

A SOLID MODELING ENGINE IN YOUR POCKET

Verocloud™ puts solid modeling tools for real-world 3D scanned data right in your smart phone or tablet. Operations like visualization, measurement, clash detection and shape matching can now be performed on the devices you always carry with you, with no inherent limits on size and complexity.

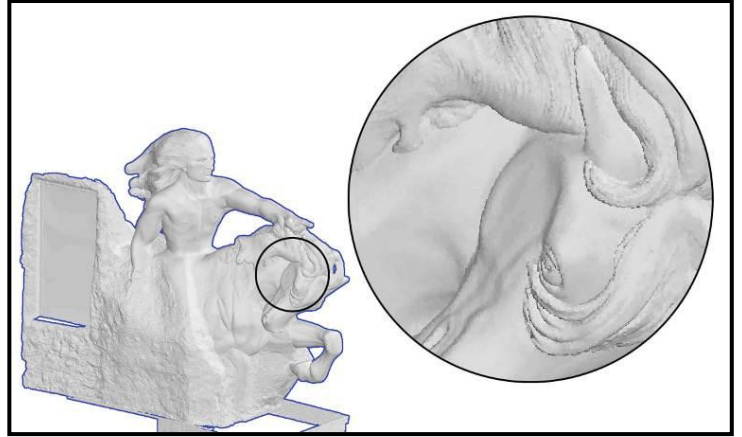


Verocloud™

Verocloud™ is a software application that facilitates display, manipulation and examination of 3D and 4D data on a portable platform. Verocloud™ is a general application for imaging surface geometry with texture acquired by any 3D scanner, including active, passive, stereo or multi camera generated 3D data. Typical operations will include metrology, clash detection, shape matching, comparison with CAD models and practical operation over the Internet or cell networks.

VeroView™

Simple viewer running on portable platforms with limited function of viewing data already converted to .oct format by Verocloud™ application.



The Technology Behind Verocloud

The use of real-world 3D sensors is increasing rapidly as new systems are developed, their capabilities improve and costs are reduced. As a result, the volume of 3D data is growing much faster than the computational capabilities of computers. And to fully exploit sensor data, it must increasingly interact with information from other sensors and disparate sources (CAD, GIS, etc.), often from geographically distributed locations. And the data must be available for use on wireless devices worldwide. One of the biggest challenges is the computational growth of algorithms to implement the needed functions as datasets grow.



To solve these problems a new method called the "Octree Transform" has been developed to support operation in software or specialized hardware. As with other transforms (e.g., Fourier Transform), it mathematically transforms information from one domain into another where important operations become practical. With the O Transform just about any type of 3D spatial data can be transformed from the normal spatial domain into a new domain where computationally difficult operations such as for visualization and exploitation (e.g., clash, shape matching) become simple, reliable and computationally efficient with unlimited datasets of any kind. Robust operation is typically maintained even when operating over limited-bandwidth networks.

