



docker

Docker Tutorials

Managing Log Files

Introduction

这个场景将探索以容器的形式运行应用程序和服务时，docker可以处理日志输出的不同方式。

example:

- *docker run -d --name redis-server redis*

Step 1 - Docker Logs

- 在后台，有一个名为 *redis-server* 的Redis实例。在Docker客户端上，使用下面命令可以访问启动时的标准输出和标准错误输出
 - *docker logs redis-server*

```
$ docker logs redis-server
1:C 18 Nov 14:00:53.281 # o000o000o000o Redis is starting o000o000o000o
1:C 18 Nov 14:00:53.283 # Redis version=4.0.2, bits=64, commit=00000000, modified=0, pid=1, just s
tarted
1:C 18 Nov 14:00:53.284 # Warning: no config file specified, using the default config. In order to
specify a config file use redis-server /path/to/redis.conf
1:M 18 Nov 14:00:53.287 * Running mode=standalone, port=6379.
1:M 18 Nov 14:00:53.287 # WARNING: The TCP backlog setting of 511 cannot be enforced because /proc
/sys/net/core/somaxconn is set to the lower value of 128.
1:M 18 Nov 14:00:53.287 # Server initialized
1:M 18 Nov 14:00:53.287 # WARNING overcommit_memory is set to 0! Background save may fail under lo
w memory condition. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf and then
reboot or run the command 'sysctl vm.overcommit_memory=1' for this to take effect.
1:M 18 Nov 14:00:53.287 # WARNING you have Transparent Huge Pages (THP) support enabled in your ke
rnel. This will create latency and memory usage issues with Redis. To fix this issue run the comma
nd 'echo never > /sys/kernel/mm/transparent_hugepage/enabled' as root, and add it to your /etc/rc.
local in order to retain the setting after a reboot. Redis must be restarted after THP is disabled
.
1:M 18 Nov 14:00:53.287 * Ready to accept connections
```

Step 2 - SysLog

- 默认情况下，Docker日志使用`json`格式输出，这意味着日志的输出将存储在主机一个JSON文件里。那么这可能导致文件过大而填满磁盘。因此，要将日志驱动程序更改为移至其他目标。
- The Syslog log driver will write all the container logs to the central syslog on the host. "syslog is a widely used standard for message logging. It permits separation of the software that generates messages, the system that stores them, and the software that reports and analyses them." [Wikipedia](#)
 - `docker run -d --name redis-syslog --log-driver=syslog redis`

Step 3 - Disable Logging❶

- 第三个选项是禁用容器上的日志记录。这对于log非常详细的容器特别有用。
- 启动容器时，为了不输出日志记录，只需将日志驱动器设置为 *none*。
 - *docker run -d --name redis-none --log-driver = none redis*
- *inspect* 命令可以识别特定容器的日志记录配置。下面的命令将输出每个容器的 *LogConfig* 部分。

Step 3 - Disable Logging②

- Server created in step 1
 - *docker inspect --format '{{ .HostConfig.LogConfig }}' redis-server*
- Server created in step 2
 - *docker inspect --format '{{ .HostConfig.LogConfig }}' redis-syslog*
- Server created in this step
 - *docker inspect --format '{{ .HostConfig.LogConfig }}' redis-none*

Reference

- <https://www.katacoda.com/courses/docker/8>