Malware Unpacking Workshop



Lilly Chalupowski August 28, 2019

whois lilly.chalupowski

Table: who.is results

Name	Lilly Chalupowski
Status	Employed
Creation Date	1986
Expiry	A Long Time from Now (Hopefully)
Registrant Name	GoSecure
Administrative Contact	Travis Barlow
Job	Threat Intelligence - Team Lead

Agenda

What will we cover?

- Disclaimer
- Reverse Engineering
 - Registers
 - Stack
 - Heap
 - Assembly
 - Calling Conventions
- Tools
 - x64dbg
 - Cutter
 - Radare2
 - Detect it Easy
 - HxD

- Injection Techniques
 - DLL Injection
 - PE Injection
 - Process Hollowing
 - Atom Bombing
- Workshop

Disclaimer Don't be a Criminal

disclaimer.log

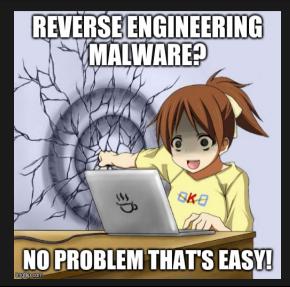
The tools and techniques covered in this presentation can be dangerous and are being shown for educational purposes.

It is a violation of Federal laws to attempt gaining unauthorized access to information, assets or systems belonging to others, or to exceed authorization on systems for which you have not been granted.

Only use these tools with/on systems you own or have written permission from the owner. I (the speaker) do not assume any responsibility and shall not be held liable for any illegal use of these tools.

Reverse Engineering

It's easy don't worry!



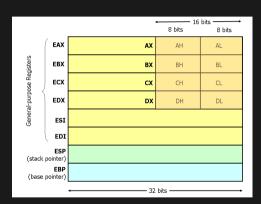
Registers Not this one!



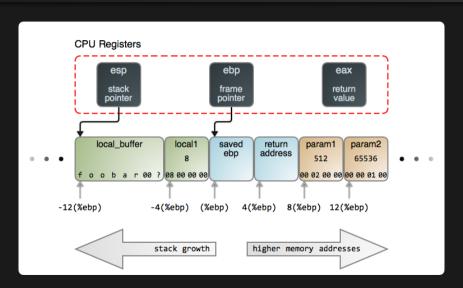
Registers

Not the kind with money in them

- EAX
- EBX
- ECX
- EDI
- ESI
- ESP
- EBP



Did You Know: In computer architecture, a processor register is a quickly accessible location available to a computer's central processing unit (CPU).



The Heap

Placeholder



Assembly Assembly