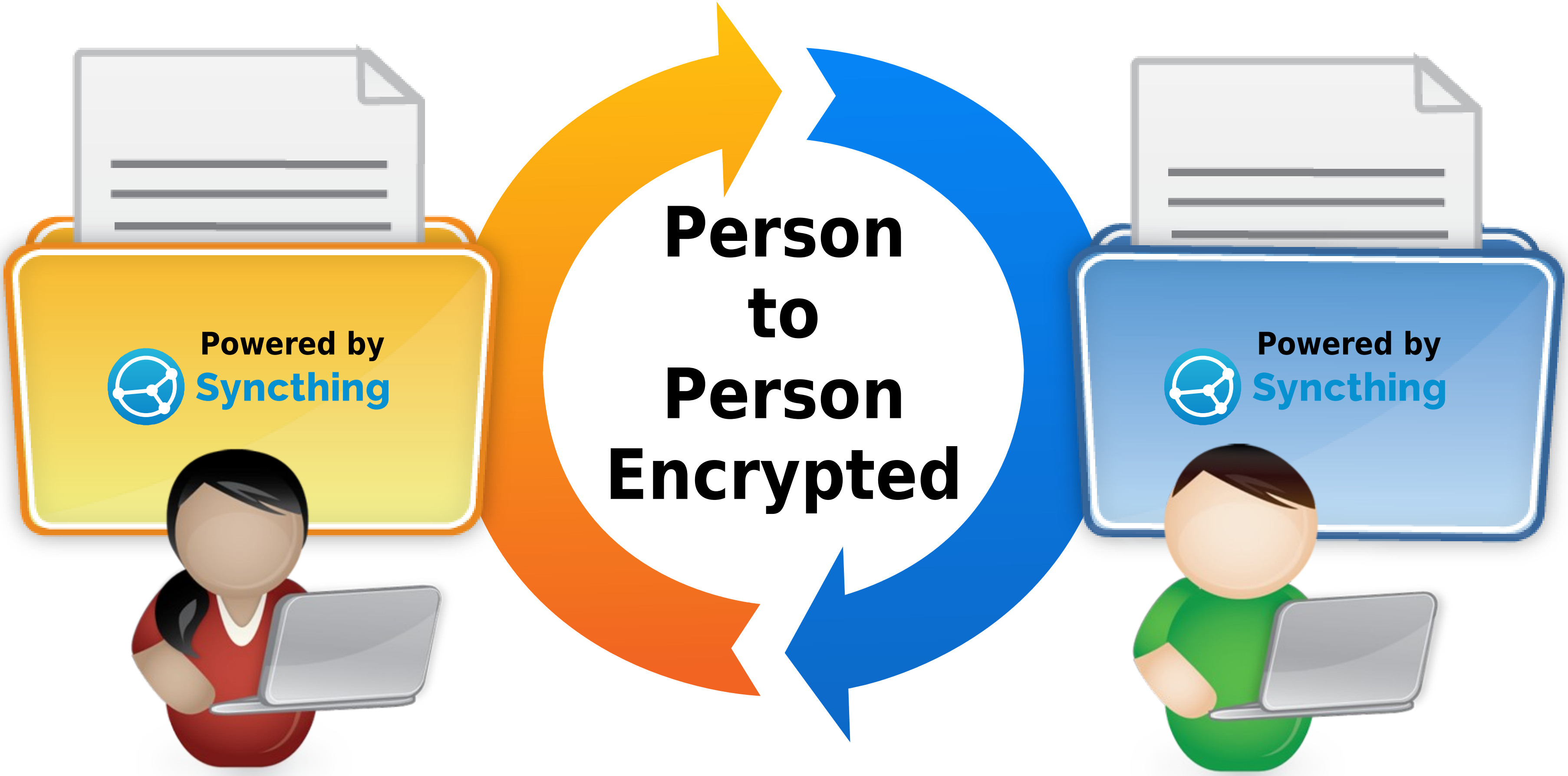
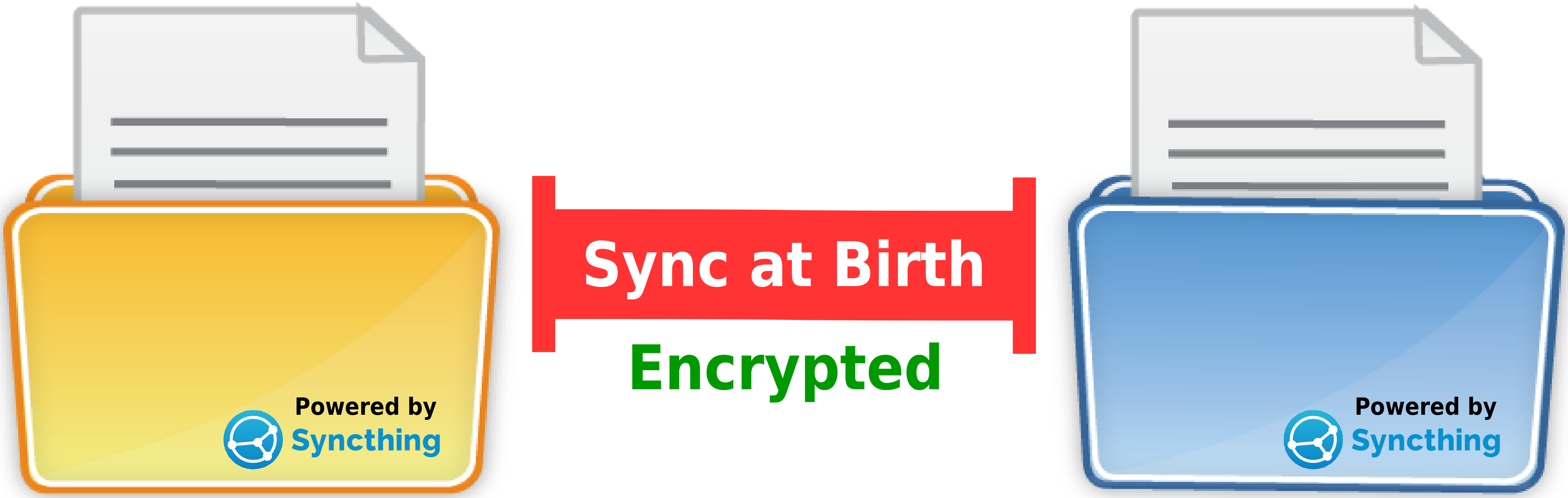
WebeLive P2P TwinFolder



Person to Person Encrypted

Create 2 Entangled Folders, Move Then Anywhere

Create Twin Entangled Folders,
Move Then Apart Anywhere On The Internet
(or anywhere on the local network)

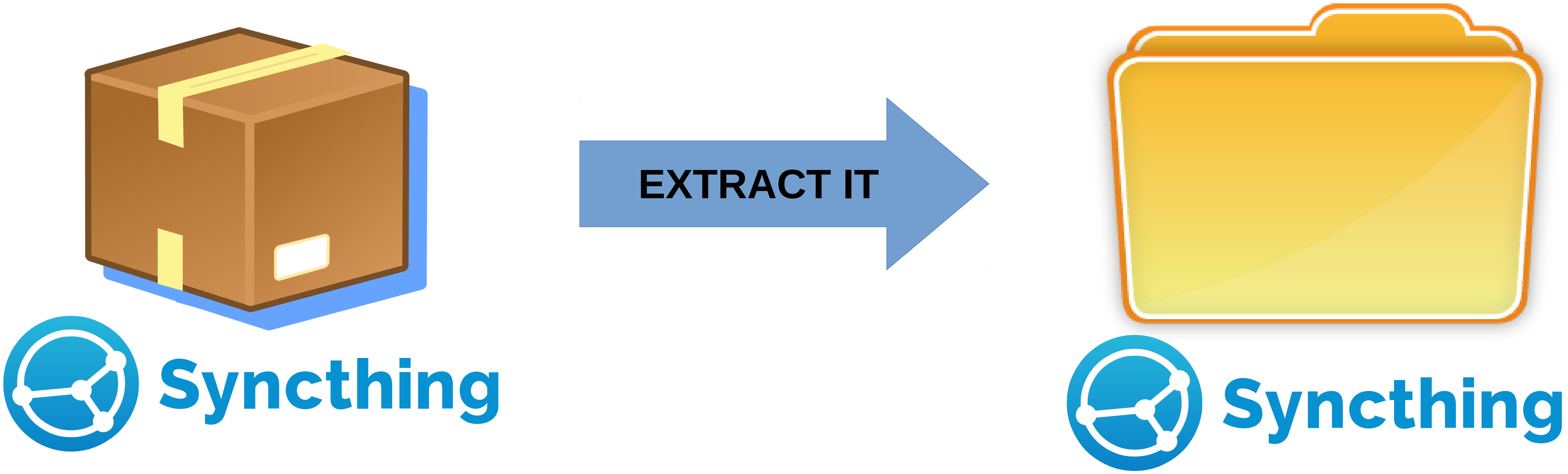


Sync at Birth

Encrypted

Just Run Both Sides And Use!

Download the Syncthing Binary Pack from Syncthing Site
[`https://syncthing.net`]
for the platforms where you want to build(create)
(PC x86, Raspberry(ARM), etc)



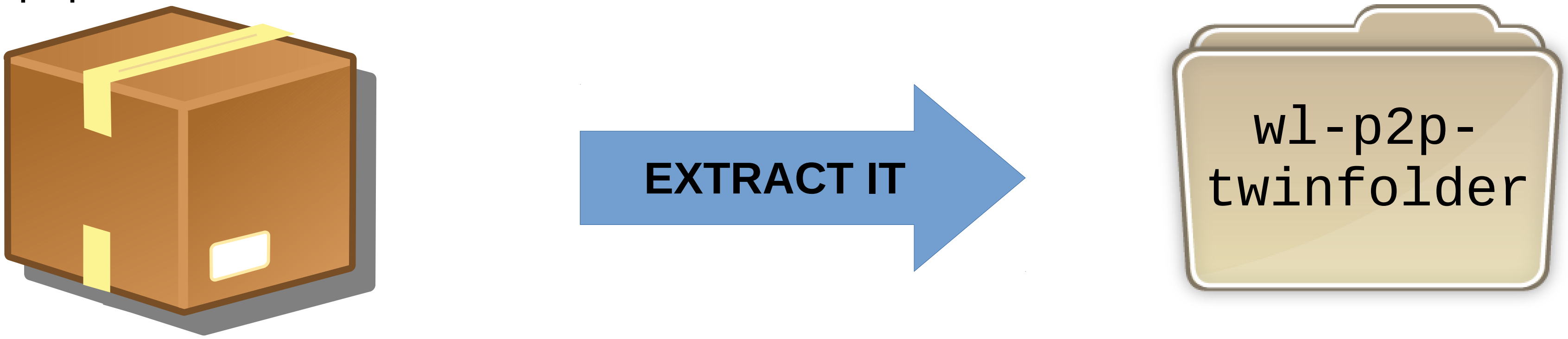
STEP 1.0

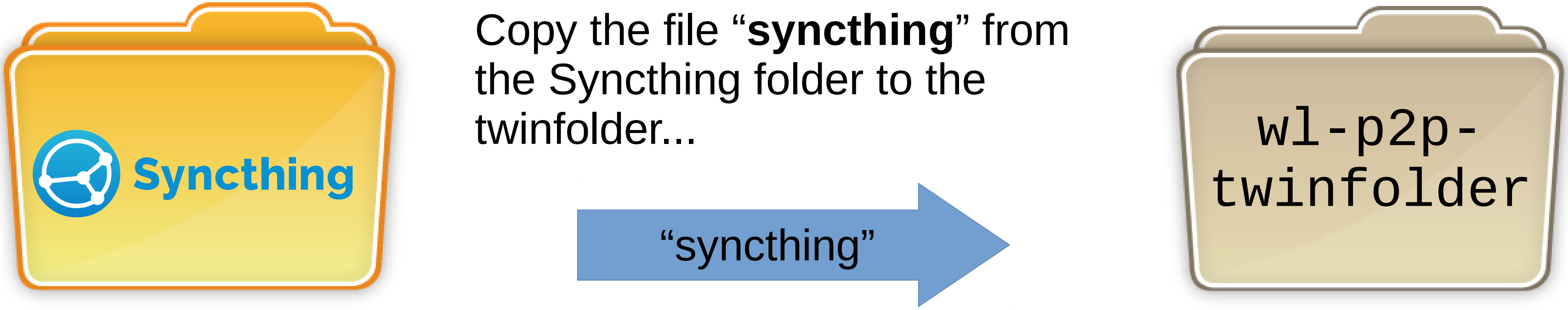
Download WL-P2P-TWINFOLDER (in zip format)

[https://github.com/t2age/wl-p2p-twinfolder]

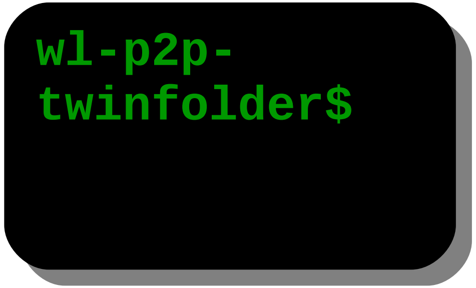
STEP 1.1

wl-p2p-twinfolder.ZIP





Copy the file “**syncthing**” from the Syncthing folder to the twinfolder...



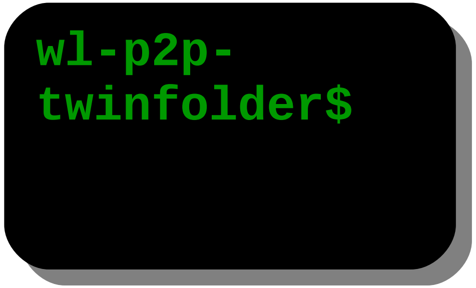
```
wl-p2p-
twinfolder$
```

Enter the twinfolder with a terminal shell. **STEP 2.1**

Run script:

```
    ./createTwinConfigs.sh
```

STEP 2.2

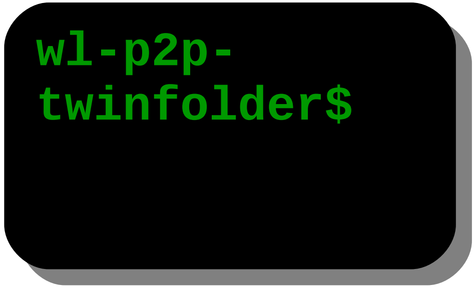


```
wl-p2p-
twinfolder$
```

Run:

```
    python  addDevice-UNO.py
```

STEP 2.2

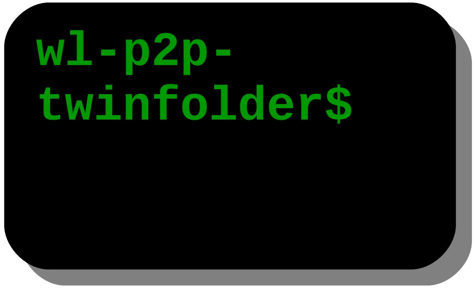


```
wl-p2p-
twinfolder$
```

Run:

```
    python  addDevice-DUO.py
```

STEP 2.3

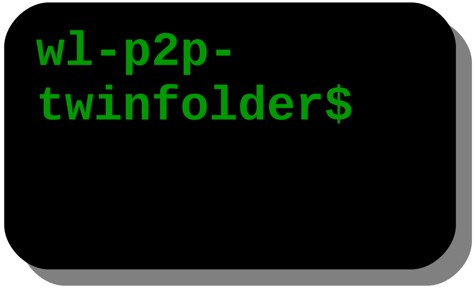


```
wl-p2p-
twinfolder$
```

Run:

```
    python  addFolder-UNO.py
```

STEP 2.4



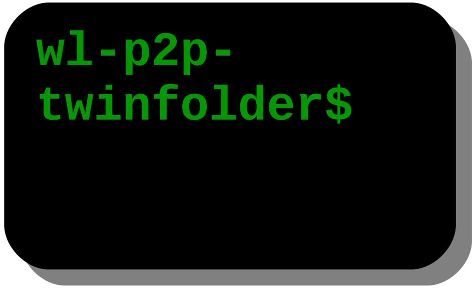
```
wl-p2p-
twinfolder$
```

Run script:

```
    ./buildTwinFolders.sh
```

STEP 2.5

This step create a new folder called “build”...
The twins will be inside this folder...

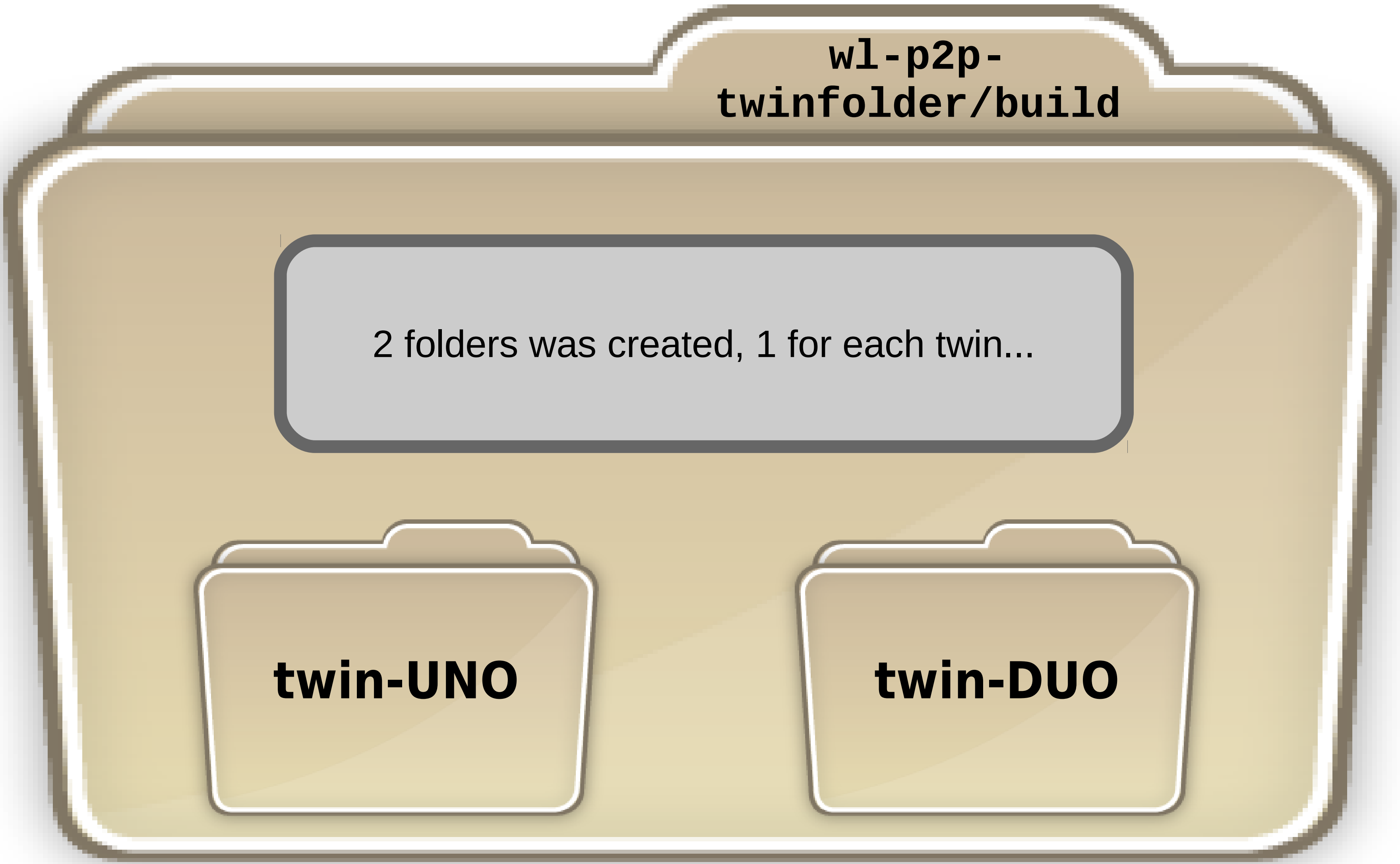


```
wl-p2p-
twinfolder$
```

To build again (if you want):

```
    ./cleanTwinConfigs.sh
    ./cleanBuild.sh
```

STEP X.0



wl-p2p-twinfolder/build

2 folders was created, 1 for each twin...

twin-UNO

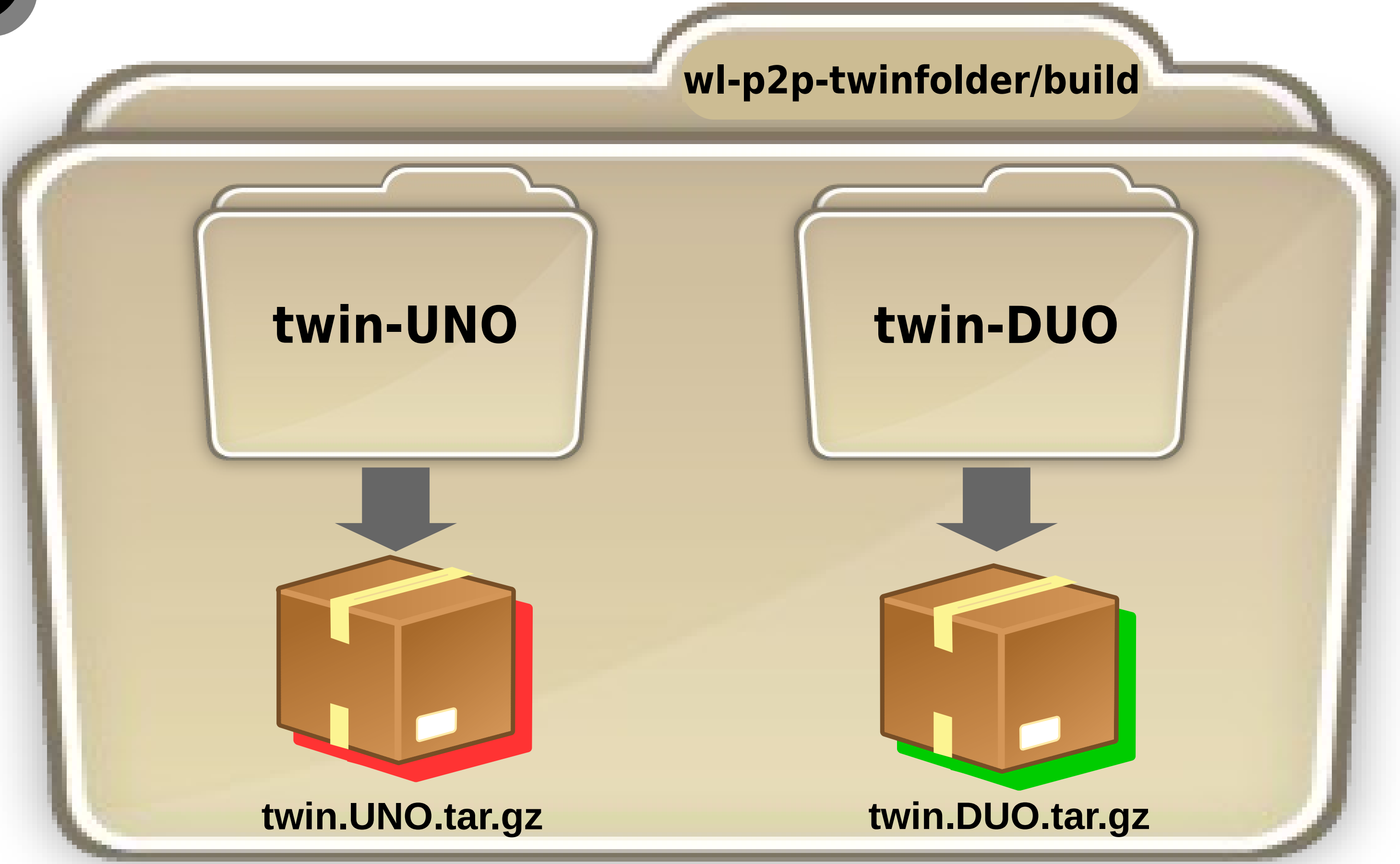
twin-DUO

```
wl-p2p-
twinfolder$
```

Run script:

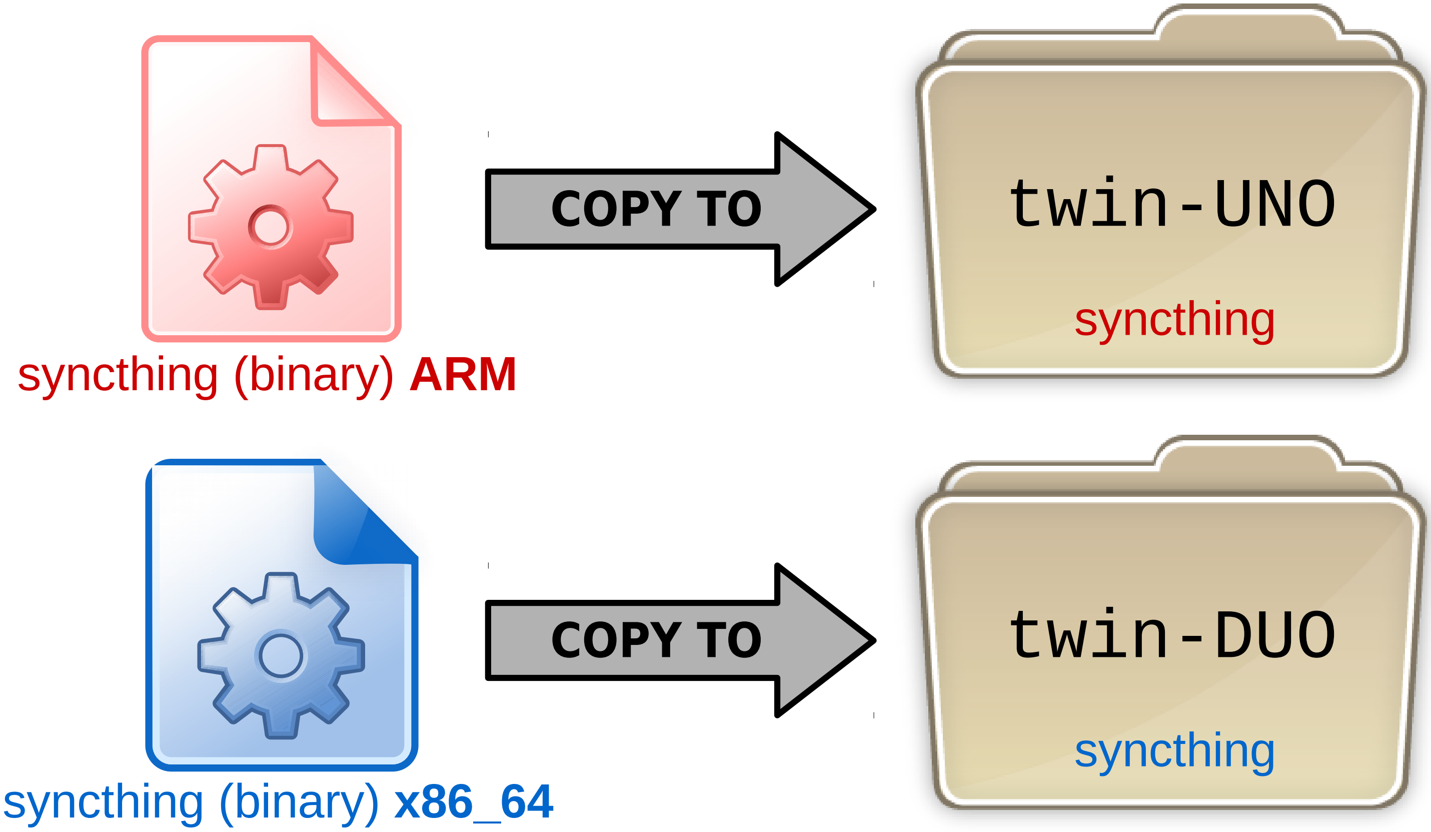
```
./compressTwinFolders.sh
```

STEP 3.0



****If you plan to use between different platforms (PC x86, ARM SBCs, etc)
YOU need to download the “syncthing” Binary
specific for the platforms that you want to run (to use the twins)
(Example: PC x86, Raspberry(ARM), ARM64, etc)**

STEP 3.1 **



syncthing (binary) **ARM**

COPY TO

twin-UNO

syncthing

syncthing (binary) **x86_64**

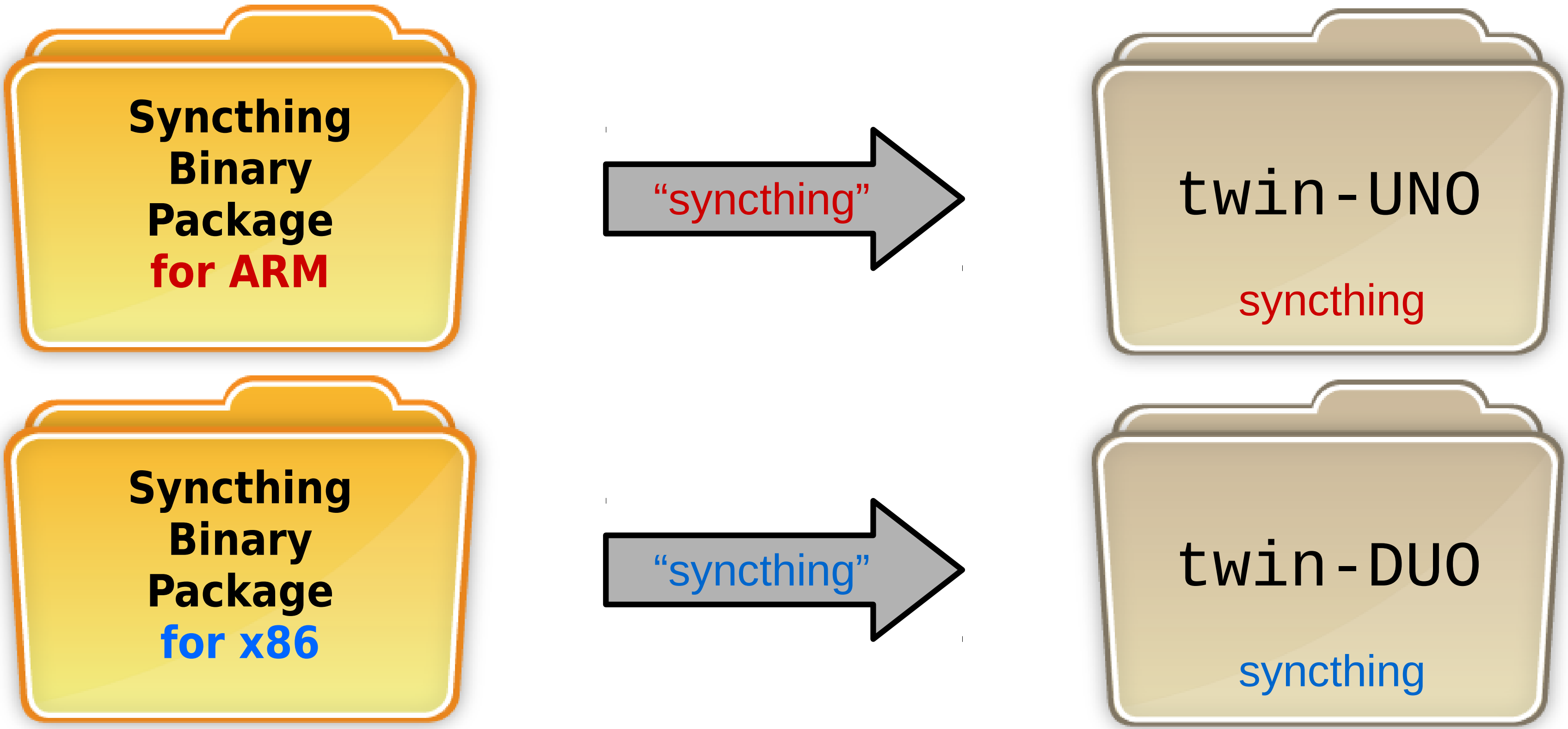
COPY TO

twin-DUO

syncthing

**After extracting, inside the Syncthing Binary Pack Folder you can find the "syncthing" binary executable file...
Copy it (just this file) to the desired twin-XXX Folder...**

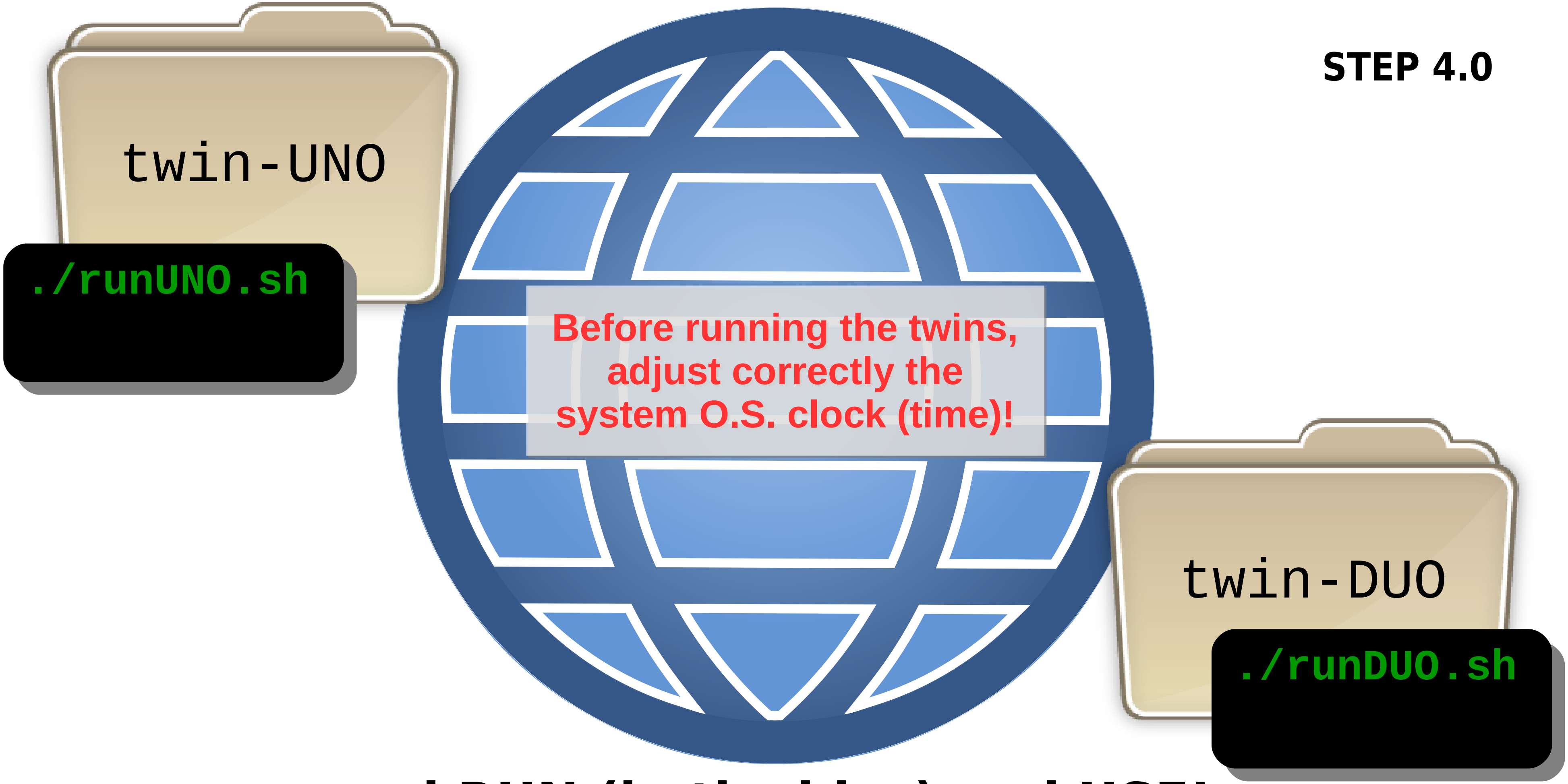
STEP 3.1 **


Syncthing Binary Package for ARM
"syncthing"
twin-UNO
syncthing
Syncthing Binary Package for x86
"syncthing"
twin-DUO
syncthing

If you downloaded different versions, the go back and COMPRESS again!

Move Them Apart, Extract (on Internet or Network)

STEP 4.0



```
./runUNO.sh
```

Before running the twins, adjust correctly the system O.S. clock (time)!

```
./runDUO.sh
```

and RUN (both sides) and USE!

twin-UNO/TwinFolder is the folder used to share...

STEP 4.1

/home/user/TwinFolder

USERHOMEFOLDER/TwinFolder is the folder used to share...

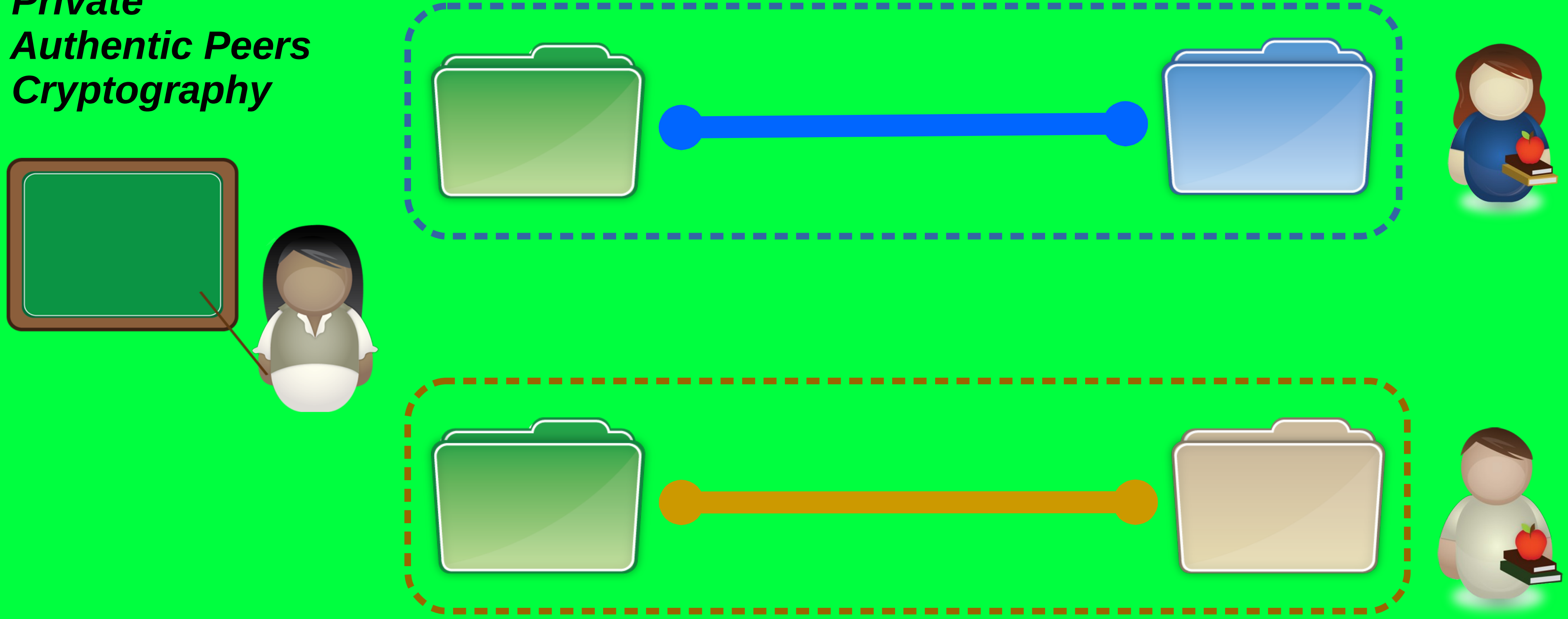
About Firewall Ports:

Syncthing docs instructs to open port **22000/tcp** for data exchange and port **21027/udp** for local discovery, both inbound and outbound

[https://docs.syncthing.net/users/firewall.html]

Example of use:
Business can create and distribute twin-folders to customers, so that, when there is a need to exchange a private information, both sides can use the TwinFolder to communicate with each other...

- ***P2P***
- ***Easy to use***
- ***Private***
- ***Authentic Peers***
- ***Cryptography***

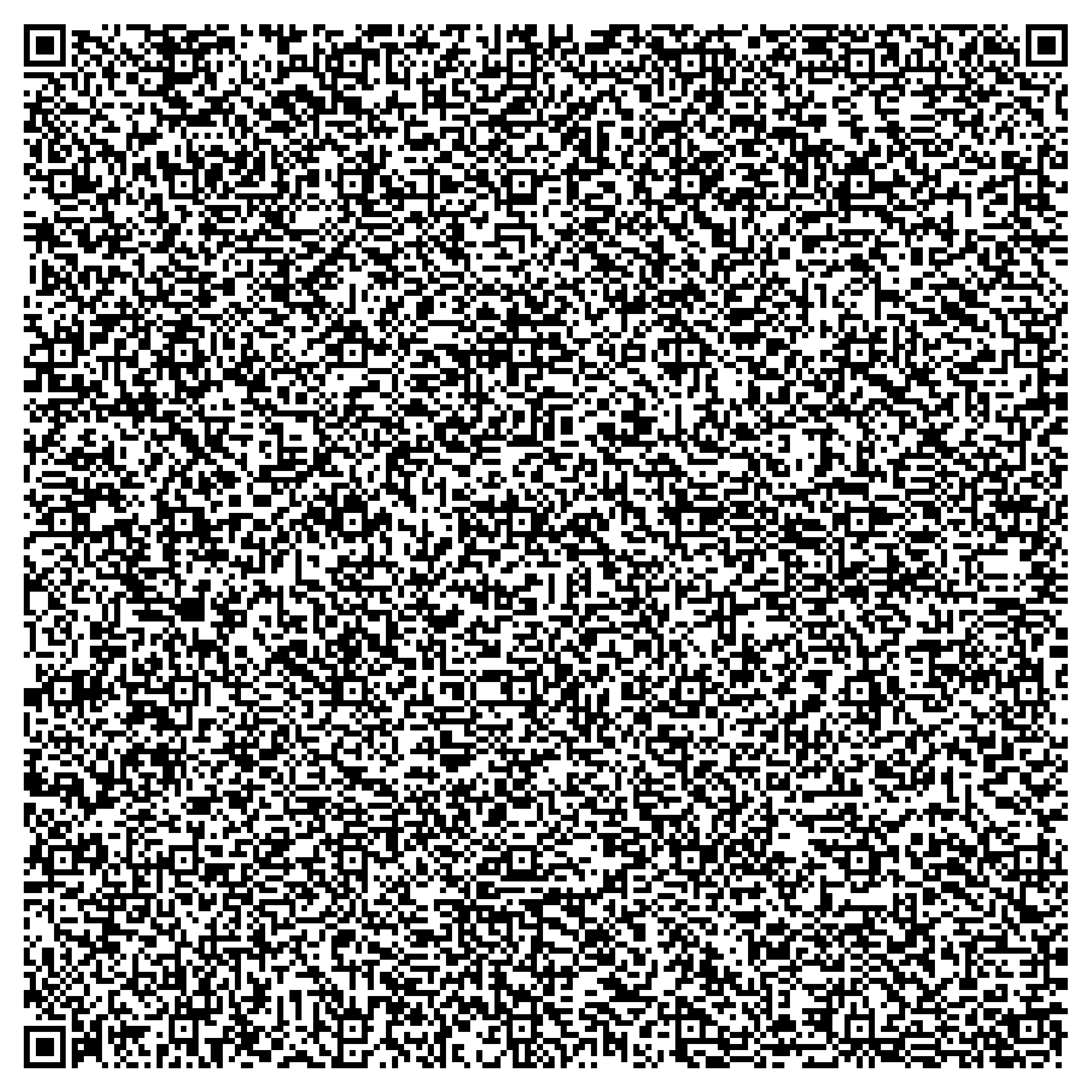


Example for use with products:
The twin-DUO ENTIRE folder compressed is small enough for a QRCode image...

Compress to 7z, converted to base64, then generated the qrcode image. The “syncthing” binary was removed to save space...

(Tested on RPI3 w/ zbarcam)
Then,
read the image with zbarcam, save the result, reconvert it to 7z format…

So, businesses can distribute the twin-DUO files on paper, without the need to put online or use CD/DVD media!



Here is how the idea was tested:

[BUILD QRCODE]

```
rm  twin-DUO/syncthing        #remove syncthing binary

7z  -mx9 a twin-DUO.7z  twin-DUO/

base64  twin-DUO.7z  >  twin-DUO.b64

cat  twin-DUO.b64  |  qrencode -o twin-DUO.png
```

[READ QR, REBUILD 7z]

```
zbarcam -q --raw
```

save text to readed-twin-DUO.b64 using geany text editor

```
base64  -d  readed-twin-DUO.b64  >rebuild-twin-DUO.7z
```

Tested on (to build, to run):
Debian Buster x86 64
Raspbian Buster
ARMbian Bionic 18.04

Syncthing version
Current scripts tested with Syncthing v1.3.4 (2020/MAR)
Procedures tested since Syncthing v0.14.39 (2017)

Should work with future versions without any problem…

For building/creation purposes
If changes in future Syncthing cause theses scripts to stop working, the needed changes should be very simple to accomplish... or, just download and use the version 1.3.4 because at this version it is working...

Some scripts requires python2.7