



Let's get technical

Mac

Hardware

- Mac Pro, iMac, iMac Pro, MacBook, MacBook Pro, MacBook Air, Mac Mini
- Mac with Apple M1/M1 Pro/M1 Max chip or Intel processor
- 2GB RAM minimum
- Up to 2.8GB of available hard drive space; more during installation
- 1280x768 display size or better
- Supports regular, retina, and expanded gamut DCI-P3 displays

Operating System

- 12 Monterey
- 11 Big Sur
- 10.15 Catalina
- 10.14 Mojave
- 10.13 High Sierra
- 10.12 Sierra
- 10.11 El Capitan
- 10.10 Yosemite
- 10.9 Mavericks

Windows

Hardware

- Windows-based PC (64 bit) with mouse or equivalent input device
- Hardware GPU acceleration*
- DirectX 10-compatible Graphics Cards and above
- 2GB RAM minimum (4GB RAM recommended)
- 934MB of available hard drive space; more during installation
- 1280x768 display size or better

Operating System

Affinity Store version

- Windows® 11
- Windows® 10 (1607 Anniversary update or higher)
- Windows® 8.1
- Windows® 7 (Service Pack 1;

- Requires:
- Windows 10 April 2020 update (or later)
 - Direct3D level 12.0-capable card

Platform Update
KB2670838; Aero enabled)

Microsoft Store version

- Windows[®] 11
- Windows[®] 10 (1607 Anniversary update or higher)

iPad

Hardware

- Compatible with...
 - iPad Pro (all models)
 - iPad Air (2, 3 & 4)
 - iPad (2017 onwards)
 - iPad Mini (5 & 6)

Operating System

- iOS 12 or above

Overview

Key:

New = Improvements and Features new to version 110.

Text = Functionality new to version 19.

It's Fast—Really Fast

- Pan and zoom at 60fps
- Live previews of transforms in the correct Z-order
- Real-time gradients, effects, blend modes and adjustments
- Always fast, whatever the complexity or size of your artwork
- 64-bit multi-core optimization and hardware acceleration

Improved Performance with:

- **New** Heavily layered documents (faster rendering during panning and text reflow)
- **New** Placed images
- **New** Embedded documents
- **New** Low-memory conditions

Beautiful By Design

- Built from the ground up for creative professionals
- Designed by designers... stylish and uncluttered interface

Over 1,000,000% Zoom

- Zoom way beyond 1,000,000% — smoothly and quickly
- See a reassuringly CAD-like level of precision
- Instantly switch between favorite zoom levels

Rich History

- Instantly undo/redo over 8,000 History steps
- Store document states as Snapshots
- Save History so you can undo steps later even on different computers
- Undo actions performed in other Affinity suite apps
- Cycle Futures feature prevents history loss after editing from undos
- A seamless AutoSave protects against unexpected shutdowns

Professional Samples

- Peek into the minds of other illustrators with professional

samples

Highly Customizable

- Light or dark user interface
- Create and save your own custom keyboard shortcuts
- Create your own toolbars and toolbar layouts (for desktop only)
- Reorganize on-screen panels, float or dock as preferred (for desktop only)
- [Create and save Studio panel \(and toolbar\) presets](#)
- Tweak UI tool size and choose monochrome or colored buttons (for desktop only)
- Use Preferences to set up Affinity Designer to your taste
- Work in pixels, points, picas and physical document units

Naturally Easy to Use

- Follows industry conventions for the most popular shortcuts
- Use generic multi-button/wheeled mice and graphics tablets (for desktop only)
- Check the Hint Line and Context toolbar for help with current actions (for desktop only)
- Quickly hide all tools and panels for a bigger design preview
- Work with multiple designs and multiple displays
- Document presets or save your own custom document setups
- Create new documents from delivery-ready presets
- Create custom document setups and templates

Mixed Discipline Design

- Task-focused design spaces create a clean, efficient environment
- Switch between vector, pixel, and export modes
- One Affinity file format is compatible with all Affinity suite apps

No Subscription

- For a single, one-off price you will own the current version (v1) of the app (on your chosen operating system). It's yours to keep and you'll even receive free updates of the software until version 2 becomes available (no planned date currently). You can then simply continue using the version you have or choose to upgrade to version 2 for an additional cost.

Registration and Account Access*

- [In-app registration \(optional\)](#)
- [In-app access and viewing of your Affinity account](#)
- [Affinity Store content synchronization](#)
- [Install free and purchased Affinity Store content \(brushes, assets and more\)](#)

*For Mac, feature requires macOS Sierra 1012 or above

Languages

- English (US and UK)
- German
- French
- Spanish
- Portuguese (Brazilian)
- Japanese
- Italian
- Chinese (Simplified)
- Russian

Pro Vector Illustration

Rock Solid Pen Tool

- Instinctively and quickly create what you want with fewer clicks
- Change node types on the fly without interrupting your flow
- Switch between Pen and Node tools with a key press
- Apply pressure, scaling, drawing, miter and line end settings for organic strokes
- Create single polycurve from multiple curves
- Snap control handles to geometry, node, grid or guide
- Arrowheads (and tails)

Clipping

- Add artwork within shapes and layers using Insert Inside and Paste Inside
- Also Insert Behind and Insert Above the current layer

Convert to Curves

- Convert primitives, imported vectors, and text to editable curves
- Optionally convert some objects to curves at export time

Curve and shape editing

- Multi-node selection using polygon/freehand lasso drawing
- Align/distribute multi-node selections
- Transform multi-node selections using Selection Box
- Match active node's geometry to that of another curve's node geometry (for desktop only)
- Construction snapping for finding control handle's angles and distances (for desktop only)
- [Straighten or delete a curve's segment](#)
- [Set precise straight line lengths using Transform Panel \(for desktop only\)](#)

Tool and Mode Switching

- One tool flexibly selects, moves, rotates, scales, and skews
- Switch to the Move tool any time with a key press (for desktop only)
- Toggle between popular tools and temporarily change modes (for desktop only)
- Intuitively edit objects within groups without ungrouping
- Optionally move parent objects without their child layers

Artboards

- Create multiple artboards within one document
- Use separate canvases for different versions of icons and other web/UI elements
- Create stationery variants all in one design
- Output artboards as separate pages in exported PDFs
- Name artboards (including using emojis)
- Apply custom grids and guides per artboard
- Print artboards on separate sheets

Symbols

- Simultaneous and automatic editing of repeating design elements
- Create symbols via easy access Symbols Panel
- Replicate symbols as individual symbol instances
- Synchronization across instances by default
- Switch off synchronization for isolated edits
- Edit distinct object properties independently of each other

Constraints for UI Design

- Avoids time-consuming design rework
- Auto-layout on differently sized device artboards
- Scale and/or anchor design elements to their 'parent' container
- Select object edges to be constrained
- Max/min fit for fixed aspect ratios

Corner Tool

- Neatly round and soften corners on shapes and lines
- For single and multiple nodes

Pencil Tool

- Draw lines with an intuitive balance of accuracy and

Multi Stroke and Fill

- Appearance Panel for all multi stroke/fill management
- Stack strokes and fills like layers
- Any stroke can have its own stroke width
- Any stroke or fill can have its own blend mode and color gradient
- Save as custom Style for later use
- Place stroke in front or behind fill

Expand Stroke

- Detach outlines from vector objects to create new shapes
- Add new outlines to expanded strokes

Contour Tool

- [Offset a curve or shape's outline and stroke](#)
- [On-page radius control](#)
- [Fill control: Auto close, Force open or Force close](#)

Power Duplicate

- Duplicate objects and repeat transforms all in one go
- Create geometric patterns or repeating, scaling, rotating designs

Layout Grids

- Create standard square and rectangular grids
- Create axonometric grids (isometric layouts and more)
- Isometric Panel (desktop) or context options (iOS) for easier grid creation, transforms and plane switching
- Transform objects directly onto grid planes
- Custom grids (Triangular, 2-axis and 3-axis)
- Cube mode for custom grids from transformable cube
- On-page draggable grid origin with grid axis scaling and angle adjustment
- Snap grid to object angles to reconstruct useful grids from finished artworks or sketches
- Snapping and constraining axis (for desktop only)
- User-definable axis subdivisions for intermediate angles (for desktop only)
- Change grid color and opacity
- Snap to standard and custom grids for accurate designing
- Presets for Grid & Axis Manager or save your own grid

Selecting, Aligning and Distributing

- Drag-over marquee selection
- Easy selection of overlapped and grouped objects
- [Select multiple objects by type, color, stroke weight, transparency, and more](#)
- Align to left, center, right, top, middle, bottom
- Works to selection bounds, spread (artboard), margins, first/last selected
- Automatically distribute objects horizontally or vertically
- Distribute to your choice of spacing
- Alignment handles for precise alignment of a selection to a position on page
- Change object Z-order

- Adjust weight automatically based on velocity, pressure, or use fixed width
- Use stabilizer for super smooth pencil strokes
- Sculpt mode for repeating and continuing strokes
- Arrowheads

Live Gradient Fills and Transparencies

- Draw gradients live in your design, instantly and smoothly
- Apply color and transparency gradients to fills and outlines
- Easily adjust the nodes and rates of change for gradients
- Use solid, linear, elliptical, radial, conical gradients and apply bitmaps
- Aspect ratio control (bitmap fill/transparency only)
- Linear and radial gradients respond to object scaling/shearing with skewed fill handle editing

Textured Noise

- Add noise to object fills and outlines, also as a gradient

Live Boolean Geometry

- Join, intersect, subtract, divide and combine shape outlines
- Boolean operations are editable (Compound Shapes) without using Undo

Editable Shapes

- Regular shapes are naturally smart with unique editing nodes
- Easily customize shapes, achieve neat results with snapping geometry
- Create perfect squares and circles by constraining primitives
- Apply special and rounded corners as absolute or % values
- Customize cogs, stars, arrows, pies, and 14 other smart shapes
- Presets for shapes or save your own shapes (for desktop only)

Advanced Layers and Masks

- Organize using layers, groups, stacks and layer naming
- Seamlessly mix vector and raster layer types
- Thumbnail sizing - Small, Medium and Large
- Isolate, rename, lock, hide and merge layers with easy shortcuts
- Unlock all locked objects simultaneously
- Show all hidden objects simultaneously
- Clip and mask by dragging and dropping, masks remain editable
- Apply multiple masks for complex transparencies
- No limits on number of layers, masks, groups, or hierarchy of layers
- Limit the affect of adjustments and layer effects by drag and drop
- Auto-scroll jumps to selected object in Layers Panel
- Color tagging (retains PSD layer colors)

Transforms

- Accurately position and scale objects to specific values
- Use functions like +50% to scale objects (for desktop only)
- Apply transforms about an anchor point selected in the Transform panel
- Rotate using dedicated lollipop handle
- Set a custom center of rotation
- Reposition objects by their custom transform origin
- Skew using on-screen controls or the Transform panel
- Flip objects with handy buttons
- Point Transform Tool scales and rotates about a chosen point
- Transform selected objects separately

Assets for easy access to stored design elements

- Dedicated panel for asset storage
- Ready-to-go iOS design elements (icons, bars, controls, and more)
- Store any object to a custom subcategory
- Import/export assets

Styles

- Save combinations of fill, line and effects settings for reuse
- Apply styles for design consistency, e.g. your favorite letterpress
- Optionally scale styles with objects
- Search for styles by style name

Embed and Place Artwork

- Embed PSDs, Affinity Designer files and others as part of larger designs
- Double-click to open and edit embedded designs and PSDs
- Place regular artwork and edit in-situ as normal
- Use embedded document's artboards selectively
- Maintain embedded contents as vectors on export
- **New** [Alt/Option-dragging files gives placement options via Place Images panel](#)

Program Defaults

- Apply your preferred object settings as defaults

Work the Way You Want

- Tailor tool behaviors and UI settings in Preferences
- Zoom, select, nudge and more the way you like

Design Aids

Snapping

- Better snapping performance with complex geometries
- Snap to grids, guides, canvas edges, margins, gaps and more
- Tailor for different use cases or choose task-based presets
- Force Pixel Alignment snapping option for UI and web design
- Snapping candidate control (last six selected or layer based)
- Dynamic alignment works smoothly on snapping candidates
- Save favorite snapping settings as new presets (for desktop only)
- [Snap to pixel selection bounds](#)

Ruler, guides and column guides

- Switch on vertical/horizontal rulers that use document measurement units (for desktop only)
- Create guides in any measurement unit or by percentage
- Spread origin repositioned from ruler intersection
- Multi-column guide support
- [Customizable bleed and margin colors](#)

Misc Design Aids

- Inter-object measurement guides
- Clip to page/artboard canvas

Live Pixel and Outline Views

- See in standard and retina qualities in Pixel view—while still editing
- Wireframe Outline view distils your shapes and line art

Live Split Screen

- Split the screen to show Regular and Pixel or Outline views together, live
- Drag the splitter across your design in real time
- Continue designing, the view is totally live

Switch Views

- Save favorite view settings in the Navigator panel
- Quickly switch from one part of a document to another at different zoom

Multiple Views (for desktop only)

- See the same design, live, with different pan, zoom, or view modes
- Work on objects close up separately from the parent design
- Work on website and UI elements as part of a larger mock-up

Canvas Rotation

- Rotate the page like you would when using paper to sketch
- Maps to popular graphics tablet and keyboard controls (for desktop only)
- Disable canvas rotation to prevent accidental use
- [Rotate document view \(canvas\) with CMD/CTRL+mouse scroll wheel](#)

Raster Design Tools

Apply Raster Techniques to Vector Art

- Switch to the Pixel persona, select a brush, and start shading or texturing

'Magic Wand' Selection Brush

- Create selections quickly using a smart selection brush
- Automatically grow regions to detected edges, whether

- Finesse artwork with Dodge, Burn, Smudge and Sharpen brush tools
- See a live preview at the brush tip before you apply your stroke (for desktop only)

Pixel Selections

- Isolate parts of your design to constrain raster retouching
- Use regular shapes, pixel-width regions, freehand lasso, and selection brush
- Select regions based on color and tonal ranges
- Grow, shrink, feather, smooth and outline selections
- [Elliptical Marquee Tool draws from center](#)

raster or vector

Refine Selections

- Select fine detail like hair and fur with advanced refining
- Set refinement border width, smoothness, mode, and feather size
- Output refinement as a selection, mask, new layer, or new layer with mask

Resources

Add External Content to Your Designs

- Stock Panel to access free and royalty-free image resources
- Place content and scale non-destructively
- Treat images as objects or as pixel-based layers
- Multi-file placement click-by-click (for desktop only)
- [Linked resources \(for desktop only\)](#)
- DPI/scaling control for placed images [and documents \(for desktop only\)](#)
- PDF passthrough for absolute output fidelity (for desktop only)

Packaging (for desktop only)

- Share projects easily
- Original document remains unaffected
- Include fonts and linked images
- Show restricted fonts on package opening

Resource Management (for desktop only)

- Missing resource alert on document load
- Linked/embedded placed image policy at document setup
- Dedicated Resource Manager for image/document management
- Display placed image (or document) status
- Convert resources from embedded to linked (and vice versa)
- Recursive resource links are honoured
- Collect linked resource into a 'sidecar' folder for project portability

Resource Manager improvements

- **New** Relink multiple missing 'same folder' images in one operation
- **New** Switch on/off columns
- **New** New File Type column
- **New** EPS files can be linked
- **New** Improvements when managing placed documents

Professional Typography

Pro Font Support

Art and Frame Text

- Create elegant text with OpenType, Type 1, and True Type fonts
- Use advanced OpenType features including Ligatures
- Insert placeholder text while constructing designs
- Insert special characters and symbols
- Copy and paste style between objects
- Font fallbacks
- **New** Improved IME text editing for Japanese and Simplified Chinese languages
- **New** Added support for emojis

Live Font Previews

- Fonts are previewed instantly while creating or customizing text
- Access fonts by collection for efficiency (for desktop only)
- Browse recent, used or your favorite fonts (for desktop only)

Live OpenType Feature Previews

- Typography panel shows live feature previews
- Easily select the right Stylistic Set every time
- Preview Ligatures, Contextual Alternates, Swashes and more

Glyph Browser (for desktop only)

- Quickly insert special characters into your text
- Display in glyph or Unicode order
- Filter by font subset, e.g. cyrillic
- Search for phrase, glyph value or Unicode value

Character and Paragraph Panels

- Style text with on-screen panels you can dock, move, and resize
- Adjust kerning, tracking, shear, baseline and other character attributes
- Easily set leading, indents, tab stops and justification
- Optical character alignment (hanging punctuation)
- Comprehensive bullets and numbering (for desktop only)

- Adding scalable art text is perfect for quick headlines and callouts
- Add body text to designs using frames as containers
- Create containers of any shape
- Control alignment, justification, character and paragraph settings
- Optionally scale text content when scaling the parent text frame
- Vertically align frame text
- Fit text frame to contained text
- Live spell checking

Text-on-a-Path

- Type text along a custom curve or shape
- Control start and end points
- Set text on both or either side of lines
- Convert shapes to text paths
- Control all the normal text attributes including baseline

Text Styles (for desktop only)

- Ensure text appears consistent
- Apply character and paragraph styles
- Easily update styles cross-document
- Design from scratch or from text selection
- Style hierarchies
- Style groups

Professional Color, Compatibility, and Output

Professional Color

- True end-to-end CMYK for professional workflows
- RGB, RGB Hex, LAB, CMYK and Grayscale color models
- PANTONE® color swatches
- ICC color management profiles supported

Full Open or Import List

- Adobe® Photoshop® PSD
- Adobe® Photoshop® PSB
- Adobe® Illustrator® AI (containing PDF stream)
- PDF

- Seamlessly jump between color modes
- Lock to prevent color mode switching (for desktop only)

Pantone® Color Matching

- PANTONE® Goe™
- PANTONE® GoeBridge™
- PANTONE®+ Formula Guide Solid (V2)
- PANTONE®+ CMYK
- PANTONE®+ Color Bridge (V2)
- PANTONE®+ Metallic, Neon, and Pastels
- Coated and uncoated variants

Full PSD Support

- Accurate opening/saving of Adobe® Photoshop® PSD files
- Open very large PSB files
- Maintain layers, groups, gradients, blend modes, paths, masks and more
- PSD flattened image representation

Open Files from Other Apps

- Open PDFs, Adobe® Illustrator® files containing a PDF stream
- Edit objects in their native form—shapes, text, images
- SVG and EPS supported for vector designs
- Illustrator objects, groups and effects maintained where possible
- Open and edit Adobe® FreeHand® files (versions 9-11)

PDF and PDF/X compatible

- Save designs as PDF for sharing
- Edit and save PDFs for round-trip app compatibility
- Create and edit CMYK PDF/X files for pro printing
- Compatible with PDF/X-1a, PDF/X-3, and PDF/X-4

Professional Printing

- Full CMYK handling and ICC profiles
- Spot colors (for desktop only)
- Overprint controls (for desktop only)
- Trim, bleed and crop marks
- Bleed preview

Open and Save SVG and EPS

- Open, edit, and output industry standard EPS and SVG files

Smart Color Picker

- Dedicated Tool for Designer and Pixel Persona
- Accurately pick color using a magnifier over any part of your display
- Point or color averaged sampling
- Sample from current or all layers
- Grab in the source color space including CMYK, RGB and LAB color
- Simple panel-based Color Picker as alternative

Palettes and Swatches

- SVG (improved)
- EPS
- Adobe® FreeHand® (versions 9 to 11)

- PNG
- TIFF
- JPG
- GIF
- EXR (Open EXR)
- HDR (Radiance)
- Affinity Photo native file
- Affinity Publisher native file (includes page navigation)
- Extensive RAW import library (auto-process on import)
- DNG
- HEIF with depth map (as separate layer)

Full Save or Export List

- Affinity template (.aftemplate)
- Adobe® Photoshop® PSD
- PDF
- SVG (improved)
- EPS
- TIFF
- PNG
- JPG
- GIF
- EXR (Open EXR)
- HDR (Radiance)
- Affinity common file format

Export document

- Export as entire document or current selection
- Exclude background from selection
- Resampling
- File size calculator

Retina @2x/@3x Web and UI Assets

- Output standard and retina resolutions in one go
- Retina versions are auto-named with @2x and @3x suffix
- Create complete icon or sprite sets within one document
- Prototype whole web pages or create individual web graphics
- Deliver UI asset designs easily
- iOS Application/Universal icon presets
- Batch Builder for multi-slice imagesets (Xcode asset JSON) (for desktop only)
- Xcode path templates (for desktop only)
- JSON export for Spine
- Export to absolute sizes (for desktop only)

Export Presets

- Create your own export presets for consistency across projects
- Use popular presets that are supplied with Affinity Designer
- Set your default export format

- Use colors and palettes based on all the available color models
- Automatically create palettes based on document colors
- Import Adobe® Swatch Exchange (.ase) files
- Display palettes created in other apps using Apple System Color Palettes
- Create complementary, analogous and other color chords
- Generate palette from any image (for desktop only)

Global Colors (for desktop only)

- Update objects in your document when their base color changes
- Tint levels are retained when base color updates
- Use as solid colors or in gradients

Advanced Rendering

- Blend ranges (Blend options)
- Per-object gamma blending
- [Per-object hierarchical antialiasing](#)
- Use some adjustments across color modes
- Live wireframe and pixel views
- Split screen views

Slices

- Output individual pages/artboards, objects, groups, layers as slices
- Draw custom slices from scratch or modify from object slices
- Automatically create slices from layer contents
- Auto-name exported files using layer/slice names
- Slice presets for popular image formats and for UI design (for desktop only)
- Apply slice presets to selected slices (for desktop only)
- Multiple export setups, formats and resolutions per slice (for desktop only)
- Hide layer contents during export process
- Exclude layer content from export
- Export at multiple resolutions in one operation (for desktop only)
- Output all slices at once, just one slice, or selected slices
- Export image sizes individually (for desktop only)
- Copy/paste export setups and formats between selected slices (for desktop only)

Advanced Scaling and Resampling

- Optionally scale content when resizing documents
- Mixed format artwork scaled intelligently for highest quality
- Lanczos 3, Bicubic, Bilinear and Nearest Neighbor resampling methods

Efficient Affinity File Format

- Compact and fast native file format
- Fully editable in Affinity Photo and Affinity Publisher

16-bits per Channel Support

- 16-bits per channel mode for accurate color processing
- Works on all supported hardware and macOS versions without limits

Live Blend Modes, Adjustments and Effects

Non-Destructive Editing

- Apply to any object, layer, group—whether vector or raster
- See effects, blend modes and adjustments instantly with no lag
- Completely finish designs without switching to another app
- Edit any time—all effects, adjustments, and blend modes are non-destructive
- Set blend modes for strokes, layers, objects, groups, and

Live Effects

- Gaussian Blur
- Outer Shadow
- Inner Shadow
- Outer Glow
- Inner Glow
- Outline
- 3D

masks

- [Blend modes now work on masks and adjustments](#)
- Selectively recolor artwork and designs without laborious reworking

Live Adjustments

- Levels
- White Balance
- HSL (with hue color ranges and color picker)
- Recolor
- Black and White
- Brightness and Contrast
- Posterize
- Vibrance
- Exposure
- Shadows/Highlights
- Threshold
- Curves
- Channel Mixer
- Gradient Map [with global color support](#)
- Selective Color
- Color Balance
- Invert
- Soft Proof
- 3D LUT (3D Look Up Table for complex adjustments)
- Lens Filter
- Split Toning

- Bevel/Emboss
- Color Overlay
- Gradient Overlay
- [Layer Effects now work with global colors](#)

Live Blend Modes

- Normal
- Darken
- Darker Color
- Multiply
- Color Burn
- Linear Burn
- Lighten
- Lighter Color
- Screen
- Color Dodge
- Add
- Overlay
- Soft Light
- Hard Light
- Vivid Light
- Pin Light
- Linear Light
- Hard Mix
- Difference
- Exclusion
- Subtract
- [Divide](#)
- Hue
- Saturation
- Luminosity
- Color
- Average
- Negation
- Reflect
- Glow
- Contrast Negate
- Erase

Professional Sketch, Paint and Texture Tools

Paint and Design Professionally

- Give curves, lines and outlines a natural weight with graphics tablet support (for desktop only)
- Create paintings at any size, you're not limited to HD, 4K, 8K etc.
- Use tablet shortcuts and controls to switch tools and

Custom Brushes

- Create completely custom vector and raster brushes using your own textures
- Choose behavior for pressure and velocity variance, corners, repeating areas and many other controls

control Affinity Designer (for desktop only)

- Control size, pressure, and speed interactivity with live brush settings

Stroke stabilization

- Enable Stabilizer for super smooth brush strokes
- Rope or Windows mode for different smoothing behavior

Edit Pressure Profiles

- Add style to lines manually with a built in pressure graph
- Store pressure profiles for reuse

Flexible Vector Brushes

- Natural media vector brushes include watercolor, ink, paint and pastels
- Edit vector brush strokes, pen lines and pencil lines any time
- Separate head, body and tail sections, plus corner treatments
- Change path, weight, color, fill, pressure gradient, opacity, and blend mode
- Non-pixel aligned head/tail offsets when dragging

High Quality Raster Brushes

- Brushes are responsive and natural, whether painting with a pen, mouse or pad (for desktop only)
- Add easy shading and highlights using a standard pixel brush
- Paint with added depth using photo-quality scalable nozzle textures
- Pick up brush color as you paint
- On-page brush preview sets width, hardness, nozzle spacing and rotation
- Customize opacity (accumulation), hardness, spacing, flow, shape, rotation, luminosity, and texture scale
- Pressure responsive (Jitter) to above brush properties
- Wet edge support with customizable ramp profiles
- Multi-brushes
- Brush symmetry (up to 32-way) and optional brush mirroring (up to five-way reflections)
- Brushes with multiple nozzle textures can set their own nozzle controller/ramp
- Wet edges and accumulation now on color brushes/brushes with HSL variance
- Nozzle rotation using left and right arrow keys (before and during stroke application)
- Paint straight strokes constrained to X or Y axis
- [Create image brushes from any pixel selection](#)
- [Create intensity brushes from any mask's pixel selection](#)

Combine Raster and Vector Art

- Seamlessly mix vector and raster design and art techniques
- Apply blend modes, opacity and color changes to achieve a perfect finish
- Drag and drop in the Layers panel to control where and how brushwork is added to your vectors
- Preferences let you fine tune how vector and raster techniques behave
- Resize documents with or without resizing your artwork

Fill and Erase Tools

- Solid coloring regions is simple with a raster flood fill tool
- Create shapes for smooth gradient fills
- Erase selectively without destroying vectors

Incredibly High Quality

- Native vectors and gradients are output at any size with no loss of quality
- Mixed media artwork is intelligently scaled and resampled

Input Devices

OS X/macOS

- Pressure-sensitive graphics tablet and pen
- Force Touch and regular Trackpad
- Touch Bar
- Mac keyboards
- Magic Trackpad and Magic Trackpad 2
- Magic Mouse and Magic Mouse 2
- Generic multi-button and wheel mouse
- Dictation offered by OS X

Windows

- DirectX 11 and Direct 2D rendering with Windows Advanced Rasterization Platform (WARP) fallback
 - Hardware accelerated for smooth panning/zooming and rendering
 - Optimized for Surface Pro 3, Surface Pro 4 and Surface Book (including support for detachable screen)
 - Surface Studio with Surface Pen/Surface Dial
 - Generic multi-button and wheel mouse
 - Wacom (and other WinTab devices) support
 - Uses Microsoft Concurrency Runtime to fully utilize/scale across modern CPUs
 - High DPI support across multiple monitors
-