

# Blink 3D

STANDARD EDITION

An authoring tool for creating  
rich interactive and animated  
3D virtual environments.



High-end game-quality graphics and physics supporting rich, interactive multi-user 3D environments all delivered in real time.



## Applications

- ▶ Games
- ▶ Education
- ▶ Marketing
- ▶ Machinima
- ▶ Virtual Heritage
- ▶ Pre-visualization
- ▶ Training
- ▶ Virtual Worlds
- ▶ Social Networks / Blogs

**Blink 3D™ is a complete system for creating and viewing multi-user**

**3D environments or Virtual Worlds that can be published and viewed on the Web or locally.**

## Blink 3D Includes

- ▶ Blink 3D Builder, an integrated application for authoring 3D environments.
- ▶ Blink 3D Viewers, allows the 3D environments to be viewed in Web browsers (Internet Explorer, Firefox, and Opera) as well as in a Standalone player.

## Flexibility

With Blink 3D, the designer has the flexibility to create something as simple and elegant as a 3D Mayan vase to a detailed 4 block recreation of a 1920's city or a full blown FPS or RPG style game. All capable of being embedded in a Web page. Blink 3D helps designers quickly build their 3D environments; it also gets out of their way when the designer does not need help.

## Enter the Metaverse 2.0

Blink 3D supports Just in Time background loading and unloading of environment extensions. Environment extensions allow designers to build extensible environments that can, in theory, go on forever. Environments can also be linked together using Portals. This allows 3D environments to be grouped together to form part of what is often referred to as the Metaverse 2.0. Designers can allow people in the environments to have their own avatar (a 3D representation of themselves) and to be able to chat with each other.

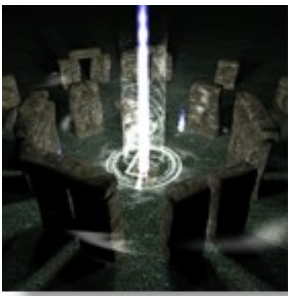
## Core Engines

To support all these features and more requires something special under the covers. Blink 3D has the most cutting edge 3D graphics engine available on a PC today. To bring the graphics to life and add realism, Blink 3D uses the same Ageia PhysX™ physics engine used in modern PC and console games. Blink 3D also supports the Ageia PhysX accelerator card which supports larger and more spectacular physics simulations. To add to the ambience of the 3D environment, Blink 3D has an extensive sound engine that allows designers to add in sound effects and to manipulate the sound to suit the room it is being played in.

## Why Blink 3D?

Reasons to use Blink 3D for developing 3D environments:

- ▶ Out of the box, easy to use authoring tool
- ▶ Extensive range of Behaviors for quickly adding interaction and animation
- ▶ Published environments can be viewed on the Web or locally



#### Viewers

- ▶ Internet Explorer
- ▶ Firefox
- ▶ Opera
- ▶ Standalone Player



#### System Requirements

##### Blink 3D Builder

- Intel Pentium 4 1.2Ghz or higher, Pentium 4 3Ghz recommended
- At least 512KB RAM, 2GB recommended
- At least 100MB Hard Disk Space
- Windows XP 32Bit (service Pack 2 or higher)
- Microsoft .NET 2.0
- Graphics Card that supports DirectX 9.0 and OpenGL
- 1024 x 768, 32-bit display

- ▶ Cutting edge graphics engine with outstanding frame rates
- ▶ Game quality Physics Engine and support for Ageia PhysX Accelerator card
- ▶ Extensive sound support including sound modeling
- ▶ Multi-user chat enabled environments and support for shared objects
- ▶ Extensive BlinkScript API to give the programmer access to the nuts and bolts of the system
- ▶ Free Blink 3D Viewers
- ▶ Royalty free distribution of 3D environments
- ▶ Environment portals and environment extensions

#### Blink 3D Builder

The Blink 3D Builder uses a point and click interface for authoring 3D environments. Designers can choose the assets to be included in the environment such as 3D models, materials, sounds and Behaviors. Use 3D models created in packages such as 3DS Max, Maya, Blender, or Lightwave by exporting to the Blink 3D format and then importing them into Blink 3D as an asset.

Designers can then position the models in the environment, adjust their properties such as color, materials, lighting, visibility, etc. The designer can then add animation and interactivity to the environment. They can use the BlinkScript API which is an extensive JavaScript API that allows the programmer to do just about anything they want. Or, the designer can use some of the 80+ Behaviors that come with Blink 3D.

Behaviors are objects containing pre-written code and sometimes 3D models. The Behaviors can be used to do things like rotate models, adjust lighting, add in fog, capture keyboard or mouse input and act on it.

Behaviors can be chained together using their Triggers and Events to perform complex operations.

Extensive, interactive and animated environments can be created without the need to write a single line of code. The designer who is also a competent programmer can use the built in code editor to write custom code for sophisticated games and educational products.

#### Blink 3D Viewers

The Blink 3D Viewers allow the completed 3D environments to be viewed in different contexts. This means that a Blink 3D environment can be created once and viewed with out modification in Web browsers such as Internet Explorer, Firefox and Opera, the environment can also be viewed in the Standalone Player. Other viewers are under development that will allow the environment to be viewed in a variety of other contexts.

#### Main Features

##### Graphics

- OpenGL or DirectX
- Hierarchical scene graph

- Ageia PhysX™ Accelerator card (optional)
- Currently no support for working behind proxy servers.

#### Blink 3D Viewers

- Intel Pentium 4 1.2Ghz or higher, Pentium 4 3Ghz recommended
- At least 256KB RAM, 1GB recommended
- Windows XP 32Bit (service Pack 2 or higher)
- Graphics Card that supports DirectX 9.0 and OpenGL
- 1024 x 768, 32-bit display
- Microsoft .NET 2.0 (required for Standalone Player)
- Internet Explorer 6.x, Mozilla Firefox 1.5 or Opera 9.0 (required for browser plugin)
- Ageia PhysX™ Accelerator card (optional)
- Currently no support for working behind proxy servers.

- Multiple views and cameras with Depth of Field
- Dynamic lights and multiple shadowing rendering techniques
- Streaming HTML and video (HTTP and RTSP) as textures
- Vertex and fragment programs (shaders)
- Skeletal and Key frame animation
- Mesh and material LOD support
- Fog, Particle System, Billboards, Compositors, Sky Boxes, Sky Planes and Sky Domes
- Textures ( PNG, JPEG, TGA, BMP and DDS)
- 2D Text Labels, Overlays and GUI

#### Physics

- Ageia PhysX™ physics engine
- Gravity, Friction, Collision detection and Physical Materials
- Rigid Bodies, Joints, Motors, Springs, Dampers and Sensors

#### Sound

- Ambient and positional (3D) sound
- Support for EAX and streaming audio (HTTP and RTSP)
- Formats: MP3, OGG, WAV, MIDI, AIFF, WMA, SPX, MOD, XM, S3M, IT, AU and SND

#### Multi User

- Chat and IM (Instant Messaging)
- Shared objects
- Avatars

#### API

- BlinkScript a fully documented JavaScript based API
- Over 110 Classes including support for TCP/IP Sockets, XMPP, XML

#### 3D Modeler Exporters

- 3DS Max, Maya, Softimage, Lightwave, Blender, Google Sketchup, Milkshape, Deled, AC3D, Fragmotion, Wings 3D and RenderMonkey.



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