Getting Started with CANVAS for Palette

If you're using CANVAS for the first time or need a refresher, here's a tutorial on how to set up a printer and slice a project with CANVAS for Palette.

Written By: Mosaic Support

INTRODUCTION

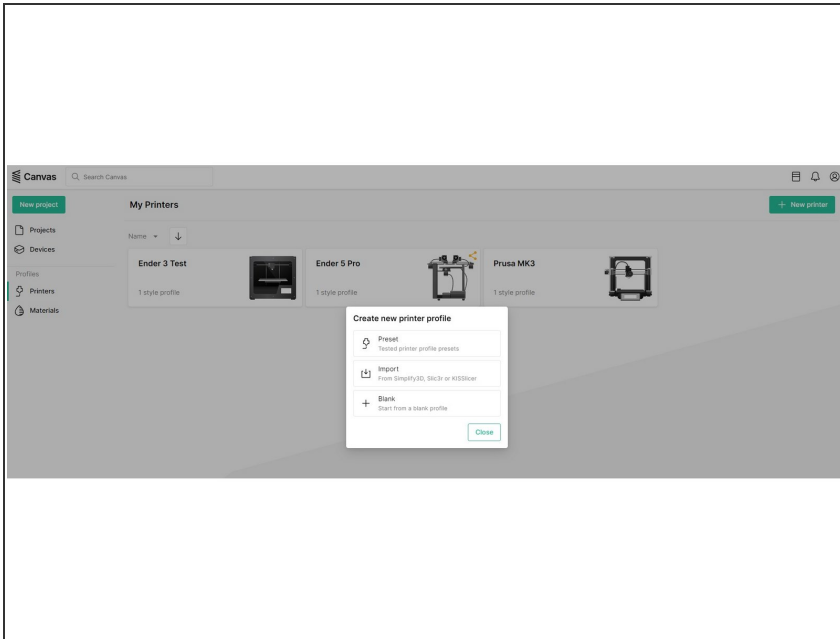Canvas is a cloud and web-based application designed for multi-material 3D printing.

Canvas allows you to color and slice single or multi-color models.

This guide provides an overview to get started with Canvas for use with any Palette model.

For a guide for using Canvas with Element/Array, please click here instead.
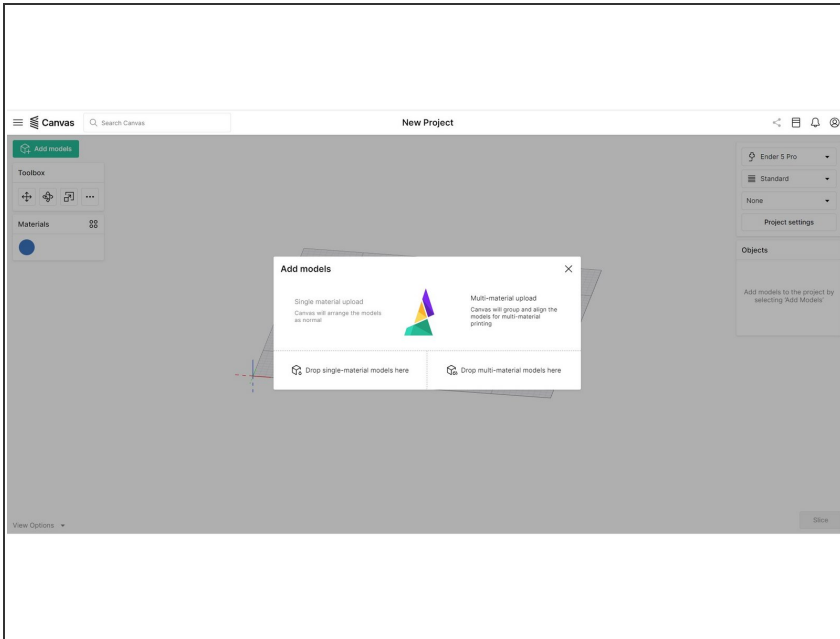
Step 1 — Add or Create Printer Profile

- Visit [Printers](#) and click on **New Printer**

- (i) Printer profiles can be 1) created as a new profile 2) imported from Simplify3D, Slic3r/Prusaslicer, or Kisslicer and 3) based off of a printer preset.

- Custom start and end sequences for bed leveling can be copied into the printer profile.

- Please see [here](#) for more information on how to create a new printer profile.

- After creating a new printer profile, there will be the option to create a setup for that profile. If this step is skipped, a new setup can still be manually created afterwards.

Step 2 — Add or Create a Style Profile
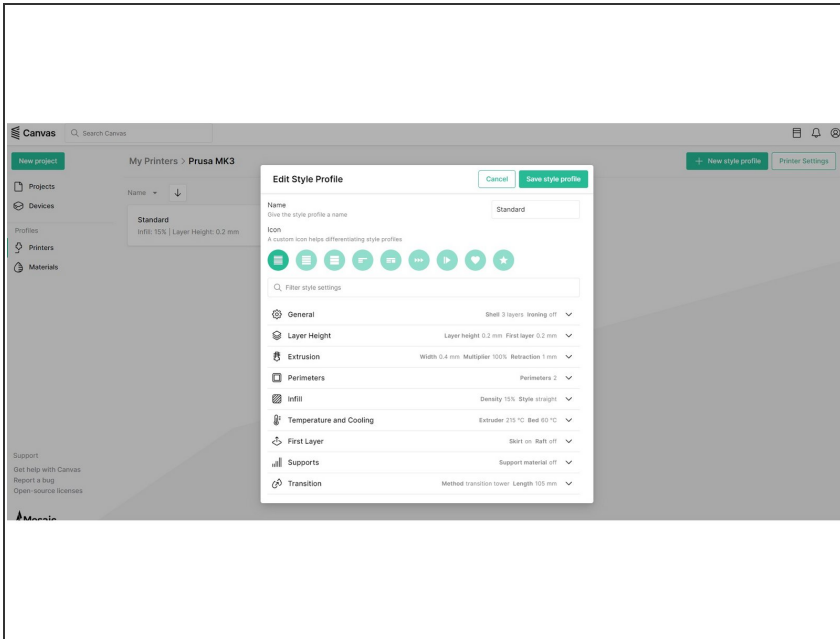
ⓘ Style profiles are slicer settings. Multiple profiles can be created for various printing results.

● Importing a printer profile from another slicer will create a new style profile based on existing settings.

● Creating a new style profile will automatically populate the settings. It would be recommended to run a single-color test print with these settings and further tuning the profile afterwards (e.g. extrusion widths, layer heights, speeds)

● Printer tagging allows for common settings to appear when hovering over tooltips for each project setting.

● Please see here for more information on creating a style profile and the settings glossary.

This document was generated on 2023-09-12 04:45:20 PM (MST).

© 2023 | support.mosaicmfg.com/ | Page 4 of 9

## Step 3 — Create a New Project and Upload Models

- Visit **Projects** and click **New Project.**

- (i) A project is where models can be customized for printing.

- Creating a new project will first prompt to upload models. If the model is one part, upload as a single-color print. If the model is multiple parts, upload it as a multi-material print.

## Step 4 — Selecting Printer Profiles and Palette
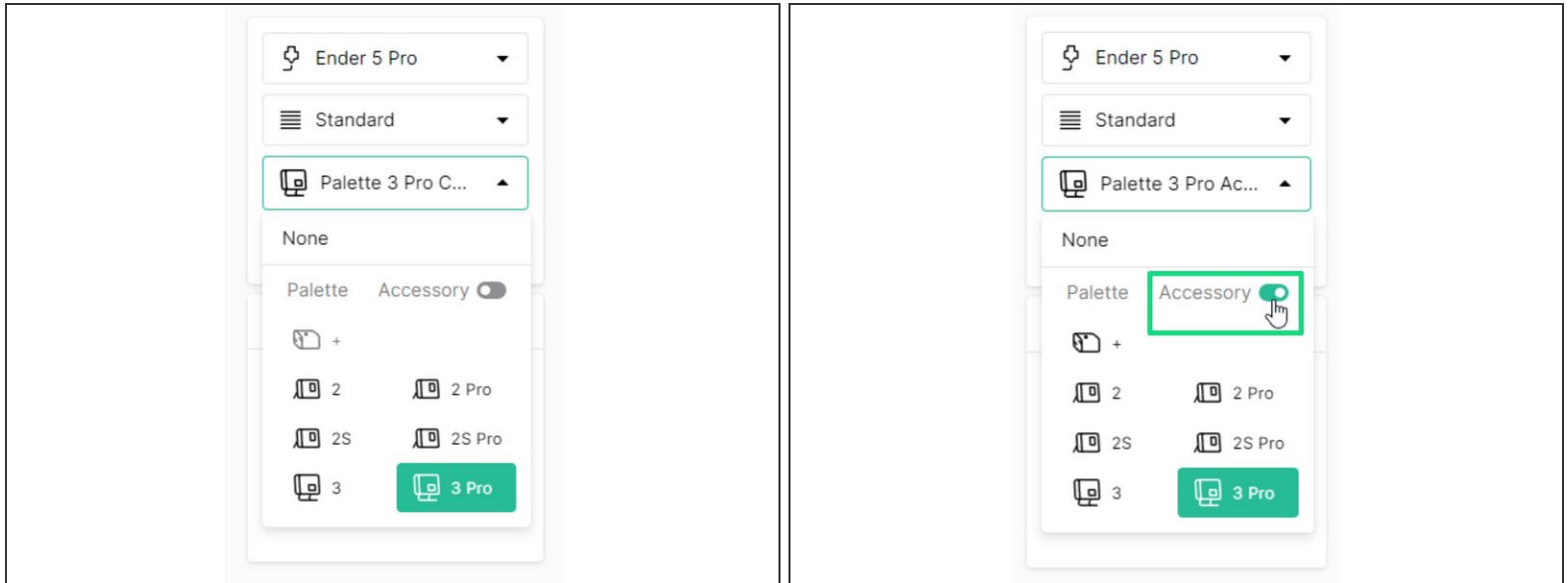
- On the top right of the project view, select the desired printer profile, style profile and Palette model.

  - For Palette 2 and 3, connected mode will be selected by default.

  - Use the toggle to enable accessory mode for Palette.

  - For Canvas Hub, select Palette 2 in connected mode. With the Canvas Hub linked in Canvas, files can be transferred to it after slicing.

Step 5 — Place and Color Models
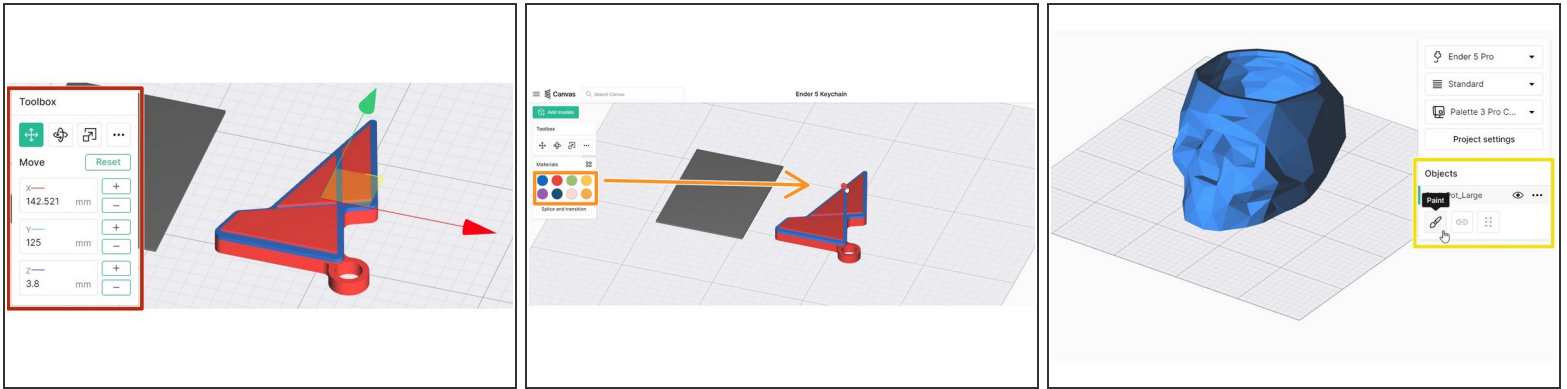
- **Toolbox:** Tools are available for translating/moving, rotation, and scaling.
  - More options in the toolbox include auto-arranging models, laying faces to the bed, dropping models to the bed, and custom supports.

- **Objects:** Grouping and Ungrouping Models - Select multiple models in the object browser by holding 'Shift + Left Click' on the models. Click the link button on the bottom of the object browser to group or ungroup the models selected.

- **Objects:** Duplicating a Model - Click the model you would like to duplicate, and then click the copy button on the bottom left of the object browser.

- If the model has multiple parts, color the model by dragging and dropping colors from the toolbox onto the model or the file name in the Objects
  - When working with multi-material projects, the transition tower will be auto-generated once colors are selected to each body.

- If only one STL is uploaded, the model can be customized with painting. To paint a model, select the STL in the object browser and then 'Paint.'

Step 6 — Project Settings
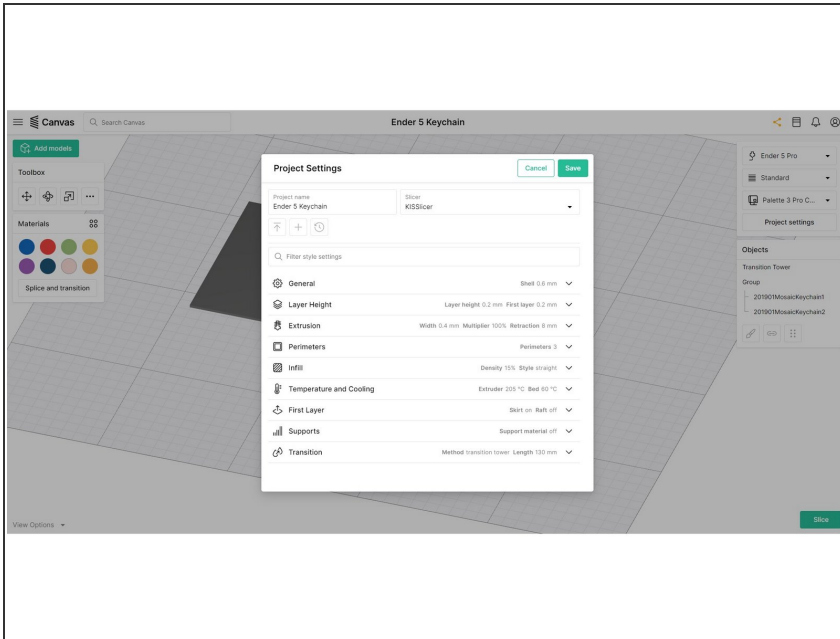
- Based on the style profile selected from the projects screen, expanded slicer settings are available.

  - **For Palette printing - Transition Settings:** The transition length determines how much filament will be purged on the transition tower. Please see variable transition settings to learn more about this setting to help with bleed.

- Project settings can be:

  - Saved to the existing style profile, overriding the previous settings. This will enable any saved changes to be used next time the style profile is selected.

  - Saved as a new style profile, separate from the one first selected in the project.

  - Reverted to the original style profile if any erroneous changes were made to that project.

Step 7 — Slice and Print

ⓘ Slice your project. Preview layers and toolpaths by tool index, path type, layer height, print speed, fan speed and print temperature. For multi-material printing the preview will also display number of splices and pings.

- **Palette 3 Accessory Mode:** Download the files, and extract the folder. Transfer the MAFX file to the USB drive for Palette, and transfer the G-Code to the storage device for the printer (e.g. USB key, microSD, SD, WiFi)

- **Palette 3 Connected Mode:** If Palette 3 is linked in Canvas, MCFX file can be sent to it directly. Or, the MCFX file can be transferred to Palette's USB drive.

- **Palette 2 Accessory mode:** Download the files, and extract the folder. Transfer the MAF file to the SD card for Palette, and transfer the G-Code to the storage device for the printer (e.g. USB key, microSD, SD, WiFi)

- **Palette 2 Connected Mode:** If Canvas Hub is set up and Canvas account is linked and connected, send the print directly. The file can also be downloaded and uploaded to Octoprint manually.

If you have any additional questions, please send us a message at support@mosaicmfg.com.