Docker Swarm 入门: Docker Stack

▶ 前言介绍

stack 是构成特定环境中的 service 集合, 它是自动部署多个相互关联的服务的简便方法,而无需单独定义每个服务。

stack file 是一种 yaml 格式的文件,类似于 docker-compose.yml 文件,它定义了一个或多个服务,并定义了服务的环境变量、部署标签、容器数量以及相关的环境特定配置等。

▶ Stack File 的编写

服务的各种配置已在之前的文章中介绍,只是在书写格式上有所变化,可以对应官方文档列举的 Demo 做参考:

https://docs.docker.com/compose/compose-file/ (https://link.jianshu.com? t=https%3A%2F%2Fdocs.docker.com%2Fcompose%2Fcompose-file%2F)

示例:使用 Stack 部署 Docker Swarm 入门: Service Network 管理 (https://www.jianshu.com/p/60bccbdb6af9) 的应用



```
version: '3.4'
services:
 mongo:
    image: mongo
   restart: always
   networks:
      - mongo_network
   deploy:
      restart_policy:
       condition: on-failure
      replicas: 2
 mongo-express:
    image: mongo-express
   restart: always
    networks:
      - mongo_network
    ports:
      - target: 8081
        published: 80
        protocol: tcp
       mode: ingress
    environment:
      ME_CONFIG_MONGODB_SERVER: mongo
      ME_CONFIG_MONGODB_PORT: 27017
    deploy:
      restart_policy:
        condition: on-failure
      replicas: 1
networks:
 mongo_network:
    external: true
```

▶ 部署 Stack

用法

docker stack deploy [OPTIONS] STACK

参数

简写	参数	默认值	描述				
	bundle-file		【实验阶段】分布式应用程序包文件的路径				
-c	compose-file		Stack File 路径				
	prune		删除不再被引用的服务	^			
	resolve-image	always	查询 Registry 以解决镜像摘要和支持的平台 ("always"、"changed"、"never")	∞			
	with-registry- auth		向 Swarm 代理发送 Registry 认证详细信息				

示例: 将上述内容写到文件 stack.yml 中, 然后部署

docker stack deploy -c stack anoyi_mongo

► Stack 列表

用法

docker stack ls

```
docker@ManagerX:~$ docker stack ls

NAME SERVICES

anoyi_mongo 2

docker@ManagerX:~$
```

▶ Stack 服务列表

docker stack services [OPTIONS] STACK

```
ManagerX:~$ docker stack services anoyi_mongo

NAME MODE REPLICAS IMAGE PORTS

vuq0w anoyi_mongo_mongo replicated 2/2 mongo:latest

iqa7lm _anoyi_mongo_mongo-express replicated 1/1 mongo-express:latest *:80->8081/tcp
```

▶ Stack 任务列表

用法

docker stack ps [OPTIONS] STACK

nagerX:-\$ docker stock ps anoyi_mongo											
		NAME	IMAGE	NODE	DESIRED STATE	CURRENT STATE	ERROR	PORTS			
	07c	anoyi_mongo_mongo-express.1	mongo-express:latest	WorkerB	Running	Running 13 minutes ago					
	dfv	anoyi_mongo_mongo.1	mongo:latest	WorkerA	Running	Running 13 minutes ago					
	b2t	anoyi_mongo_mongo.2	mongo:latest	ManagerX	Running	Running 13 minutes ago					
	nagerX:~\$										

► Stack 删除



示例:

docker stack rm anoyi_mongo

▶ 补充案例

Docker Swarm 下搭建 MongoDB 分片+副本+选举集群 (https://www.jianshu.com/p/31db684deeba)

