

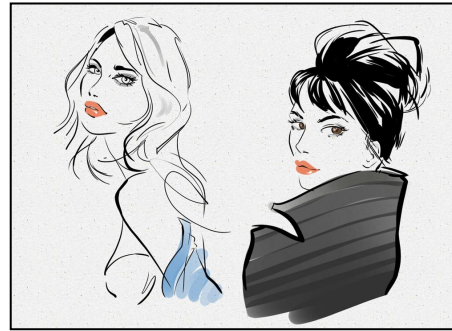
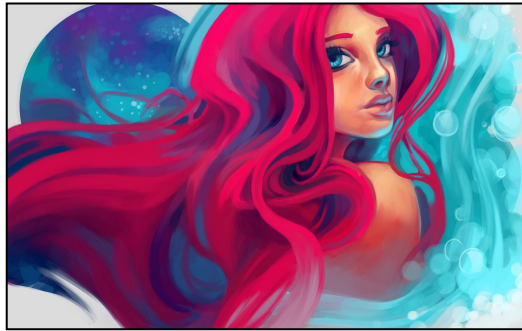
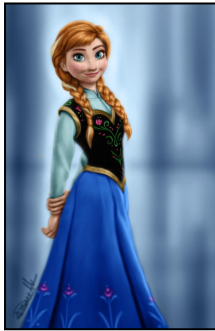
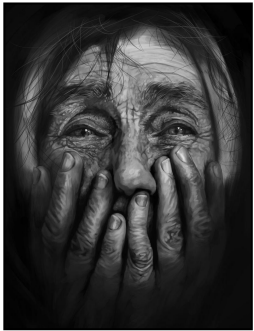


# ICE: Infinite Canvas Engine



# Introduction

The ICE Drawing Engine uses a new approach for digital drawing which allows the creation of detailed and textured artwork typical of pixel-based systems such as Adobe Photoshop but with the infinite, artifact-free scalability and small memory footprint of vector-based (SVG) systems such as Adobe Illustrator.



# Introduction

ICE provides several advantages over today's digital drawing systems and representations.



# General Advantages

- The ability to create graphical elements that exhibit the richness of pixels with the artifact-free scalability and small size of SVG.
- An infinite canvas in both spatial (x and y) extent and scale (z) thereby providing seamless infinite zoom and infinite definition, features not available in any other system.
- A new multi-scale rendering algorithm for image textures that enables a wide variety of scanned paper textures to be rendered at any scale (infinite paper).
- Very small file sizes, providing an ideal solution for memory- or bandwidth-limited environments.

# General Advantages

- High-quality tunable anti-aliased rendering. Support for a wealth of primitives such as variable width textured strokes with intricate sub-pixel features.
- Realtime fast rendering by exploiting the massive parallelism inherent in GPUs enabling immediate feedback during drawing and interactive canvas transformations.
- Support for layers, an indispensable metaphor for content creation.
- An enabling technology for a novel representation of existing pixel-based images that provides the intricate detail and texture that pixels allow but with the small size and artifact-free transformations only available with SVG.
- An internal representation that enables stylization for different looks and levels of abstraction.

# Superior drawing experience for content creators

- A natural, smooth, pencil-on-paper feel, where pen strokes match the artist's input precisely.
- Immediate visual feedback during drawing due to on-the-fly curve fitting and fast rendering.
- A rich assortment of pressure-sensitive, customizable, scalable, textured pens.
- An organic, free flowing drawing experience where ideas can be expanded without bounds, both spatially and in z, due to the infinite canvas which requires no upfront planning regarding size and resolution.
- The ability to create seamless, hierarchical, infinite resolution, story-within-a-story experiences not possible with the current state of the art systems such as Adobe Photoshop and Adobe Illustrator.

"It's mind-blowing stuff: 5/5 stars."



- ImagineFX

“While other programs slavishly adhere to the ancient rules of what art should be, Mischief rips it up and starts again.”

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- ImagineFX



“Mischief is a refreshing approach to drawing programs, and it makes Photoshop and Painter feel archaic in the way they’re restrained by traditional media.”

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- ImagineFX

"Mischief is a superb choice for all creatives."  
8/10 stars.



- Creative Bloq

“Mischief: an extraordinary drawing tool for  
extraordinary artists”



- ArtStation

“Mischief is an inventive sketching app.”



- Fast Company

“For me – it’s revolutionary. From A to Z, everything with sketch, colour, and ink, I make with Mischief. I love the simplicity and how it aids our discovery process and encourages ideation and illustration. The idea that people in our profession can have an infinite canvas and go into microscopic detail is very exciting.”



- Creative Bloq