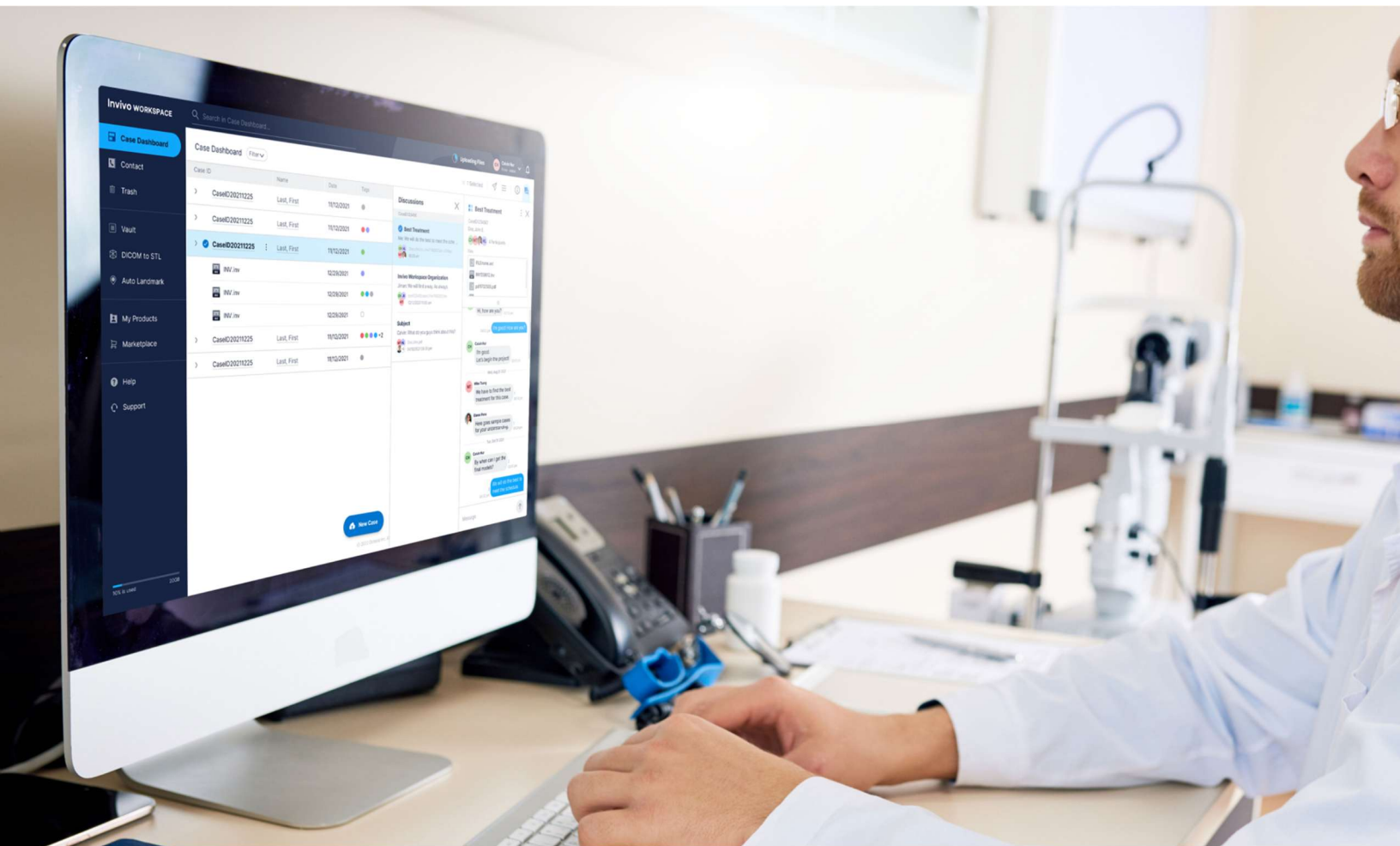


# Invivo WORKSPACE



## Web Viewer 1.5 Instructions for Use



3350 Scott Blvd #29, Santa Clara, CA 95054, U.S.A.  
Tel 408.333.3484 | Fax 408.295.9786 | [www.osteoidinc.com](http://www.osteoidinc.com)

## Warranty Statement

There are no warranties, express or implied, with respect to the contents of this document, and all information provided herein is provided “as is.” Osteoid reserves the right to periodically change the information that is contained in this document; however, Osteoid makes no commitment to provide any such changes in a timely manner or at all.

## Limitation of Liability

In no event shall Osteoid or its affiliates be liable to any party for any direct, indirect, special, or consequential damages in connection with your use of this document, including, without limitation, loss of business revenue or earnings, lost data, damages caused by delays, lost profits, or a failure to realize expected savings, even if Osteoid was expressly advised of the possibility of such damages.

## End of Life Statement

Osteoid is committed to the continuous improvement of Invivo Workspace Web Viewer by utilizing state-of-the-art technology and trends to provide the most comprehensive software for the diagnoses of patients. The “shelf life” of Invivo Workspace Web Viewer software has been defined as 3 years from the release to ensure the highest level of patient care and safety. Notification of software improvements and new releases will be provided to customers to update to the latest version. Previous (older) versions may continue to be utilized, but support may be limited and the software may no longer receive security patches or software updates. If the device remains in service following the end of support, the cybersecurity risks for end-users can be expected to increase over time.

## Trademarks

Osteoid and related marks, images, and symbols are the exclusive properties of, and trademarks of, Osteoid Inc. All other brands and marks are the properties of their respective owners.

## Copyright

Documentation for Invivo Workspace Web Viewer and the operating software are copyrighted with all rights reserved. Under the copyright laws, this documentation may not be reproduced, transmitted, transcribed, or translated into any human or computer language in whole or part without the prior written permission of the copyright holder.

## About Osteoid and Invivo Workspace Web Viewer Software

This version of Invivo Workspace Web Viewer was released as an update to the Invivo Web Viewer 1.0 software from Anatomage, Inc., formerly known as Cloud 3D. In this document, Invivo Workspace Web Viewer refers to the latest version of the Invivo Workspace Web Viewer software. To learn more about Osteoid, access the Osteoid website ([www.Osteoidinc.com](http://www.Osteoidinc.com)).

## Reporting of Serious Events

If the use of this product resulted in, or may have contributed to, a death or a serious deterioration of health, this should be reported to the manufacturer at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).

**Caution:** Federal law restricts this device to sale by or on the order of medical and dental clinicians.

## Intended Use

Invivo Workspace Web Viewer is a software application used for the display and 3D visualization of medical image files from scanning devices, such as CT and MRI. It is intended for use by radiologists, clinicians, referring physicians, and other qualified individuals to retrieve, process, render, review, and assist in diagnosis, utilizing web user interface. Additionally, Invivo Workspace Web Viewer is a preoperative software application used for the planning and evaluation of dental implants placement and surgical treatments.

This device is not indicated for mammography use.

## Indications

Invivo Workspace Web Viewer is a preoperative software application used for the simulation and evaluation of dental implants, orthodontic planning, and surgical treatments.

## Contraindications

None

## Intended Patient Population

Individuals requiring dental implant surgery due to missing or damaged teeth

## Intended User

Invivo Workspace Web Viewer is designed to be used by medical and dental professionals who have been appropriately trained to use 3D CT imaging devices and read the image data generated by the devices.

## Clinical Benefits

Invivo Workspace Web Viewer provides indirect benefits through accurate medical information of patients and by allowing medical professionals to take measurements to plan surgical procedures.

## Measurement Accuracy

Invivo Workspace Web Viewer's measurement functionality has been verified to be accurate up to  $\pm 0.10$  mm. However, measurement accuracy depends on the image data and the hardware scanner that generated the image data. The measurement cannot be more precise than the resolution of the image. Software reports the value based on user-picked points. Due to the nature of medical imaging, the boundary is not always well defined. The apparent boundary depends on the current brightness and contrast setting. The boundary may shift as the user makes adjustments to brightness and contrast. The user must understand the limitation of the measurement value before applying to the patient. Any measurement that is incorrect can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based on the incorrect measurements. It is critical for the end user to learn how to perform measurements correctly and employ proper usage of all measurement tools. If you notice any inconsistencies or software problems with measurements, or have further questions or concerns about using measurement tools correctly, please contact us at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).

## Required Training

Prior to any clinical applications using Invivo Workspace Web Viewer, user is recommended to take training and practice for the following content:

View digital image in 2D and 3D; image operations such as pan, zoom, brightness/contrast adjustment; place implant at given location; move and rotate implant; and change implant parameters. The user is recommended to contact Osteoid technical support for a full software training at 408-333-3484 ext. 4.

## Security Precautions

- Restrict access by requiring a username and password in operating system security settings. Only assign login credentials to trusted individuals within your organization. Refer to operating system website or customer support for instructions.
- Ensure that system restore and backup functionality is enabled. The ability to toggle system restore and backup should be restricted to system administrators.
- Enable multi-factor authentication where possible.
- Use cybersecurity controls such as a firewall, anti-virus, anti-malware, etc.
- Invivo Workspace Web Viewer requires internet access for license verification. Ensure that the network you will be using with the software is secure.
- To set up the controls recommended above, contact your internal IT team, operating system manufacturer, internet service provider (ISP), modem/router manufacturer, or refer to manufacturer website/documentation.
- Customers who purchase and use Invivo Workspace Web Viewer are ultimately responsible for the implementation of safe and secure practices for the protection of patient data.
- Note: To request a copy of the Invivo Workspace Web Viewer Software Bill of Materials (SBOM), or the list of data ports used by the software, e-mail [support@osteoidinc.com](mailto:support@osteoidinc.com)

## Physical Copy of User Manual

To request physical copies of this or any user manual listed on <https://learn.osteoidinc.com/invivo-user-manuals>, please e-mail [support@osteoidinc.com](mailto:support@osteoidinc.com).

## General Precautions



Warning: The software provides tools for dental implant planning but is dependent on the user to determine and use the appropriate parameters. Incorrect parameters may affect the quality of the final milled products or otherwise to surgical delays or complications.



Warning: Incorrect image orientation may cause surgical delays or complications. The software orients the scan based on the inherent scan information and clearly labels the directionality. However, the software should only be used by licensed clinicians familiar with dental and medical imaging who can best identify any discrepancies with scan orientation in the software.



Warning: Please ensure all hardware devices with the software are password-protected from unauthorized use and all patient information is secure.



Warning: Implant planning must be performed by a trained healthcare professional for proper implant placement relative to the patient's anatomy. Implant angulation, divergence, location, and depth should abide by the implant manufacturer's instructions for use and placement parameters.

# Table of Contents

<b>Table of Contents .....</b>	<b>5</b>
<b>Introduction.....</b>	<b>7</b>
<b>System Requirements.....</b>	<b>8</b>
<b>Signing into Invivo Workspace / Signing out of Invivo Workspace .....</b>	<b>9</b>
Sign-In .....	9
Sign-Out.....	10
<b>Viewing a File.....</b>	<b>11</b>
Viewing a File .....	11
<b>Feature List.....</b>	<b>12</b>
<b>Software Layout .....</b>	<b>13</b>
<b>Image Navigation .....</b>	<b>14</b>
Slider Scroll .....	14
Zoom In/Out.....	14
Pan (Shift) .....	14
Free Rotate.....	15
Free Rolling.....	15
Clipping .....	15
Scroll Slice.....	16
<b>Section View Features .....</b>	<b>17</b>
Section: Toolbar .....	18
Section: Control Panel.....	20
Section: Rendering Window .....	21
<b>ArchSection View Features .....</b>	<b>22</b>
ArchSection: Toolbar .....	23
ArchSection: Control Panel.....	24
ArchSection: Rendering Window .....	25
<b>Implant View Features .....</b>	<b>26</b>
Implant: Toolbar .....	27
Implant: Control Panel.....	29
Implant: Rendering Window .....	30
<b>Model View Features.....</b>	<b>31</b>
Model: Toolbar.....	32
Model: Control Panel .....	33
Model: Rendering Window.....	34

Model: Model Settings .....	35
Model: Custom View Preset Setup .....	36
<b>Gallery View Features .....</b>	<b>37</b>
Gallery: Toolbar .....	38
Gallery: Control Panel.....	38
<b>Invivo Workspace Web Viewer Troubleshooting .....</b>	<b>39</b>
<b>Index.....</b>	<b>40</b>

# Introduction

## *Invivo Workspace Web Viewer Imaging Software*

Osteoid, Inc. is a medical imaging company composed of a cross-functional team consisting of the most elite researchers, mathematicians, engineers, software developers, business analysts, industry leaders, academic faculty, and dental specialists. Ultimately, our mission is dedicated to developing simple and refined software specially designed for dentists to utilize the most advanced cutting-edge software and technology to better serve their patients. With our software, doctors can create 3D volume renderings on their own computers, get cross sections, trace nerves, place implants, print images, save images, and many more functions. The software is designed to reconstruct these 3D volume renderings from DICOM files generated by CBCT, Medical CT, and MRI radiography machines. Invivo Workspace Web Viewer is intended for use for the planning and evaluation of dental implants placement and surgical treatments.

This manual is intended to provide supplementary information to your direct training with the Osteoid support team. For correct and safe use, training is available to all Invivo Workspace Web Viewer users and is highly recommended. In this document, Invivo Workspace Web Viewer refers to the latest version of the Invivo Workspace Web Viewer software. For more information, please contact the Osteoid customer support team at (408) 333-3484 or email [support@osteoidinc.com](mailto:support@osteoidinc.com)

# System Requirements

*Below are the minimal and recommended system configurations.*

The Invivo Workspace Web Viewer is a browser-based application and requires Internet access.

Osteoid recommends the following configurations to fully utilize all the features within the Invivo Workspace Web Viewer.

## Summary

	Recommended
HTML5 Compatible Browser	Firefox 92.0 and later Google Chrome 94.0 and later Microsoft Edge 14 and later Apple Safari 15 and later
Hardware	Refer to your browser's manufacturer for recommended computer requirements, but at minimum:  Intel i3 Core or equivalent 8GB RAM
Display	Minimal resolution of 800 x 600 pixels

***Note: If the browser does not match the above, there may be some display differences or discrepancies.***

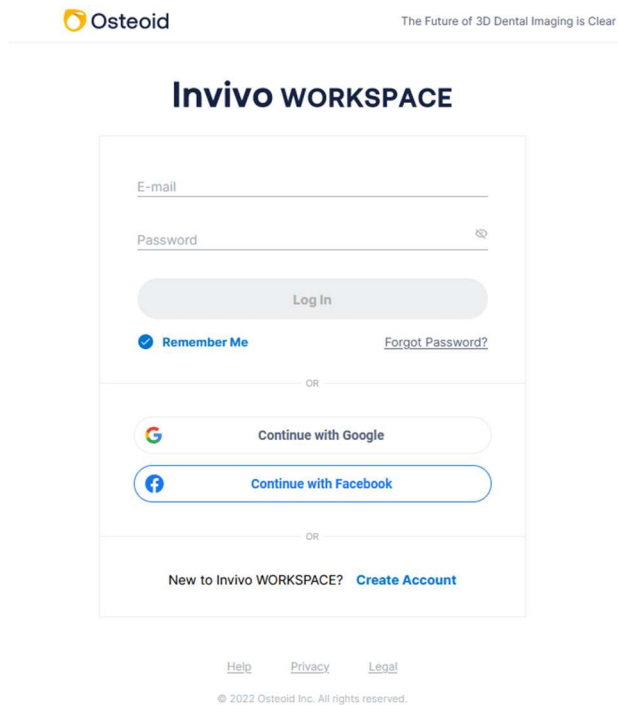


# Signing into Invivo Workspace / Signing out of Invivo Workspace

Access Invivo Workspace Web Viewer by signing into Invivo Workspace

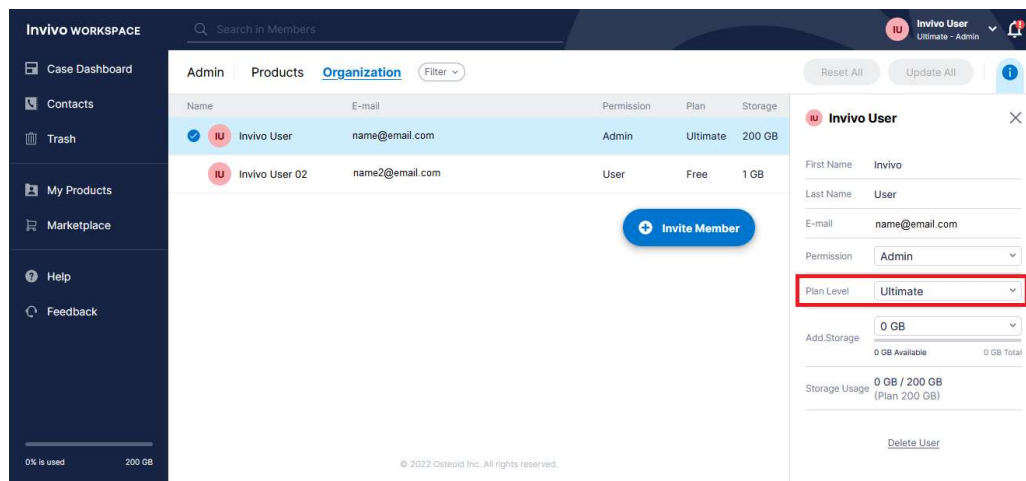
## Sign-In

1. Login into your Invivo Workspace account at <https://www.invivoworkspace.com/signin>.
2. Type in your login credentials. If you have not created an account yet, please click “Create Account” and follow the instructions.



The image shows the Invivo Workspace sign-in page. At the top, the Osteoid logo is on the left and the tagline "The Future of 3D Dental Imaging is Clear" is on the right. Below this is the "Invivo WORKSPACE" heading. The sign-in form includes fields for "E-mail" and "Password" with a "Log In" button. There are checkboxes for "Remember Me" and a link for "Forgot Password?". Below the form are options to "Continue with Google" and "Continue with Facebook". At the bottom, there is a link to "Create Account" for new users. The footer contains links for "Help", "Privacy", and "Legal", and a copyright notice for 2022 Osteoid Inc.

3. As an Admin, find your email username in the Organization list. In the Information Panel, assign yourself an Invivo One plan in the “Plan Level” section.

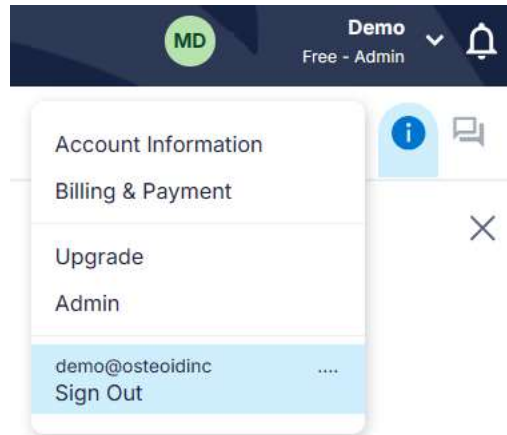


The image shows the Invivo Workspace interface. On the left is a sidebar with navigation links: Case Dashboard, Contacts, Trash, My Products, Marketplace, Help, and Feedback. The main area displays the "Organization" tab with a table of users. The table has columns for Name, E-mail, Permission, Plan, and Storage. Two users are listed: "Invivo User" (Admin, Ultimate, 200 GB) and "Invivo User 02" (User, Free, 1 GB). An "Invite Member" button is visible. On the right, the "Invivo User" information panel is open, showing details for the selected user. The "Plan Level" dropdown is highlighted with a red box, showing "Ultimate". Other fields include First Name, Last Name, E-mail, Permission, Add Storage, and Storage Usage.

Name	E-mail	Permission	Plan	Storage
Invivo User	name@email.com	Admin	Ultimate	200 GB
Invivo User 02	name2@email.com	User	Free	1 GB

## Sign-Out

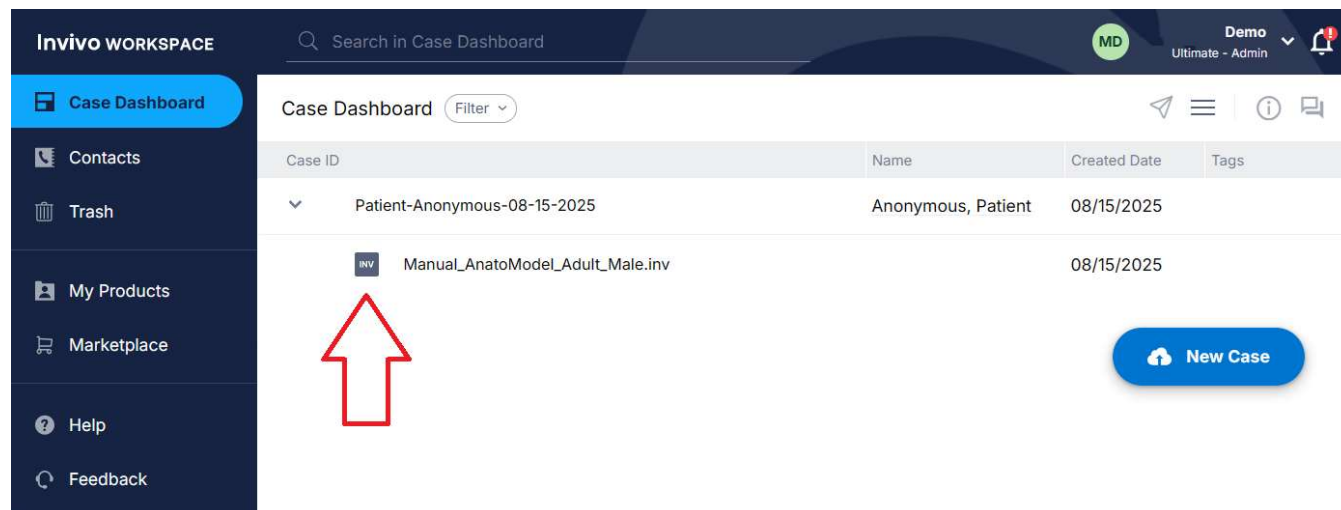
1. Click on your name in the upper-right corner
2. Click “Sign Out” to sign-out of your account



# Viewing a File

## Viewing a File

1. Within the Case Dashboard, click on the file's icon to launch Invivo Workspace Web Viewer.



The screenshot displays the Invivo Workspace interface. On the left is a dark sidebar with navigation links: Case Dashboard (highlighted), Contacts, Trash, My Products, Marketplace, Help, and Feedback. The main area is titled 'Case Dashboard' and contains a table with columns: Case ID, Name, Created Date, and Tags. A dropdown arrow is next to the Case ID 'Patient-Anonymous-08-15-2025'. Below this, a file entry is shown with a small 'inv' icon, the filename 'Manual\_AnatoModel\_Adult\_Male.inv', and the date '08/15/2025'. A large red arrow points to this file icon. In the bottom right corner, there is a blue button labeled 'New Case' with a cloud icon.

Case ID	Name	Created Date	Tags
▼ Patient-Anonymous-08-15-2025	Anonymous, Patient	08/15/2025	
	Manual_AnatoModel_Adult_Male.inv	08/15/2025	

# Feature List

*An overview of the various features provided by Invivo Workspace Web Viewer.*

- **Scan Visualization**
- **Section View Operations**
- **Volume Rendering of Scan Data**
- **Linear and Angular Measurements\***
- **Implant, Abutment, and Restoration Visualization**
- **Invivo Model and Simulation Display**
- **Gallery Image Display**

\*All measurements are performed with the metric system.

# Software Layout

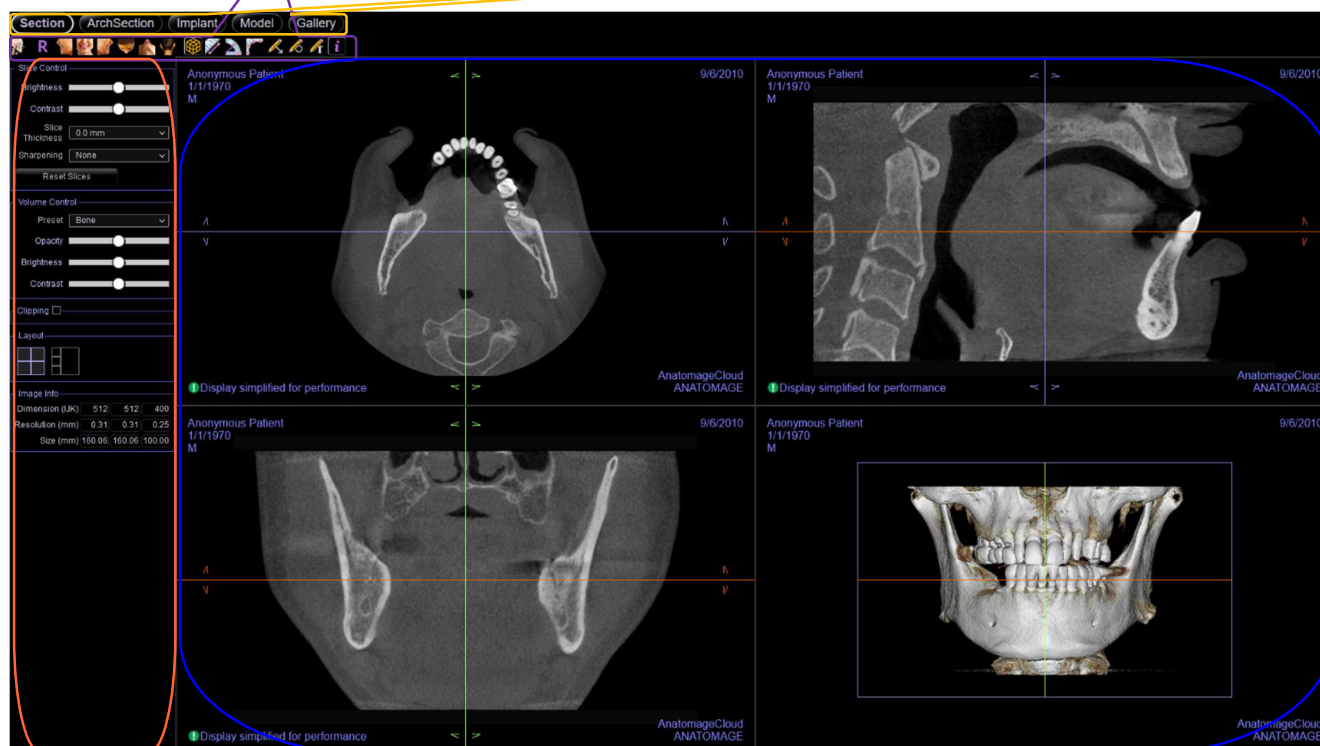
The following is a description of how Invivo Workspace Web Viewer is organized by **Toolbar**, **View Control Panel**, and **Rendering Window**.

## Toolbar

Tools can be accessed to perform certain functions on patient images.

## View Tabs

The **View Tabs** perform specific tasks or look at specific subjects of interest by adjusting the **Toolbar** and **View Controls**.



## Control Panel

The **Control Panel** is the region where patient images can be manipulated and controlled. The **Control Panel** is associated with a specific **View Tab**.

## Rendering Window

**Rendering Window** is the region where patient images are displayed. This window can be customized within many of the **View Tabs** by using the **Toolbar**.

# Image Navigation

*Below is an explanation showing how to manipulate images in the rendering window with the keyboard and mouse.*

## Slider Scroll



- Click and drag the slider (e.g. opacity, brightness, etc.) to adjust the image.
- Click the slider header text to reset the slider to the center position.

## Zoom In/Out

- Place the mouse cursor in the center of the image you want to zoom.
- Hold down the “Control” key + left-button on the mouse.
- While holding down the buttons indicated above, move the mouse up and down on the screen.
- This shrinks/enlarges the image: Down vertically zooms out. Up vertically zooms in.



## Pan (Shift)

- Place the mouse cursor in the center of the image you want to shift.
- Hold down the “Shift” key + left-button on the mouse.
- While holding down the buttons indicated above, move the mouse any direction to achieve the desired image displacement.



## Free Rotate

*Applicable only for 3D images.*

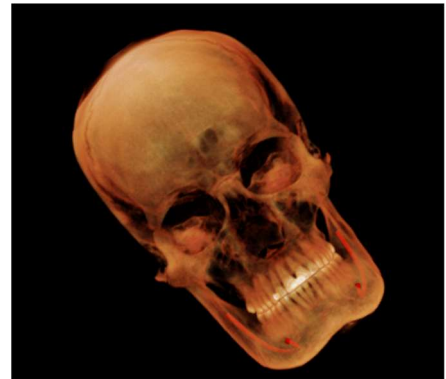
- Place the mouse cursor in the center of the image you want to shift. Hold down the left-button on the mouse.
- While holding down the left-button, move the mouse in any direction to achieve the desired rotational position.



## Free Rolling

*Applicable only for 3D images.*

- Hold down the “Space” key + left-button on the mouse.
- While holding down the buttons indicated above, move the mouse up and down to rotate the image about a central axis.



## Clipping

*Applicable only for 3D images.*

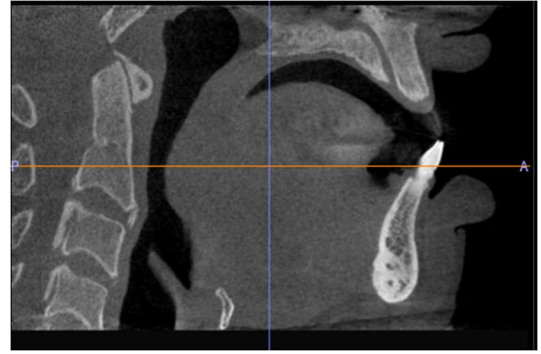
- Place the mouse cursor over the center of the image, then scroll the mouse wheel forward or backward to clip the anatomic plane as you like (after enabling clipping in the Control Panel).



## Scroll Slice

Use when you would like to move through the series of sections when in the 2D slice views.

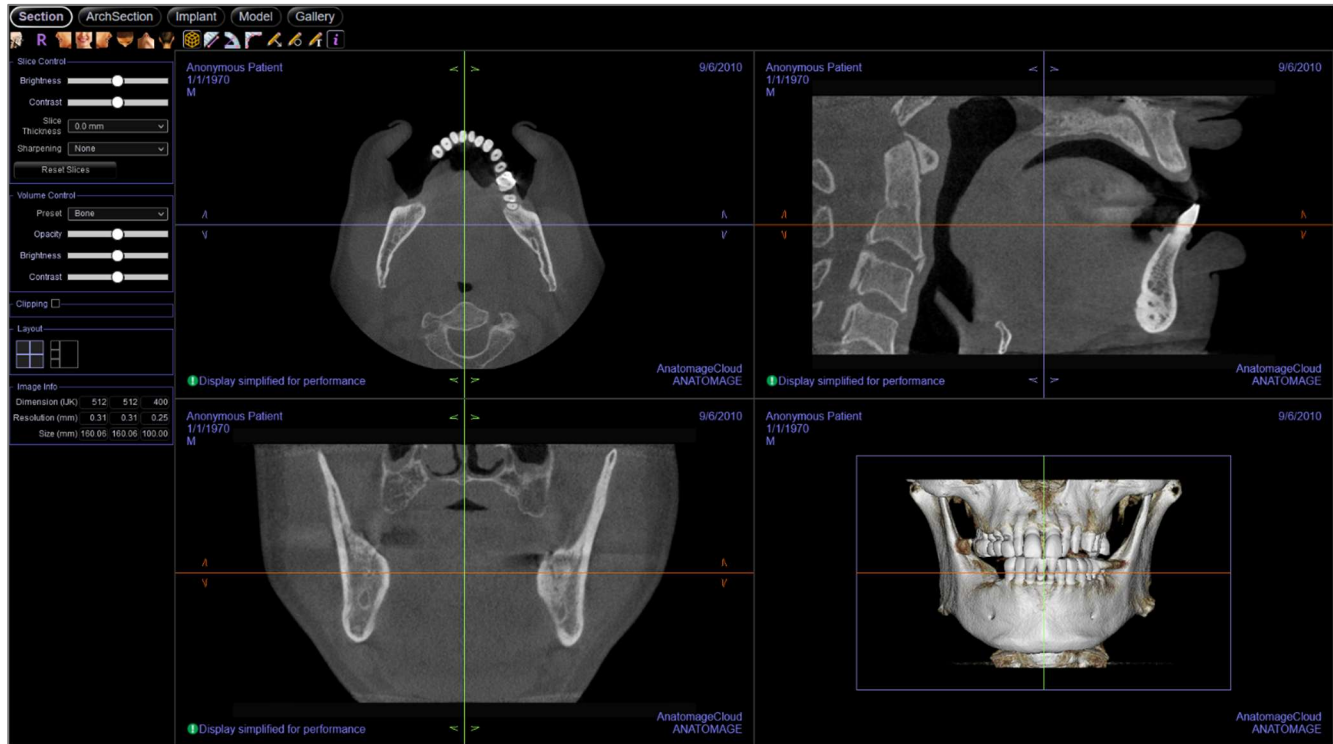
- Place the mouse cursor in the center of the image then scroll the mouse wheel forward or backward to move one section at a time as you advance through the data slices.





# Section View Features

The **Section View Tab** gives the ability to view the X, Y, and Z sections (axial, coronal, sagittal) simultaneously for 2D visualization, measurements, and the utilization of several image enhancement features. *Invivo Workspace Web Viewer* also integrates 3D functions in the Section View Tab.



## Section: Toolbar

*The following is a detailed explanation of the various features provided by Invivo Workspace Web Viewer:*



**About:** Displays the software version information.



**Reset Zoom:** Resets the rendering window to the original view size.



**Left:** Automatically orients the volume in a left sagittal view.



**Front:** Automatically orients the volume in a front view.



**Right:** Automatically orients the volume so the patient is facing right sagittal.



**Top:** Automatically orients the volume in a top-down view.



**Bottom:** Automatically orients the volume in a bottom-up view.



**Back:** Automatically orients the volume to the posterior view.



**Toggle Cursor Visibility:** Conceals or displays cursors.



**Distance Measurement:** After selecting this tool, click two points to mark the desired distance. A number in millimeters will automatically display. Click on the measurement and press the “delete” key to delete it. Measurements can only be created on the 2D slice views.



**Angle Measurement:** After selecting this tool, click the first point, then click the vertex, then click the last point to create an angle. A number in degrees automatically displays. Click on the measurement and press the “delete” key to delete it.



**Polyline Measurement:** Select this option and mark any number of points in the slice view. Right-click to end the measurement, and the total distance appears. Clicking on the nodes and moving the cursor can modify points. Click on the measurement and press the “delete” key to delete it.



**Arrow Notation:** Allows an arrow to be drawn on the image.



**Circle Notation:** Allows a circle to be drawn on the image.



**Text Notation:** Allows text to be written and edited on the image.



**Information Display:** Displays or hides case information embedded in the data.



Warning: Invivo Workspace Web Viewer's measurement functionality has been verified to be accurate up to  $\pm 0.10$  mm. However, measurement accuracy depends on the image data and the hardware scanner that generated the image data. The measurement cannot be more precise than the resolution of the image. Software reports the value based on user-picked points. Due to the nature of medical imaging, the boundary is not always well defined. The apparent boundary depends on the current brightness and contrast setting. The boundary may shift as the user makes adjustments to brightness and contrast. The user must understand the limitation of the measurement value before applying to the patient. Any measurement that is incorrect can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based on the incorrect measurements. It is critical for the end user to learn how to perform measurements correctly and employ proper usage of all measurement tools. If you notice any inconsistencies or software problems with measurements, or have further questions or concerns about using measurement tools correctly, please contact us at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).

## Section: Control Panel

The Control Panel is divided into several sections:

- Slice Control:**
  - Brightness: Slider (set to approximately 80%)
  - Contrast: Slider (set to approximately 50%)
  - Slice Thickness: 0.0 mm (dropdown menu)
  - Sharpening: None (dropdown menu)
  - Reset Slices: Button
- Volume Control:**
  - Preset: Bone (dropdown menu)
  - Opacity: Slider (set to approximately 50%)
  - Brightness: Slider (set to approximately 50%)
  - Contrast: Slider (set to approximately 50%)
- Clipping:**
  - ☒ Clipping
  - ☐ Flip: Full Half (dropdown menu)
  - ☐ Sagittal, ☒ Axial, ☐ Coronal, ☐ Arch
  - Clipping plane position: Slider (set to approximately 50%)
- Layout:**
  - Layout icons: 2x2 grid, 2x1 grid, 1x2 grid, 1x1 grid
- Image Info:**
  - Dimension (IJK): 512, 512, 400
  - Resolution (mm): 0.31, 0.31, 0.25
  - Size (mm): 160.1, 160.1, 100.0

### Slices Control

- **Brightness & Contrast:** Can be adjusted for each of the presets to enhance the image.
- **Slice Thickness:** Uses ray sum when reconstructing the 3D image along each orthogonal plane.
- **Sharpening:** Applies the selected sharpening filter from the drop-down menu to the 2D slice renderers.
- **Reset Slices:** Resets the orientation of the 2D slices altered with the rotation widgets to the scan orientation.

### Volume Control

- **Preset:** Sets the rendering type of the 3D volume.
  - **Bone:** Shows a realistic view of patient anatomy
  - **Teeth:** Shows a translucent skeletal view highlighting the teeth, roots, and bone
  - **Soft Tissue:** Shows translucent soft tissue
  - **Soft Tissue+Teeth:** Combines the Teeth and Soft Tissue renderings
- **Opacity:** Adjusts the translucency of the volume
- **Brightness & Contrast:** Can be adjusted for each of the presets to enhance the image.

### Clipping

- Check the “Clipping” box to slice the image along the predefined anatomical planes (sagittal, axial, coronal, and arch) and to reveal the clipping options.
- To switch the clip to the opposite side, click “Flip.”
- Select the amount of volume to clip in the drop-down menu.
- Scrolling the mouse wheel or slider moves the clipping plane.

### Layout

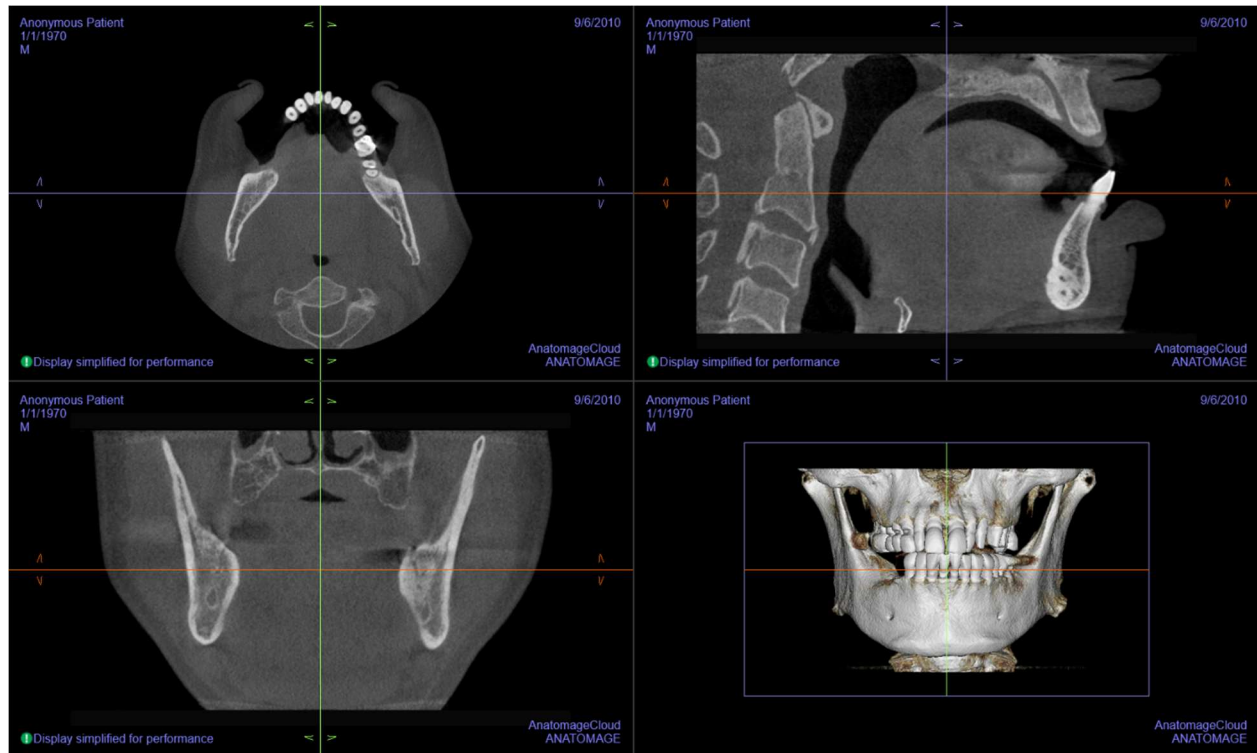
- Toggle between the available layout options.

### Image Info

- Dimension, resolution, and field of view size are summarized.
- **Warning:** Images may be resampled for browser display optimization. Resampled images may not be the same size and resolution or contain the same details as the original scan and are indicated in the rendering window.

## Section: Rendering Window

This window allows viewing of the X, Y, and Z sections (axial, coronal, sagittal) and custom sections or a 3D view simultaneously. This allows the clinician to have very accurate 2D visualization and 2D measurements.



**Scroll wheel:** Move mouse pointer to the desired cross section. Use the scroll wheel to move the slice up and down.

**Cursor:** Grab one of the cursors (axial, sagittal or coronal). Move the cursor in the desired direction. The corresponding image is updated.

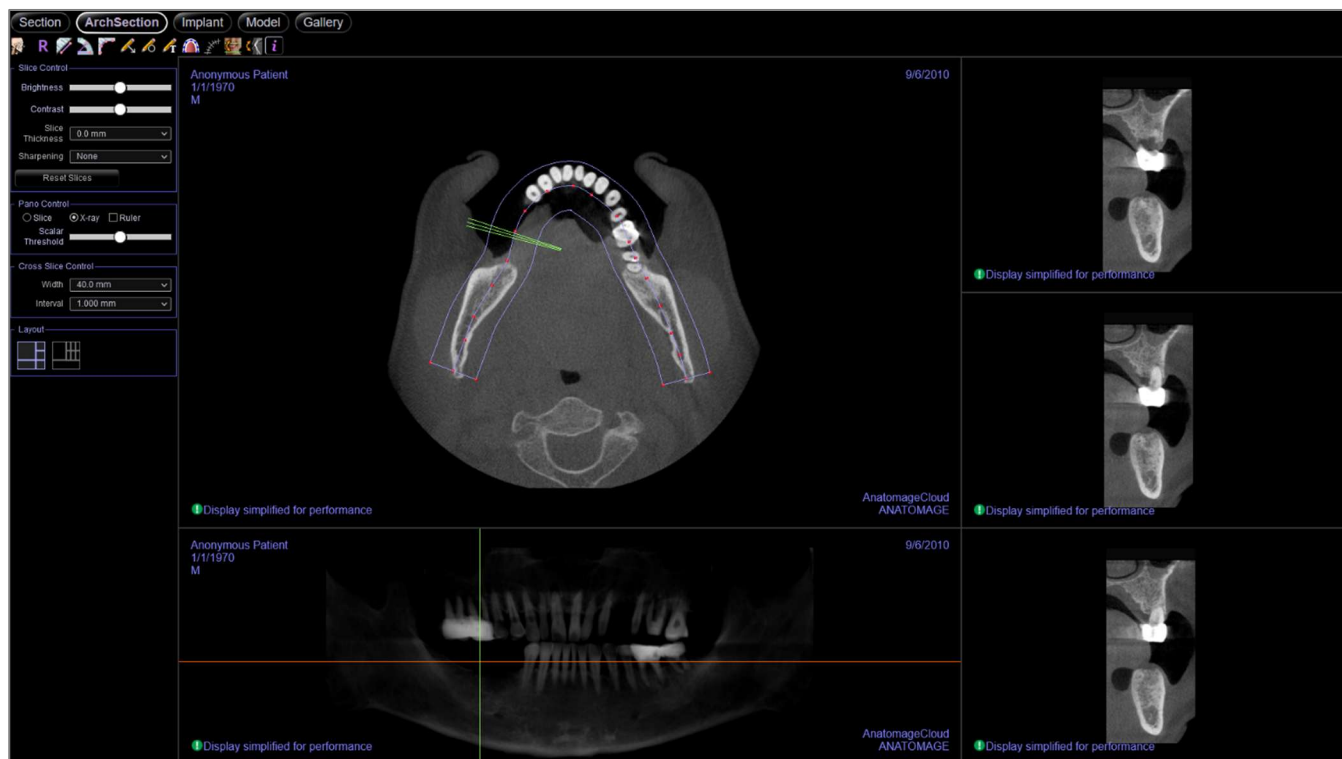
**Zoom:** Click and hold the left-click mouse button on the image and the “Ctrl” key on the keyboard. Drag the mouse cursor up and down to zoom in and out.

**Pan:** Click and hold the left-click mouse button on the image and the “Shift” key on the keyboard. Drag the mouse cursor to move the image.

**Reorientation:** Click and drag the arrow widgets to reorient the scan. Changes in orientation only apply in the Section tab

# ArchSection View Features

*ArchSection View Tab is a sectional image exploration view. Instead of conventional X-Y-Z sections, this view allows the user to review the image in dentally meaningful perspectives using multiple cross sections, traversing the lengths of the dental arches.*



## ArchSection: Toolbar

Shown below are the Toolbar and tools that are loaded with the ArchSection Tab:



**About:** Displays the software version information.



**Reset:** Resets the window to the original view.



**Distance Measurement:** After selecting this tool, click two points to mark the desired distance. A number in millimeters automatically displays.



**Angle Measurement:** Select this option and mark three points on the volume, and the angle between them appears. Clicking on their control points and moving the cursor can modify measurements. Click on the measurement and press the “delete” key to delete it.



**Polyline Measurement:** Select this option and mark any number of points in the slice view. Right-click to end the measurement, and the total distance appears. Clicking on the nodes and moving the cursor can modify points. Click on the measurement and press the “delete” key to delete it.



**Arrow Notation:** Allows an arrow to be drawn on the image.



**Circle Notation:** Allows a circle to be drawn on the image.



**Text Notation:** Allows text to be written and edited on the image.



**Create Arch Spline:** After selecting this tool, create a new arch spline or edit an existing arch spline. Left-click to place nodes along the arch. Right-click or double-click to finish the arch spline. To modify an existing arch spline, drag the nodes to the desired positions. To move the arch while maintaining its shape, click and drag the central spline.



**Arch Spline Ruler:** Places ruler along the arch spline for easy reference.



**Reorientation:** Adjusts the patient orientation and the visible range of the scan.



**Rotate Cross Section:** Adjusts the patient orientation in the cross sections.



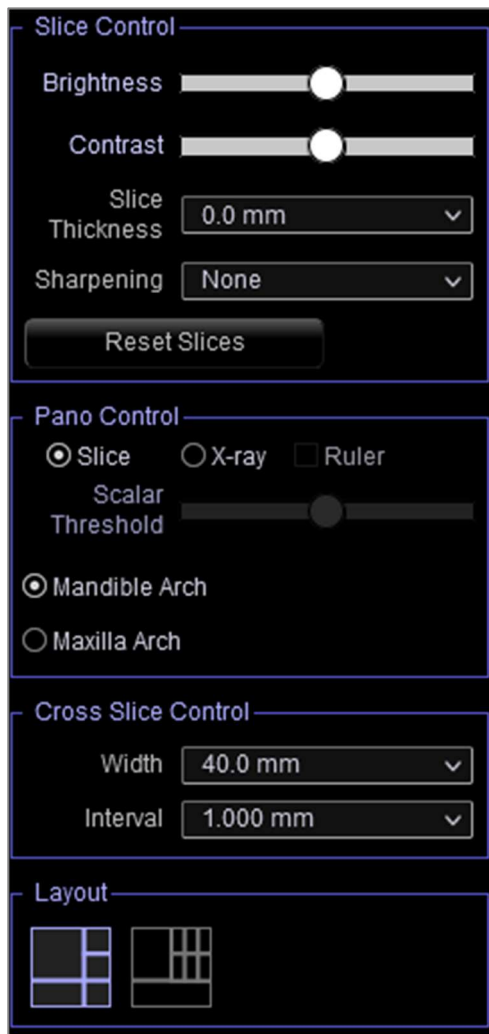
**Information Display:** Displays or hides case information embedded in the data.



Warning: Invivo Workspace Web Viewer's measurement functionality has been verified to be accurate up to  $\pm 0.10$  mm. However, measurement accuracy depends on the image data and the hardware scanner that generated the image data. The measurement cannot be more precise than the resolution of the image. Software reports the value based on user-picked points. Due to the nature of medical imaging, the boundary is not always well defined. The apparent boundary depends on the current brightness and contrast setting. The boundary may shift as the user makes adjustments to brightness and contrast. The user must understand the limitation of the measurement value before applying to the patient. Any measurement that is incorrect can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based on the incorrect measurements. It is critical for the end user to learn how to perform measurements correctly and employ proper usage of all measurement tools. If you notice any inconsistencies or software problems with measurements, or have further questions or concerns about using measurement tools correctly, please contact us at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).



## ArchSection: Control Panel



### Slice Control

- Brightness and Contrast can be used to adjust the image.
- Slice Thickness: Allows for the cumulative thickness of the slices to be viewed in the cross sections.
- Sharpening applies the selected sharpening filter from the drop-down menu to the 2D slice renderers.
- Reset Slices: Resets slice rotation if applied.

### Pano Control

- Slice mode displays a single cross section along the panoramic curve (blue).
- X-ray shows the ray sum (reconstructed x-ray) in the focal trough.
- Ruler: Displays a ruler on the bottom of the panoramic image.
- Maxillary Arch and Mandibular Arch options allow two different arch splines to be viewed. Switching between the two options changes which spline is manipulated and used in creating the panoramic and cross sections. These options are only available if the uploaded case has different arch splines created.

### Cross Slice Control

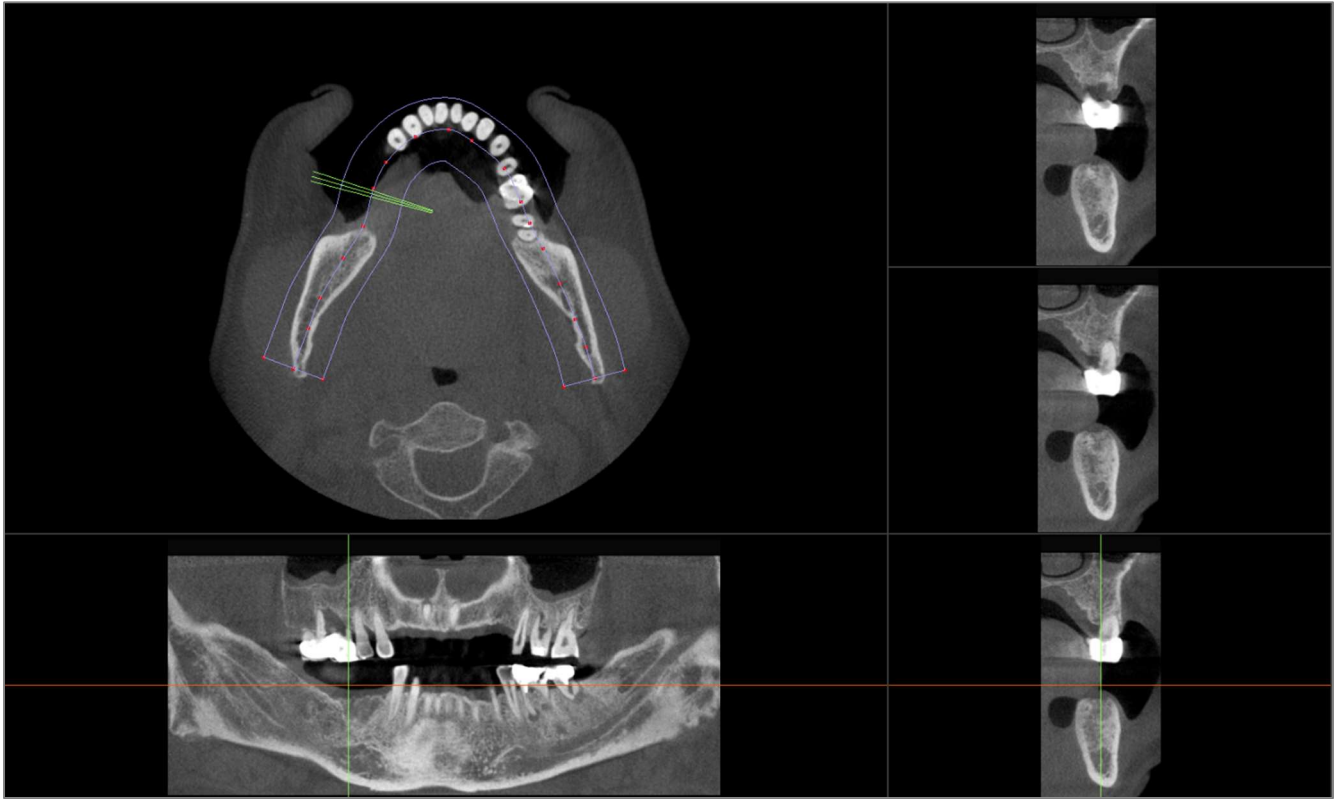
- Width: Cross-section width.
- Interval: Distance between the subsequent cross sections.

### Layout

- Toggle between the available layout options.



## ArchSection: Rendering Window

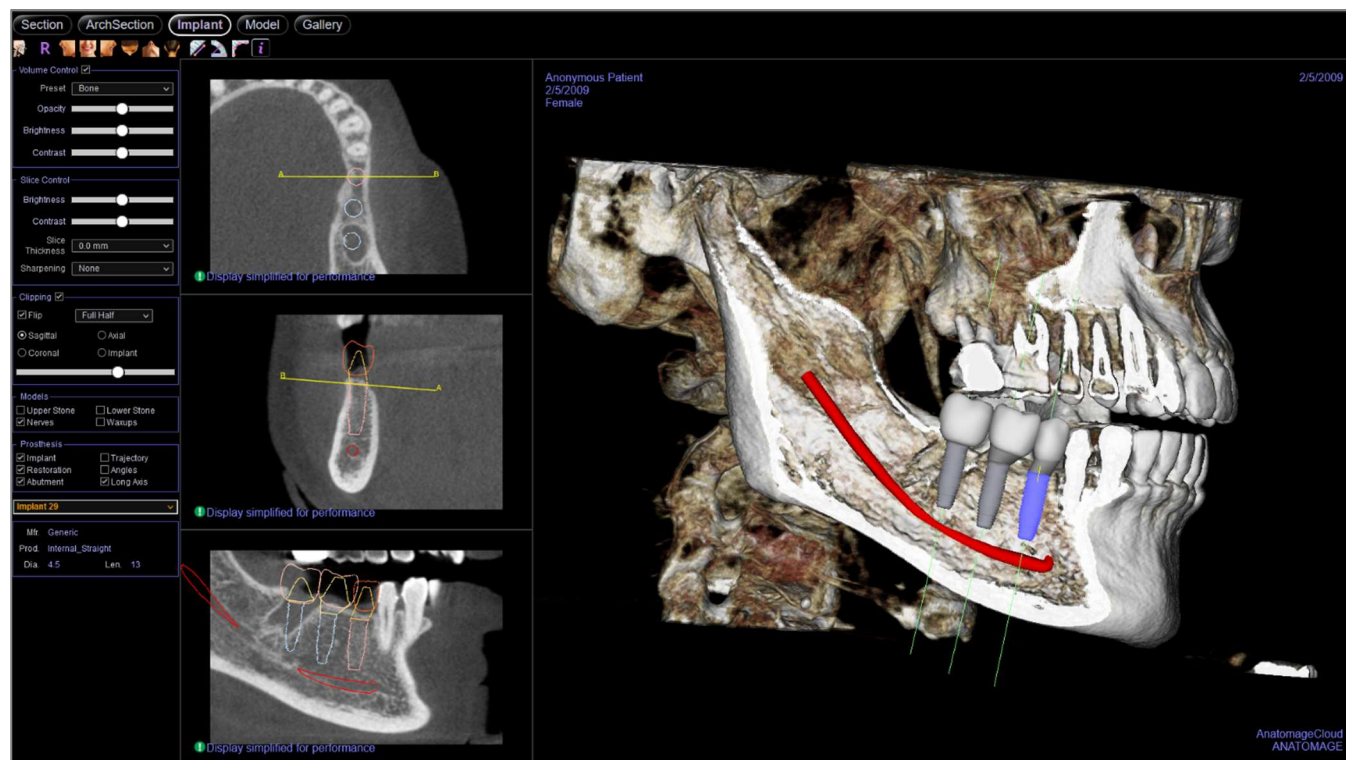


**Arch Cursor:** Notice the green, orange, and yellow coordinate indicators. These ArchSection coordinate indicators show the spatial location within the ArchSection rendering window.

- **Cross Section Indicator:** The green lines give the location of the cross sections along the arch spline.
- **Axial Slice Indicator:** The orange line shows the axial coordinate position within the section.
- **Arch Spline:** The yellow spline in the center of the arch spline represents the current position where the arch section has moved.
- **Cross Section:** Mouse scrolling within any one of the three sagittal frames advances the slices to the patient's right or left and causes the green coordinate indicator to move mesial or distally in the axial and pano sections simultaneously.
- **Axial Section:** Mouse scrolling within the axial section advances the sections superiorly or inferiorly and causes the orange coordinate indicator to move superiorly or inferiorly in the cross or pano sections simultaneously.
- **Pano Section:** Mouse scrolling within the coronal frame advances the slices buccally or lingually and causes the yellow coordinate indicator to move buccally or lingually in the axial and cross sections simultaneously.

# Implant View Features

The **Implant View Tab** contains implant information and views for reviewing existing implant plans.



## Implant: Toolbar

Shown below are the Toolbar and tools that are loaded with the Implant View Tab:



**About:** Displays the software version information.



**Reset Zoom:** Resets the rendering window to the original view size.



**Left:** Automatically orients the volume in a left sagittal view.



**Front:** Automatically orients the volume in a front view.



**Right:** Automatically orients the volume so the patient is facing right sagittal.



**Top:** Automatically orients the volume in a top-down view.



**Bottom:** Automatically orients the volume in a bottom-up view.



**Back:** Automatically orients the volume to the posterior view.



**Distance Measurement:** After selecting this tool, click two points to mark the desired distance. A number in millimeters will automatically display. Click on the measurement and press the “delete” key to delete it. Measurements can only be created on the 2D slice views.



**Angle Measurement:** After selecting this tool, click the first point, then click the vertex, then click the last point to create an angle. A number in degrees automatically displays. Click on the measurement and press the “delete” key to delete it.



**Polyline Measurement:** Select this option and mark any number of points in the slice view. Right-click to end the measurement, and the total distance appears. Clicking on the nodes and moving the cursor can modify points. Click on the measurement and press the “delete” key to delete it.



**Information Display:** Displays or hides case information embedded in the data.



Warning: Invivo Workspace Web Viewer's measurement functionality has been verified to be accurate up to +/- 0.10 mm. However, measurement accuracy depends on the image data and the hardware scanner that generated the image data. The measurement cannot be more precise than the resolution of the image. Software reports the value based on user-picked points. Due to the nature of medical imaging, the boundary is not always well defined. The apparent boundary depends on the current brightness and contrast setting. The boundary may shift as the user makes adjustments to brightness and contrast. The user must understand the limitation of the measurement value before applying to the patient. Any measurement that is incorrect can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based on the incorrect measurements. It is critical for the end user to learn how to perform measurements correctly and employ proper usage of all measurement tools. If you notice any inconsistencies or software problems with measurements, or have further questions or concerns about using measurement tools correctly, please contact us at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).



Warning: Any implant planning that is performed incorrectly in any aspect including but not limited to implant location, orientation, angle, diameter, length, and/or manufacture can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based off of the implant planning error(s) in question. It is critical for the end user to learn how to use the implant treatment planning tools correctly. If you notice any inconsistencies or software problems with implant planning or have further questions or concerns about correct utilization of implant planning, please contact Osteoid support at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com)

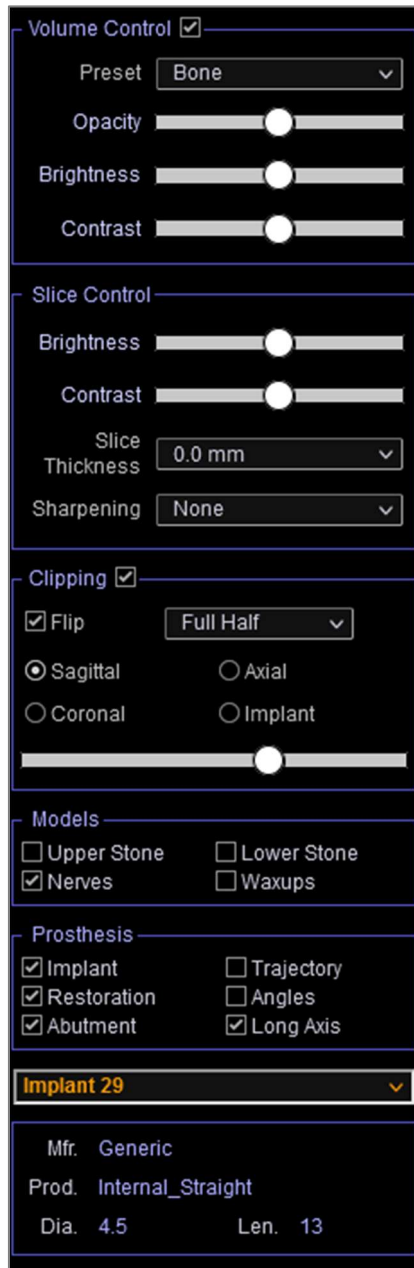


Warning: Implant planning must be performed by a trained healthcare professional for proper implant placement relative to the patient's anatomy. Implant angulation, divergence, location, and depth should abide by the implant manufacturer's instructions for use and placement parameters.



Warning: Any nerve that is traced in a way that does not conform to the actual pathway of the nerve can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based off of the incorrect tracing. It is critical for the end user to learn how to properly perform nerve tracings correctly. If you notice any inconsistencies or software problems with nerve tracing or have further questions or concerns about nerve tracing, please contact Osteoid support at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com)

## Implant: Control Panel



### Volume Control:

- **Rendering Preset:** Different settings allow for better visualization of certain anatomic structures, soft tissue profiles, hard tissue, etc. This is achieved by displaying specific densities with specific colors.
- **Opacity:** Allows for the translucency/opacity to be adjusted.
- **Brightness & Contrast:** Can be adjusted for each of the presets to enhance the image.
- **Visible:** Allows the 3D Volume Rendering to be turned on or off from view.

### Slice Control

- **Brightness and Contrast** can be used to adjust the image.
- **Slice Thickness:** Allows for the cumulative thickness of the slices to be viewed in the cross sections.
- **Sharpening:** Applies the selected sharpening filter from the drop-down menu to the 2D slice renderers.

### Clipping

- Check the “Clipping” box to slice the image along the predefined anatomical planes (sagittal, axial, coronal, and arch) and to reveal the clipping options.
- To switch the clip to the opposite side, click “Flip.”
- Select the amount of volume to clip in the drop-down menu.
- Scrolling the mouse wheel or slider moves the clipping plane.

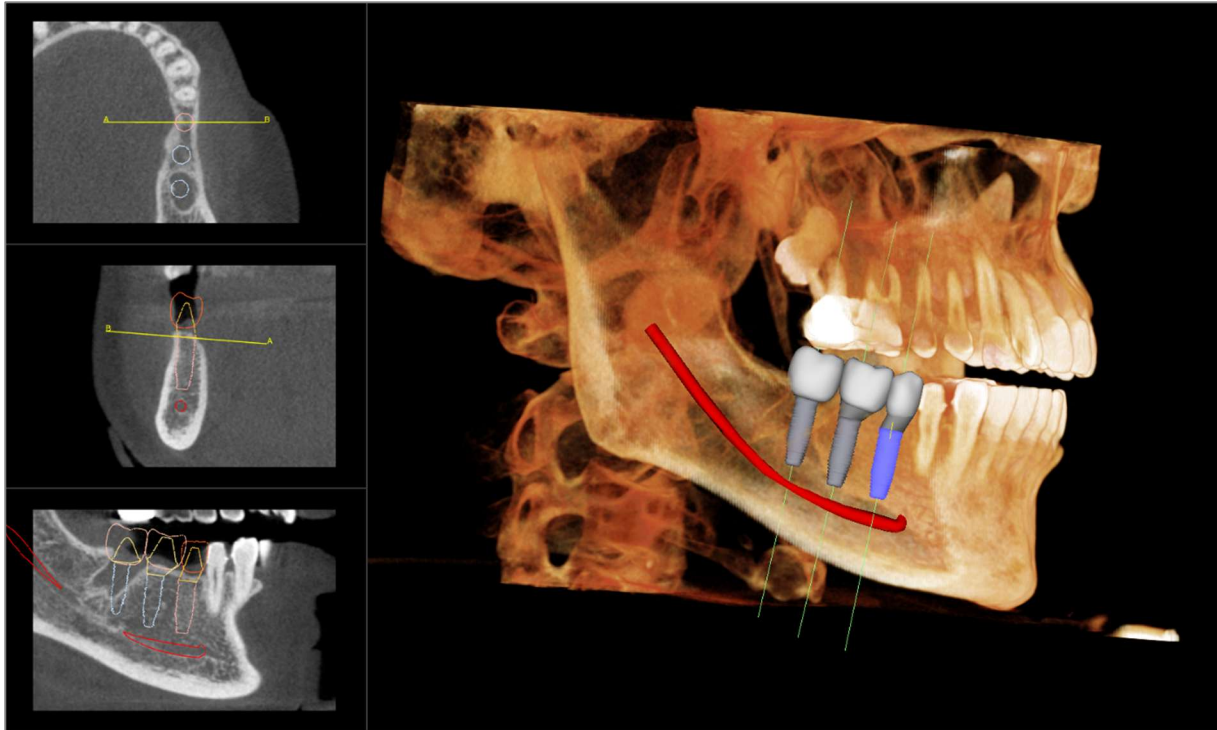
### Models and Prostheses

- Toggle on and off visibility of available model and prostheses.

### Implant Control:

- **ID Drop-down menu:** Select available implants from the drop-down. The selected implant is highlighted in the 3D rendering view, and the 2D slices are updated to show the axial and two cross-sectional views of the selected implant. Implant details and parameters appear below once an implant is selected.
- **Mfr.:** Implant manufacturer
- **Prod.:** Implant product type
- **Implant dimensions:** Diameter and length

## Implant: Rendering Window



**Axial Section:** Top left window. This section is the view from the top of the implant. The yellow A-B line passing through the axis creates the view seen in the middle window. Scrolling the mouse wheel after clicking inside the axial window, or clicking and dragging the line changes the cross section seen in the middle and bottom views as the line rotates about the axis of the implant.

**2D Section:** Middle and bottom left windows. The A-B line passing through the implant in the axial view creates the cross-section view that appears in the axial view and is set by default to be positioned at the level of the implant emergence point. Scroll the mouse wheel after clicking inside the middle and lower windows, or click and drag the A-B line in the axial slice to change the cross section views.

**Volume Rendering:** Right window. This view displays the 3D volume in the selected rendering preset. If available, implants, models, and prosthesis can be visualized in 3D.



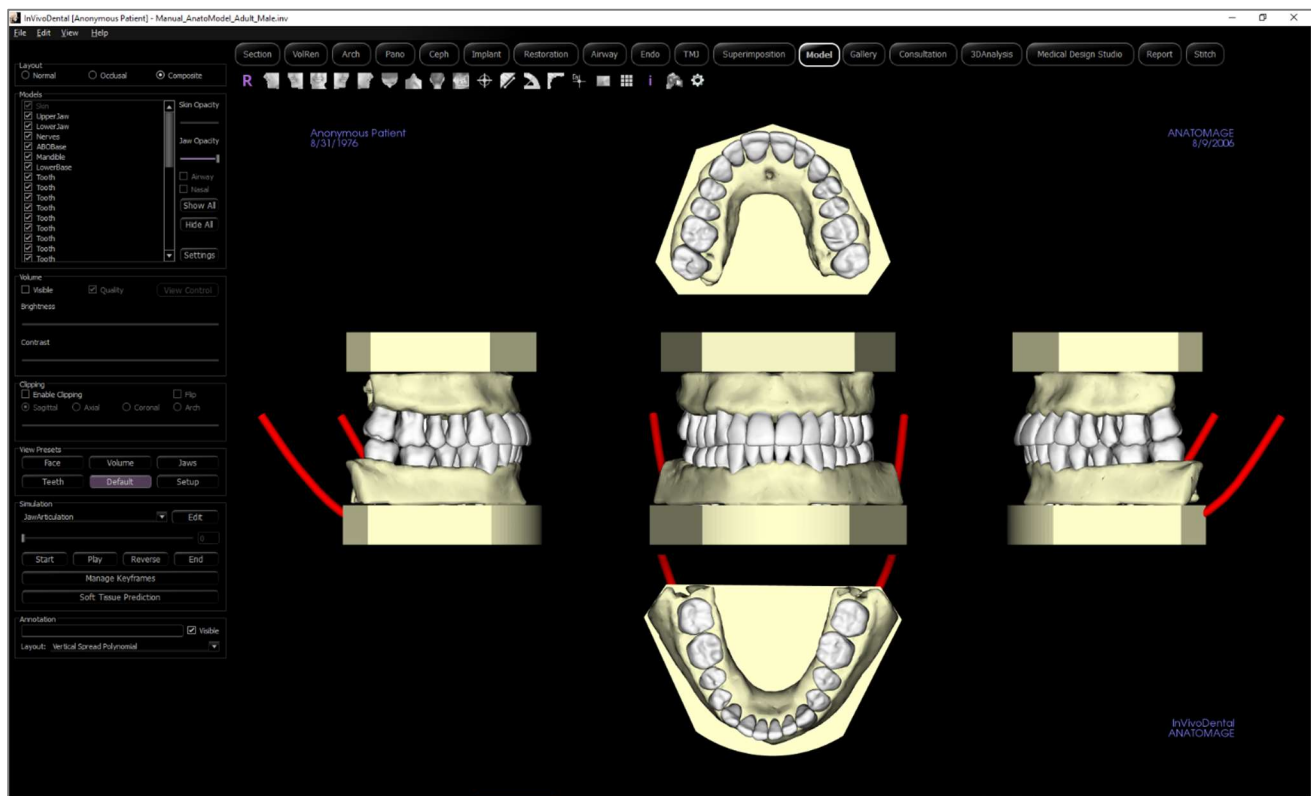
Warning: Any implant planning that is performed incorrectly in any aspect including but not limited to implant location, orientation, angle, diameter, length, and/or manufacture can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based off of the implant planning error(s) in question. It is critical for the end user to learn how to use the implant treatment planning tools correctly. If you notice any inconsistencies or software problems with implant planning or have further questions or concerns about correct utilization of implant planning, please contact Osteoid support at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com)



# Model View Features

The **Model View Tab** allows the user to see the patient's InVivo Model or 3D photograph and create surgical or orthodontic simulations, as well as 3D soft tissue predictions. An InVivo Model is a 3D digital study model that is made by Osteoid on a case-by-case service. The DICOM data of the patient is sent to Osteoid where it is modeled to create the most advanced digital study model available. InVivo Models contain anatomy such as roots, developing teeth, impactions, alveolar bone, and more, while other models merely show the crowns of teeth. The 3D photograph service that Osteoid offers is also viewed here. Osteoid developed the technology to combine a frontal photo of the patient and the CT scan to create a 3D model that overlays the scan data.

Any nerve tracing, implant planning, or superimposition that has been done is also visible in the Model Tab. Each item can be independently turned on/off to see how all these systems come together with the scan data.



For additional information about the InVivo Model service, please contact Osteoid at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).

## Model: Toolbar

Shown below are the Toolbar and tools that are loaded with the Model View Tab:



**About:** Displays the software version information.



**Reset Zoom:** Resets the rendering window to the original view size.



**Left:** Automatically orients the volume in a left sagittal view.



**Front:** Automatically orients the volume in a front view.



**Right:** Automatically orients the volume so the patient is facing right sagittal.



**Top:** Automatically orients the volume in a top-down view.



**Bottom:** Automatically orients the volume in a bottom-up view.



**Back:** Automatically orients the volume to the posterior view.



**Distance Measurement:** After selecting this tool, click two points to mark the desired distance. A number in millimeters will automatically display. Click on the measurement and press the “delete” key to delete it. Measurements can only be created on the 2D slice views.



**Angle Measurement:** After selecting this tool, click the first point, then click the vertex, then click the last point to create an angle. A number in degrees automatically displays. Click on the measurement and press the “delete” key to delete it.



**Polyline Measurement:** Select this option and mark any number of points in the slice view. Right-click to end the measurement, and the total distance appears. Clicking on the nodes and moving the cursor can modify points. Click on the measurement and press the “delete” key to delete it.



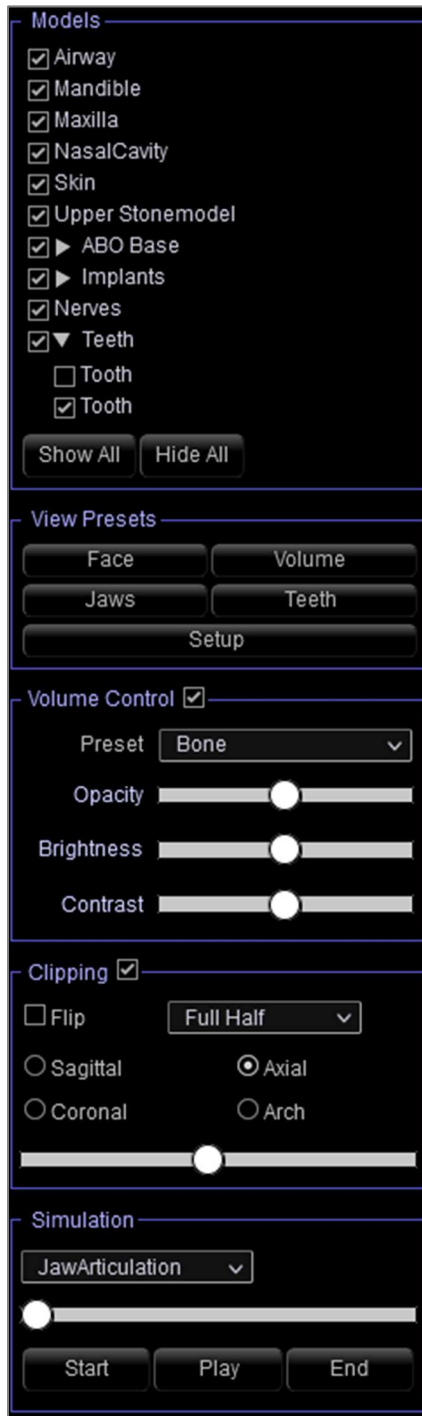
**Information Display:** Displays or hides case information embedded in the data.



Warning: Invivo Workspace Web Viewer's measurement functionality has been verified to be accurate up to +/- 0.10 mm. However, measurement accuracy depends on the image data and the hardware scanner that generated the image data. The measurement cannot be more precise than the resolution of the image. Software reports the value based on user-picked points. Due to the nature of medical imaging, the boundary is not always well defined. The apparent boundary depends on the current brightness and contrast setting. The boundary may shift as the user makes adjustments to brightness and contrast. The user must understand the limitation of the measurement value before applying to the patient. Any measurement that is incorrect can lead to surgical complications if diagnosis, treatment plans and/or actual treatment is based on the incorrect measurements. It is critical for the end user to learn how to perform measurements correctly and employ proper usage of all measurement tools. If you notice any inconsistencies or software problems with measurements, or have further questions or concerns about using measurement tools correctly, please contact us at (408) 333-3484 or email us at [dental@osteoidinc.com](mailto:dental@osteoidinc.com).



## Model: Control Panel



### Models:

- Models: The individual, digital models (implants, abutments, restorations, nerves, teeth, superimposition) can be turned on or off in the rendering window.
- Additional settings for model visibility and display are available once a model is selected.
- **Show All** and **Hide All** toggle the visibility of all the listed models.

### View Presets:

- Preset toggles that display predetermined views. A custom view can also be set.

### Volume Control:

- Rendering Preset: Different settings allow for better visualization of certain anatomic structures, soft tissue profiles, hard tissue, etc. This is achieved by displaying specific densities with specific colors.
- Opacity: Allows for the translucency/opacity to be adjusted.
- Brightness & Contrast: Can be adjusted for each of the presets to enhance the image.
- Visible: Allows the 3D Volume Rendering to be turned on or off from view.

### Clipping

- Check the “Clipping” box to slice the image along the predefined anatomical planes (sagittal, axial, coronal, and arch) and to reveal the clipping options.
- To switch the clip to the opposite side, click “Flip.”
- Select the amount of volume to clip in the drop-down menu.
- Scrolling the mouse wheel or slider moves the clipping plane.

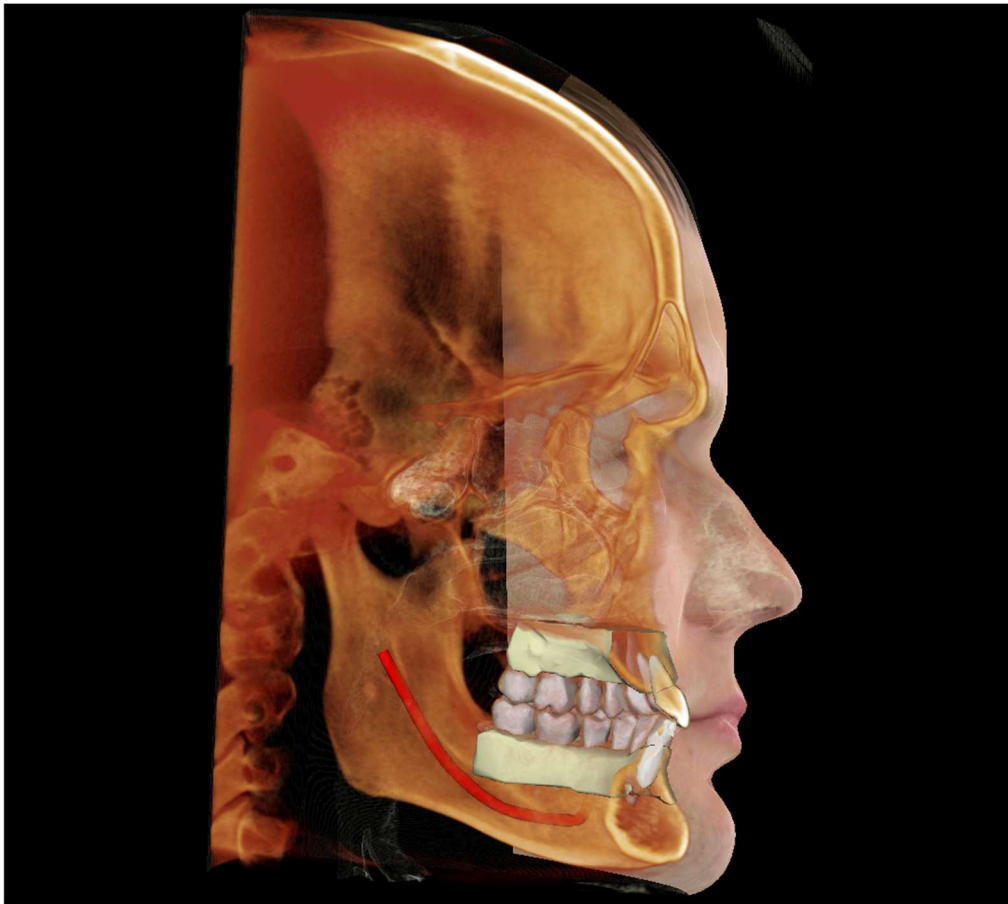
### Simulation

- Select a simulation from the drop-down menu
- Press **Play** to view the simulated movement.
- Use **Start** and **End** or the slider bar to jump to different frames of the simulation.



Warning: Soft tissue prediction is an approximation and may not reflect actual results.

## Model: Rendering Window



*This window allows the viewing of Invivo Models, 3D photographs, and simulation, all of which are services that must be ordered per case for this feature to work. These services provide excellent diagnostic data and case presentation material.*

## Model: Model Settings

**Visibility**

Visible: ☒

Opacity:

**Rendering**

Mode:

Shading:

Back Face Culling: ☐

No Clipping: ☐

**Material**

Ambient Color:

Diffuse Color:

Specular Color:

When a model is selected, additional options become available for adjusting the model's appearance and properties.

### Visibility:

- Visible: Allows the model to be turned on or off from view.
- Opacity: Allows for the translucency/opacity to be adjusted.

### Rendering:

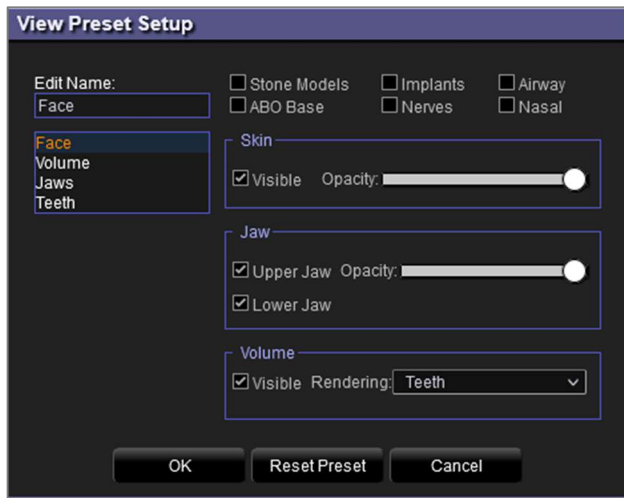
- Mode: Surface and wireframe options are available for the texture of the model. Wireframe converts the model to a wire mesh form when selected.
- Shading: Smooth and Flat options are available for adjusting the shading.
- Back Face Culling: Determines the visibility of the surface textures from certain viewing angles
- No Clipping: When toggled, the model is exempt from the global clipping setting.

### Material

- Ambient, Diffuse, and Specular Color: Determine the color of the model.

## Model: Custom View Preset Setup

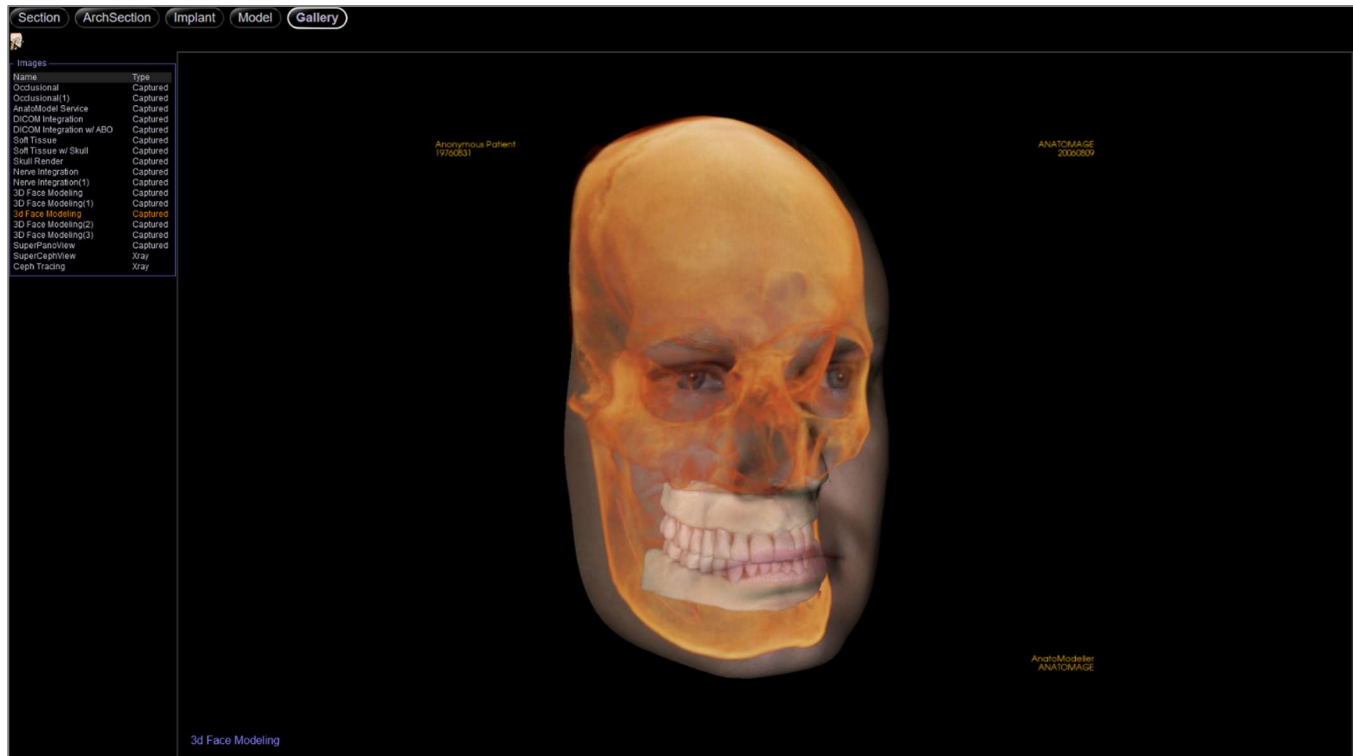
Visibility presets allow for easy switching between set views. Each option can be adjusted by the user. To configure these settings, click on **Setup**.



- Visibility checkboxes hide or show features in the rendering window.
- Skin Opacity: Controls the visibility of the face photo wrap from the Invivo Model workup file or 3DAnalysis. Varying degrees of transparency can be obtained with the slider.
- Jaw Opacity: Controls the visibility of the jaw models. Varying degrees of transparency can be obtained with the slider.
- **Reset Preset:** Returns the preset to the default settings.

# Gallery View Features

The **Gallery View Tab** archives images that have been captured or imported in Imvivo.



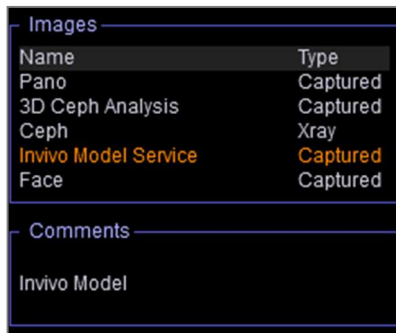
## Gallery: Toolbar

Shown below are the Toolbar and tools that are loaded with the Gallery View Tab:



**About:** Displays the software version information.

## Gallery: Control Panel



**Images:** Gives a list of all captured images.

- Each of these images has a “Name” and “Type” as captured from Invivo

**Comments:**

- Text box displays comments about the image displayed in the rendering window.
- Add or change comments by editing the text in the Comments Box.



**X-ray Image Controls:**

- Controls settings for 2D images.
- For grayscale images in the Gallery, the user has the option to adjust several settings such as Gray Scale Threshold, Brightness, Contrast, and Sharpening.

# Invivo Workspace Web Viewer

## Troubleshooting

Category	Issue	Solution
General	Measurement cannot be created.	Please make sure that the measurement creation stays in the same view. Measurements cannot be created across different views. Measurements cannot be created in the 3D rendering for certain tabs.
	Annotations or measurements cannot be deleted.	Click on the annotation or measurement to select it. Then press the “delete” key on the keyboard. If this is a Mac device, use “fn” + “del”.
	Cannot zoom in or out.	Hold the “Ctrl” key and left click and drag up or down. If this is a Mac device, use “Cmd” and left click and drag up or down.
	Case cannot be saved.	Case saving is not available in this version of the Invivo Workspace Web Viewer. Cases on Invivo Workspace can be downloaded locally for further treatment planning. All changes to the case must be performed in the Invivo software.
	Viewer does not load.	Use Chrome versions 94.0 or higher, or Firefox version 92.0 or higher. If viewer was previously working, refresh the page or clear the browser cache.
	Laggy response when manipulating the 3D volume or 2D slices or other general performance issues.	For Windows 10 and higher, go to the Windows Graphics Settings. Select the browser in use. Click Options and set the Graphics Preference to High performance.
Implant	No implants are present.	Implants must be added to the case in the Invivo software prior to uploading the file on Invivo Workspace.
	Implants cannot be moved or deleted.	Implant manipulation is not available in this version of the Invivo Workspace Web Viewer. All changes to the implant plan must be performed in the Invivo software.
Model	No models are present.	Models must be added to the case through the Invivo Model service or through certain procedures within the Invivo software prior to uploading the file on Invivo Workspace.
Gallery	No Gallery images are present.	Gallery images must be captured in the Invivo software prior to uploading the file on Invivo Workspace

For all other issues, please contact Osteoid Inc. Customer Support at (408) 333-3484.

# Index

*This comprehensive list provides a quick and easy way to find the relevant information that you would like to examine.*

Arch Section View Tab .....	22
Arch Spline .....	23, 25
Brightness & Contrast .....	24, 29, 33
Color Presets .....	29, 33
Comments .....	38
Control Panel .....	24, 29, 33, 38
Gallery View Tab .....	37
Implant View Tab .....	26
Layout .....	30
Measurements .....	18, 23, 27, 32
Model View Tab .....	31
Mouse Navigation Tools .....	21, 25, 30
Panoramics .....	25
Patient Info .....	23
Rendering Window	
Reset Zoom .....	23
Section View Tab .....	17
Software Layout	
Toolbar .....	18, 23, 27, 32, 38





## Invivo Workspace Web Viewer 1.5

Invivo Workspace Web Viewer is a software application used for the display and 3D visualization of medical image files from scanning devices, such as CT and MRI. It is intended for use by radiologists, clinicians, referring physicians, and other qualified individuals to retrieve, process, render, review, and assist in diagnosis, utilizing web user interface. Additionally, Invivo Workspace Web Viewer is a preoperative software application used for the planning and evaluation of dental implants placement and surgical treatments.

This device is not indicated for mammography use.



US : Sept. 4<sup>th</sup>, 2025



Manufactured by:  
Anatomage, Inc.  
3350 Scott Blvd. Bldg. #29  
Santa Clara, CA 95054, U.S.A.  
Tel: +1 (408) 333-3484  
Fax +1 (408) 295-9786  
[www.Osteoidinc.com](http://www.Osteoidinc.com)



<https://learn.osteoidinc.com/invivo-user-manuals>



2797

0086



Freyr Regulatory GmbH  
Marie-Curie-Straße 8,  
D-79539 Lörrach, Germany  
Tel: +49 618 170 79007  
[www.freyrsolutions.com](http://www.freyrsolutions.com)

UKRP:  
Qserve Group UK, LTD.  
282 Farnborough Road  
Farnborough, GU14 7NA  
Hampshire, United Kingdom  
Tel: +44 7408 830172  
[www.qservegroup.com](http://www.qservegroup.com)

Australia Sponsor (TGA):  
Henry Schein Halas  
Locked Bag 5003  
Alexandria, NSW, 2015  
[customer.care@henryschein.com.au](mailto:customer.care@henryschein.com.au)  
Tel: +61 1300-65-88-22

Taiwan (TFDA):  
公司名稱(Company Name): 摩信科技  
有限公司  
地址(Address): 台北市大同區承德路  
三段八巷19號2樓  
連絡電話(Contact Number):  
+866 911714563

South Korea:  
서울특별시 강남구 인주로 506,  
3층, 역삼 아르누보씨티 (06152)  
Tel: +82 2-586-3728  
[info@anatomage.co.kr](mailto:info@anatomage.co.kr)

For the latest device labeling, visit: <https://learn.osteoidinc.com/device-labeling>



(01)00852060007105(10)1.5.2