

## Experiment 10 (Docker - Managing Log Files)

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In the background, there is an instance of Redis running with the name `redis-server`. Using the Docker client, we can access the standard out and standard error outputs using the following command

```
$ docker run -d --name redis-server redis
ae14b2f5bd70aa4c5208012b390e477c6a260675bf9c220a8d3ec5e791a554f3
$
$
$ docker logs redis-server
1:C 02 May 16:36:32.341 # 000000000000 Redis is starting 000000000000
1:C 02 May 16:36:32.342 # Redis version=4.0.11, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 02 May 16:36:32.343 # 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 02 May 16:36:32.344 * Running mode=standalone, port=6379.
1:M 02 May 16:36:32.344 * 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 02 May 16:36:32.344 # Server initialized
1:M 02 May 16:36:32.344 # WARNING overcommit memory is set to 0! Background save may fail under low 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 02 May 16:36:32.344 # WARNING you have Transparent Huge Pages (THP) support enabled in your kernel. This will create late
ncy and memory usage issues with Redis. To fix this issue run the command 'echo never > /sys/kernel/mm/transparent_hugepage/e
nabled' as root, and add it to your /etc/rc.local in order to retain the setting after a reboot. Redis must be restarted afte
r THP is disabled.
1:M 02 May 16:36:32.344 * Ready to accept connections
```

The command below will redirect the redis logs to syslog

```
$ docker run -d --name redis-syslog --log-driver=syslog redis
86f91f67d38284a393426da26ad2c926916a030ee9662230a7a375741b285e76
```

When the container is launched, no output will be logged when we set log-driver to none

```
$ docker run -d --name redis-none --log-driver=none redis
3e9c553cbc2448baf65d92f22a66c26808406ec0dd15a5ca24a4bc50c1739b04
```

The commands below will output the LogConfig section for each of the containers.

```
$ docker inspect --format '{{ .HostConfig.LogConfig }}' redis-server
{"json-file map[]}
```

```
$ docker inspect --format '{{ .HostConfig.LogConfig }}' redis-syslog
{syslog map{}}
```

```
$ docker inspect --format '{{ .HostConfig.LogConfig }}' redis-none
{none map[]}
```