





















#### Docker核心技术之容器与镜像-课程概要

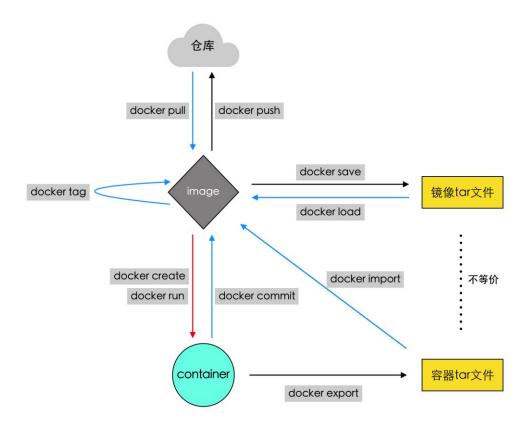
- Docker的容器与镜像
- 深入理解Docker的容器与镜像
- 总结



# Docker 容器与镜像



## Docker容器与镜像的关系





#### 容器提交 – docker commit

作用:

根据容器生成一个新的镜像

• 命令格式:

docker commit [OPTIONS] CONTAINER [REPOSITORY[:TAG]]

• 命令参数(OPTIONS):

-a, --author string 作者

-c, --change list 为创建的镜像加入Dockerfile命令

-m, --message string 提交信息,类似git commit -m

-p, --pause 提交时暂停容器 (default true)



#### 容器提交 – docker commit

#### • 命令演示:

```
[root@centos-linux master_dir]# docker run --rm -dti centos bash
a1c2e1877c89102e1c218fc33f9c8401ded218bda3fa22044f2562057fa16f89
[root@centos-linux master_dir]# docker exec -d a1c2 yum -y install net-tools
[root@centos-linux master_dir]# docker commit -m 'install net-tools' a1c2 centos-net-tools:latest
sha256:d0fd61facf104cfd8b3119eea376b709dfc926de509f1a7179d0a30dcd58d386
[root@centos-linux master_dir]# docker images
REPOSITORY
                            TAG
                                                IMAGE ID
                                                                    CREATED
                                                                                        SIZE
centos-net-tools
                            latest
                                                d0fd61facf10
                                                                    4 seconds ago
                                                                                        263MB
```

| [root@centos-lin    | ux master_dir]# docke | r history centos-net-tools                   |        |                   |
|---------------------|-----------------------|--|--------|-------------------|
| IMAGE               | CREATED               | CREATED BY                                   | SIZE   | COMMENT           |
| d0fd61facf10        | 46 seconds ago        | bash   | 64.2MB | install net-tools |
| e934aafc2206        | 5 weeks ago           | /bin/sh -c #(nop) CMD ["/bin/bash"]          | 0B     |                   |
| <missing></missing> | 5 weeks ago           | /bin/sh -c #(nop) LABEL org.label-schema.sc  | 0B     |                   |
| <missing></missing> | 5 weeks ago           | /bin/sh -c #(nop) ADD file:f755805244a649ecc | 199MB  |                   |



# 容器导出 – docker export

作用:

将容器当前的文件系统导出成一个tar文件

• 命令格式:

docker export [OPTIONS] CONTAINER

• 命令参数(OPTIONS):

-o, --output string

指定写入的文件,默认是STDOUT



# 容器打包的导入 – docker import

作用:

从一个tar文件中导入内容创建一个镜像

• 命令格式:

docker import [OPTIONS] file|URL|- [REPOSITORY[:TAG]]

• 命令参数(OPTIONS):

-c, --change list 为创建的镜像加入Dockerfile命令

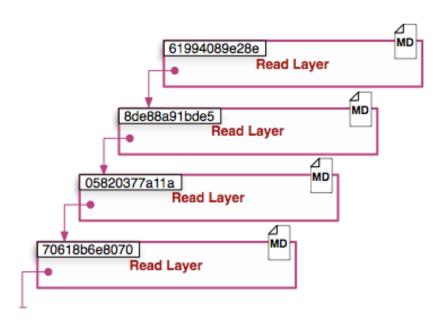
-m, --message string 导入时,添加提交信息



# 深入理解Docker容器与镜像

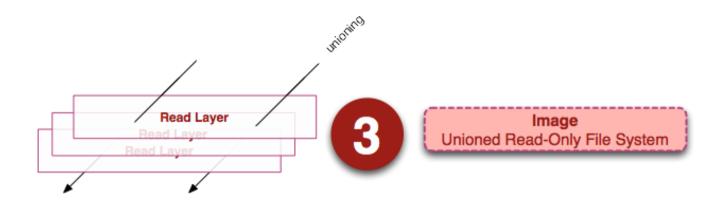


# 镜像的Layer



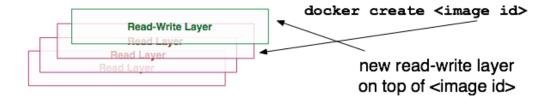


# 镜像的视角

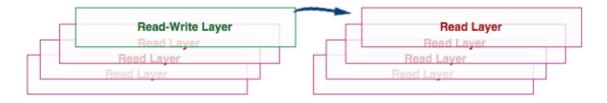




# 容器的Layer

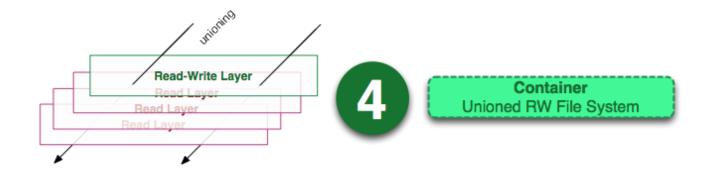


#### docker commit



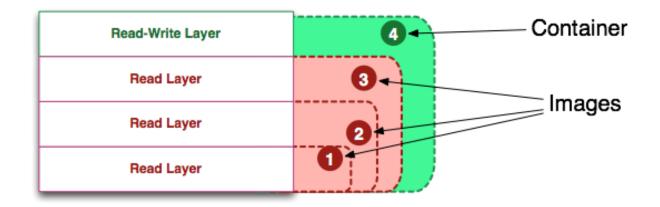


# 容器的视角



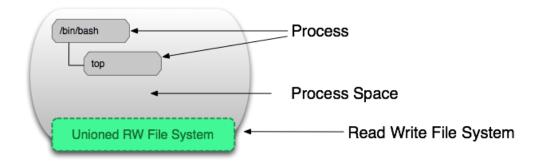


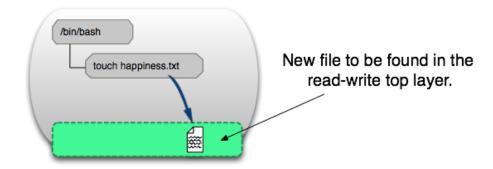
# 容器与镜像的底层关系





# 容器的运行



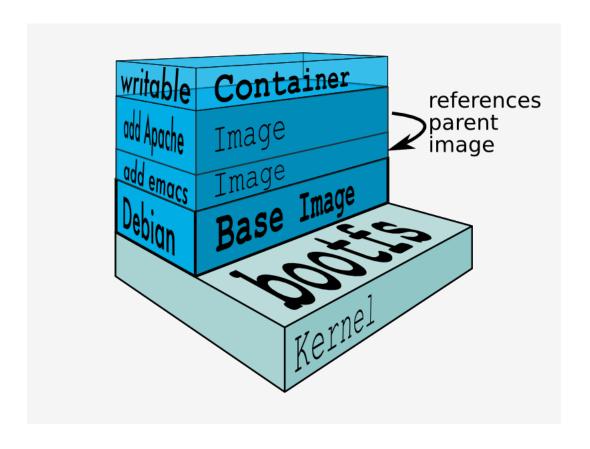




# 总结



## Docker核心技术之容器与镜像- 总结























# Thank you!

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