

3DFEEDY WITH CURA USER GUIDANCE

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3DBIZZ UG (haftungsbeschränkt)

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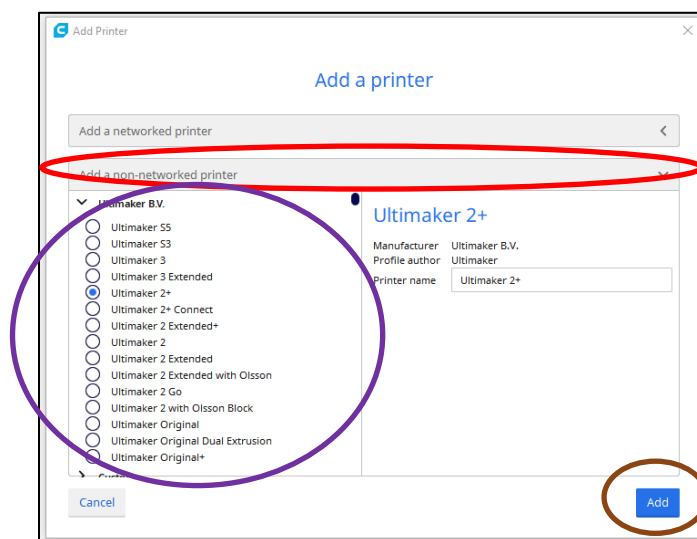
CREATING 3D-PRINTER IN CURA

For using 3Dfeedy with Cura, multi material printing have to be prepared within the slicer.

As most of the implemented 3D-printer in Cura do not support multi material printing, as the number of extruders can't be increased directly, a new 3D-printer has to be created, which is done as follows.

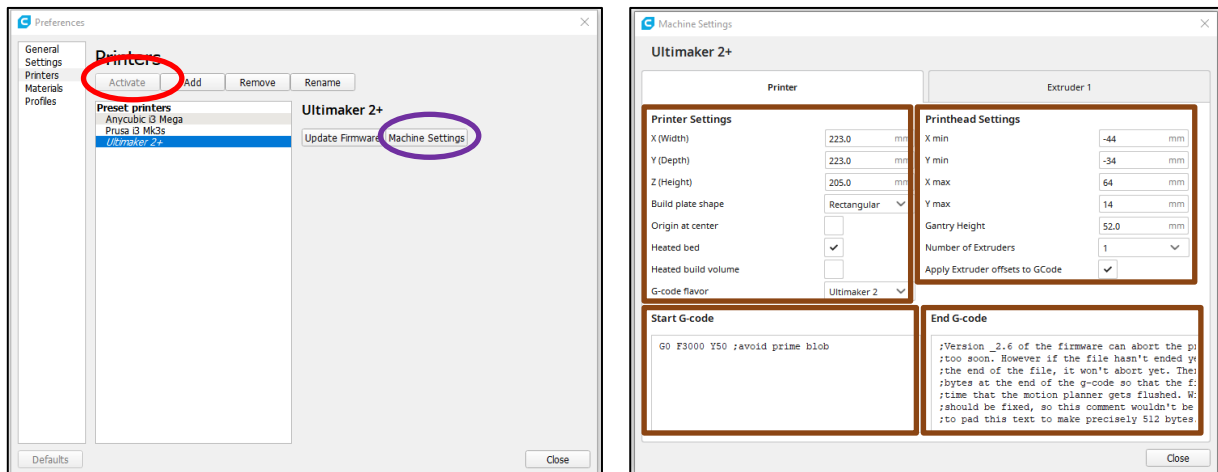
The following instruction is prepared for an Ultimaker 2+, however it can be performed the same way for any other 3D-printer. The same procedure can even be followed for DIY 3D-printers, however the parts for copying the values can not be done directly and have to be determined in a different way.

1. Add your Printer as Temporary 3D-Printer



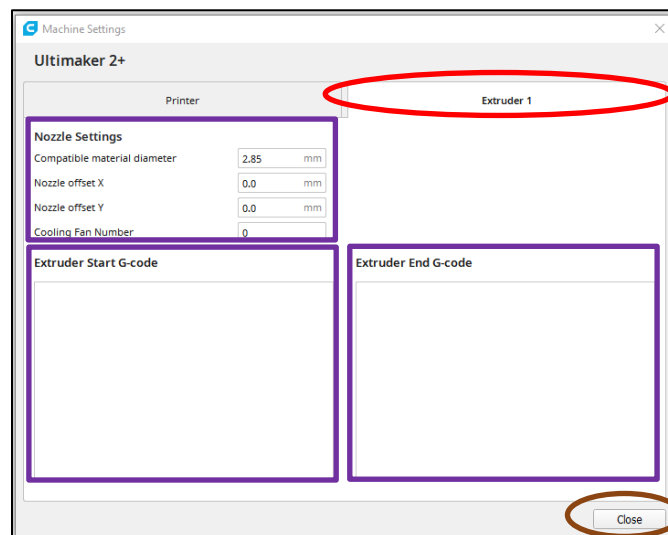
- ① If your 3D-printer is already added to Cura, you can skip this step.
- ① If you are having a DIY-3D-printer, you can skip this step.
 - Choose “Settings > Printer > Add Printer...” to add a printer.
 - Select “Add a non-networked printer”.
 - Search for your Printer and select it.
 - Use “Add” for adding your 3D-printer.

2. Copy the Printer Settings of your 3D-Printer



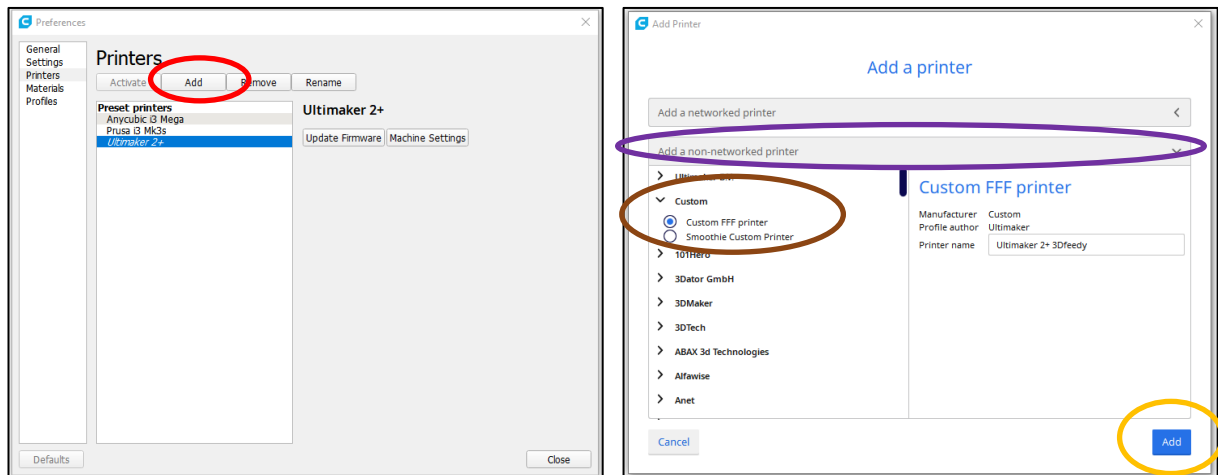
- ❶ If you are having a DIY-3D-printer, you can skip this step.
- Choose “Settings > Printer > Manage Printers...” to manage your printers.
 - Select your printer, choose “Activate” in case it is not activated.
 - Select “Machine Settings”.
 - Copy the “Printer Settings”, the “Printhead Settings”, the “Start G-code” and the “End G-code” to a temporary place.

3. Copy the Extruder Settings of your 3D-printer



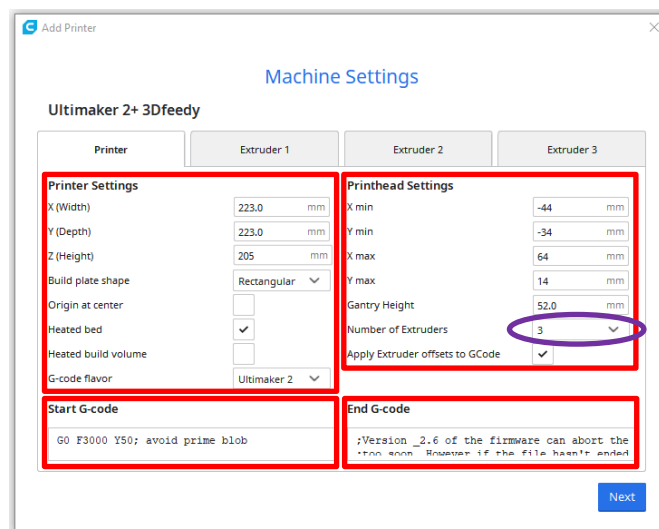
- ❶ If you are having a DIY-3D-printer, you can skip this step.
- Select “Extruder 1” to read the Extruder Settings.
 - Copy “Nozzle Settings”, “Extruder Start G-code” and “Extruder End G-code” to a temporary place.
 - Select “Close”.

4. Create Multi-Material Printer



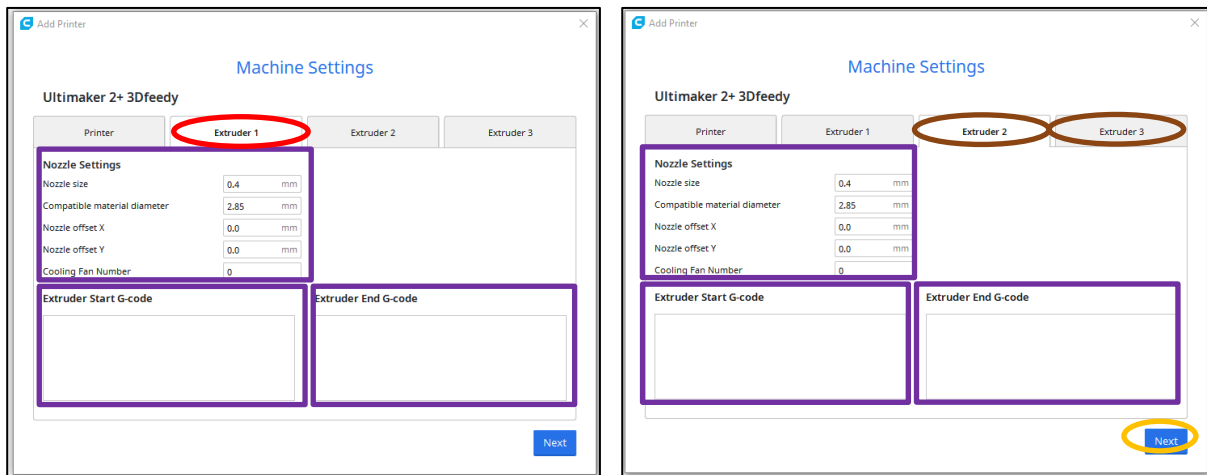
- Select “Add” to add a new 3D-printer.
- Select “Add a non-networked printer”.
- Select “Custom > Custom FFF printer” to create a new 3D-printer in Cura.
- Select “Add” to add a new 3D-printer.

5. Configure Printer Settings of Multi-Material Printer



- Insert the “Printer Settings”, the “Printhead Settings”, the “Start G-code” and the “End G-code” from the temporary printer above.
- Change the “Number of Extruders” to the correct number of repeating units of your 3Dfeedy.

6. Configure Extruder Settings of Multi-Material Printer



The image shows two screenshots of the Cura 'Add Printer' dialog, specifically the 'Machine Settings' section for an 'Ultimaker 2+ 3Dfeedy' printer. The first screenshot shows 'Extruder 1' selected, with its settings (Nozzle size: 0.4 mm, Compatible material diameter: 2.85 mm, Nozzle offset X: 0.0 mm, Nozzle offset Y: 0.0 mm, Cooling Fan Number: 0) and 'Extruder Start G-code' and 'Extruder End G-code' fields highlighted with a purple box. The second screenshot shows 'Extruder 2' and 'Extruder 3' selected, with the same settings and G-code fields highlighted. A blue 'Next' button is visible in both screenshots.

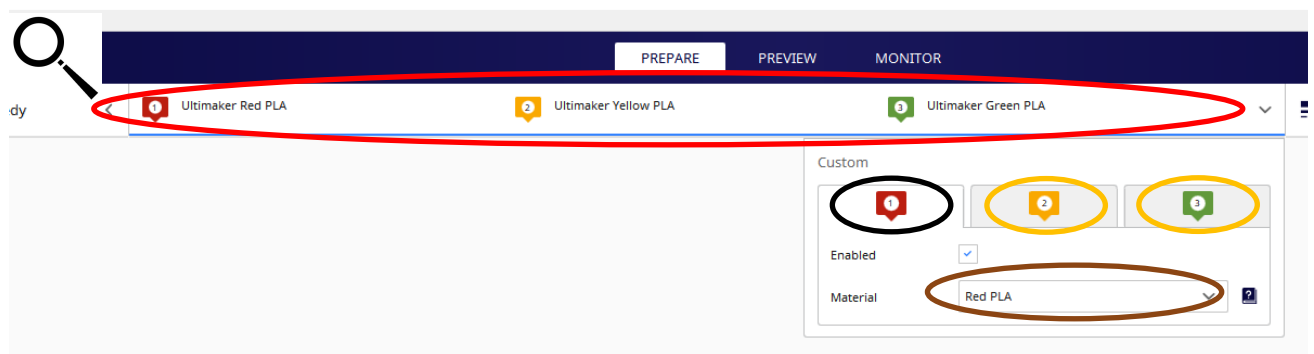
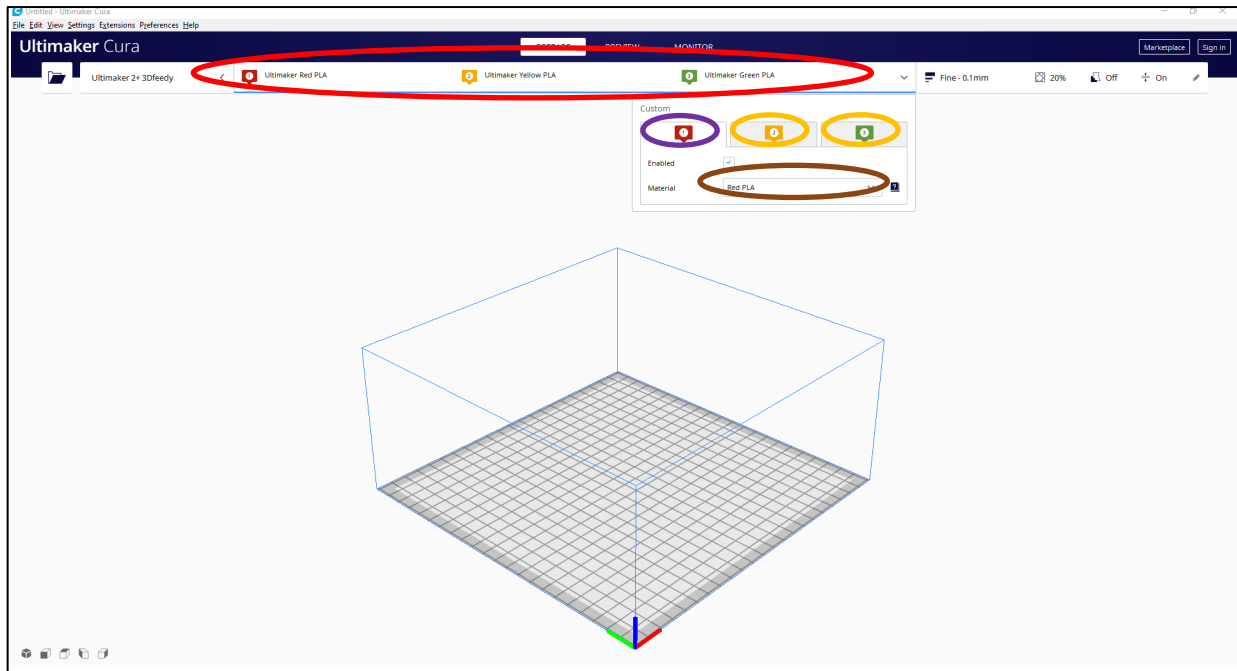
- Select "Extruder 1" to change the settings of extruder 1.
- Insert the "Nozzle Settings", the "Extruder Start G-code" and the "Extruder End G-code" from the temporary printer above.
- Repeat the previous step for "Extruder 2" and "Extruder 3" with the equal settings.
- Select "Next" to finish the creation of a new multi-material printer.

PREPARING A MULTI-MATERIAL 3D-PRINT IN CURA

For preparing a multi material 3D-print in Cura, following steps are necessary.

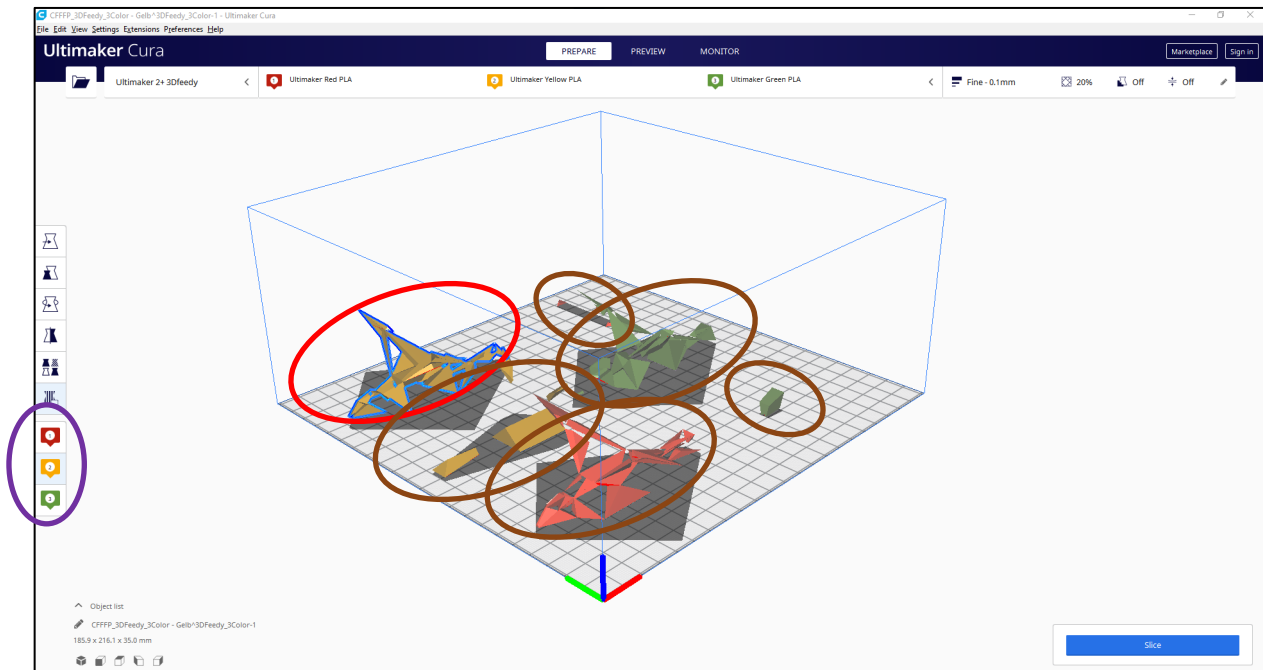
This process will be shown on one demonstration object, but it will be equal to any multi-material object.

1. Select Material for each Extruder



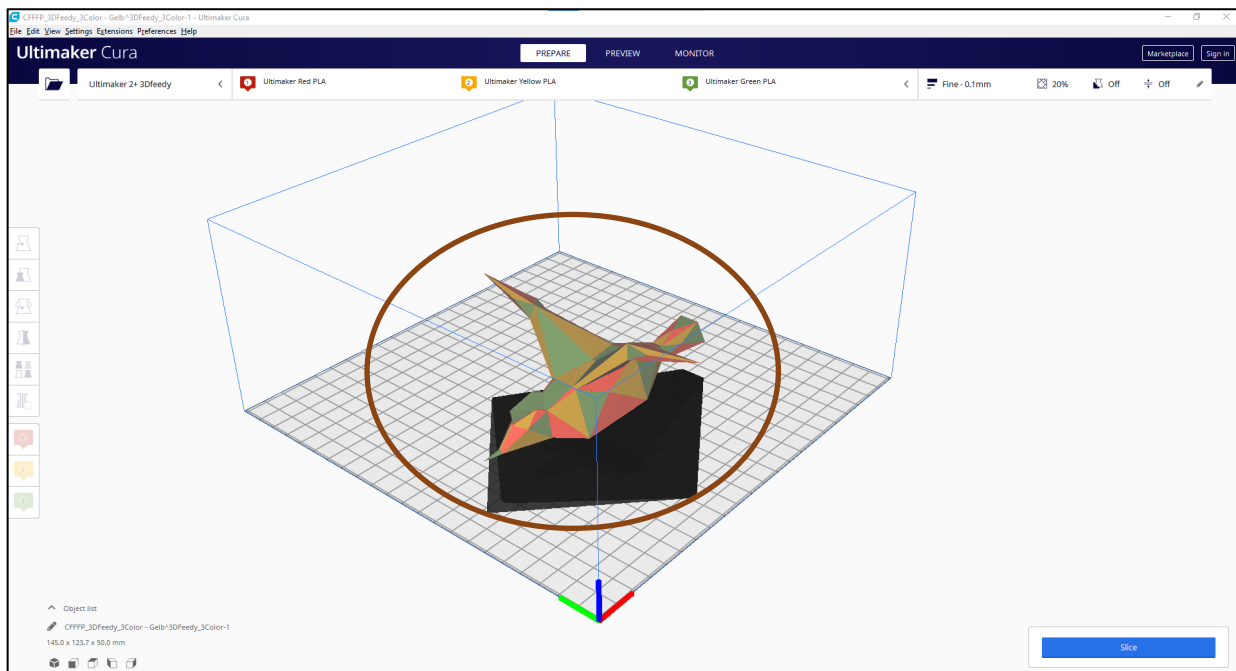
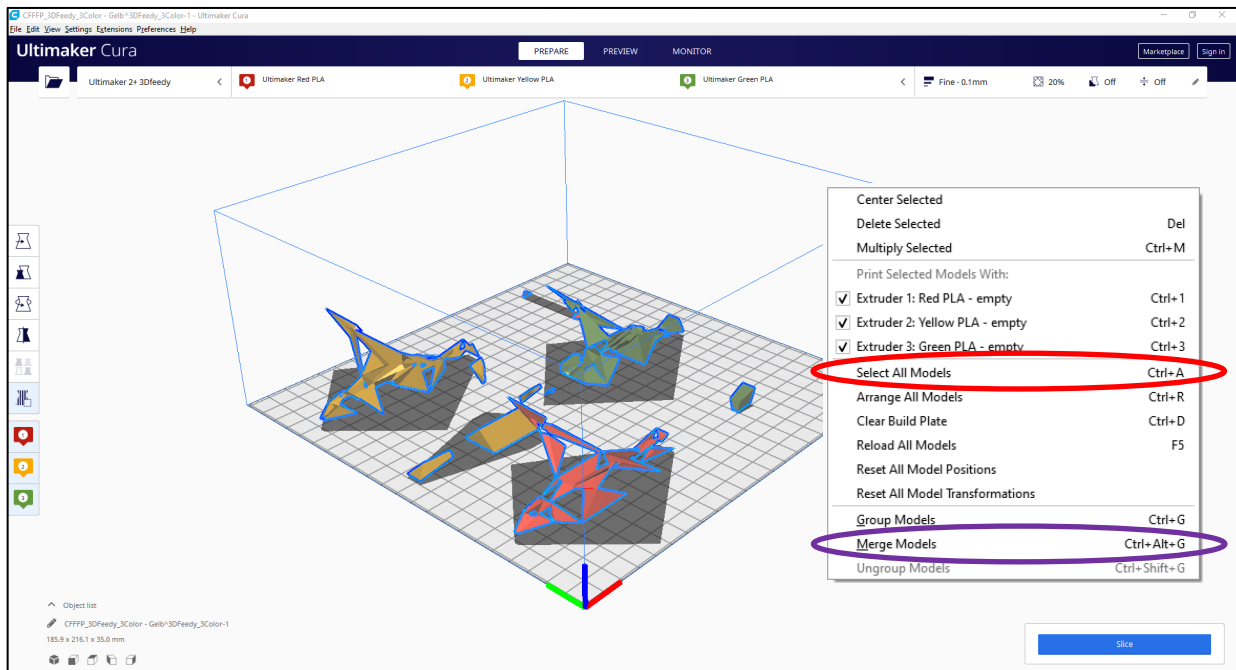
- ① The selected colors of the extruder do not have to be equal to the final color used for 3D-printing, however it is easier to select the right material to see the final result.
- Select the material manager on the top of Cura to open the custom materials menu.
- Select the extruder number 1.
- Select the material for the extruder number 1.
- Repeat the previous steps for extruder number 2, 3, etc.

2. Assign extruder to the Models in Cura



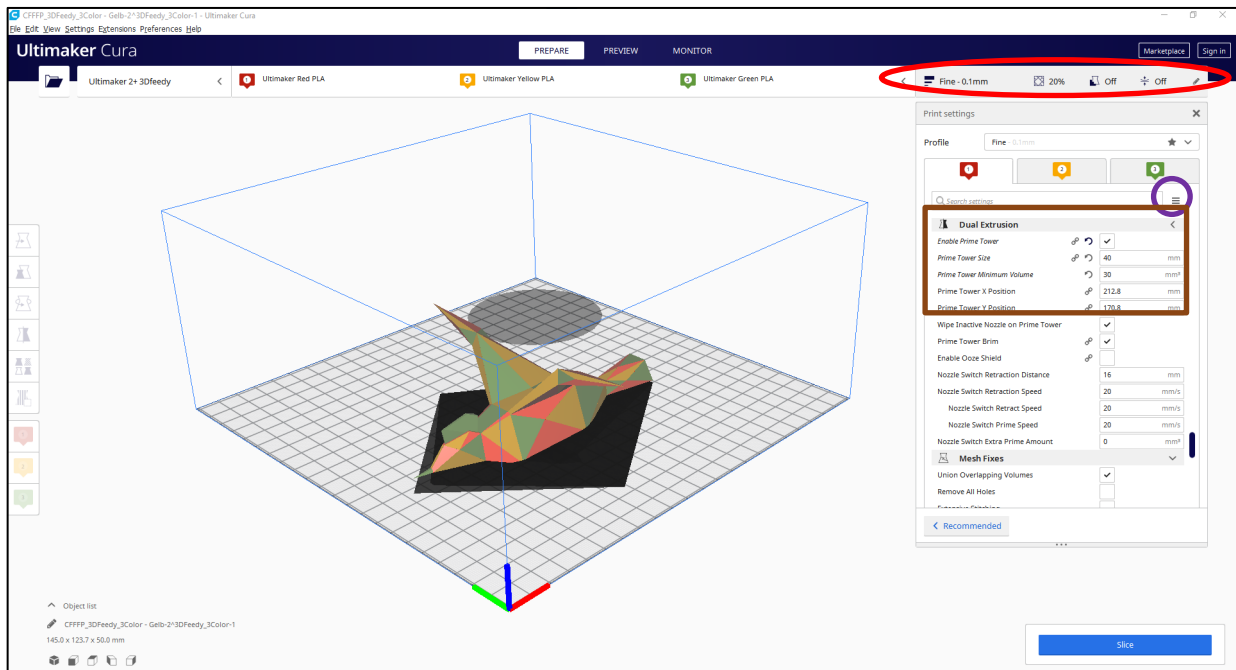
- ❶ Select at least one individual model (part of the final model) for each filament that should be used.
- ❶ Even multiple models for one extruder are possible.
- ❶ It is not possible to divide one model (eg. one stl file) in Cura, however if it consists of one single component or multiple individual components. This has to be done in a previous step.
 - Insert all the individual components of the model as a separate model.
- ❶ At first Extruder 1 is assigned to any component.
 - Select a model.
 - Choose an extruder for assigning a filament to an object.
 - Repeat the previous steps for every single object.

3. Merge the Models in Cura



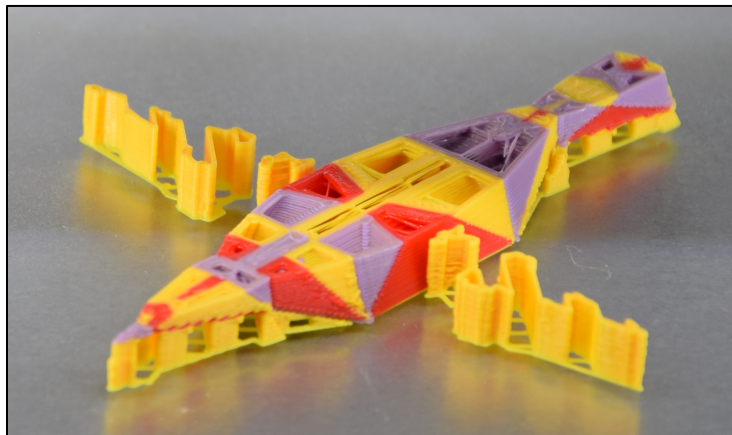
- Right click with the mouse and choose “Select All Models” to highlight every component.
- Right click with the mouse and choose “Merge Models” to create one multi-material model of the individual components.
- Place the model somewhere on the buildplate.

4. Choose Settings for Prime Tower



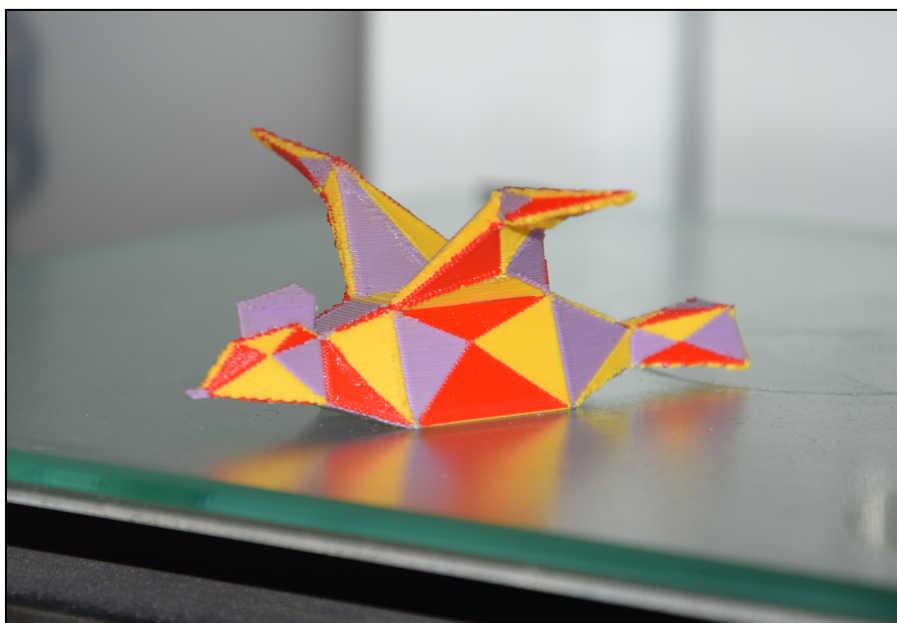
- If not selected choose expanding the print settings and select “Custom”.
 - Choose show all parameters.
 - Select “Enable Prime Tower” and choose the settings for “Prime Tower Size”, “Prime Tower Minimum Volume” and “Prime Tower (X/Y) Position”.
- ① The “Prime Tower Minimum Volume” has to be selected individually for any extruder.
- ① The “Prime Tower Minimum Volume” can be different for every extruder, as e.g. light materials need a larger Volume than dark ones, which can be optimized here.
- ① The “Prime Tower Minimum Volume” has to be determined once for every material. If the “Prime Tower Minimum Volume” is not enough and the previous material is not replaced by the current one, increase it for the next tests, until the prime volume is sufficient for your printer and your extruder.
- Select “Slice” to slice the model.

5. Print the Model



- Print the model with your 3D-printer and 3Dfeedy.
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6. Have fun with your Model



- Have fun with your 3D-printed multi material model.

SERVICE AND MAINTENANCE

1. Further Information

For detailed information, please visit the following links:

Feedy Converter www.3dbizz.com/downloads

All manuals (multilingual) www.3dbizz.com/manuals

**All user guides
(multilingual)** www.3dbizz.com/guides

FAQs www.3dbizz.com

**PDF-version of all
manuals and guides** www.3dbizz.com/downloads

Warranty www.3dbizz.com/warranty

*Have fun with your 3Dfeedy
and don't hesitate to ask us if you have any questions*

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