PHILIPS

IntelliSpace Portal 10

3D modeling

Making visualization
tangible

Making visualization tangible

There is growing interest in using 3D printing in fields like bone, cardio, vascular, and others. Core to the creation of the printed model is the underlying imaging. Advanced visualization plays a special role in the development of time–tested, and clinically validated 3D segmentations algorithms, providing anatomical models of major anatomical structures. Such models may be 3D printed for a host of clinical uses as they closely represent the actual anatomy.
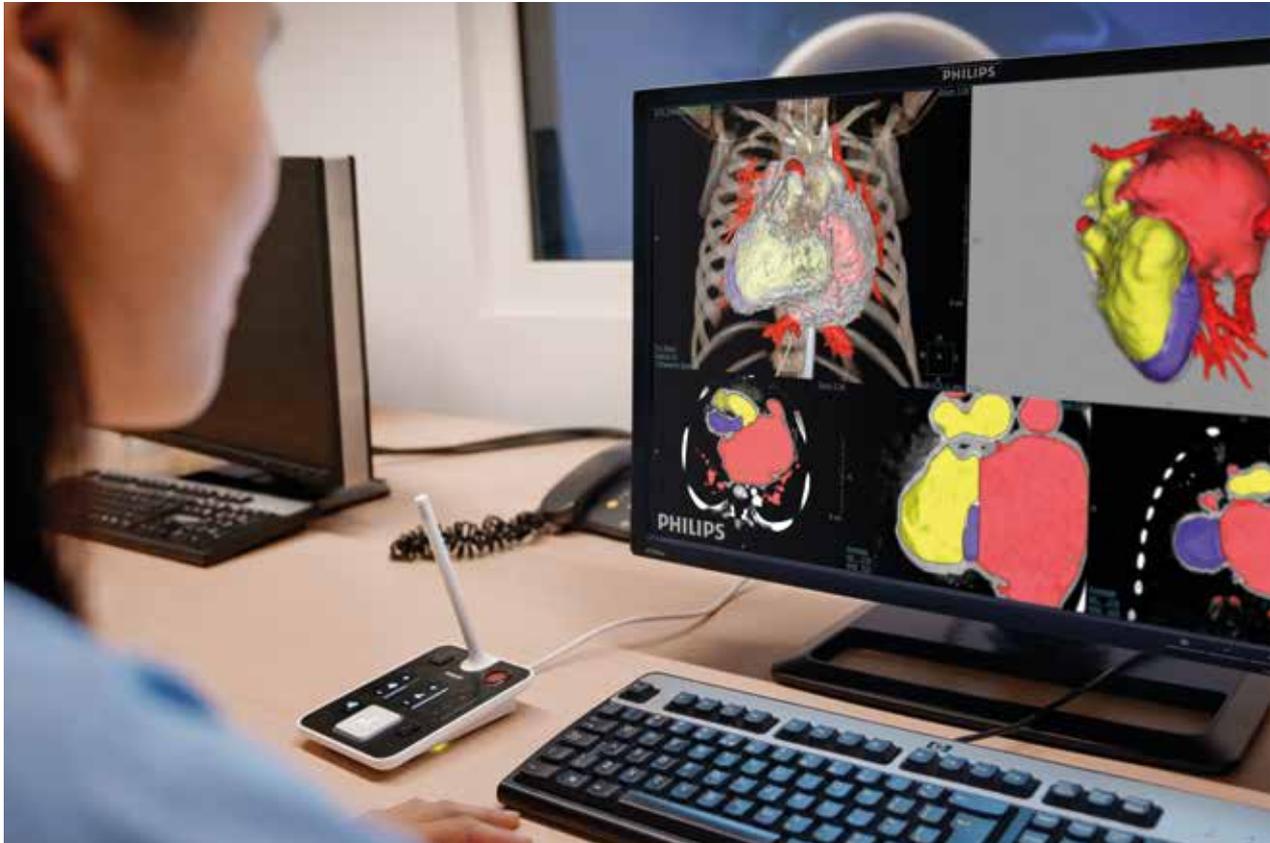
Bringing innovation into patient care

Better Anatomical Understanding
3D modeling is used across a variety of clinical specialties. It provides the physicians additional view and strengthening anatomical knowledge which could increase clinical impact while reviewing complex, multi-disciplinary cases.

Clinical training
3D models play significant role in teaching basic and clinical medicine. This innovative, simulation-based educational approach can create a novel opportunity to stimulate interests in different fields, expend medical knowledge like understanding the anatomical structures of tissue, and provide additional practice methods to improve experience of clinicians.

Patient Education
3D models are utilized by clinicians to improve patient and family understanding of anatomy and pathology.Explaining therapeutic approaches and techniques by visualization can empower the patient and can contribute to the overall patient experience.
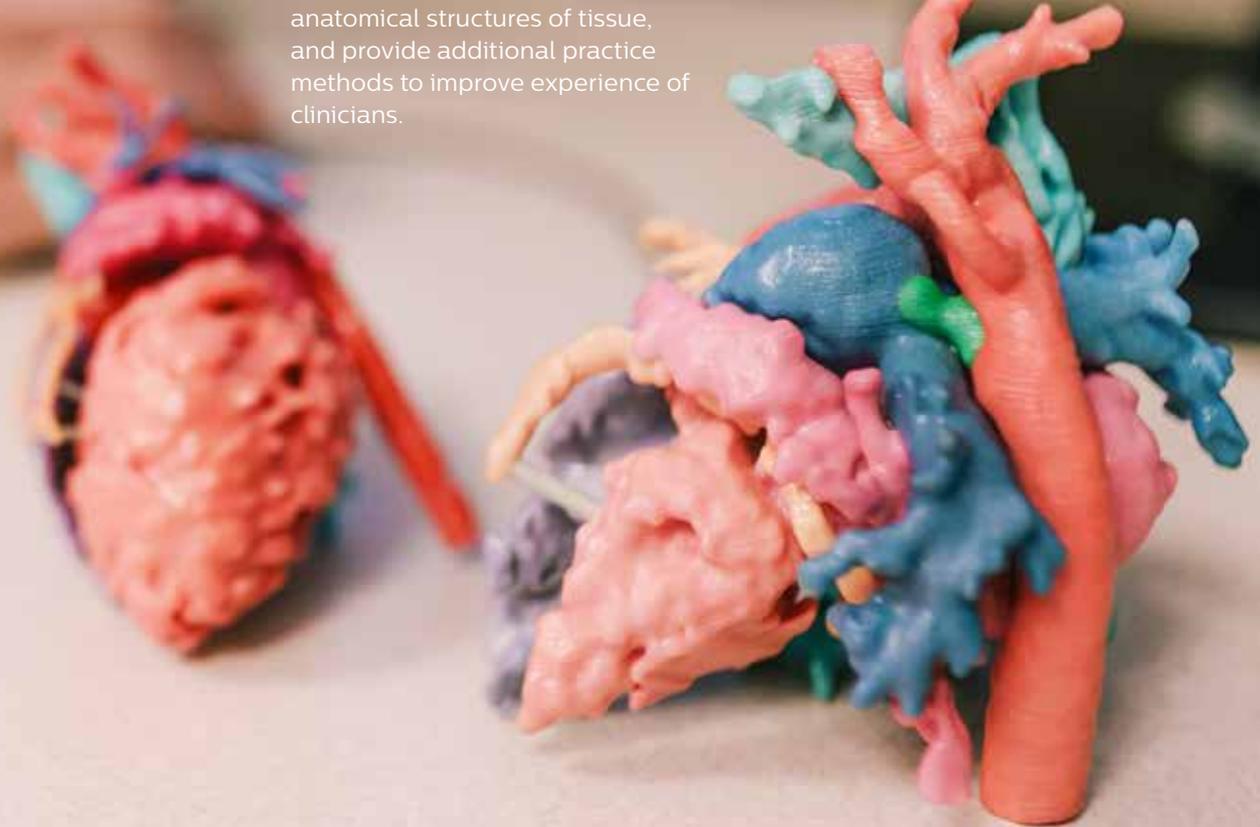
Streamlined Modeling workflow optimized for 3D printing

3D Modeling application provides an optimized workflow for physicians wishing to print models utilizing the 3D segmentations (CT or MR) of IntelliSpace Portal applications for verity of purposes. Whether importing 3D segmentations from applications within the Portal or creating your own custom models directly from DICOM images, 3D Modeling application offers a suite of clinician focused rendering and editing tools to optimize a model for printing, and to help assure that the model reflect the true patient anatomy. The users can utilize volumetric tools to create hollow structures and edit wall thickness.

Physicians may preview meshes against original DICOM imaging, and make adjustments in real time. 3D Modeling application batches files for easy export in standard formats such as STL, and even renders your printable file in 3D PDF for better communication in the department and with 3D printing services with files physicians may choose to annotate for further processing. A variety of export options help streamline the transference of your file to a printing service, or for hospital internal use.

Benefits:

- Segment multiple anatomies and component parts in a single workflow

- Enhanced mesh libraries for cleaner printable files

- Tools for optimized 3D editing and tissue management

- Enhancement multiple model preview

- "Quality check" function of model against underlying imaging

- Export to even multiple STLs for print easily

- Save models as 3D PDF for communication and annotation

"We perform multiple types of image post-processing, allowing us to view anatomy in any axis or plane, to help us make the diagnosis. The radiologist and surgeon often work together manipulating images as consulting and referring physicians. This method of working together helps us understand the anatomy more thoroughly. Using virtual or printed 3D images, even an untrained eye can perceive anatomy more readily. For a parent, to see their child hold a model of their heart in their hand, it is truly amazing"

Dianna Bardo, MD,
Director of Body MR &
Co-Director of 3D Innovation Lab,
Phoenix Children's Hospital, AZ, USA

3D modeling as part of IntelliSpace Portal 10.0

"The importance of sharing information in healthcare is extreme. The Portal is that connecting piece."

Richard Towbin, MD.
Division Chief of Radiology,
Phoenix Children's Hospital, AZ, USA

Enhance the patient and staff experience

With Philips IntelliSpace Portal 10.0, you can obtain a fast, multi-faceted view of your patient's condition using a single, multi-modality solution, with multiple workflow enhancements, pre-fetch, and pre-processing which can help speed time, diagnostic confidence, and save up to an hour of time each day.

Drive improved treatment and outcomes

With the right tools to make the assessment, IntelliSpace Portal 10.0 boasts more than 70 clinical applications across multiple domains, with continues innovation that comes to the market every year.

Simplify data and insight gathering

Now there's an advanced visualization and analysis solution to open these dimensions to you – virtually anytime, anywhere. IntelliSpace Portal 10.0 designed to give you a comprehensive clinical view while helping you work quickly and to reduce variance in your analysis across the enterprise. With thin client architecture, ISP10.0 can be accessed from nearly any computer and integrate datasets from multiple vendors.

Reduce costs

IntelliSpace Portal solutions let you work as one across your network, bringing locations and people together. Boost productivity and help reduce the complexity of resource planning today while preparing you for growth tomorrow. Without any major investments, IntelliSpace Portal can quickly accommodate a large increase in users and easily adapts when additional users join your network.

Share the goal of superb patient care

When you choose Philips, you're investing in a long-term relationship. We're committed to helping you realize the full clinical and operational potential of IntelliSpace Portal 10.0 in your organization. To do this, we leverage our strong track record, deep clinical insights, global delivery capabilities, and broad spectrum of services.

PHILIPS

How to reach us
Please visit www.philips.com
healthcare@philips.com