ViewPoint

visualisation in three dimensions

3D

irresistible images

Display solutions

演示文稿和数字标牌   프리젠 테이션 및 디지털 간판

プレゼンテーションとデジタルサイネージ

Ray tracing in real-time

COMPLETE SUV MODEL WITH 4k VIDEO BACKGROUND Shot with LUMIX GH4   4K

Viva3D Super HD

Full Quad HD

May 16 2014

Live auto-updating content

for 2D & 3D in-scene objects

with Video streaming to 8K

Interactive 3D content with direct output to 2D+Z & Autostereoscopic
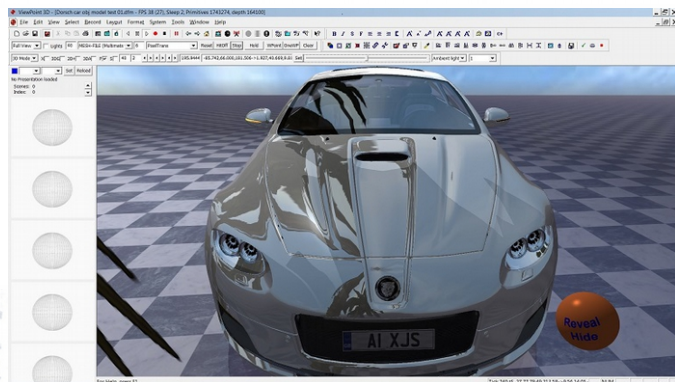
Viva3D®Pro 4K

Light yet Powerful™

Visualization on desktop, embedded & mobile for digital signage, education, industry, science, defence & medicine

Inform, advertise, educate & entertain in full 3D

Content Creation, Streaming, Playback & Management

GPU-powered 3D Computer Graphics

Sophisticated yet easy to use • Effective • Powerful • Multiplatform • Reliable 24x7

Advanced visualization for a wide-range of applications

Introducing a completely new 3D content creation, presentation and management application, delivering dynamic high-definition interactive content: Viva3D® Pro - *GPU-powered* for advanced computer graphics. Create and present stunning full 3D visuals in a fraction of the usual time, content such as TV-quality presentations and adverts, or visualisations of complex models ranging from new products to complex architectural, automotive, naval or aerospace designs, and modelled right down to the very last nut and bolt.

Digital Signage TV: For a shopping mall, a hotel or retail chain, a website, for a complex 3D business presentation, or an educational film, until now the only way to create such content was using complex 3D design software that took weeks or longer to produce.

Now Viva3D uses efficient new techniques to bring the full power of 3D computer animation right to your fingertips, and what's more, with content that auto-updates!

Applying super-computer technology – with the modern GPU:

Our development team focused exclusively on using the very latest graphics processing technology, designing completely new software that enables the instant creation of high-resolution animated 3D with unique live in-scene news, video and data feed, all at photo-realistic quality.

By putting the latest hardware technology to work, Viva3D is the very first application that allows live news and data to be directly and automatically incorporated into high-resolution 3D content without the need for costly content updates.

For glasses-free 3D displays, Viva3D uniquely produces the final multi-view interleaved format directly avoiding post processing, providing an enormous reduction in production costs, and allowing real-time video, news and other data to be presented.
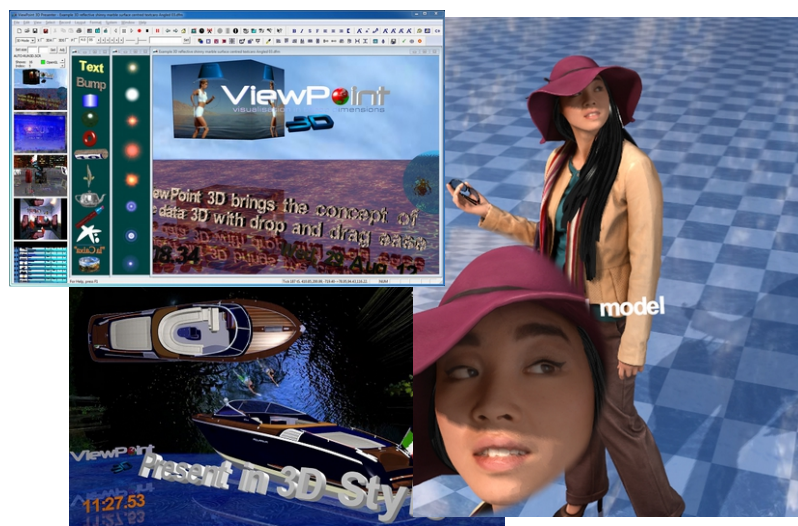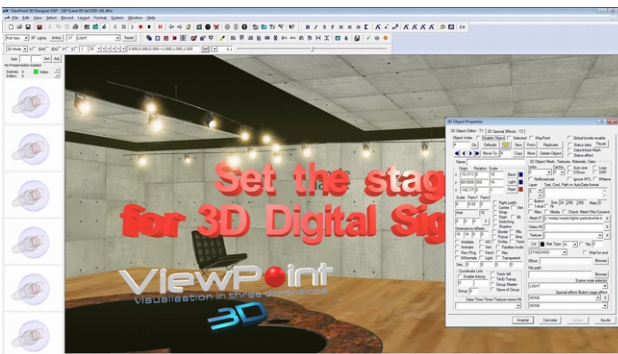
Key facts

- Viva3D runs 6-10x faster than Blender & 3D Studio, & 12x faster than Microsoft Paint3D
- Reduces content production costs by 50-80% compared to other 3D & 2D applications
- Offers a complete solution, from 3D content creation to management & detailed 24x7 reporting
- Fully interactive 3D content creation and management supporting all languages
- Asian fonts: 复杂的模型演示　복잡한 모델 프레젠테이션　複雑なモデルのプレゼンテーション
- Instant rendering of complex animated content with full environmental effects
- Realistic human model animation in GPU with voice recognition and AI driven interaction
- Live data, news & HD video is instantly incorporated into 3D content avoiding remakes
- Compatible with all 2D displays, & directly drives video walls and projectors
- Drives the latest 3D glasses-free TVs at the highest quality (autostereoscopic & 2D+depth)
- Scalable digital signage for global networks, easily managed in regional groups
- Designed and tested for desktop, mobile and 24x7 embedded operation
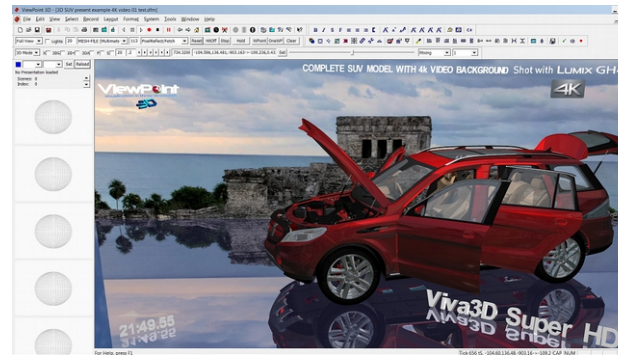- Operates on all low-cost computers, tablets and modern phones with a GPU

A new and efficient approach

with GPU-powered technology
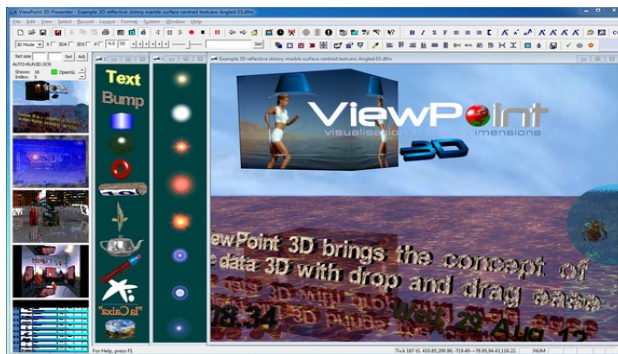
Viva3D is unique in that it allows the rapid creation of sophisticated presentations and content for 2D as well as 3D devices with live-data content, avoiding frequent and costly re-editing.
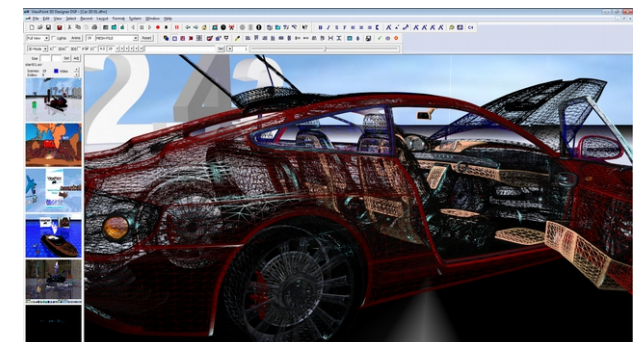

4K Quad-resolution video can be directly streamed into 3D scenes as shown above. Viva3D can also simulate environmental reflections, liquid surfaces, weather, realistic cloud formations, lighting and more.

Advanced 3D technology allows the instant reproduction of the highest resolution content, even for Ultra high definition monitors. 3D objects can operate as buttons, show high definition video, and update from remote data.

Viva3D allows content that currently takes days to produce, to now be created in a mater of hours or even minutes. This technology simplifies content creation, produces content that self-updates with live data and news, reduces staff training costs, and allows a much higher content throughput.

Scenes are created by simply placing objects and models, and then setting their attributes. Current time, date, text/RSS, video, and 3D model selection can be controlled by remote data feeds. A wide range of lighting & animation effects can be selected to create content that can be reproduced on low-cost hardware, including on an extensive range of 24x7-certified ePC media controllers.
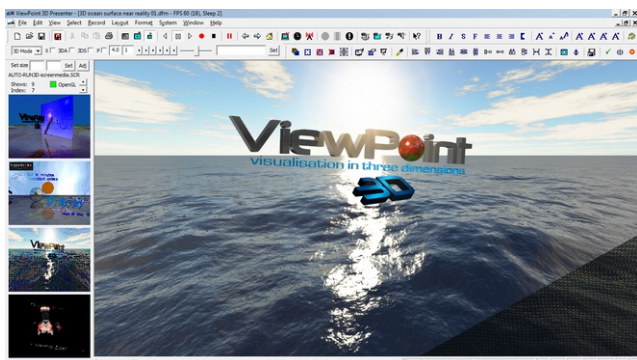

Complex models with hundreds of textures can be edited and painted. Individual textures can be bump-mapped, reflective, or transparent, creating realistic models. Textures can show live data or video from any standard source, local or remote.
Viva3D can also record content for distribution and use on websites & computers that do not have Viva3D.

Diverse Applications from desktop & mobile to embedded

4K

Manage high resolution data displays with full 3D effects.

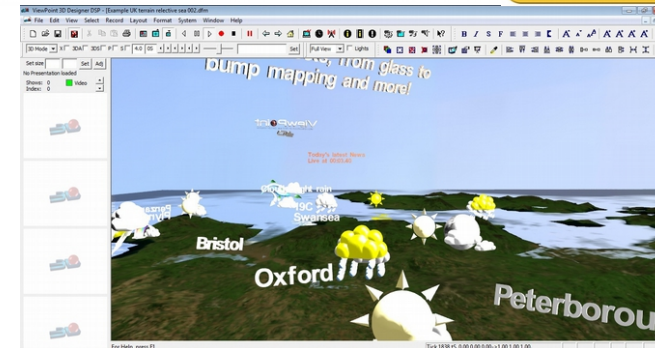Create 3D fly-throughs with remote data updating.

Offering a total solution for advanced content creation, stereo streaming & management, including detailed playback and operational status reporting for regionalized 24x7 digital signage.
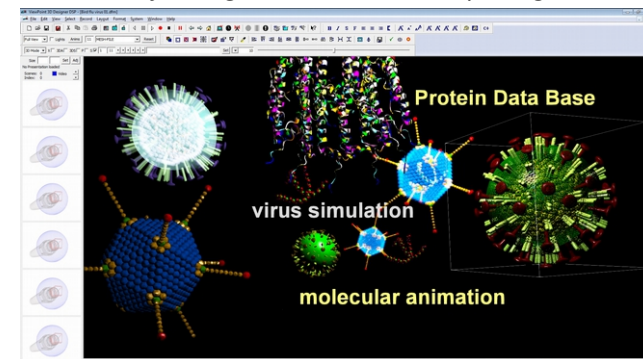
Producing animated 3D live-data content is now easy, with 3D advertising, presentations, interactive educational content, 3D simulations and even weather fly-throughs that automatically update, and even instantly drive glasses-free 3D devices, including the latest 4K monitors.
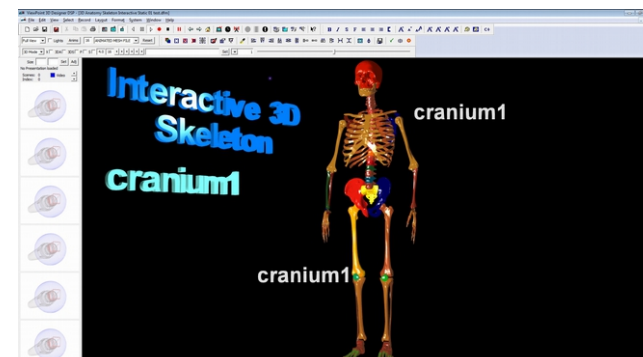

Create enhanced virtual reality or near-reality content.

Create complex simulations for education and industry.

Create 3D interactive content quickly and with full support.

Real-time autostereoscopic, WOWvx 2D+Depth, Declipse and anaglyph output is built-in for glasses-free 3D devices.

Complex content in real-time 3D

Viva3D is a flexible real-time 3D engine capable of rendering many types of scenes, unique in being data-driven and capable of directly encoding autostereoscopic output. The scene on top-right shows a complete airport terminal presentation, with three 747s and a private jet, plus 2 fully detailed cars, a tower and animated clouds, trees, aircraft, cars and people.

Viva3D is efficient, it can run these presentations on low-cost personal computers, and even on our $99- tablet.

Rendering scenes in real-time means you can drop CAD models straight into Viva3D and set them up to look quite realistic in very little time, also, making changes can be done on the spot.

Simply export your models from your CAD or 3D design software, and drop them into Viva3D's scene editor. You can then drag and drop textures, select realistic HDR sky and land scenery, and with instant rendering you can view your interactive photorealistic presentation.

Fly-throughs of your models can be created and modified instantly, even complex models can be visualised on 3D screens with ease.

For further information please email us at www.viewpoint-3d.com.

Live real-time Stereo Vision for streaming & movie conversion with 3D CG mixing

Phone-based headset with 2K and 4K resolution for low-cost VR and AR

Autostereoscopic interweaved image as seen on 2D monitor

When you watch movies, presentations or live-streamed content with both eyes receiving a stereo view, you feel the depth, you feel part of what you are watching, users feel teleported to the event or video-call, or directly into the presentation!

Viva3D is fully real-time, instantly converting 2D and 3D stereo video and images to full 3D, and then converting that to autostereoscopic formats with zero wait.

The key barriers to commercial implementation of stereo viewing were the high cost of 3D content creation, movie conversion, updating and management; problems that are now solved. New light AR glasses are coming that will make stereo viewing a necessary feature of every service.

Breaking technological barriers, Viva3D provides a complete and affordable solution. Uniquely, Viva3D software generates 3D content in which any element of the 3D content updates from external data, such as stored on a remote server, or through standard RSS feeds, allowing news and views to be shown in 3D by the hour.

This allows anything from complex 3D models, video streams to 3D text, and more to be changed instantly, as real-world events and news change your 3D content self-updates. In addition, Viva3D creates fully interactive 3D content for 2D and 3D screens, and can even recreate external 3D real world scenes automatically.

Viva3D will also merge live streaming video (mono or stereo) into 3D scenes, even 4K video, and even map it onto the surface of 3D objects in scene.

Viva3D includes full support for stereo camera input, mixing 3D live feed with 3D CG in real-time.

Airport & Transport Displays with full 3D CG

Airports across the UK, Italy and further afield have used ViewPoint's 2D software since the 90´s, and today have the benefits of the most flexible display system available. Display what you need to, when and where you need to.

Viva3D effortlessly mixes 2D and 3D content, processing and displaying your data with advanced control, reporting and effects.

Remote data is broadcast to displays via efficient multicast datagram transmission, meaning your network bears no noticeable load however many displays used.

Viva3D can run on very low-cost ePC Stick computers providing proven 24x7 reliability and full status reporting at a fraction of the cost of competing systems.

24/7 Certified 2K & 4K interactive players

Display Network Management

ePC content players provide optimum performance and reliability

The ePC range of players are designed to operate 24x7 with laboratory certified performance and reliability. From the tiny Stick or tablet-based ePC´s running Viva3D Pro, to multi-GPU systems driving the latest 4K & 8K Ultra High Resolution monitors, the ePC range delivers the best value for money backed by a full 5-year warranty*.

Economy and flexibility:

ePC systems can manage three FHD, or two 4K screens, supporting multi-monitor and large video wall displays economically. ePC systems are fault tolerant, with full reporting and recovery from any type of failure, with PC rebooting if necessary, ensuring that digital signage displays operate at peak efficiency at all times. All ePCs are 24/7 certified by SAS.

Managing small or large Digital Signage networks:

From one to millions of clients, ViewPoint offers the management and server-side software needed for the job, software that has been proven in the largest projects, such as key international airports and national retail chains, operating reliably over many years with the highest reliability.

The management software is fault-tolerant, operating on multiple servers, sending email and SMS status messages to ensure that system managers are always fully informed.

Full support of complex language scripts in 2D and 3D

Viva3D supports the full range of international glyphs & keyboards

Just select your keyboard, Chinese, Korean, Japanese, Arabic or even Tibetan, and start typing! You can create 3D content with beautiful glyphs in whatever language you need!

Furthermore, the 3D text in your content can automatically update itself, instantly, from remote Unicode text streams from services or your own FTP server.

There are 28,762 Chinese glyphs, 21,647 Korean glyphs and 22,290 Japanese glyphs available in Viva3D Pro for 2D and 3D text, which appears instantly as you type in the selected language.

CUSTOM PROJECTS: We can provide comprehensive hardware and software services for both industrial and commercial projects. If you have special requirements or support needs, we can provide a solution efficiently, rapidly and economically. Please ask for our references.

Advanced software development:

✔ Desktop and embedded applications
✔ C, C++, Java, ASM – Win, Linux & Android
✔ Specialised 3D computer graphics
✔ Autostereoscopic drivers
✔ Stereo streaming and Communications
✔ Industrial process control
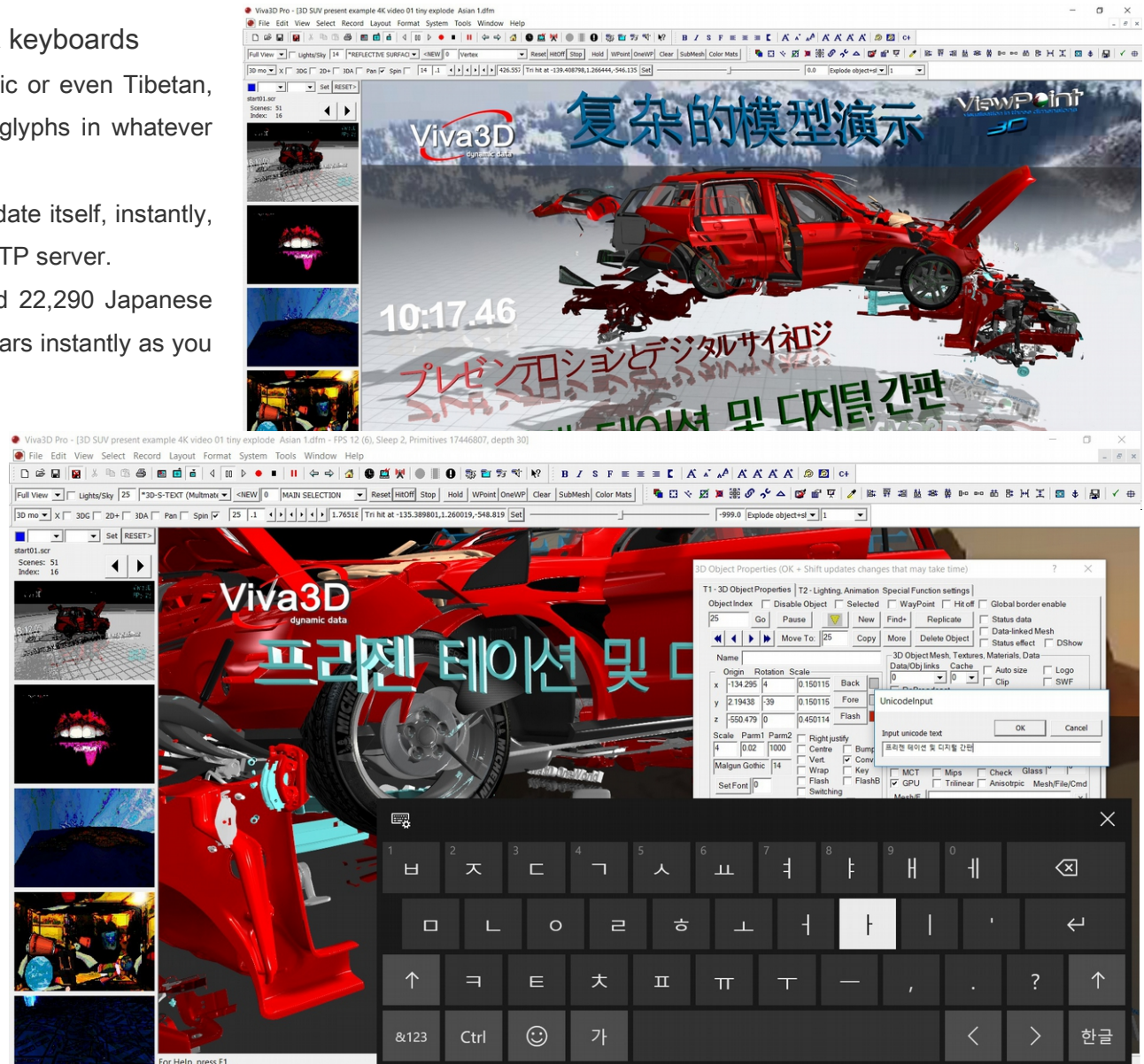
Contact

Viva3D Pro in profile

Advances in computer graphics technology has enabled new improved methods to create live-data 3D that can instantly render content that once took hours or days. We have striven to apply these advances to create a completely new 3D application enabling fully interactive content to be created much more easily, that uniquely can be instantly updated by users, or remotely from the Cloud or FTP servers. Our aim has been to make creating 3D content as easier or easier than 2D.

Viva3D Pro can provide high-end functionality, including speech recognition & stereo vision support, where it can not only mix content with stereo camera feed within the 3D scene, but also detect people and objects, and interact with people in a truly human manner.

Whether used to create 3D presentations, advertising content, interactive presentations, entertainment, or virtual reality scenes, Viva3D can manage a wide range of tasks faster and at lower cost than any other application available today, thanks to its uniquely efficient algorithms.

Viva3D Pro software offers true environmental effects, reflections, pixel lighting, soft shadows, video streaming into the 3D scene at up to 4K resolution, truly massive data model rendering in real-time, cross-sectioning and and much more. Viva now has an industry standard key frame animation system with skinning and morphing running entirely on the GPU, supporting photo realistic human model animation even on low-cost and mobile devices. Our next challenge is to create content using photorealistic human models that you can talk to, that can interact with you fully in the most human way!

Viva3D Pro software can be used on all modern devices, from PCs to phones. It is highly expandable and uses industry standard hardware. As an object-oriented system it is readily expandable to meet all future requirements, operating at up to 20x the speed of similar applications due to code efficiency.

Visit YouTube to learn more:

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