



Simplifying the FDM manufacturing process through the cloud

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2020

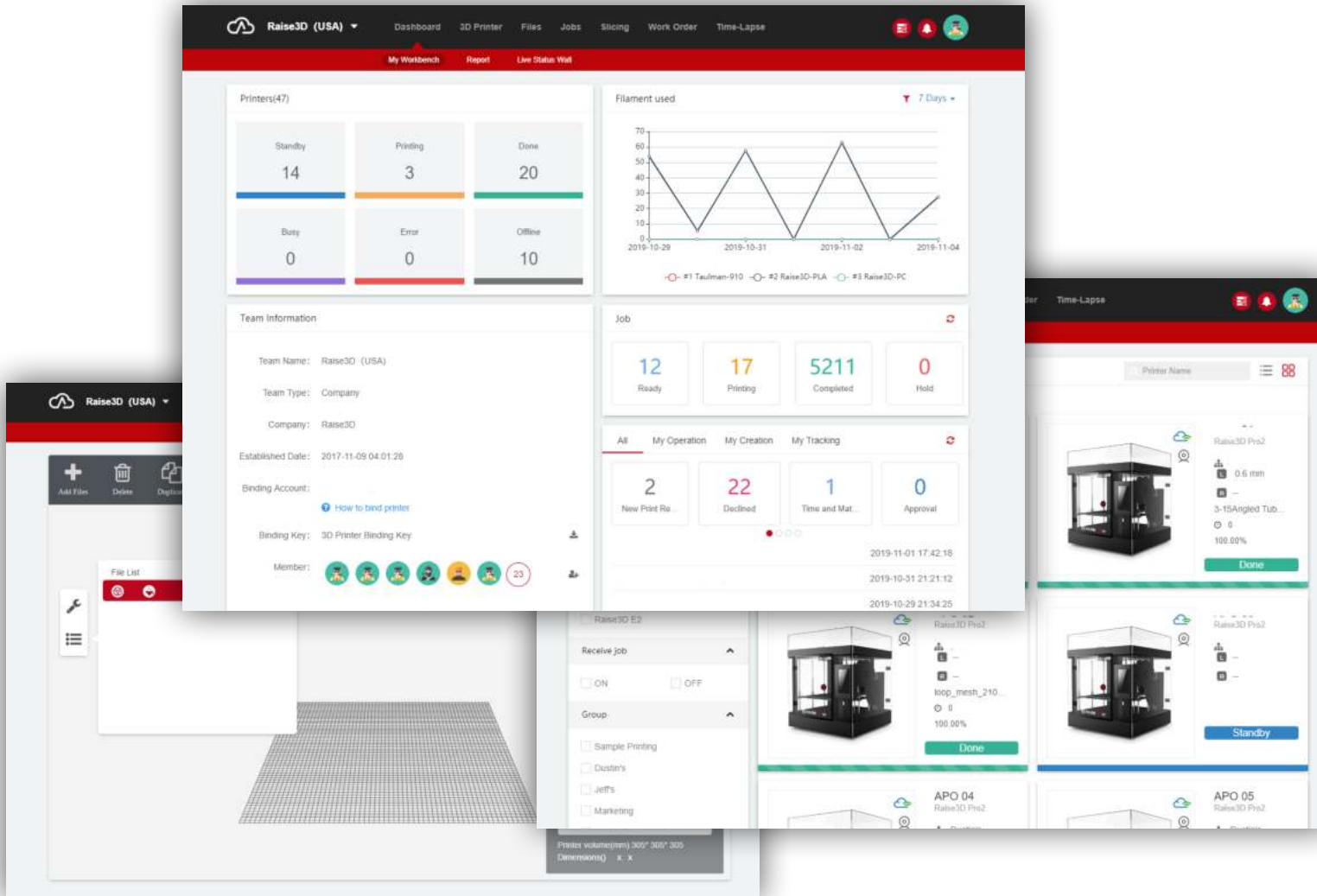


Current Manufacturing Process

- Requires dedicated staff
 - Training
 - Slicing
 - Printing
 - Monitoring
 - Printer Control
- Costly
- Time consuming
- Tracking and Auditing near impossible



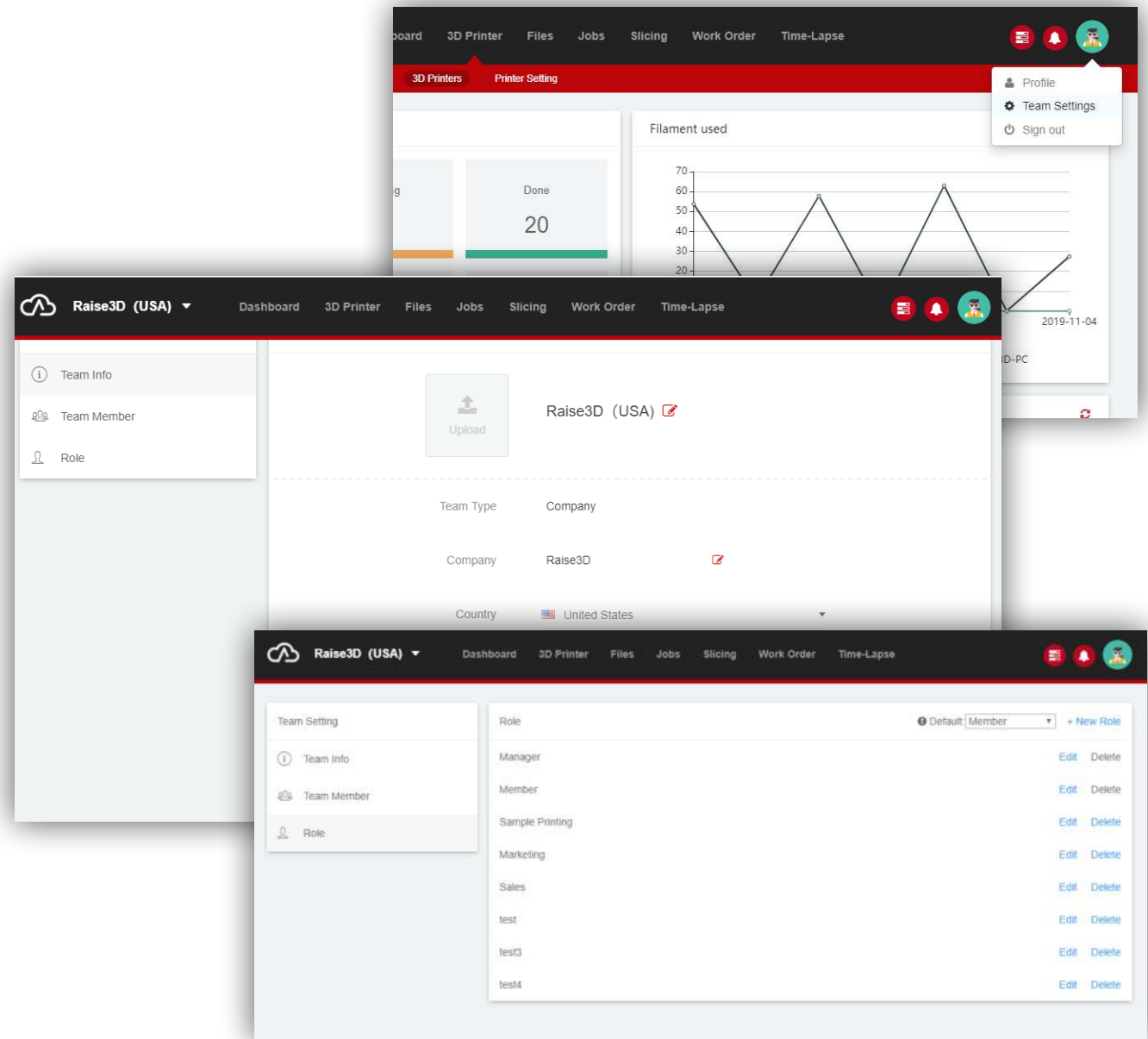
Raisecloud Solution



- Full control over your productivity
- Slicing ability
- Team assignment jobs
- 3d printer controls
- File repository
- Reporting
- Monitoring

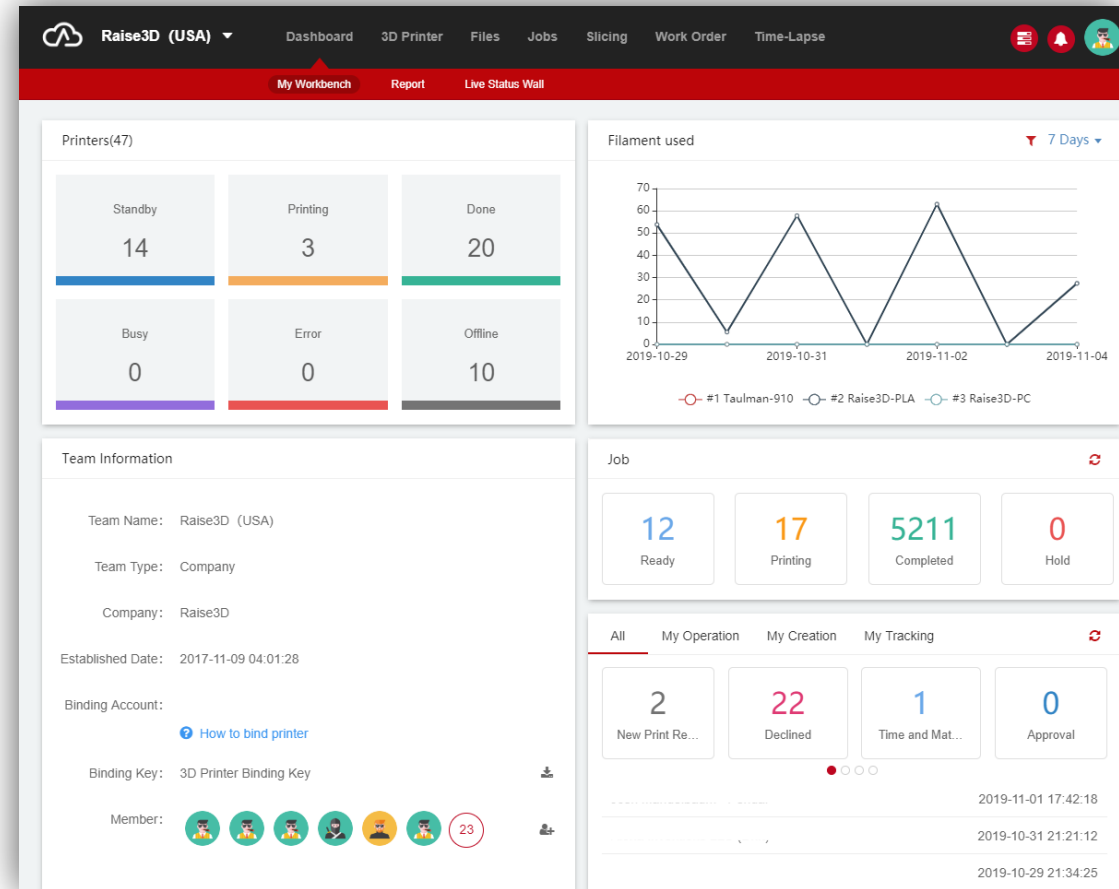
Team Setup

- Teams may be created in RaiseCloud
- Give different rights and access to each team member
- More control within your organization



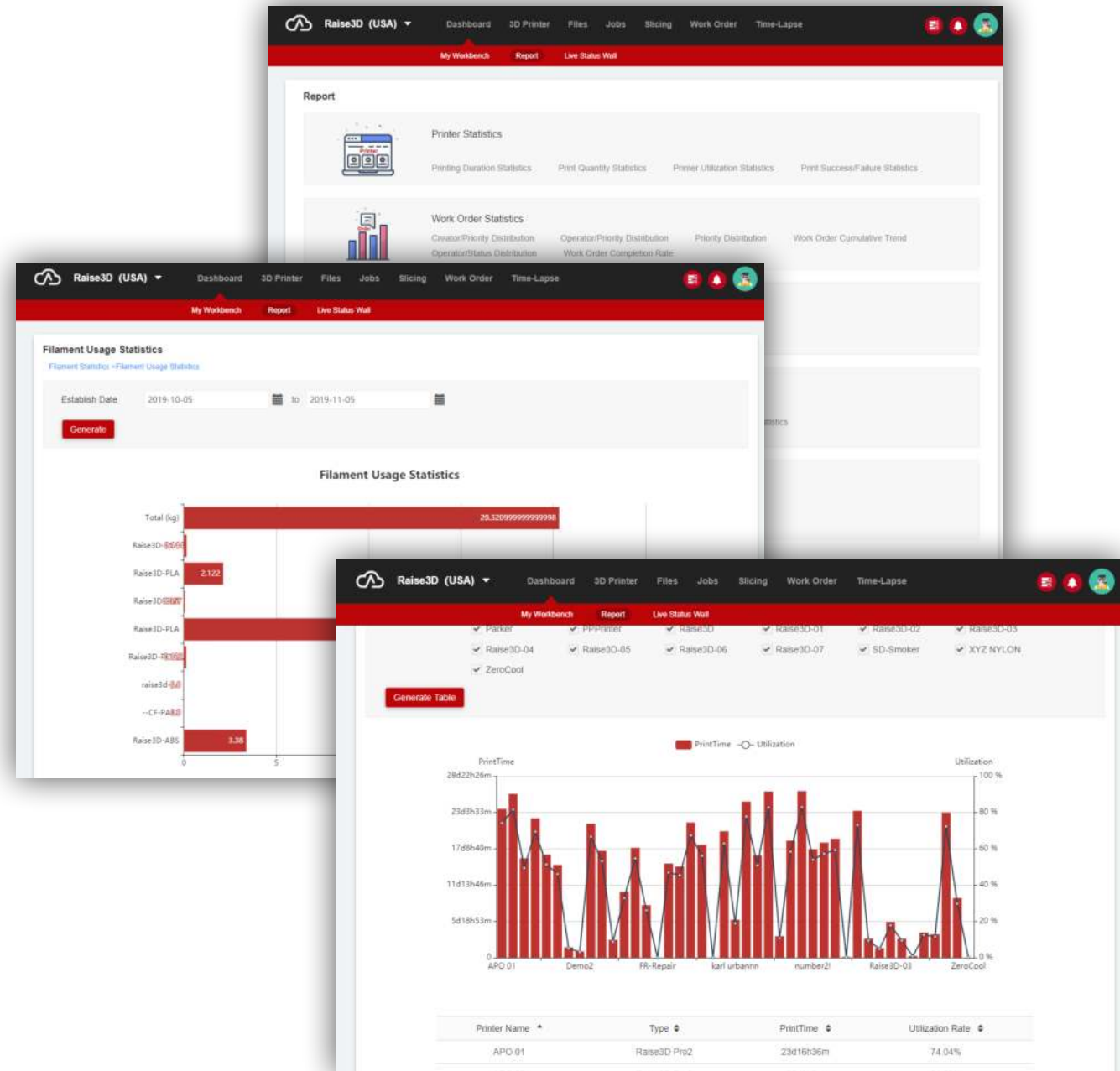
Workbench

- The workbench screen gives you a holistic overview of the operations
- Printer information (how many are printing, done, on standby etc)
- List of jobs that are ready, currently printing, completed etc
- All information can be drilled down into for additional information



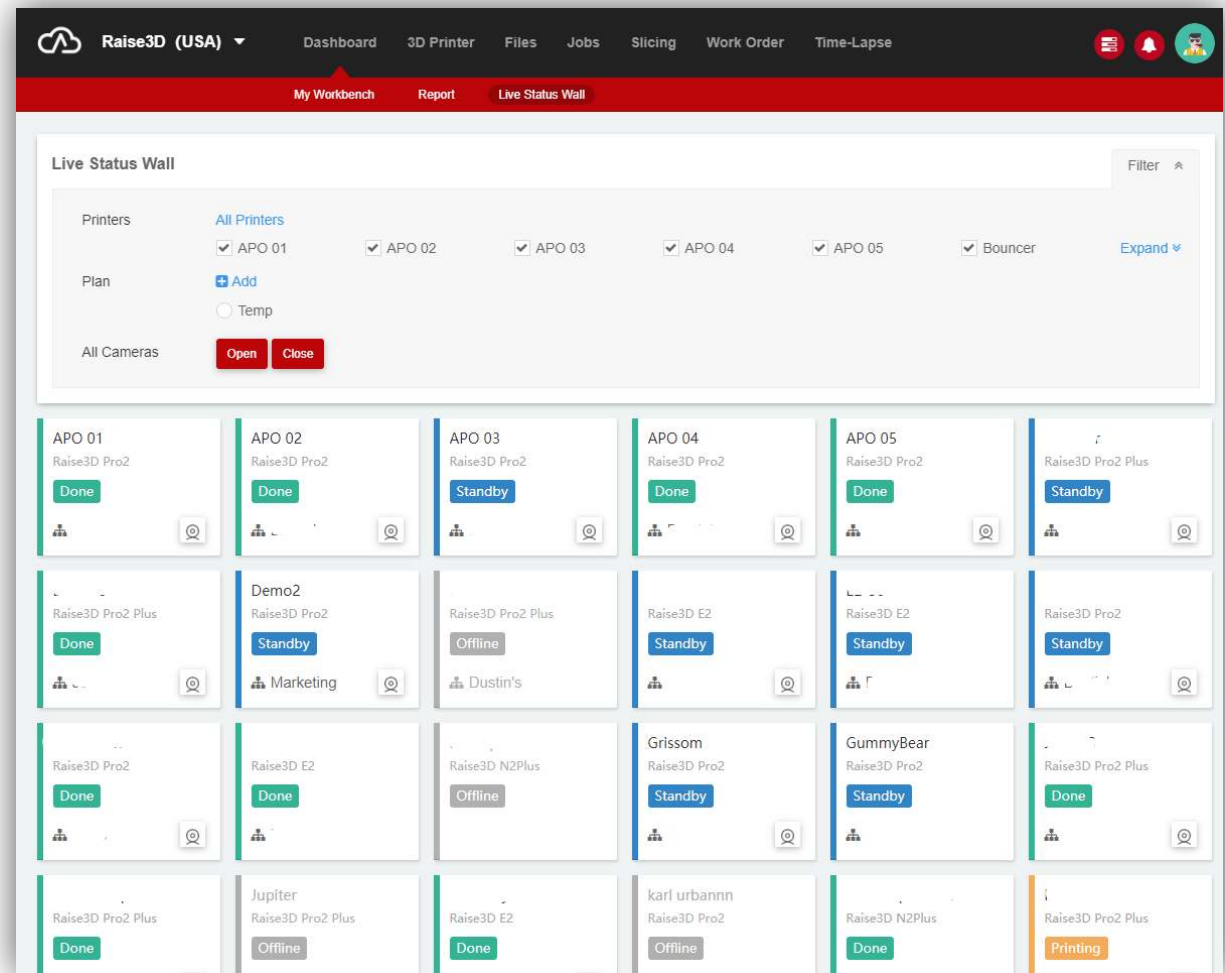
Reporting

- Run any form of report related to the operations
- Reports can be drilled down to time frame, team member, machine, filament type etc
- Reporting on demand also possible



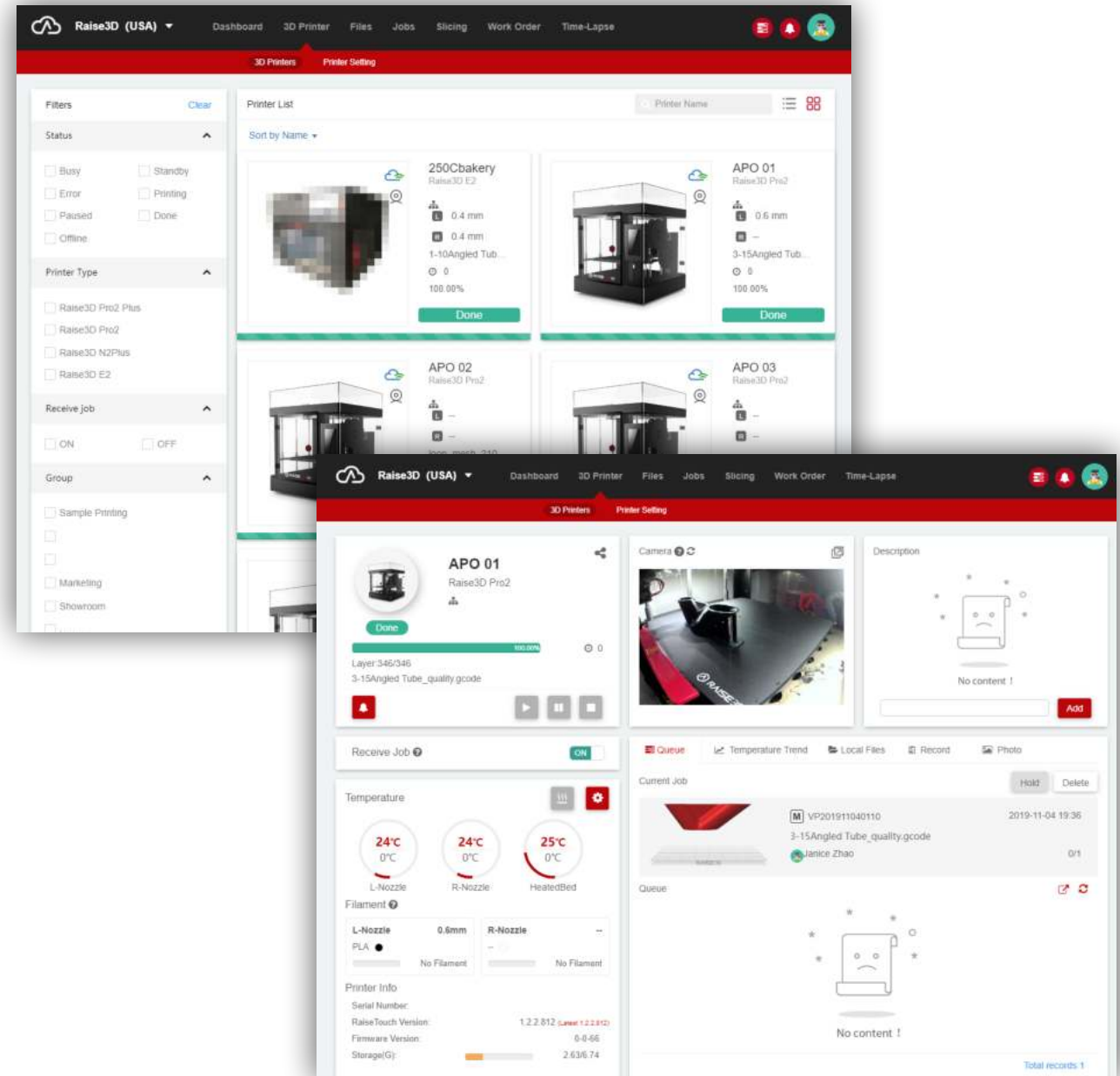
Live Status Wall

- The live status wall shows you all the selected machine's current activity
- Printers can be filtered through checkboxes
- Each machine with a camera can be viewed through this screen as well for monitoring



3D Printers

- View all bound printers along with their current status of activity
- Selecting any printer will open a detailed view of the printer, current information and also access to the live feed from the camera



3D Printers

- Any settings modification to any of the printers can be done on the Printer Settings tab
- All machines will be listed along with their group info
- Edit gives you the ability to change any attributes to the machines itself

The screenshot displays the Raise3D (USA) software interface. The top navigation bar includes links for Dashboard, 3D Printer, Files, Jobs, Slicing, Work Order, and Time-Lapse. The '3D Printers' tab is active, showing a 'Printer Setting' table. Below this, the 'Edit Printer' dialog is open for the machine '250Cbakery'.

Printer Setting Table:

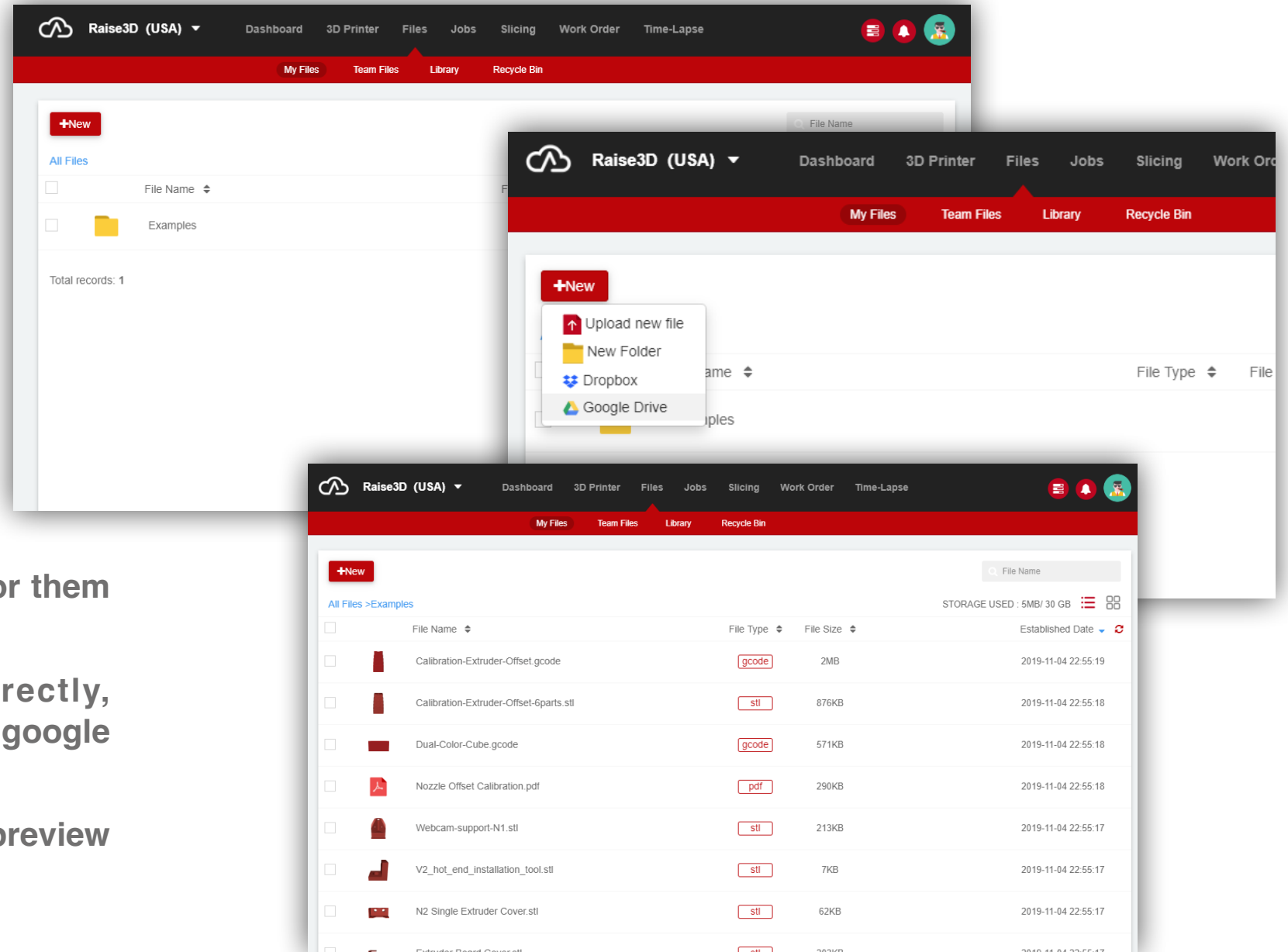
Printer Name	Printer Type	L-Nozzle(mm)	R-Nozzle(mm)	Group	Operation
250Cbakery	E2	0.4	0.4		☒
APO 01	Pro2	0.6	0		☒
APO 02	Pro2	0	0		☒
APO 03	Pro2	0	0		☒
APO 04	Pro2	0	0		☒
APO 05	Pro2	0	0		☒
Bouncer	Pro2 Plus	0.4	0		☒
DELTA2	Pro2 Plus	0.4	0.6		☒
Demo2	Pro2	0	0		☒
DSPIN					
dundundun					
E2-50					
EII-AC					
Eric-Tester					

Edit Printer Dialog (Machine Name: 250Cbakery):

- General Tab:**
 - Printer Settings:
 - L-Nozzle Diameter(mm): 0.4
 - R-Nozzle Diameter(mm): 0.4
 - Build Width: 305 mm
 - Build Depth: 305 mm
 - Build Height: 305 mm
 - ☐ Use Heated Bed
 - ☐ Enable Fan Speed Control (Use PWM-Controllable Fans)
 - Distance From Border of Build Plate: 2.5 mm
 - Build Plate Shape: Rectangle
 - Firmware: Marlin
- Extruders Tab:**
 - Extruder Count: 2
 - Left Extruder: [Dropdown]
 - Right Extruder: [Dropdown]
- Sequential Printing Tab:**
 - Gantry Height: 55 mm
 - ☐ Allow Custom Printing Priority in Sequential Printing
 - ☒ Validate Printing Priority before Slicing
- Gcode Export Tab:**
 - Default Action: Upload to Printer

A 'Confirm' button is located at the bottom right of the dialog.

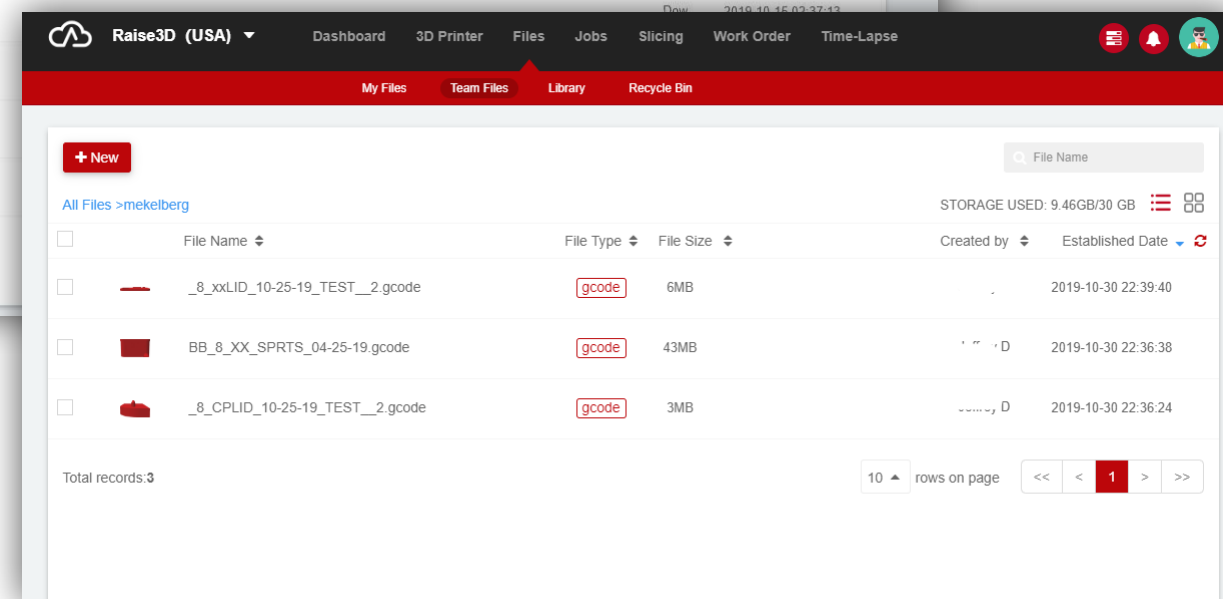
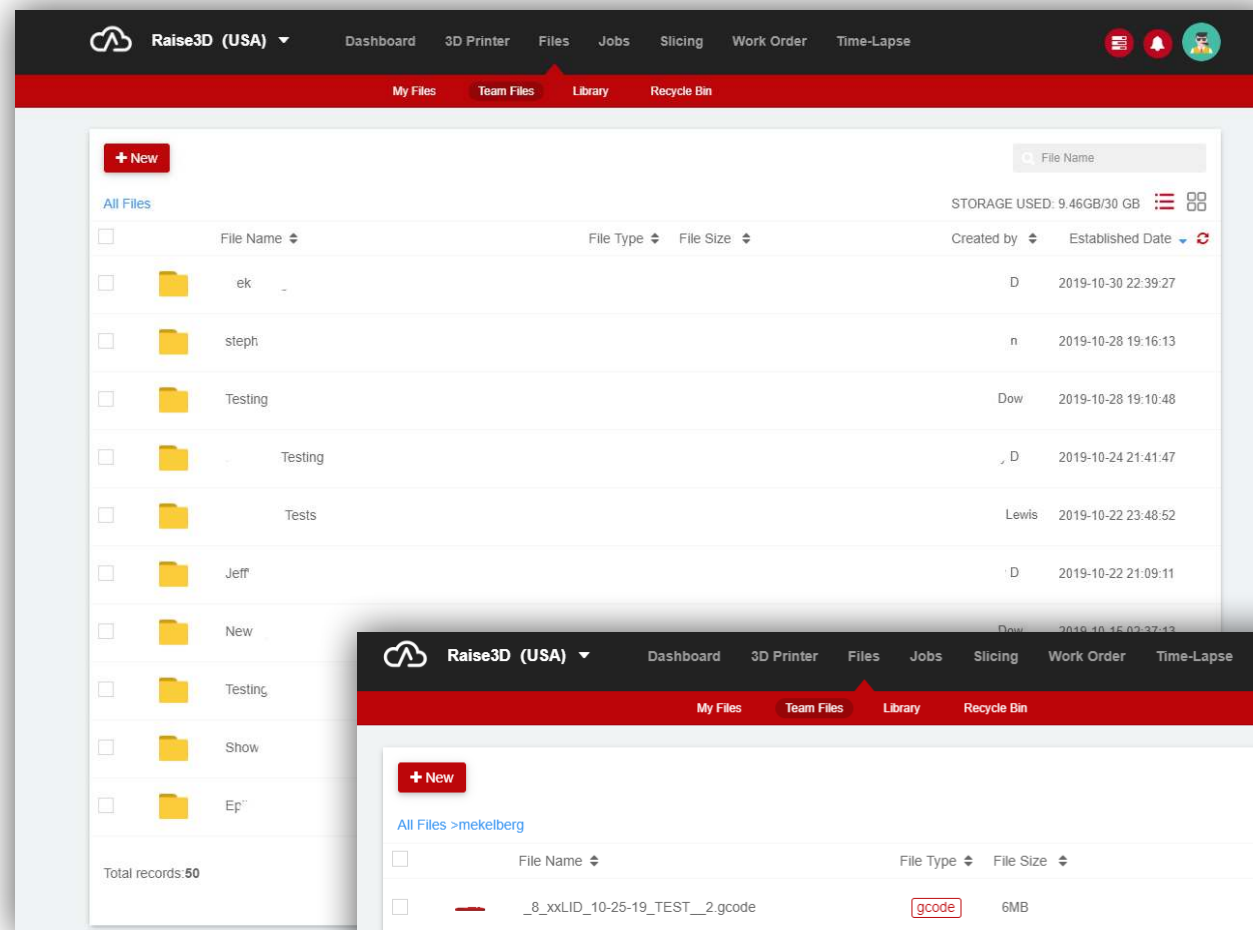
My Files



- Files are stored on the cloud for them to be accessible remotely
- Files can be uploaded directly, through dropbox or through google drive
- File information along with a preview of the model is available

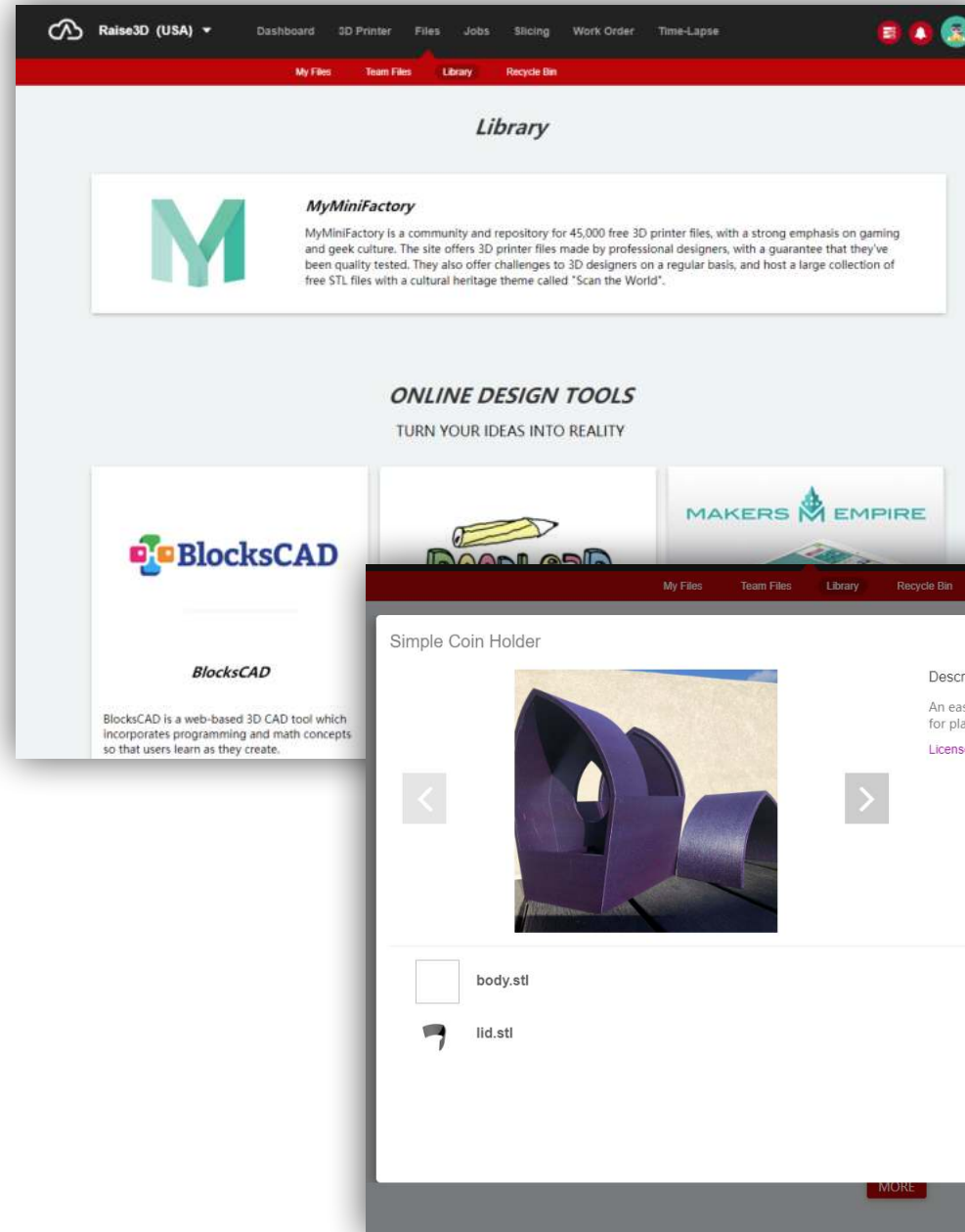
Team Files

- Teams can create their own organized folders for file uploading
- Just like the other folders, these can be viewed in more detail by checking the folder



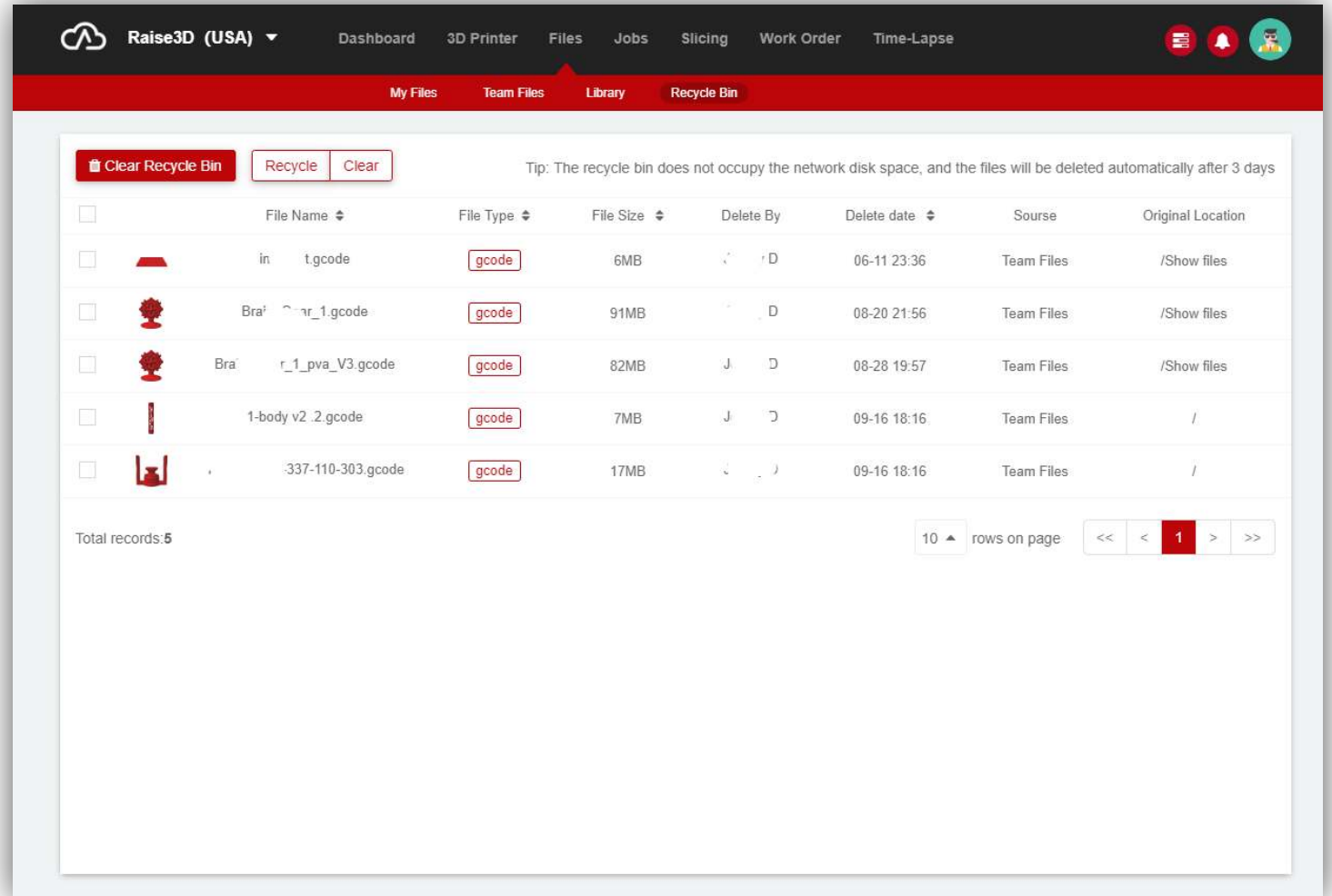
Library

- Through RaiseCloud you have the ability to log directly into popular file hosting and CAD sites
- From here you can directly download models into your files directory ready for printing



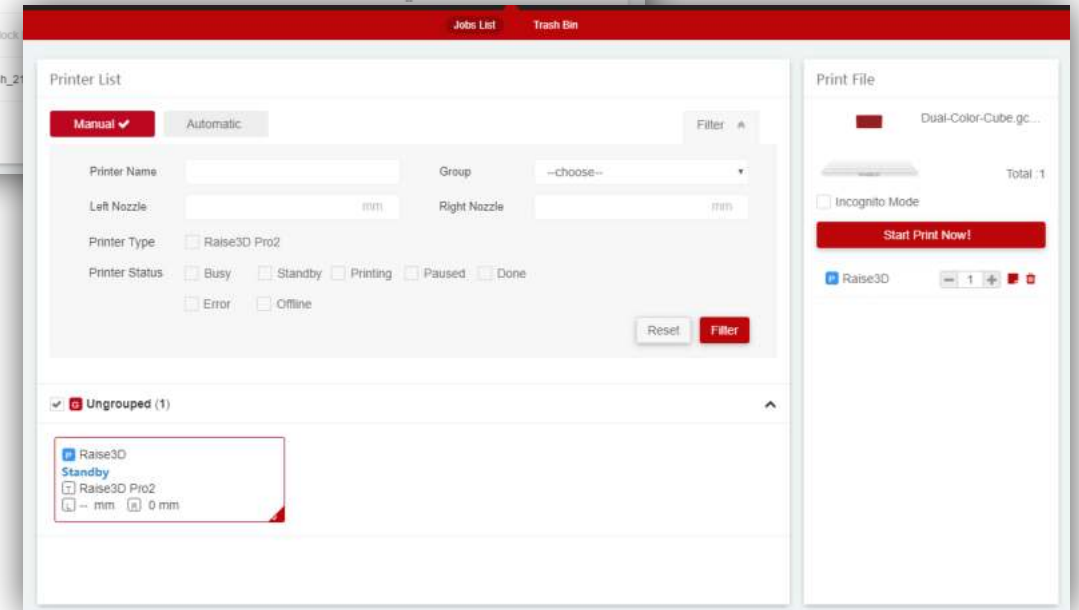
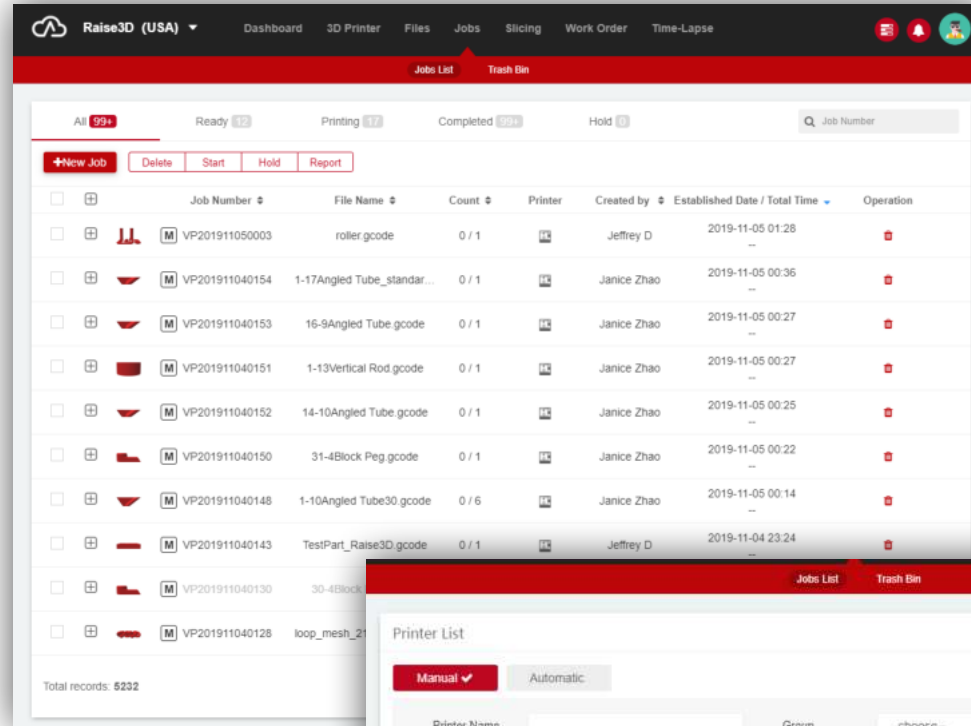
Recycle Bin

- The recycle bin allows you to view all deleted files by any team member
- Files can either be cleared or recycled
- Files are automatically deleted after 3 days in the Recycle Bin



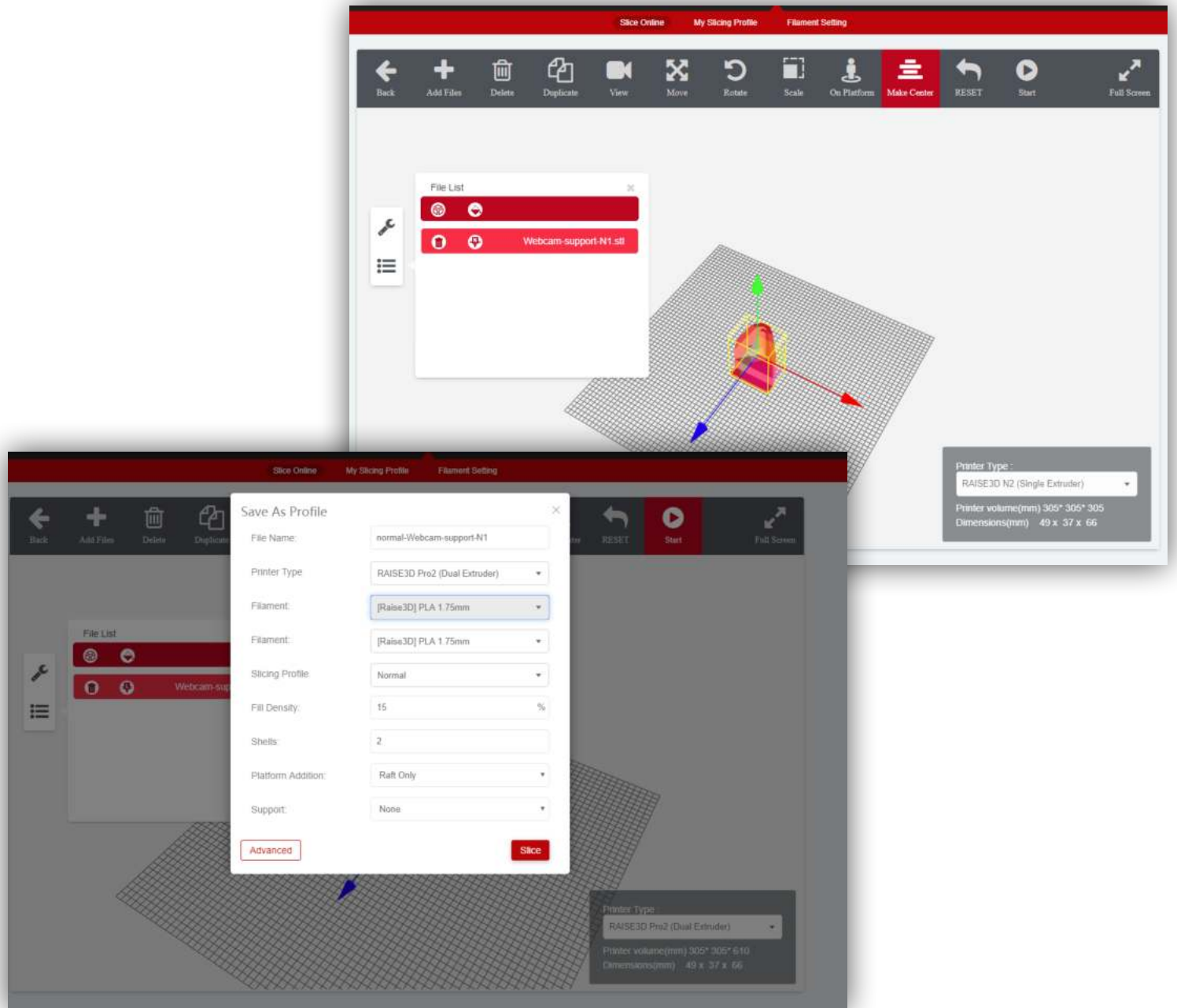
Jobs List

- The jobs list is where all the files for printing can be queued
- New jobs can be added to available printers in the list
- Any job started or queued will trigger notifications on the mobile app
- Trash bin shows all jobs prints which have been deleted



Slice Online

- Slice online lets you import files from your or your team's folders
- You have the same features you would in ideaMaker making it extremely versatile
- From here you can slice with preset profiles or modify any existing profile



Slice Online

- Once a model is sliced successfully, it will appear in the files section
- Clicking on the + sign next to the file sliced will expand the model to show the gcode
- From here you can send the model directly to print

The screenshot displays the Slice Online web interface. The top navigation bar includes 'My Files', 'Team Files', 'Library', and 'Recycle Bin'. Below this is a table listing files with columns for file name, format, size, and upload time. The file 'normal-V2_hot_end_installation_tool.gcode' is selected, and its details are shown in a modal window.

File Name	Format	Size	Upload Time
Duct FinalV2.stl	stl	2MB	2019-09-17 17:50:54
Calibration-Extruder-Offset.gcode	gcode	2MB	2019-09-17 17:12:25
Calibration-Extruder-Offset-6parts.stl	stl	876KB	2019-09-17 17:12:25
Dual-Color-Cube.gcode	gcode	571KB	2019-09-17 17:12:25
Webcam-support-N1.stl	stl	213KB	2019-09-17 17:12:24
normal-Webcam-support-N1.gcode	gcode	2MB	2019-11-05 12:58:32
Nozzle Offset Calibration.pdf	pdf	290KB	2019-09-17 17:12:24
N2 Single Extruder Cover.stl	stl	62KB	2019-09-17 17:12:24
V2_hot_end_installation_tool.stl	stl	70KB	2019-09-17 17:12:24
normal-V2_hot_end_installation_tool.gcode	gcode	467KB	2019-11-05 13:00:24
Leveling Block.stl	stl	10KB	2019-09-17 17:12:24
Extruder Board Cover.stl	stl	10KB	2019-09-17 17:12:24

Total records: 15

File Detail

File Info | **Print Count**

Form Templates

File Name:	normal-V2_hot_end_installation_tool.gcode
Dimension:	35mm* 30mm* 35mm
Print Time:	1h2m
Size:	467KB
Upload Time:	2019-11-05 13:00:24

Detail | [Upload .data File](#)

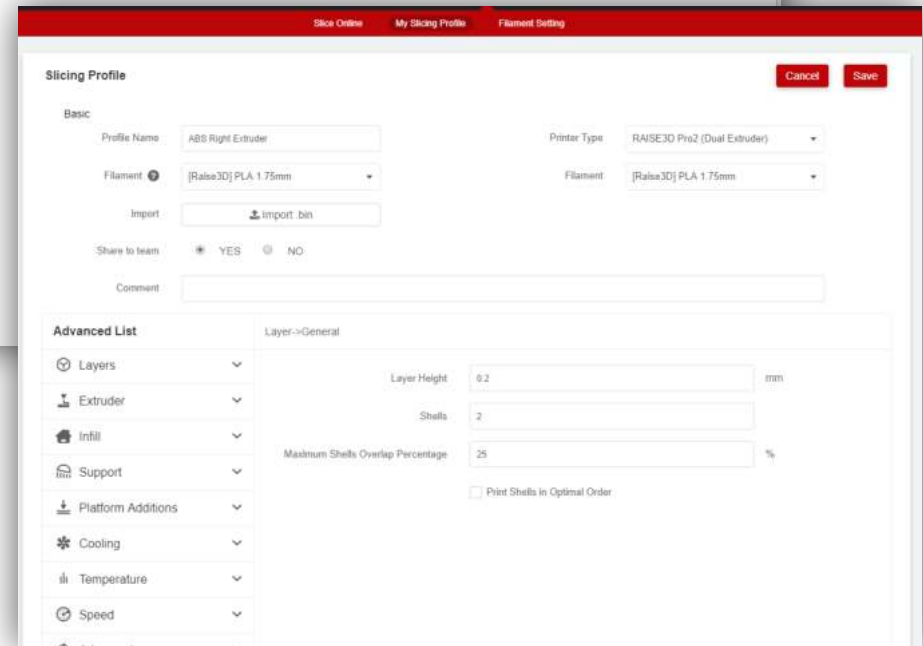
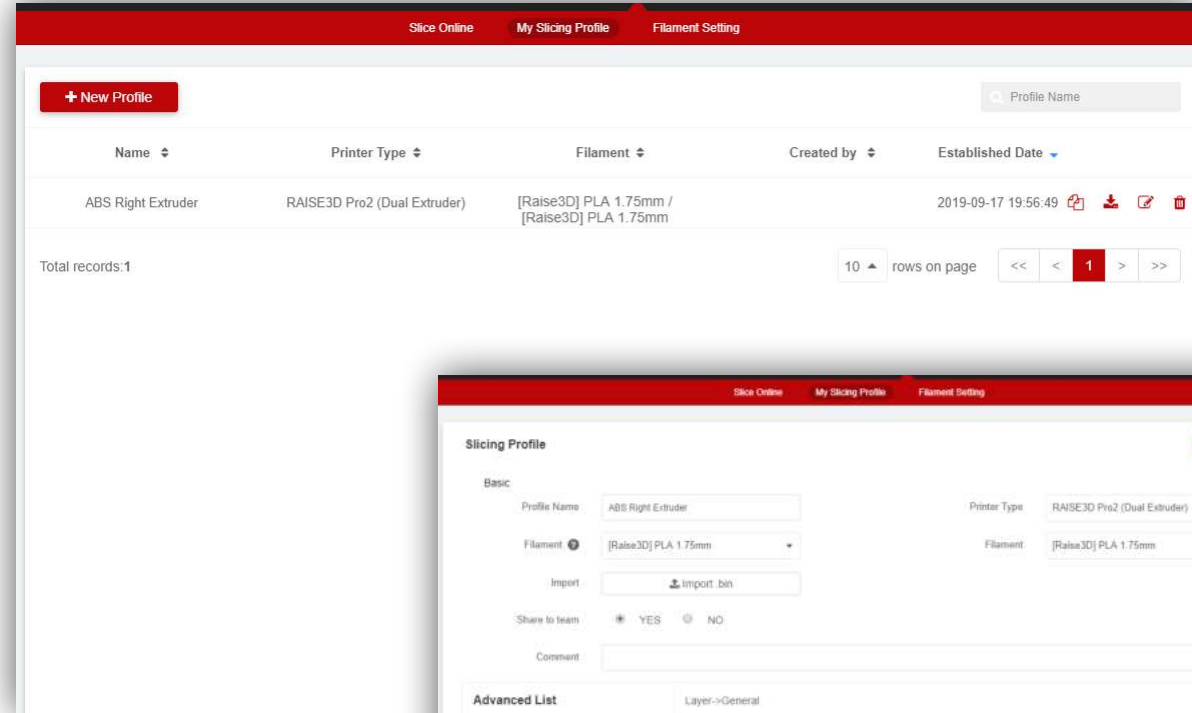
Template:	normal-Pro2-pla
Printer Type:	RAISE3D Pro2
Filament used:	10.12g
Layer Height:	0.20
Shells:	2
Fill Density:	15%
Infill Speed:	80

Dimension: 35mm* 30mm* 35mm

[Delete](#) [Print](#)

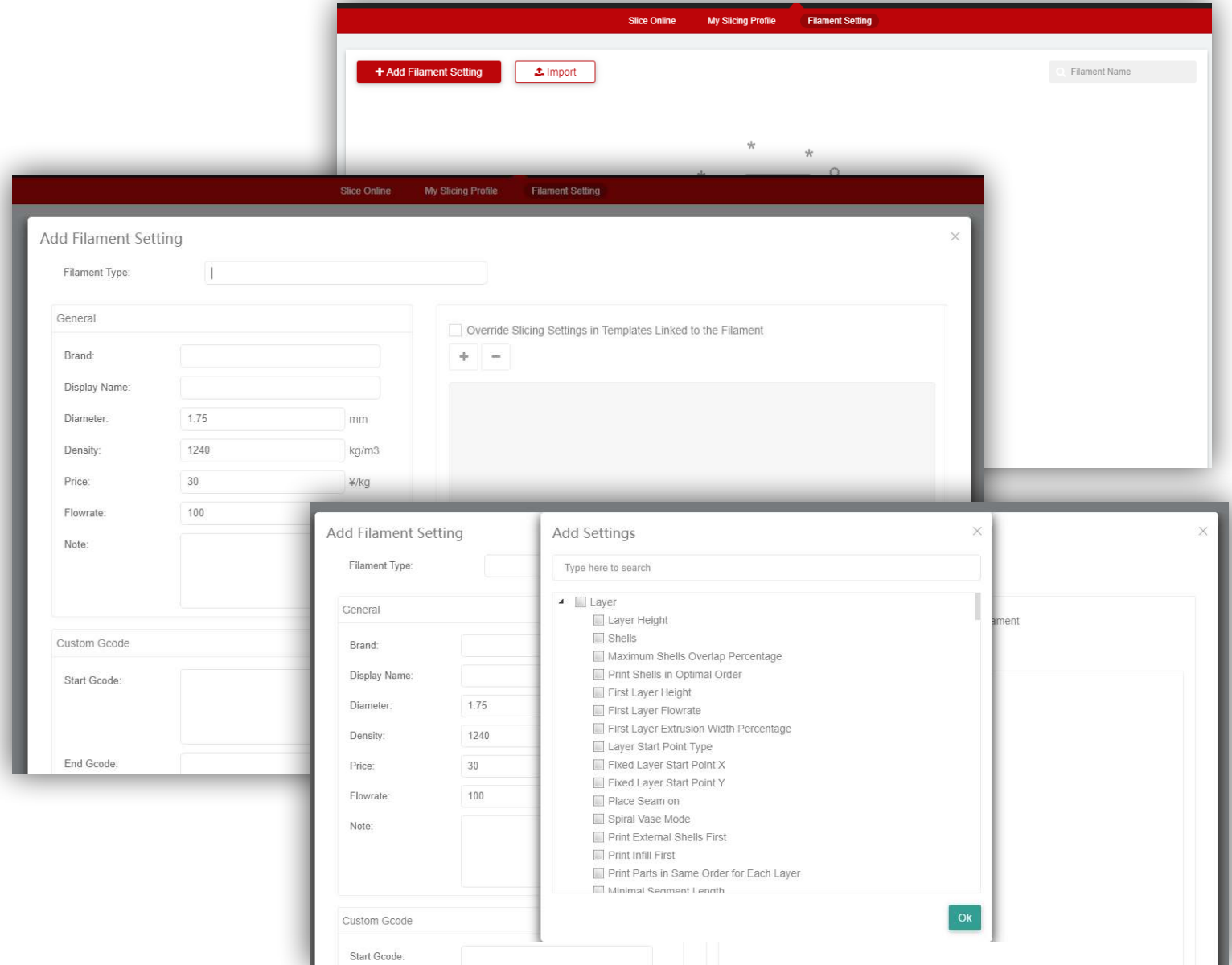
My Slicing Profile

- Dedicated page to view all printing profiles for each team and individual
- It shows the profiles for the printers and also for the filament it is set for
- Create new slicing profiles
- Easily tweak or import new profiles from ideaMaker



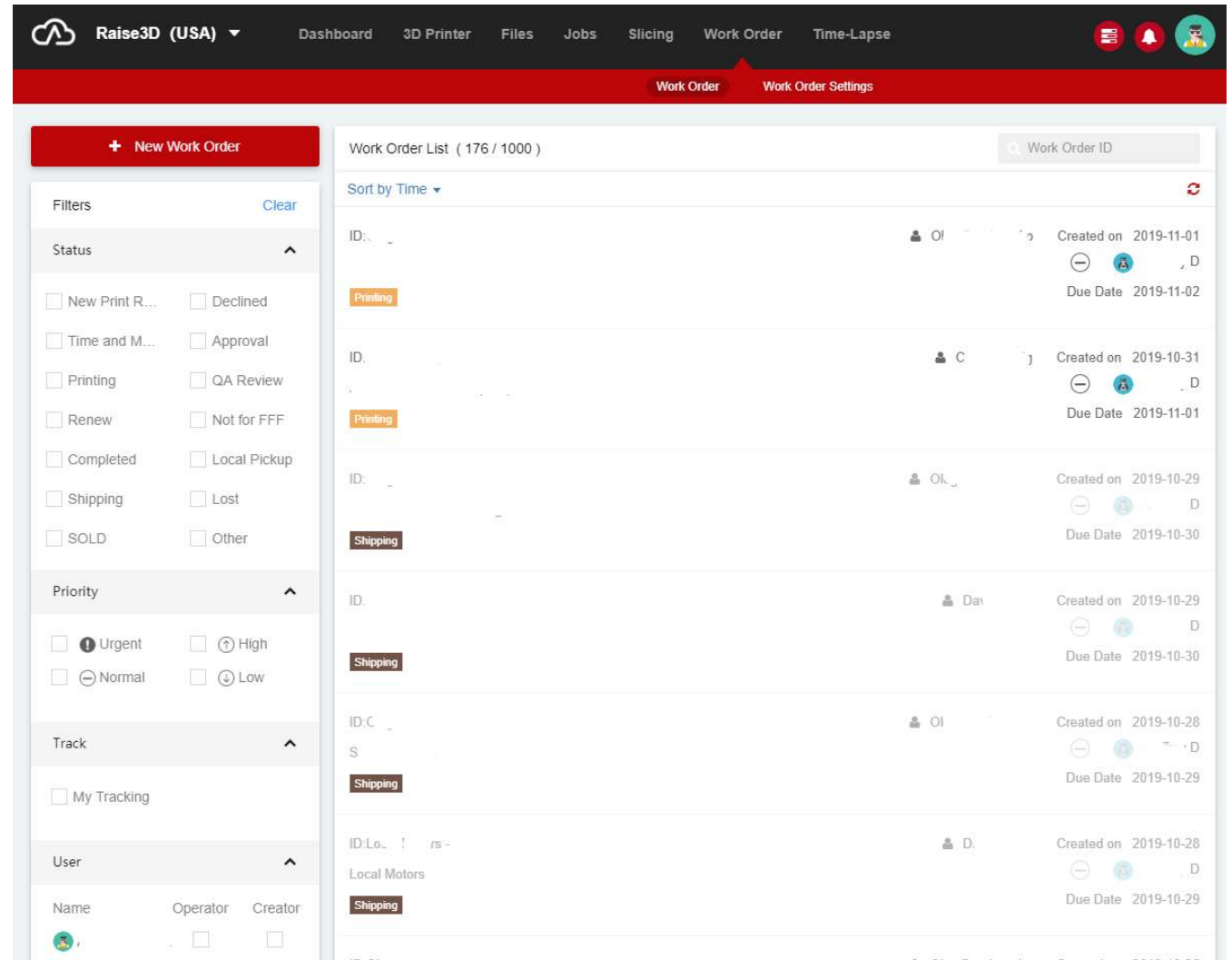
Filament Settings

- You also have the ability to create specific filament profiles to use with the printer profiles
- You can also change specific parameters from the profile to override the main slicing profile
- Importing filament profiles from ideaMaker is also possible



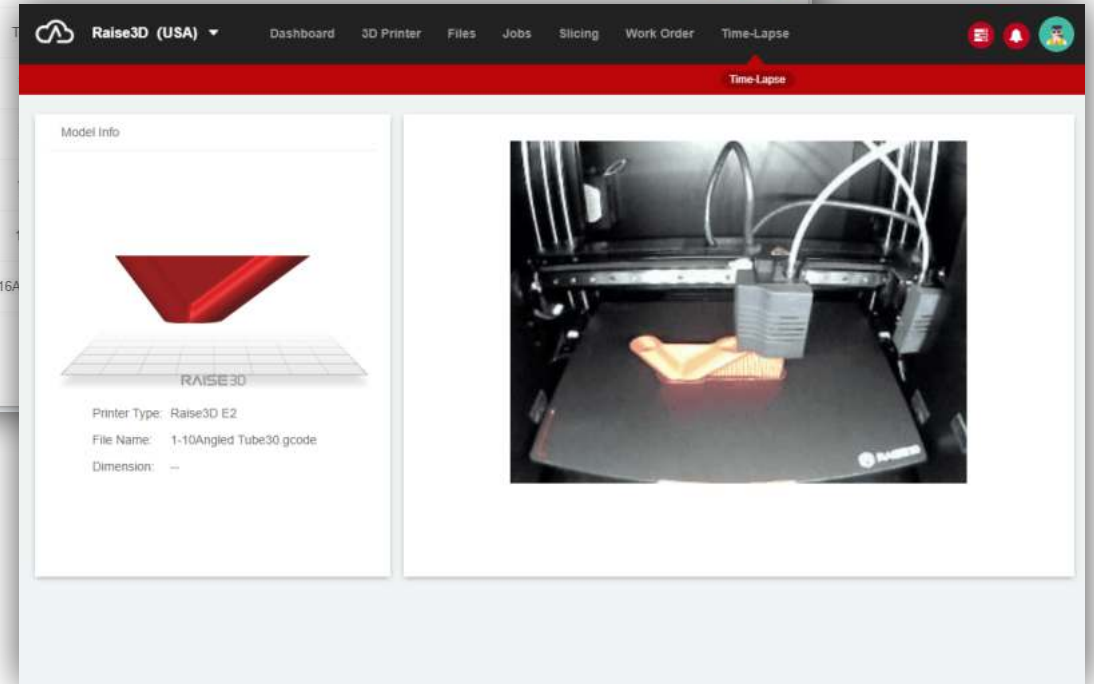
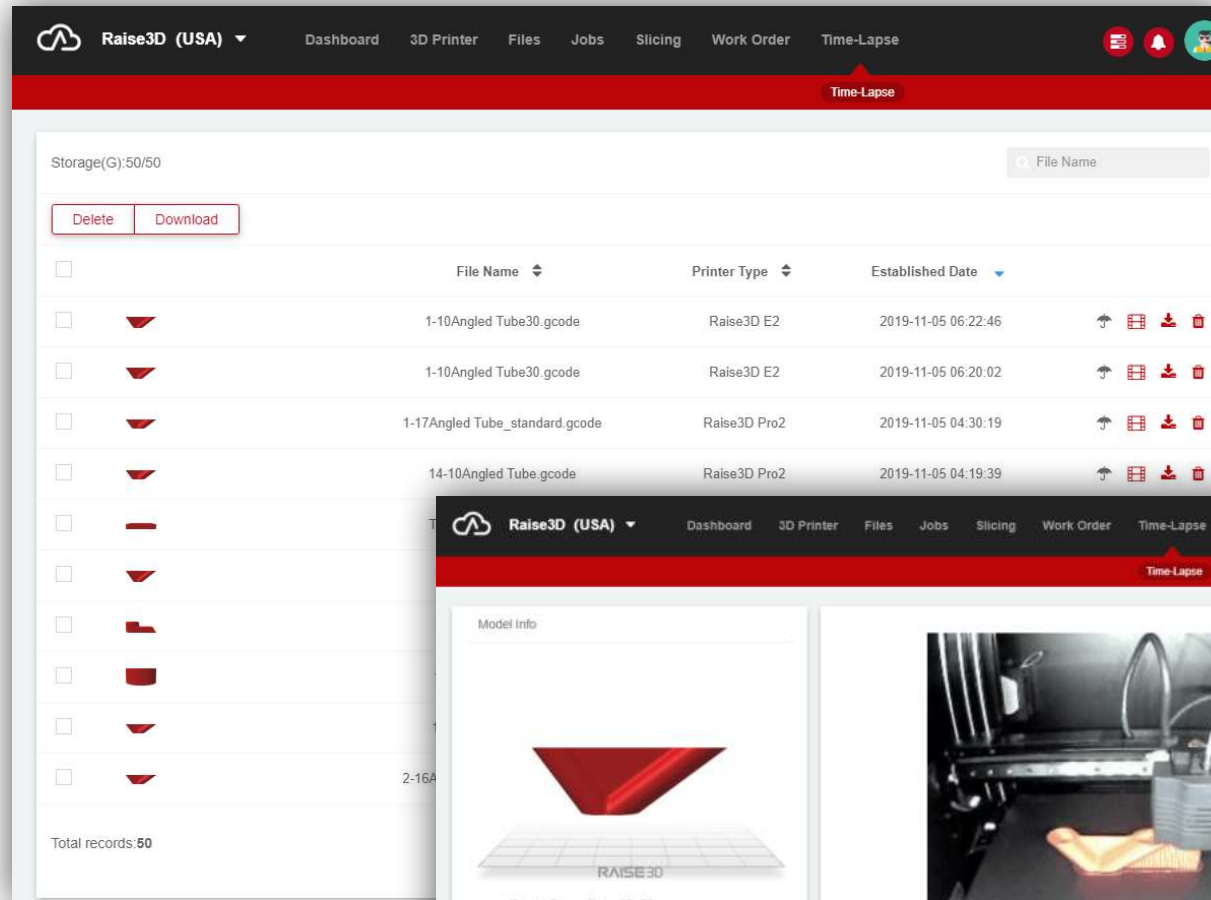
Work Order

- Track the progress of your production, from creation to delivery
- Information on each item is displayed along with the team member in charge of the current process
- The process is also visible on whether the object is printing, shipping etc
- Never miss a deadline with complete control



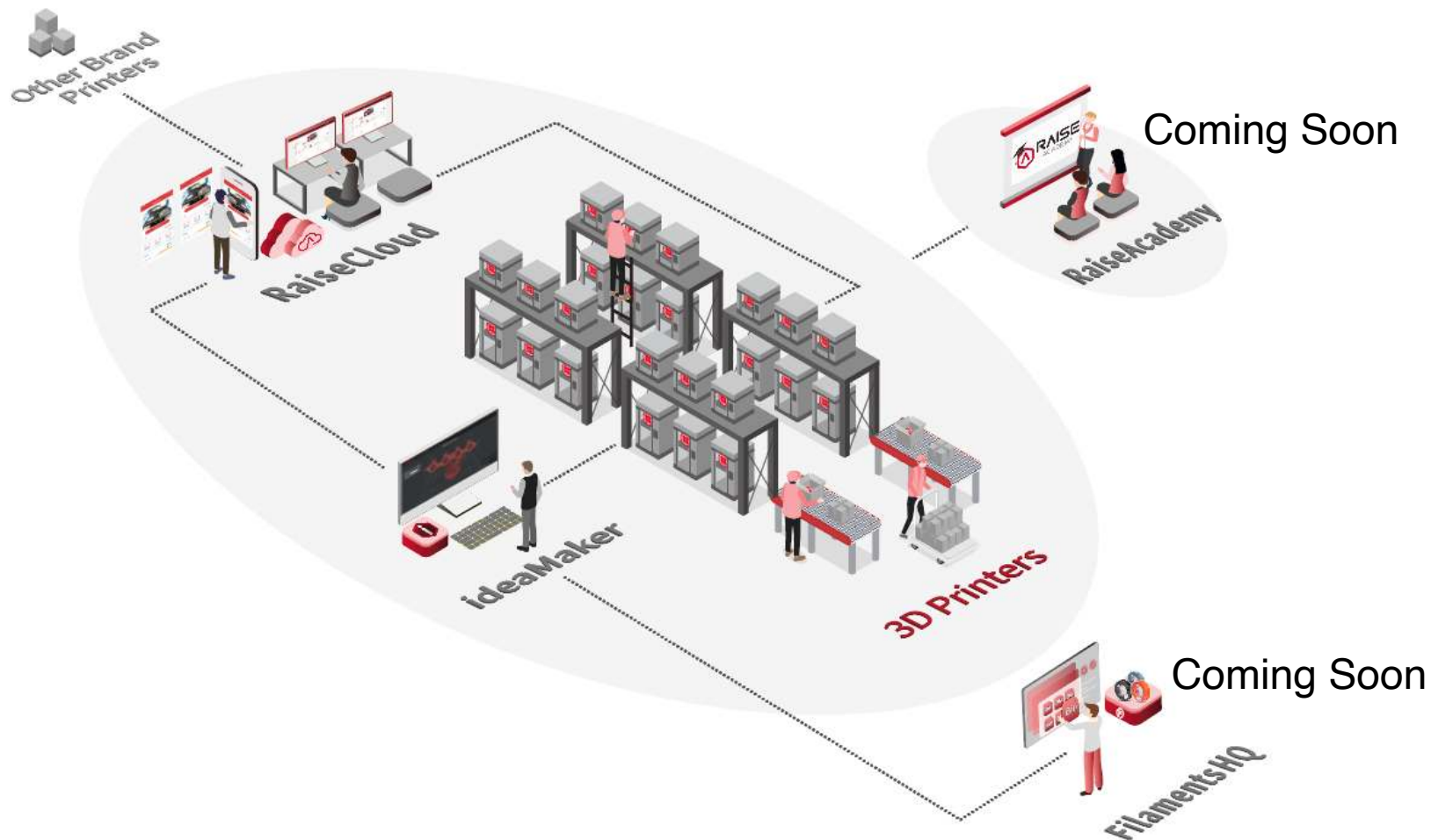
Time-Lapse

- Here you have a list of all recorded time-lapses made for all prints (where a time-lapse camera is available)
- Time-lapses can be viewed along with the model details or they can be downloaded



Raise Ecosystem

- All-in-one solution for the FDM Additive Manufacturing Process
- Including support for leading brands of filament manufacturers
- Different Installation Options
 - Public Cloud/Public Server
 - Public Cloud/Private Server
 - Private Cloud/Private Server
- Fully GDPR Compliant



Questions?





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