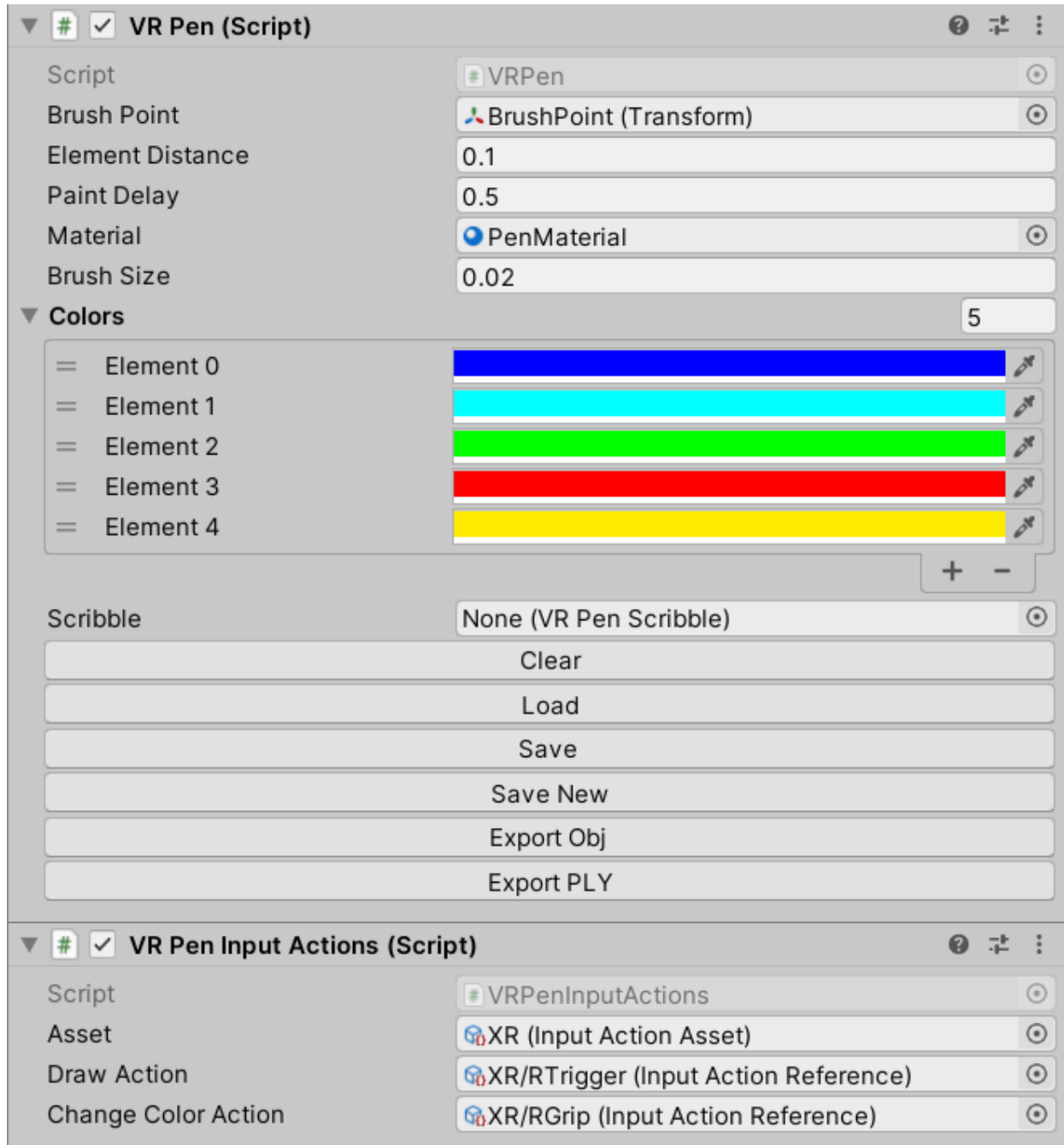# Quick start

Add VRPen script to a game object.
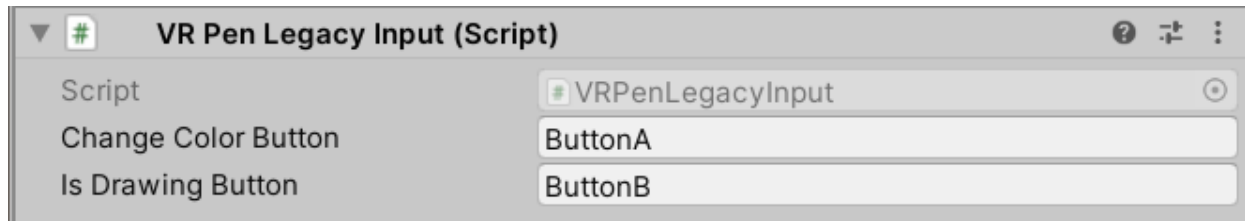Two scripts will be added automatically.
The first one is the main VR Pen script, the second is the input script.

	VR Pen (Script)	
Script	#VRPen	
Brush Point	BrushPoint (Transform)	
Element Distance	0.1	
Paint Delay	0.5	
Material	PenMaterial	
Brush Size	0.02	

Colors — 5

=	Element 0	(blue)
=	Element 1	(cyan)
=	Element 2	(green)
=	Element 3	(red)
=	Element 4	(yellow)

Scribble	None (VR Pen Scribble)

Clear

Load

Save

Save New

Export Obj

Export PLY

	VR Pen Input Actions (Script)	
Script	#VRPenInputActions	
Asset	XR (Input Action Asset)	
Draw Action	XR/RTrigger (Input Action Reference)	
Change Color Action	XR/RGrip (Input Action Reference)	

If you have the new input system enabled there will be added a script that accepts Input Actions.

If you have the legacy input manager enabled there will be added a script that accepts button names.

VR Pen Legacy Input (Script)

| Script	#VRPenLegacyInput
Change Color Button	ButtonA
Is Drawing Button	ButtonB

Or you can just implement the **IVRPenInput** interface and add such a script beside the **VRPen** script to integrate it with your own game input manager.

```
public interface IVrPenInput
{
    bool ChangeColor { get; }
    bool IsDrawing   { get; }
}
```

Set up brush point property, that will be the tip of your brush

Brush Point	BrushPoint (Transform)
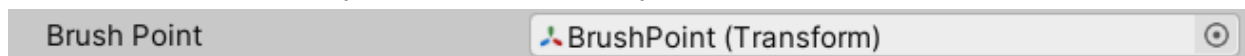
Set up material property if you wish. By default it is set to **PenMaterial**. Any material that shows vertex colors will suffice.

Material	PenMaterial
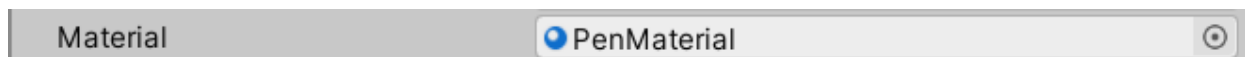
You are ready to draw!
Don't forget to save your drawing to file by pressing "Save" button

Properties

**Brush Point** - accept transform. That transform will be your brush tip.
Element Distance - Minimum distance between mesh elements, the smaller it is the fine details you can add.
Paint Delay - Minimum time between paint drops, reduces jitter and allows you to draw straight lines easily. Reduce the value if you wish it to be more responsive.
Material - Material used for strokes. By default it is set to PenMaterial, unlit material that shows only solid vertex colors.
Brush Size - Radius of the strokes .The smaller it is the fine details you can add.

Colors - Color roundabout. You can add your own or replace the default ones. Every time you press the "Change Color" button you will circle through them.
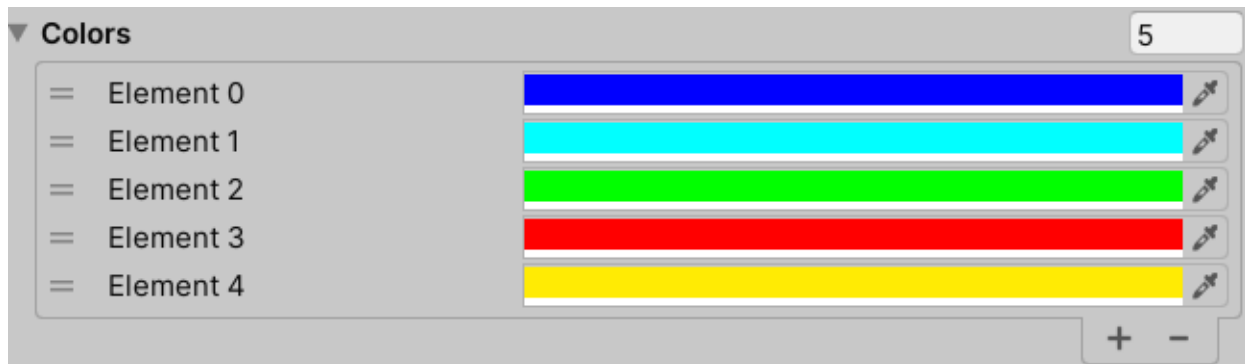
Scribble - File that contains your current drawing.

        Load - load file as current and show strokes.

        Clear - clear current drawing.

        Save - saves current drawing to the set scribble file.

        Save New - saves current drawing to a new scribble file and sets it as a current.

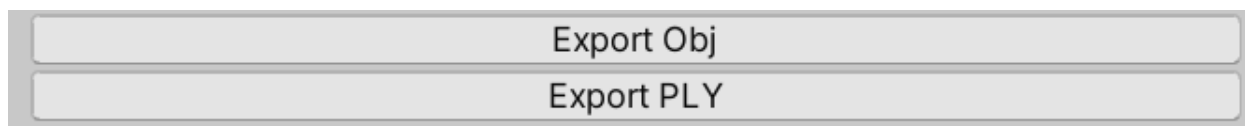It's just a scriptable object so you can copy and edit it like any other ScriptableObjects.

Export

To use your drawings outside Unity you can export it. Two mesh formats are available.
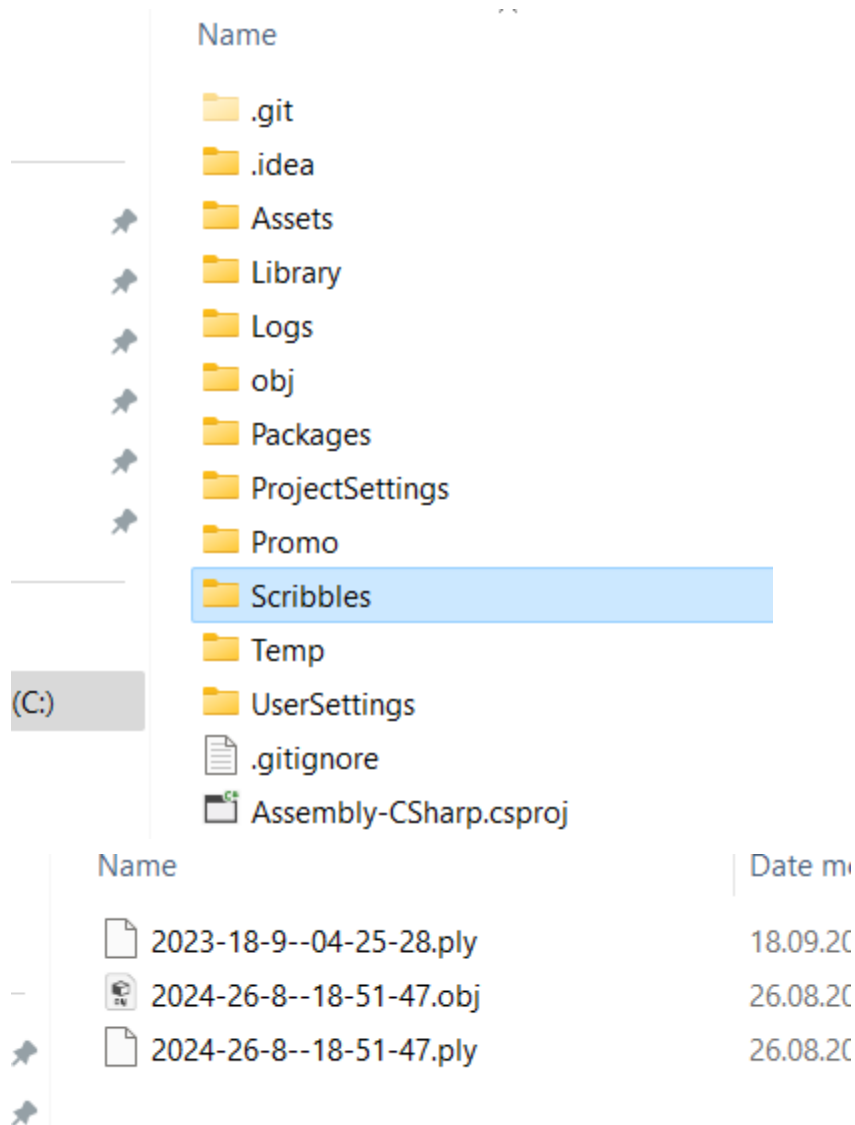**Obj** - Widely accepted file format. Color support is limited.
Ply - Less widely accepted but pretty common formal that supports colors.
Blender supports both.

To export just press the Export button. The file will be saved in the directory "Scribbles" outside the current Assets folder.

In Blender click **File > Import > Stanford Ply.**
If no color visible select **Viewport Shading > Color > Attribute**

Collaboration/Network

Network collaboration is available for the Pro package.
VR Pen Network allows you to give feedback and discuss issues online.
It's available for standalone untethered devices.

Quick Start

After you install the Pro package you will see additional input properties.

Menu Toggle	XR/RButtonA (Input Action Reference)	⊙
Menu Up Down	XR/LThumbStick (Input Action Reference)	⊙
Menu Enter	XR/RButtonB (Input Action Reference)	⊙

These input actions control an in-game menu. The in-game menu allows you to connect to others and transfer yours or their work between headsets or PCs.

Make sure all devices are connected to the same Wi-Fi Spot.
Toggle the in-game menu.
Select a device to connect to from the list
If the connection is successful, you should see other players' avatars and their drawings.

In-Game menu

Open - Toggles device visibility to other devices.
Connect To - list of devices available to connect. Press *Menu-Enter* button to connect to device
Disconnect - disconnects from all currently connected devices
Select Avatar Color - submenu that allows you to change your own avatar color
Load - submenu that allows you to load sketch stored on the device
Save - save current sketch on the device storage
Clear - clear current sketch
File:<file_name> - current sketch file name. Empty if the current sketch wasn't saved.
Save Peer To Local - saves peer sketches to the current local sketch.