Xdagj Node 0.7.2 Run Document

System environment

> JDK : v17
>
> Maven : v3.9.1
>
> MySQL :Above v8.0

1. clone code

```
$ git clone https://github.com/XDagger/xdagj.git
```

- **Or go to the existing xdag folder and execute the following command to update the code:**

```
$ git pull
```

2. install and configure MySQL

```
1.Install MySQL
 //install MySQL
$ sudo apt install mysql-server
 //Log in to the MySQL database as the root user.
$ sudo mysql -u root
 //change Password
 mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY
'your_new_password';
 mysql> FLUSH PRIVILEGES;
 mysql> EXIT;

2.Create a database for saving transaction history.
 //Log in to MySQL as the root user, using the password you just set.
$ mysql -u root -p
 //Create a database named your_store_transaction_history_database_name
 mysql> CREATE DATABASE your_store_transaction_history_database_name;
 //Check if the database was created successfully.
 mysql> SHOW DATABASES;

3.Create a table
 //Find the mysql_create_table.sql script, under the "xdagj/script" path.
 //Select the database you just created
```

```
 mysql>USE your_store_transaction_history_database_name;
 //Create a table under this database, source [mysql_create_table.sql file path].
 mysql> source absolute_path_of_your mysql_create_table.sql script;
 //For example: mysql>source /home/ubuntu/xdagj/script/mysql_create_table.sql;
```

- **If you have already configured MySQL and have run nodes before, please ignore the above steps and perform the following steps:**

```
1. Login to MySQL
$ mysql -u root -p

2. Back up previous versions of transaction history
// Select the database where you previously stored transaction history
mysql> USE your_store_transaction_history_database_name;
// Back up previous versions of transaction history data
mysql> RENAME TABLE t_transaction_history TO transaction_history_v_0_7_1;

3. Re-create an empty t_transaction_history table
// Find the mysql_create_table.sql script, under the "xdagj/script" path.
// Select the database where you previously stored transaction history, and create
a new table
mysql> USE your_store_transaction_history_database_name;
// Create table t_transaction_history under this database, source
[mysql_create_table.sql file path].
// For example:
mysql> source /home/ubuntu/xdagj/script/mysql_create_table.sql;
// Check whether the table is created successfully
mysql> SHOW TABLES;
```

3. execute mvn

```
$ cd xdagj
$ mvn clean package -Dmaven.test.skip=true
```

//After the code is compiled successfully, a new **xdagj-0.7.2-shaded.jar** will be generated under **xdagj/target/**

4. create run folder

```
$ mkdir run

// Copy "xdag-mainnet.conf", "xdag.sh" and "xdagj-0.7.2-shaded.jar",
"druid.properties", "rpc_modules.conf" to run.

// Modify the configuration file as required（druid.properties , xdag-mainnet.conf
, xdag.sh）.

Modifications in druid.properties
    1.Modify the url in the druid.properties file to
```

```
jdbc:mysql://localhost:3306/your_store_transaction_history_database_name?
autoReconnect=true&useUnicode=true&characterEncoding=utf-8&&serverTimezone=UTC.

    2.The user name is root, and the password is the password (your_new_password)
set in the mysql configuration before.

Modifications in xdag-mainnet.conf
    1.The "fund.address" in xdag-mainnet.conf: please change to this address:
4duPWMbYUgAifVYkKDCWxLvRRkSByf5gb  Note: You must use the new address, otherwise
miner rewards cannot be distributed.
    2.The "node.generate.block.enable" in xdag-mainnet.conf: if you are a mining
node, node.generate.block.enable = true, if you are an exchange,
node.generate.block.enable = false.
    3.The "Randomx Config" in xdag-mainnet.conf: Please set randomx.flags.fullmem =
false
    4."fund.ration" and "node.ration" are the block node reward ratio and the
foundation reward ratio respectively.
    5."node.reject.transaction.address" is the address you want to deny service to.
    6."pool.whiteIPs" is the pool whitelist. If pool.whiteIPs=["0.0.0.0"], it means
the pool whitelist is open, and any pool can access the node. Or specify some
specific IPs to connect to the node.

Modification in xdag.sh
    1.The "XDAG_VERSION" in xdag.sh: Modify the version number
XDAG_VERSION="0.7.2".
```

If you have already completed the above steps, please ignore the above steps and perform the following steps:

```
1. Copy xdagj-0.7.2-shaded.jar to the run folder
2. The "XDAG_VERSION" in xdag.sh: Modify the version number
   XDAG_VERSION="0.7.2".
3. Modifications in xdag-mainnet.conf. Please set randomx.flags.fullmem = false
(Because we have separated nodes and mining pools, nodes do not require large
memory)
4. Run xdag.sh --version and make sure the result is 0.7.2
   For example:
   $xdag.sh --version // return: 0.7.2
5. Please ask the community if node.whiteIPs needs to be updated, added or deleted.
```

5. make snapshot (developer node steps, please ignore if not)

```
// If you use an existing snapshot file, please ignore this step.

// Please make sure to update file "xdagj-0.7.2-shaded.jar" before performing this
step.

$ sh xdag.sh --makesnapshot convertxamount

// Snapshot file "SNAPSHOT" will be generated in directory mainnet/rocksdb/xdagdb
```

6. import SNAPSHOT file

```
// The download address of the SNAPSHOT: https://storage.xdagpool.com/

// Unzip the compressed package to get a SNAPSHOT folder

// Delete files other than SNAPSHOT files in the rocksdb/xdagdb directory.

// Copy the new unzipped SNAPSHOT file to the mainnet/rocksdb/xdagdb
directory in the root directory, overwriting the original SNAPSHOT folder
```

7. verify version

```
$ sh xdag.sh --version

// return: 0.7.2
```

8. start xdagj

```
// Note: The node wallet address and the pool wallet address cannot be the same,
otherwise the rewards will not be issued.

$ cd run/

$ sh xdag.sh --enablesnapshot true [Snapshot Height] [Timestamp]
//For example:$ sh xdag.sh --enablesnapshot true 2993553 197d6290000 (Please ask
the community for the actual startup command)
```

Notice: If any exception occurs during the startup of the snapshot. Please remove the loaded data in the t_transaction_history table in the mysql database. Make sure the data in t_transaction_history is empty when restarting the snapshot. Delete files other than SNAPSHOT files in the rocksdb/xdagdb directory.

9. Verify MySQL data

```
// Verify whether the data is successfully written to MySQL
// Login to MySQL
$ mysql -u root -p
mysql> USE you_database_name;
mysql> SELECT COUNT(*) FROM t_transaction_history;
// If the data amount is greater than 0, it means that it has been successfully
written to MySQL.
```

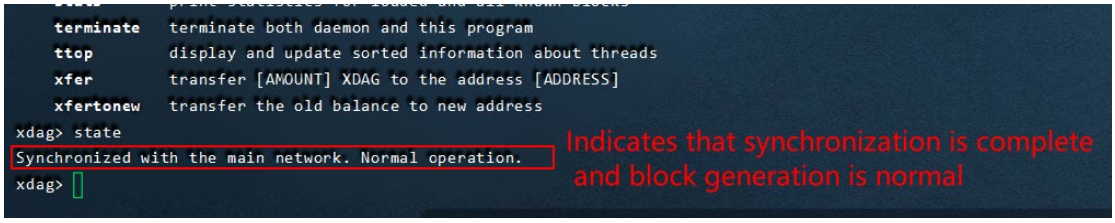
This is an example of a successful node startup result (please ask the community for the actual snapshot startup command)

```
ubuntu@          :~/xdagj_develop_node/run$ sh xdag.sh --enablesnapshot true 2993553 197d6290000
xdag.sh: 3: ulimit: error setting limit (Operation not permitted)
enable snapshot:true
Please Enter Wallet Password:
init snapshot...
amount in address: 611155412.801972776
amount in blocks: 626200043.198033001
init snapshotJ done
time: 914847ms
Our balance: 128.000000000
All amount: 1237355456.000005777
telnetd is running on 127.0.0.1:6001
May 23, 2024 8:44:11 AM org.jline.builtins.telnet.PortListener run
INFO: Listening to Port 6,001 with a connectivity queue size of 10.
May 23, 2024 8:45:56 AM org.jline.builtins.telnet.ConnectionManager makeConnection
INFO: connection #1 made.
```

You can check the node status by using the **telnet 127.0.0.1** command and entering the telnet password (the password is **admin.telnet.password** in **xdag-mainnet.conf**)

```
ubuntu@10-35-118-64:~$ telnet 127.0.0.1 6001
Trying 127.0.0.1...
Connected to 127.0.0.1.
Escape character is '^]'.
Enter Admin password>***
xdag> mainblocks
-------------------------------------------------------------------------------------------------------------
height        address                              time                    state     mined by
-------------------------------------------------------------------------------------------------------------
03113022   xw9FxlRcA8XZujNS7nqTLuJ1cmUgg+BY   2024-06-13 02:47:27.999   Main      www1.xdag8.com
03113021   I0+ZOnbvLt2I8holCrGKu+u69+qqvIHe   2024-06-13 02:46:23.999   Main      equal.xdagminer.com
03113020   Y4dgO44cR8vIOrEd3fvq9H4zK4djDTdI   2024-06-13 02:45:19.999   Main      HTTPS://XDAG.ORG EQUAL
03113019   8jtK2PKYiyFou5tRMaAldAKpqqBZRAuW   2024-06-13 02:44:15.999   Main      www1.xdag8.com
03113018   sno1Ybat3hTtsewMasgCHdyguX0AXRYD   2024-06-13 02:43:11.999   Main      HTTPS://XDAG.ORG EQUAL
03113017   Khn15a/a2rbv1X6dMTjABjhJCSb1RUR1   2024-06-13 02:42:07.999   Main      HTTPS://XDAG.ORG EQUAL
03113016   hzDZb7y+g+20LuM1ssxoUSHPoqt8WRny   2024-06-13 02:41:03.999   Main      www1.xdag8.com
03113015   monnu7YtY55AtfNjD3PKkx0MfdbOwWUC   2024-06-13 02:39:59.999   Main      xdag.eu - node1
03113014   TudLPbsb+kEXmOgZPEItC6Df+zk5ohhd   2024-06-13 02:38:55.999   Main      HTTPS://XDAG.ORG EQUAL
03113013   RStkd5mwUfAwwmG2eExV1LlMmcr76Mio   2024-06-13 02:37:51.999   Main      www1.xdag8.com
03113012   wRQFb0/zAndy425dlLfYmjwDkf7BOHLy   2024-06-13 02:36:47.999   Main      equal.xdagminer.com
03113011   BlSiC2rcBPgAx3up5LLLJBXUpgFmBUPJ   2024-06-13 02:35:43.999   Main      equal.xdagminer.com
03113010   t/Rbho+QHS5e03cXNh/KWJ/IAmQrDgMl   2024-06-13 02:34:39.999   Main      www1.xdag8.com
03113009   xt+HlX1c4tXuO4va9CBtX3aSH4z8MujN   2024-06-13 02:33:35.999   Main      www1.xdag8.com
03113008   0Zrif0FjrDDQjld7JNMUaFcL8kiuMldD   2024-06-13 02:32:31.999   Main      HTTPS://XDAG.ORG SOLO
03113007   icpk/tJLxx4Z6gaSfTDBoYr648sX5ewx   2024-06-13 02:31:27.999   Main      HTTPS://XDAG.ORG EQUAL
03113006   B8q3Is8QvX00EfmSGAtHUGa+KF0AkptC   2024-06-13 02:30:23.999   Main      www1.xdag8.com
03113005   6tEXOu3cuQglOUpH1GuCraexzqPTn+03   2024-06-13 02:29:19.999   Main      www1.xdag8.com
03113004   By6nuX/fnt6xDLcZ9+iFQyO9ufWH6YkX   2024-06-13 02:28:15.999   Main      HTTPS://XDAG.ORG EQUAL
03113003   SD3qyWwSv3nIM/PjjHWeecV1xSgJU5kv   2024-06-13 02:27:11.999   Main      www1.xdag8.com
```

```
xdag> help
    account     print first [SIZE] (20 by default) our addresses with their amounts
    address     address-  print extended info for the account corresponding to the address, page size 100
    balance     print balance of the address [ADDRESS] or total balance for all our addresses
    block       print extended info for the block corresponding to the address or hash [A]
    exit        exit from app/script
    help        command help
    keygen      generate new private/public key pair and set it by default
    lastblocks  print latest [SIZE] (20 by default, max limit 100) main blocks
    mainblocks  print latest [SIZE] (20 by default, max limit 100) main blocks
    minedblocks print list of [SIZE] (20 by default) main blocks mined by current pool
    net         run transport layer command, try 'net --help'
    oldbalance  print max balance we can transfer
    pool        for pool, print list of recent connected pool
    state       print the program state
    stats       print statistics for loaded and all known blocks
    terminate   terminate both daemon and this program
    ttop        display and update sorted information about threads
    xfer        transfer [AMOUNT] XDAG to the address [ADDRESS]
    xfertonew   transfer the old balance to new address
```



At this point, your node has been successfully built and is synchronized with the mainnet. Good luck!