RSA
FIRSTWATCH

MALWARE AUTOMATION

Christopher C. Elisan
Principal Malware Scientist
RSA NetWitness

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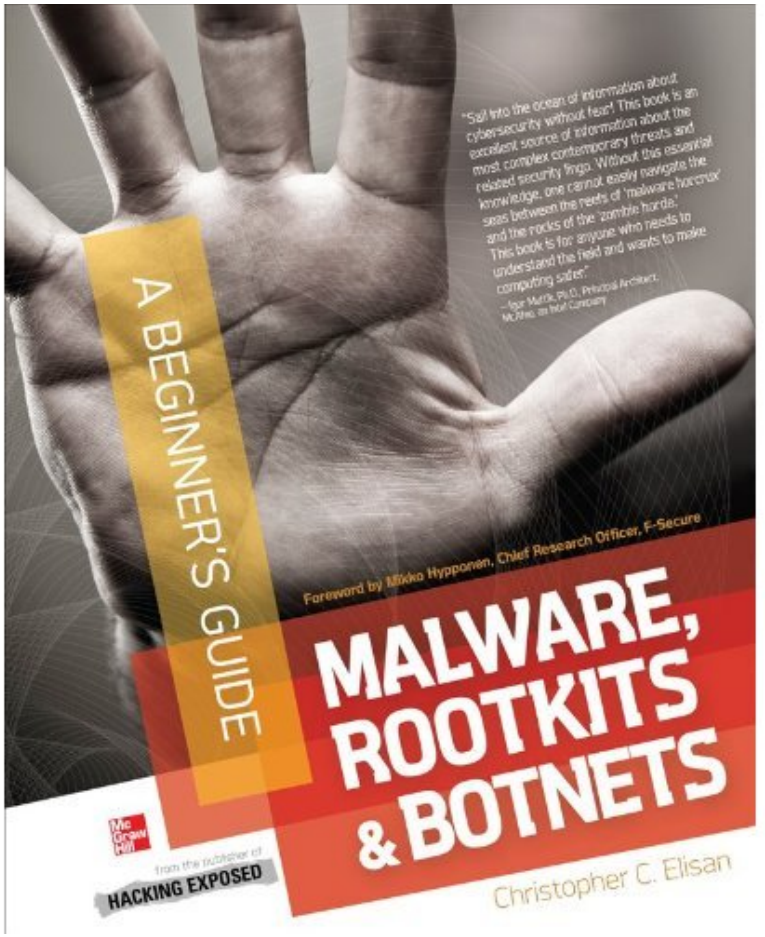
WHO AM I?

- Principal Malware Scientist – RSA NetWitness
- Author of *"Malware, Rootkits & Botnets: A Beginner's Guide"* (*bit.ly/mrbbook*)
- Past Adventures
  - Damballa (2009-2012)
  - F-Secure (2006-2009)
  - Trend Micro (1998-2006)
- @Tophs



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- RSA's elite, highly trained global threat research and intelligence team
- Provides covert and strategic threat intelligence on advanced threats and actors
- Focuses on unknown threats
- Research operationalized automatically via RSA Live
- @RSAFirstWatch

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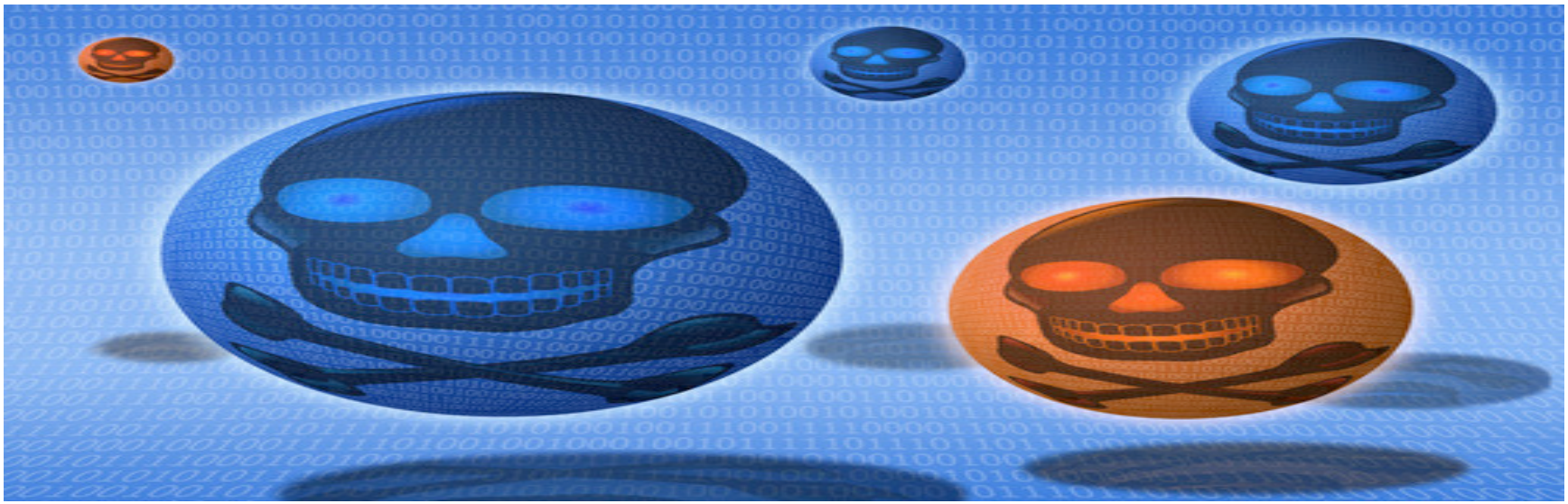
PURPOSE OF THE TALK

Understand the tools and methodologies behind the staggering number of malware discovered on a periodic basis…



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AGENDA

- What are we up against?
- What are the tools used by attackers?
- How are they doing it?
- Why are they doing it?
- Live Demo

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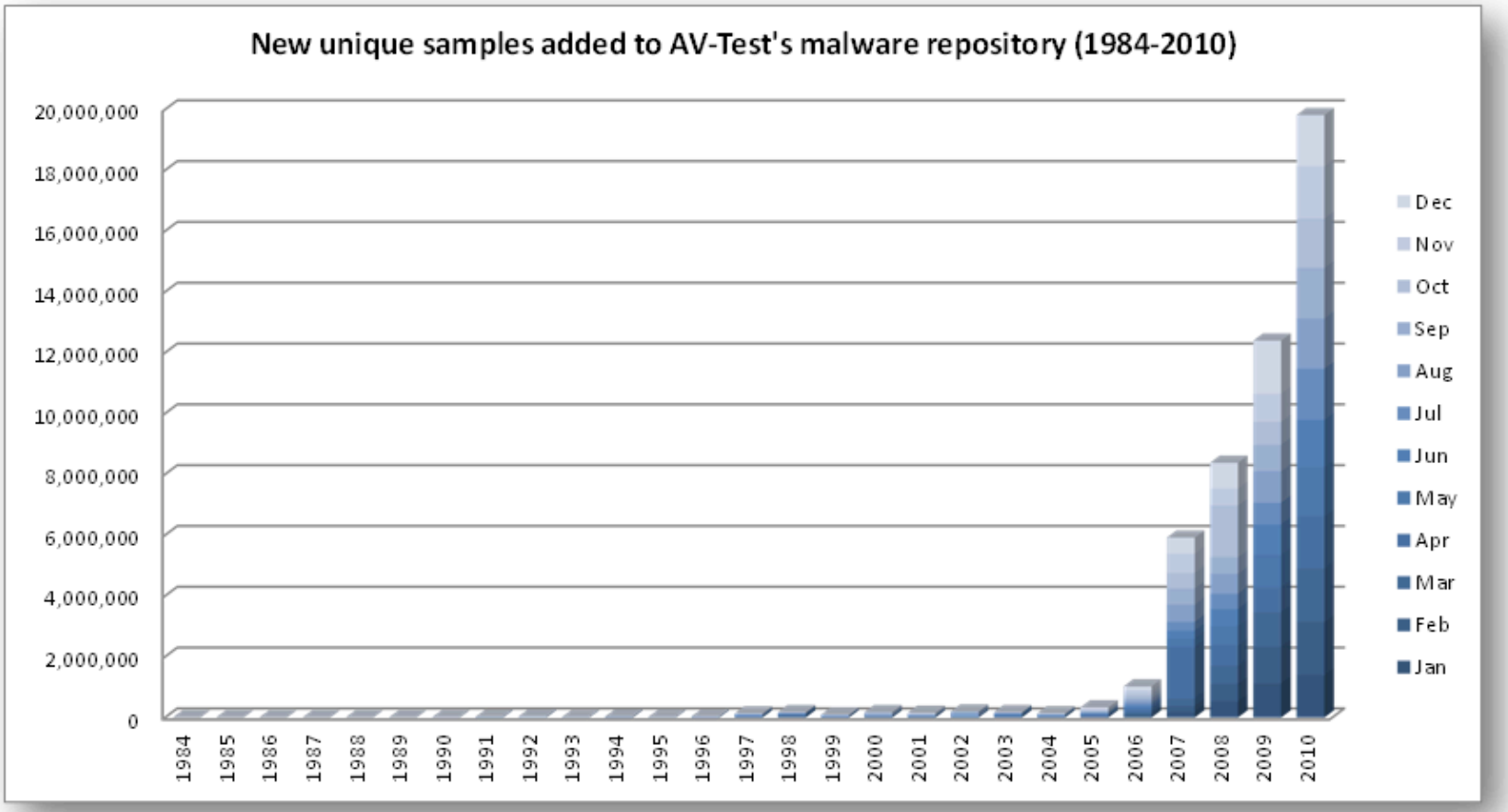
WE ARE UP AGAINST…



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ARMY OF ARMORED MALWARE

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WHAT?

- DiY Kits
- Armoring Tools
  - Packers
  - Encrypters
  - Joiners / Binders
- AV Scanners
  - On-premise
  - In-the-cloud

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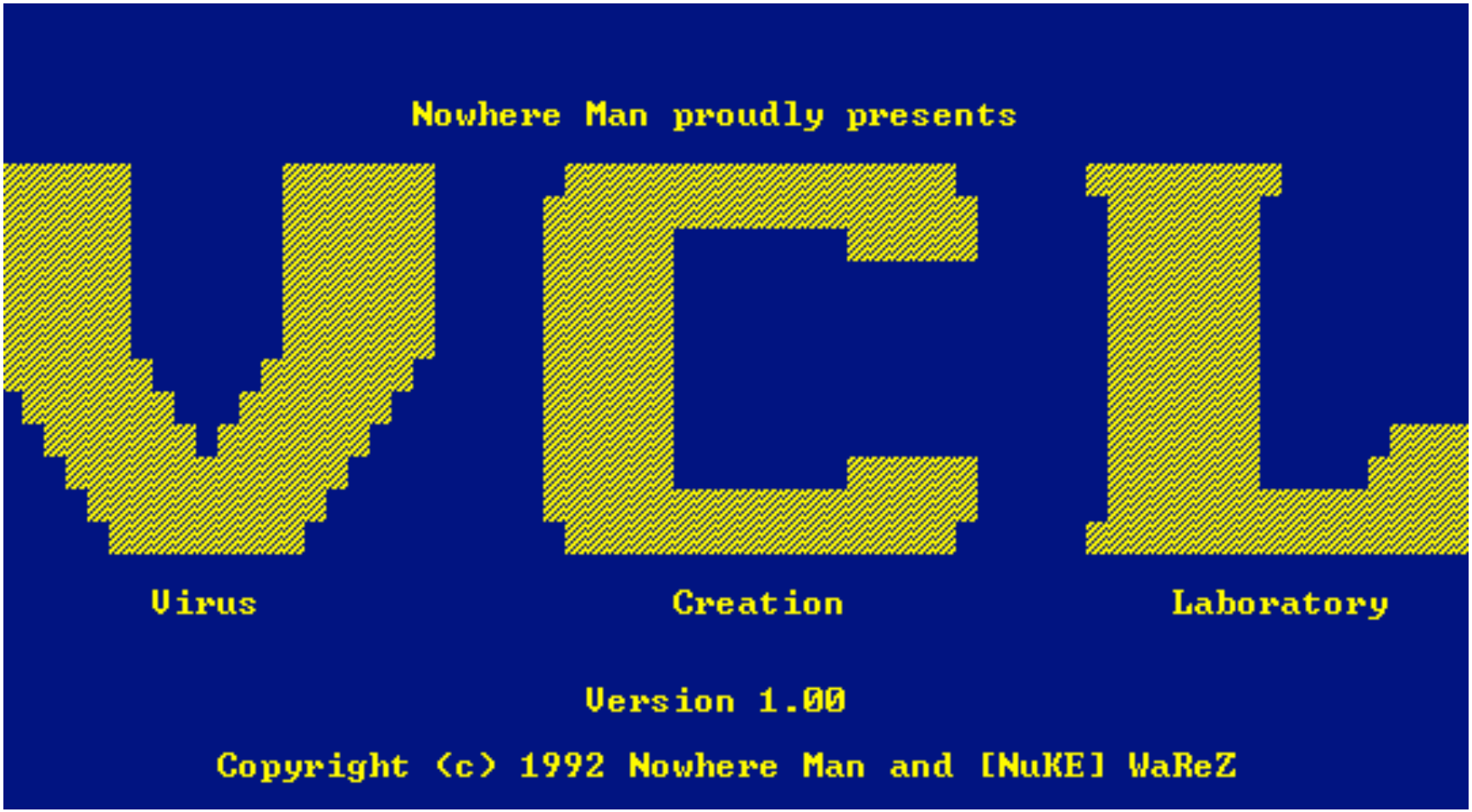
DIY KITS



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DIY KITS

```
PS-MPC ▮ Phalcon/Skism Mass Produced Code Generator
       ▮ Version 0.91β          Written by Dark Angel

Syntax: PS-MPC <file1> <file2> ...
  file1 = name of first configuration file
  file2 = name of second configuration file

Thank you for using the Phalcon/Skism Mass Produced Code Generator
```

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DIY KITS

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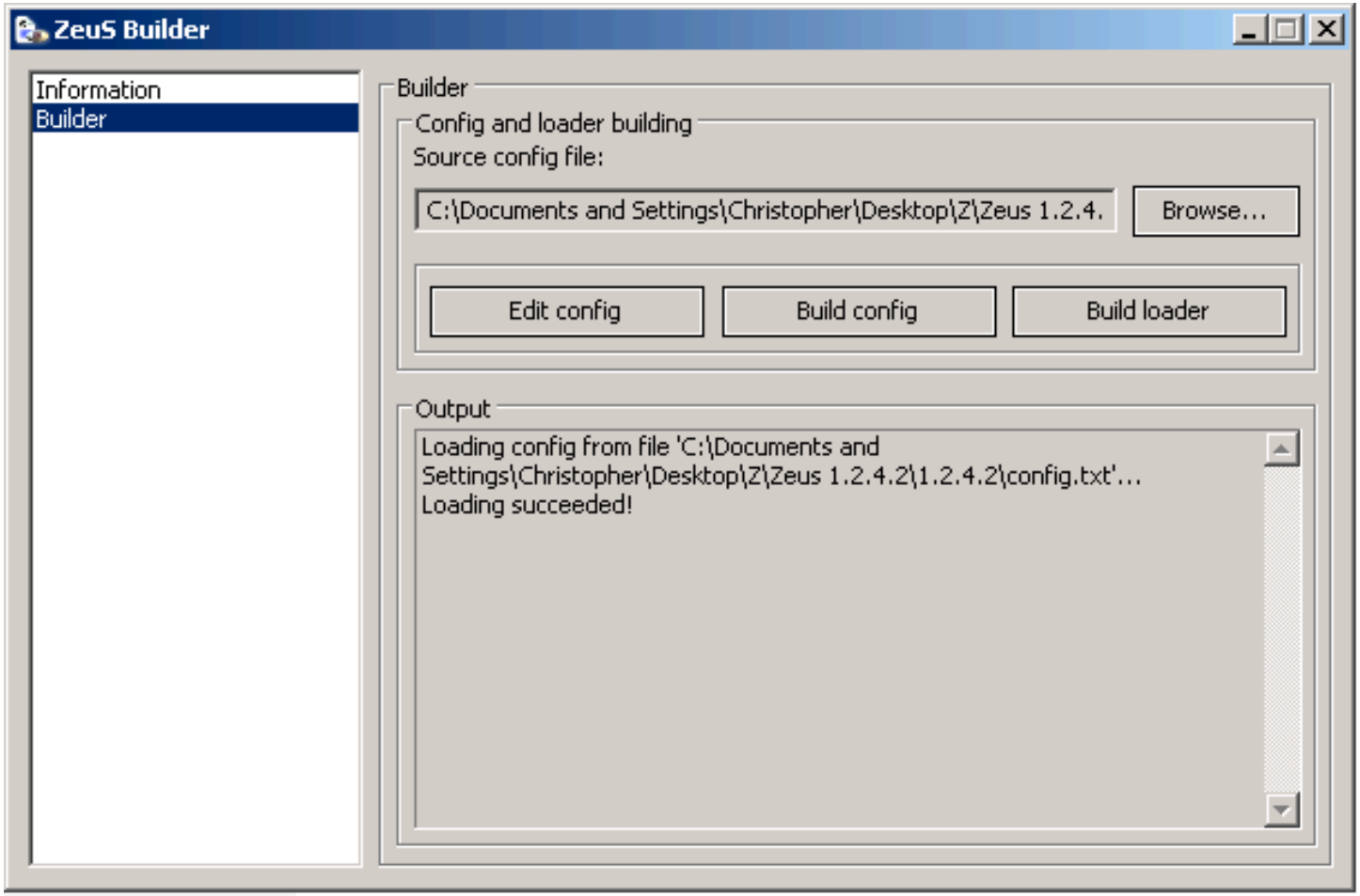
DIY KITS



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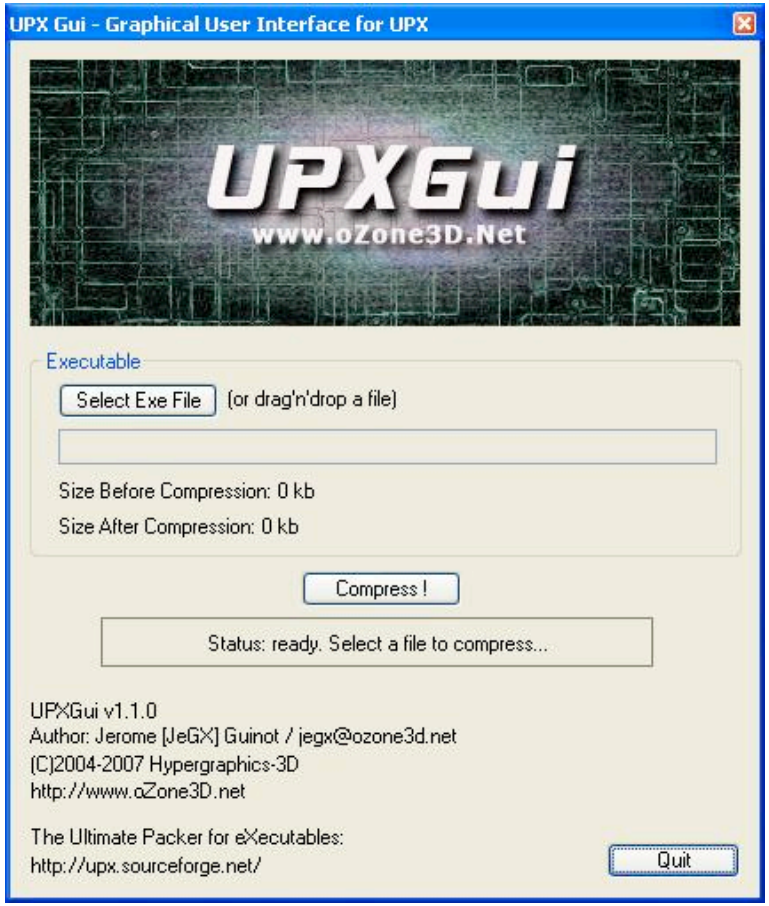
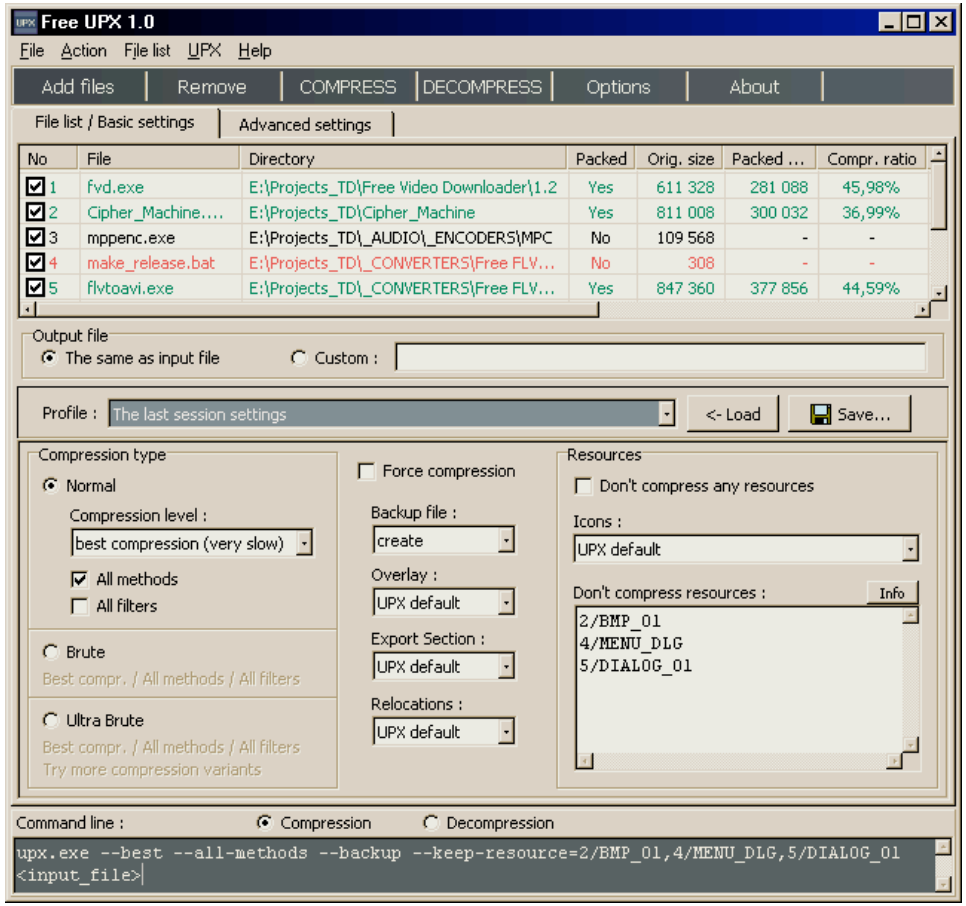
ARMORING TOOLS





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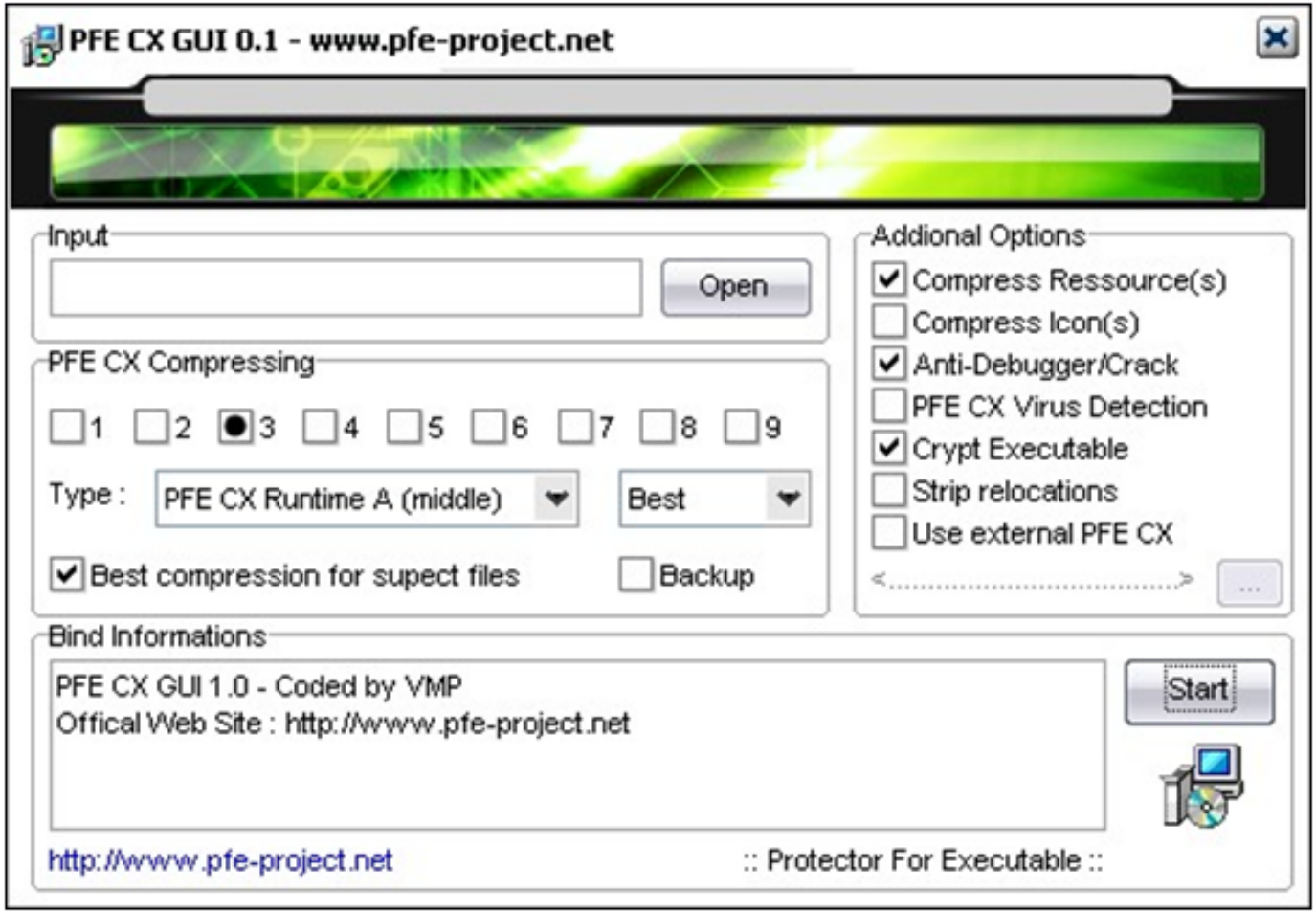

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ARMORING TOOLS

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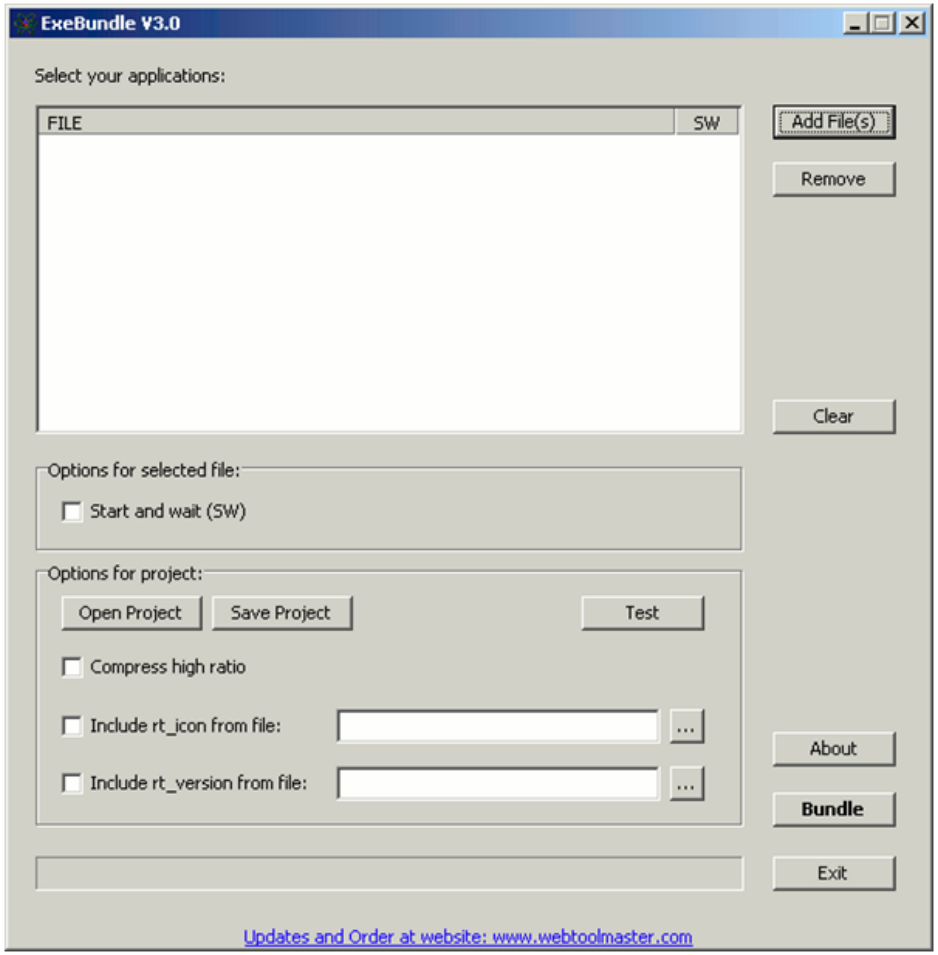

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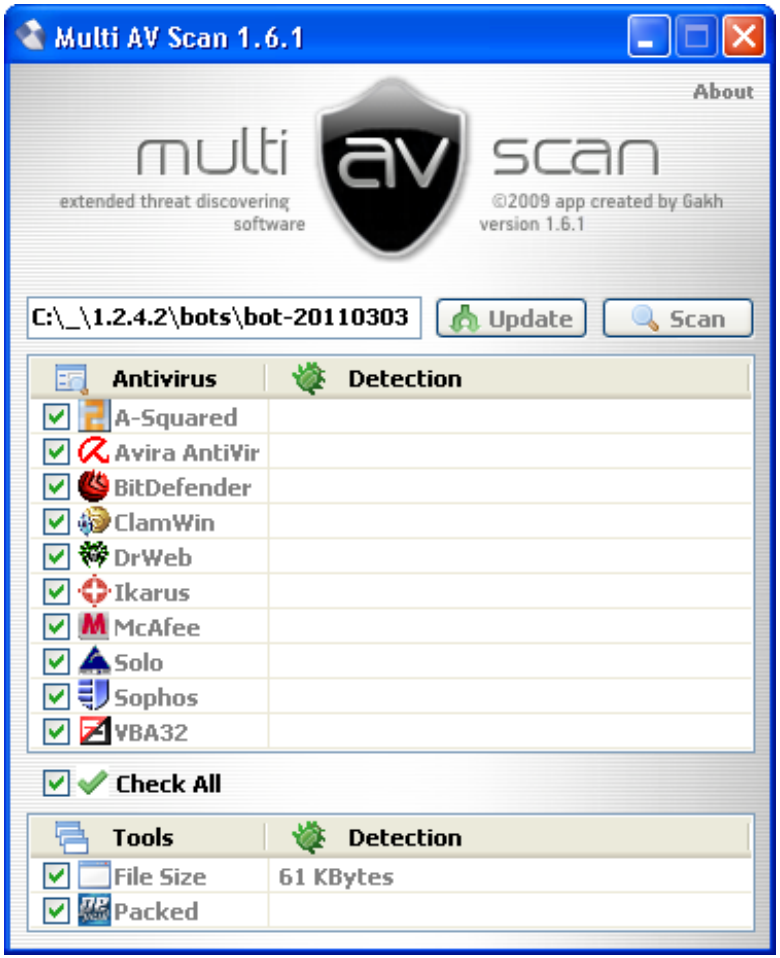
AV SCANNERS



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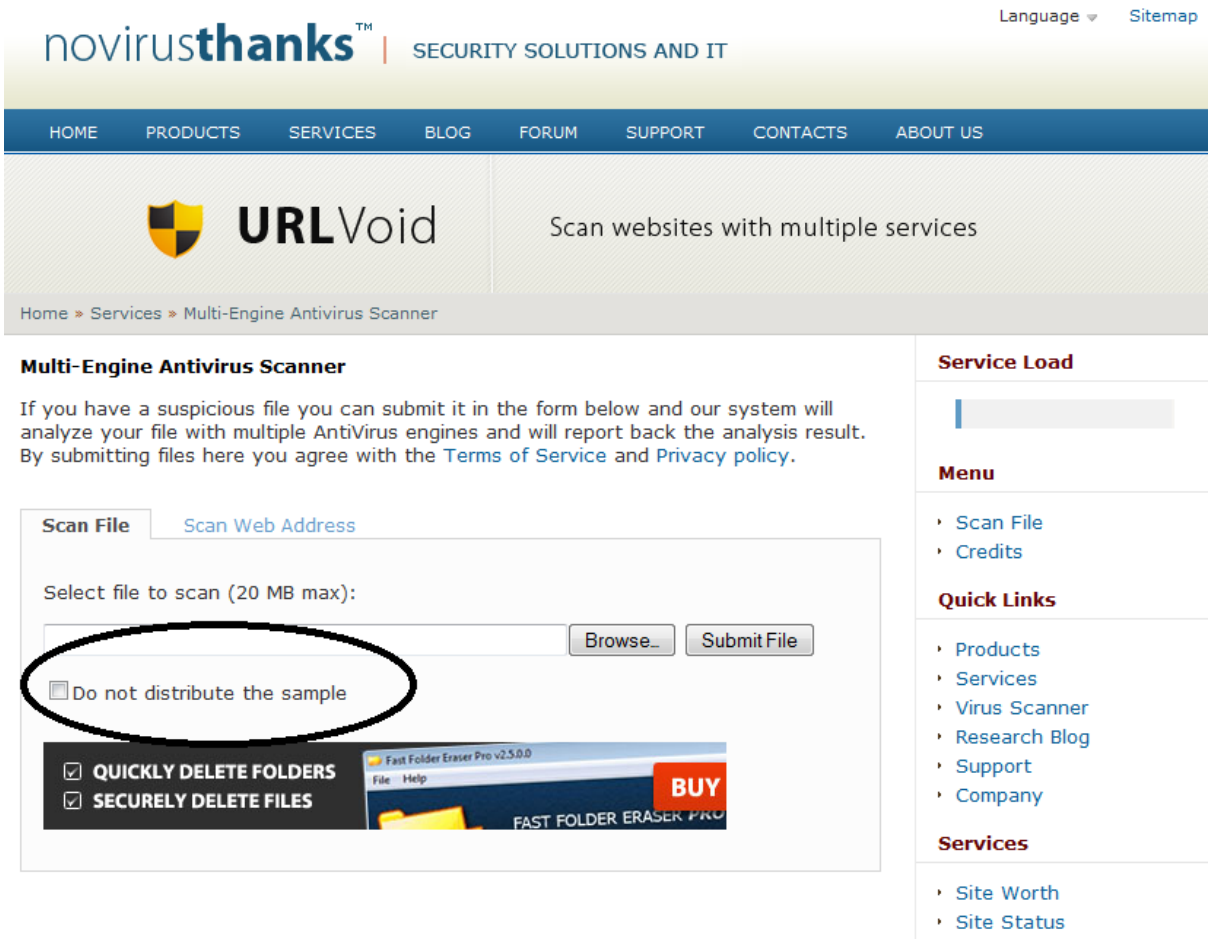
AV SCANNERS



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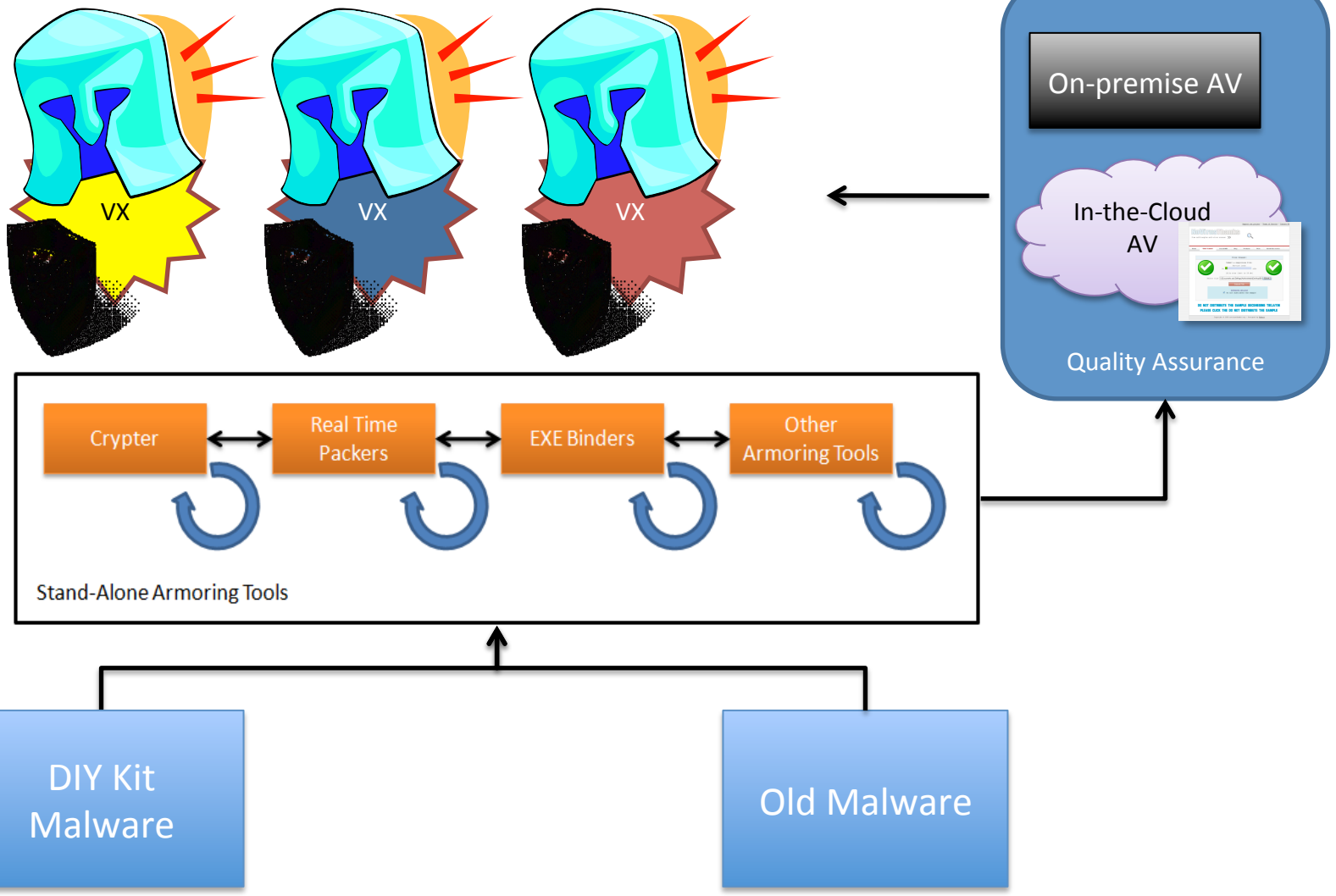
HOW?



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WHY?

- Exponential effect – strength in numbers
- Easy malware update
- Knock AV Out

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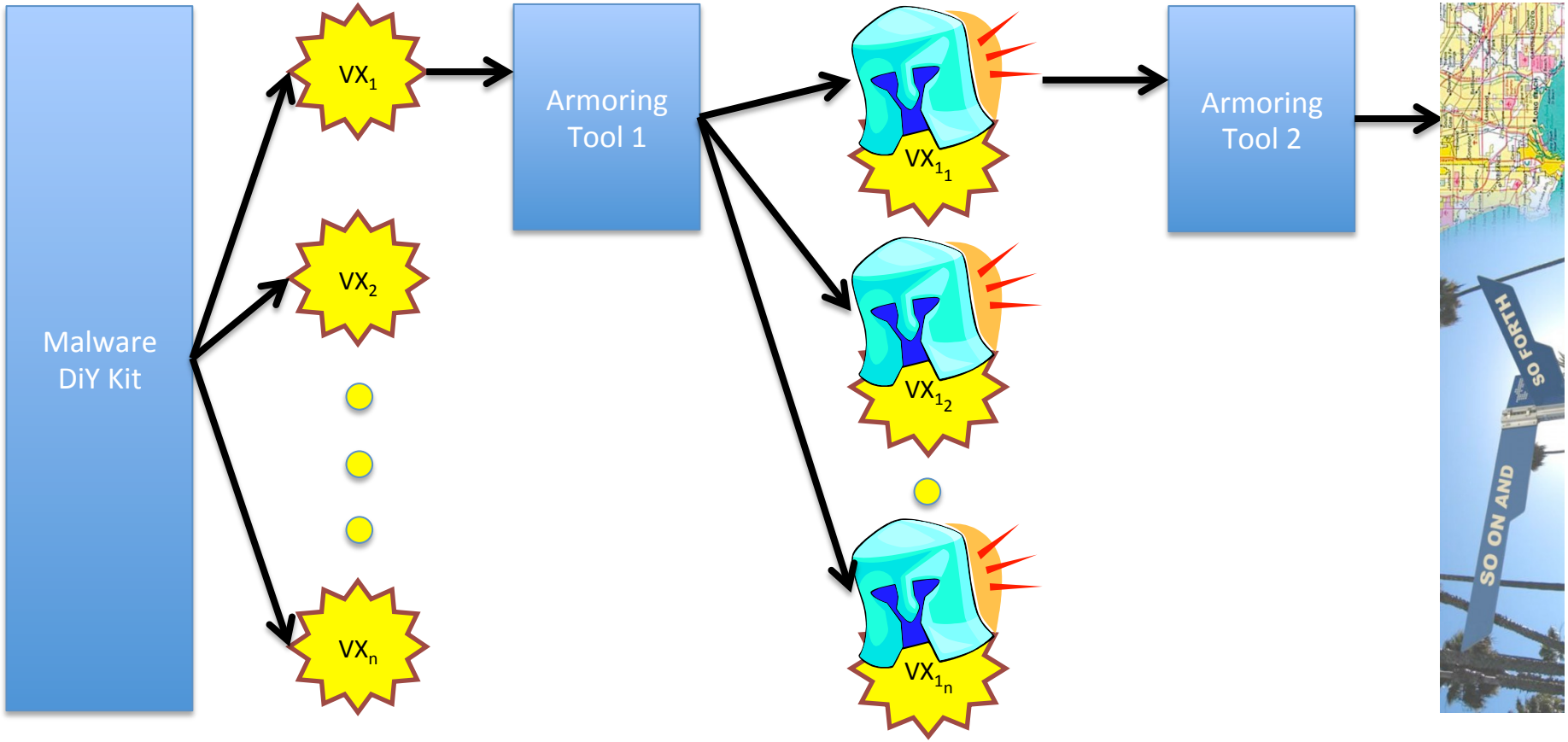
EXPONENTIAL EFFECT



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EASY MALWARE UPDATE

- Unique samples per malware deployment technology
- Malware serving domains can rotate malware in minutes (date and time seed)

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KNOCK AV OUT

- Malware creation time vs. Solution Cycle time
- AV evasion effectively utilized
- 1:1 signature ratio
- Understanding the malware requires reversing and not just analysis

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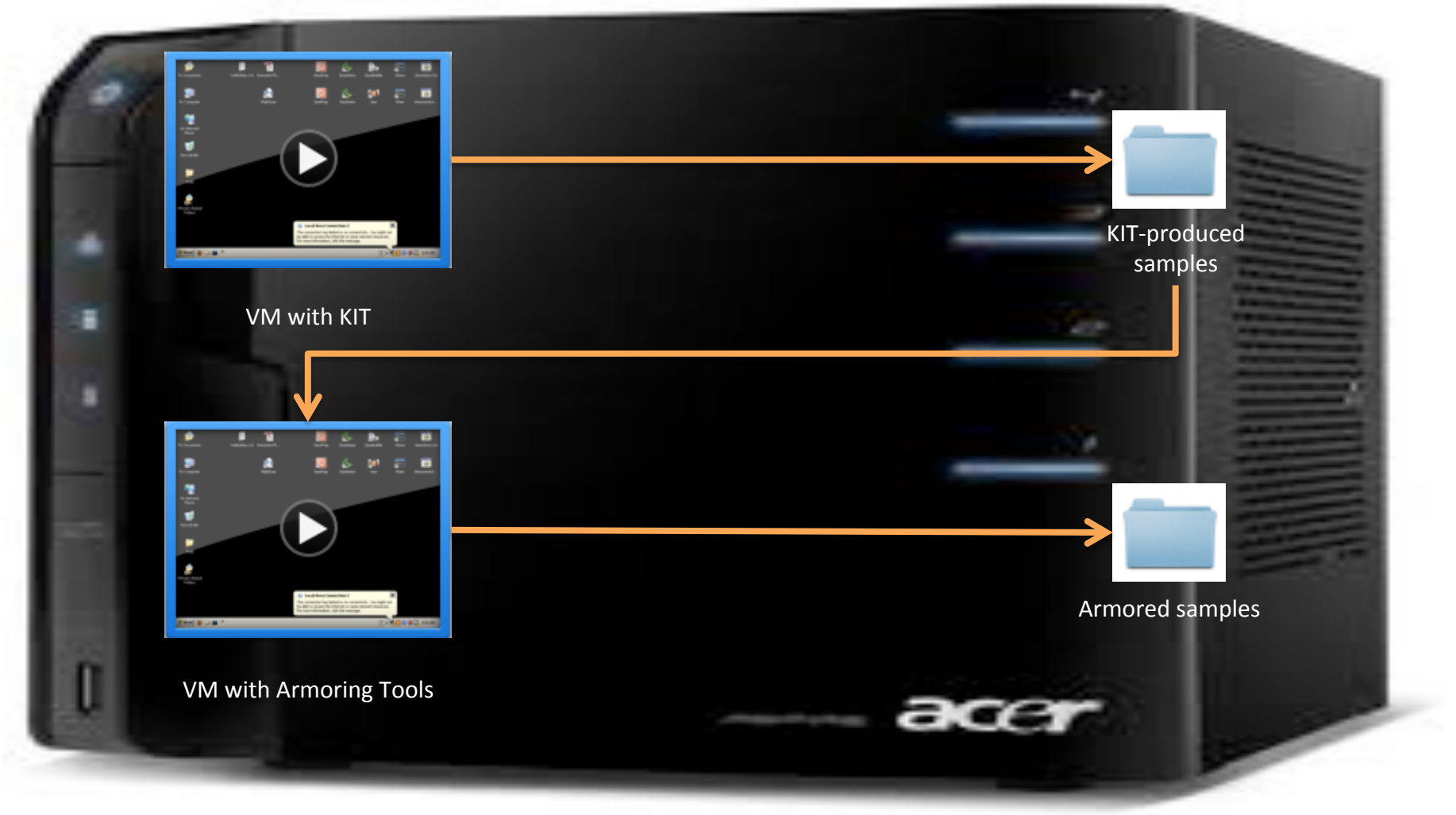
PUTTING THEM TOGETHER



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