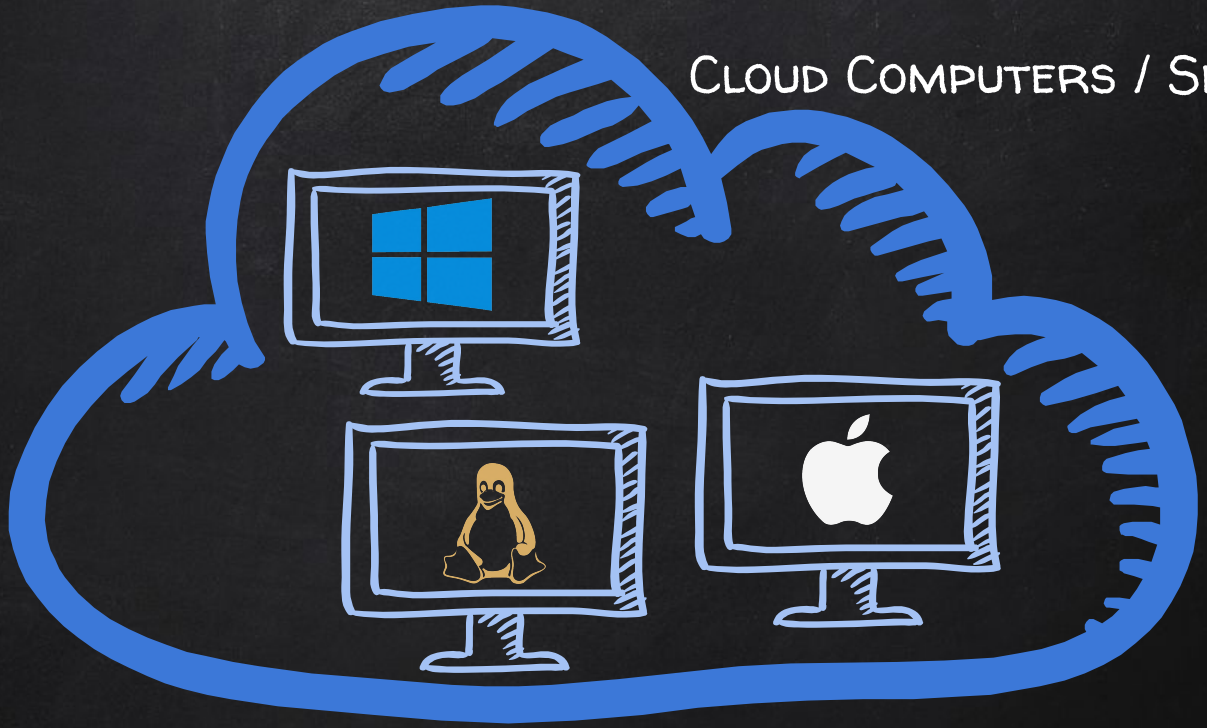
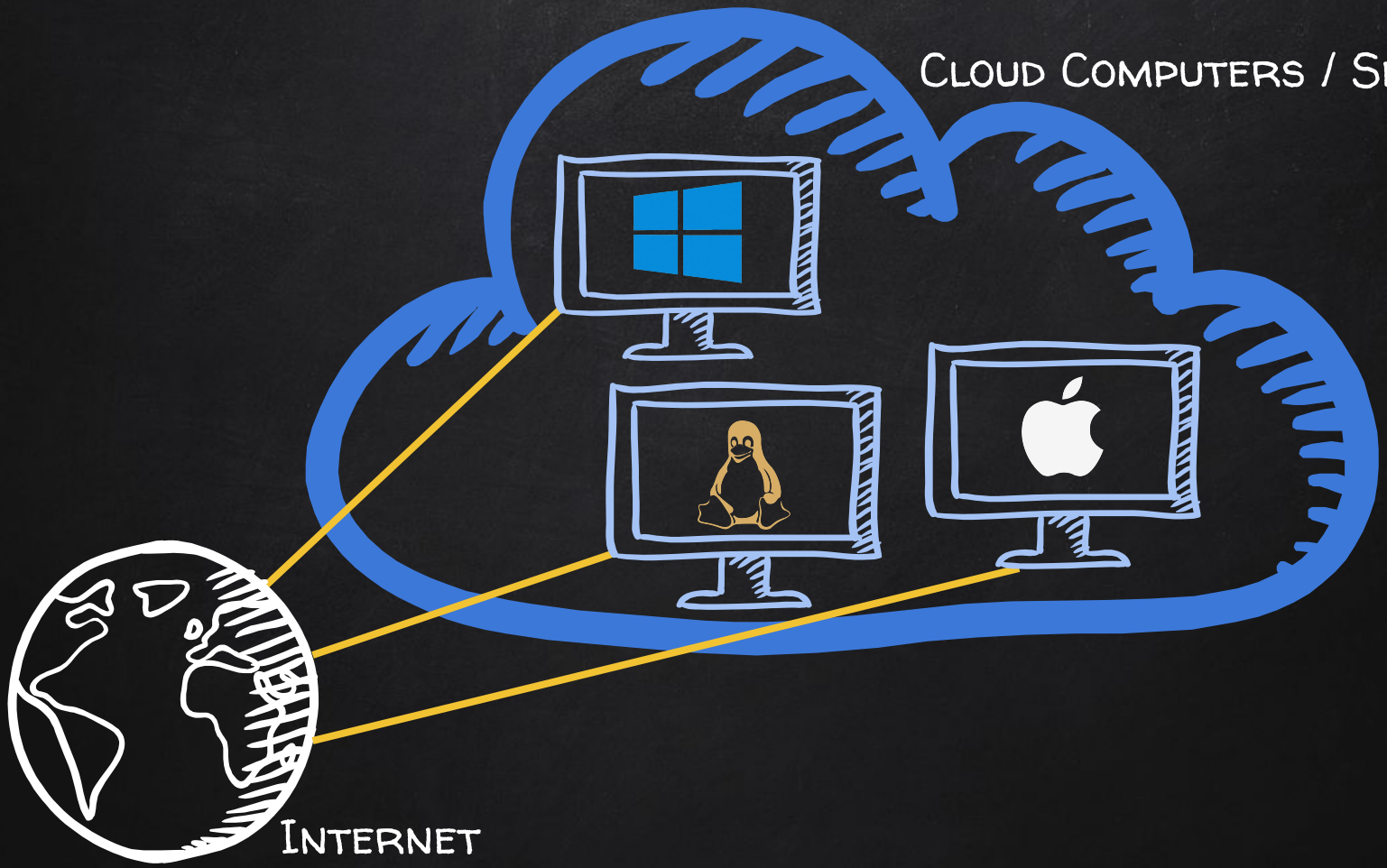
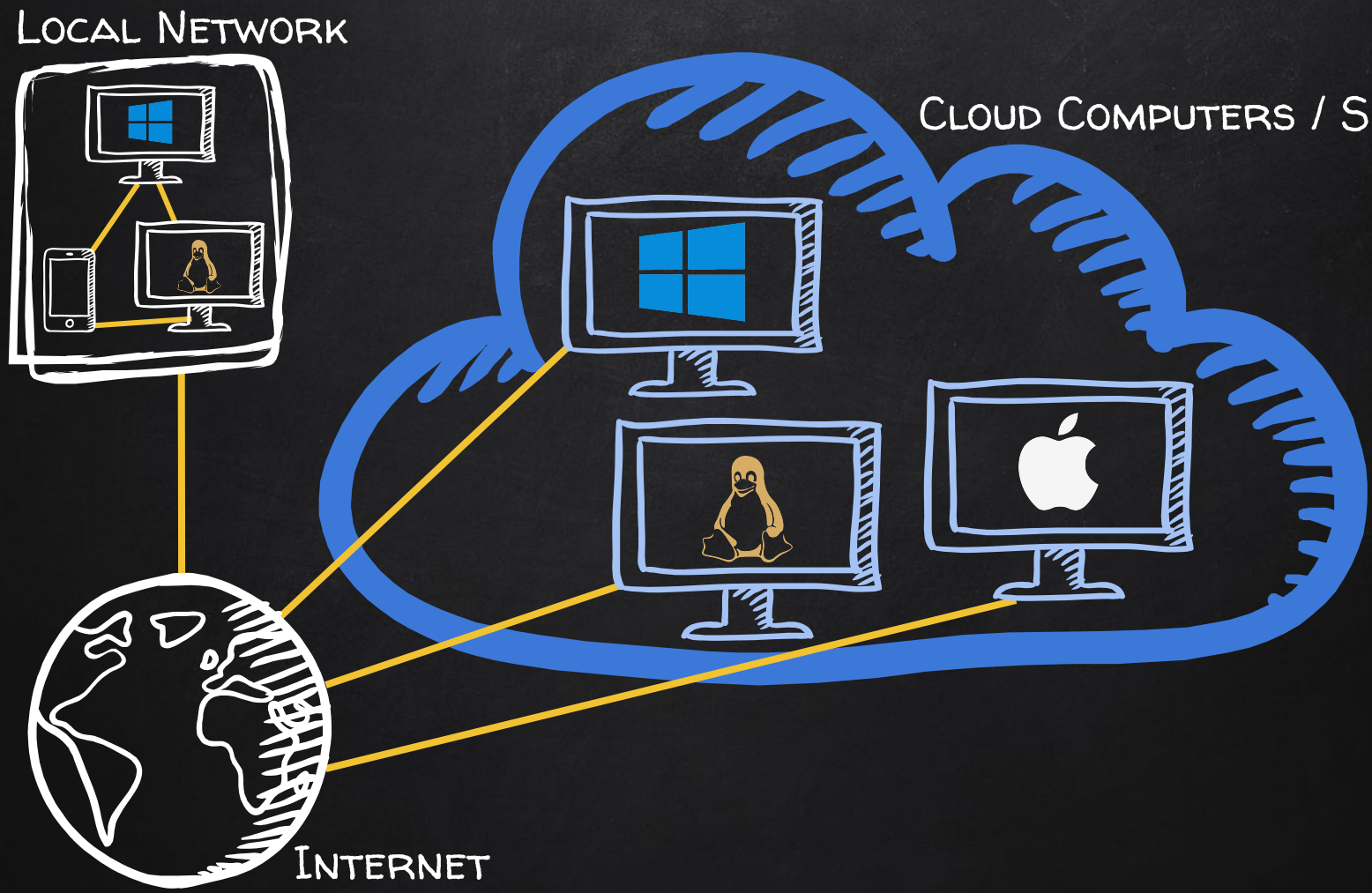
The
Cloud

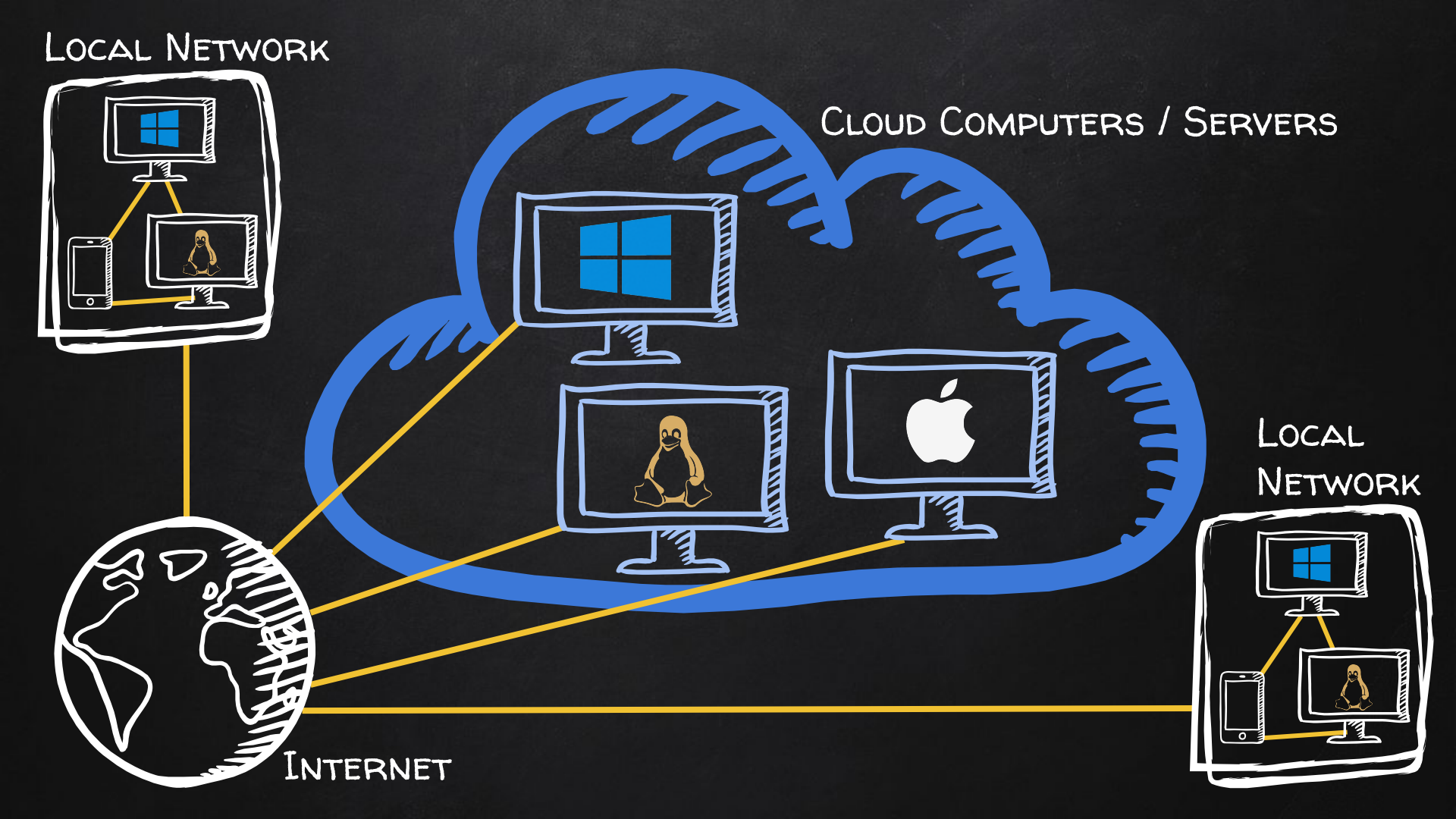
→ Remote computers providing services on the internet.

Cloud Computers / Servers




Cloud Computers / Servers
Internet

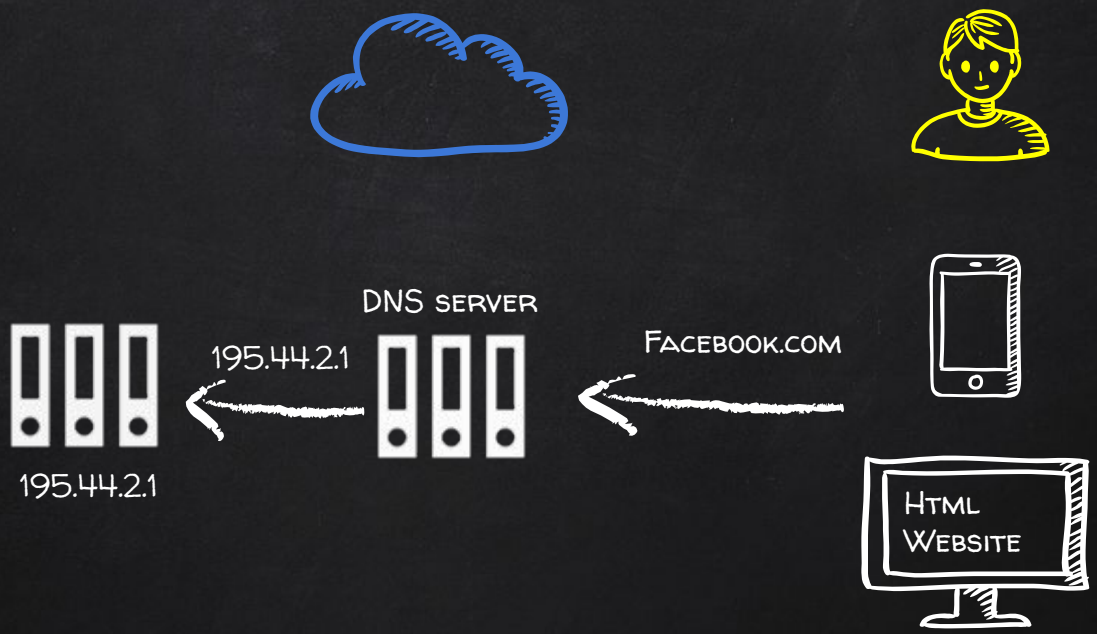

Local Network
Cloud Computers / Servers
Internet


Local Network
Cloud Computers / Servers
Local Network
Internet

What is a Website

How to hack a Website?

- Computer with OS and some servers.
- Apache, MySQL ...etc
- Contains web application.
- PHP, Python ...etc
- Web application is executed here and not on the client's machine

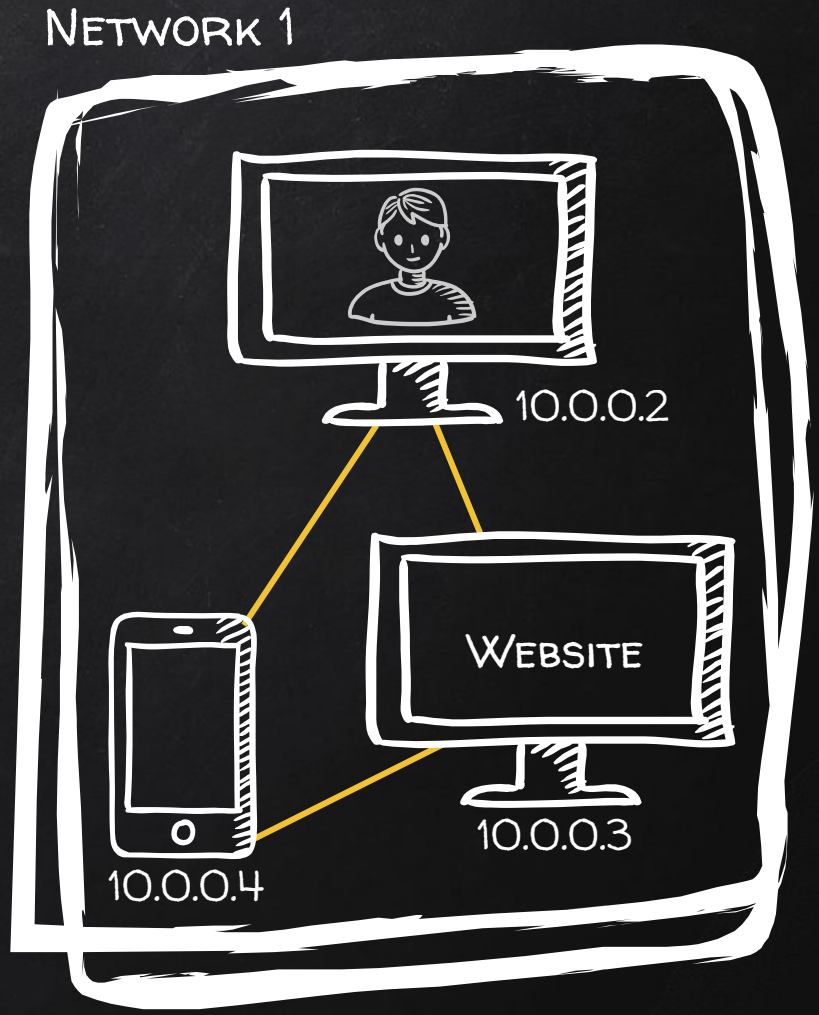

DNS server
195.44.2.1
Facebook.com
195.44.2.1
Html
Website

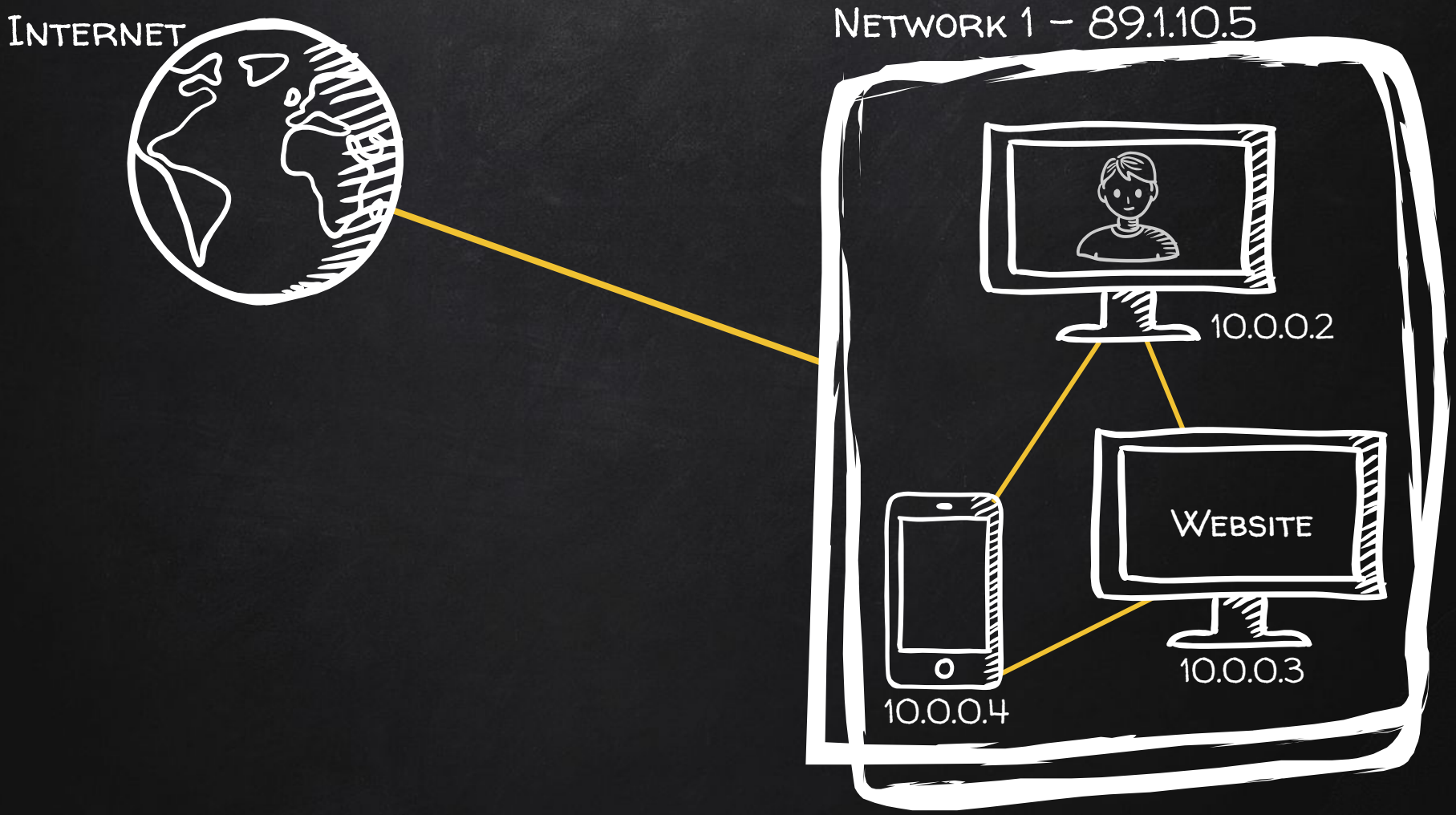
What is a Website

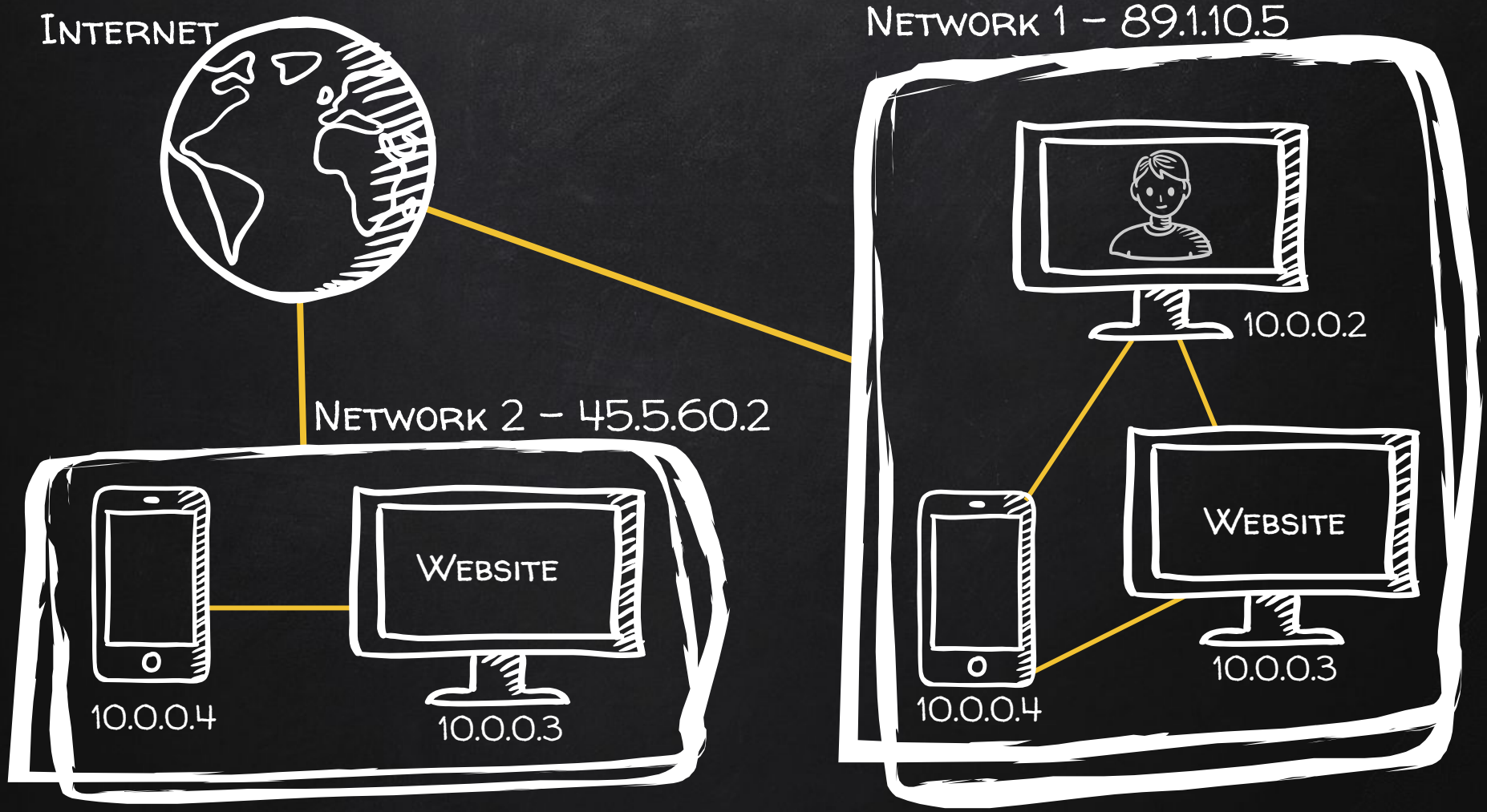
How to hack a Website?

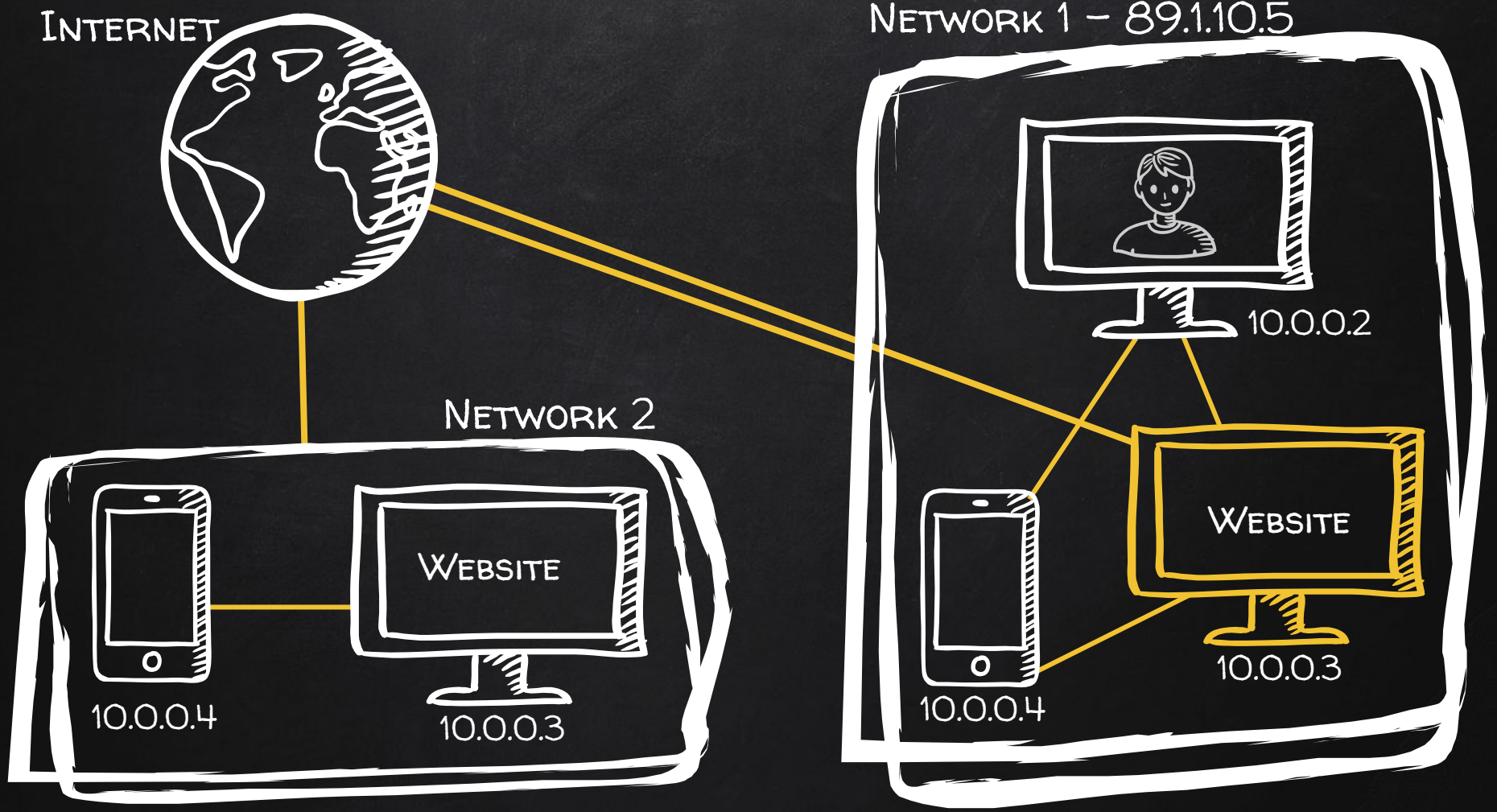
- An application installed on a computer . → web application pentesting
- Computer uses an OS + other applications. → server side attacks.
- Managed by humans. → client side attacks.

→ This course will focus on web application penetration testing.


Network 1
10.0.0.2
Website
10.0.0.3
10.0.0.4


Internet
Network 1 – 89.1.10.5
10.0.0.2
Website
10.0.0.3
10.0.0.4


Internet
Network 1 – 89.1.10.5
10.0.0.2
Website
10.0.0.4
10.0.0.3
Network 2 – 45.5.60.2
Website
10.0.0.4
10.0.0.3


Internet
Network 1 – 89.1.10.5
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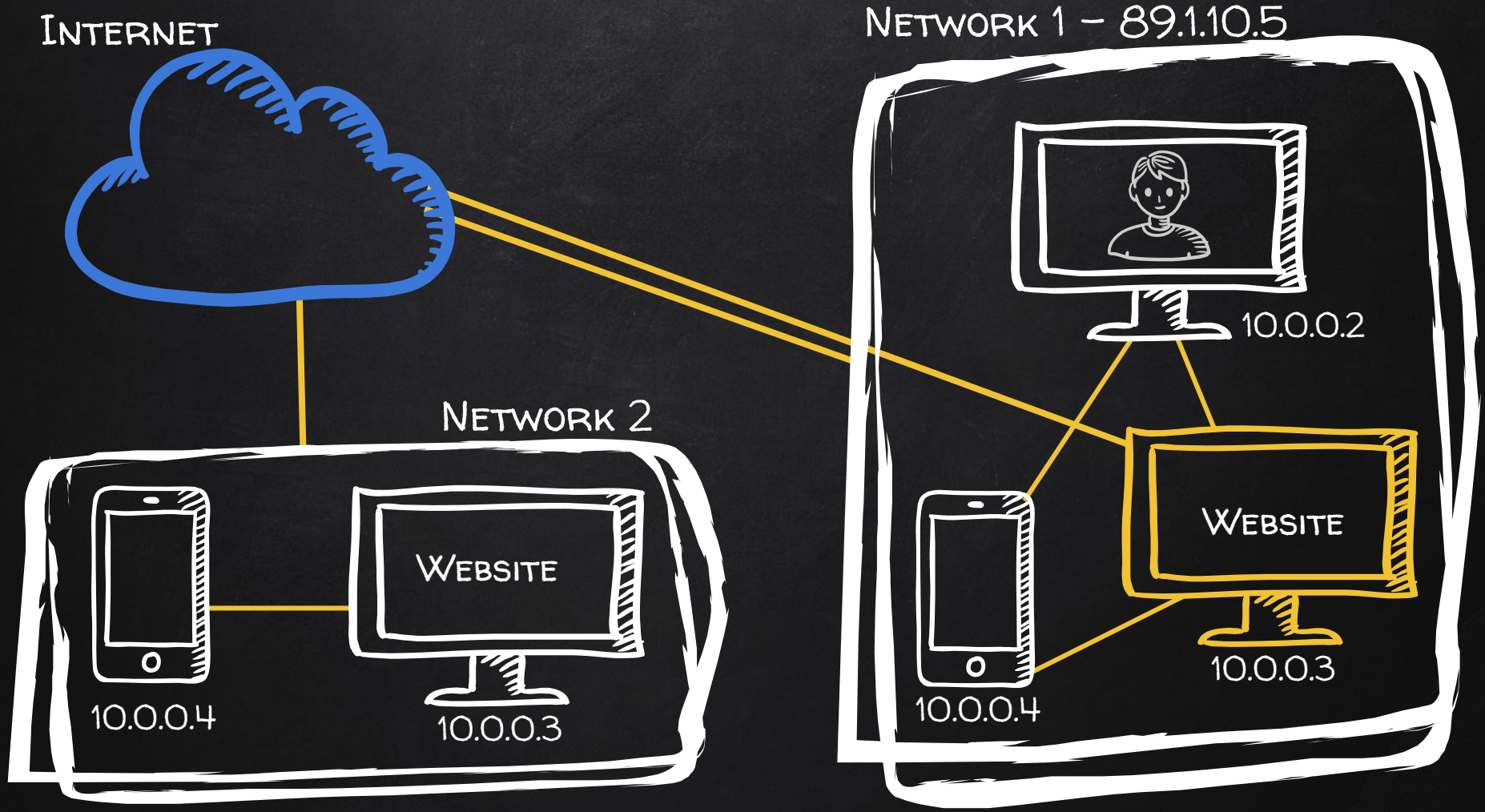
Website
10.0.0.4
10.0.0.3
Network 2
Website
10.0.0.4
10.0.0.3


Internet
Network 1 – 89.1.10.5
10.0.0.2
Website
10.0.0.4
10.0.0.3
Network 2
Website
10.0.0.4
10.0.0.3

Website

Cloud Providers
Amazon AWS
Microsoft Azure
Linode
Digital ocean

Kali Linux

- Linux Distribution based on Debian.
- Made for hackers.
- Contains lots of hacking tools.

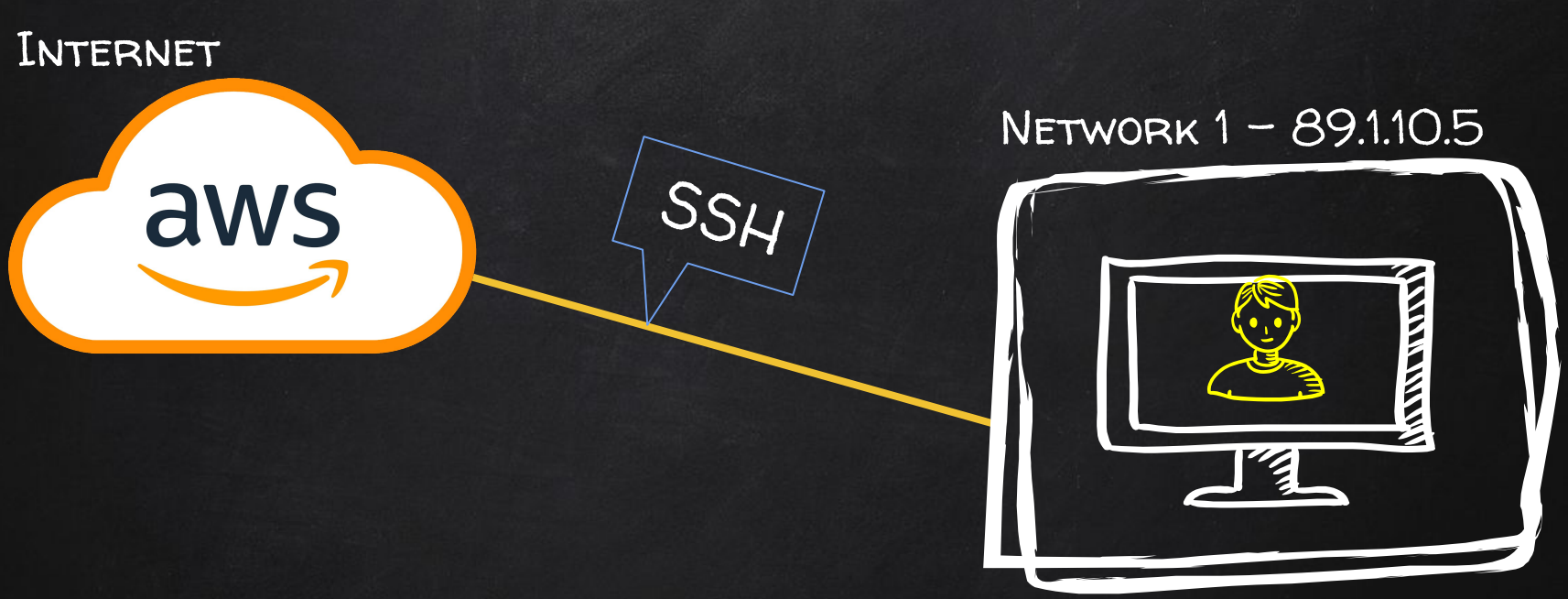
→ This is going to be the hacker machine.

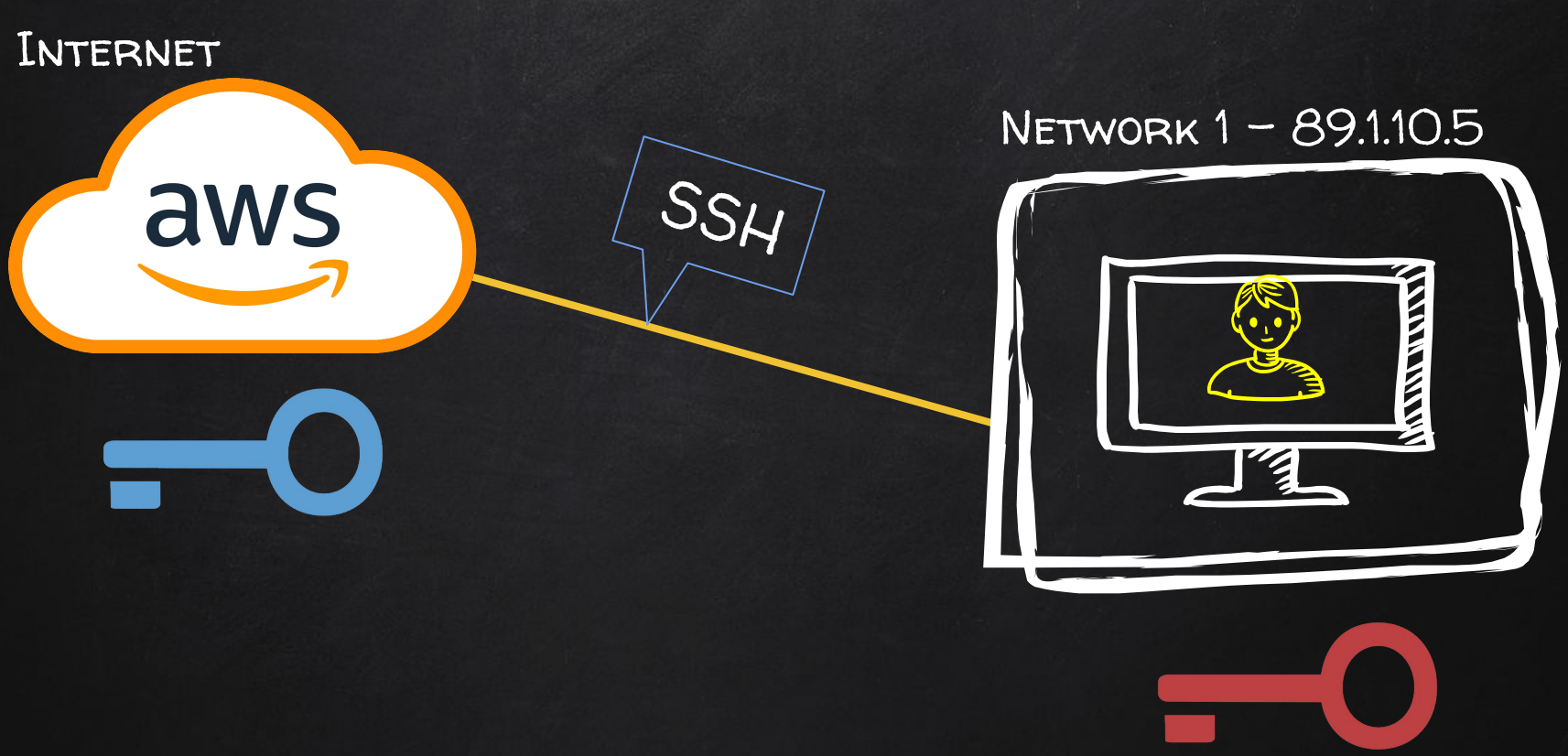
Why learn about the cloud?

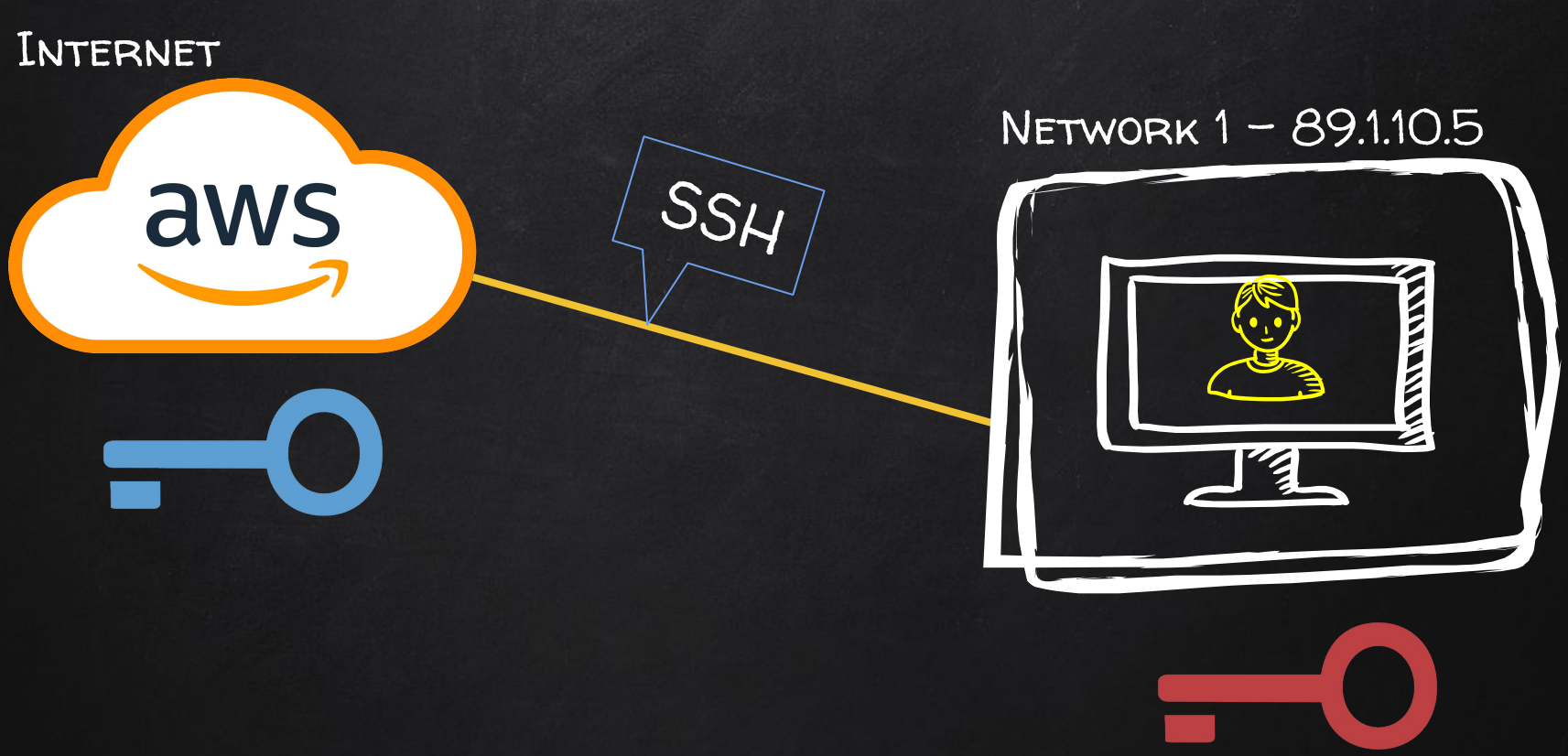
1. Understand how websites work.
2. Understand how cloud services work.
3. Run own website / cloud services.
4. Run own hacking services.
5. Host your own hacking machine on the cloud.
6. Run resource-intensive tasks.

Internet

Network 1 – 89.1.10.5


Internet
aws
SSH
Network 1 – 89.1.10.5


INTERNET
aws
SSH
NETWORK 1 – 89.1.10.5

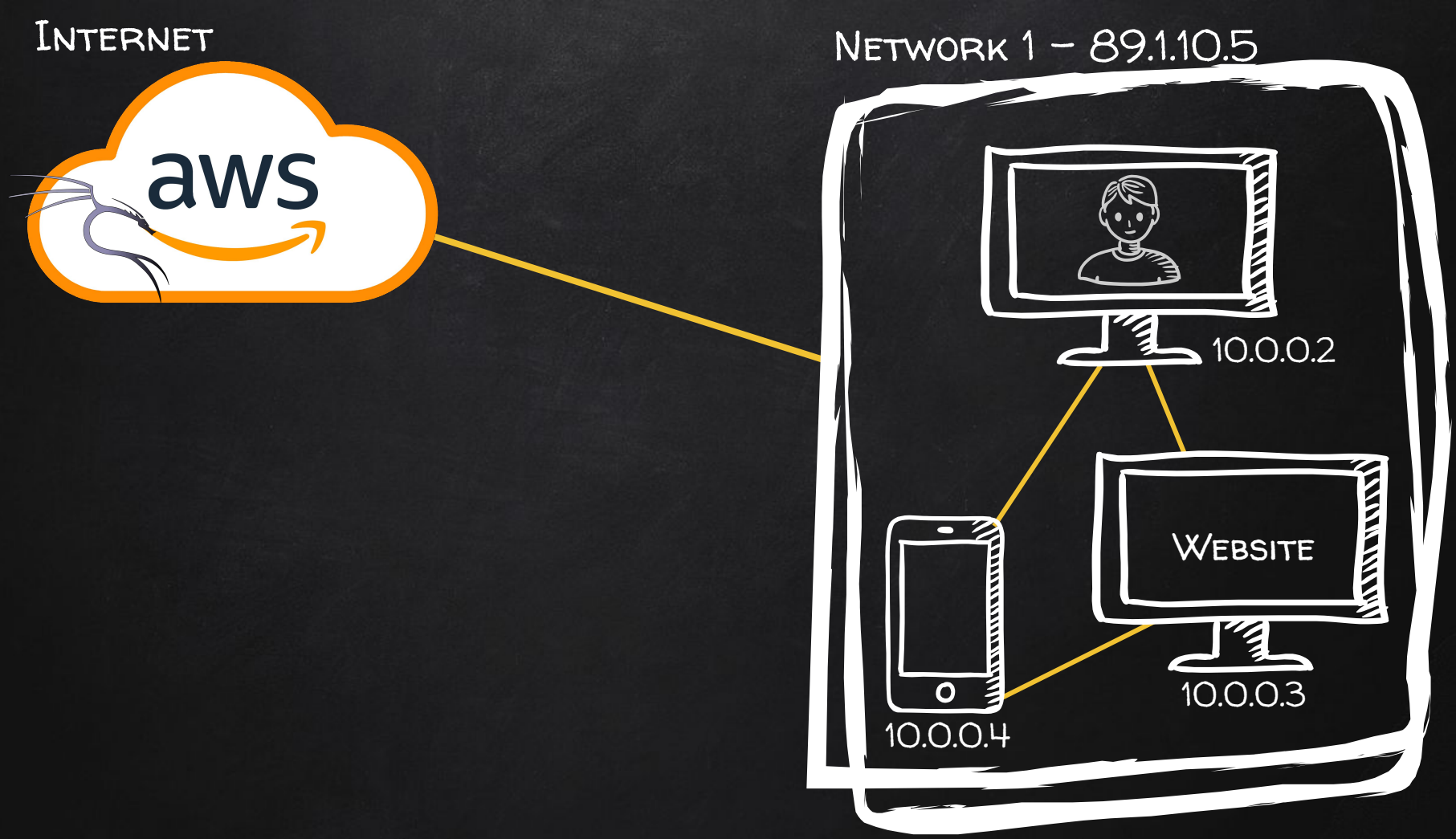

INTERNET
aws
SSH
NETWORK 1 – 89.1.10.5

Internet
aws
SSH
Network 1 – 89.1.10.5

INTERNET

INTERNET

NETWORK 2 – 45.2.40.5


Internet
aws
Network 1 – 89.1.10.5
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Website
10.0.0.3
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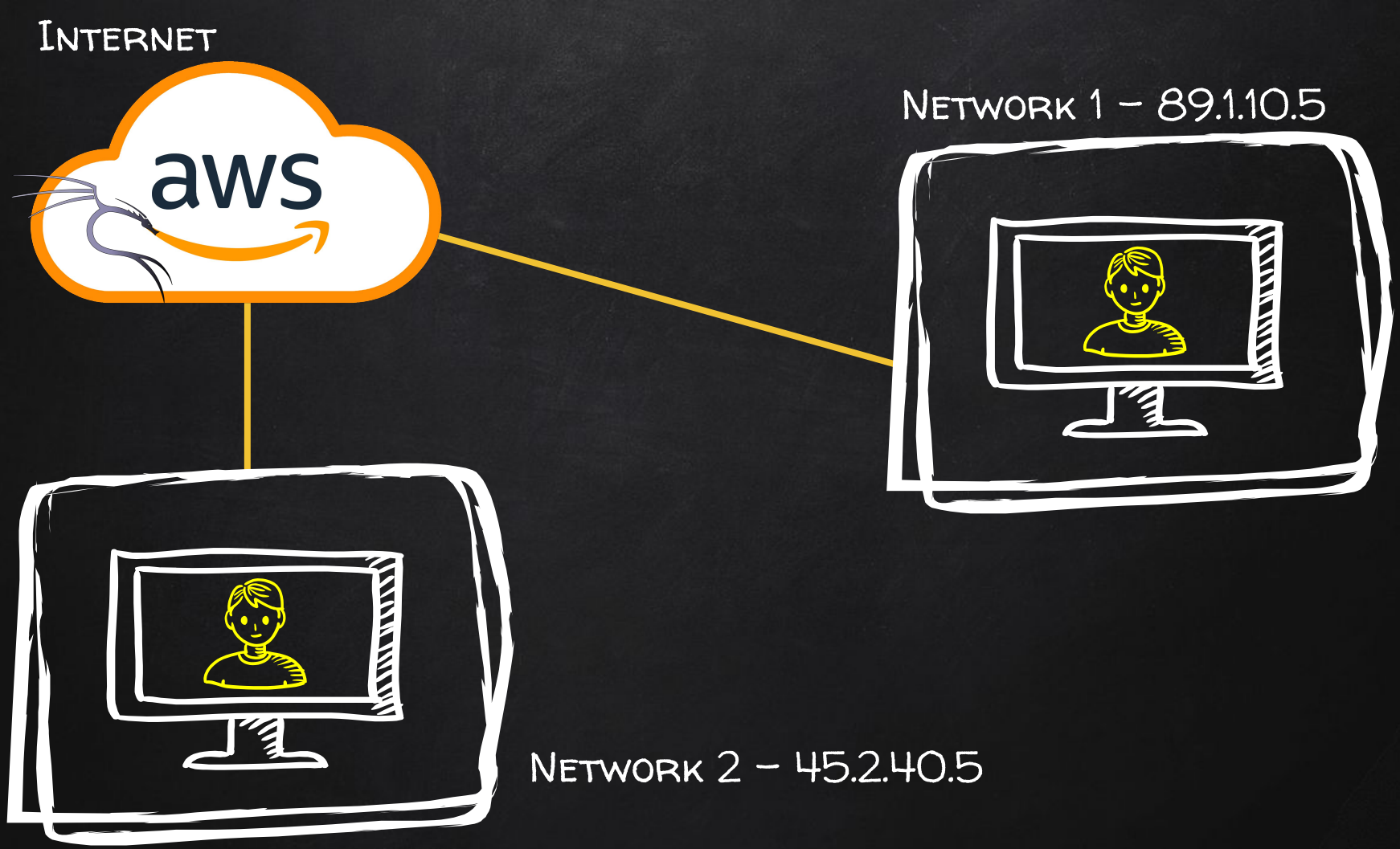
INTERNET
aws
NETWORK 1 – 89.1.10.5
NETWORK 2 – 45.2.40.5