright, as well as information about the database and the geometry engine.

Cybersecurity Best Practices

To help keep your elemetrix system as secure as possible, please make every effort to follow these cybersecurity best practices:

- Keep your computer's operating system up to date with patches and fixes.
- Install and maintain an anti-virus program.
- Install and maintain a firewall between your LAN and the internet.
- Avoid installing browser add-ins or plug-ins.
- Avoid downloading or installing software from unknown sites
- Create a hard to guess password by using at least 8 characters of mixed case letters, numbers, and symbols.
- Avoid using common words or phrases.
- Do not reuse the same password for any accounts.
- Consider using a password program to manage passwords, such as KeePass or LastPass.
- Do not display your password where others can see it.
- Change your password periodically, every 60 to 90 days.
- Logout or lock your workstation when leaving your desk.
- Avoid clicking on links in email. Instead, go directly to the site and login using your user-id and password.