

# 搭建OceanBase开发环境 -- 编译 & 运行

[已报名参加大赛]

参照教程:

[https://oceanbase.github.io/miniob/dev-env/how\\_to\\_dev\\_miniob\\_by\\_vscode/#\\_2](https://oceanbase.github.io/miniob/dev-env/how_to_dev_miniob_by_vscode/#_2)

[https://github.com/oceanbase/miniob/blob/main/docs/docs/how\\_to\\_build.md](https://github.com/oceanbase/miniob/blob/main/docs/docs/how_to_build.md)

## 环境搭建

已经安装的工具如下:

```
--- 以下使用apt install即可安装, 安装之前先更行apt: sudo apt update ; sudo apt upgrade
casinan@caisinan:~/Desktop$ cmake --version
cmake version 3.28.3

casinan@caisinan:~/Desktop$ make --version
GNU Make 4.3

casinan@caisinan:~/Desktop$ g++ --version
g++ (Ubuntu 13.2.0-23ubuntu4) 13.2.0

casinan@caisinan:~/Desktop$ gcc --version
gcc (Ubuntu 13.2.0-23ubuntu4) 13.2.0

casinan@caisinan:~/Desktop$ sudo apt install googletest
[sudo] password for casinan:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
googletest is already the newest version (1.14.0-1).
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.
```

其中libevent的安装方式如下:

```
wget https://github.com/libevent/libevent/releases/download/release-2.1.12-stable/libevent-2.1.12-stable.tar.gz
```

然后参考教程: <https://blog.csdn.net/superhoner/article/details/112001995>

配置安装环境:

```
cd libevent-2.1.11-stable
./configure --prefix=/usr
```

测试是否安装成功:

```
ls -al /usr/local/lib | grep libevent
```

其中jsoncpp的安装方式如下:

参考教程 : [https://blog.csdn.net/qq\\_52201535/article/details/133581163](https://blog.csdn.net/qq_52201535/article/details/133581163)

```
安装:
sudo apt-get install libjsoncpp-dev
sudo apt install libjson-c-dev
```

```
检查是否安装成功:
ls /usr/include/jsoncpp/json/
ls /usr/include/json-c/
```

```
*****如何使用***:
#include <jsoncpp/json/json.h>
#include <json-c/json.h>
编译: [链接库]
g++ -l jsoncpp
g++ -l ljson-c
```

flex安装: sudo apt-get install flex

bison安装参考: <https://blog.csdn.net/Mculover666/article/details/118934814>

## 尝试编译

```
cd ./minidb
sudo bash build.sh init
成功执行
bash build.sh
成功编译
```

## 打包一个镜像

用vmware直接克隆一个备份即可

## 运行oceanBase数据库

这里记录一下提交代码的网址:

<https://open.oceanbase.com/train?questionId=200001>

oceanBase如何运行起来:

[https://oceanbase.github.io/minioib/how\\_to\\_run/](https://oceanbase.github.io/minioib/how_to_run/)

命令记录:

```
cd home/casinan/workspace/oceanBCompetition/minioib/build
以监听TCP端口的方式启动服务端程序:
./bin/observer -f ../etc/observer.ini -p 6789

打开另一个终端:
到build目录下:
客户端连接到服务端的6789端口:
./bin/obclient -p 6789
```

```
Welcome to the OceanBase database implementation course.

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Learn more about OceanBase at https://github.com/oceanbase/oceanbase
Learn more about MiniOB at https://github.com/oceanbase/minio
b

miniob > ls
SQL_SYNTAX > Failed to parse sql
miniob > create database db;l
SQL_SYNTAX > Failed to parse sql
miniob > create database db;
SQL_SYNTAX > Failed to parse sql
miniob > create table t1(id int);
SUCCESS
miniob > select * from t1;
id
```

好的准备提交第一笔代码

[备注: 此文档已经提交oceanBase官网]