

**User Definition Manual** 



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# Open and Login to BASE

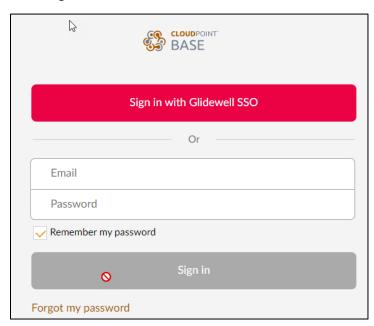
Locate the BASE icon on the desktop.



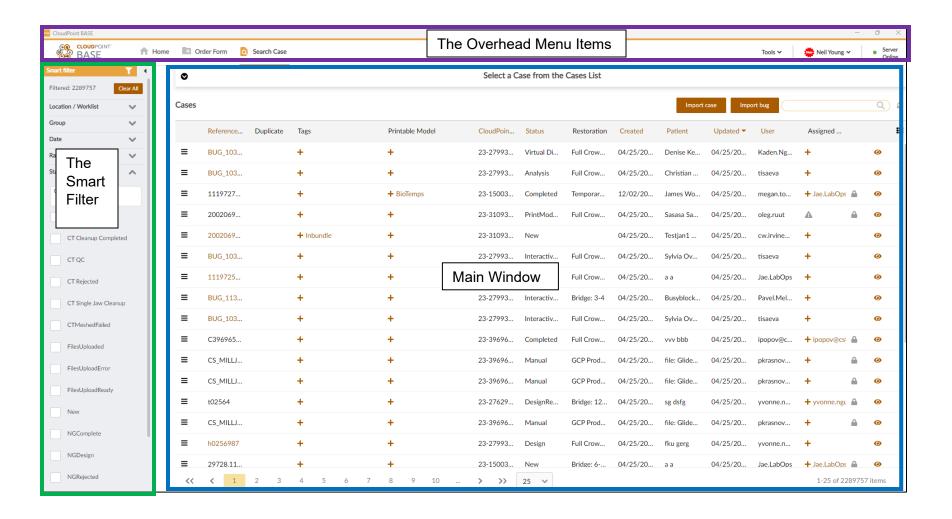
Double-click to open.

Log in using Username (usually the email) and Password (per registration for first time users)

Click Sign In.



BASE brings the user to the opening page.



## The Basics

The following items are accessible from the overhead menu:

- 1. Home
- 2. Order Form
- 3. Search Case
- 4. Tools
- 5. Username Drop Down
- 6. The Search Filter

The following items are available on the main screen's columns:

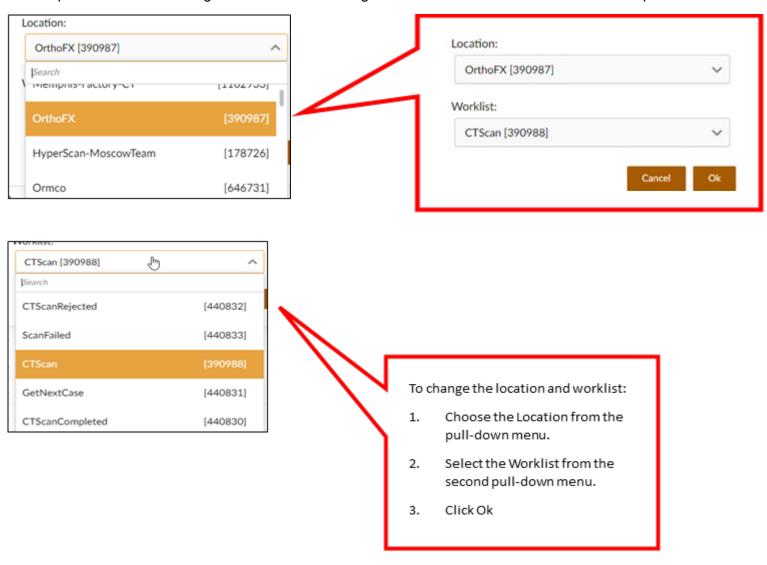
- 1. Reference ID
- 2. Duplicate
- 3. Tags
- 4. Printable Model
- 5. Remake
- 6. CloudPoint ID
- 7. Collapsible columns:
  - a. Status
  - b. Restoration
  - c. Created
  - d. Patient
- 8. Updated
- 9. Iser
- 10. Assigned User
- 11. Preview Case

## Home Page

The Home icon takes the user to the Home page, where the Location and Worklist finder and the Queue are located.

# Change Location and Worklist

The drop-down menu on the right allows users to change locations and worklists of the individual queues.



#### The Queue

The queue where the cases are lined up to be processed. The Queue is the list of cases, based on order received (listed in order by date and time), to be processed. Each location/worklist has its own queue. This window displays the total number of cases in the presented queue.

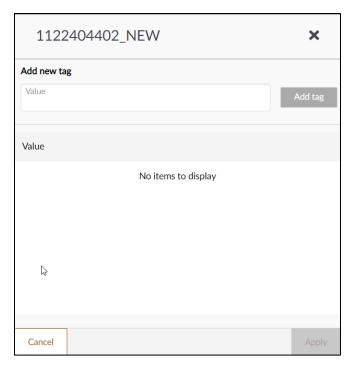
#### The Get Next Case in Queue

The Get Next Case in Queue button when selected automatically loads the oldest case in the queue. Cases are listed based on the date/time they are loaded into the app.

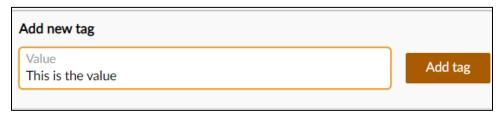


# Tag

The user can modify the tag of the case. Clicking the tag '+' symbol in the tag column. The tag window displays:



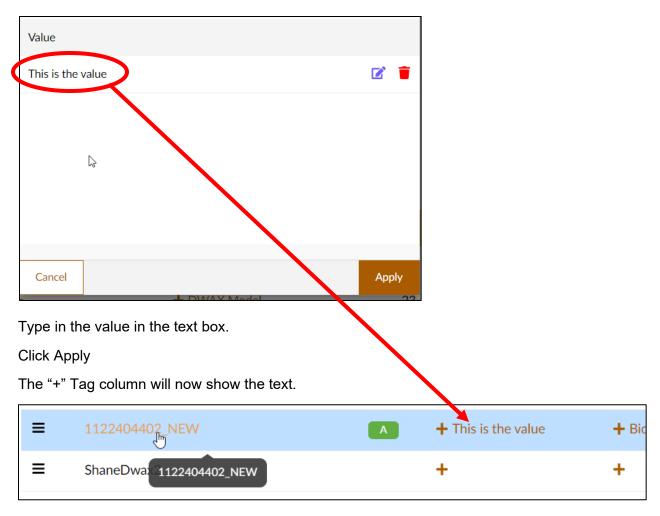
In the Value box, type in the desired text.



Type in the desired value (i.e. tag)

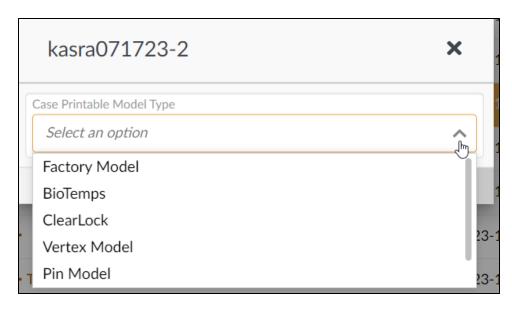
Click Apply.

The new tag appears in the Value space below.



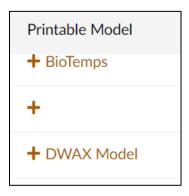
## Printable Model

This is similar to the Tag Column, and is identified by an "+"sign in the Printable Model column. When the "+" is clicked, the following window displays:



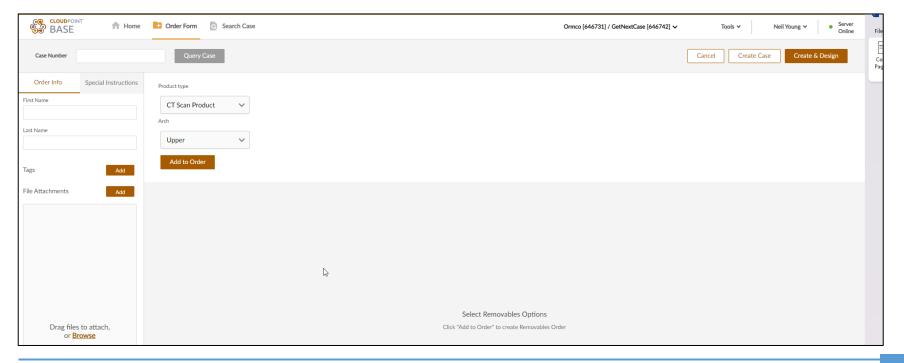
At this Case Printable Model Type window, select the appropriate Factory Model from the drop-down menu. Click Update.

The Model Type appears in the Printable Models column



# Order Form

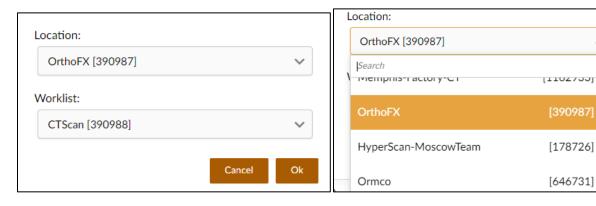
The Order Form icon displays the form used to create and design new cases.

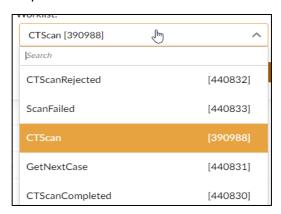


Listed in the Order Form window are the following functions. Click to place the cursor in each window, then type the required information:

# Change Location and Worklist

The drop-down menu on the right allows users to change locations and worklists of the individual queues.





To change the location and worklist:

- Choose the Location from the pull-down menu.
- Select the Worklist from the second pull-down menu.
- Click Ok or
- Cancel to abort the process.



- Query Case (type in the case ID number and click Query Case) to access a specific case number. Or click Query Case if the ID isn't known. This button can also be used to manually insert a new case ID.
- Cancel (clears the form.)
- Create Case (after typing in the Case Number, First and Last Name, and Product Type, will create a new case and closes it).
- Create & Design (after typing the Case Number, First/Last Name, and Product Type, will create a new case and opens it).
- Add to Order (after selecting the Product Type and the Arch, clicking this button adds the combination to the file).

# Creating a Case

- 1. Click Order Form (this takes the user to the order form)
- 2. Select the Appropriate Worklist (from the pull-down menu)
- 3. Type the Case Number
- 4. Type the Name, first and last
- 5. Select the Restoration Type and Arch (both from pull-down menus)
- 6. Click Add to Order
- 7. Drag or attach any relevant files (Either drag and drop or use the Add button)
- 8. Click Create Case (This will create the new case)
- 9. Click Create & Design

## Search Case



Note: Columns' width in search case tab can be adjusted if not all case information is showing up in the column,

Note: User also can hide unwanted columns and organize the columns based on user preference

Note: cases in search case tab can be sorted by each column with clicking on column title

The default screen is a simple search function with a magnifying glass icon. Simply fill in the criteria for the search and click the icon.

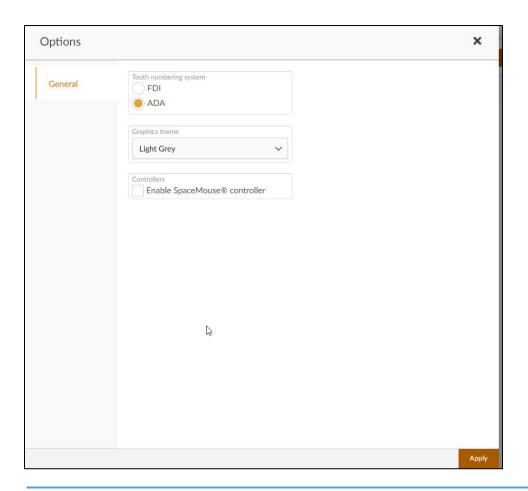
The Search Case function, located in the Seach tab, can be used to locate a case by other identifiers (Tag, Printable Model, etc.)



## Options

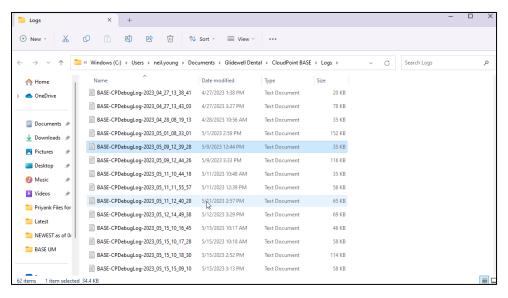
At the opening screen, it is possible to select the Options menu to customize the user layout and organization.

- Select either the FDI or ADA tooth numbering system.
- Using the drop-down menu, select one of 6 color themes.
- There is an enable option for users equipped with SpaceMouse® Controller devices.
- Click **Apply** once selections are made.



## Open Logs Folder

Opens the CloudPoint BASE logs in Windows Explorer, directly to the Logs folder, for the user.



Double-clicking on the log displays the log's information (date,time, usage info, etc.) **NOTE**: This section is used for development and issue investigations by the technical team.

BASE-CPDebugLog-2023_05_09_12 × +		
File Edit View		
[17:32:51.414][TULO	lreak haßen hoot nzaße	סויו כ.ש
[12:39:21.414][Info	]Current paged pool usage	0.5 MB
[12:39:21.414][Info	]Peak nonpaged pool usage	0.0 MB
[12:39:21.414][Info	]Current nonpaged pool usage	0.0 MB
[12:39:21.414][Info	]Peak Commit Charge value	55.7 MB
[12:39:21.414][Info	]Current Commit Charge value	55.7 MB

## Submit Bug

Allows the user the ability to Submit a bug. **NOTE:** The Submit Bug function is available in the Tools drop-down menu in all three tabs



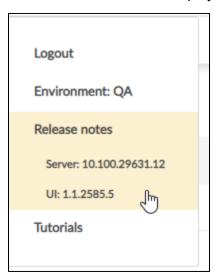
# To Submit a bug:

Select Submit Bug from the Tools pull-down menu.

- 1. The Submit Bug window displays.
- 2. Input the Bug (Problem)
- 3. Input the description of the problem.
- 4. List steps necessary to reproduce the problem.
- 5. Click Submit.
- 6. Click Done.

# Username Dropdown Menu

The Release Notes icon displays the latest changes and new tools included in the current release, it displays the following options:



Smart Filter	Definition (examples)
Option	
Location/Worklist	Using a pull-down menu, select the appropriate location or worklist.
Group	Using a pull-down menu, select the GW group the case is in.
Date	Select the date range of the case in question.
Range	Select the tooth range concerned.
Status	Choose the status (CT Align Bite, CT QC, New, etc.)

Release Notes: 10.100.29631.12

Updated 4/25/2022 x

### 1. Improved Auto-Align Bite

The algorithm for auto-align bite has been improved for full arch jaws that have missing partial jaw information.

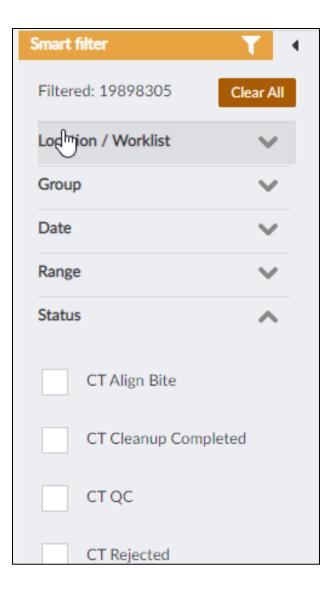
## 2. Improved MRS Tool

We have re-designed the look and feel of the MRS tool.

- · The tool has a new color scheme
- · We have made the tool smaller to make it easier and faster to use
- We have improved the saving, and pushed it to the background. This provides the tool with a smoother transition between dicks.

#### The Smart Filter

The Smart Filter allows users to narrow the criteria of the cases, this making it easier to search for cases based on a number of factors. This includes:



The '+' icon located in the Tabs, Printable Model, and Assigned User tabs. Each allows for added functionality.

### **Assigned User**

In the Assigned User column, select the '+' sign to display the assigned user window. Clicking the '+' sign in the Assigned User Column expands the Assigned User window. NOTE: This column is usually collapsed, and only the first letter will be visible.



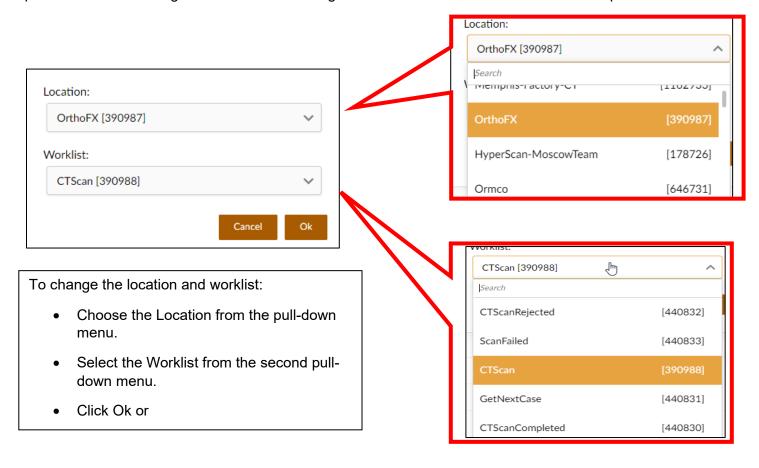


To use the Assign User Window:

- 1. Select the desired name from the pull-down menu.
- 2. Select the appropriate time period.
- 3. Click Assign to save the assignment, or
- 4. Click Unassign to remove that user from the case, or
- 5. Click Cancel to exit the window without saving.
- 6. To unassign, select the user and click Unassign.

# Change Location and Worklist

The drop-down menu on the right allows users to change locations and worklists of the individual queues.



# Adjusting and Hiding the Columns

BASE allows for control over the columns for easy reference. There are two ways users can make changes to the columns.

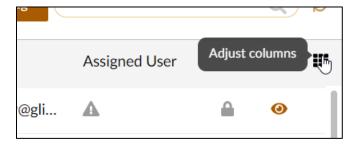
## Manual Adjustments

Manual adjustments can be made by simply hovering the cursor over edges of the column, holding a click, then dragging the column's edge left or right, depending whether the user desires more visibility or less.

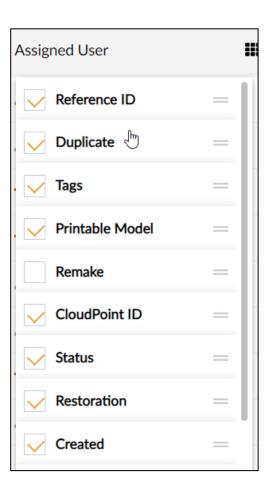


## Adjust columns feature

At the left end of the columns is the icon, or Adjust columns feature



. Right-clicking on this icon displays a checkbox list of the columns. Selecting or unchecking the appropriate checkbox will hide or unhide the corresponding column in the main window.



# Right Clicking on Case ID

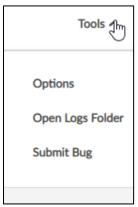
Right-clicking on the Case ID displays a list of controls for that case. The include:



- **Edit Case:** Takes the user to the Order form to change aspects of the case (order info, product type, etc.).
- Reset Case: Restores the case to its original parameters.
- **Delete Case:** Removes the case from the app.
- Open Folder: Opens the file folders, in Windows File Explorer.
- Open Screenshots Folder: Displays the screenshots taken for the case.
- Assign Worklist: Allows users to change the worklists the case is in.
- Duplicate Case: Makes an exact copy of the case.
- Submit Bug: Per the Submit Bug feature, as in the Tools Menu, page 18.

#### Tools

The Tools function is a dropdown menu with three options:



# Accessing the Case

#### Left Click

To open a case for adjustment, search for the case and left click on case reference ID.

Certain case statuses can be opened by BASE.

# CT Scan QC Stage

New cases will open in CT Scan QC stage. At this stage jaw scans can be checked for correct assignment and be swapped or rejected if they are not workable.

Labels on each scan show the registered articulation as "articulated Upper" and Articulated Lower", to swap registered jaw scans, click on upper scan to highlight it and click the other scan to apply the swap.

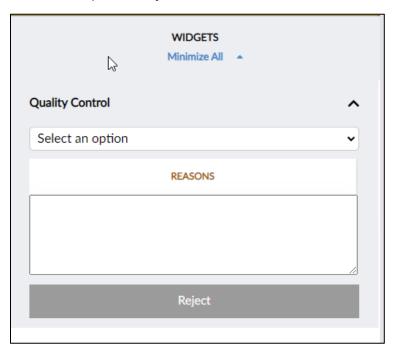
## To manipulate the scans:

- Scroll Wheel: Magnify or reduce the image.
- RMB: Move the image on the screen.
- Pressing Scroll Wheel: Rotates the image side-toside or top/bottom.



# **Quality Control widget**

Gives user option to reject case for scan issues to the dedicated stage in the workflow that is set by technical team



The Quality Control Widget:

- 1. Select the reasons from the pulldown menu.
- 2. Add any special instructions.
- 3. Click Reject.

# Widget bars

The main design space window is divided into the following sections:

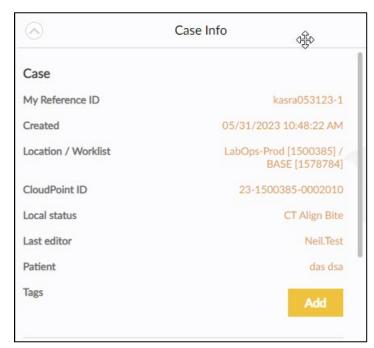
On either side of the articulated scans, the window on the left and right allows for storing tools' widgets.

Tools' widgets can be stored by drag and drop into the widget bar or drag and take out of the widget bar.

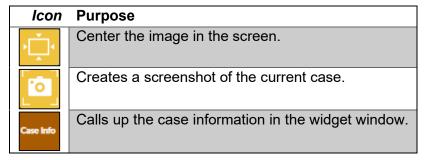
Widget bars shall be resized by click and drag the edge of the widget bar.

### Case info widget

Click on the case info button opens the case info widget that contains basic information about the open case such as:



### Control Icons



### Next

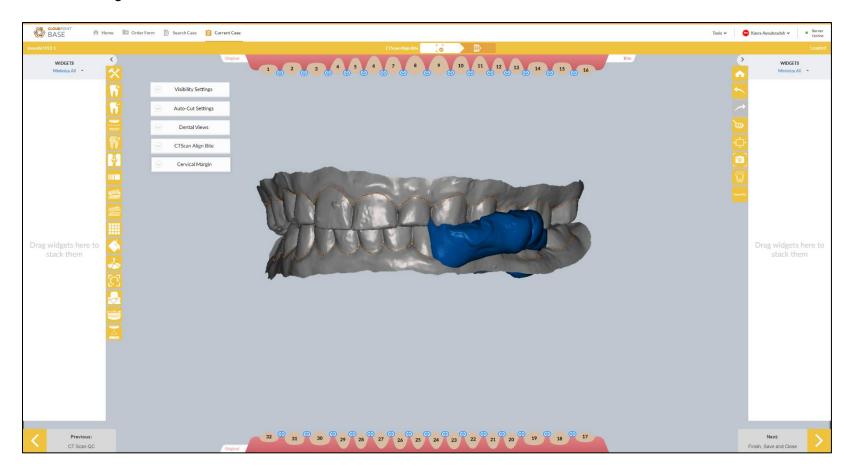
When finished with the CTScan QC, click Next.



# CTScan Align Bite stage.

The CTScan Align Bite allows for a wide range of manipulations of the case. This includes:

- 1. Widget Bars (as discussed before)
- 2. Left/right Tool bar options
- 3. Tooth Chart
- 4. Tools' Widgets



### Widget bars

These were discussed in the previous section.

#### Left tool bar Items



Flatten (Shortcut: F key)

The flatten tool is used to repair scan data: Spikes, small holes, extra scanned data, bubbles, and is used to block out undercuts on the die surface. Also known as the digital block out tool, it is useful for evening out protrusions, spikes, holes and other imperfections.



Add Material (Shortcut: A key)

A widget tool to modify width and strength, with adjustments made via slider indicators. The higher the profile and strength, the deeper and wider the addition. A lower profile and strength will create a narrower and shallower addition.



Remove Material (Shortcut: R key)

This Widget tool removes surface scan data. Strength and area affected is modified by the profile and strength sliders. A higher profile and strength make a deeper and wider removal, while a lower profile and strength make a narrower and shallower removal.



**Invert Scans** 

When a scan appears inverted (i.e. inside out) that scan will display darker. Click on the icon and a window displays asking the user to specify whether the upper or lower jaw needs to be inverted. Once corrected, the inverted section will appear at its normal shade.



Surface Issue Repair (Mesh Doctor Tool)

Allows for the auto-fixing of distorted scan data with the model. Click the icon. A Mesh Window pop-up displays, listing all the problems with the case. The number of errors (in parentheses) show. Click **Fix**.



Partial Filled Hole (Shortcut: H key)

Allows for holes in the scanned jaws to be filled. Click the icon. The cursor becomes a red line. Follow the outline of the hole with the red line. NOTE: There is no need to continuously click. Once the line comes full circle, the hole disappears.



Delete (Shortcut: Delete key)

Removes any section of the model, or 'cuts' once the cursor is placed on the area. Click the tool located on the left side of the screen, then draw a circle around the area to be deleted. Releasing the left mouse button (LMB) will be deleted automatically.



Smooth Tool (Shortcut: S key)

This tool reduces or increases the texture on the scan. This is indicated by a circle over the restoration when the left mouse button is pressed. Dragging while holding the left mouse button continues to smooth the targeted area on the scan. The strength of the Smooth tool can be adjusted with the Smooth Strength slider.

- Left is for a lighter effect
- Right is for a stronger effect
- 1 being strongest.



Remove Motion Appliance (Shift + M)

A lasso tool, Remove Motion Appliance removes redundant selections.



Scan Filtration Tool

This tool automatically finds imperfections on the scan and cleans up the scan. This will includes noises and distortions caused by scans and appliances. This tool determines the ideal scan and removes the imperfections, debris and appliance marks, but does not check and fix mesh (Not similar to Mesh Dr tool)



Show Grid (Shortcut: G key)

Displays the grid pattern on the scan to better allow for reference and measure.



FreeForm (Shortcut: E key)

Allows deformation of the restoration.



Move Rotate Bite (MRB) (Shortcut: Z key)

Clicking this feature allows for rotation of the scan for various views and directions. Click the arrows or at any point on the desired color and drag up, down, or side to side. Click the icon or hold Z button to rotate



Reroute (Shortcut: T key)

Allows users to make alternative courses for restoration margins, in this way the cervical margin can be rerouted using this tool icon by double-clicking on the margin point, or by using the T hotkey.



**Extend Scans** 

Allows for the user to make and addition or extension to the scans. The reverse of Auto-cut.



Align Using Bite Scan

In the Interactive Bite Alignment stage, this allows for the separation of the case into three screens. The bite scan, the original scan, and combined image. **NOTE:** This icon only appears active if there is a bite scan.

## Right Toolbar Items



This tool completely resets the user's actions and displays the original state of the scans.



Undo/ Redo (Shortcut: Crtl + Z/Shift +Crtl + Z)

The tool undoes a user's action or puts their action back to the previous modification.

Once an action has been performed, click the Undo icon. This includes work on the die itself, even if the die has been created and the user has moved on to the next stage. If the user wants to retrieve that last action, click the Redo icon.



Edit Influence (Shortcut: Crtl + W)

Edit Influence helps the user to easily change the size of the current tool. First, click on Add/Remove/Smooth tool. Second, click on Edit Influence button. Third, move mouse cursor to the scans, press and hold Left Mouse Button while moving mouse up or down.



Fit to View (Shortcut: Crtl + F)

Clicking this button will recenter the scan from whatever magnification or view the user has manipulated the scan to. If you are not able to see scans in the view, use this tool to bring scans back.



Make a Screenshot (Shortcut: P key)

The Screen Shot tool takes a screenshot of the current view displayed, including jaw part, widgets and buttons.



Cross Section (Shortcut: X key)

Takes a cross-section of the restoration, allowing for greater detailed viewing.

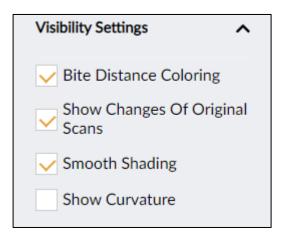


Case Information

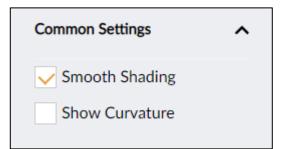
This button, when clicked, displays information about the case. In a scrolling widget,

### Widgets

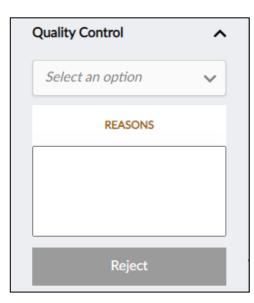
Widgets are apps in the user interface that allow the user to perform specific tasks. Widgets can be hidden in the far corners of the UI, giving the user the option to set the widget in a collapsible panel when not in use. Widgets can be customized and separated by manually dragging them out of the panel. The Widgets available in BASE are as follows:



Visibility Settings is a series of checkboxes that allow the user to select aspects of the restoration by toggling them off and on.



Common Settings concerns itself with the Smooth Shading and Show curvature.

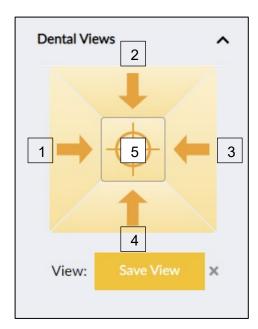


Quality Control offers a quick way for the user to reject a case. To properly use, select the reason for the rejection (i.e. Missing Data, Poor Meshing, etc.), type the specific reasons for the rejection into the Reasons box. Click Reject.

Dental Views is a Widget that allows for quick and instant positioning of the scan, as well as the ability to save the desired scan.

- 1 Set Distal View
- 2 Set Lingual View
- 3 Set Mesial View
- 4 Set Buccal View
- 5 Set Occlusal View

Click Save View to save the current state of the restoration. When selected, the button is changed to Restore View that allows users to instantly switch back to the modified view at any stage of case manipulation.



# Saving and Reloading Views

The application allows users to save a view at any point, as well as recall the views at a later stage.

#### To Save View:

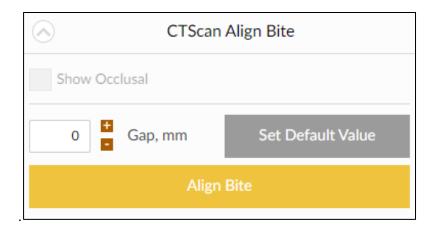
Adjust the image to the desired angle and magnification.

#### Click Save View

The current view will be saved, and the Save View button changes to Restore View.



At any time after the image has been saved, the user can click on Restore View and the image will revert to the saved position. To cancel the restored view and reset the Save View function, click the 'x' just to the right of the button.

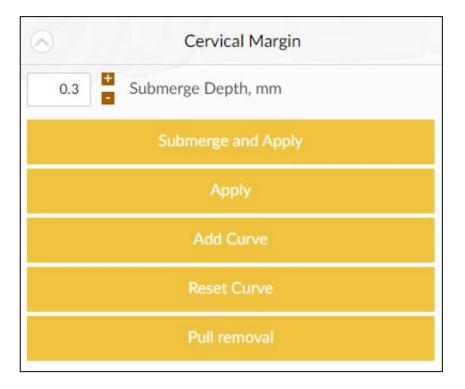


#### Feature Definitions:

## CTScan Align Bite

This widget assures the case's bite is aligned properly. The gap can be specified in increments (of 0.01 millimeters). Otherwise, the alignment is set automatically.

# Cervical Margin Options Window



**Submerge Depth** (in mm) - The depth setting tolerance for creating grooves on submerging margin. Used to increase or decrease the amount of submersion of the tool when in use.

**Submerge and Apply:** Adjusts the scan data by submerging the margin line into scan based on the Submerge Depth parameter that is set in the widget to create grooves.

**Apply:** This will enhance and smooth the surrounding area near the curve line without submerging. Used to help smooth areas in the margin that do not need additional depth added.

**Add Curve:** Ability to start a new margin line to add to the cervical margin.

**Reset Curve:** Removes the curve formation from the scan data.

**Pull Removal:** Removes the pulls and artifacts from the scan when applying the cervical margin curve through the affected data and submerges the margin to the scan.

## **Auto-Cut Settings**



Auto cut applies automatic trimming and cleaning the excessive data from the scan, if auto cut results are not acceptable:

**Revert Upper Mesh Fixes** reverts the adjusted areas on upper scan to the original

**Revert Lower Mesh Fixes** reverts the adjusted areas on Lower scan to the original

**Revert Both Mesh Fixes** reverts the adjusted areas on upper and Lower scans to the original

### **Definitions**

**Action Menu**The Action Menu item allows for the creating of adjustments and modification to the individual case.

**Assigned User** The person who utilizes a computer or network service that is designated by the administrator to do the work.

**BASE** Bite Articulation Scan Evaluator

**Bug** An error, flaw, or fault in the design or operation of the software that results in an incorrect or unexpected result.

**Case** Each restoration, complete with its records and scans.

**Case Reference ID** Commonly called the Case number or Case ID, this is the file name for the restoration case.

**Chairside Mill** A device capable of producing a three-dimensional dental restoration by cutting a block of dental material on site with the customer.

CT Scan A type of x-ray producing three-dimensional images of the teeth and jaw bones.

Doctor The Dentist, often the Dentist's office where the restoration is being performed.

**Drop-Down Menu** A list of options. When the visible item is clicked, other items from the list "drop-down" are shown.

**FD** FastDesign.io software application that allows a user to design restorations.

**Mill** The process of running the chairside mill to cut and shape the block into a restoration.

**PLY** A file format for a three-dimensional object that also supports other properties such as color and transparency of said object.

**Printable Model** The stage of the model of the restoration that is finished and ready to be milled, or 'printed.'

**Queue** A list of cases stored in sequential order ready to be retrieved.

**Restoration** The end product for dental work. Crowns, bridges, veneers, implants, removables are all restorations.

Scan
A digitized image saved into the application, which can subsequently be modified by a computer application.
Single Sign On allows the user to log in once and access services without re-entering authentication factors.

STL A file format for describing the geometry of a three-dimensional object.

Tab A dedicated area at the top of a window that displays another page or area when clicked.

Tag A marker to aid classification, mark ownership, note boundaries, and indicate identity.

**Tool** See Tools Section

**Tooth Chart** Numbering chart system is routinely used in most dental practices for naming teeth, recording dental data, and communicating

among dental professionals.

**UI** User Interface

**User** The individual operating the software.

Status Refers specifically what stage the case is in, to better allow the user to keep track of the case progress.

Widget An app or component of the User Interface that allows the user to perform one or more functions.

**Workflow** An orchestrated and repeatable pattern of activity. A sequence of operations.