

Redis：兼WSL的一些操作

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高峰的快感 刹那失憾
风花雪月不肯等人 要献便献吻
好风景多的是 夕阳平常事
然而每天眼见的 永远不相似
——《夕阳无限好》 陈奕迅

不想用linux虚拟机，所以使用了WSL2 (ubuntu22.04) 来安装redis。

参考：[官方文档：WSL2安装redis](#)

高 (sha3) 贵 (bi1) 的windows！

0. WSL

0.1 运行WSL

非常简单：

```
PS C:\WINDOWS\system32> wsl  
cdm@DESKTOP-FK33F9A: /mnt/c/WINDOWS/system32$
```

0.2 退出WSL

要退出WSL (Windows Subsystem for Linux) ， 你可以执行以下操作：

1. 关闭所有终端窗口：

如果你在WSL中打开了一个或多个终端窗口，可以通过关闭这些窗口来退出WSL。这将终止所有与WSL相关的进程。

2. 在终端中使用 `exit` 命令：

如果你只在一个终端窗口中工作，可以在该窗口中输入 `exit` 命令，然后按回车键。这会关闭当前终端窗口并退出WSL。

3. 使用 `wsl.exe` 命令退出：

如果你想要通过命令行退出WSL，可以按以下步骤操作：

- 打开命令提示符 (Command Prompt) 或 PowerShell。
- 运行以下命令来列出当前正在运行的WSL发行版：

```
wsl -l
```

- 选择要退出的WSL发行版，然后运行以下命令，将 `YourDistroName` 替换为实际的发行版名称：

```
wsl --terminate YourDistroName
```

这将关闭指定的WSL发行版。

无论你选择哪种方法，退出WSL后，你将返回到Windows的命令行界面或GUI界面，取决于你的当前环境。

0.3 windows和wsl通信

默认情况下，WSL分配了一个IP地址给每个WSL发行版。

```
cdm@DESKTOP-FK33F9A:/$ ip addr show eth0 | grep -oP '(?<=inet\s)\d+(\.\d+){3}'  
172.27.104.20
```

1. 一些前期准备

1.1 install redis

```
curl -fsSL https://packages.redis.io/gpg | sudo gpg --dearmor -o /usr/share/keyrings/redis-arch:  
  
echo "deb [signed-by=/usr/share/keyrings/redis-archive-keyring.gpg] https://packages.redis.io/d:  
  
sudo apt-get update  
sudo apt-get install redis
```

1.2 run redis: 跑server

```
sudo service redis-server start
```

跑起来居然是这个死样子，没有显示redis的图标，我还以为挂了呢：

```
cdm@DESKTOP-FK33F9A:/$ sudo service redis-server start
Starting redis-server: redis-server.
cdm@DESKTOP-FK33F9A:/$ sudo service redis-server status
* redis-server is running
```

——分割线——

额，换了一种方法启动，就有redis的图标了：

```
cdm@DESKTOP-FK33F9A: /
612:M 09 Oct 2023 17:14:34.152 * Server initialized
612:M 09 Oct 2023 17:14:34.153 * Ready to accept connections tcp
^C612:signal-handler (1696842884) Received SIGINT scheduling shutdown...
612:M 09 Oct 2023 17:14:44.398 * User requested shutdown...
612:M 09 Oct 2023 17:14:44.398 * Saving the final RDB snapshot before exiting.
612:M 09 Oct 2023 17:14:44.398 # Failed opening the temp RDB file temp-612.rdb (in server root dir /) for saving: Permission denied
612:M 09 Oct 2023 17:14:44.398 # Error trying to save the DB, can't exit.
612:M 09 Oct 2023 17:14:44.398 # Errors trying to shut down the server. Check the logs for more information.
^C612:signal-handler (1696842895) Received SIGINT scheduling shutdown...
612:M 09 Oct 2023 17:14:55.246 * User requested shutdown...
612:M 09 Oct 2023 17:14:55.246 * Saving the final RDB snapshot before exiting.
612:M 09 Oct 2023 17:14:55.246 # Failed opening the temp RDB file temp-612.rdb (in server root dir /) for saving: Permission denied
612:M 09 Oct 2023 17:14:55.246 # Error trying to save the DB, can't exit.
612:M 09 Oct 2023 17:14:55.246 # Errors trying to shut down the server. Check the logs for more information.
Killed
cdm@DESKTOP-FK33F9A: $ where redis-server
where: command not found
cdm@DESKTOP-FK33F9A: $ whereis redis-server
redis-server: /usr/bin/redis-server /usr/share/man/man1/redis-server.1.gz
cdm@DESKTOP-FK33F9A: $ sudo redis-server
[sudo] password for cdm:
643:C 09 Oct 2023 17:23:18.049 # WARNING Memory overcommit must be enabled! Without it, a background save or replication may fail under low memory condition. Being disabled, it can also cause failures without low memory condition, see https://github.com/jemalloc/jemalloc/issues/1328. 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.
643:C 09 Oct 2023 17:23:18.049 * oOoOoOoOoOoOo Redis is starting oOoOoOoOoOoOo
643:C 09 Oct 2023 17:23:18.049 * Redis version=7.2.1, bits=64, commit=00000000, modified=0, pid=643, just started
643:C 09 Oct 2023 17:23:18.049 # Warning: no config file specified, using the default config. In order to specify a config file use redis-server /path/to/redis.conf
643:M 09 Oct 2023 17:23:18.049 * Increased maximum number of open files to 10032 (it was originally set to 1024).
643:M 09 Oct 2023 17:23:18.049 * monotonic clock: POSIX clock_gettime

Redis 7.2.1 (00000000/0) 64 bit

Running in standalone mode
Port: 6379
PID: 643

https://redis.io

643:M 09 Oct 2023 17:23:18.050 * Server initialized
643:M 09 Oct 2023 17:23:18.050 * Ready to accept connections tcp
^C643:signal-handler (1696843401) Received SIGINT scheduling shutdown...
643:M 09 Oct 2023 17:23:21.565 * User requested shutdown...
643:M 09 Oct 2023 17:23:21.565 * Saving the final RDB snapshot before exiting.
643:M 09 Oct 2023 17:23:21.576 * DB saved on disk
643:M 09 Oct 2023 17:23:21.576 # Redis is now ready to exit, bye bye...
cdm@DESKTOP-FK33F9A: $
```

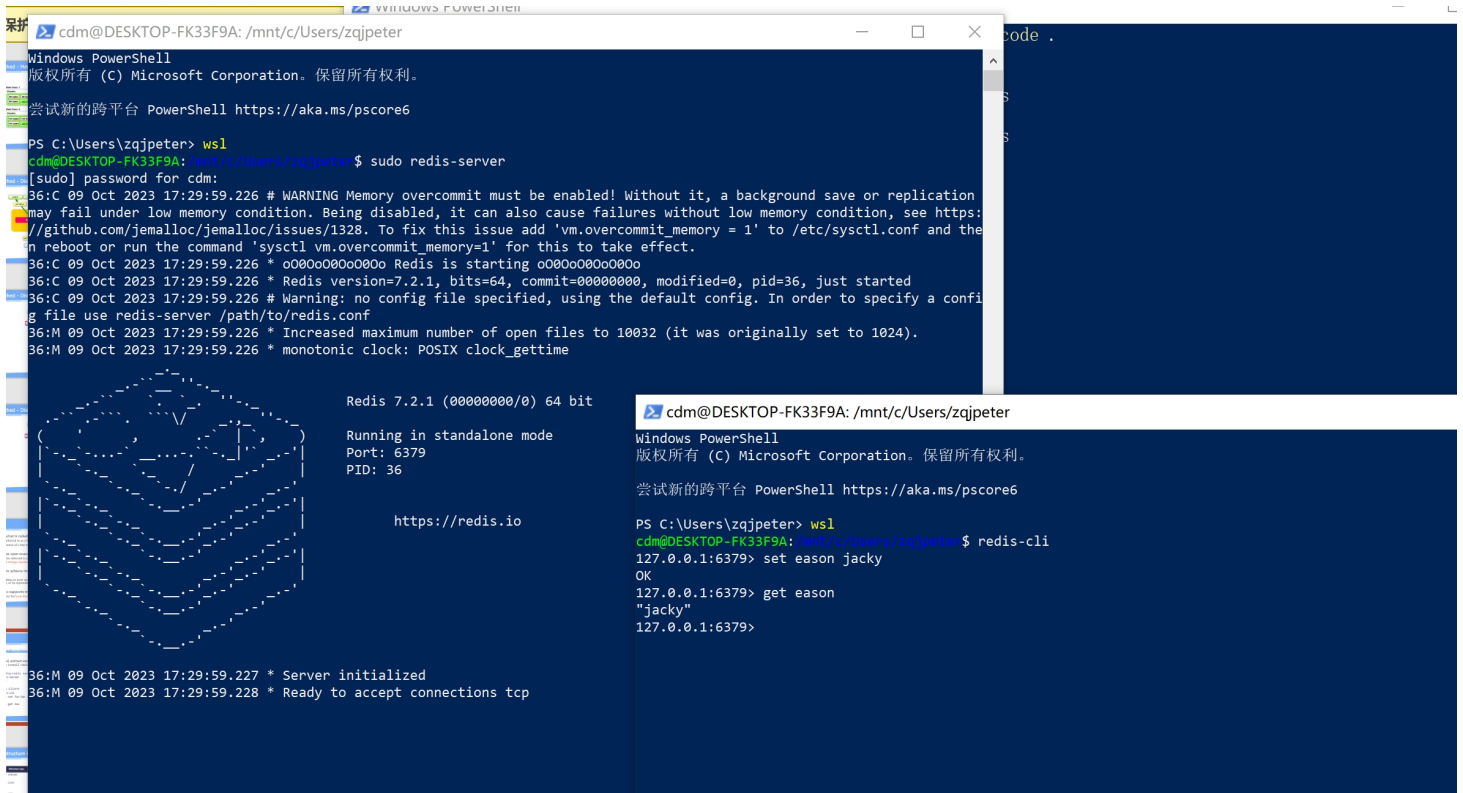
请注意一定要用sudo来启动redis！否则ctrl+c退出的时候会出现权限的问题！（我还是用kill -9杀死的，册那）。

1.3 connect to redis: client

```
cdm@DESKTOP-FK33F9A:/$ redis-cli
127.0.0.1:6379> ping
PONG
127.0.0.1:6379>
```

可以看出：

- Redis 服务器默认监听本地主机（127.0.0.1）上的端口 6379，这是为了提供本地访问，并确保安全性。



```
cdm@DESKTOP-FK33F9A: /mnt/c/Users/zqjpeter
Windows PowerShell
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尝试新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\zqjpeter> wsl
cdm@DESKTOP-FK33F9A: /mnt/c/Users/zqjpeter$ sudo redis-server
[sudo] password for cdm:
36:C 09 Oct 2023 17:29:59.226 # WARNING Memory overcommit must be enabled! Without it, a background save or replication
may fail under low memory condition. Being disabled, it can also cause failures without low memory condition, see https:
//github.com/jemalloc/jemalloc/issues/1328. To fix this issue add 'vm.overcommit_memory = 1' to /etc/sysctl.conf and the
n reboot or run the command 'sysctl vm.overcommit_memory=1' for this to take effect.
36:C 09 Oct 2023 17:29:59.226 * o000o000o000o Redis is starting o000o000o000o
36:C 09 Oct 2023 17:29:59.226 * Redis version=7.2.1, bits=64, commit=00000000, modified=0, pid=36, just started
36:C 09 Oct 2023 17:29:59.226 # Warning: no config file specified, using the default config. In order to specify a confi
g file use redis-server /path/to/redis.conf
36:M 09 Oct 2023 17:29:59.226 * Increased maximum number of open files to 10032 (it was originally set to 1024).
36:M 09 Oct 2023 17:29:59.226 * monotonic clock: POSIX clock_gettime

Redis 7.2.1 (00000000/0) 64 bit

Running in standalone mode
Port: 6379
PID: 36

https://redis.io

36:M 09 Oct 2023 17:29:59.227 * Server initialized
36:M 09 Oct 2023 17:29:59.228 * Ready to accept connections tcp

cdm@DESKTOP-FK33F9A: /mnt/c/Users/zqjpeter
Windows PowerShell
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尝试新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\zqjpeter> wsl
cdm@DESKTOP-FK33F9A: /mnt/c/Users/zqjpeter$ redis-cli
127.0.0.1:6379> set eason jacky
OK
127.0.0.1:6379> get eason
"jacky"
127.0.0.1:6379>
```

1.4 shutdown redis

方法:

- 通过redis-cli连接服务器后执行shutdown命令，则执行停止redis服务操作。

```
cdm@DESKTOP-FK33F9A:/$ sudo service redis-server status
[sudo] password for cdm:
* redis-server is running
cdm@DESKTOP-FK33F9A:/$ redis-cli
127.0.0.1:6379> shutdown
not connected>
cdm@DESKTOP-FK33F9A:/$ sudo service redis-server status
* redis-server is not running
```

当然，如果你在redis-server的窗口中，直接ctrl+c也可以停止redis服务。

2. redis-client的一些基本概念

对redis-cli有个基本概念。

参考文档：[官方文档](#)

redis-cli 是Redis命令行界面，一个简单的程序，允许直接从终端向Redis发送命令，并读取服务器发送的回复。

- redis数据库对命令大小写不敏感，ping、Ping、PING是同一个命令
- redis数据库对变量大小写敏感，A、a是两个变量
- 默认情况下redis-cli，通过127.0.0.1 端口 6379 连接到服务器。