The Cutting-Edge Real-Time Rendering Engine
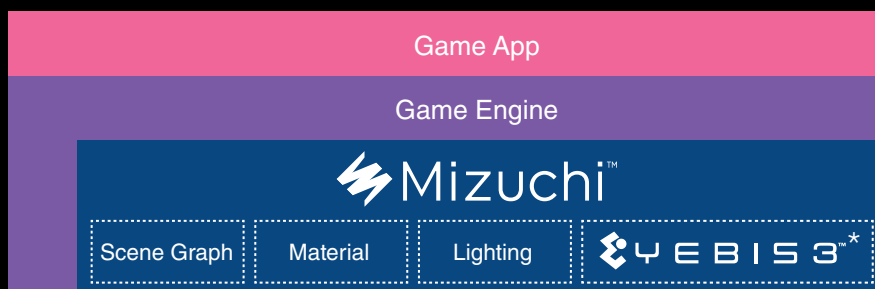
Mizuchi™

Mizuchi goes beyond the limits for real-time graphics

Mizuchi

An array of technology to support new levels of graphical creation

It is becoming necessary to have a wide range of top quality techniques such as shading, post processing effects and lighting in real-time rendering solutions for the current generation.

Mizuchi is a real-time rendering graphics middleware that brings together technology at the highest level. With physically based rendering, movie level post processing effects and high resolution material technology which stands up to close inspection, makes it possible to achieve new heights in graphics.

Game App
Game Engine

Mizuchi

Scene Graph	Material	Lighting	YEBIS 3*

＊YEBIS 3 is the post processing effects middleware by Silicon Studio

The Real-Time "Museum" Demo, achieves over 30fps on PlayStation®4

➡ For more info, search: "Mizuchi Tech Demo"

Scene construction is possible with DCC style Tools

Features

- **Materials**
  - Metals, Rust, Plastics, Leathers, Concrete, Leaves etc.
  - Semi-transparent materials such as glass is also supported
  - A rich representation can be achieved using layered materials

- **Lighting / Shadows**
  - Wide range of light sources
    - Directional lighting, Spot lighting
    - Spherical lighting, Area lighting, Omnidirectional lighting
  - Wide range of shadows
    - Standard shadow, Omnidirectional shadow, Cascade shadow
  - Supports Deferred and Forward shading
  - Image-based lighting

- **Screen Space effects**
  - The latest in anti-aliasing technology
  - Screen space reflection
  - Screen space ambient occlusion

- **SDK**
  - Provides a clean cross-platform abstraction layer
  - Easily customizable rendering pipelines
  - Useful debugging utilities

- **Documentation**
  - Comprehensive tutorial for programmers / designers
  - API Reference

- **Support Tools**
  - Material Design Tool
  - Edit materials and lighting in Mizuchi's integrated editor
  - Smooth integration with DCC tool workflow

- **YEBIS 3**
  - World Class Post Processing Effects Middleware "YEBIS 3" installed as standard

Platforms

- Microsoft Windows 7 and above (DirectX11)
- PlayStation®4
- Scheduled for support: Xbox One

www.siliconstudio.co.jp/middleware/mizuchi/en

Silicon Studio