EthUpdater Manual

ethUpdater is an easy Ethereum installation tool for the Linux platform.

This tool will download the latest source code of go-ethereum, solidity, and epirus project, which then compiles the code and install them in the current directory.

You only have to install the prerequisite libraries for compiling Ethereum and add the installation path to your PATH environment variables.

If you are using the Blockchain Demo Environment

ethUpdater is a built-in tool in Blockchain Demo Environment. To update the built-in Ethereum, please command:

cd /home/blkdemo/ethereum/

and

ethUpdate

```
~: ethUpdate — Konsole
         Rediaér
                                 Bogmærker
                                                         Indstillinger
                         Vis
                                                                                Hjælp
blkdemo@BLKDEMO-DK:~> ethUpdate
                     % Received % Xferd
                                                      Average Speed
                                                                                                                        Current
                                                      Dload Upload
                                                                                 Total
                                                                                                              Left Speed
                                                                                               Spent
                 100
                           126
--2021-02-19 12:04:52-- https://github.com/ethereum/go-ethereum/archive/v1.9.25.zip
Løser github.com (github.com)... 140.82.121.3
Tilslutter github.com (github.com)|140.82.121.3|:443... forbundet.
HTTP forespørgsel sendt, afventer svar... 302 Found
Sted: https://codeload.github.com/ethereum/go-ethereum/zip/v1.9.25 [omdirigeret]
--2021-02-19 12:04:53-- https://codeload.github.com/ethereum/go-ethereum/zip/v1.9.25
Løser codeload.github.com (codeload.github.com)... 140.82.121.9
Tilslutter codeload.github.com (codeload.github.com)|140.82.121.9|:443... forbundet.
HTTP foresporgsel sendt, afventer svar...
Længde: uspecificeret [application/zip]
Gemmer til: 'v1.9.25.zip'
v1.9.25.zip
                                                                                                                                               4,47M 7,04MB/s
```

If you liked to install Ethereum using this tool

Although ethUpdater can determine and download the latest version of Ethereum and its toolset, it cannot determine whether your Linux system is installed with the required packages, since the package naming scheme varies from distro to distro.

- Determine your Linux Distro and Prepare the environment.

We provided a list of required packages to install before running ethUpdate (See the following table). If you are not able to determine the Linux distro that you are using or having trouble locating specific packages, please contact me at: weich@dtu.dk

| Package Name | In Debian-based / Ubuntu-based Repo. | In RHEL-based / Fedora-based Repo. | In Novell-based / SUSE-based Repo. |
|------------------|---|---------------------------------------|---------------------------------------|
| Go compiler | golang | | |
| GNU C compiler | gcc | | |
| GNU C++ compiler | g++ | gcc-c++ | |
| OpenJDK 8 | openjdk-8-jdk | java-1.8.0-openjdk | |
| make | make | | |

If you installed the above package correctly, you can proceed to the next step.

- Create the installation directory.

To keep the maintenance both as easy and as simple as possible, the tool will install the Ethereum Client and its toolset into the directory where ethUpdater located.

- Download and run ethUpdater

We provided a compiled executable for x86-64 Linux Platforms: https://github.com/tlchiu40209/ethCreateChain/blob/master/createChainV4-linux

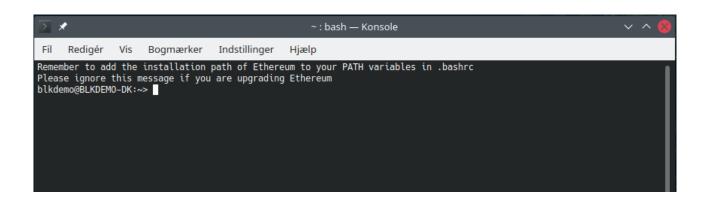
If you are using a computing platform rather than x86-64, you can download the source code and compile the code yourself.

https://github.com/tlchiu40209/ethCreateChain/blob/master/createChainV4-linux.cpp

The program relies on standard C++ and Linux Library, no additional package is required. You can compile the code by:

g++ ./createChainV4-linux.cpp

You can simply create a directory and place ethUpdater into the directory and run it. If you see this message, it means the program has finished the installation process.



```
ethereum: bash - Konsole
      Redigér
                 Vis
                                       Indstillinger
                       Bogmærker
                                                      Hjælp
blkdemo@BLKDEMO-DK:~/ethereum> ls -l
totalt 340812
-rwxr-xr-x 1 blkdemo users 25164536 17 feb 16:18 abidump
-rwxr-xr-x
            1 blkdemo users 27745336 17 feb 16:19
-rwxr-xr-x 1 blkdemo users 26958560 17 feb 16:19
-rwxr-xr-x 1 blkdemo users 27518456
                                        17 feb 16:19
              blkdemo users 38876240 17 feb 16:21 clef
-rwxr-xr-x
                                         17 feb 16:22 devp2p
              blkdemo users 24269288
-rwxr-xr-x
                                        17 feb 16:23 epirus -> ./epirus-cli/bin/epirus
lrwxrwxrwx 1
              blkdemo users
                                     23
                                            feb 12:20 epirus-cli
              blkdemo users
drwxr-xr-x
              blkdemo users 27176472 17 feb 16:22
-rwxr-xr-x
                                         17 feb 16:15 ethUpdate
                                  43008
-rwxrwxr-x
              blkdemo users
              blkdemo users 27648080
                                        17 feb 16:22
-rwxr-xr-x
              blkdemo users 31027048
                                         17 feb 16:22
-rwxr-xr-x 1
                                        17 feb 16:22
              blkdemo users 38661656
-rwxr-xr-x 1
-rwxr-xr-x 1 blkdemo users 24273512 17 feb 16:22
-rwxr-xr-x 1 blkdemo users 15703768 17 feb 16:23 puppeth
-rwxr-xr-x 1 blkdemo users 2377994 17 feb 16:23 rlpdump
-rwxrwxr-x 1 blkdemo users 11514424 27 jan 15:05 solc
blkdemo@BLKDEMO-DK:~/ethereum>
```

- Setup the PATH variable

For one time trail, you may command:

```
export PATH = path-to-eth-directory:$PATH
```

If you want to have a permanent change to the PATH variable, consider adding the command into your .bashrc file.

If you liked to upgrade Ethereum installed by this tool

Please note: The tool can only upgrade the installation performed by this tool. If you manually installed Ethereum by other method, we suggest not to use this tool to upgrade your current Ethereum installation.

To upgrade your Ethereum installation, please command ethUpdate command again.