Using Cura for the Ultimakers
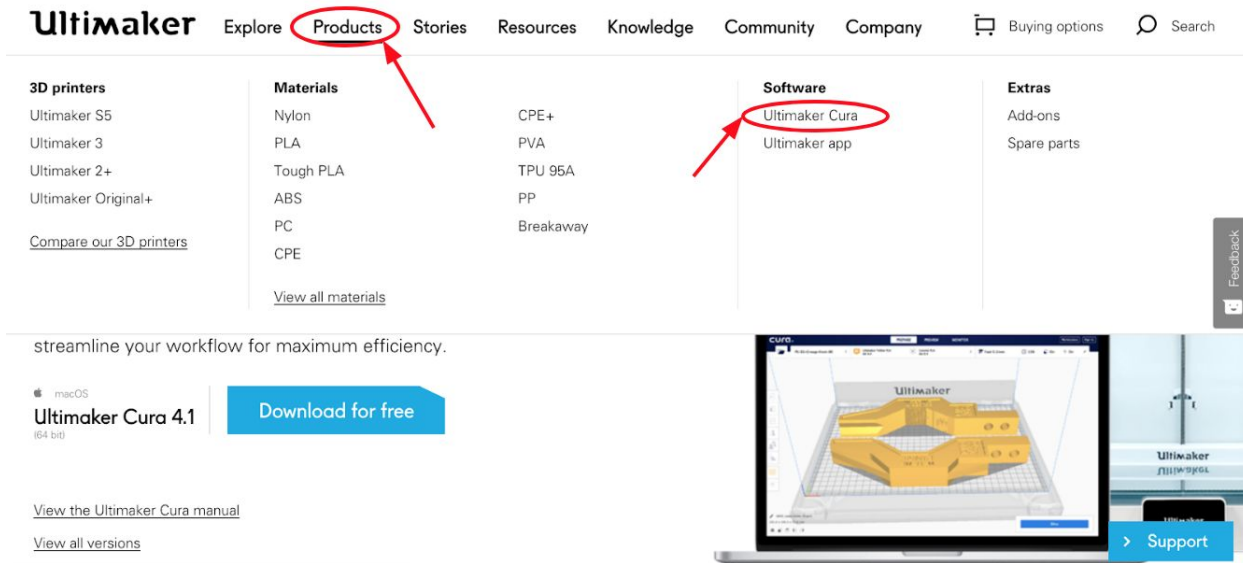
Install Cura

Go to the Ultimaker website and find the software page under the products tab at the top of the page.

Starting Cura for the first time

After installation you can open Cura for the first time. Simply open Cura from your applications folder.

Welcome Setup

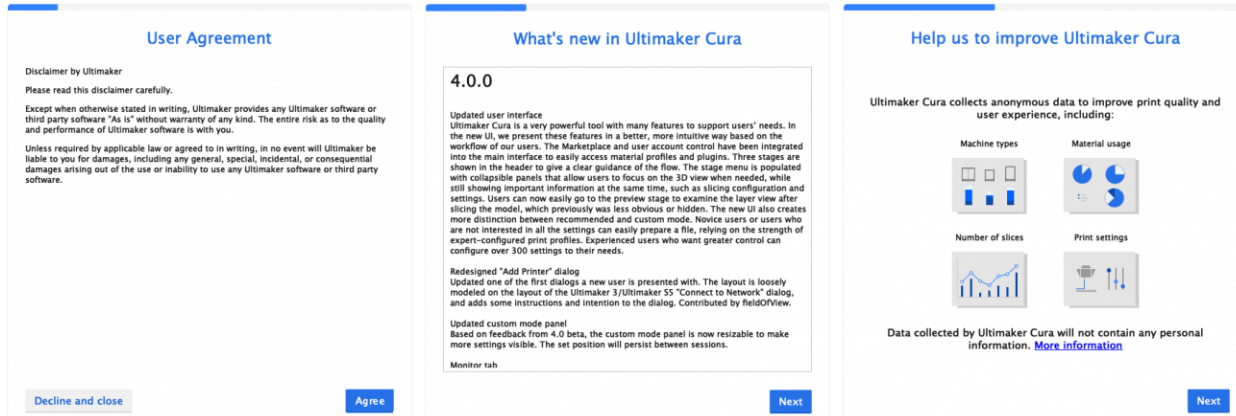When you open Cura for the first time, you will enter the welcome setup.
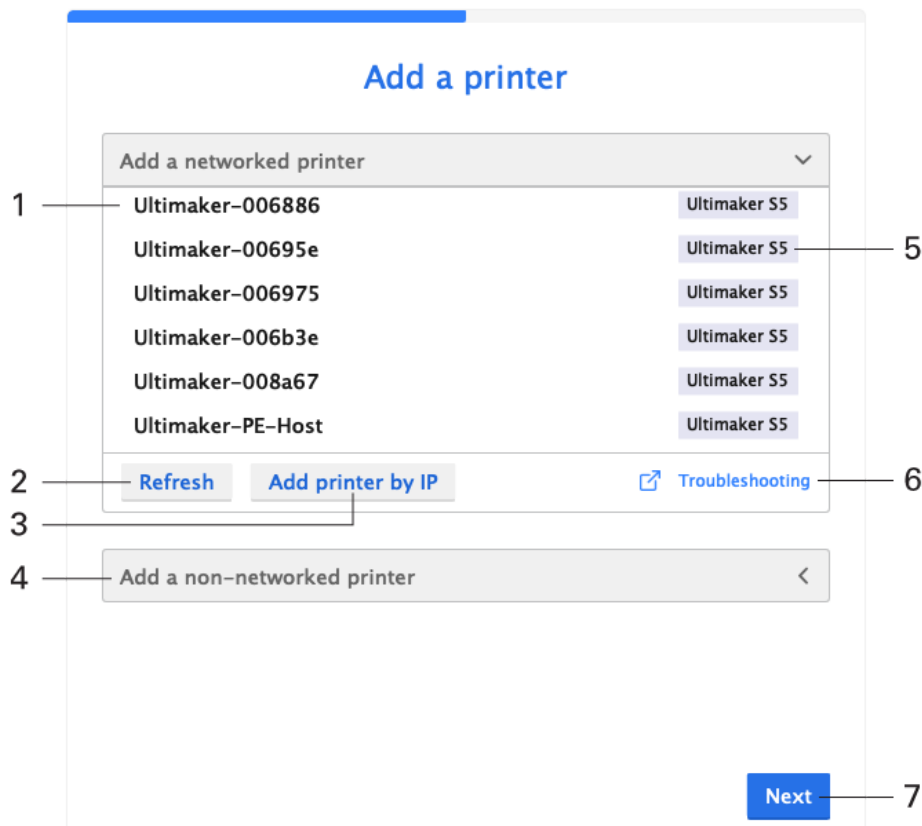
User agreement, release notes, and data sharing

The first few screens allow you to review and accept the user agreement, read the latest release notes and decide whether to allow Ultimaker Cura to collect anonymous user data. Click 'more information' to learn what user data will be shared and provide the option to turn data sharing off.

Add printer

Networked and non-networked 3D printers can be added to Cura. If your Ultimaker is connected to the same local network, you can connect to it directly to automatically configure your setup.

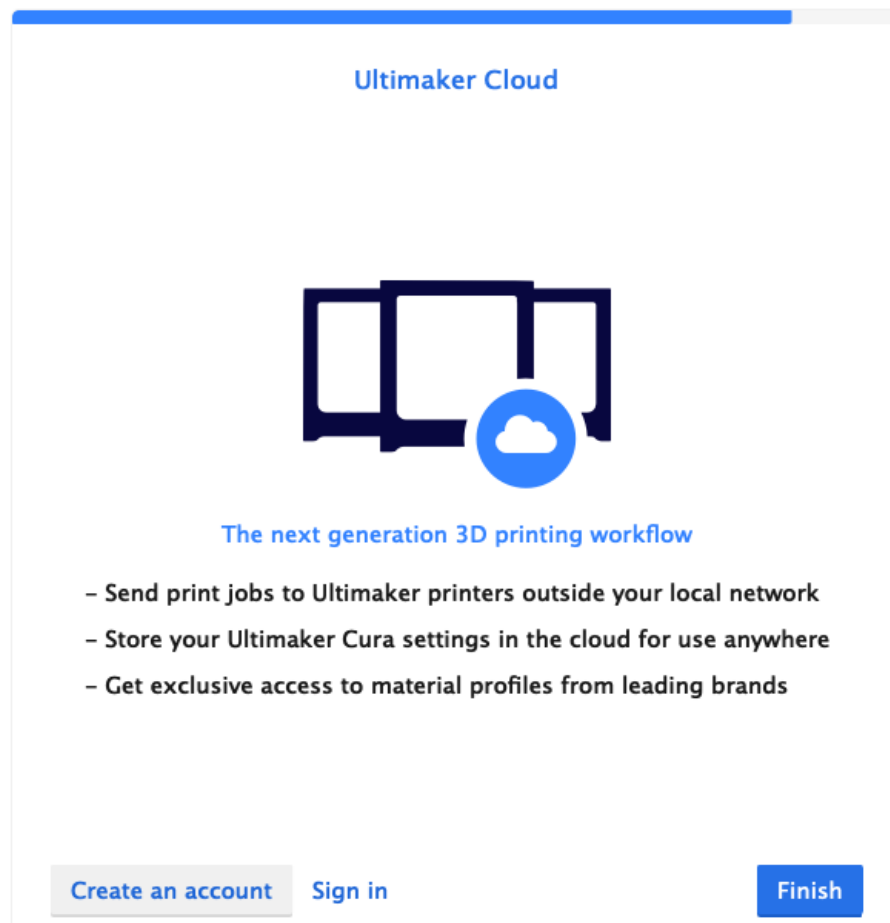You will select non-networked printer (number 4) and select Ultimaker 2+.

1. List of networked printers, shows all printers Cura has found on your local network. Default names are shown for Ultimaker printers connected over LAN
2. Refresh, click this button to refresh the list of visible printers
3. Add printer by IP, this feature can be used if Cura has trouble finding your Ultimaker printer. The IP address can be found on the printer, in the network menu
4. Add a non-networked Ultimaker printer, a custom printer or choose any of the available third party printers available
5. The type of Ultimaker printer is displayed, to indicate what kind of printer you connect with
6. Troubleshooting, links to our resources pages on the Ultimaker website
7. After selecting your printer, simply click next.
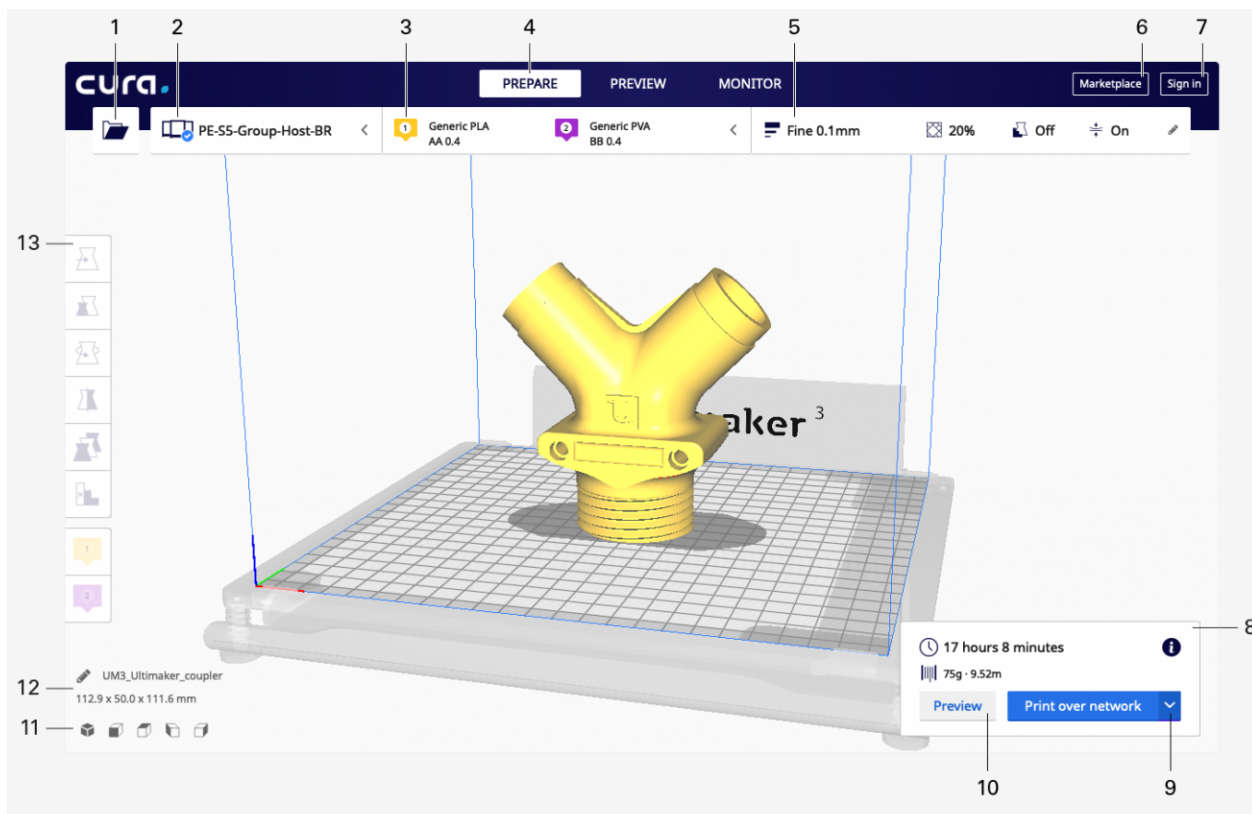
Ultimaker Cloud

The last step is to sign up and log in with your Ultimaker account. An Ultimaker account provides cloud-based tools to make your 3D workflow easier.
- Send and monitor print jobs outside of your local network
- Back up your Cura settings and print profiles
- Get exclusive access to plugins and print profiles from leading material brands in the Ultimaker Marketplace

After signing in, simply click finish to start using Ultimaker Cura.
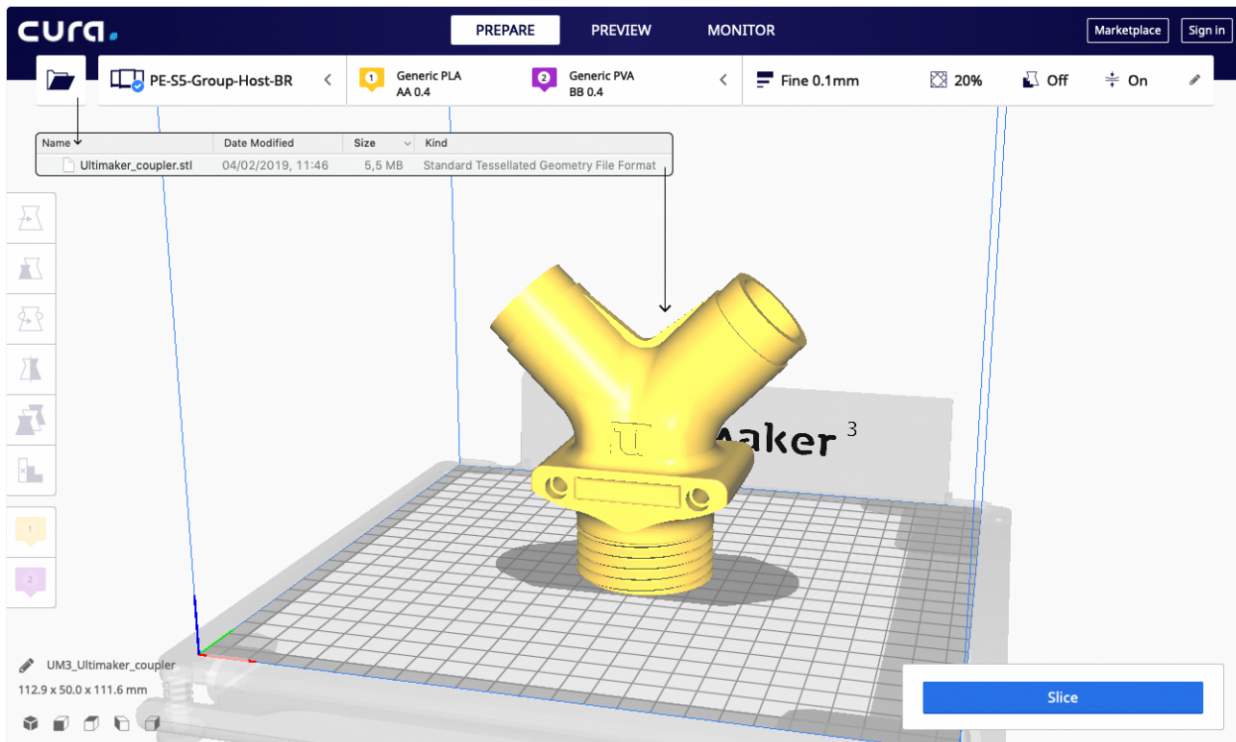
Interface overview

1. **Open file.** Opens a 3D file.
2. **Printer selection panel.** Displays the selected printer.
3. **Configuration panel.** Contains the material and print core setup.
4. **Stages.** The prepare. Preview and monitor stage. Each stage is arranged to efficiently go through each 3D printing step.
5. **Print settings panel.** Contains all slice strategy parameters.
6. **Marketplace.** Contains plugins and material packages.
7. **Ultimaker account.** Allows access to cloud functionality, Marketplace plugins and print profiles, backups and more.
8. **Action panel.** Contains an action button dependent on the current stage.
9. **Print over network.** Save to removable disk or save to file.
10. **Preview.** Proceeds to the next stage, the preview stage.
11. **Camera position tool.** Easily positions the camera to default show default viewing angles.
12. **Model information.** Contains the 3D model name and dimensions of all printable models on the build plate.

First print workflow

Now that Cura is completely set up we can start using the application.

Open 3D files

The easiest way to open 3D models is by the 'open file' button. The button is in the top left corner and is the first button in the stage menu. Select the model you want to prepare for printing and open it. The model will now be loaded and shown on the 3D viewer.
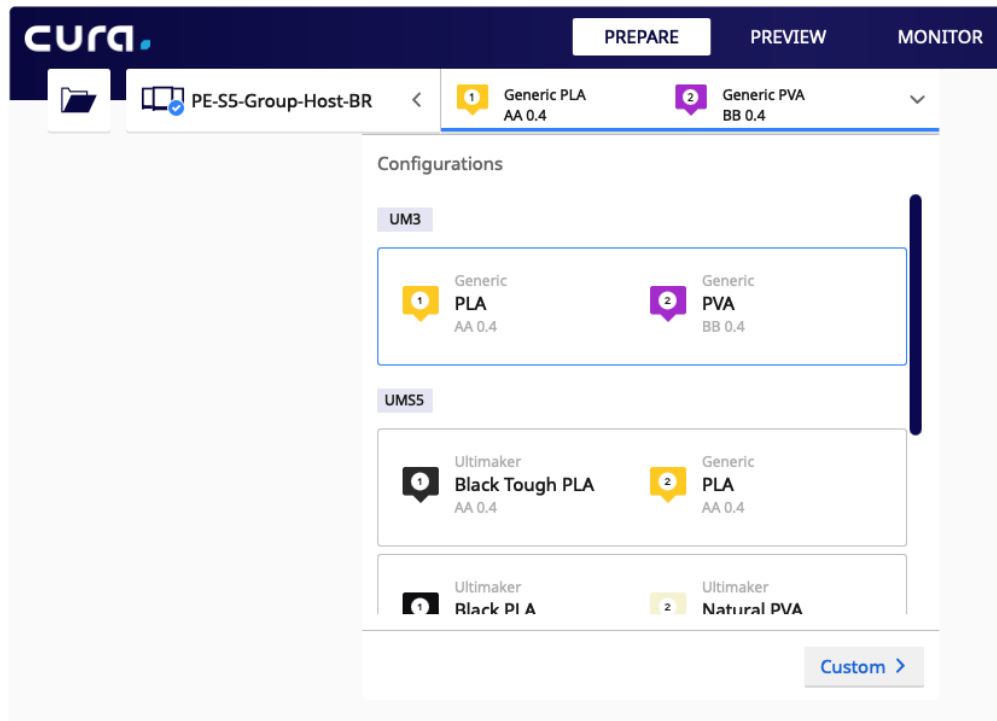

Configure your setup

The second button in the stage menu contains the printer selection panel. Network enabled printers will indicate a valid connection with a checkmark icon. Select the printer you would like to use.
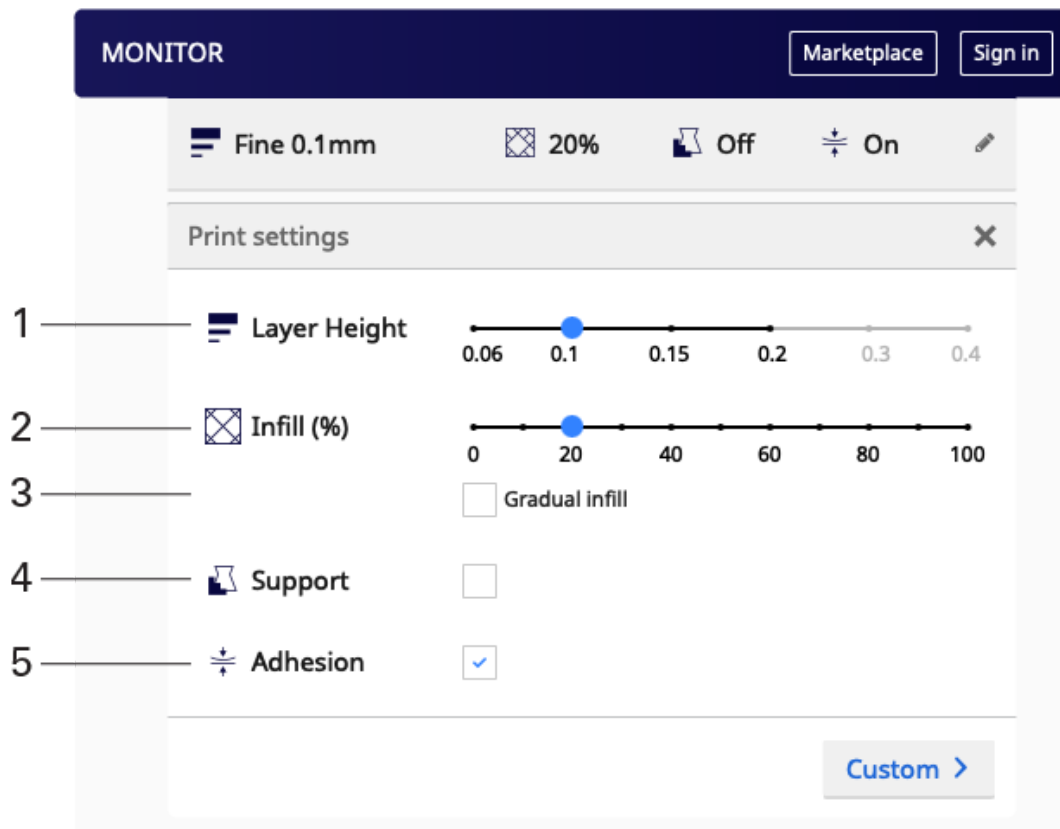The third button in the stage menu contains the configuration panel. Once opened, the panel displays your current print core/nozzle and material setup. Network enabled printers will display available configurations in your printer group. Non-network enabled printers need to be configured manually.

You will make sure that the non-network printer option is selected and Ultimaker 2+ is selected. Check with your faculty or shop staff as to what material type is currently available.

Print settings

The rightmost button in the stage menu contains the print settings panel, which includes all settings that define the printing strategy. By default, it opens in the recommended mode. This mode is ideal if you want to do a quick print with optimized printing profiles. Check with your faculty as to which settings will be appropriate for your object. There are a few parameters you can set:
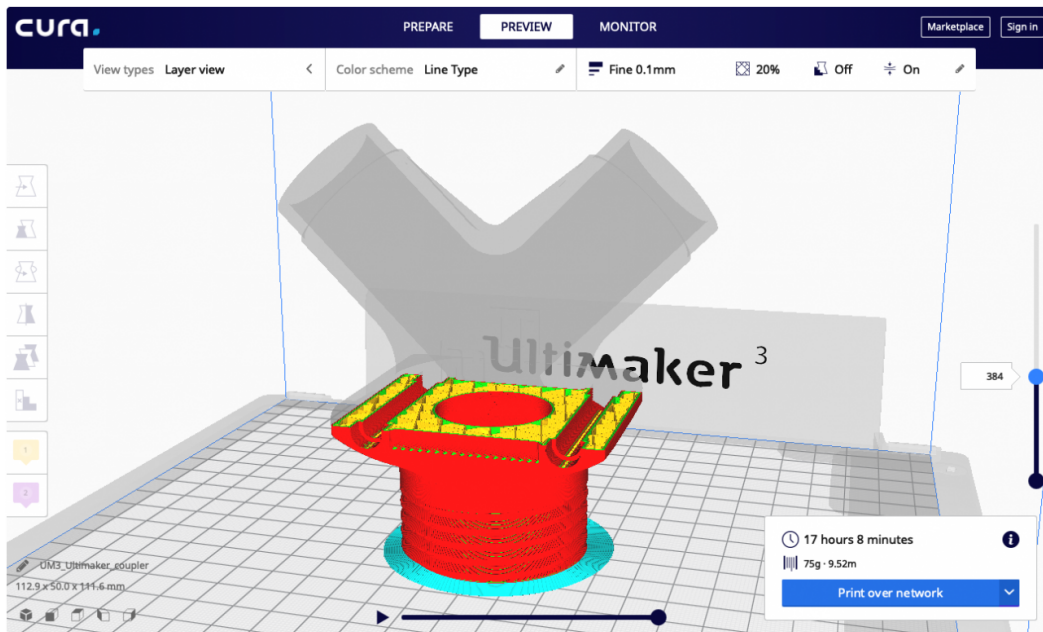
By default, Ultimaker Cura opens in the recommended mode. This mode is ideal if you want to do a quick print with optimized printing profiles. There are a few parameters you can set:

1. **Layer height.** Choose the layer height quality. The options available depend on your printer configuration.
2. **Infill.** Choose an infill percentage by dragging the slider.
3. **Enable gradual infill.** Reduces the amount of infill in your print by gradually increasing density.
4. **Generate support.** This will generate a support structure below overhanging parts of a model to prevent the model from sagging or printing mid-air.
5. **Build plate adhesion.** Adds a brim or raft around the base of the model to ensure the print doesn't detach from the build plate.

Slice and preview

Now that the printer type, configuration and print settings are in place, it's time to slice the model, with the button in the bottom right corner. When the process completes, it will immediately show a 'preview button', click it to go to the preview stage.

This view is ideal for seeing what the inside of your print will look like and how it will be printed. Use the layer slider and simulation view to check important parts of your 3D slice.

Save the file

Evaluate and improve the printing strategy until you are satisfied. You can then print directly over the network using Cura Connect, save to removable disk or save the file to your computer.

Printing

You are now ready to print. Be sure to fill out a 3D printing worksheet which can be found in the 3D Shop or on the 3D Shop intranet page. You will also need to make an appointment with the Ultimaker 3D printer of your choice. **Check in with 3D Shop Staff before starting your print.**