

 **3D Sprint™**

Quick Start Guide

FabPro 1000

Release Date: 2018.05

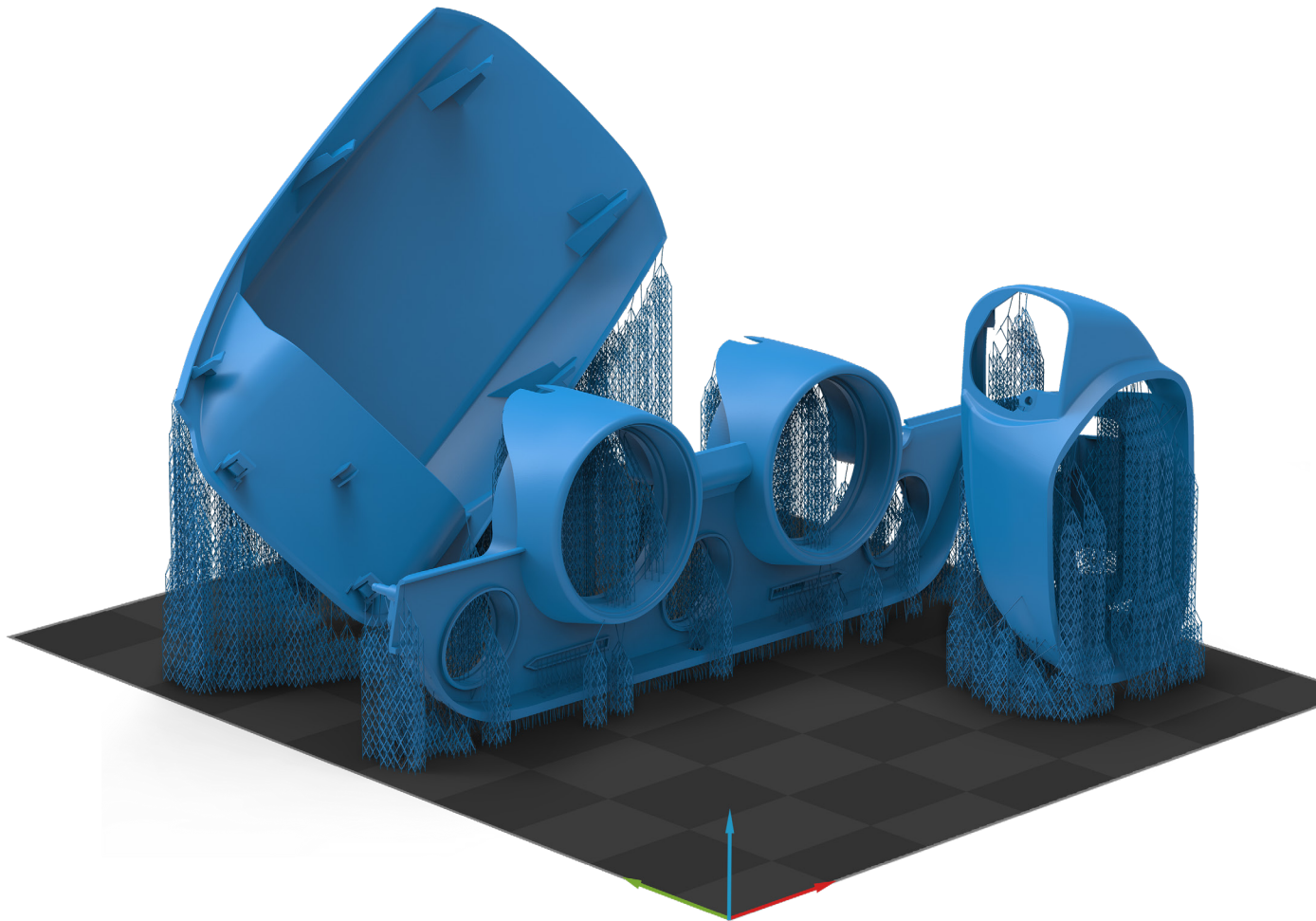


TABLE OF CONTENTS

1	SECTION ONE - CONNECTING TO THE PRINTER.....	1
	Install 3D Sprint.....	1
	Add the Printer.....	1
	Network Connection.....	1
	Virtual Printers.....	2
	Printer Setup.....	2
	Materials.....	2
	Print Mode.....	2
	Build Style.....	2
2	SECTION TWO - ADDING PARTS.....	3
	Open or Import Part.....	3
	Optimizing your Build.....	3
	Quality Check.....	3
	Auto place.....	3
	Smart Supports.....	3
	Build Style.....	3
	Accuracy Wizard.....	3
	Estimate.....	3
3	SECTION THREE - SENDING IT TO THE PRINTER.....	4
	Add to Queue.....	4
	Add Job Name.....	4
	Print to File.....	4
	Add Job from File.....	4

This guide takes you through the 3D Sprint workflow for setting up your print with the new FabPro 1000.

Note: To get help at any time in the 3D sprint application, press F1 or click the help icon. The help contents will open in your default browser.

1 SECTION ONE - CONNECTING TO THE PRINTER

Install 3D Sprint

To download 3D Sprint and obtain a license, please visit the [Software Downloads](#) page for your printer.



Before installing 3D Sprint, you may have to update some settings on your computer and graphics card. Please read the 3D Sprint Installation Guide for procedures on this and for full installation instructions.

After installing 3D Sprint, launch the application.

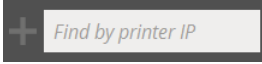

Add the Printer

3D Sprint can connect with physical printers via network. Virtual printers are also available to set up and verify a print without having the actual printer connected.

Network Connection

1. To detect your printer, click the **Printer**  button on the **Print** tab to open the **Printer Setup Dialog**.
2. Click **Find Printers** 
3. If the PC with 3D Sprint is on the same network as the printer, then ideally you should see the printer under Network/USB printer section.

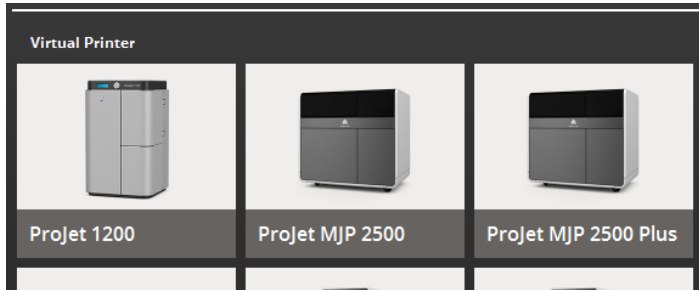


4. If the printer is not detected, you may have to find the printer by its IP Address.

5. Once you find the printer, complete the printer setup by selecting it and then choosing the appropriate **Materials**, **Print Mode** and **Build Style**.
6. Click the **Set** button. 

Virtual Printers

To setup a virtual printer:

1. Select one of the virtual printers that is shown in the bottom of the printer dialog listed under Virtual Printer.



2. Follow the same printer setup steps as connecting to a physical printer.
3. Click the **Set** button.



Printer Setup

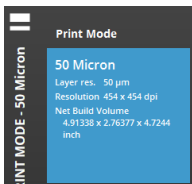
Several options need to be set in the **Printer Setup** before you begin printing.



Materials

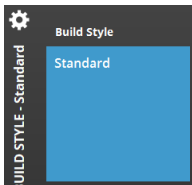
1. Select a Material from the options available. There are pre-set Print Modes and Build Styles for each material.
2. Click **Next**.

Note: Each material also has a link to a material safety guide for more information.



Print Mode

1. Select an available Print Mode available for the current Material selection.
2. Click **Next**.



Build Style

1. Select an available Build Style for the current Material selection.
2. Click **Set**.

Note: See the current printer, material and volume in the information box at the bottom right of the platform screen.

Open or Import Part

From the **Print** tab, click the **File** option and select **Import** to load parts meshes from supported file types onto the platform. Please consult the help for a list of supported file types.

Imported meshes automatically check for geometry defects when imported. If the Mesh Repair option is selected in preferences, 3D Sprint will attempt to repair these defects.

Alternatively, you can load a saved 3D Sprint Project file by selecting **Open**. The native file contains the entire project, print setup and file preparations including part data.

Optimizing your Build

The FabPro uses a similar workflow to existing SLA technology printers. Below are some of the available commands to help you create a successful print.

For more information on the usage of these commands, please consult the 3D Sprint Help by clicking the help icon in these commands or by pressing F1 key at any time in 3D Sprint application.

Quality Check



Auto place

The **Auto Place** command on the **Print** tab automatically places part files on the printing platform. This command allows you to change the distance between the placement of parts and automatically places all or selected parts on the platform.



Smart Supports

In order for most parts to be printed, they will require a supporting structure. The Smart Supports command generates a supporting structure for all or selected parts on the platform. Parameters for the Anchor Points and supporting structures can be edited to modify the supports.

When generating a supporting structure for multiple parts, you are given the option to combine the current parts into a single part.

Support structures can play a big part in the success of you build and we have put together a Must Watch video guide to help you successful generate supports for you print. You can find it here: <http://www.3dsystems.com/contents/3dsprint/GettingStarted/PixelSLA/PixelSLA-Supports.htm>



Build Style

Build Styles are parameters that control the slicing 3D Sprints software does to your parts. Styles consist of information on the type of DLP setup upon which you intend to build your parts and are initially assigned to an entire build platform based on the Printer configuration and can then be changed with the Build Style command.

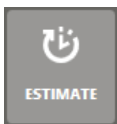
Once assigned, you can change the style preset, edit the build parameters in the style preset, or add a different style preset to a particular range of a part or edit the global parameters that effect all regions. Build Profiles are assigned to all parts in a print build.

The values for scaling and offset used by the Build Style can easily be found by running the Accuracy Wizard tool.

Accuracy Wizard

The first time you print with a new material or with a new printer setup, we recommend that you step through the Accuracy Wizard to determine the optimal scale factors and offsets along X and Y for this print configuration based on the measurements of reference parts that have been printed using the same print configuration.

More information on using the accuracy wizard can be found here: <http://infocenter.3dsystems.com/fabpro1000/user-guide/installing-3d-sprint-software/accuracy-wizard>



Estimate

Before printing, it is useful to know the time and materials requirements. The Estimate command from the Print tab in 3D Sprint will calculate the estimated build time as well as a material consumption estimation by volume for your current build.

3 SECTION THREE - SENDING IT TO THE PRINTER

Once the parts are ready, they can be saved to a build file or sent directly to the printer to be added to the printing queue.

Add to Queue

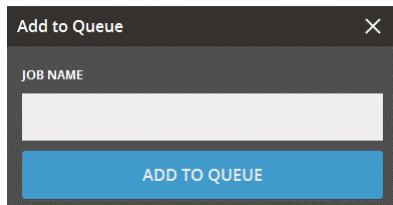
When connected to a printer via a network connection, the job can be sent directly to the printer queue by selecting the **Add to Queue** button from the navigational options at the bottom right of the **Print** tab.



Add Job Name

After clicking the **Add to Queue** button, you will be prompted to set a job name.

Enter a name and click **Add to Queue**.



Note: Job names can only contain English alphanumeric characters, underscores (_) and dashes (-). Spaces and other characters are not allowed.

Print to File

There is also the option to save a print project as a build file (.PXL) that can be later sent to the printer via the Add Job from File command in the Queue tab or transferred to the printer by a USB key.

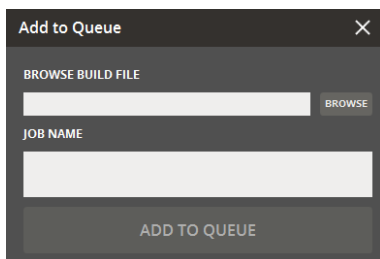
To do this:

1. Select **Print to File** button from the navigational options at the bottom right of the **Print** tab.
2. Select a location to save the file and enter a filename
3. Click **Save**.

Add Job from File

3D Sprint can add a job (PXL) file directly to the queue of a connected printer.

1. On the **Queue** tab Select **Add Job From File**
2. Browse to select the build file (.PXL)
3. Enter a Job Name.



Note: Job names can only contain English alphanumeric characters, underscores (_) and dashes (-). Spaces and other characters are not allowed.

4. Click **Add to Queue**.



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