3D Orchestrator

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Overview

The 3D Orchestrator application is designed for the management of 3D printing files and 3D printers.

> The application is created as a WEB application.
>
> At this moment, it supports Bambulab printers, and support for printers with Klipper is being prepared.

Installation

1. Unzip the 3dorch.zip file.

2. Run one of the files app-amd64-linux, app-amd64-windows.exe, or app-arch64-linux depending on your operating system.

3. Open a web browser and enter http://localhost:8083 or http://IP:PORT.

Printers

Click on NEW PRINTER and fill out the form.
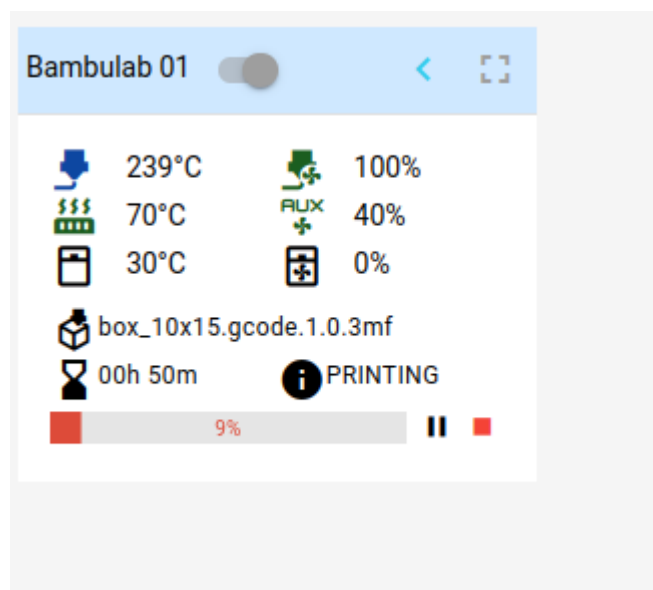

After adding, the printer will be disconnected; activate it by toggling the switch in the card header.

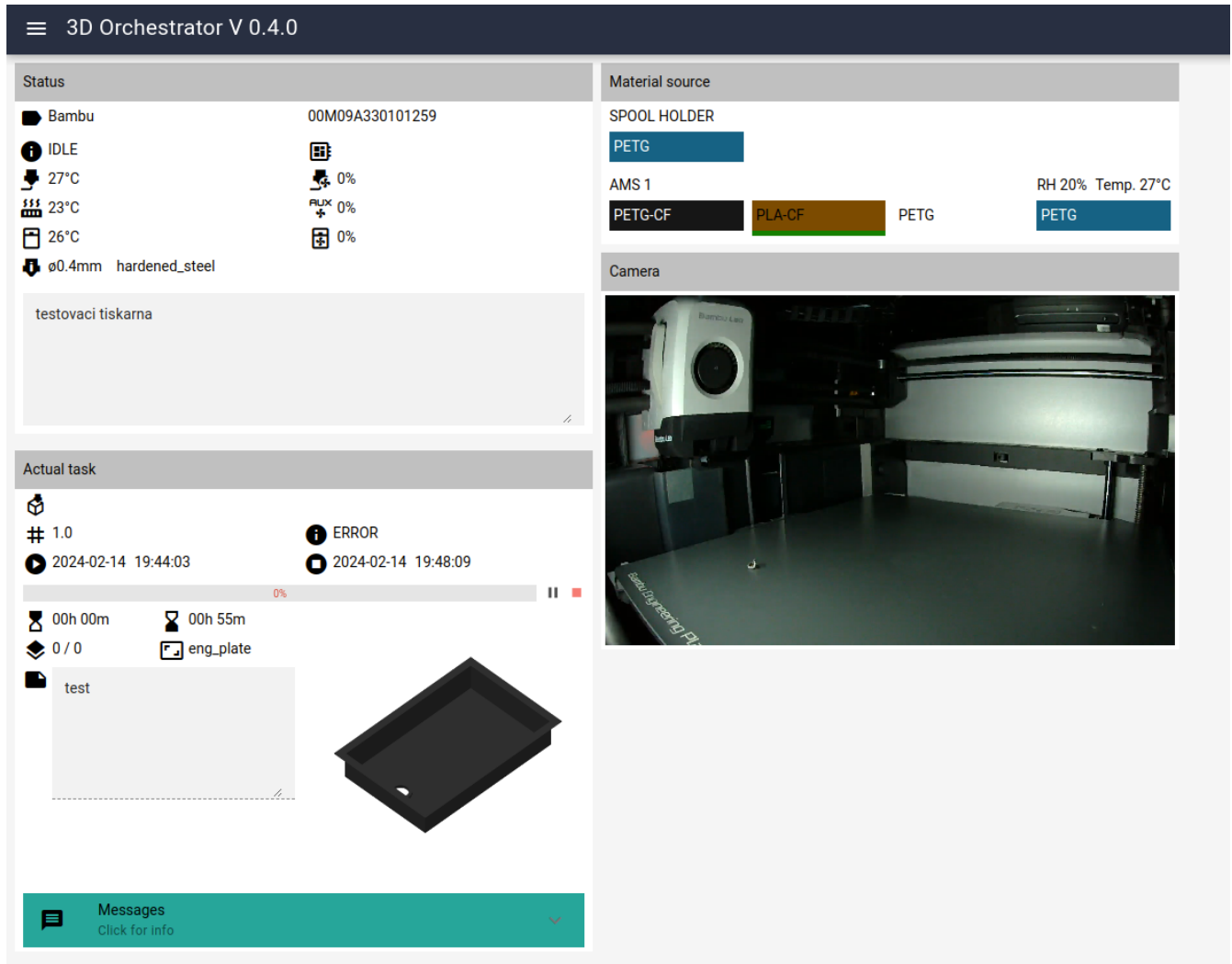On the printer card, you can monitor the printing status, and optionally pause or cancel it.

The card header is color-coded according to the printer mode:

- green - idle state, ready to print
- blue - printing in progress
- orange - printer needs assistance (pause, filament out)
- red - an error has occurred

The nozzle and bed icons can change color according to their status:

- black - off

- green - heating up

- blue - cooling down

The top right corner of the card reveals control elements for deleting, editing the printer, and for opening a window with detailed information about the printer.
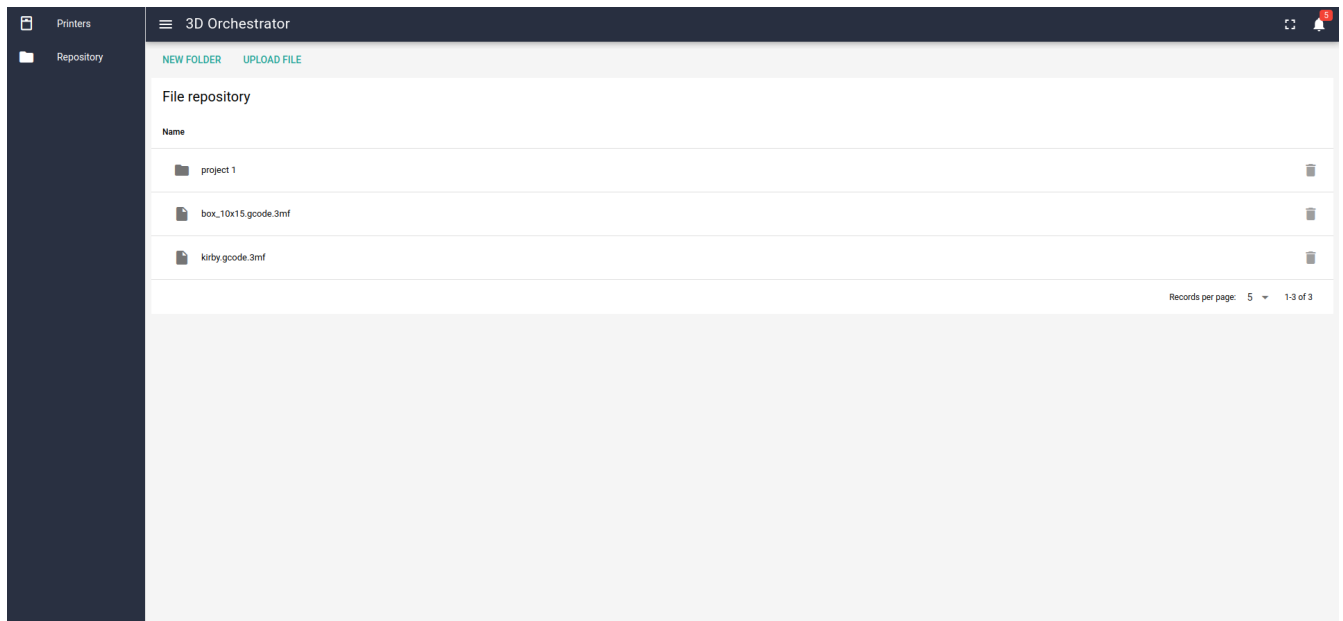

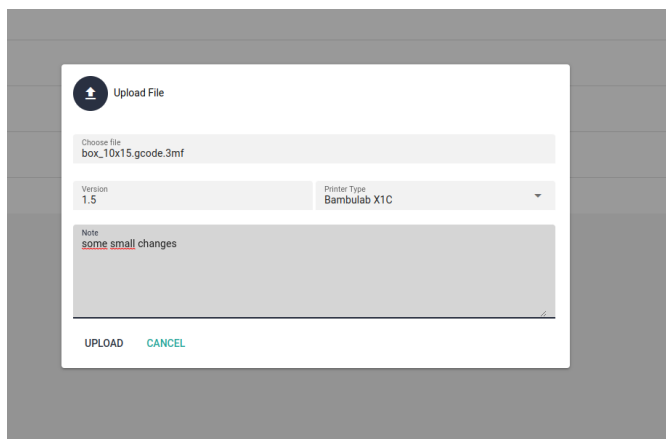The printer detail includes the following sections:

- Status - information about the temperature of the nozzle, heat-bed, chamber, fan speeds

- Actual task - information about the current or most recently completed print job, including a preview of the print object. This section also includes any list of error messages generated during printing.

- Material source - information on filament sources and currently used filaments. A green indicator shows which filament is being used for printing.

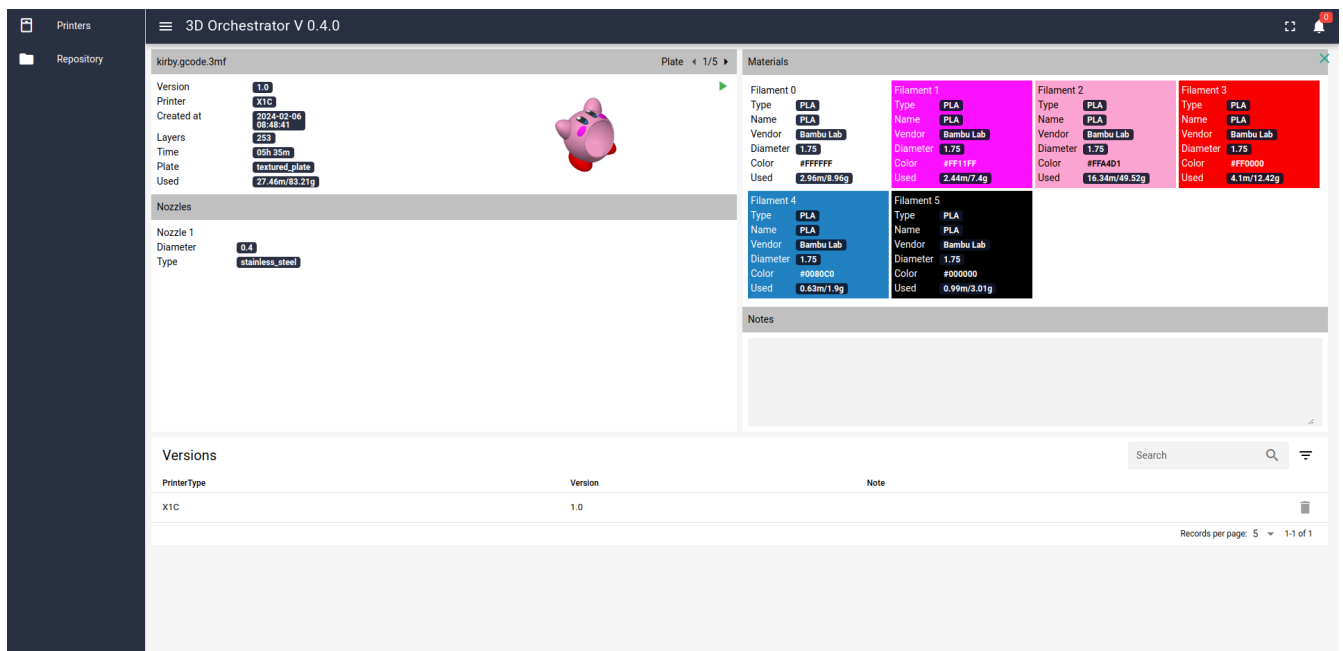- Camera - camera image, if the printer is equipped with one.

Repository

The repository is in the form of a directory structure. Adding files is done by clicking on Upload file.

In the form, select the type of printer for which the file is generated, mark the version with any text label, and optionally add more textual information into the Note field.

> ❗ If you have new versions of the file, please save them under the same name. On the file card, you will then see the individual versions and can switch between them.
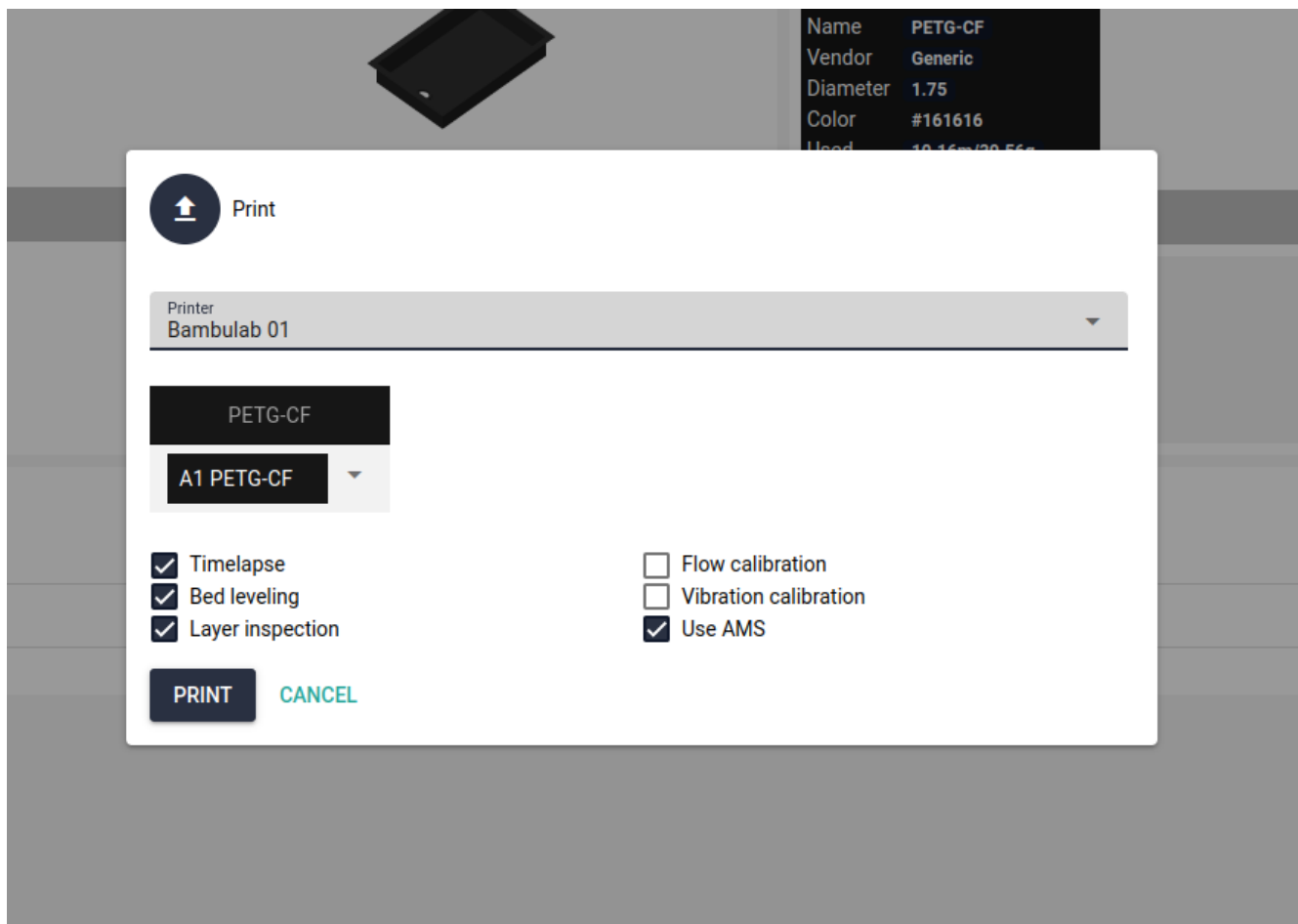
On the file card, you can edit the notes for individual versions; you just need to click into the Notes field.

If you have selected a version, press the green ▶ button to send it to the printer and start printing.

In the header, there is information about the number of plates used in the file. Using arrow buttons, you can select a specific plate and start its printing.

In the printing window, you can map individual filaments to slots in the AMS. You can choose from printers that are not currently printing or performing another activity.

The feature of print queues is planned for the future.