

Moderní technologie a bezpečnost

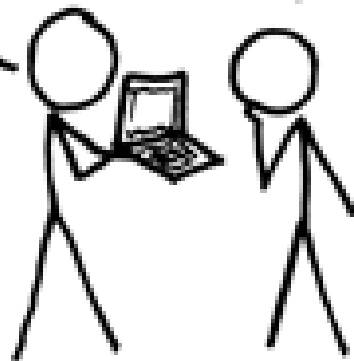
Bezpečnost v kyberprostoru II.

A CRYPTO NERD'S IMAGINATION:

HIS LAPTOP'S ENCRYPTED.
LET'S BUILD A MILLION-DOLLAR
CLUSTER TO CRACK IT.

BLAST! OUR
EVIL PLAN
IS FOILED!

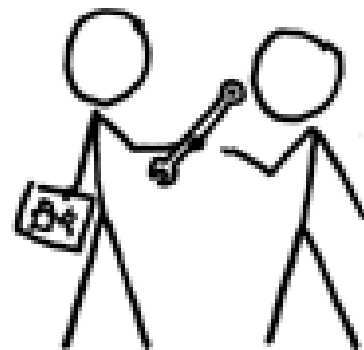
NO GOOD! IT'S
4096-BIT RSA!



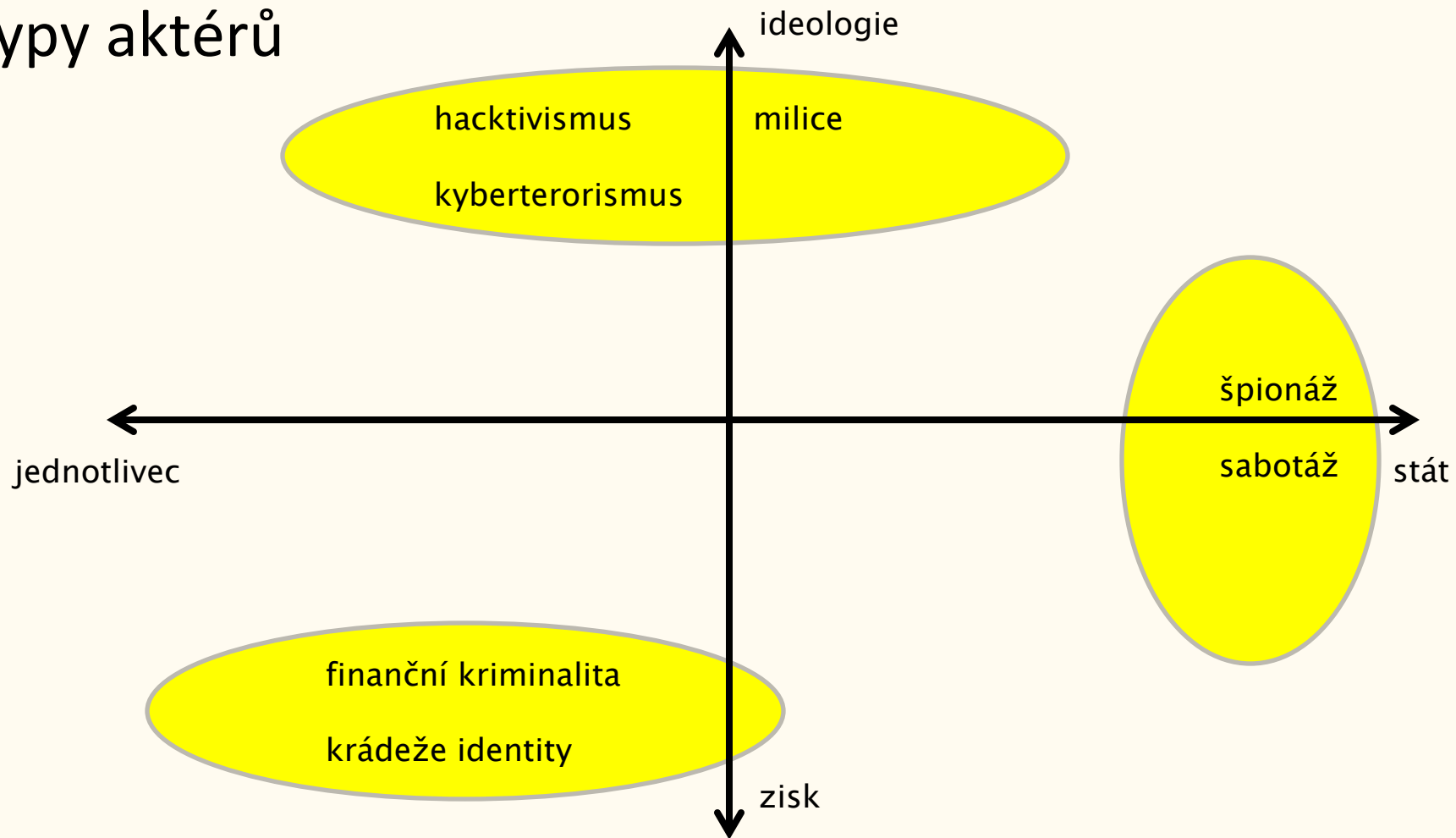
WHAT WOULD ACTUALLY HAPPEN:

HIS LAPTOP'S ENCRYPTED.
DRUG HIM AND HIT HIM WITH
THIS \$5 WRENCH UNTIL
HE TELLS US THE PASSWORD.

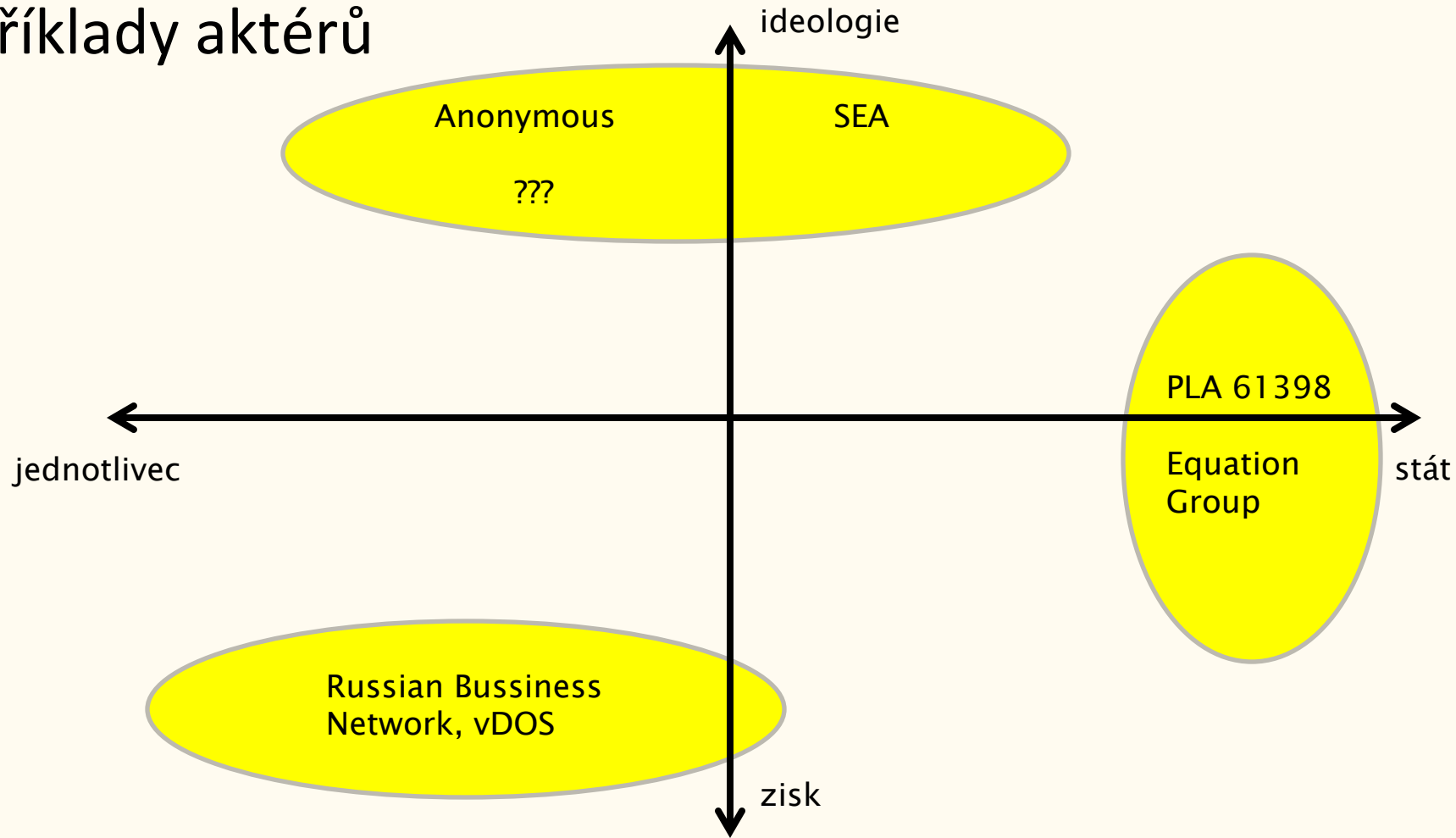
GOT IT.



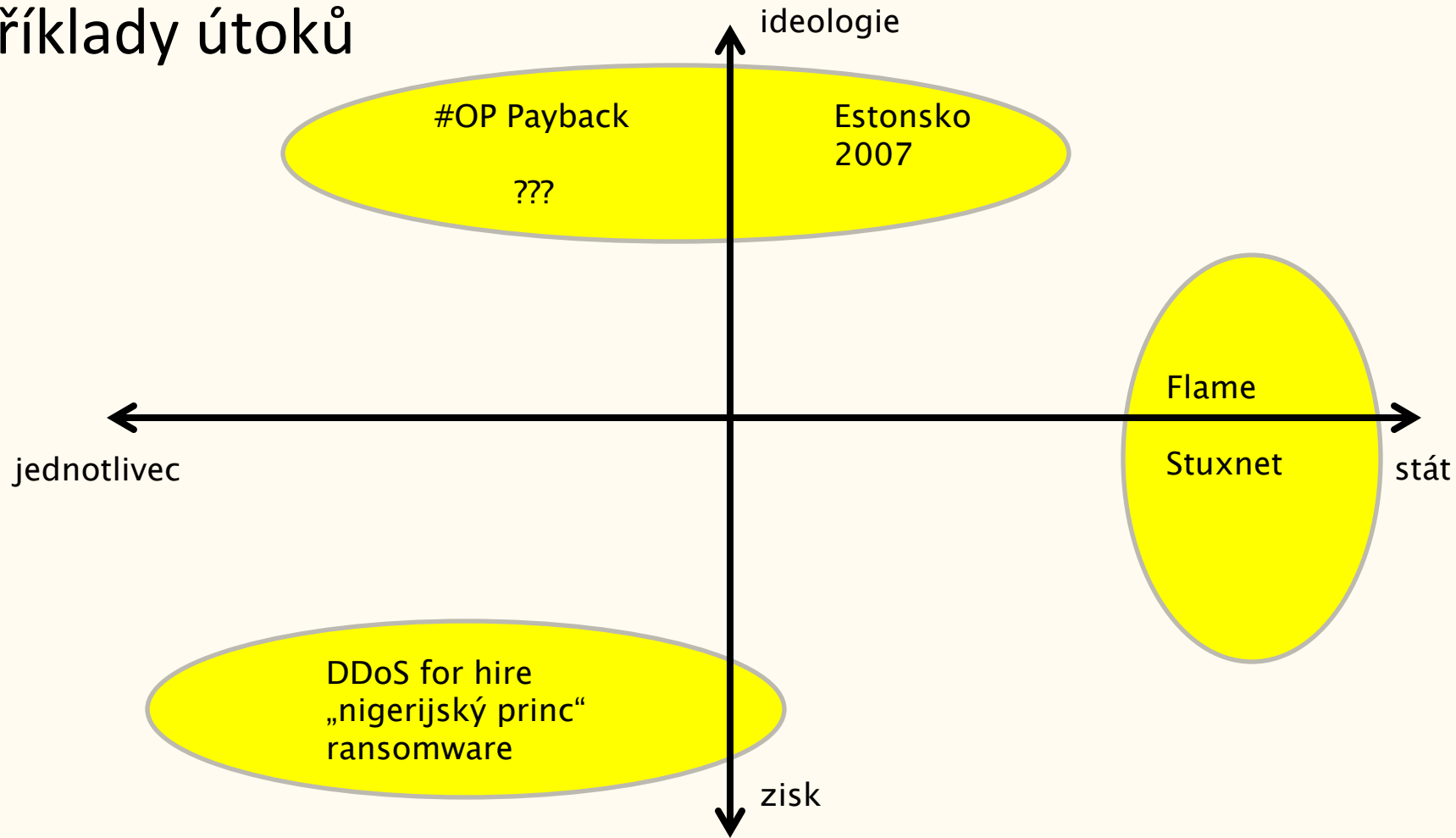
Typy aktérů



Příklady aktérů



Příklady útoků



DDoS for hire
„nigerijský princ“
ransomware

CIA(n)

- confidentiality
- integrity
- availability
- (nonrepudiation)

APT

- Advanced Persistent Threat
- primárně státní aktéři
- primárně strategicky či politicky motivovaní
- <https://apt.securelist.com/>
- jména ...

Hlavní státní aktivity

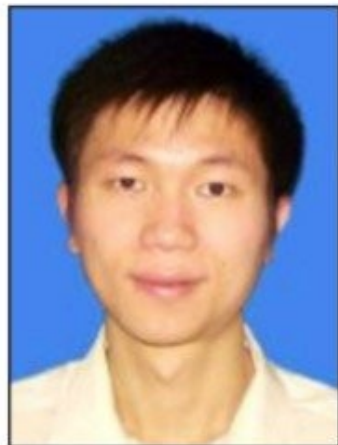
- špionáž (Flame, Sandworm, GhostNet)



WANTED BY THE FBI

APT 40 CYBER ESPIONAGE ACTIVITIES

Conspiracy to Damage Protected Computers and Commit Economic Espionage;
Criminal Forfeiture



Zhu Yunmin



Wu Shurong



Ding Xiaoyang



Cheng Qingmin

Hlavní státní aktivity

- špionáž (Flame, Sandworm, GhostNet)
- sabotáž (Stuxnet, Shamoon, Petya)

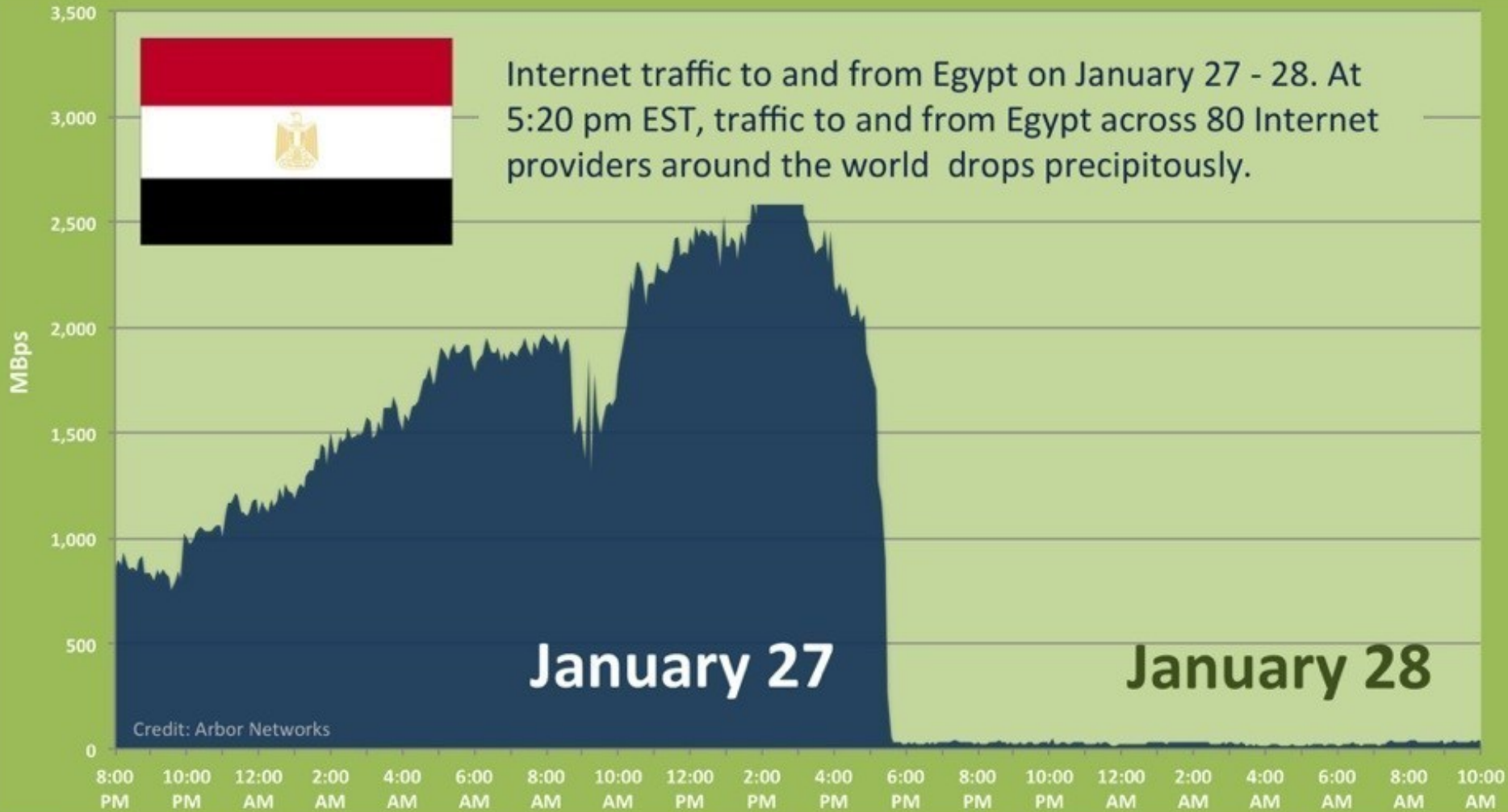


Hlavní státní aktivity

- špionáž (Flame, Sandworm, GhostNet)
- sabotáž (Stuxnet, Shamoon, Petya)
- cenzura (Great Firewall of China)



Internet traffic to and from Egypt on January 27 - 28. At 5:20 pm EST, traffic to and from Egypt across 80 Internet providers around the world drops precipitously.



Credit: Arbor Networks

Hlavní státní aktivity

- špionáž (Flame, Sandworm, GhostNet)
- sabotáž (Stuxnet, Shamoon, Petya)
- cenzura (Great Firewall of China)
- informační válka/propaganda (Agentstvo Internet-Issledovaniy)

RTERDOGAN

...mardaki g...
karsi bir kalkismasidir. Se
milleti demokrasine ve h
sahip cik. Turk milletini si
dusunen bu dar kadronun
karsi sizleri sokaga ve milletinize
sahip cikmaya cagiriyorum.
Devletine milletine sahip cik
Recep Tayyip Erdogan



Hlavní státní aktivity

- špionáž (Flame, Sandworm, GhostNet)
- sabotáž (Stuxnet, Shamoon, Petya)
- cenzura (Great Firewall of China)
- informační válka/propaganda (všichni a pořád)
- demonstrace síly (Estonsko 2007)

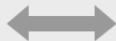
Error 522

Connection timed out

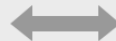


You

Browser
Working



CloudFlare
Working



www-local.projecthoneypot.org

Host
Error

What happened?

The initial connection between CloudFlare's network and the origin web server timed out. As a result, the web page can not be displayed.

What can I do?

If you're a visitor of this website:

Please try again in a few minutes.

If you're the owner of this website:

Contact your hosting provider letting them know your web server is not completing requests. An Error 522 means that the request was able to connect to your web server, but that the request didn't finish. The most likely cause is that something on your server is hogging resources. [Additional troubleshooting information here.](#)

Hlavní státní aktivity

- špionáž (Flame, Sandworm, GhostNet)
- sabotáž (Stuxnet, Shamoon, Petya)
- cenzura (Great Firewall of China)
- informační válka/propaganda (Rusko)
- demonstrace síly (Estonsko 2007)
- podpora konvenčních operací (Gruzie 2008, Orchard 2007)



Zajímavé případy

1. sibiřský plynovod 1982
2. mrtvý mafián
3. Lodz 2008
4. německá slévárna 2014
5. The Interview 2014
6. Lazarus heist 2016



Válka v kyberprostoru

- „Substitute“
- „Complement“
- „Independent“

WHY RUSSIAN CYBER DOGS HAVE MOSTLY FAILED TO BARK

Why Cyber Dogs Have Yet to Bark Loudly in Russia's Invasion of Ukraine

Is Ukraine the Cyberwar That Wasn't?

OPINIONS ON INTERNET PRIVACY

THE PHILOSOPHER:

"PRIVACY" IS AN IMPRACTICAL WAY TO THINK ABOUT DATA IN A DIGITAL WORLD SO UNLIKE THE ONE IN WHICH OUR SOCI-

SO BORED.



THE CRYPTO NUT:

MY DATA IS SAFE BEHIND SIX LAYERS OF SYMMETRIC AND PUBLIC-KEY ALGORITHMS.

WHAT DATA IS IT?

MOSTLY ME EMAILING WITH PEOPLE ABOUT CRYPTOGRAPHY.



THE CONSPIRACIST:

THESE LEAKS ARE JUST THE TIP OF THE ICEBERG. THERE'S A WAREHOUSE IN UTAH WHERE THE NSA HAS THE ENTIRE ICEBERG.

I DON'T KNOW HOW THEY GOT IT THERE.



THE NIHILIST:

JOKES ON THEM, GATHERING ALL THIS DATA ON ME AS IF ANYTHING I DO MEANS ANYTHING.



THE EXHIBITIONIST:

MMMM? I SURE HOPE THE NSA ISN'T WATCHING ME BITE INTO THESE JUICY STRAWBERRIES!!

OOOPS, I DRIPPED SOME ON MY SHIRT! BETTER TAKE IT OFF.

GOOGLE, ARE YOU THERE?

GOOGLE, THIS LOTION FEELS SOOOO GOOD.



THE SAGE:

I DON'T KNOW OR CARE WHAT DATA ANYONE HAS ABOUT ME.

DATA IS IMAGINARY. THIS BURRITO IS REAL.

