

## Bloom Defocus

#### OII About Brainstorm

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Established in 1993, Brainstorm Multimedia provides industry-leading real-time 3D graphics and virtual set solutions for all broadcast graphics types and workflows as well as for feature film production and 3D real-time presentations. Brainstorm customer list include many of the world's leading broadcasters plus a large number of smaller and regional stations.



brainstorm3d

# eStudio

The industry's fastest real-time 3D graphics and virtual set solution

eStudio is a hugely powerful and integrated real-time 3D graphics toolset that provides solutions for all types of broadcast graphics and workflows. Developed to deliver unlimited design capabilities for real-time graphics, eStudio is considered to be the industry's fastest real-time 3D graphics and virtual set solution available in the market.







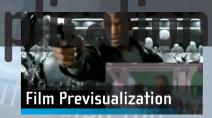












The one-stop shop in broadcast graphics

## The fastest virtual set and 3D graphics solution

Brainstorm eStudio is a powerful and flexible toolset that provides solutions for all real-time graphics requirements. The eStudio is unique in the market due to its hugely powerful capabilities, open architecture and versatility, enabling both design and real-time playout of virtual studios and 3D graphics as well as the easy creation of customized applications. It provides stunning results for applications such as News & Sports, channel branding, weather, entertainment, charts and graphics, interactive corporate presentations and film pre-visualization, amongst other graphics intensive requirements. Being recognised as the fastest 3D graphics render engine around, eStudio is the one-stopshop capable of fulfilling any broadcaster's requirements.



#### Customizable Interface

eStudio enables the easy drag-anddrop creation of customized interfaces for simple and intuitive control.

The GUI is so flexible that the user can select just a few buttons for basic animations or detailed control panels for complex tasks. All the tools are there, but only those required are visible.



### **Extreme Flexibility**

With more than 20 years of development, eStudio has always been at the forefront of broadcaster's needs, providing them with the capabilities necessary to stay ahead of their competition. Reliability is also a key concern, and with eStudio deployed in multiple and complex environments around the world, its robustness and flexibility continues to be proven daily.

#### Open Architechture

Brainstorm has always been synonymous with real-time 3D graphics operations. and developments are focused increasing our customers' abilities to build on their creative demands and the visual appearance of their graphics. As such, our goal is to stretch the latest technology in 3D graphics hardware to its limits and so provide our clients with the ultimate software/ hardware configuration running on standard PC workstations with GPU technology from NVIDIA and high-end video I/O cards to ensure the highest performance and compatibility.

#### **Virtual Set Production**

Brainstorm has been pushing the boundaries of virtual set **production** and development for two decades. Brainstorm pioneered the application of camera tracking to 3D real-time virtual sets, and today eStudio interfaces with practically all current tracking systems, making integration with any production hardware an out-of-the-box feature.

As well as working as a high-end virtual set using camera tracking and external chroma keyers, eStudio also facilitates inexpensive virtual set productions thanks to its optional built-in chroma keyer and the ability to avoid the need for camera tracking through control of virtual cameras and the insertion of the character as a live texture. All is coupled with an user-friendly operation and image quality, both paramount to ensure the best results for our customers.





#### Flexibility in Graphics

From stills, tickers, lower-thirds or OTS to award-winning full screen graphics and animations, virtually any kind of 2D or 3D graphic can be designed with eStudio. It supports StormLogic and SmartTemplates, which can automatically look up data and redraw graphics accordingly, allowing manual or automatic data input from other applications, databases, spreadsheets or realtime feeds.

It also **imports graphic files** and 3D models from 3D software packages such as 3D Studio Max or Maya in a variety of formats, plus image and video files, movies from disc storage systems and external video feeds.

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#### **Augmented Reality**

The term Augmented Reality has been used lately to describe ways to **enhance** visual perspectives or views in a variety of media to describe information graphics applied to television programs, amongst other applications. As a form of Virtual Reality, is a method to overlay synthetic images along with real ones. Since its very beginning, Brainstorm has provided Virtual and Augmented Reality for television programs. election coverage entertainment shows. displaying data and information in a very attractive manner, providing broadcasters more options to deliver complex and detailed data to their audience.



#### **Advanced Applications**

Brainstorm's eStudio can be used for 3D visualisation for green screen film production. Directors and film makers can see their shots, view different angles and be sure of the final result thanks of the real-time previsualization of the takes using eStudio technology, regardless of the complexity of the scene.

eStudio was used on numerous films such as I Robot, Artificial Intelligence, Speed Racer, Stealth, Alice in Wonderland, X-Men Origins and Hugo by film directors and actors to get an immediate realtime view and reference of what a take will look like before getting into expensive post-productions.



#### Key Features

#### Advanced Modelling Tools

Built-in geometries and primitives, imported models, hierarchy of objects, materials and textures, built-in text effects and particle systems. Texturize objects using pictures or movies.

#### Advanced Rendering

Fully OpenGL power with shaders like Phong, bumpmap, shadows and impostors. Multi-texturing and multi-pass per material and customized filter shaders and 2D effects (distortion, bloom...).

#### Open Hardware Interfaces

Brainstorm works closely with many hardware manufacturers such as NVIDIA, Bluefish, AJA, Blackmagic, FOR-A, and many other. The eStudio also interfaces with most camera tracking systems.

#### Open Access to External Data

eStudio allows manual or automatic data input from external applications, databases or real-time feeds in a variety of formats: XML, ODBC, Excel, RSS, etc.

#### Easy API

Simple drag and drop controls allow non-technical users to fully control any element in the Brainstorm software and build their own applications.

#### Plugins

Customize your eStudio with the extensive library of plugins, from Excel, Maya, 3D Max or Photoshop importers to MIDI interfaces or camera callibration.

#### The eStudio range

#### eStudio Global

The complete eStudio Suite with all the options.

#### eStudio Designer

Module providing an interface for graphics creation, without video output.

#### eStudio Plaver

Module providing full screen real-time rendering in SD and HDTV, without creation capabilities.

#### Hardware

#### **Recommended Graphics Boards**

**NVIDIA Quadro Family** 

#### Recommended Video Boards I/O

AJA Kona 3G, Bluefish Epoch, Blackmagic DeckLink HD Extreme 3D, NVIDIA SDI Output, NVIDIA SDI Capture, FOR-A MBP 12, Matrox Xmio 2.

#### Supported Tracking Systems

Vinten, Radamec, Blue i, Thoma, Cartoni, Mo-Sys, Xync, Panasonic, Tecnopoint, Telemetrics, Super Encodacam, Shotoku, Motion Analysis, Trackmen. Please contact Brainstorm if your preferred tracking system is not listed here.

Brainstorm reserves the right to alter any specification, feature or technical requirement without prior notice. Please contact Brainstorm Multimedia or your local distributor for updated information.

