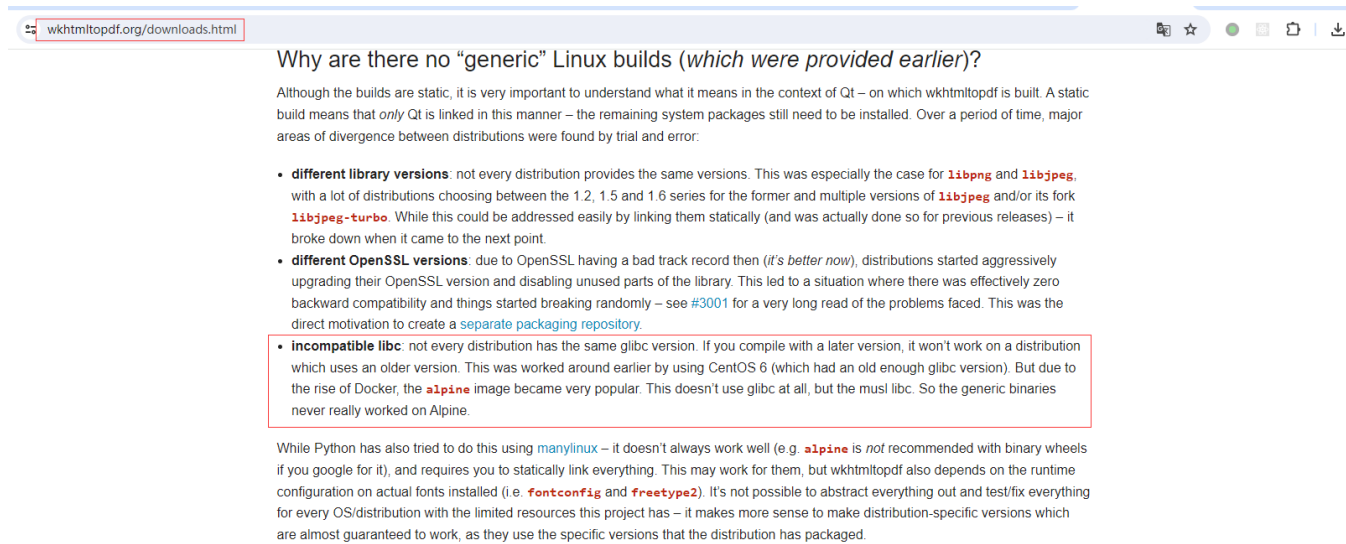


# Docker镜像安装版导出PDF中文乱码问题

当前安装环境为官方docker镜像，使用的基础系统镜像为alpine-3.19。

## 一、安装wkhtmltopdf



Why are there no “generic” Linux builds (*which were provided earlier*)?

Although the builds are static, it is very important to understand what it means in the context of Qt – on which wkhtmltopdf is built. A static build means that *only* Qt is linked in this manner – the remaining system packages still need to be installed. Over a period of time, major areas of divergence between distributions were found by trial and error:

- **different library versions:** not every distribution provides the same versions. This was especially the case for **libpng** and **libjpeg**, with a lot of distributions choosing between the 1.2, 1.5 and 1.6 series for the former and multiple versions of **libjpeg** and/or its fork **libjpeg-turbo**. While this could be addressed easily by linking them statically (and was actually done so for previous releases) – it broke down when it came to the next point.
- **different OpenSSL versions:** due to OpenSSL having a bad track record then (*it's better now*), distributions started aggressively upgrading their OpenSSL version and disabling unused parts of the library. This led to a situation where there was effectively zero backward compatibility and things started breaking randomly – see [#3001](#) for a very long read of the problems faced. This was the direct motivation to create a [separate packaging repository](#).
- **incompatible libc:** not every distribution has the same glibc version. If you compile with a later version, it won't work on a distribution which uses an older version. This was worked around earlier by using CentOS 6 (which had an old enough glibc version). But due to the rise of Docker, the **alpine** image became very popular. This doesn't use glibc at all, but the musl libc. So the generic binaries never really worked on Alpine.

While Python has also tried to do this using [manylinux](#) – it doesn't always work well (e.g. **alpine** is *not* recommended with binary wheels if you google for it), and requires you to statically link everything. This may work for them, but wkhtmltopdf also depends on the runtime configuration on actual fonts installed (i.e. **fontconfig** and **freetype2**). It's not possible to abstract everything out and test/fix everything for every OS/distribution with the limited resources this project has – it makes more sense to make distribution-specific versions which are almost guaranteed to work, as they use the specific versions that the distribution has packaged.

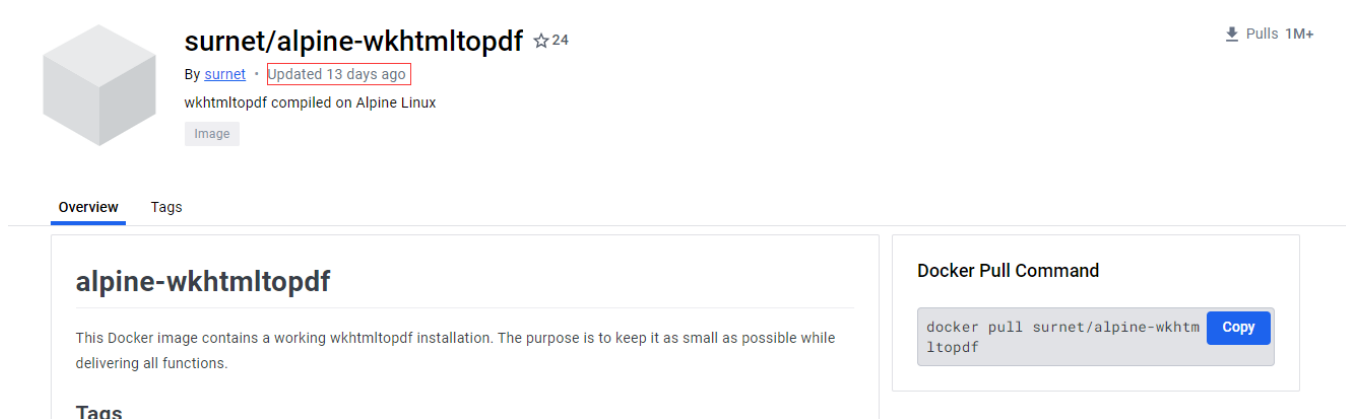
可能是因为alpine使用musl libc而不是glibc，会有很多兼容性问题，所以官方仓库中从3.15版开始已经不再包含wkhtmltopdf包，不过后来还是在docker仓库中找到还算是在维护中的镜像“[alpine-wkhtmltopdf](#)”，通过从该镜像中直接复制二进制发行包即可。

```
FROM docker.freedom-yun.com/wkhtmltopdf:alpine-3.19 as wkhtmltopdf
FROM linuxserver/bookstack:amd64-24.02.3

# Copy wkhtmltopdf files from docker-wkhtmltopdf image
COPY --from=wkhtmltopdf /bin/wkhtmltopdf /usr/bin/wkhtmltopdf
COPY --from=wkhtmltopdf /bin/wkhtmltoimage /usr/bin/wkhtmltoimage
COPY --from=wkhtmltopdf /bin/libwkhtmltox* /usr/bin/

# 安装依赖库
RUN sed -i "s/dl-cdn.alpinelinux.org/mirrors.aliyun.com/g" /etc/apk/repositories && \
  apk add --no-cache \
  libstdc++ \
  libx11 \
  libxrender \
  libxext \
  libssl3
```

[【DockerHub】 - alpine-wkhtmltopdf](#)



**surnet/alpine-wkhtmltopdf** ☆24 ↓ Pulls 1M+

By [surnet](#) · Updated 13 days ago

wkhtmltopdf compiled on Alpine Linux

Image

Overview Tags

### alpine-wkhtmltopdf

This Docker image contains a working wkhtmltopdf installation. The purpose is to keep it as small as possible while delivering all functions.

Tags

#### Docker Pull Command

```
docker pull surnet/alpine-wkhtmltopdf
```

Copy

## 二、安装中文字体

将需要使用到的字体文件复制到“`/usr/share/fonts/`”目录下，然后使用以下命令检测是否有效。

```
fc-list :lang=zh
```

中间我尝试了其他alpine安装中文字体的文章但都没有效果，最后在另外一台linux服务器上找到以前不知道什么时候在windows下复制的字体文件，复制到“`/usr/share/fonts/chinese`”目录后检测成功，当前使用到中文字体已经上传到了个人maven仓库([chinese-fonts-10.0.0.tar.gz](#))中方便后续下载。

```
root@46a92849e8da:~# fc-list :lang=zh
/usr/share/fonts/chinese/TrueType/msyh.l.ttc: Microsoft YaHei, 微软雅黑, Microsoft YaHei Light, 微软雅黑 Light:style=Light, Regular
/usr/share/fonts/chinese/TrueType/simsun.ttc: SimSun, 宋体:style=Regular, 常规
/usr/share/fonts/chinese/TrueType/msyh.ttc: Microsoft YaHei, 微软雅黑:style=Regular, Normal, obyčejné, Standard, Kavoviká, Normaali, Normál, Normale, Standaard, Normalny, Обычный, Normálne, Navadno, Arrunta
/usr/share/fonts/chinese/TrueType/msyh.l.ttc: Microsoft YaHei UI, Microsoft YaHei UI Light:style=Light, Regular
/usr/share/fonts/chinese/TrueType/simsun.ttc: NSimSun, 新宋体:style=Regular, 常规
/usr/share/fonts/chinese/TrueType/msyh.ttc: Microsoft YaHei UI:style=Regular, Normal, obyčejné, Standard, Kavoviká, Normaali, Normál, Normale, Standaard, Normalny, Обычный, Normálne, Navadno, Arrunta
/usr/share/fonts/chinese/TrueType/msyhd.ttc: Microsoft YaHei, 微软雅黑:style=Bold, Negreta, tučné, fed, Fett, Evrova, Negrita, Lihavoitu, Gras, Félkövér, Grassetto, Vet, Halvfet, Pogrubiomy, Negrito, Полужирный, Fet, Kalin, Krepko, Lodia
/usr/share/fonts/chinese/TrueType/msyhd.ttc: Microsoft YaHei UI:style=Bold, Negreta, tučné, fed, Fett, Evrova, Negrita, Lihavoitu, Gras, Félkövér, Grassetto, Vet, Halvfet, Pogrubiomy, Negrito, Полужирный, Fet, Kalin, Krepko, Lodia
root@46a92849e8da:~#
```

## 三、制作Docker镜像

将第一步和第二步的内容合并最终生成如下Dockerfile

```
FROM surnet/alpine-wkhtmltopdf:3.19.0-0.12.6-full as wkhtmltopdf
FROM linuxserver/bookstack:amd64-24.02.3

# Copy wkhtmltopdf files from docker-wkhtmltopdf image
COPY --from=wkhtmltopdf /bin/wkhtmltopdf /usr/bin/wkhtmltopdf
COPY --from=wkhtmltopdf /bin/wkhtmltoimage /usr/bin/wkhtmltoimage
COPY --from=wkhtmltopdf /bin/libwkhtmltox* /usr/bin/

# 下载中文字体
ADD https://registry.freedom-yun.com/repository/public-archives/com/microsoft/fonts/chinese-fonts/10.0.0/chinese-fonts-10.0.0.tar.gz
  /usr/share/fonts/

# 安装wkhtmltopdf运行时依赖库
RUN sed -i "s/dl-cdn.alpinelinux.org/mirrors.aliyun.com/g" /etc/apk/repositories && \
  apk add --no-cache \
  libstdc++ \
  libx11 \
  libxrender \
  libxext \
  libssl3 && \
  tar -zxvf /usr/share/fonts/chinese-fonts-10.0.0.tar.gz -C /usr/share/fonts/ && \
  rm -f /usr/share/fonts/chinese-fonts-10.0.0.tar.gz
```

## 四、启用wkhtmltopdf

修改“`/${project_dir}/config/www/.env`”文件，添加如下配置

```
WKHTMLTOPDF=/usr/bin/wkhtmltopdf
ALLOW_UNTRUSTED_SERVER_FETCHING=true
```

## 参考资料

- [【CSDN】 - alpinelinux镜像安装中文字体](#)
- [【CSDN】 - Linux下查看已安装字体的方法](#)
- [【wkhtmltopdf】 - 官方网站](#)
- [【DockerHub】 - surnet/alpine-wkhtmltopdf](#)
- [【book.fanfou.dev】 - BookStack 导出中文 PDF](#)
- [【Github】 - wkhtmltopdf](#)
- [【Github】 - docker-wkhtmltopdf](#)
- [【Alpine】 - Alpine Linux packages](#)
- [【Maven仓库】 - chinese-fonts-10.0.0.tar.gz](#)

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