



# Stake at the heart

*Destroying common security wisdom*

Ayoub EL AASSAL

# Disclaimer

The opinions expressed during this presentation are my own and do not necessarily reflect those of my current employer or any other affiliated organization. The information and advice shared here are based on my personal experience and expertise in the field of cybersecurity and should not be considered as an official position of my employer.

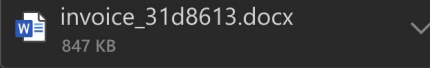


“Humans are the weakest link in  
cyber security”



Francis Cargo <francis.cargoo@folsenn.com>

To: You



Here is the invoice you request. Pleas proceed with payment before EoD.

Regards,

--  
Francis Cargo



Your documents, photos, databases and other important files encrypted



To decrypt your files you need to buy our special software - General-Decryptor



Follow the instructions below. But remember that you do not have much time

### General-Decryptor price

the price is for all PCs of your infected network

You have **2 days, 23:38:14**  
\* If you do not pay on time, the price will be doubled  
\* Time ends on Jul 5, 14:15:38

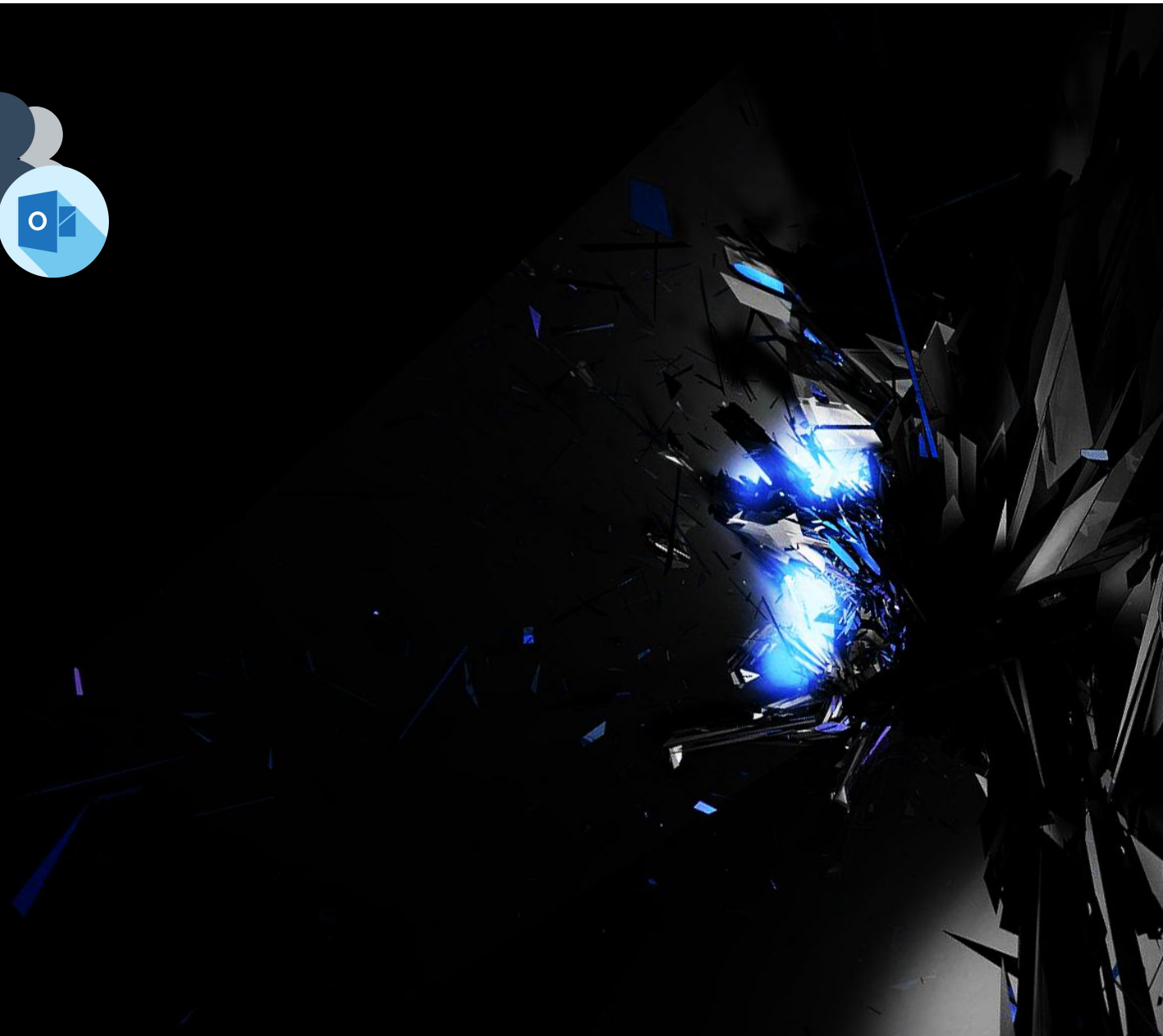
Current price **24435.5 XMR**  
≈ 5,000,000 USD  
After time ends **48871 XMR**  
≈ 10,000,000 USD

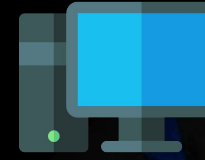
Monero address:

\* XMR will be recalculated in 5 hours with an actual rate.



- *What about Spam filters?*
- *Sandbox analysis?*





- *Lack of logical isolation?*
- *Full access to the underlying OS' APIs from a text document*
- *EDR/AV bypass or lack there of*



- *Lack of patching or even availability of a patch*
- *Bypass any system detection/protection*



- *No network isolation*
- *Same password everywhere*
- *Clear text protocols*
- *Broken authentication protocols*
- *No detection of unusual behavior*
- *Etc.*





*The company and its vendors made significant errors and breached their security commitments*

...Yet, it's the job of the employee to be prudent?

~~"Humans are the weakest link in cyber security"~~

*Let's build an environment where a  
single error does not threaten the  
company's security*



“The job of the security team is finding vulnerabilities”

## A common operating system in security:

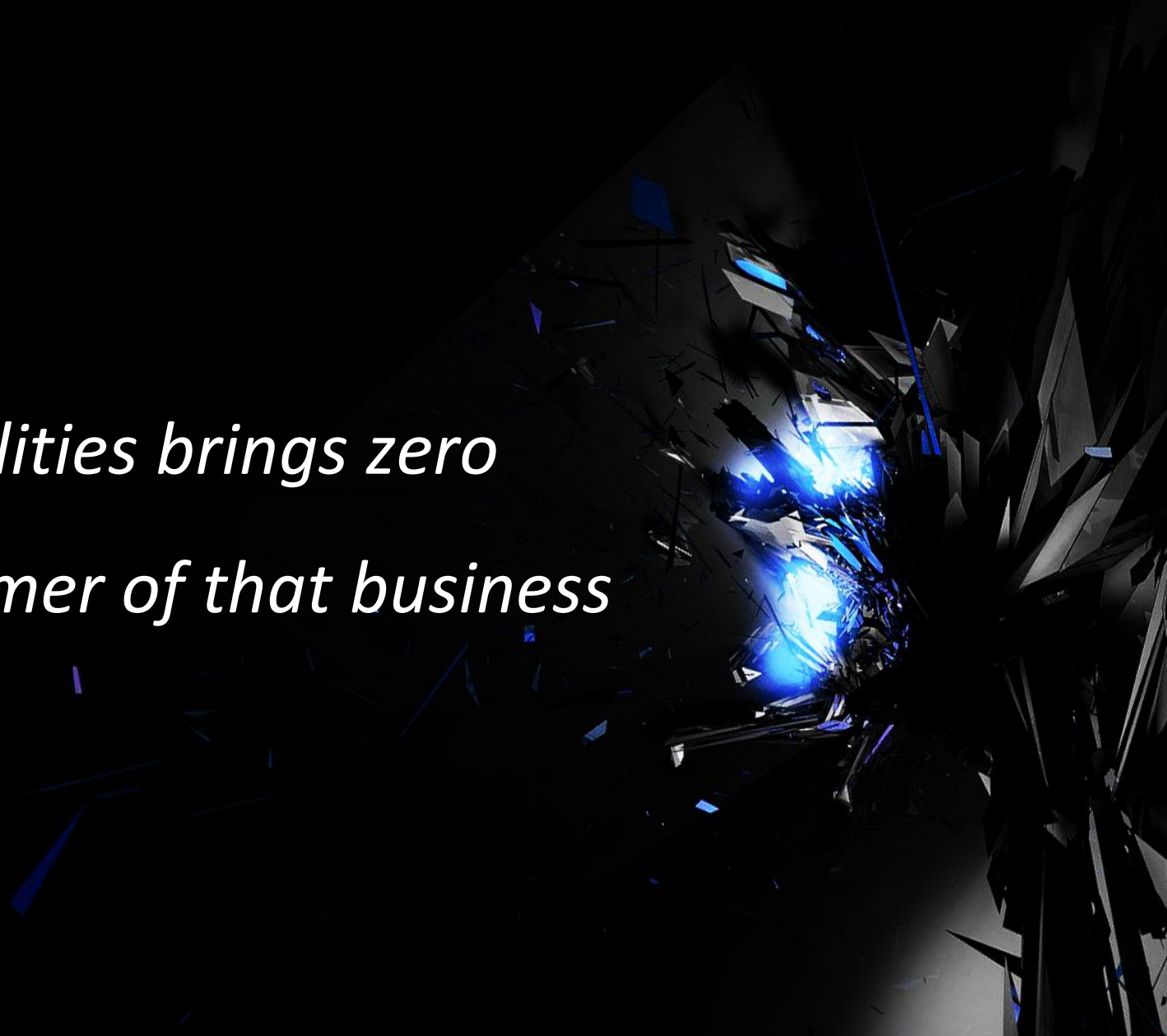
- *Second/third line of defense*
- *Auditing systems and processes*
- *Pages of vulnerabilities and recommendations*

*...Of course after 2 years, barely anything changes*



An auditor's paradox

*Pointing vulnerabilities brings zero  
value to the customer of that business*



# Misaligned incentives

## *Security team*

- *Finding vulnerabilities*
- *Accurate recommendations*
- *Audit as many systems as possible*

## *Rest of the*

### *company*

- *Deliver value to customers*
- *Ship feature to increase revenue*
- *Keep the platform stable*

# We need to align our goals

- *Yes to auditing systems but...*
- *Security team with a mandate to fix vulnerabilities*
- *Ownership of projects*



~~“The job of the security team is finding vulnerabilities”~~

*The job of the security team  
is to fix vulnerabilities*





“The attacker has the  
advantage”




~~“The attacker has the advantage”~~

“The company forfeits its advantage”



Contact

Ayoub EL AASSAL

 ayoul3\_\_

Icons from <https://www.flaticon.com>