# Printing

## Overview

- [\*\*OctoPrint - Web interface for controlling 3D printers\*\*](#octoprint)

- [\*\*CUPS - Common UNIX printing system\*\*](#cups)

??? info "How do I run \*\*DietPi-Software\*\* and install \*\*optimised software\*\* items?"

To install any of the \*\*DietPi optimised software items\*\* listed below run from the command line:

```sh

dietpi-software

```

Choose \*\*Browse Software\*\* and select one or more items. Finally select `Install`.

DietPi will do all the necessary steps to install and start these software items.

![DietPi-Software menu screenshot](../assets/images/dietpi-software.jpg){: width="643" height="365" loading="lazy"}

To see all the DietPi configurations options, review the [DietPi Tools](../../dietpi\_tools/) section.

[Return to the \*\*Optimised Software list\*\*](../../software/)

## OctoPrint

OctoPrint provides a web interface for controlling consumer 3D printers.

![OctoPrint web interface screenshot](../assets/images/dietpi-software-printserver-octoprint.png){: width="400" height="297" loading="lazy"}

=== "Access to the web interface"

The web interface is accessible via port \*\*5001\*\*:

- URL = `http://<your.IP>:5001`

=== "First run setup"

Once you are connected to the web interface, simply run through the setup wizard and configure the software and printers as needed. A login user and password needs to be created, but it does not need to match any existing UNIX login user, i.e. can be freely chosen.

=== "OctoPrint directories"

- Base directory: `/mnt/dietpi\_userdata/octoprint`

- Data and config: `/mnt/dietpi\_userdata/octoprint/.octoprint`

- Main config file: `/mnt/dietpi\_userdata/octoprint/.octoprint/config.yaml`

- Binaries and plugins: `/mnt/dietpi\_userdata/octoprint/.local`

=== "View logs"

- Service and core logs: `journalctl -u octoprint`

- Log files and plugin logs: `/mnt/dietpi\_userdata/octoprint/.octoprint/logs/`

- Configure logging via web interface > \*\*Settings\*\* > \*\*Logging\*\*

=== "Command line interface (CLI)"

OctoPrint offers a command line interface to execute OctoPrint commands. To use it, simply run `octoprint --help` from the command line.

The current shell needs to be `bash` and the user needs to be allowed to use `sudo`, as the above command is an alias to call a local OctoPrint binary as system user `octoprint`. The alias is defined in `/etc/bashrc.d/dietpi-octoprint.sh`, which is loaded automatically from bash shells. But you can as well load it from non-bash shells, if required.

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Website: <https://octoprint.org>

Official documentation: <https://docs.octoprint.org>

Forum: <https://community.octoprint.org>

Source code: <https://github.com/OctoPrint/OctoPrint>

License: [AGPLv3](https://github.com/OctoPrint/OctoPrint/blob/master/LICENSE.txt)

## CUPS

The Common UNIX Printing System (CUPS) provides a command-line interface (CLI) and a web interface for managing your local and network printers.

![CUPS web interface screenshot](../assets/images/dietpi-software-printserver-cups.png){: width="500" height="385" loading="lazy"}

=== "Access to the web interface"

The web interface is accessible via port \*\*631\*\*:

- URL = `http(s)://<your.IP>:631`

- Username = `root`

- Password = `<your root password>`

Checkout the official docs for quick start instructions: <https://www.cups.org/doc/overview.html>

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Website: <https://www.cups.org>

Official documentation: <https://www.cups.org/documentation.html>

GitHub: <https://github.com/apple/cups>

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