

1. ANONYMITY.
2. PRIVACY.
3. DARK WEB.
4. SECURITY.



1. PRIVACY.

A state in which one is not observed by others.

ID: **Known** Activity: **Unknown**

2. ANONYMITY.

A state where the acting person's name is unknown.

ID: **Unknown** Activity: **Known**

1. PRIVACY.

- 1. Anonymising service.
- 2. Private online services.

2. ANONYMITY.

3. DARK WEB.

4. SECURITY.

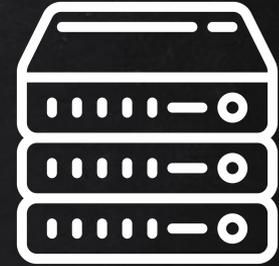


TOR – THE ONION ROUTER

- Network of servers designed to improve anonymity and privacy.
- Most common anonymizing network.
- Connected computers can be configured to offer [hidden/onion services](#).
- Onion routing was designed by the US army to protect their communications.



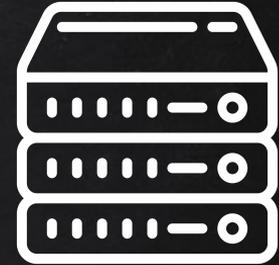
WHAT HAPPENS WHEN YOU VISIT A WEBSITE



GOOGLE.COM

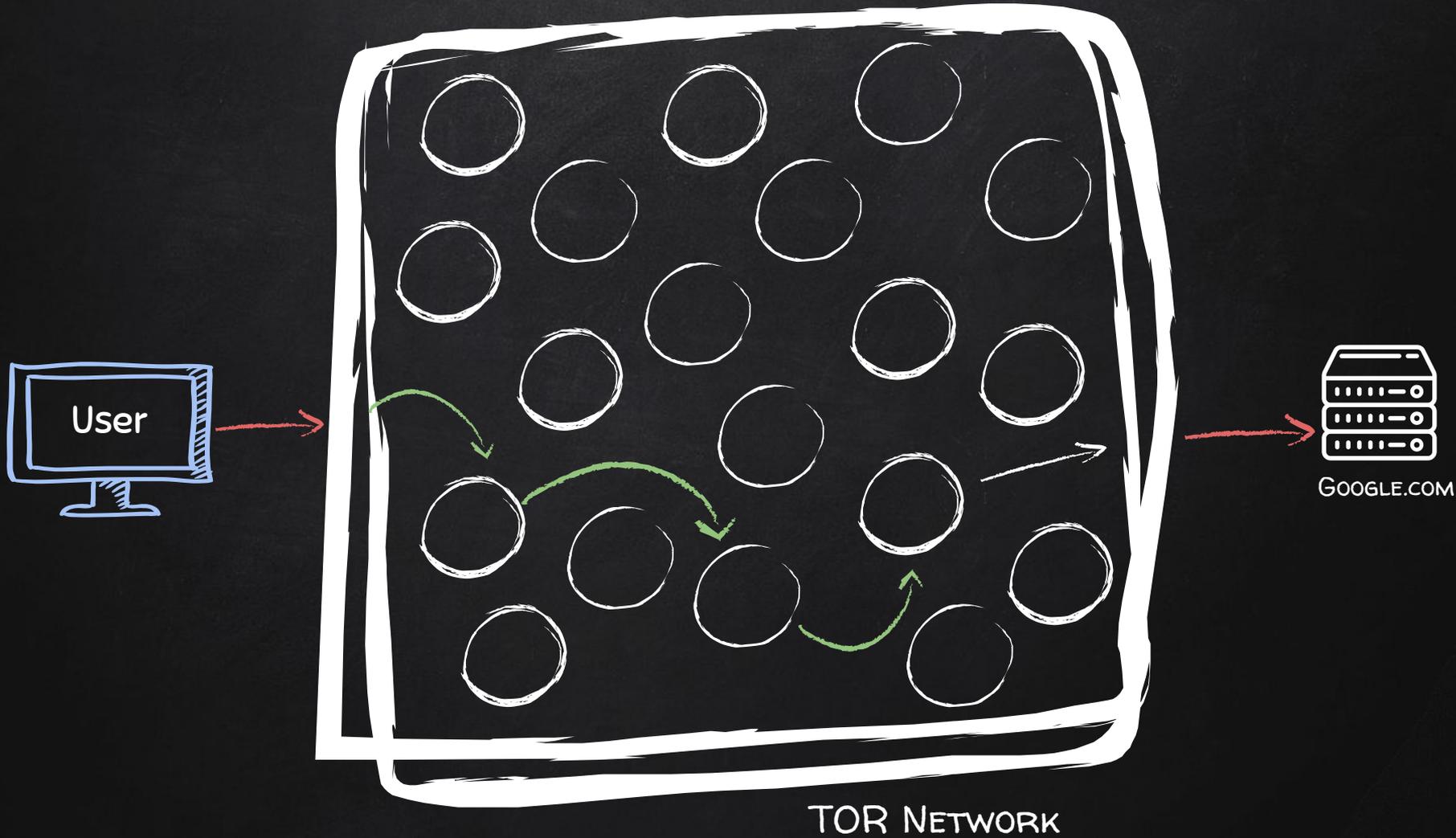
- Location.
- Browser.
- Operating System.

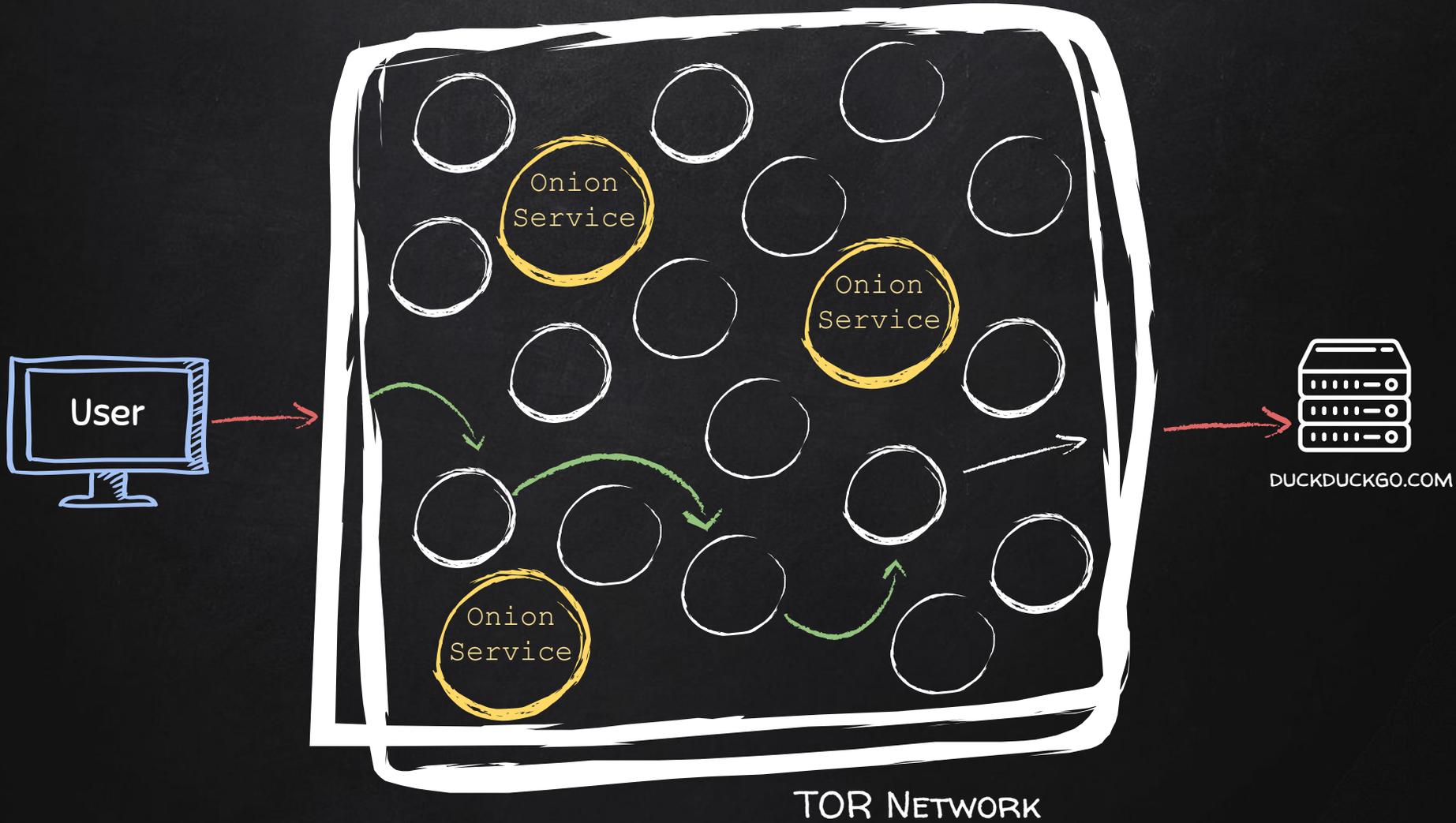
WHAT HAPPENS WHEN YOU VISIT A WEBSITE

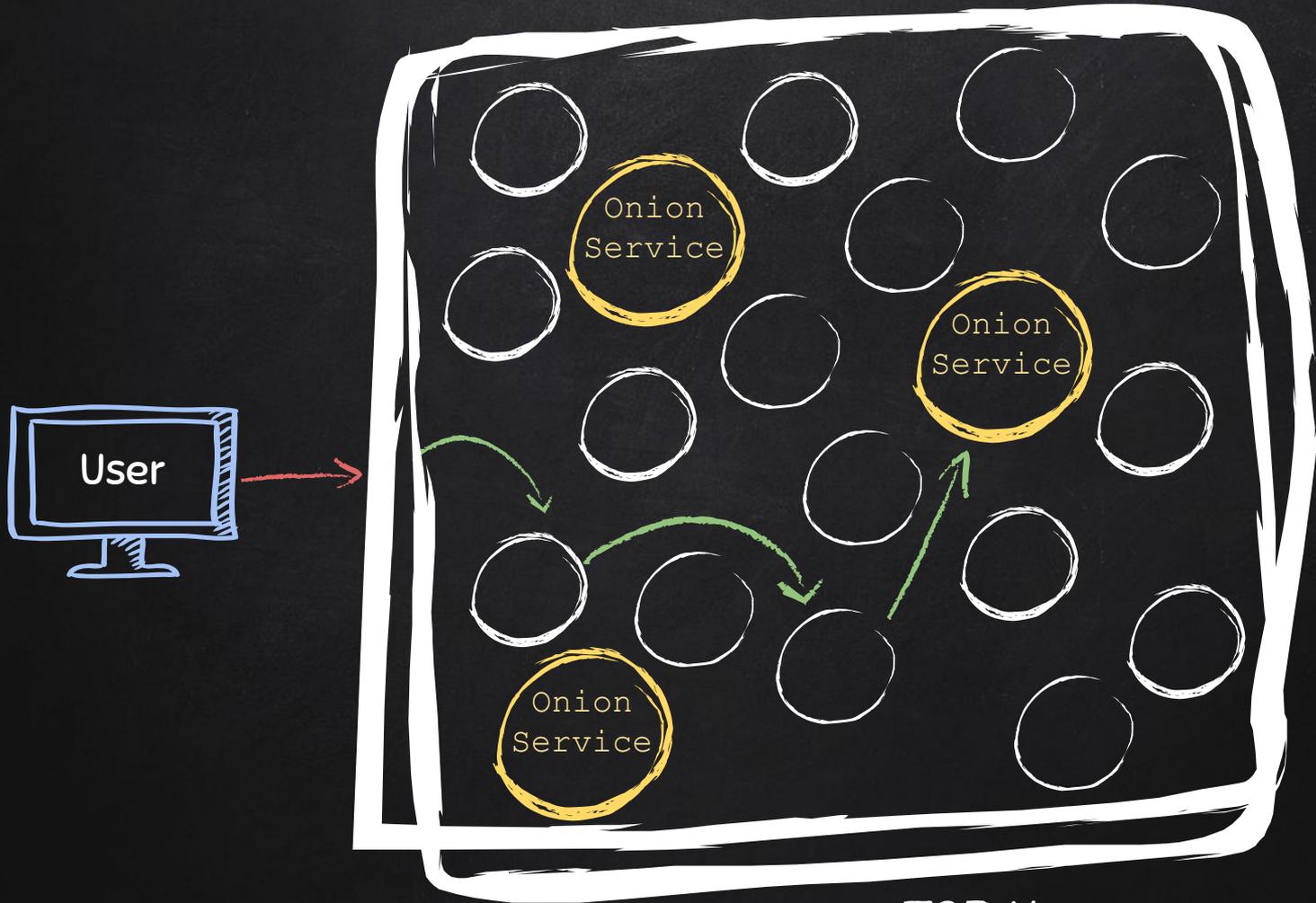


GOOGLE.COM

- Location.
- Browser.
- Operating System.
- Previous activity on this website.
- Potentially activity outside of this website.
-etc



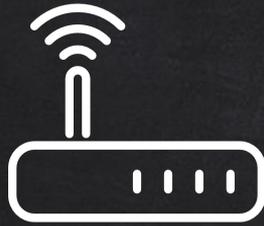




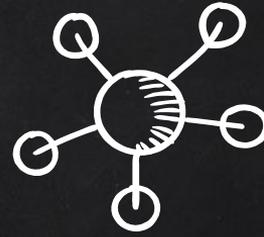
DUCKDUCKGO.COM

TOR NETWORK

WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



Local Network



ISP

File

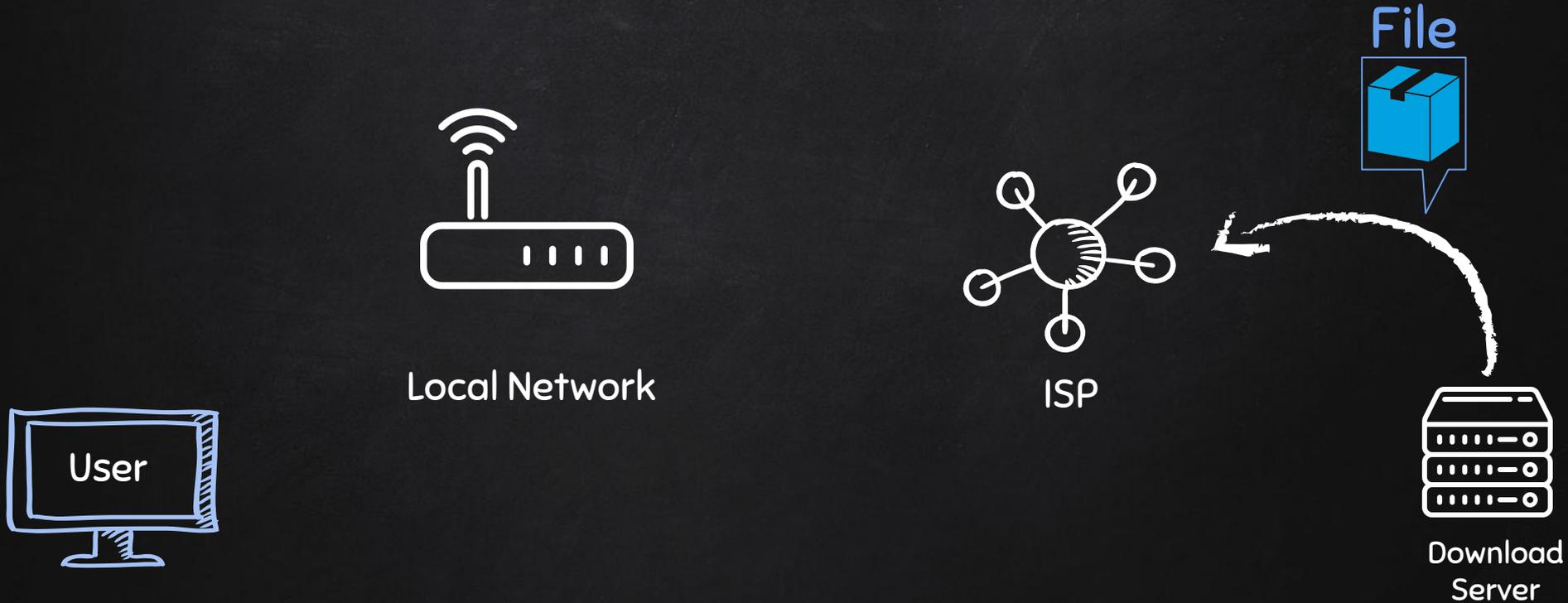


Download
Server

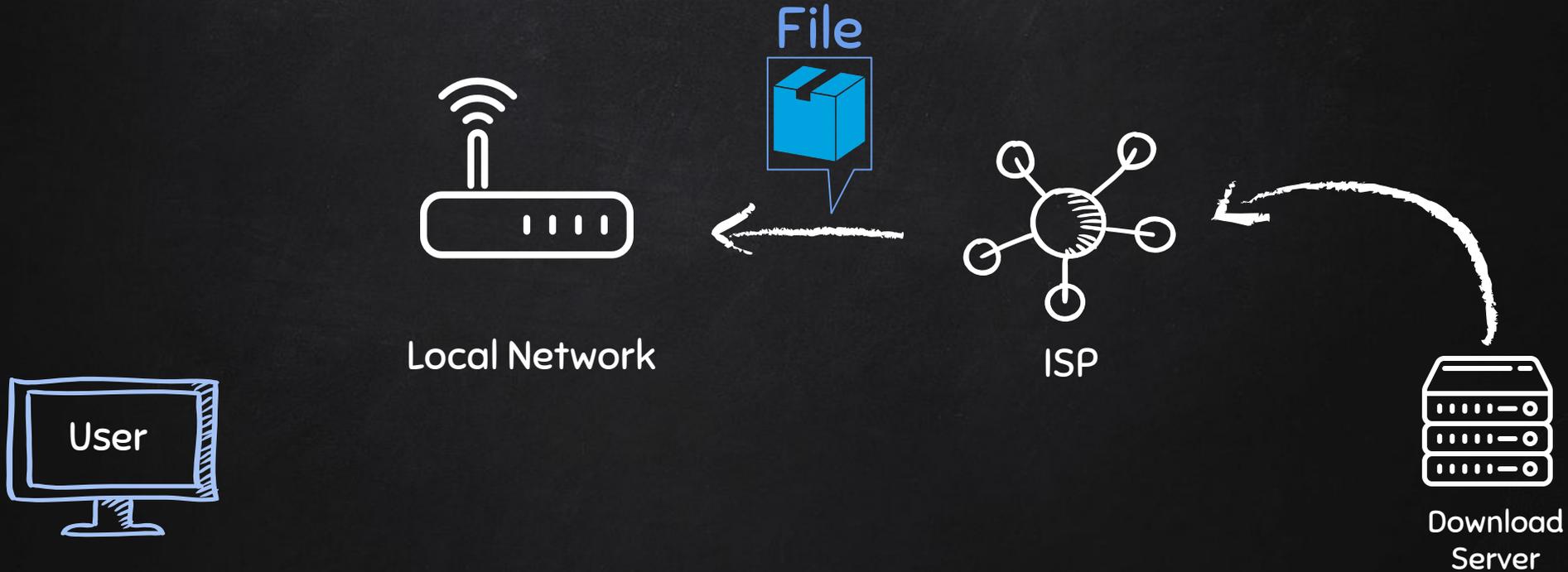
User



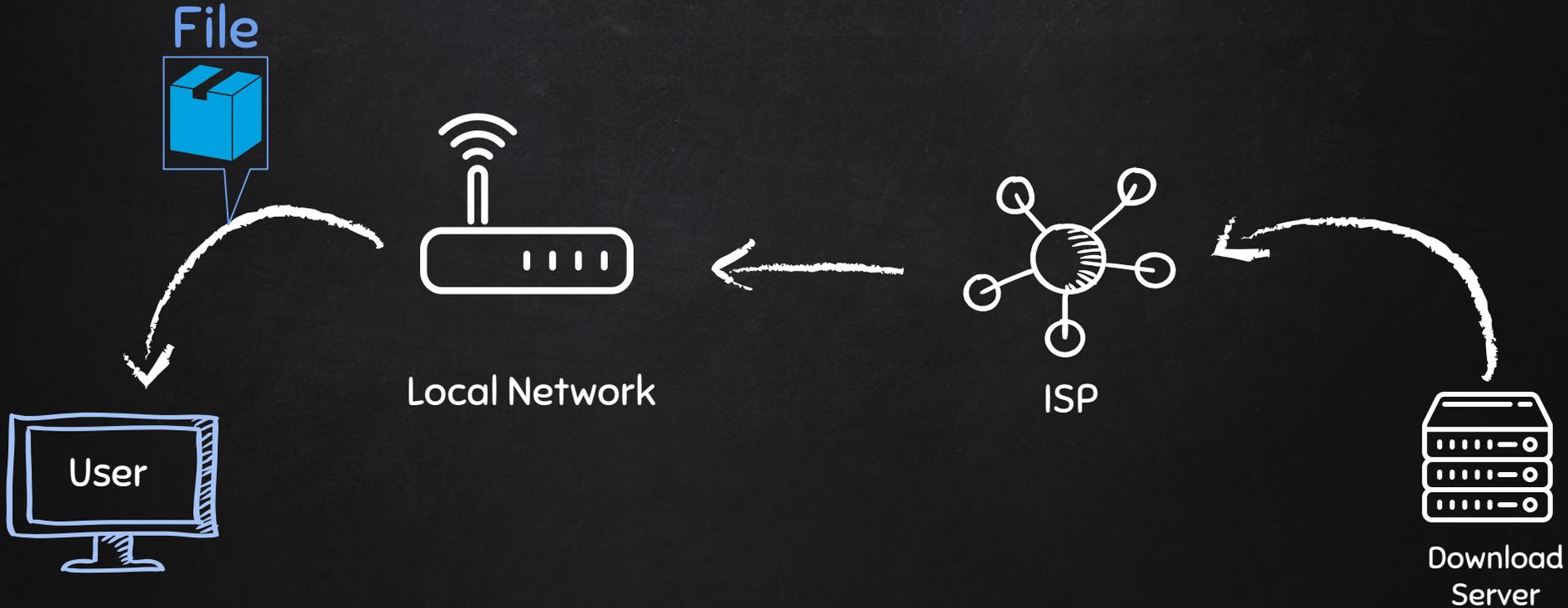
WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



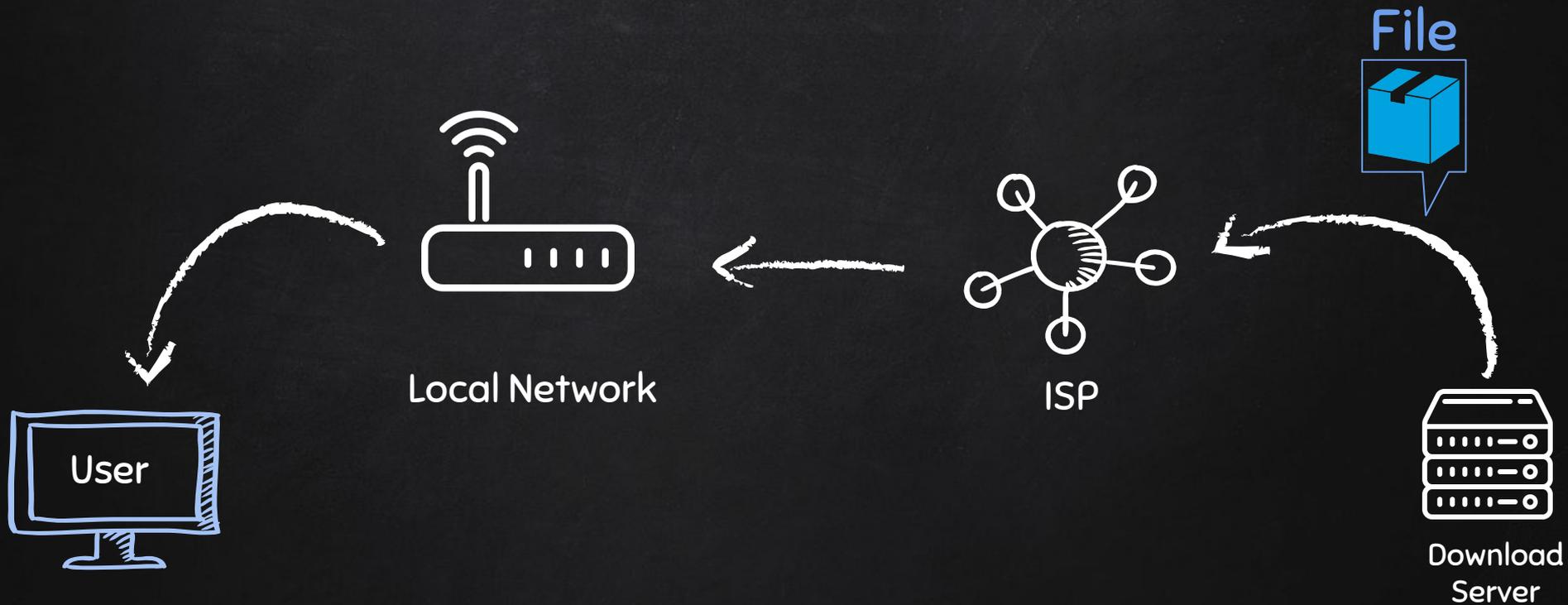
WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



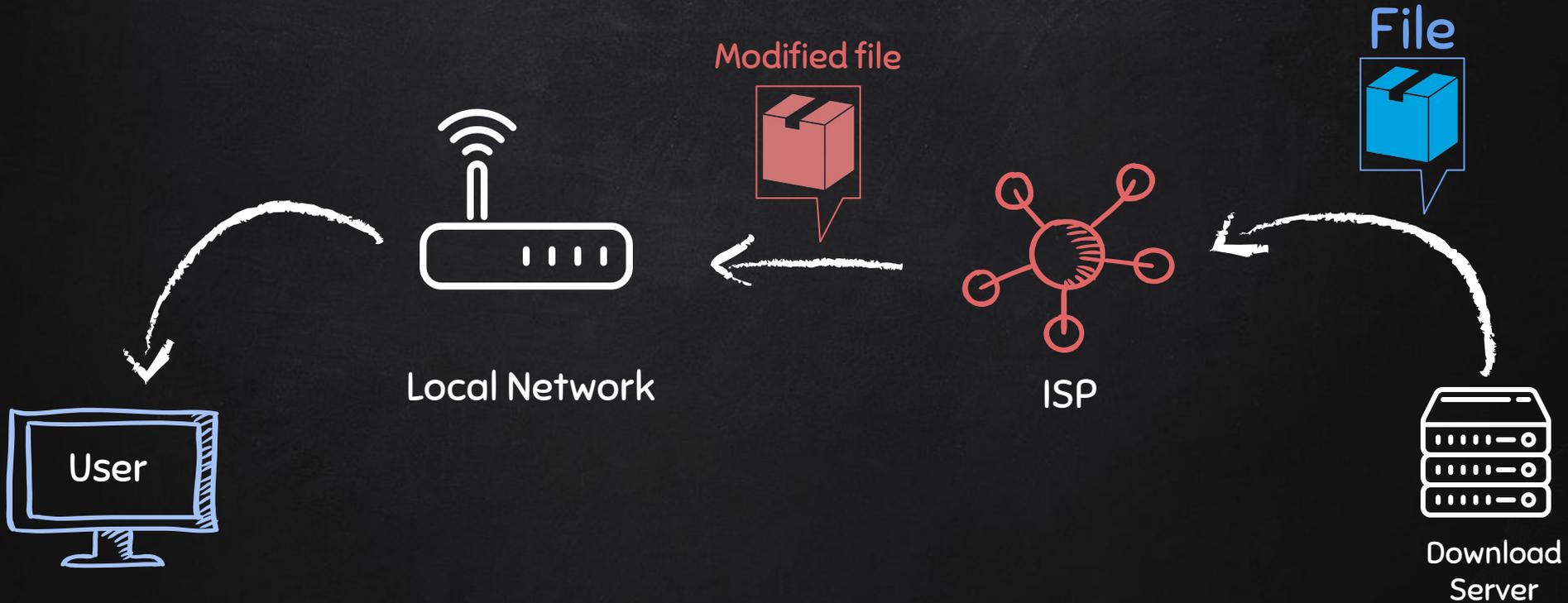
WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?

Modified file



Local Network

File



ISP



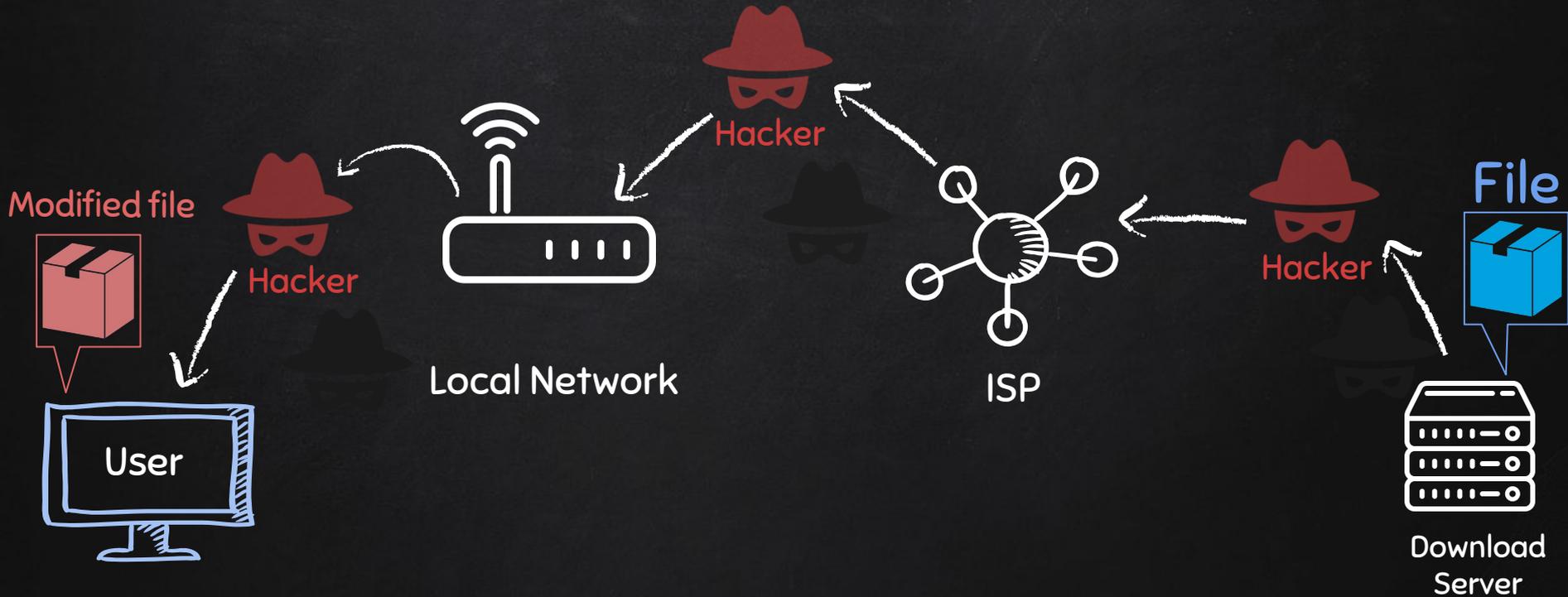
Download Server



User



WHAT HAPPENS WHEN YOU DOWNLOAD A FILE?



TOR – THE ONION ROUTER

You could configure your computer to route all traffic through the TOR network.

Problems:

- Internet **speed** will dramatically drop.
- Difficult to prevent **leaks**.
- Web browser can also **leak** information.
- Data leaves the exit node **un-encrypted!**

Solution:

- Use TOR Browser → **Simplest** but not best.
- Tails; → **Great**.
- Or Qubes with whonix → **Best**.

