

Cyber Security & Data protection



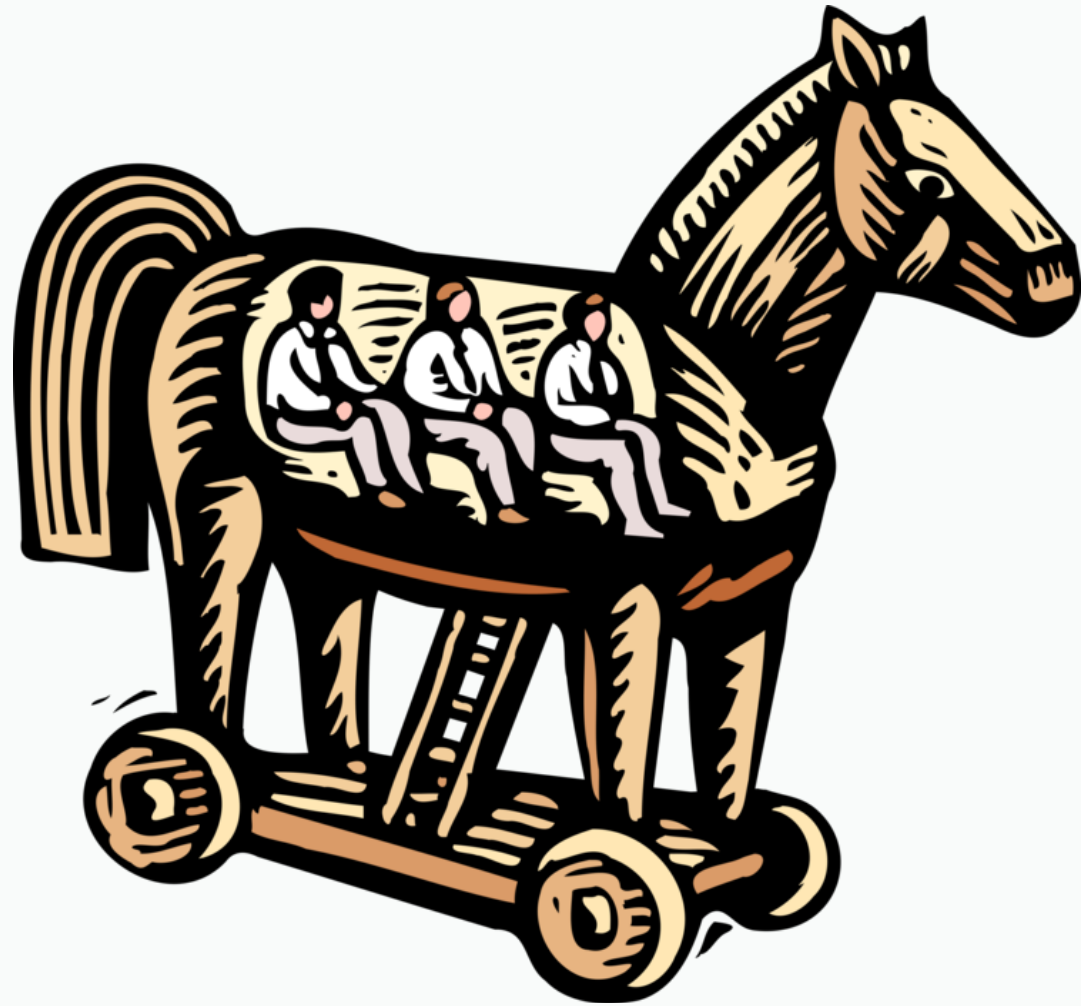
S. I. Francis Rozario SMA

@ SMA - 21 March 2023



Common challenges

1. Distributed Denial-of-Service (DDoS) Attack
2. Botnets



Common challenges

3. Trojan

4. Logic bombs

Various types of infections

5. Viruses, Worms

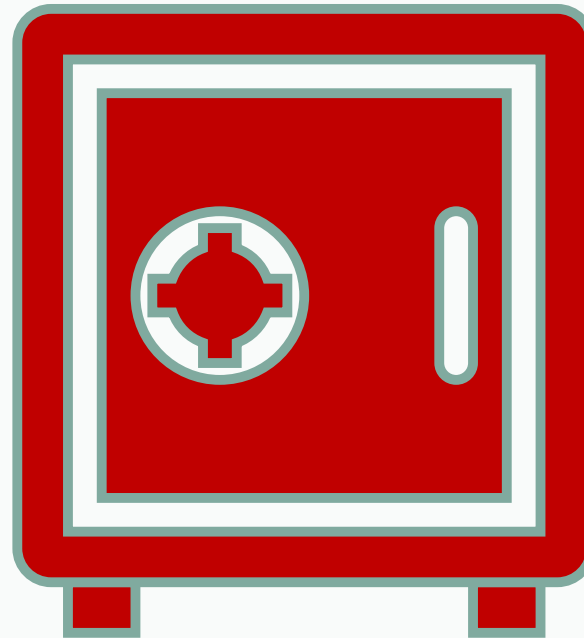
6. Adwares, Spywares, malwares (PUPs)

Common challenges

7. Ransomware

Files are made inaccessible and a ransom is demanded to release the files.

(Lazio government in 2021 – Numerous documents related to health were compromised)



Common challenges

8. Cyber fraud

Identity theft (email, bank accounts), numerous other ways of cheating by not fulfilling the business contract.

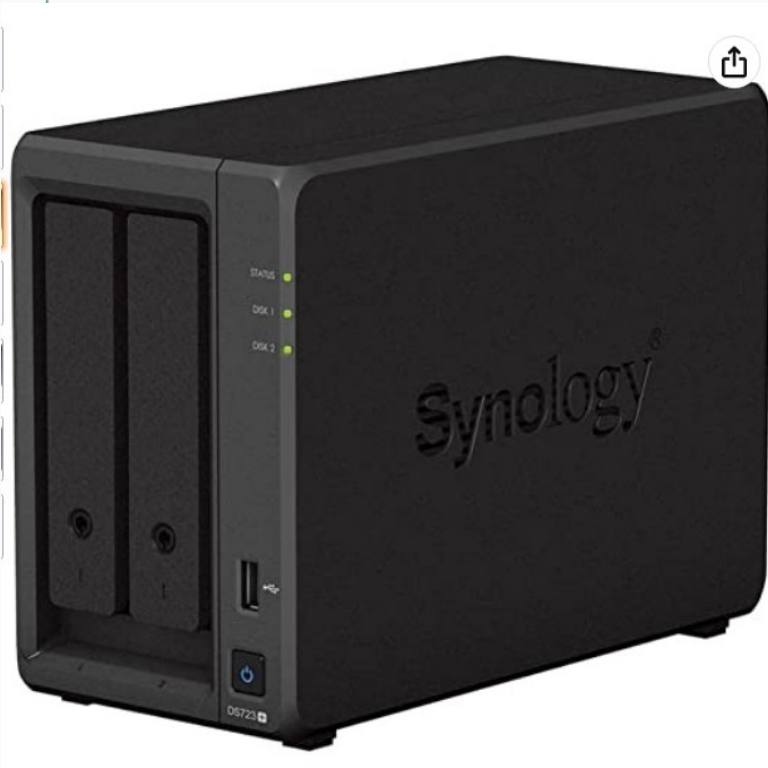


Backups

- – Synchronised online

1. NAS (Network-attached storage)

Good Brands



Synology

About € 500 - € 1,000
For 4 TB – 18 TB

Qnap



+



Backups

- – Synchronised online
 1. NAS (Network-attached storage)
 2. Cloud services - smaller (e.g Google Drive, One Drive, Dropbox ...etc) – 1 TB OneDrive for Units that need.

Backups

- – Synchronised online

1. NAS (Network-attached storage)

2. Cloud services - smaller (e.g Google Drive, One Drive, Dropbox ...etc)

3. Cloud services – corporate size (idrive.com,
icedrive.net ...etc)

Free

10 GB

No credit card required



\$2.95

per year

One user

100 GB Storage

100 GB

\$2.95 per year



~~\$79.50~~/year

\$59.62

first year

One user, Multiple

computers

5 TB Storage

5 TB

~~\$79.50~~/year

\$59.62 first year

~~\$159.00~~



~~\$99.50~~/year

\$74.62

first year

Five Computers, Five Users

5 TB Storage

5 computers,
5 users

(5 TB)

~~\$99.50~~/year



~~\$99.50~~/year

\$74.62

first year

Unlimited users, multiple

computers and servers /

Exchange / SQL / NAS devices

250 GB Storage

250 GB

~~\$99.50~~/year

\$74.62 first year

Backups

- – Synchronised online

1. NAS (Network-attached storage)
2. Cloud services - smaller (e.g Google Drive, One Drive, Dropbox ...etc)
3. Cloud services – corporate size (idrive.com, icedrive.net ...etc)

4. Manual back up – offline, disconnected (cold)

External hard disks, NAS, Tabs, DVD...etc

Lifespan of storage devices

- Temperature, humidity ...etc play a big role
 - Manufacture date matters
 - Nothing is permanent
 - **Burry them before they die!!!**
- Tapes – 10 – 20 years (till the magnetic charge lasts)
 - CD – 5 years
 - DVD – 5 years
 - Blue-Ray – 10-20 years
 - M.Disc – 1000 years (in theory) about € 20/100GB
 - Cannot be erased or rewritten
 - Pendrive – 10 years
 - Hard drive – 3-5 years (Computers, NAS) € 100/1-4TB
 - SSD – 8 – 12 years