Cockroach DB Connection

Step-1: Download CockroachDB(LINK)

Version **v23.1.2** ▾

Install CockroachDB on Windows

  Mac   Linux   ⊞ Windows

See Release Notes for what's new in the latest release, v23.1.2. To upgrade to this release from an older version, see Cluster Upgrade.

> **Tip:**
> To deploy a free CockroachDB Cloud cluster instead of running CockroachDB yourself, see the Quickstart.

Use one of the options below to install CockroachDB.

Download the executable

> **Warning:**
> The CockroachDB executable for Windows is experimental and not suitable for production deployments. Windows 8 or higher is required.

1. Use PowerShell to download the CockroachDB v23.1.2 archive for Windows ⧉ and copy the binary into your PATH:

Step-2: Unzip cockroachDB.zip file

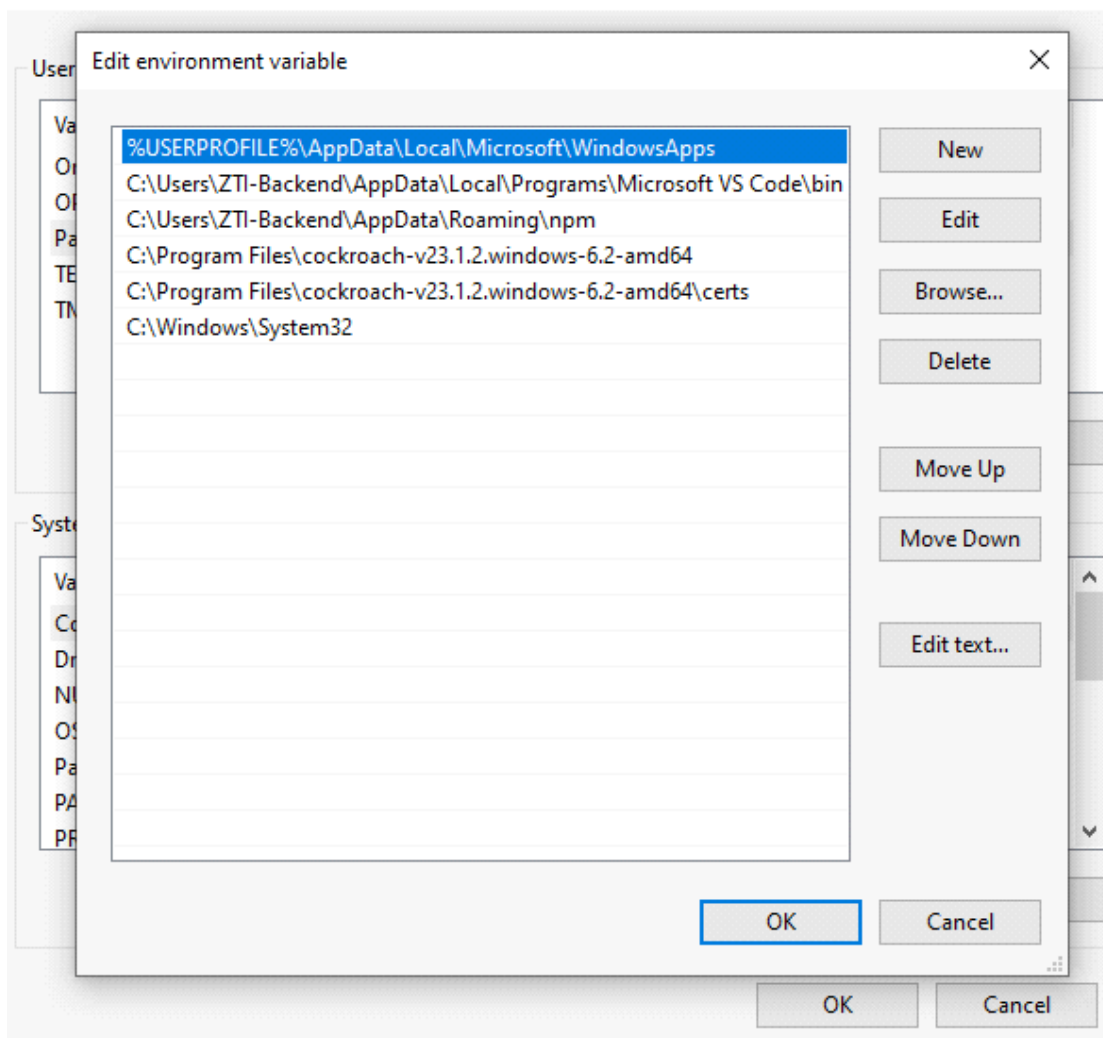## Step-3: Move cockroachDB folder to
       i. C:/Program Files/cockroachDB

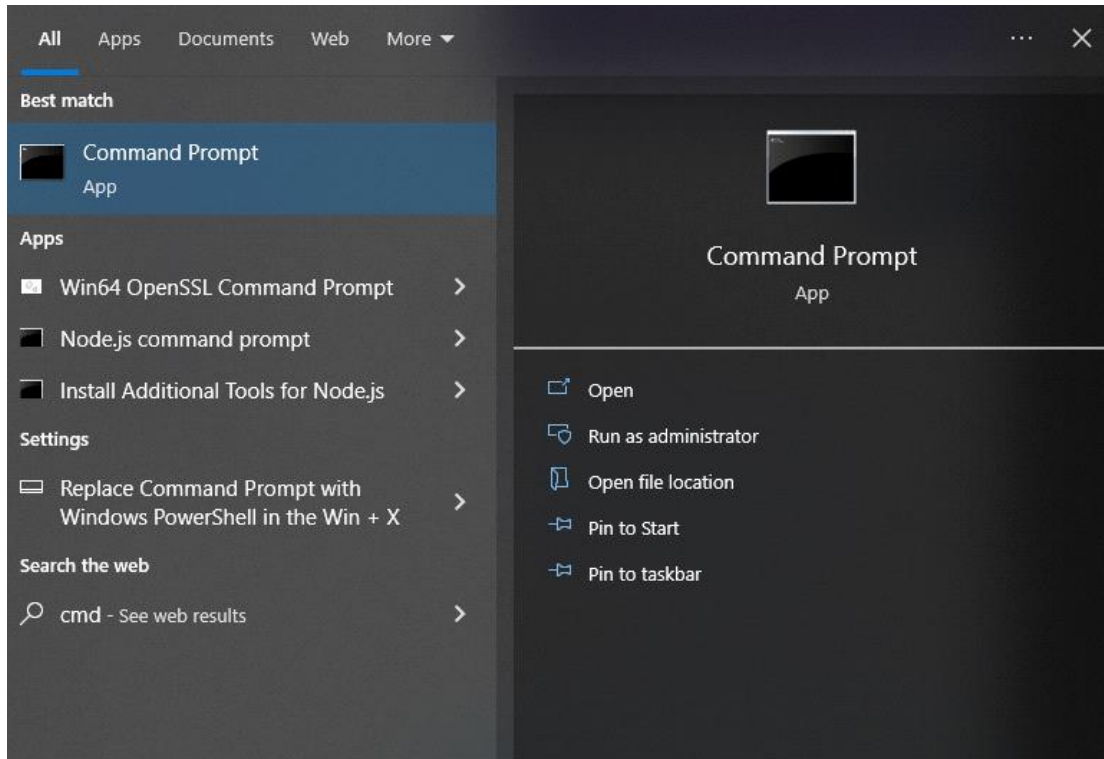## Step-4: Set this two below paths into **environment variable**
       i. C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64
      ii. C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64\certs

Step-5: Open **cmd** as run as Administrator

Step-6: Open below path in cmd

       i. C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64

Step-7: Run below commands in cmd(Link)

       i. mkdir certs my-safe-directory
      ii. cockroach cert create-ca --certs-dir=certs --ca-key=my-safe-directory/ca.key
     iii. cockroach cert create-node localhost $(hostname) --certs-dir=certs --ca-key=my-safe-directory/ca.key
     iv. cockroach cert create-client root --certs-dir=certs --ca-key=my-safe-directory/ca.key

Step-8: Download OpenSSL (Link)

Step-9: Move openSSL folder to

       i. C:\Program Files

Step-10: if openssl path automatically set in environement
            variables then no worry but if not then set like this
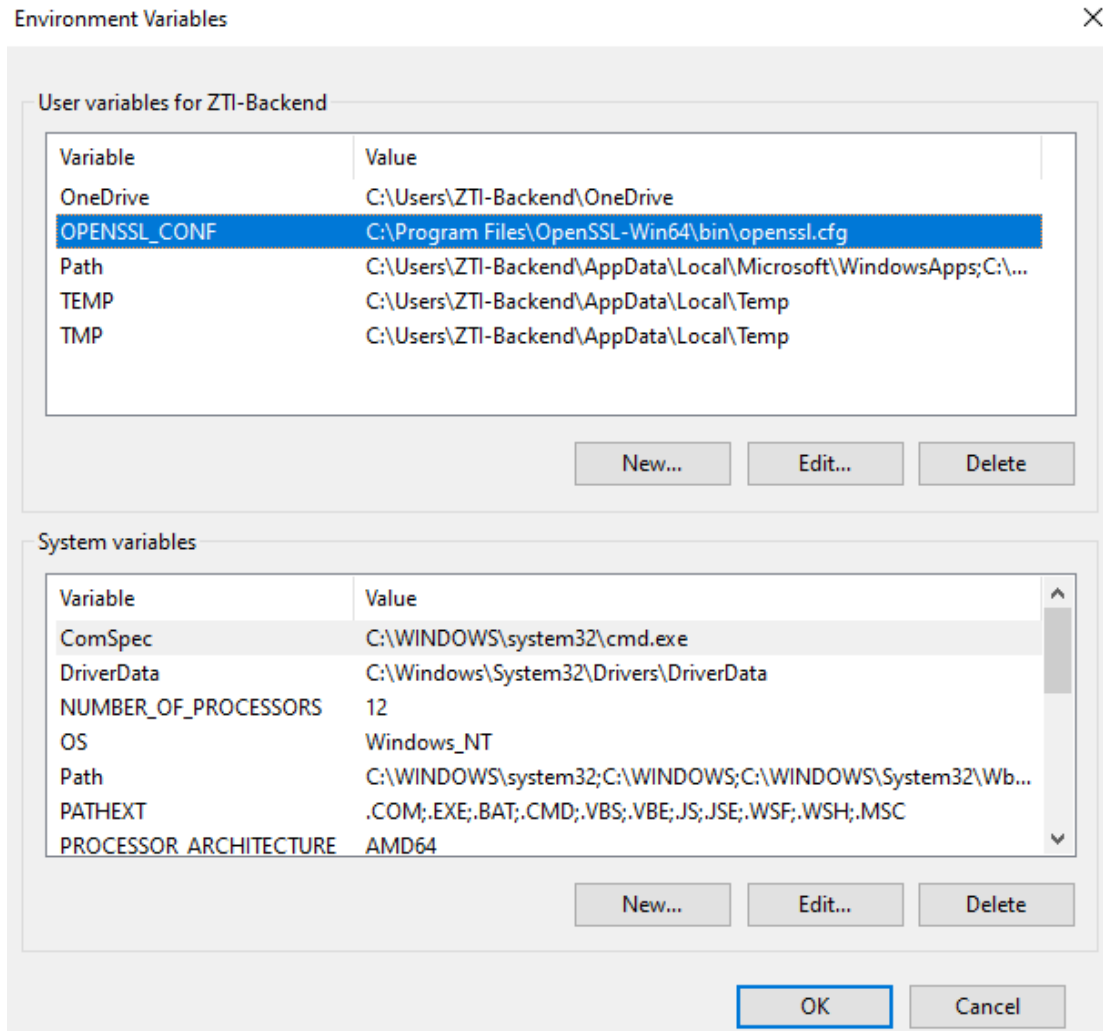
Step-11: Open openSSL folder to run oepnssl command

Name	Date modified	Type	Size
bin	29-05-2023 15:00	File folder	
exp	29-05-2023 15:00	File folder	
include	29-05-2023 15:01	File folder	
lib	29-05-2023 15:00	File folder	
tests	29-05-2023 15:01	File folder	
acknowledgements	14-03-2023 10:42	Text Document	1 KB
authors	14-03-2023 10:42	Text Document	2 KB
c_rehash	14-03-2023 10:42	Perl Source File	7 KB
changes	14-03-2023 10:42	Text Document	749 KB
faq	14-03-2023 10:42	Text Document	1 KB
libcrypto-3-x64.dll	14-03-2023 10:42	Application exten...	5,940 KB
libssl-3-x64.dll	14-03-2023 10:42	Application exten...	760 KB
license	14-03-2023 10:42	Text Document	11 KB
news	14-03-2023 10:42	Text Document	73 KB
readme	14-03-2023 10:42	Text Document	7 KB
start	14-03-2023 10:42	Windows Batch File	1 KB
unins000.dat	29-05-2023 15:01	DAT File	159 KB
unins000	29-05-2023 15:00	Application	714 KB

```
Win64 OpenSSL Command Prompt                                          —   □   ×

Win64 OpenSSL Command Prompt

OpenSSL 3.1.0 14 Mar 2023 (Library: OpenSSL 3.1.0 14 Mar 2023)
built on: Tue Mar 14 15:56:12 2023 UTC
platform: VC-WIN64A
options:  bn(64,64)
compiler: cl  /Z7 /Fdossl_static.pdb /Gs0 /GF /Gy /MD /W3 /wd4090 /nologo /O2 -DL_ENDIAN -DOPENSSL_PIC -D_USING_V110_SDK
71_ -D_WINSOCK_DEPRECATED_NO_WARNINGS -D_WIN32_WINNT=0x0502
OPENSSLDIR: "C:\Program Files\Common Files\SSL"
ENGINESDIR: "C:\Program Files\OpenSSL\lib\engines-3"
MODULESDIR: "C:\Program Files\OpenSSL\lib\ossl-modules"
Seeding source: os-specific
CPUINFO: OPENSSL_ia32cap=0x7ef8320b078bffff:0x40068c219c97a9

C:\Users\ZTI-Backend>
```

Step-12: Open certs folder inside cockroachdb
i. C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64\certs

```
Win64 OpenSSL Command Prompt                                    —    ☐    ✕
Win64 OpenSSL Command Prompt

OpenSSL 3.1.0 14 Mar 2023 (Library: OpenSSL 3.1.0 14 Mar 2023)
built on: Tue Mar 14 15:56:12 2023 UTC
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71_ -D_WINSOCK_DEPRECATED_NO_WARNINGS -D_WIN32_WINNT=0x0502
OPENSSLDIR: "C:\Program Files\Common Files\SSL"
ENGINESDIR: "C:\Program Files\OpenSSL\lib\engines-3"
MODULESDIR: "C:\Program Files\OpenSSL\lib\ossl-modules"
Seeding source: os-specific
CPUINFO: OPENSSL_ia32cap=0x7ef8320b078bffff:0x40068c219c97a9

C:\Users\ZTI-Backend>cd ..

C:\Users>cd ..

C:\>cd "Program Files"

C:\Program Files>cd cockroach-v23.1.2.windows-6.2-amd64

C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64>cd certs

C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64\certs>_
```

Step-13: Run this Command in cmd

i. openssl pkcs8 -topk8 -inform PEM -outform DER -in client.root.key -out client.root.pk8

Step-14: After run above command client.root.pk8 file generated like this
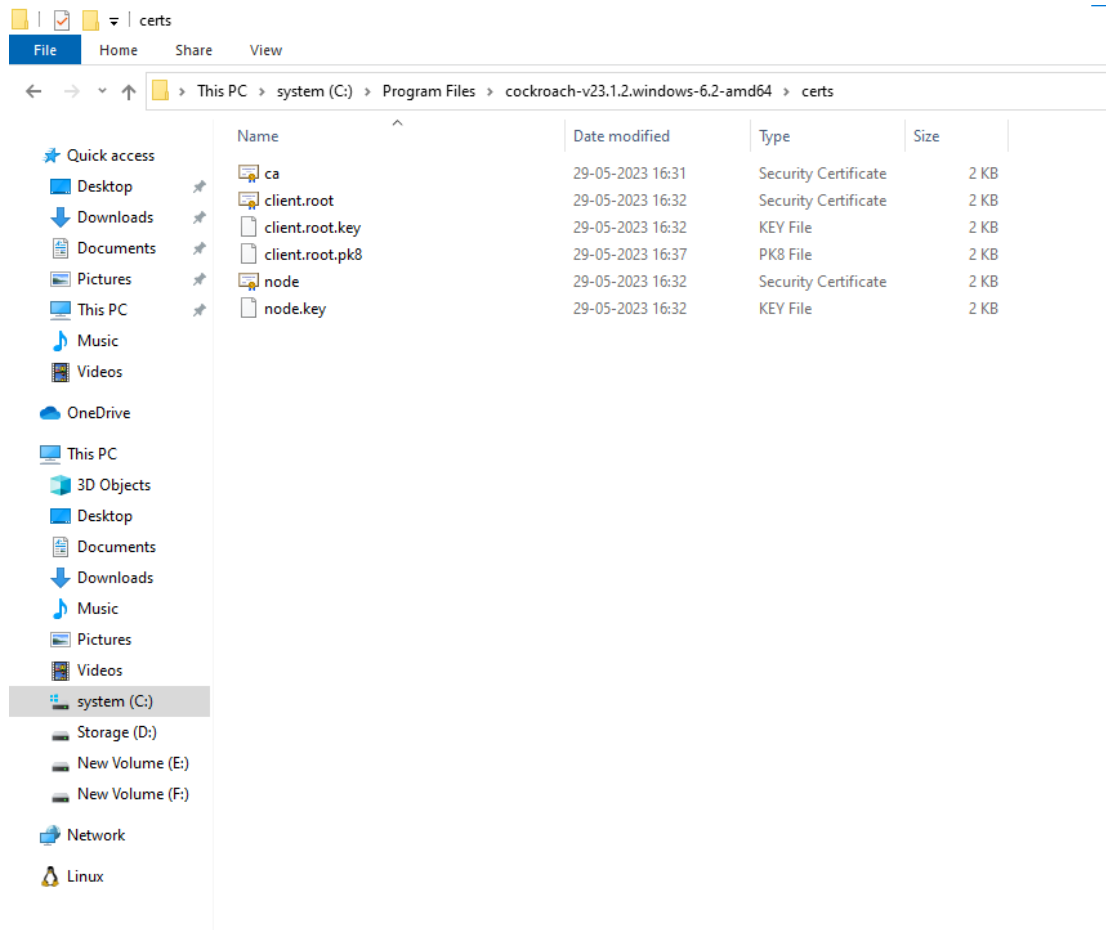
Step-15 Open cmd as administrator in below path and run commands
        Path: C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64
        Command: cockroach start-single-node --certs-dir=certs --listen
                -addr=localhost:26257 --http-addr=localhost:8080

Step-16: Open new cmd as administrator in below path and rum command

Path: C:\Program Files\cockroach-v23.1.2.windows-6.2-amd64

Command: cockroach sql --certs-dir=certs --host=localhost:26257

Step-17: Create user with password in above CMD

Command: CREATE USER (user name) WITH PASSWORD
('user Password');

Step-18: Command: show users;

Step-19: Provide Grant to db_admin
Command: GRANT admin to (user name);

Step-20 Create database

Command: create database (db name)

step-21:command: Show databases;

```
C:\Windows\System32\cmd.exe - cockroach  sql --certs-dir=certs --host=localhost:26257                    —   □   ✕

(3 rows)

Time: 3ms total (execution 3ms / network 0ms)

root@localhost:26257/defaultdb> show databases;
   database_name   | owner | primary_region | secondary_region | regions | survival_goal
-------------------+-------+----------------+------------------+---------+----------------
  defaultdb        | root  | NULL           | NULL             | {}      | NULL
  event_management | root  | NULL           | NULL             | {}      | NULL
  stock_portfolio  | root  | NULL           | NULL             | {}      | NULL
  system           | node  | NULL           | NULL             | {}      | NULL
(4 rows)

Time: 3ms total (execution 3ms / network 0ms)

root@localhost:26257/defaultdb> █
M-? toggle key help • C-d erase/stop • C-c clear/cancel • C-r search hist • M-. hide/show prompt
```