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大航海4.2.2.1(Epictetus)升级说明 GreatVoyage-v4.2.2.1(Epictetus) Upgrade Instructions

本次升级是强制升级, 请严格按照以下步骤执行:

This version is a Force upgrade version, please follow below steps:

如果你有主备节点设置, 请先参阅此[文件](#)。

Please refer to this [doc](#) if you have Main node / Backup node setup.

1. 关闭进程

Shut down the process.

a. 获取进程 pid

Obtain the process pid.

ps -ef | grep java

```
→ ~ ps -ef | grep java
501 53729 1 0 Fri04PM ?? 17:08.47 /Library/Java/JavaVirtualMachines/jdk1.8.0_161.jdk/Contents/Home/bin/java -XX:MaxPermSize=256m -XX:+HeapDumpOnOutOfMemoryError -Dcom.sun.management.jmxremote -Dcom.sun.management.jmxremote.port=9090 -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxremote.authenticate=false -jar FullNode.jar -c /Users/haqizhao/FullNode/main_net_config.conf
501 8309 1 0 24Aug18 ttys002 2875:01.78 /usr/bin/java -jar FullNode.jar -c /Users/haqizhao/FullNode/main_net_config.conf
501 63764 431 0 12:30PM ttys002 0:00.01 grep --color=auto --exclude-dir=.bzr --exclude-dir=CVS --exclude-dir=.git --exclude-dir=.hg --exclude-dir=.svn java
→ ~
```

b. 停止原先的节点进程

Stop the previous node process.

kill -15 \$pid

```
501 8309 1 0 24Aug18 ttys002 2875:01.78 /usr/bin/java -jar FullNode.jar -c /Users/haqizhao/FullNode/main_net_config.conf
501 63764 431 0 12:30PM ttys002 0:00.01 grep --color=auto --exclude-dir=.bzr --exclude-dir=CVS --exclude-dir=.git --exclude-dir=.hg --exclude-dir=.svn java
→ ~ kill -15 8309
→ ~ ps -ef | grep java
501 53729 1 0 Fri04PM ?? 17:09.13 /Library/Java/JavaVirtualMachines/jdk1.8.0_161.jdk/Contents/Home/bin/java -XX:MaxPermSize=256m -XX:+HeapDumpOnOutOfMemoryError -Dcom.sun.management.jmxremote -Dcom.sun.management.jmxremote.port=9090 -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxremote.authenticate=false -jar FullNode.jar -c /Users/haqizhao/FullNode/main_net_config.conf
501 63792 431 0 12:33PM ttys002 0:00.00 grep --color=auto --exclude-dir=.bzr --exclude-dir=CVS --exclude-dir=.git --exclude-dir=.hg --exclude-dir=.svn java
→ ~
```

Database backup : <https://developers.tron.network/docs/mainnet-backups>

2. 备份

Back up

a. 备份当前执行jar包

Back up the current jar package.

mv \$JAVA_TRON.jar \$JAVA_TRON.jar.`date "+%Y%m%d%H%M%S"`

```
→ FullNode ls
FullNode.jar java-tron logs main_net_config.conf output-directory start.log tmp
→ FullNode mv FullNode.jar FullNode.jar.`date "+%Y%m%d%H%M%S"`
→ FullNode ls
FullNode.jar.20180912114931 java-tron logs main_net_config.conf output-directory start.log tmp
→ FullNode
```

b. 备份当前数据库output-directory

Back up the current output-directory database.

tar cvzf output-directory.`date "+%Y%m%d%H%M%S"`.tgz output-directory

```
→ FullNode ls
FullNode.jar.20180912114931 java-tron logs main_net_config.conf output-directory start.log tmp
→ FullNode tar cvzf output-directory.`date "+%Y%m%d%H%M%S"`.tgz output-directory
→ FullNode ls
FullNode.jar.20180912114931 logs output-directory start.log
java-tron main_net_config.conf output-directory.20180912115112.tgz tmp
→ FullNode
```

c. 备份当前配置文件

Back up the current configuration file.

`mv $config.conf $config.conf.`date "+%Y%m%d%H%M%S"```

```
[→ FullNode ls
FullNode.jar.20180912114931      logs      output-directory      start.log
java-tron      main_net_config.conf      output-directory.20180912115112.tgz tmp
[→ FullNode mv main_net_config.conf main_net_config.conf.`date "+%Y%m%d%H%M%S"``
[→ FullNode ls
FullNode.jar.20180912114931      logs      output-directory      start.log
java-tron      main_net_config.conf.20180912120032 output-directory.20180912115112.tgz tmp
[→ FullNode
```

3. 准备新版本替换文件

Prepare the files of the new version for replacement.

a. 在其他文件位置下载最新代码或者jar包, 从页面

<https://github.com/tronprotocol/java-tron/releases> 下载 latest release 代码, zip 或者 tar.gz 任选其一即可, 解压压缩包。

Download the latest released code or jar packages from

<https://github.com/tronprotocol/java-tron/releases>.

Uncompress either the .zip or tar.gz package.

```
[→ temp java tron 3.1.8 ls
java-tron-Odyssey-v3.1.0.tar.gz
[→ temp java tron 3.1.8 tar xzvf java-tron-Odyssey-v3.1.0.tar.gz
```

b. 编译程序: 进入解压后的代码目录, 执行命令编译(如果是下载的jar包跳过此步, 使用下载的JAR需要校验jar文件的完整性, 详细步骤参看

<https://tronprotocol.github.io/documentation-zh/releases/>)

```
→ java-tron-Odyssey-v3.1.8 cd build/libs
→ libs ls
FullNode.jar      KeystoreFactory.jar SolidityNode.jar      java-tron-1.0.0.jar java-tron.jar
→ libs
```

`./gradlew clean build -x test`

Compile the program: enter the uncompressed code directory, execute the command to compile (skips this step if you choose to download the jar package, confirm the checksum of the downloaded jar file to ensure the file is not corrupted, detail step please refer to

<https://tronprotocol.github.io/documentation-en/releases/>)

`./gradlew clean build -x test`

```
→ temp java tron 3.1.8 ls
java-tron-Odyssey-v3.1.8      java-tron-Odyssey-v3.1.0.tar.gz
→ temp java tron 3.1.8 cd java-tron-Odyssey-v3.1.0
→ java-tron-Odyssey-v3.1.8 ./gradlew clean build -x test
```

注: Soliditynode不是必须的, fullnode已经支持soliditynode接口(除了

`gettransactionfromthis`

和`tothis`两个接口)。如果需要Soliditynode并且和fullnode运行在同一台机器, 需要修改Soliditynode配置文件里的rpc的端口为8093, 以免和fullnode冲突。如果fullnode和

soliditynode运行在不同机器,则需要soliditynode的配置文件中的trustnode改成你运行的fullnode的ip:port。

Note:Soliditynode is not a must, Fullnode already supports soliditynode interfaces except Gettransactionfromthis,gettransactiontothis. If soliditynode and fullnode are running on the same machine, you need to modify the port of rpc in the soliditynode configuration file to 8093 to avoid conflict with fullnode. If fullnode and soliditynode are running on different machines, you need to change the trustnode in the soliditynode configuration file to the ip:port of the fullnode you are running.

4. 替换旧文件

Replace the old files.

- a. 将编译后生成的最新版本jar包(或者下载的jar包)复制到原先的节点位置,编译完成的执行文件在目录 build/libs 中,将编译好的程序拷贝到工作目录替换旧程序的执行文件(FullNode 对应 FullNode.jar, SolidityNode 对应 SolidityNode.jar)

Copy the newest compiled jar package (or downloaded jar package) to the original location of the node. The compiled executable files are in the build/libs directory. (FullNode.jar for FullNode, and SolidityNode.jar for SolidityNode).

- b. 用最新的配置文件覆盖旧的配置文件,如需添加keystore file、私钥等修改请自行添加。
Please use the latest configuration files to replace the previous ones. If you need to add the keystore file or private key, or make other changes, please do so yourself.

5. 启动节点

Start the nodes

- a. Witness:

```
nohup java -Xmx24g -XX:+UseConcMarkSweepGC -jar FullNode.jar -p  
private key --witness -c main_net_config.conf </dev/null &>/dev/null &
```

(p.s. 如果是用keystore file方式或者,在配置文件中配置私钥或者keystore file方式,请按照原先的方式对应选择keystore file或者修改配置文件)

(If you use any of the following approaches: using keystore file in command line, setting up private key in the configuration files, or using keystore file in the configuration files; please use the previous approach to choose keystore file accordingly or modify the configuration files)

FullNode:

```
nohup java -Xmx24g -XX:+UseConcMarkSweepGC -jar FullNode.jar -c  
main_net_config.conf </dev/null &>/dev/null &
```

- b. 等待同步完成。

Wait for syncing completion.

6. 升级完成。

Upgrade completed.

7. 等待全网升级完成。

Wait for the upgrade completion of the entire network.

Full Node, Solidity Node, Witness Node都来一遍

Repeat the process with Full Node, Solidity Node, and Witness Node.

此后请自行升级小版本。

Please update minor versions going forward.

至此, 请帮忙完善文档。

Please help update the doc as needed.

谢谢

Thanks.