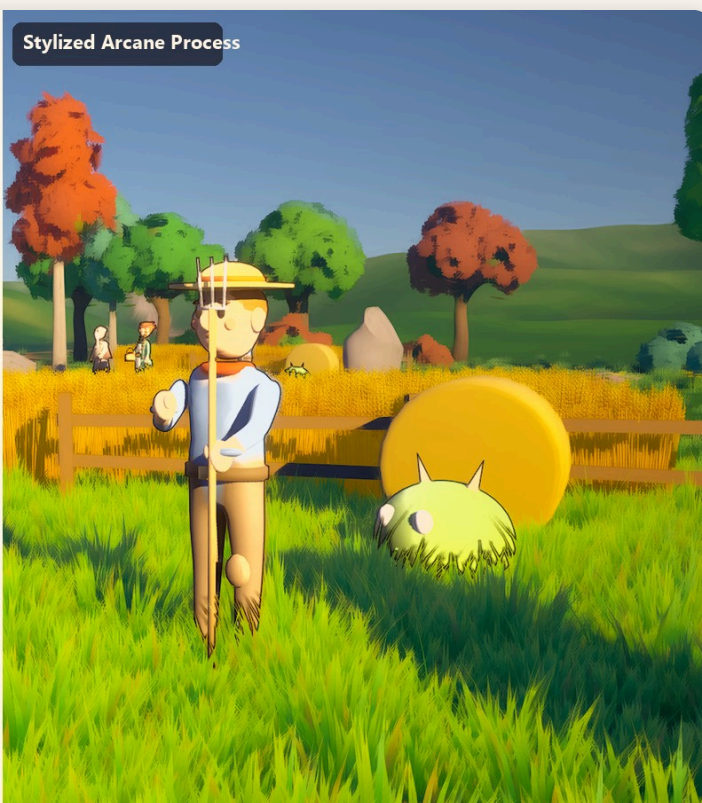


Stylized Arcane Process

A painterly post-process for Unreal Engine 5.4 to 5.8. It turns any 3D scene into a hand-painted image: flat light planes, cool colored shadows against warm lights, oil brush strokes, a painted haze in the distance, and a hand-drawn ink outline around your characters. One material, five ready-made presets, every setting adjustable live.

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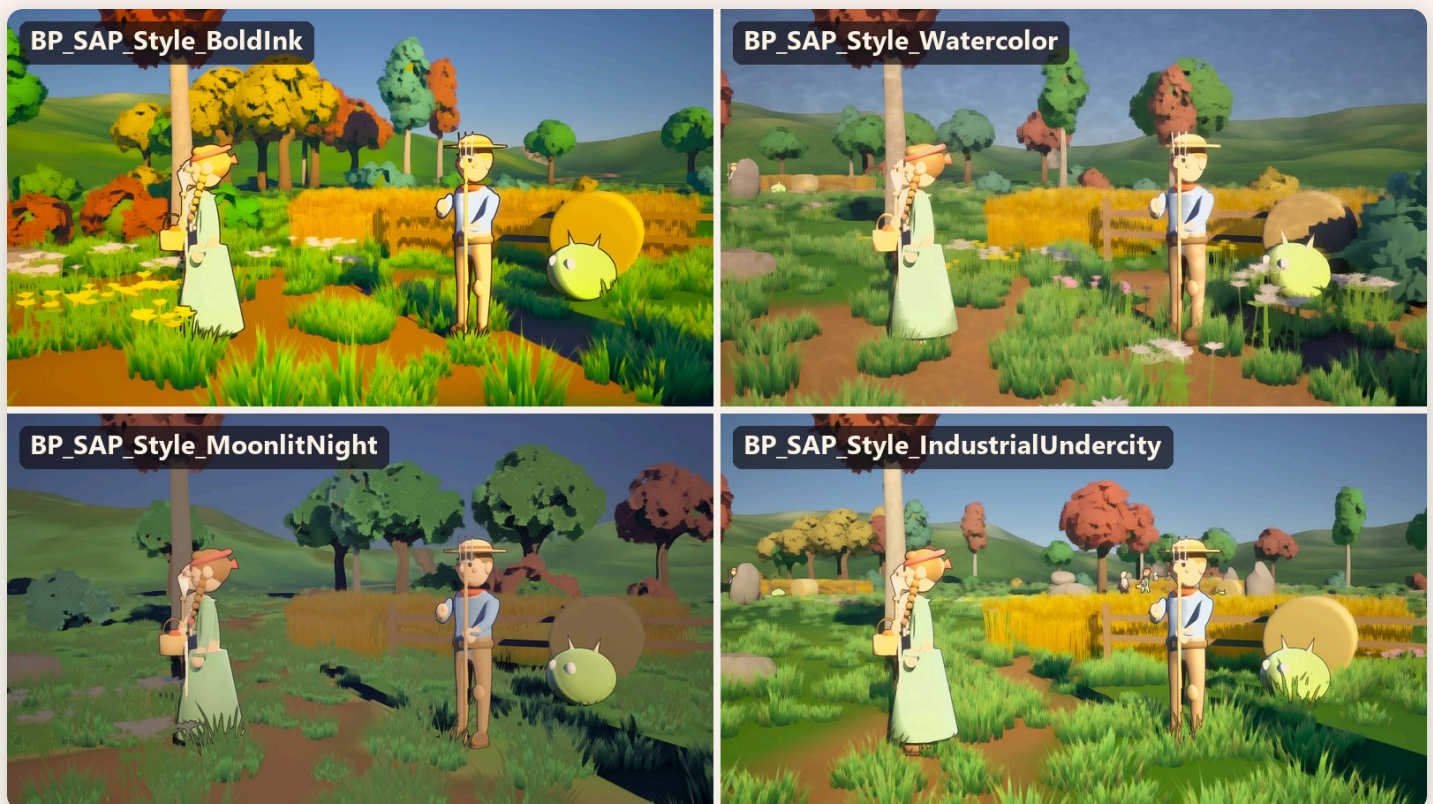


1. What is in the pack

Folder	Content
PostProcess/Materials	M_SAP_Master — the effect itself. You never need to open it.
PostProcess/Presets	Five ready-to-use looks (material instances): Default , Bold Ink , Watercolor , Moonlit Night , Industrial Undercity .
PostProcess/Blueprints	BP_SAP_Style_Default , BP_SAP_Style_BoldInk , BP_SAP_Style_Watercolor , BP_SAP_Style_MoonlitNight , BP_SAP_Style_IndustrialUndercity — drag one into a level and the whole scene is painted with its preset. BP_SAP_StyleZone — a box that applies a preset only inside its volume, with a soft blend at the border.
PostProcess/Textures	T_SAP_Brush — the brush texture that breaks up lines and tone borders.
Demo	A small showcase level with a free camera. Not part of the effect : you can delete this folder.

No code, no plugin: content only. It works in any project, Blueprint or C++.

2. Quick start — style a whole level (10 seconds)



1. In the Content Browser, open `PostProcess/Blueprints`.

2. Drag **BP_SAP_Style_Default** into your level. Its position does not matter: it covers the whole level.
3. That's it. The paint applies to the whole image at once.

Each style Blueprint is an unbound Post Process (Infinite Extent) that carries one preset. An icon makes it easy to select in the viewport.

Change the look

- Delete the style Blueprint you placed, then drag in another one: **BP_SAP_Style_BoldInk**,

BP_SAP_Style_Watercolor, **BP_SAP_Style_MoonlitNight** or **BP_SAP_Style_IndustrialUndercity**.

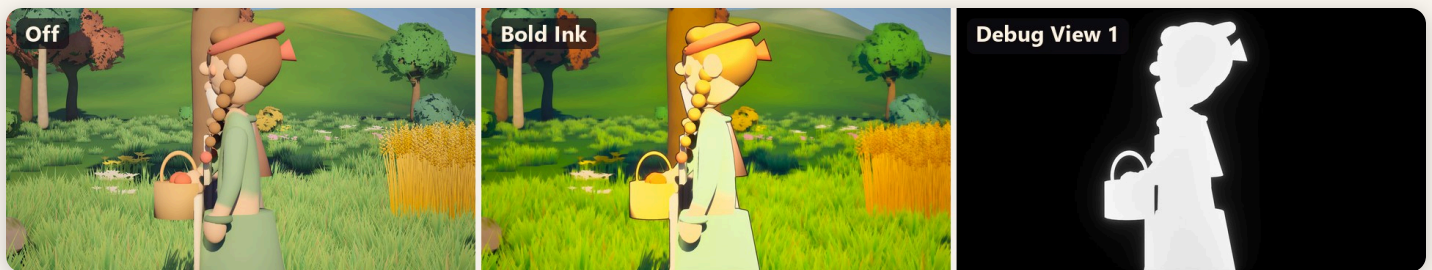
- Keep only one style Blueprint per level: two of them blend together.
- To go further, select the Blueprint, then its **Style** component. In **Rendering Features → Post Process**

Materials **you can pick another preset (or your own, section 6)**. Blend Weight** sets how strongly the style applies (1 = full).

Alternative: with your own Post Process Volume

1. Place a **Post Process Volume** in your level (or select the one you already have).
2. In its Details panel, tick **Infinite Extent (Unbound)** so it covers the whole level.
3. Open **Rendering Features → Post Process Materials**, click +, choose **Asset reference**, and pick **MI_SAP_Default** (or any other preset).
4. That's it. The paint applies to the whole image at once.

3. Ink outline on characters



The painted look applies to everything. The **ink outline** is drawn only around objects that write to Custom Depth, so you decide what gets inked.

1. Select your character's mesh component (Skeletal Mesh or Static Mesh).
2. In **Rendering**, tick **Render CustomDepth Pass**.
3. Project Settings → Engine → Rendering → **Custom Depth-Stencil Pass** must be **Enabled** (the engine default). For team colors (section 7), set it to **Enabled with Stencil**.

4. Style Zones — a different look per area

Drag **BP_SAP_StyleZone** into the level. Inside its box, its own preset replaces the global one; at the border both blend smoothly. Typical use: a dark cave inside a sunny valley, a dream sequence, a boss arena.

The two work together: one style Blueprint (for example **BP_SAP_Style_Default**) paints the whole level, and a few zones change the look locally. A zone has **Priority** 1, the style Blueprints have 0: inside its box, the zone wins.

- Resize: select the **Zone** component and change its **Box Extent** (or scale the actor).
- Choose the look: select the **Style** component → Rendering Features → Post Process Materials → pick a preset.
- Softness of the transition: **Blend Radius** on the Style component (in cm).
- Priority: if two zones overlap, the higher **Priority** wins. Keep it above 0 so the zone stays above the global

style.

The zone reacts to the **camera** position, not to the character: with a third-person camera, the camera is a few meters behind your character, so make the zone large enough.

5. The five presets



Preset	Blueprint	The look
Default	BP_SAP_Style_Default	The reference look: warm cream lights, cool teal shadows, oil brush strokes, soft ink. Start here.
Bold Ink	BP_SAP_Style_BoldInk	Thick, dark ink with extra inner lines, more contrast and color: a graphic, comic-like reading.
Watercolor	BP_SAP_Style_Watercolor	No ink at all: large soft paint strokes, canvas grain, gentle tone transitions and light tints.

Preset	Blueprint	The look
Moonlit Night	BP_SAP_Style_MoonlitNight	Deep blue shadows, dim silver-blue lights, blue rim light and haze, low saturation. Turns a day level into a night scene without relighting it.
Industrial Undercity	BP_SAP_Style_IndustrialUndercity	Green-teal shadows, a strong cyan rim light and teal-black ink: a cold industrial mood.

6. Make your own look



Never edit the presets of the pack directly (an update would overwrite your work). Instead:

1. Right-click a preset → **Create Material Instance** (or duplicate it into your own folder).
2. Open your new instance: every setting is sorted into numbered groups, from the most important (1) to the most technical (Advanced). Tick a setting to override it, then drag the value: the viewport updates live.
3. Hover any setting to read what it does. The full list, with ranges and defaults, is in section 9.

Good first knobs: **Ink Strength**, **Oil Brush Strokes**, **Shadow Tint**, **Light Tint**, **Saturation**, **Atmospheric Depth**.

7. Team colors (optional)

For strategy or multiplayer games, the ink can take a team color:

1. Set Custom Depth-Stencil Pass to **Enabled with Stencil** (section 3).
2. On each character mesh: **Custom Depth Stencil Value** = 1 for team A, 2 for team B.
3. In your preset, set **Team Colored Ink** to 1 and choose **Team A / Team B Ink Color**.

8. Tips and troubleshooting

- **Nothing changes.** Check that a style Blueprint is in the level. With your own Post Process Volume, check that it

is Unbound (or that the camera is inside it), and that the preset is listed in Post Process Materials with a weight of 1.

- **No ink on my character.** Render CustomDepth Pass is not ticked on its mesh (section 3).
- **Ink appears through walls.** It does not by design; if it flickers where a character touches a wall, raise

Occlusion Tolerance slightly.

- **The image is too bright or too dark.** The look is tuned for a fixed exposure. In your Post Process Volume, set

Exposure → **Min EV100** and **Max EV100** to the same value (1 is a good start), then adjust **Exposure Compensation**.

- **Far characters keep their ink / lose it too early.** Tune **Full Style Up To** and **No Ink Beyond** (group 5).
- **The haze covers my foreground.** Raise **Haze Start Distance**, or lower **Atmospheric Depth**.
- **Lines look stable.** The effect runs before the engine's temporal anti-aliasing (TSR/TAA), so outlines are smoothed

like the rest of the image instead of shimmering.

- **Clear sky, warm sun.** The style is a post-process: it paints whatever your lighting gives it. A clear sky and a

warm sun make it shine.

- **Debug View** (last group) shows the character mask, the ink alone or the depth used: useful to understand what

the effect sees.

9. Parameter reference

The default values below are those of the master material; each preset overrides some of them.

1 - Ink Outline

Parameter	Range	Default	What it does
Ink Strength	0 – 1.5	1	How strong the hand-drawn ink line is around characters. 0 removes all ink; 1 is the reference look.
Ink Thickness	0.5 – 6	2.3	Width of the outer outline, in pixels at the reference distance. It thins out automatically with distance.
Ink Color	color	(0.05, 0.03, 0.05)	Base color of the ink. Dark plum reads softer than pure black.
Ink Takes Local Color	0 – 1	0.5	0 = one ink color everywhere. 1 = the line becomes a darker version of the color it borders (brown on skin, green on a tunic), like colored pencil.
Ink Bleed Outside	0 – 1	0.5	How much of the stroke spills outside the silhouette, charcoal-style. 0 = line drawn only inside the character.
Ink Brush Breakup	0 – 1	0.55	Lets the brush texture eat into the line so it looks painted by hand instead of filtered.

2 - Painted Look

Parameter	Range	Default	What it does
Paint Strokes (World)	0 – 1	0.85	Turns soft gradients of the environment into flat painted patches with crisp edges. 0 = sharp image.
Stroke Size	1 – 5	2.5	Size of the painted patches, in pixels. Same cost at any size.
Paint Strokes (Characters)	0 – 1	0.35	Same effect on characters. Keep it lower than the world: too much makes faces muddy.

Parameter	Range	Default	What it does
Canvas Grain	0 – 1	0.25	A light canvas texture over the whole image that ties characters and world together.
Stylize World	0 – 1	1	How much of the painted look and grading the environment receives. 0 = untouched world, characters keep their full style.
Saturation	0 – 2	1.18	Gives back the color that the paint averaging takes away. 1 = unchanged.

2b - Oil Paint

Parameter	Range	Default	What it does
Oil Brush Strokes	0 – 1	0.75	Smears the paint ALONG the shapes (a stem, a shoulder, the edge of a rock), like oil brush strokes. Flat areas follow the brush direction.
Oil Stroke Length	0 – 24	11	Length of the oil strokes, in pixels.
Oil Impasto	0 – 1	0.3	Bristle marks: fine ridges along each stroke catch the light, like thick oil paint.
Canvas Weave	0 – 1	0	A fine woven canvas showing under the paint.
Canvas Weave Size	2 – 12	4	Size of the canvas weave, in pixels.

2c - Painted Atmosphere

Parameter	Range	Default	What it does
Haze Color	color	(0.62, 0.78, 0.92)	Color of the distant haze. Pale sky blue for daylight, warm amber for dusk.
Atmospheric Depth	0 – 1	0.7	Painted aerial perspective: distant shapes fade into a luminous, paler, bluish haze, like the backgrounds of a painted film. 0 = off.
Haze Start Distance	0 – 20000	1500	Distance (cm) where the haze begins.
Haze Full Distance	500 – 60000	9000	Distance (cm) where the haze reaches full strength.

Parameter	Range	Default	What it does
Foreground Color Boost	0 – 1	0.6	Extra saturation close to the camera, where the eye lands.

3 - Color Grading

Parameter	Range	Default	What it does
Shadow Tint	color	(0.58, 0.56, 0.92)	Color pushed into the shadows. Cool violet is the signature look. Only tints: it never darkens on its own.
Shadow Tint Strength	0 – 1	0.85	How strongly the shadow tint is applied to the world.
Light Tint	color	(1.16, 1.04, 0.86)	Color pushed into the highlights. Warm gold against cool shadows gives the two-temperature painted feel.
Light Tint Strength	0 – 1	0.7	How strongly the light tint is applied to the world.
Adapt To Scene Brightness	0 – 1	1	1 = shadow and light thresholds follow the overall brightness of the level, so a dark forest and a sunny desert both look right with the same preset.
Tone Edge Hardness	1 – 40	9	Softness of the border between shadow, mid-tone and light. ~10 = painted, 40 = sharp cel shading.

4 - Rim Light

Parameter	Range	Default	What it does
Rim Light Strength	0 – 1	0.35	A warm fringe of light along the edges of characters seen at grazing angles.
Rim Light Color	color	(0.95, 0.72, 0.40)	Color of the fringe. Gold for a warm city, cyan for an industrial undercity.
Rim Light Width	0.5 – 8	3	Higher = thinner fringe, closer to the very edge.
Rim Light In Shadow	0 – 1	0.65	Extra rim on characters standing in shadow. Lower it for night levels if outlines look whitish.

5 - Distance & Masking

Parameter	Range	Default	What it does
Full Style Up To	500 – 20000	4200	Distance from the camera (cm) up to which characters get the full ink style. Override it per level with a Post Process Volume.
No Ink Beyond	500 – 25000	6200	Distance (cm) past which far characters lose their ink and keep only their colors. Between the two distances the ink fades smoothly.
Line Reference Distance	200 – 10000	1400	Distance (cm) at which line widths are exactly as set. Use your usual camera distance.
Occlusion Tolerance	0 – 50	2	Characters hidden behind walls get no style (no outlines seen through walls). Raise slightly if styling flickers at contact points.
Screen Edge Margin	0 – 16	4	Pixels at the screen border left unstyled, which prevents edge artifacts. Invisible in practice.

Advanced - Characters

Parameter	Range	Default	What it does
Character Brightness	0.5 – 2	1.08	Overall brightness boost for characters only.
Character Shadow Lift	0.3 – 1.5	0.78	Below 1 lifts the dark tones of characters without burning their highlights.
Character Contrast	0.5 – 2.5	1.3	Contrast of characters, around their own mid-tone.
Character Contrast Pivot	0.02 – 0.8	0.3	Mid-tone used by the contrast. Lower brightens dark materials, higher pushes them to black.
Character Saturation	0 – 2.5	1.25	Color intensity of characters.
Keep Original Character Colors	0 – 1	0.6	Gives characters back their original hues while keeping the styled lighting, so they never look washed out in dark levels.
Character Shadow Tint	0 – 1	0.25	Shadow tint on characters. Keep it low: dark leather or metal is not a shadow.
Character Light Tint	0 – 1	0.45	Light tint on characters.

Advanced - Ink

Parameter	Range	Default	What it does
Inner Line Width	0.25 – 4	1.1	Width of the inner lines (an arm in front of the body, a weapon in front of a hip).
Inner Lines From Shape	0 – 1	0.6	Inner lines where the geometry overlaps itself. Reliable on every character.
Inner Lines From Surface Detail	0 – 1	0	Inner lines from normal maps. Off by default: on clothed characters every seam becomes a line.
Shape Line Threshold	0.005 – 0.3	0.05	Depth step needed to draw an inner line. Lower = more lines.
Surface Line Threshold	0 – 1	0.55	Angle change needed to draw a surface line.
Surface Line Softness	0.01 – 1	0.2	Softness of surface lines.
Outline Softness	0.02 – 1	0.4	Feathering of the outline. Higher = softer, charcoal-like stroke that never shimmers.
Line Wobble	0 – 3	0.6	A fixed hand-drawn wobble of the line, in pixels. It never boils on a still character.
Line Charcoal Grain	0 – 1	0.55	Lets the paper show through the line, like charcoal.
Minimum Line Scale	0.05 – 1	0.35	Lines never get thinner than this fraction when far away, so distant characters keep a readable outline.

Advanced - Paint

Parameter	Range	Default	What it does
Brush Texture Scale	0.5 – 16	4	Size of the brush texture used to break up lines and tone borders.
Grain Texture Scale	2 – 64	22	Size of the fine canvas and charcoal grain.
Shadow Threshold	0 – 1	0.34	Brightness below which a pixel counts as shadow (at the reference scene brightness).
Light Threshold	0 – 1	0.66	Brightness above which a pixel counts as light.
Shadow Exposure	0.3 – 1.5	0.88	The only control that darkens shadows. 1 = no change.
Light Exposure	0.5 – 2	1.08	Brightens or dims the light tone. 1 = no change.

Parameter	Range	Default	What it does
Reference Scene Brightness	0.05 – 1	0.53	Scene brightness at which the thresholds are used as typed. Set it to the average brightness of your reference level.

Advanced - Team Colors

Parameter	Range	Default	What it does
Team Colored Ink	0 – 1	0	1 = ink takes the team color from the Custom Depth stencil (1 = team A, 2 = team B). Helps reading big fights.
Team A Ink Color	color	(0.20, 0.60, 0.95)	Ink color for stencil value 1.
Team B Ink Color	color	(0.90, 0.20, 0.30)	Ink color for stencil value 2.

Advanced - World Sketch Lines

Parameter	Range	Default	What it does
World Sketch Lines	0 – 1	0	Optional charcoal lines on the environment where depth breaks (rock against sky, tree against grass). 0 = off.
World Line Width	0.5 – 6	2.5	Width of the environment lines.
World Line Threshold	0.005 – 0.5	0.05	Depth break needed for a world line. Higher = only big silhouettes.
World Line Grain	0 – 1	0.45	Charcoal grain of the world lines.

Debug

Parameter	Range	Default	What it does
Debug View	0 – 6	0	0 = off. 1 = character mask, 2 = ink only, 3 = GBuffer normal, 4 = character depth, 5-6 = pass-through tests.

10. Demo level





Open `Demo/Maps/L_SAP_Showcase` and press **Play**. The camera is free: WASD and mouse to fly.

The level holds one **BP_SAP_Style_Default**, which paints the whole scene. Try the other looks yourself: delete it, drag in **BP_SAP_Style_BoldInk** (or another style Blueprint), and see the change in the viewport. Then drag in a **BP_SAP_StyleZone** to give one area its own look.

The demo lighting is standard Unreal lighting, tuned for the presentation: it is not part of the pack. The level and its meshes are only there to show the effect: you can delete the `Demo` folder.

11. Support

Questions, bugs, ideas: contact **TINY RPG** through the Fab seller page. Please give your engine version and, if possible, a screenshot with **Debug View** set to 1.