

Test guide: reading filament usage from an OctoPrint printer

Data collection for a future version of 3MF Katalog Manager · As of 25 Sep 2026 · Takes about 5–10 minutes · Linux, Windows and macOS

Hi, and thanks for helping out!

3MF Katalog Manager is meant to support OctoPrint printers in the future: the app would ask your OctoPrint printer how much filament it really used and, after you confirm, deduct it from the right spool. Many printers run OctoPrint on a Raspberry Pi, for example older Prusa, Ender or Anycubic models. OctoPrint knows the filament length from the print file and remembers which files were printed. Plugins like SpoolManager or PrintJobHistory often know even more.

Nothing is changed on your printer. You just open a few addresses and send me what OctoPrint answers.

1 Does my printer qualify?

If you control your printer in the browser with OctoPrint (or OctoPi), you can take part.

● OCTOPI / OCTOPRINT

Any printer driven through OctoPrint, e.g. Prusa MK3S+, Ender 3, Anycubic i3 Mega, Artillery.

● WITH PLUGINS

SpoolManager, FilamentManager or PrintJobHistory: please do take part, their data is especially valuable.

● OCTOEVERYWHERE & CO.

Please don't use remote-access services, only the address on your home network.

● KLIPPER WITH OCTOPRINT

If you run Moonraker, please use the Klipper guide instead (Testanleitung-Druckeranbindung).

2 Security first

Important: In OctoPrint, under *Settings* → *Application Keys*, create a **dedicated, new API key**, e.g. "3MF Test". Don't use your main key. The key is only used locally in the addresses below (as `?apikey=` or the header `X-Api-Key`) – **never paste it into the reply form, an email or the Discord post**. Delete the key in OctoPrint again afterwards.

3 Preparation

- ☐ The printer is switched on and you can open OctoPrint in your browser.
- ☐ Your computer is on the same network as the printer (same Wi-Fi or LAN).
- ☐ You've created your own API key under *Settings* → *Application Keys* (see section 2).

□ You know the printer's address, e.g. `192.168.1.40` or `octopi.local` .

Below, `<ADDRESS>` stands for that address and `<KEY>` for your API key. If nothing answers, try the address with `:5000` .

4 The requests in the browser

NO.	ADDRESS	WHEN	WHAT IT SHOWS
1	<code>http://<ADDRESS>/api/version?apikey=<KEY></code>	anytime	OctoPrint version
2	<code>http://<ADDRESS>/api/printer?apikey=<KEY></code>	anytime	printer state and temperatures
3	<code>http://<ADDRESS>/api/job?apikey=<KEY></code>	during a print	the running job with filament length, volume and progress
4	<code>http://<ADDRESS>/api/files/local?recursive=true&apikey=<KEY></code>	after a finished print	the "printed/cancelled" counters and last print per file
5	same address as 4	after a cancelled print	how the counters change on a cancel
6	<code>http://<ADDRESS>/api/files/local/<file>?apikey=<KEY></code>	anytime	filament analysis and any slicer data for the printed file
7	<code>http://<ADDRESS>/api/plugin/pluginmanager/plugins?apikey=<KEY></code>	anytime	which plugins are installed

Steps 4 (finished print) and 5 (cancelled print) matter most – please test both if you can. A 401 or 403 is a result too, just copy the message along.

5 Alternative: in the terminal

If you prefer the terminal: these commands save the answers straight to files. Replace the address and key with your own.

Linux **macOS** Terminal

```
A=192.168.1.40
K=YOUR-API-KEY
curl -sS -H "X-API-Key: $K" "http://$A/api/version" -o version.json
curl -sS -H "X-API-Key: $K" "http://$A/api/printer" -o printer.json
curl -sS -H "X-API-Key: $K" "http://$A/api/job" -o job.json
curl -sS -H "X-API-Key: $K" "http://$A/api/files/local?recursive=true" -o files.json
```

Windows PowerShell

```
$A = "192.168.1.40"
$K = "YOUR-API-KEY"
curl.exe -sS -H "X-API-Key: $K" "http://$A/api/version" -o version.json
curl.exe -sS -H "X-API-Key: $K" "http://$A/api/printer" -o printer.json
```

```
curl.exe -sS -H "X-API-Key: $K" "http://$A/api/job" -o job.json
curl.exe -sS -H "X-API-Key: $K" "http://$A/api/files/local?recursive=true" -o files.json
```

Important: type `curl.exe` with “.exe”, otherwise PowerShell runs a different program. The files land in the current folder and don't contain your key, only the printer's answer.

6 What I need back

Please attach these answers as text or files (items 5 and 7 are optional but welcome):

ANSWER	WHEN	NEEDED?
/api/version	anytime	yes
/api/printer	anytime	yes
/api/job	during a print	yes
/api/files/local?recursive=true	after a finished print	yes
/api/files/local?recursive=true	after a cancelled print	optional
/api/files/local/<file>	anytime	yes
/api/plugin/pluginmanager/plugins	anytime	optional

- ☐ printer model and OctoPrint version (e.g. “Prusa MK3S+ with OctoPi, OctoPrint 1.10.3”)
- ☐ which address worked (with or without a port)
- ☐ if SpoolManager or PrintJobHistory is installed: their data is welcome too (e.g. an export of the print history)

7 How and where to send it

Easiest via the form on the test page: <https://3mfkatalog.de/en/printer-test.html#octoprint> . It also auto-redacts key patterns and file names before sending.

Or **on the 3MF Discord**, channel **#feature-wünsche-requests**, post **“OctoPrint – test results”**. Not on the server yet? Join at <https://discord.gg/abfVNfFqu3> .

Your data: Answers 4 and 6 contain the file names of your prints. If you don't want to share them, replace them with “File 1”, “File 2” etc. before sending. The API key doesn't belong in any field – it's never sent and never stored.

8 If something doesn't work

WHAT HAPPENS	WHAT YOU CAN DO
401 Unauthorized	Key missing or wrong. Check the address and send the message anyway.
403 Forbidden	Similar to 401, sometimes a permissions issue with the key. Please report it.
404 Not Found (plugin address)	The plugin isn't installed – that's a normal result.
No connection	Check the IP, same network, try the address with <code>:5000</code> .
Empty list in request 4	No stored prints yet. Start a short print and query again.

Sources: OctoPrint API documentation (docs.octoprint.org, [docs/api/files.rst](https://docs.octoprint.org/api/files.rst) and [job.rst](https://docs.octoprint.org/api/job.rst)). Endpoints and ports may differ depending on version and setup.

Thanks a lot for helping!
Andreas