

Advantage beyond imaging

***OnDemand3D***

www.ondemand3d.com

About OnDemand3D™

OnDemand3D™ provides sophisticated 3D image processing tools and enables easy sharing of images between practices and imaging specialists or image guided service organizations. These enabling technologies provide small organizations the benefits of state-of-the-art 3D imaging, image transmission, and image guided technology.

The *OnDemand3D* systems consists of

- 3D Imaging and planning applications
- Servers
- Free or low cost viewers
- Other services built on OnDemand3D technology

About OnDemand3D™

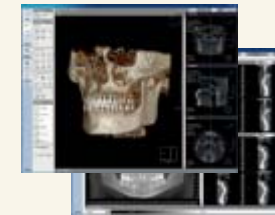


Integrated
Conebeam CT
Solutions

Conebeam CT Viewing



3D, DVR, X-ray generation tools provides high-quality 3D visualization and optimized analysis tools for dental diagnosis. Users can analyze Skin, Skeletal system, Dentition, Airway, etc. Furthermore, various dental reconstructions: panoramic, cross-sectional, TMJ, and orthodontic are provided, with such imaging layouts becoming the de-facto standard for diagnosis with Conebeam CT.



PACS/ Integrated PACS/RIS



OnDemand3D PACS provides seamless management of dental images such as Photo, Periapical, Panoramic, Ceph X-ray, and enormously large CBCT data. Integrated PACS/RIS manages imaging center workflow and images efficiently, offering an online experience for referral clinics in order referral, report & data up/download, and more. Also provides upgraded services for imaging centers to differentiate themselves: professional diagnostic service by remote referral radiologist, model service, surgical guide service, etc.



Applications



Implant planning and surgical guide or IGI systems are the most demanded applications. Users need easy and accurate planning tools and surgical guides or IGI systems to make precise treatments as intended and planned.

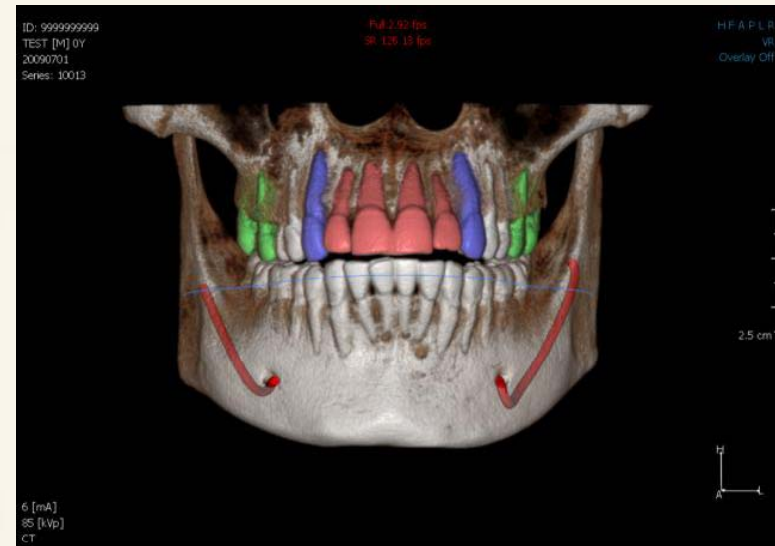
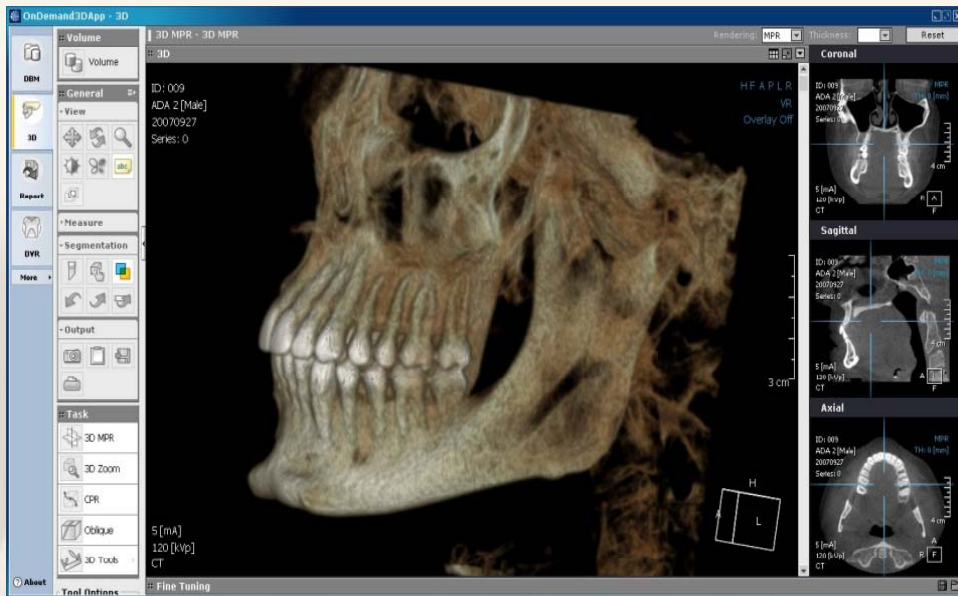


Conebeam CT Viewing Software

OnDemand3D Application


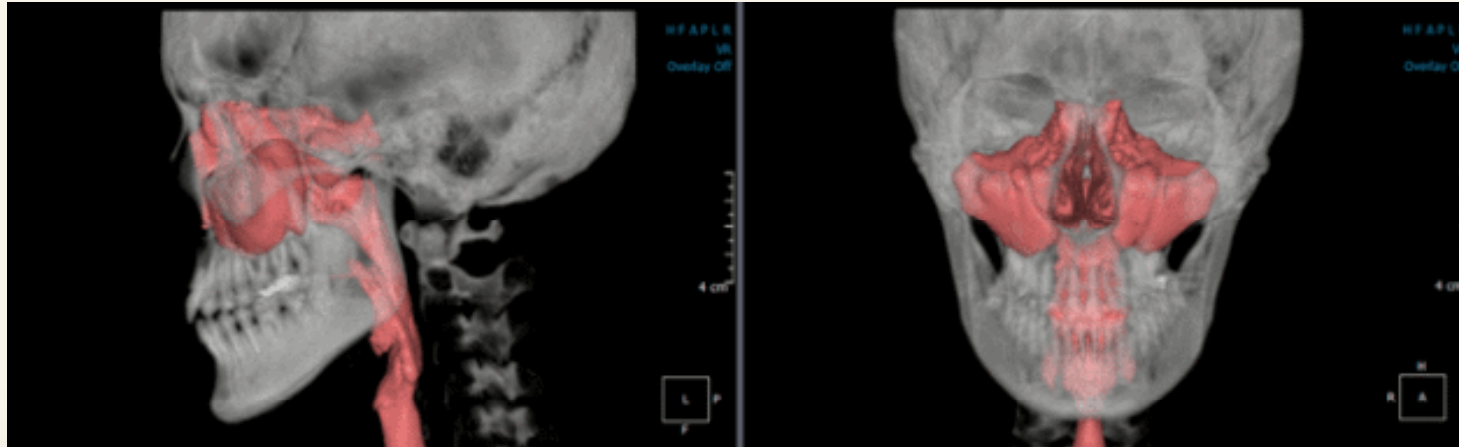
3D Application

OnDemand3D Application uses 2D CT scanned data and generates 3D volume images for dental use. The reformatted images can be used for diagnosis, treatment planning, and surgical planning. OnDemand3D Application can handle every digital dental image. With this powerful yet easy application, images can be stored and instantly generated into 3D format for visualization.



3D Application

3D Segmentation



A 3D model of a segmented sinus structure, rendered in blue. The model shows the complex, interconnected nature of the sinuses.

Object Mask Tool

Sculpt Pick Grow Expand/Shrink Merge Threshold

Sculpt - Draw object masks

Drawing Type Poly-lines Action Remove

Apply to opaque voxels only.

Object mask list

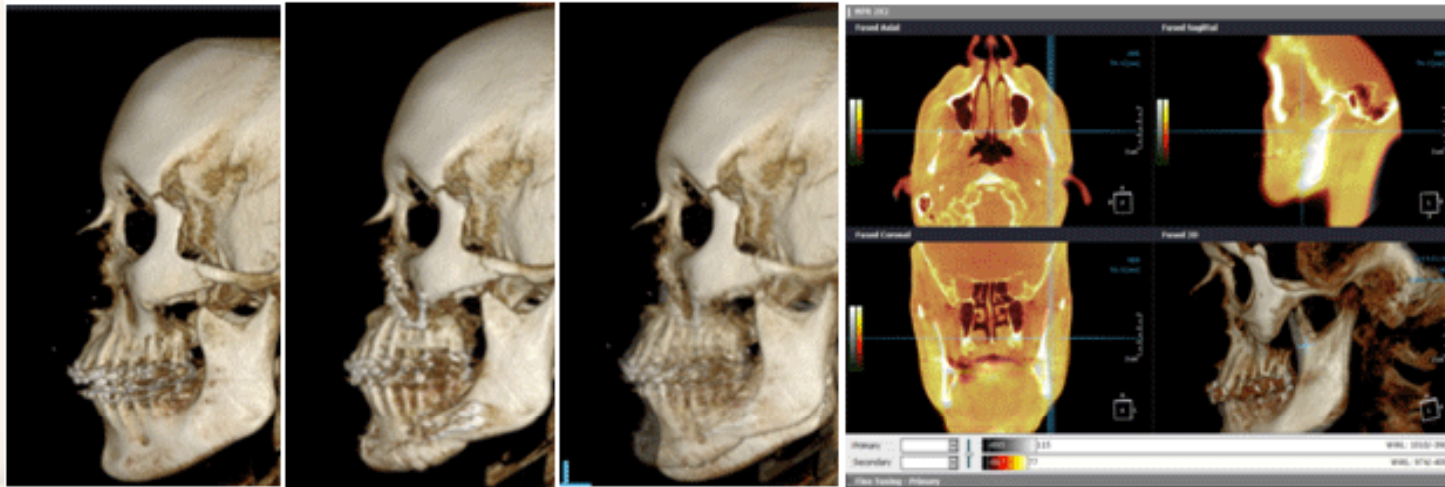
Object Mask	Transparency	Color-tone	Volume
<input type="checkbox"/> Remainder	Opaque		
<input type="checkbox"/> Bone	75%		
<input checked="" type="checkbox"/> Sinus&Airway	Opaque		98.0342

Show volume in [cc]

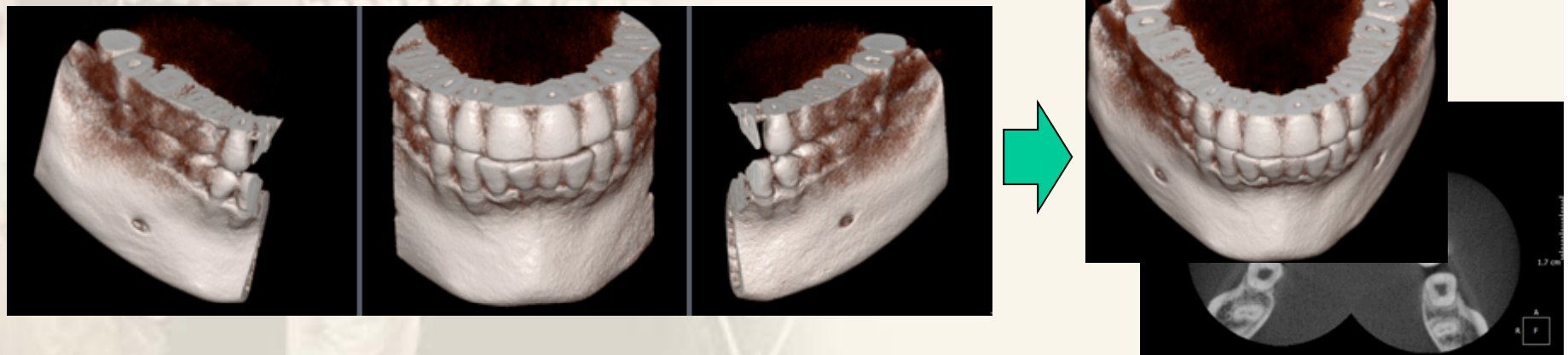
Collapse Hide

3D Application

3D Fusion

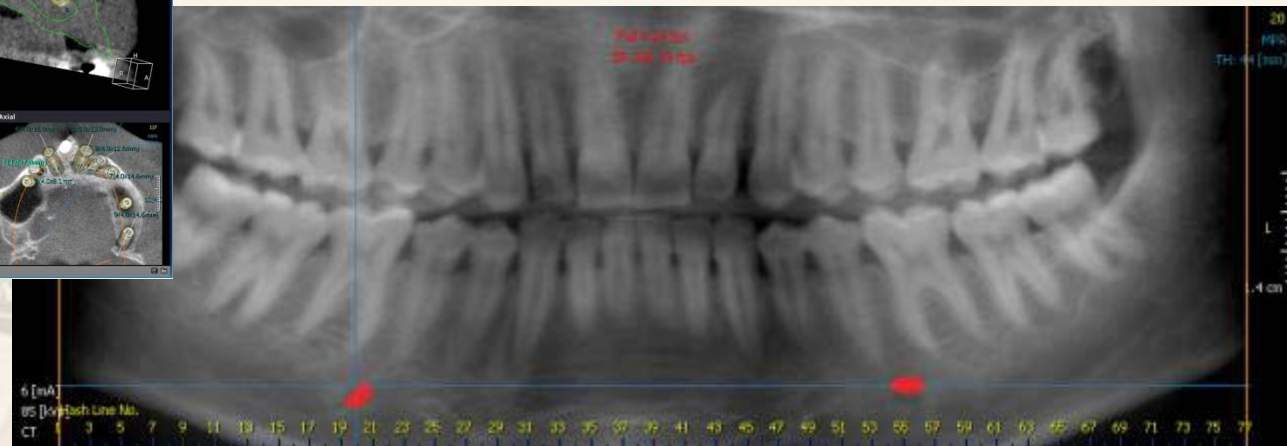
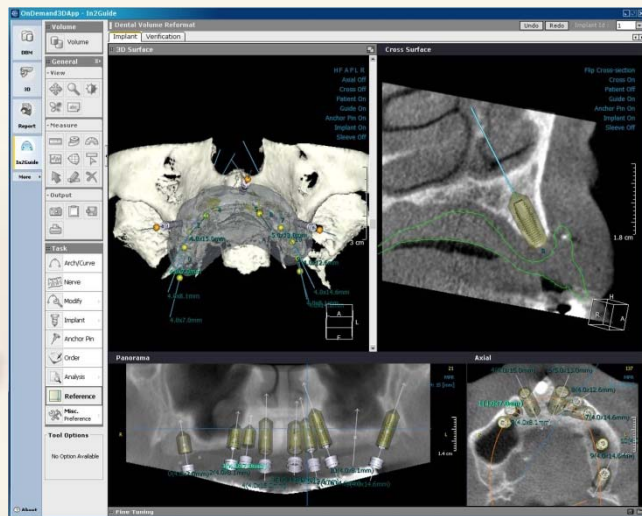


3D Image Stitching



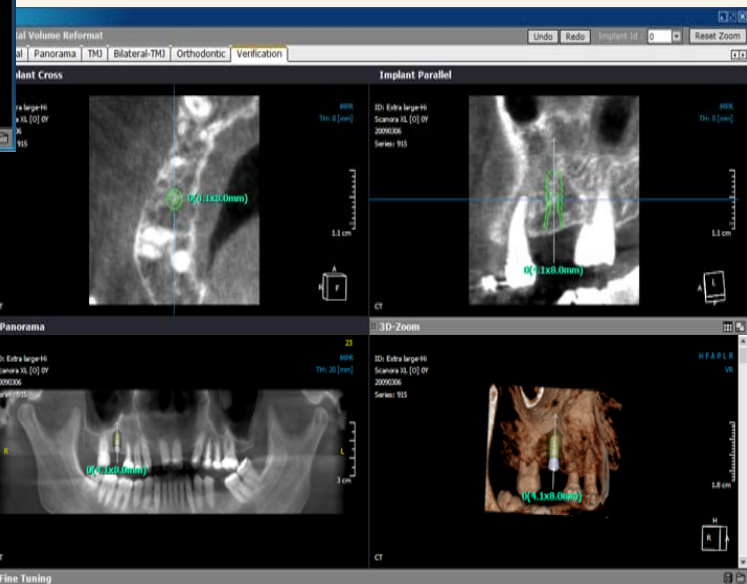
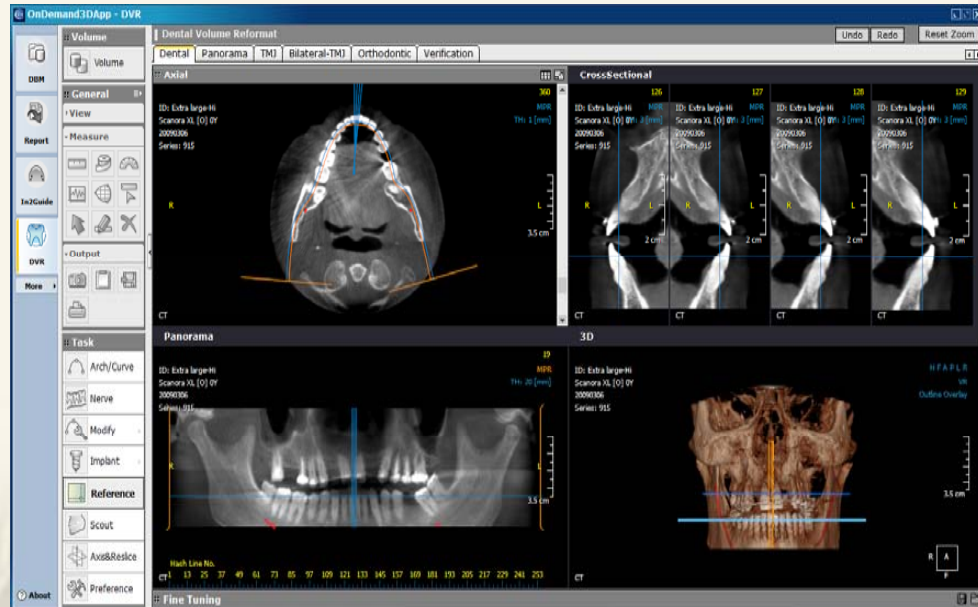
Implant Application

OnDemand3D Application provides images for dental use such as Panorama, CrossSectional, TMJ, and Orthodontics. With these reformatted images, nerve marking and simulation with actual implant models of major implant companies (3i, Bicon, Camlog, Straumann, Zimmer, Friadent, etc.) can be done to ensure a safe, predictable, and accurate surgery planning.



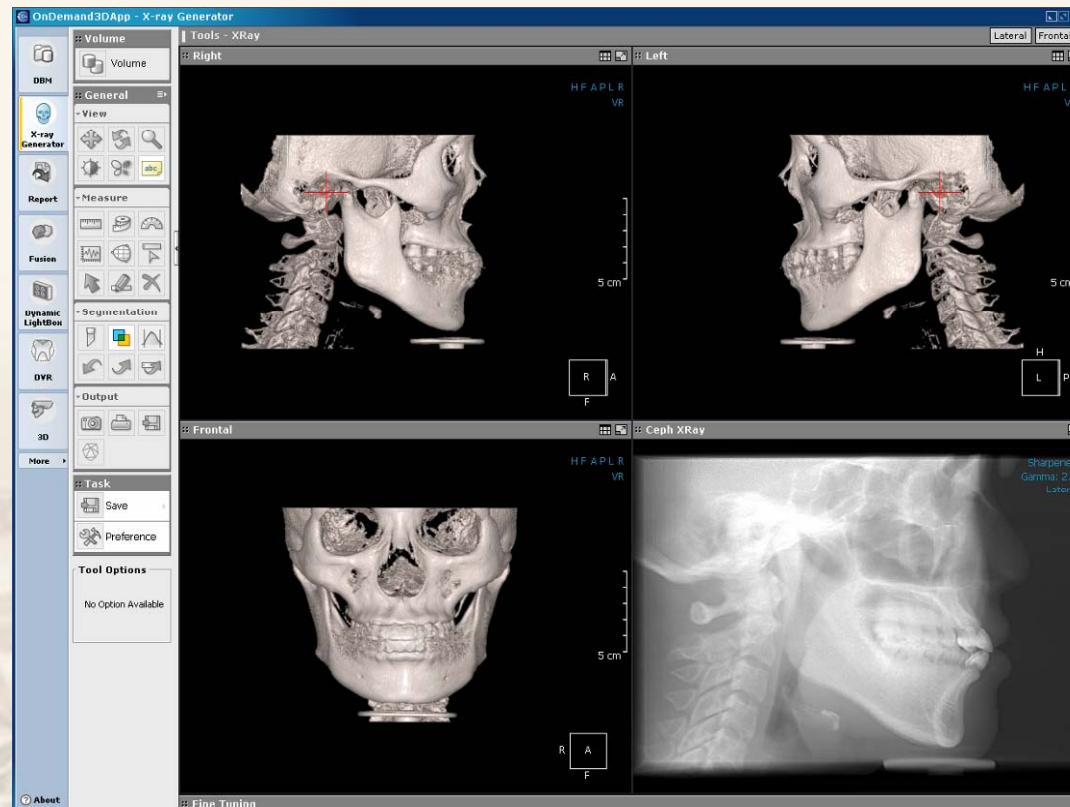
Implant Application

DVRi Module



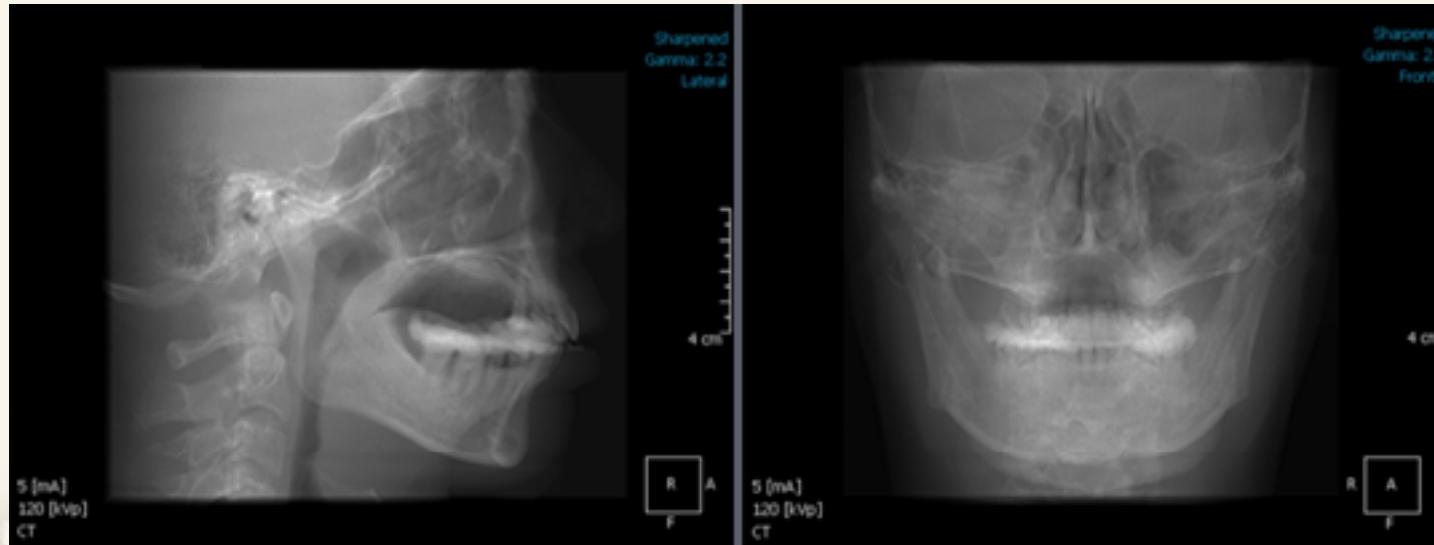
Orthodontic Application

OnDemand3D can simulate virtual X-Ray images (Real Cephalometric image and PA image) from CT data.

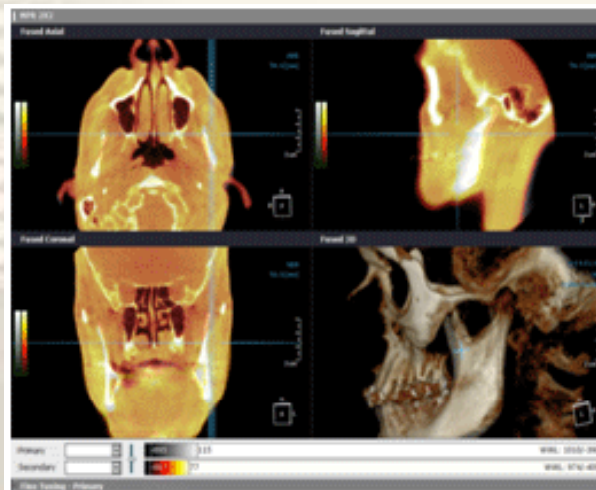


Orthodontic Application

X-ray Generation Module



Fusion Module



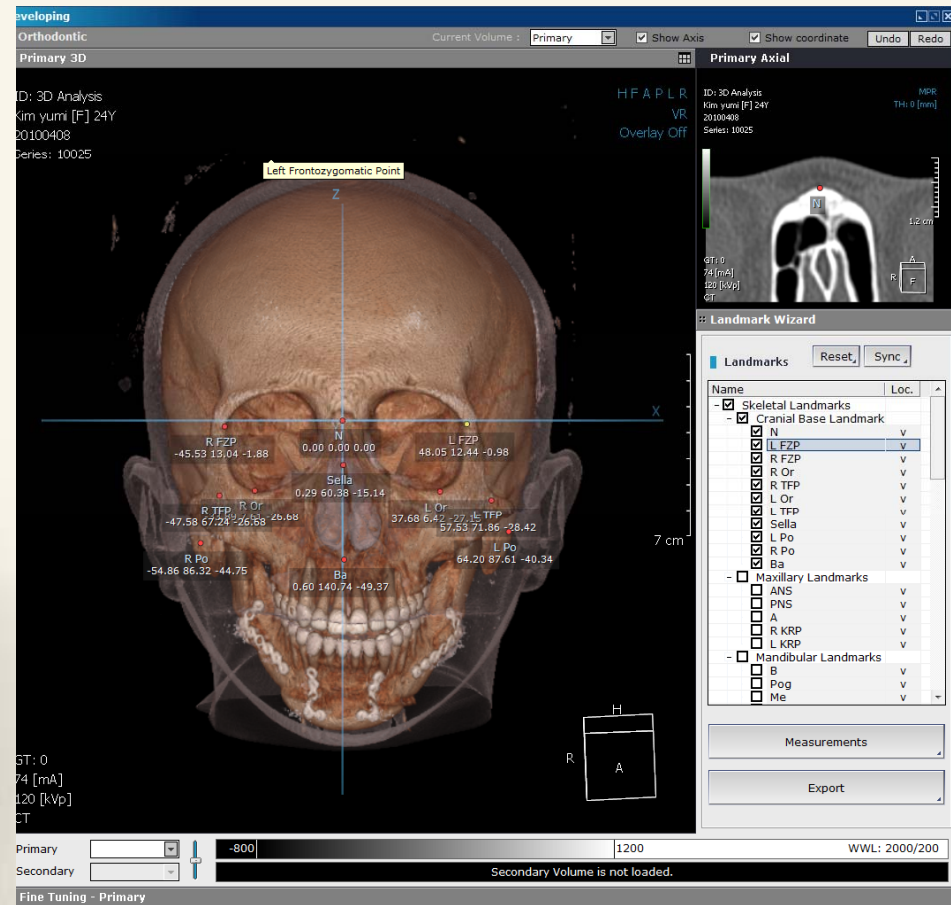
Orthodontic Application (Developing)

Orthodontic Module

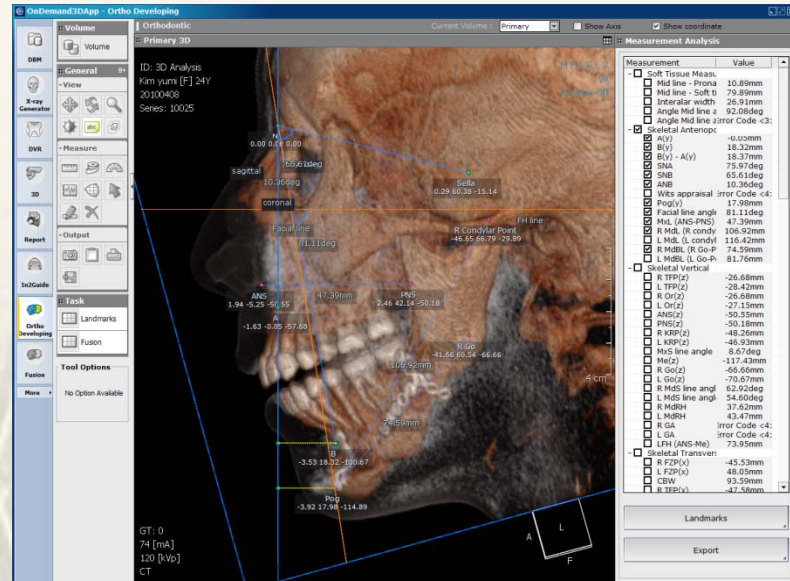
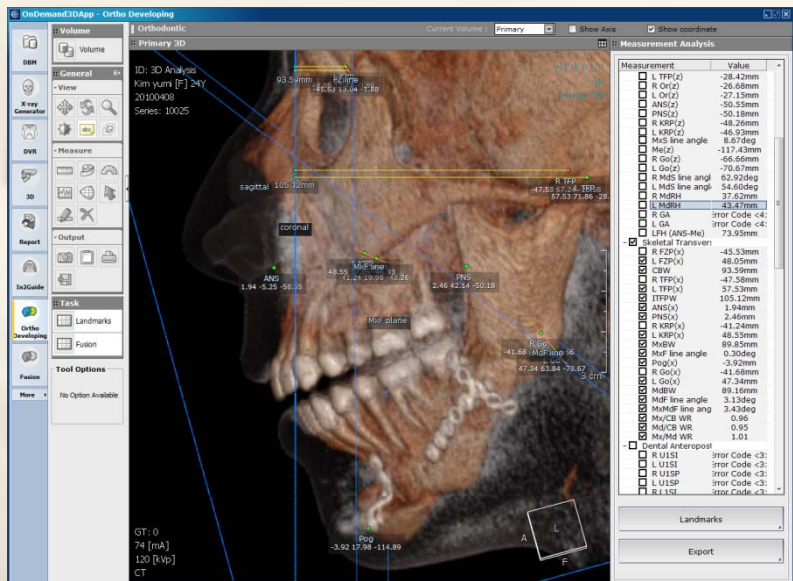
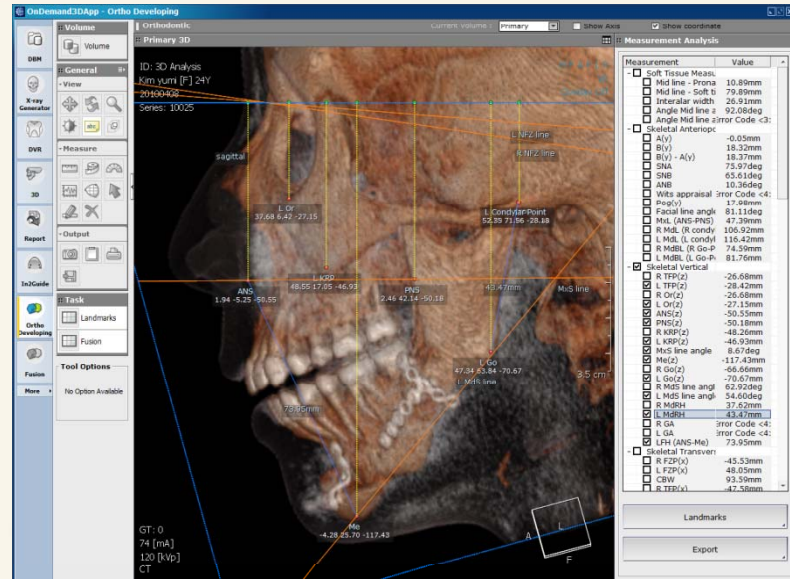
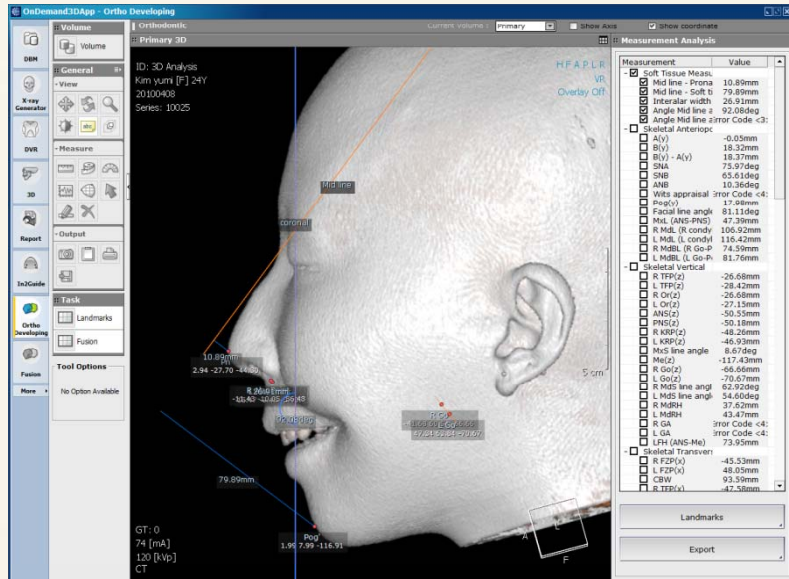
Orthodontic module can define relations among landmarks(distance, degree, etc) and calculate the result as definition.

Ortho Consist of

- Primary/Secondary pane
- Landmark Wizard
- Task tool(Reorient / Measure / Analysis manage / Fusion)



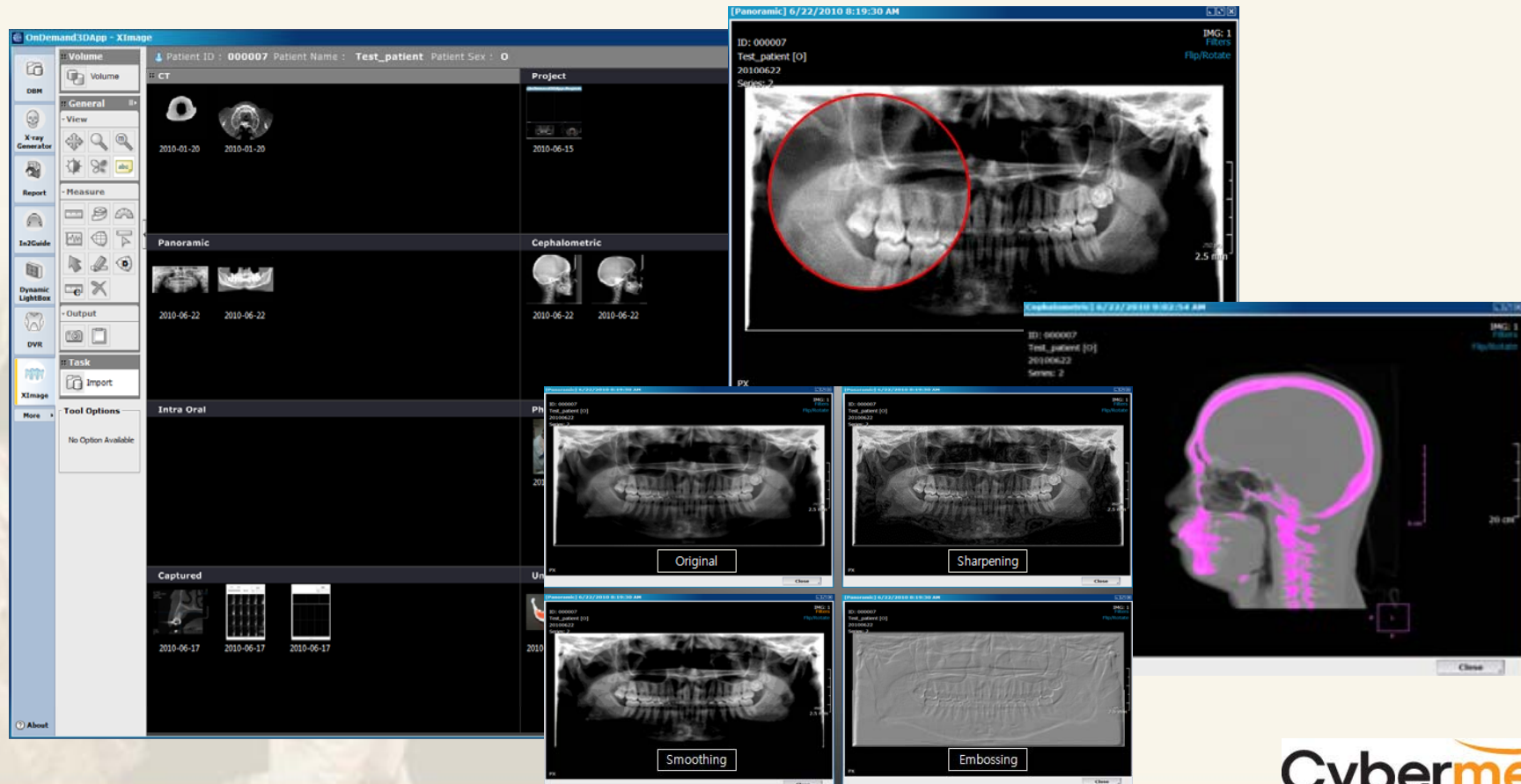
3D Analysis



Viewing Application (Developing)

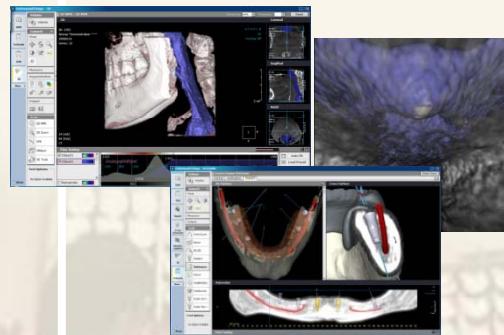
Ximage Module

Ximage is 2D image viewing module on Ondemand3D Application which enables 2D Image Acquisition specialized in 2D scanned image supporting DICOM, BITMAP, JPG, TIF. Acquire Images directly from modality (almost Panorama/ Cephalometric / Intraoral) and view.



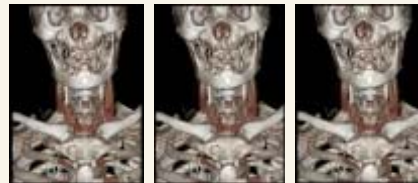
Technology of OnDemand3D

OnDemand3D Technology



3D Imaging

- State-of-the-art 3D Imaging
- Multiple Image Fusion
- Accurate Surface/Solid Modeling Technology



4MB	12MB	204MB (original)
30sec	1.5min	5min

Image Transmission

- Unique 3D Progressive Streaming Technology
- Scalable to Server Hardware
- Scalable to Network Bandwidth
- Web-enabled



Imaging aided surgery

- Surgical template service
- Robust and accurate tracking
- Surface registration technology
- Surgical Instrumentation

Thank you