### HTTPD

#### 构建镜像

缓存2个文件

|  |
| --- |
| https://www.apache.org/dist/httpd/httpd-2.4.37.tar.bz2  https://www.apache.org/dist/httpd/httpd-2.4.37.tar.bz2.asc |

创建Dockerfile内容如下

|  |
| --- |
| #httpd  FROM debian:jessie  #设置时间  RUN rm -rf /etc/localtime && ln -s /usr/share/zoneinfo/Asia/Shanghai /etc/localtime  #添加字符集为UTF-8  ENV LANG=C.UTF-8  #设置aliyun apt源  RUN set -ex \  && { \  echo 'deb http://mirrors.aliyun.com/debian/ jessie main non-free contrib'; \  echo 'deb http://mirrors.aliyun.com/debian/ jessie-proposed-updates main non-free contrib'; \  echo 'deb-src http://mirrors.aliyun.com/debian/ jessie main non-free contrib'; \  echo 'deb-src http://mirrors.aliyun.com/debian/ jessie-proposed-updates main non-free contrib'; \  } > /etc/apt/sources.list  #apache2安装目录  ENV HTTPD\_PREFIX /usr/local/apache2  WORKDIR $HTTPD\_PREFIX  ENV PATH $PATH:$HTTPD\_PREFIX/bin  #创建目录,设置权限,debian:jessie自带 www-data用户  RUN set -ex \  && mkdir -p "$HTTPD\_PREFIX" \  && chown www-data:www-data "$HTTPD\_PREFIX"  #安装apache依赖  RUN apt-get update \  && apt-get install -y --no-install-recommends \  libapr1 libaprutil1 libaprutil1-ldap libapr1-dev libaprutil1-dev libpcre++0 libssl1.0.0 \  && rm -r /var/lib/apt/lists/\*  ENV HTTPD\_VERSION 2.4.37  ENV HTTPD\_BZ2\_URL http://download.uairobot.com/httpd/$HTTPD\_VERSION/httpd-$HTTPD\_VERSION.tar.bz2  #安装编译依赖环境,下载安装包,校验,编译安装,移除依赖必须一步完成  RUN buildDeps='ca-certificates curl bzip2 gcc libpcre++-dev libssl-dev make' \  set -ex \  && apt-get update \  && apt-get install -y --no-install-recommends $buildDeps \  && rm -r /var/lib/apt/lists/\* \  && curl -fSL "$HTTPD\_BZ2\_URL" -o httpd.tar.bz2 \  && curl -fSL "$HTTPD\_BZ2\_URL.asc" -o httpd.tar.bz2.asc \  && export GNUPGHOME="$(mktemp -d)" \  && gpg --keyserver ha.pool.sks-keyservers.net --recv-keys A93D62ECC3C8EA12DB220EC934EA76E6791485A8 \  && gpg --batch --verify httpd.tar.bz2.asc httpd.tar.bz2 \  && rm -r "$GNUPGHOME" httpd.tar.bz2.asc \  \  && mkdir -p src \  && tar -xvf httpd.tar.bz2 -C src --strip-components=1 \  && rm httpd.tar.bz2 \  && cd src \  && ./configure --prefix="$HTTPD\_PREFIX" --enable-mods-shared=reallyall \  && make -j"$(nproc)" \  && make install \  && cd .. \  && rm -r src \  \  && sed -ri \  -e 's!^(\s\*CustomLog)\s+\S+!\1 /proc/self/fd/1!g' \  -e 's!^(\s\*ErrorLog)\s+\S+!\1 /proc/self/fd/2!g' \  "$HTTPD\_PREFIX/conf/httpd.conf" \  && echo >> "IndexOptions Charset=UTF-8" >> "$HTTPD\_PREFIX/conf/httpd.conf"  \  && apt-get purge -y --auto-remove $buildDeps  COPY httpd-foreground /usr/local/bin/  EXPOSE 80  CMD ["httpd-foreground"] |

构建命令

|  |
| --- |
| docker build -t litongjava/httpd:2.4.37 .  docker push litongjava/httpd:2.4.37  docker tag litongjava/httpd:2.4.37 registry.uairobot.com/litongjava/httpd:2.4.37 |

#### 启动镜像

|  |
| --- |
| docker run -dit --restart=always --name=httpd --privileged=true -p 1024:80 \  -v /dv/httpd/htdocs:/usr/local/apache2/htdocs \  -v /dv/httpd/log:/usr/local/apache2/logs \  litongjava/httpd:2.4.37 |

和kod整合最为下载镜像启动

|  |
| --- |
| docker run -dit --restart=always --name=httpd --privileged=true -p 1024:80 \  -v /dv/httpd/log:/usr/local/apache2/logs \  -v /dv/kod/Group/public/home/htdocs:/usr/local/apache2/htdocs \  litongjava/httpd:2.4.37 |

### 构建过程中命令讲解

#### gpg验证

|  |
| --- |
| gpg --keyserver ha.pool.sks-keyservers.net --recv-keys A93D62ECC3C8EA12DB220EC934EA76E6791485A8 |

输入如下

|  |
| --- |
| gpg: directory `/root/.gnupg' created  gpg: new configuration file `/root/.gnupg/gpg.conf' created  gpg: WARNING: options in `/root/.gnupg/gpg.conf' are not yet active during this run  gpg: keyring `/root/.gnupg/secring.gpg' created  gpg: keyring `/root/.gnupg/pubring.gpg' created  gpg: requesting key 791485A8 from hkp server ha.pool.sks-keyservers.net  gpg: /root/.gnupg/trustdb.gpg: trustdb created  gpg: key 791485A8: public key "Jim Jagielski (Release Signing Key) <jim@apache.org>" imported  gpg: no ultimately trusted keys found  gpg: Total number processed: 1  gpg: imported: 1 (RSA: 1) |

进行文件验证

|  |
| --- |
| gpg --batch --verify httpd.tar.bz2.asc httpd.tar.bz2 |

文件验证失败,输出输入

|  |
| --- |
| gpg: Signature made Thu Oct 18 22:34:25 2018 CST using RSA key ID 1AD84DFF  gpg: Can't check signature: public key not found |

重新添加--recv-keys,重新验证

|  |
| --- |
| gpg --keyserver ha.pool.sks-keyservers.net --recv-keys 1AD84DFF  gpg --batch --verify httpd.tar.bz2.asc httpd.tar.bz2 |

#### sed修改配置文件

|  |
| --- |
| sed -ri \  -e 's!^(\s\*CustomLog)\s+\S+!\1 /proc/self/fd/1!g' \  -e 's!^(\s\*ErrorLog)\s+\S+!\1 /proc/self/fd/2!g' \  "$HTTPD\_PREFIX/conf/httpd.conf" \ |

执行后变动如

|  |  |
| --- | --- |
| old | new |
| ErrorLog "/logs/error\_log" | ErrorLog /proc/self/fd/2 |
| CustomLog "/logs/access\_log" common | CustomLog /proc/self/fd/1 common |

#### httpd前台启动

Dockerfile文件中 COPY httpd-foreground /usr/local/bin/ 是将当前目录下的httpd-foreground拷贝到镜像里，作为httpd服务的启动脚本，所以我们要在本地创建一个脚本文件httpd-foreground

|  |
| --- |
| #!/bin/bash  set -e  # Apache gets grumpy about PID files pre-existing  rm -f /usr/local/apache2/logs/httpd.pid  exec httpd -DFOREGROUND |

赋予httpd-foreground文件可执行权限

|  |
| --- |
| chmod +x httpd-foreground |

通过Dockerfile创建一个镜像，替换成你自己的名字

|  |
| --- |
| docker build -t httpd . |

运行,其中/usr/local/apache2/conf/目录中的有内容是对我们有用的,需要将这个目录的配置文件复制出来

#### 添加中文支持

### 使用其镜像

|  |
| --- |
| docker run -p 80:80 -v $PWD/www/:/usr/local/apache2/htdocs/ -v $PWD/conf/httpd.conf:/usr/local/apache2/conf/httpd.conf -v $PWD/logs/:/usr/local/apache2/logs/ -d httpd |

命令说明：

|  |  |
| --- | --- |
| -p 80:80 | 将容器的80端口映射到主机的80端口 |
| -v $PWD/www/:/usr/local/apache2/htdocs/ | 将主机中当前目录下的www目录挂载到容器的/usr/local/apache2/htdocs/ |
| -v $PWD/conf/httpd.conf:/usr/local/apache2/conf/httpd.conf | 将主机中当前目录下的conf/httpd.conf文件挂载到容器的/usr/local/apache2/conf/httpd.conf |
| -v $PWD/logs/:/usr/local/apache2/logs/ | 将主机中当前目录下的logs目录挂载到容器的/usr/local/apache2/logs/ |

httpd命令讲解

|  |  |
| --- | --- |
| apt -no-install-recommends | 不安装推荐的包 |

|  |
| --- |
| gpg --keyserver ha.pool.sks-keyservers.net --recv-keys A93D62ECC3C8EA12DB220EC934EA76E6791485A8 |

--keyserver 指定keyserver服务器

#### 启动其他镜像

|  |
| --- |
| docker run -dit --restart=always --name=hg\_doc --privileged=true -p 1042:80 \  -v /dv/doc/htdocs:/usr/local/apache2/htdocs \  -v /dv/doc/log:/usr/local/apache2/logs \  httpd:2.4.34 |

可以对外映射的目录

|  |  |
| --- | --- |
| /usr/local/apache2/conf/ | 配置文件目录 |
| /usr/local/apache2/logs | 日志目录 |
| /usr/local/apache2/htdocs | 网站目录 |

httpd:2.4.34有中文乱码问题