【3-14】Dockerfile构建tomcat及jdk

1、之前手动部署的tomcat及jdk用Dockerfile怎么搞？

- 1）要把两个包拷贝到这个Dockerfile所在的目录下

```
[root@instance-g8qc0vgv docker_test]# pwd
/root/docker_test
[root@instance-g8qc0vgv docker_test]# ls -l
total 190616
-rw-r--r-- 1 root root   9532698 Aug 11 12:40 apache-tomcat-8.5.29.tar.gz
-rw-r--r-- 1 root root       913 Aug 11 13:02 Dockerfile
-rw-r--r-- 1 root root       133 Aug 11 12:41 index.html
-rw-r--r-- 1 root root 185646832 Aug 11 12:40 jdk-8u181-linux-x64.tar.gz
[root@instance-g8qc0vgv docker_test]#
```

- 2）Dockerfile

```
FROM centos:centos7.9.2009

MAINTAINER 'Lanhai <574628881@qq.com>'

#       把宿主机当前上下文的index.html文件拷贝到容器的/usr/local/目录下
COPY index.html /usr/local/

#       把jdk和tomcat添加到容器中
ADD jdk-8u181-linux-x64.tar.gz /usr/local/
ADD apache-tomcat-8.5.29.tar.gz /usr/local/

RUN mv /usr/local/apache-tomcat-8.5.29 /usr/local/tomcat

#       安装vim编辑器
RUN yum install -y vim

#       设置工作目录
ENV MYPATH /usr/local/tomcat/logs/
WORKDIR $MYPATH

#       配置jdk和tomcat环境变量
ENV JAVA_HOME /usr/local/jdk1.8.0_181
ENV CLASSPATH $JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar
ENV CATALINA_HOME /usr/local/tomcat/
ENV CATALINA_BASE /usr/local/tomcat/
ENV PATH $PATH:$JAVA_HOME/bin:$CATALINA_HOME/lib:$CATALINA_HOME/bin

#       容器运行时监听的端口
EXPOSE 8080

#       启动时运行tomcat
CMD /usr/local/tomcat/bin/startup.sh && tail -f /usr/local/tomcat/logs/catalina.out
```

- ）构建镜像

```
[root@instance-g8qc0vgv docker_test]# docker build . -t mytomcat:v0.0.1
Sending build context to Docker daemon  578.1MB
Step 1/16 : FROM centos:centos7.9.2009
---> eeb6ee3f44bd
Step 2/16 : MAINTAINER 'Lanhai <574628881@qq.com>'
---> Running in 801c1a7eb784
Removing intermediate container 801c1a7eb784
---> 32adeff052ef
Step 3/16 : COPY index.html /usr/local/
---> 69aa421c6b17
Step 4/16 : ADD jdk-8u181-linux-x64.tar.gz /usr/local/
---> 91e1cf7937b4
Step 5/16 : ADD apache-tomcat-8.5.29.tar.gz /usr/local/
---> 39da81f93c31
Step 6/16 : RUN mv /usr/local/apache-tomcat-8.5.29 /usr/local/tomcat
---> Running in eab40d9f4bda
```

```
Removing intermediate container eab40d9f4bda
 ---> f7198cbe6a94
Step 7/16 : RUN yum install -y vim
 ---> Running in f2ba58fd152d
Loaded plugins: fastestmirror, ovl
Determining fastest mirrors
 * base: mirrors.bupt.edu.cn
 * extras: mirrors.bfsu.edu.cn
 * updates: mirrors.bfsu.edu.cn
Resolving Dependencies
--> Running transaction check
---> Package vim-enhanced.x86_64 2:7.4.629-8.el7_9 will be installed
--> Processing Dependency: vim-common = 2:7.4.629-8.el7_9 for package: 2:vim-enhanced-7.4.629-8.el7_9.x86_64
--> Processing Dependency: which for package: 2:vim-enhanced-7.4.629-8.el7_9.x86_64
--> Processing Dependency: perl(:MODULE_COMPAT_5.16.3) for package: 2:vim-enhanced-7.4.629-8.el7_9.x86_64
--> Processing Dependency: libperl.so()(64bit) for package: 2:vim-enhanced-7.4.629-8.el7_9.x86_64
--> Processing Dependency: libgpm.so.2()(64bit) for package: 2:vim-enhanced-7.4.629-8.el7_9.x86_64
--> Running transaction check
---> Package gpm-libs.x86_64 0:1.20.7-6.el7 will be installed
---> Package perl.x86_64 4:5.16.3-299.el7_9 will be installed
--> Processing Dependency: perl(Socket) >= 1.3 for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Scalar::Util) >= 1.10 for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl-macros for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(threads::shared) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(threads) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(constant) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Time::Local) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Time::HiRes) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Storable) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Socket) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Scalar::Util) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Pod::Simple::XHTML) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Pod::Simple::Search) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Getopt::Long) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Filter::Util::Call) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(File::Temp) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(File::Spec::Unix) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(File::Spec::Functions) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(File::Spec) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(File::Path) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Exporter) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Cwd) for package: 4:perl-5.16.3-299.el7_9.x86_64
--> Processing Dependency: perl(Carp) for package: 4:perl-5.16.3-299.el7_9.x86_64
---> Package perl-libs.x86_64 4:5.16.3-299.el7_9 will be installed
---> Package vim-common.x86_64 2:7.4.629-8.el7_9 will be installed
--> Processing Dependency: vim-filesystem for package: 2:vim-common-7.4.629-8.el7_9.x86_64
---> Package which.x86_64 0:2.20-7.el7 will be installed
--> Running transaction check
---> Package perl-Carp.noarch 0:1.26-244.el7 will be installed
---> Package perl-Exporter.noarch 0:5.68-3.el7 will be installed
---> Package perl-File-Path.noarch 0:2.09-2.el7 will be installed
---> Package perl-File-Temp.noarch 0:0.23.01-3.el7 will be installed
---> Package perl-Filter.x86_64 0:1.49-3.el7 will be installed
---> Package perl-Getopt-Long.noarch 0:2.40-3.el7 will be installed
--> Processing Dependency: perl(Pod::Usage) >= 1.14 for package: perl-Getopt-Long-2.40-3.el7.noarch
--> Processing Dependency: perl(Text::ParseWords) for package: perl-Getopt-Long-2.40-3.el7.noarch
---> Package perl-PathTools.x86_64 0:3.40-5.el7 will be installed
---> Package perl-Pod-Simple.noarch 1:3.28-4.el7 will be installed
--> Processing Dependency: perl(Pod::Escapes) >= 1.04 for package: 1:perl-Pod-Simple-3.28-4.el7.noarch
--> Processing Dependency: perl(Encode) for package: 1:perl-Pod-Simple-3.28-4.el7.noarch
---> Package perl-Scalar-List-Utils.x86_64 0:1.27-248.el7 will be installed
---> Package perl-Socket.x86_64 0:2.010-5.el7 will be installed
---> Package perl-Storable.x86_64 0:2.45-3.el7 will be installed
---> Package perl-Time-HiRes.x86_64 4:1.9725-3.el7 will be installed
---> Package perl-Time-Local.noarch 0:1.2300-2.el7 will be installed
---> Package perl-constant.noarch 0:1.27-2.el7 will be installed
---> Package perl-macros.x86_64 4:5.16.3-299.el7_9 will be installed
---> Package perl-threads.x86_64 0:1.87-4.el7 will be installed
---> Package perl-threads-shared.x86_64 0:1.43-6.el7 will be installed
---> Package vim-filesystem.x86_64 2:7.4.629-8.el7_9 will be installed
--> Running transaction check
---> Package perl-Encode.x86_64 0:2.51-7.el7 will be installed
---> Package perl-Pod-Escapes.noarch 1:1.04-299.el7_9 will be installed
---> Package perl-Pod-Usage.noarch 0:1.63-3.el7 will be installed
--> Processing Dependency: perl(Pod::Text) >= 3.15 for package: perl-Pod-Usage-1.63-3.el7.noarch
--> Processing Dependency: perl-Pod-Perldoc for package: perl-Pod-Usage-1.63-3.el7.noarch
---> Package perl-Text-ParseWords.noarch 0:3.29-4.el7 will be installed
--> Running transaction check
---> Package perl-Pod-Perldoc.noarch 0:3.20-4.el7 will be installed
--> Processing Dependency: perl(parent) for package: perl-Pod-Perldoc-3.20-4.el7.noarch
--> Processing Dependency: perl(HTTP::Tiny) for package: perl-Pod-Perldoc-3.20-4.el7.noarch
--> Processing Dependency: groff-base for package: perl-Pod-Perldoc-3.20-4.el7.noarch
---> Package perl-podlators.noarch 0:2.5.1-3.el7 will be installed
--> Running transaction check
---> Package groff-base.x86_64 0:1.22.2-8.el7 will be installed
---> Package perl-HTTP-Tiny.noarch 0:0.033-3.el7 will be installed
---> Package perl-parent.noarch 1:0.225-244.el7 will be installed
--> Finished Dependency Resolution
```

```
Dependencies Resolved


================================================================================
 Package                 Arch         Version             Repository    Size
================================================================================
Installing:
vim-enhanced             x86_64       2:7.4.629-8.el7_9   updates      1.1 M
Installing for dependencies:
gpm-libs                 x86_64       1.20.7-6.el7        base          32 k
groff-base               x86_64       1.22.2-8.el7        base         942 k
perl                     x86_64       4:5.16.3-299.el7_9  updates      8.0 M
perl-Carp                noarch       1.26-244.el7        base          19 k
perl-Encode              x86_64       2.51-7.el7          base         1.5 M
perl-Exporter            noarch       5.68-3.el7          base          28 k
perl-File-Path           noarch       2.09-2.el7          base          26 k
perl-File-Temp           noarch       0.23.01-3.el7       base          56 k
perl-Filter              x86_64       1.49-3.el7          base          76 k
perl-Getopt-Long         noarch       2.40-3.el7          base          56 k
perl-HTTP-Tiny           noarch       0.033-3.el7         base          38 k
perl-PathTools           x86_64       3.40-5.el7          base          82 k
perl-Pod-Escapes         noarch       1:1.04-299.el7_9    updates       52 k
perl-Pod-Perldoc         noarch       3.20-4.el7          base          87 k
perl-Pod-Simple          noarch       1:3.28-4.el7        base         216 k
perl-Pod-Usage           noarch       1.63-3.el7          base          27 k
perl-Scalar-List-Utils   x86_64       1.27-248.el7        base          36 k
perl-Socket              x86_64       2.010-5.el7         base          49 k
perl-Storable            x86_64       2.45-3.el7          base          77 k
perl-Text-ParseWords     noarch       3.29-4.el7          base          14 k
perl-Time-HiRes          x86_64       4:1.9725-3.el7      base          45 k
perl-Time-Local          noarch       1.2300-2.el7        base          24 k
perl-constant            noarch       1.27-2.el7          base          19 k
perl-libs                x86_64       4:5.16.3-299.el7_9  updates      690 k
perl-macros              x86_64       4:5.16.3-299.el7_9  updates       44 k
perl-parent              noarch       1:0.225-244.el7     base          12 k
perl-podlators           noarch       2.5.1-3.el7         base         112 k
perl-threads             x86_64       1.87-4.el7          base          49 k
perl-threads-shared      x86_64       1.43-6.el7          base          39 k
vim-common               x86_64       2:7.4.629-8.el7_9   updates      5.9 M
vim-filesystem           x86_64       2:7.4.629-8.el7_9   updates       11 k
which                    x86_64       2.20-7.el7          base          41 k


Transaction Summary
================================================================================
Install  1 Package (+32 Dependent packages)


Total download size: 19 M
Installed size: 63 M
Downloading packages:
warning: /var/cache/yum/x86_64/7/base/packages/gpm-libs-1.20.7-6.el7.x86_64.rpm: Header V3 RSA/SHA256 Signature,
key ID f4a80eb5: NOKEY
Public key for gpm-libs-1.20.7-6.el7.x86_64.rpm is not installed
Public key for perl-Pod-Escapes-1.04-299.el7_9.noarch.rpm is not installed
--------------------------------------------------------------------------------
Total                                          1.8 MB/s |  19 MB  00:10
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A80EB5:
Userid     : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org>"
Fingerprint: 6341 ab27 53d7 8a78 a7c2 7bb1 24c6 a8a7 f4a8 0eb5
Package    : centos-release-7-9.2009.0.el7.centos.x86_64 (@CentOS)
From       : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : gpm-libs-1.20.7-6.el7.x86_64                            1/33
  Installing : 2:vim-filesystem-7.4.629-8.el7_9.x86_64                 2/33
  Installing : 2:vim-common-7.4.629-8.el7_9.x86_64                     3/33
  Installing : which-2.20-7.el7.x86_64                                 4/33
install-info: No such file or directory for /usr/share/info/which.info.gz
  Installing : groff-base-1.22.2-8.el7.x86_64                          5/33
  Installing : 1:perl-parent-0.225-244.el7.noarch                      6/33
  Installing : perl-HTTP-Tiny-0.033-3.el7.noarch                       7/33
  Installing : perl-podlators-2.5.1-3.el7.noarch                       8/33
  Installing : perl-Pod-Perldoc-3.20-4.el7.noarch                      9/33
  Installing : 1:perl-Pod-Escapes-1.04-299.el7_9.noarch               10/33
  Installing : perl-Encode-2.51-7.el7.x86_64                          11/33
  Installing : perl-Text-ParseWords-3.29-4.el7.noarch                 12/33
  Installing : perl-Pod-Usage-1.63-3.el7.noarch                       13/33
  Installing : 4:perl-macros-5.16.3-299.el7_9.x86_64                  14/33
  Installing : perl-Storable-2.45-3.el7.x86_64                        15/33
  Installing : perl-Exporter-5.68-3.el7.noarch                        16/33
  Installing : perl-constant-1.27-2.el7.noarch                        17/33
  Installing : perl-Socket-2.010-5.el7.x86_64                         18/33
  Installing : perl-Time-Local-1.2300-2.el7.noarch                    19/33
  Installing : perl-Carp-1.26-244.el7.noarch                          20/33
```

```
  Installing : perl-PathTools-3.40-5.el7.x86_64                        21/33
  Installing : perl-Scalar-List-Utils-1.27-248.el7.x86_64              22/33
  Installing : 1:perl-Pod-Simple-3.28-4.el7.noarch                     23/33
  Installing : perl-File-Temp-0.23.01-3.el7.noarch                     24/33
  Installing : perl-File-Path-2.09-2.el7.noarch                        25/33
  Installing : perl-threads-shared-1.43-6.el7.x86_64                   26/33
  Installing : perl-threads-1.87-4.el7.x86_64                          27/33
  Installing : 4:perl-Time-HiRes-1.9725-3.el7.x86_64                   28/33
  Installing : perl-Filter-1.49-3.el7.x86_64                           29/33
  Installing : 4:perl-libs-5.16.3-299.el7_9.x86_64                     30/33
  Installing : perl-Getopt-Long-2.40-3.el7.noarch                      31/33
  Installing : 4:perl-5.16.3-299.el7_9.x86_64                          32/33
  Installing : 2:vim-enhanced-7.4.629-8.el7_9.x86_64                   33/33
  Verifying  : perl-HTTP-Tiny-0.033-3.el7.noarch                        1/33
  Verifying  : perl-threads-shared-1.43-6.el7.x86_64                    2/33
  Verifying  : perl-Storable-2.45-3.el7.x86_64                          3/33
  Verifying  : groff-base-1.22.2-8.el7.x86_64                           4/33
  Verifying  : perl-Exporter-5.68-3.el7.noarch                          5/33
  Verifying  : perl-constant-1.27-2.el7.noarch                          6/33
  Verifying  : perl-PathTools-3.40-5.el7.x86_64                         7/33
  Verifying  : 4:perl-macros-5.16.3-299.el7_9.x86_64                    8/33
  Verifying  : 2:vim-enhanced-7.4.629-8.el7_9.x86_64                    9/33
  Verifying  : 1:perl-parent-0.225-244.el7.noarch                      10/33
  Verifying  : perl-Socket-2.010-5.el7.x86_64                          11/33
  Verifying  : which-2.20-7.el7.x86_64                                 12/33
  Verifying  : 2:vim-filesystem-7.4.629-8.el7_9.x86_64                 13/33
  Verifying  : perl-File-Temp-0.23.01-3.el7.noarch                     14/33
  Verifying  : 1:perl-Pod-Simple-3.28-4.el7.noarch                     15/33
  Verifying  : perl-Time-Local-1.2300-2.el7.noarch                     16/33
  Verifying  : 1:perl-Pod-Escapes-1.04-299.el7_9.noarch                17/33
  Verifying  : perl-Carp-1.26-244.el7.noarch                           18/33
  Verifying  : 2:vim-common-7.4.629-8.el7_9.x86_64                      19/33
  Verifying  : perl-Scalar-List-Utils-1.27-248.el7.x86_64              20/33
  Verifying  : perl-Pod-Usage-1.63-3.el7.noarch                        21/33
  Verifying  : perl-Encode-2.51-7.el7.x86_64                           22/33
  Verifying  : perl-Pod-Perldoc-3.20-4.el7.noarch                      23/33
  Verifying  : perl-podlators-2.5.1-3.el7.noarch                       24/33
  Verifying  : 4:perl-5.16.3-299.el7_9.x86_64                          25/33
  Verifying  : perl-File-Path-2.09-2.el7.noarch                        26/33
  Verifying  : perl-threads-1.87-4.el7.x86_64                          27/33
  Verifying  : 4:perl-Time-HiRes-1.9725-3.el7.x86_64                   28/33
  Verifying  : gpm-libs-1.20.7-6.el7.x86_64                            29/33
  Verifying  : perl-Filter-1.49-3.el7.x86_64                           30/33
  Verifying  : perl-Getopt-Long-2.40-3.el7.noarch                      31/33
  Verifying  : perl-Text-ParseWords-3.29-4.el7.noarch                  32/33
  Verifying  : 4:perl-libs-5.16.3-299.el7_9.x86_64                     33/33


Installed:
  vim-enhanced.x86_64 2:7.4.629-8.el7_9


Dependency Installed:
  gpm-libs.x86_64 0:1.20.7-6.el7
  groff-base.x86_64 0:1.22.2-8.el7
  perl.x86_64 4:5.16.3-299.el7_9
  perl-Carp.noarch 0:1.26-244.el7
  perl-Encode.x86_64 0:2.51-7.el7
  perl-Exporter.noarch 0:5.68-3.el7
  perl-File-Path.noarch 0:2.09-2.el7
  perl-File-Temp.noarch 0:0.23.01-3.el7
  perl-Filter.x86_64 0:1.49-3.el7
  perl-Getopt-Long.noarch 0:2.40-3.el7
  perl-HTTP-Tiny.noarch 0:0.033-3.el7
  perl-PathTools.x86_64 0:3.40-5.el7
  perl-Pod-Escapes.noarch 1:1.04-299.el7_9
  perl-Pod-Perldoc.noarch 0:3.20-4.el7
  perl-Pod-Simple.noarch 1:3.28-4.el7
  perl-Pod-Usage.noarch 0:1.63-3.el7
  perl-Scalar-List-Utils.x86_64 0:1.27-248.el7
  perl-Socket.x86_64 0:2.010-5.el7
  perl-Storable.x86_64 0:2.45-3.el7
  perl-Text-ParseWords.noarch 0:3.29-4.el7
  perl-Time-HiRes.x86_64 4:1.9725-3.el7
  perl-Time-Local.noarch 0:1.2300-2.el7
  perl-constant.noarch 0:1.27-2.el7
  perl-libs.x86_64 4:5.16.3-299.el7_9
  perl-macros.x86_64 4:5.16.3-299.el7_9
  perl-parent.noarch 1:0.225-244.el7
  perl-podlators.noarch 0:2.5.1-3.el7
  perl-threads.x86_64 0:1.87-4.el7
  perl-threads-shared.x86_64 0:1.43-6.el7
  vim-common.x86_64 2:7.4.629-8.el7_9
  vim-filesystem.x86_64 2:7.4.629-8.el7_9
  which.x86_64 0:2.20-7.el7


Complete!
Removing intermediate container f2ba58fd152d
```

```
---> 5552d8b8c89e
Step 8/16 : ENV MYPATH /usr/local/tomcat/logs/
---> Running in f938c0cf0c04
Removing intermediate container f938c0cf0c04
---> 5b6fcbaf7d9c
Step 9/16 : WORKDIR $MYPATH
---> Running in 4e72cb5abc0f
Removing intermediate container 4e72cb5abc0f
---> 377ecec452ef
Step 10/16 : ENV JAVA_HOME /usr/local/jdk1.8.0_181
---> Running in 8cbfa2879351
Removing intermediate container 8cbfa2879351
---> 55106ccb2395
Step 11/16 : ENV CLASSPATH $JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar
---> Running in b0a97712c51b
Removing intermediate container b0a97712c51b
---> c02a6a1a2b82
Step 12/16 : ENV CATALINA_HOME /usr/local/tomcat/
---> Running in 731da958e5c3
Removing intermediate container 731da958e5c3
---> b832b33b2ff5
Step 13/16 : ENV CATALINA_BASE /usr/local/tomcat/
---> Running in e62afb4c18cd
Removing intermediate container e62afb4c18cd
---> aab52e82463f
Step 14/16 : ENV PATH $PATH:$JAVA_HOME/bin:$CATALINA_HOME/lib:$CATALINA_HOME/bin
---> Running in b085ad181f04
Removing intermediate container b085ad181f04
---> 5010a1af3bf9
Step 15/16 : EXPOSE 8080
---> Running in 7fee0e9305b8
Removing intermediate container 7fee0e9305b8
---> a85257ae5516
Step 16/16 : CMD /usr/local/tomcat/bin/startup.sh && tail -f /usr/local/tomcat/logs/catalina.out
---> Running in aa2884e0772d
Removing intermediate container aa2884e0772d
---> fe8dfba7b0f5
Successfully built fe8dfba7b0f5
Successfully tagged mytomcat:v0.0.1
[root@instance-g8qc0vgv docker_test]#
```

- 4）查看镜像

```
[root@instance-g8qc0vgv docker_test]# docker image ls
REPOSITORY    TAG           IMAGE ID       CREATED        SIZE
mytomcat      v0.0.1        fe8dfba7b0f5   3 minutes ago  845MB
centos        centos7.9.2009 eeb6ee3f44bd  10 months ago  204MB
centos        latest        5d0da3dc9764   10 months ago  231MB
mysql         5.7.32        cc8775c0fe94   19 months ago  449MB
nginx         1.17.2        4733136e5c3c   2 years ago    126MB
nginx         1.17.1        98ebf73aba75   3 years ago    109MB
tomcat        8.0-jre8      8391ef8f6ae4   3 years ago    463MB
[root@instance-g8qc0vgv docker_test]#
```

- 5）使用镜像

```
[root@instance-g8qc0vgv docker_test]# docker run -d -p 8081:8080 --name tomcat1 mytomcat:v0.0.1
491d98d296c4d4da17c5d2e470e83fb77559115abfc20fb2c5548becba063fa0
[root@instance-g8qc0vgv docker_test]#
[root@instance-g8qc0vgv docker_test]# docker ps
CONTAINER
ID  IMAGE              COMMAND               CREATED       STATUS        PORTS                          NAMES
491d98d296c4  mytomcat:v0.0.1  "/bin/sh -c '/usr/lo…"  3 seconds ago  Up 2 seconds   0.0.0.0:8081->8080/tcp,
:::8081->8080/tcp    tomcat1
[root@instance-g8qc0vgv docker_test]# docker logs --tail 10 tomcat1
11-Aug-2022 05:08:42.363 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deployment of web application directory [/usr/local/tomcat/webapps/host-manager] has finished in [40] ms
11-Aug-2022 05:08:42.363 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deploying web application directory [/usr/local/tomcat/webapps/ROOT]
11-Aug-2022 05:08:42.378 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deployment of web application directory [/usr/local/tomcat/webapps/ROOT] has finished in [15] ms
11-Aug-2022 05:08:42.378 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deploying web application directory [/usr/local/tomcat/webapps/examples]
11-Aug-2022 05:08:42.659 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deployment of web application directory [/usr/local/tomcat/webapps/examples] has finished in [281] ms
11-Aug-2022 05:08:42.659 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deploying web application directory [/usr/local/tomcat/webapps/manager]
11-Aug-2022 05:08:42.702 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory
Deployment of web application directory [/usr/local/tomcat/webapps/manager] has finished in [43] ms
11-Aug-2022 05:08:42.705 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-
nio-8080"]
11-Aug-2022 05:08:42.720 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["ajp-
nio-8009"]
```

```
11-Aug-2022 05:08:42.723 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in 850 ms
[root@instance-g8qc0vgv docker_test]#
```

- 6）使用容器
  - 进入容器查看
    - 工作目录没有问题
    - 拷贝的`index.html`也没有问题
  - 访问也没有问题