

Dockerizing python app

Python scripts/apps can be dockerised rather than using a venv and/or installing in the host system.

For example, ffpb is a wrapper for ffmpeg to show progress. Using pipx comes with a lot of dependencies, a standalone package is not available, so dockerizing it is the simplest option and bundling it with the latest statically linked ffmpeg binaries.

Startup code - which is the content of the ffpb script in /usr/bin when installed:

[main.py](#)

```
#!/bin/python
import sys
from ffpb import main
if __name__ == '__main__':
    if sys.argv[0].endswith('.exe'):
        sys.argv[0] = sys.argv[0][:-4]
    sys.exit(main())
```

This Dockerfile uses the slim Python 3.9 docker image, adds the main.py

[Dockerfile](#)

```
FROM python:3.9-slim
ADD main.py .
COPY ffmpeg-n8.0-latest-linux64-lgpl-8.0/bin/* /usr/bin
#RUN pip install ffpb && wget
https://github.com/BtbN/FFmpeg-Builds/releases/download/latest/ffmpeg-n
8.0-latest-linux64-lgpl-8.0.tar.xz && tar -xvf ffmpeg-n8.0-latest-
linux64-lgpl-8.0.tar.xz && mv ffmpeg-n8.0-latest-linux64-lgpl-8.0/bin/*
/usr/bin/
RUN pip install ffpb
ENTRYPOINT ["python", "main.py"]
```

```
docker build -t python-ffpb .
```

It can just be called using this command which could be wrapped into a shell wrapper or alias for convenience. It supports command line options as well:

```
docker run python-ffpb
```

For debugging purposes, the default entrypoint can be overridden. Ensure to add the options before the image name as otherwise the arguments will be passed to the entrypoint script inside the docker:

```
docker run -it --entrypoint /bin/bash python-ffpb
```

The size of this image is 560MB, 413MB of which are the statically linked ffmpeg binaries, so the base image size is about 147MB. Using other base images (for example alpine based ones may result in smaller image sizes).

From:

<http://wuff.dyndns.org/> - **Wulf's Various Things**

Permanent link:

<http://wuff.dyndns.org/doku.php?id=linux:dockerizing-python-app>

Last update: **2025/09/04 16:15**

