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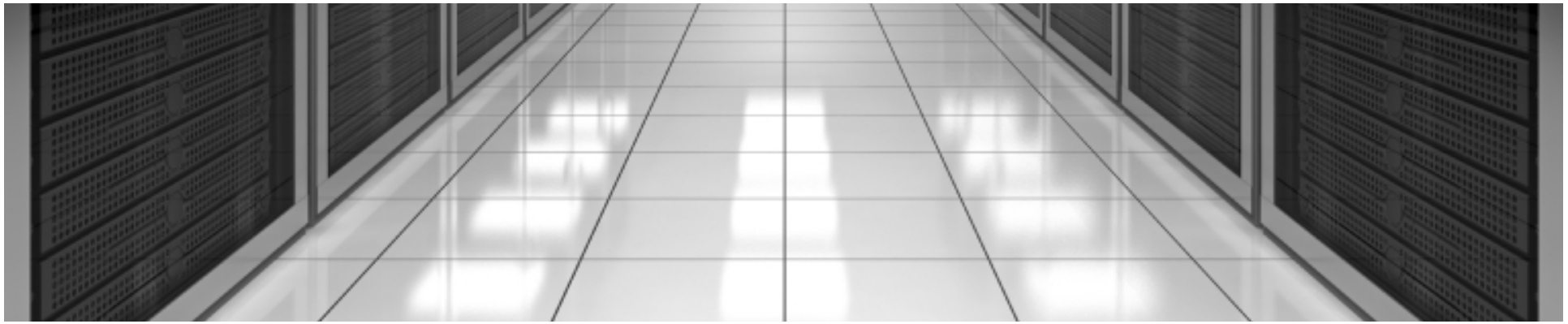
AV VENDORS AREN'T
AS STUPID AS THEY LOOK



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EVP of Product and Engineering

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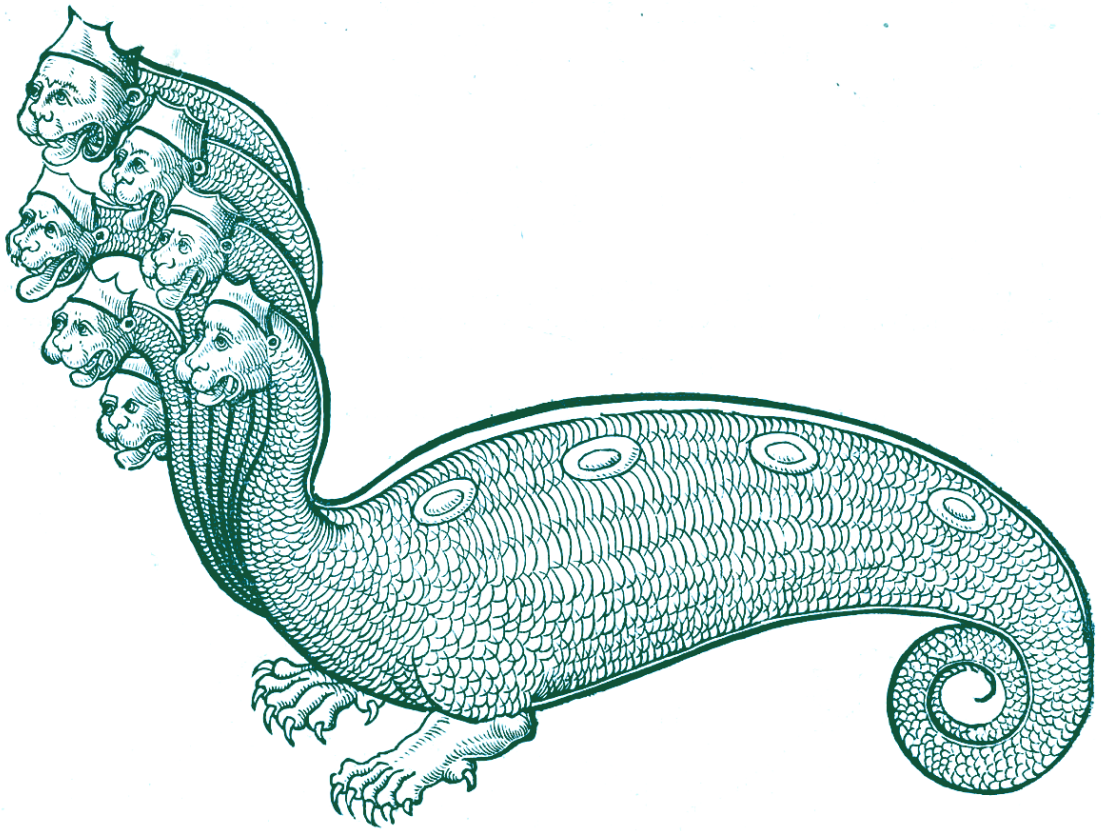
Anti-virus is a misnomer

- Viruses
- Worms
- Botnet software
- Trojans
- Rootkits
- Spyware
- Adware
- Attack tools



- AV technologies try to eliminate it all
- Let’s generically say malware.

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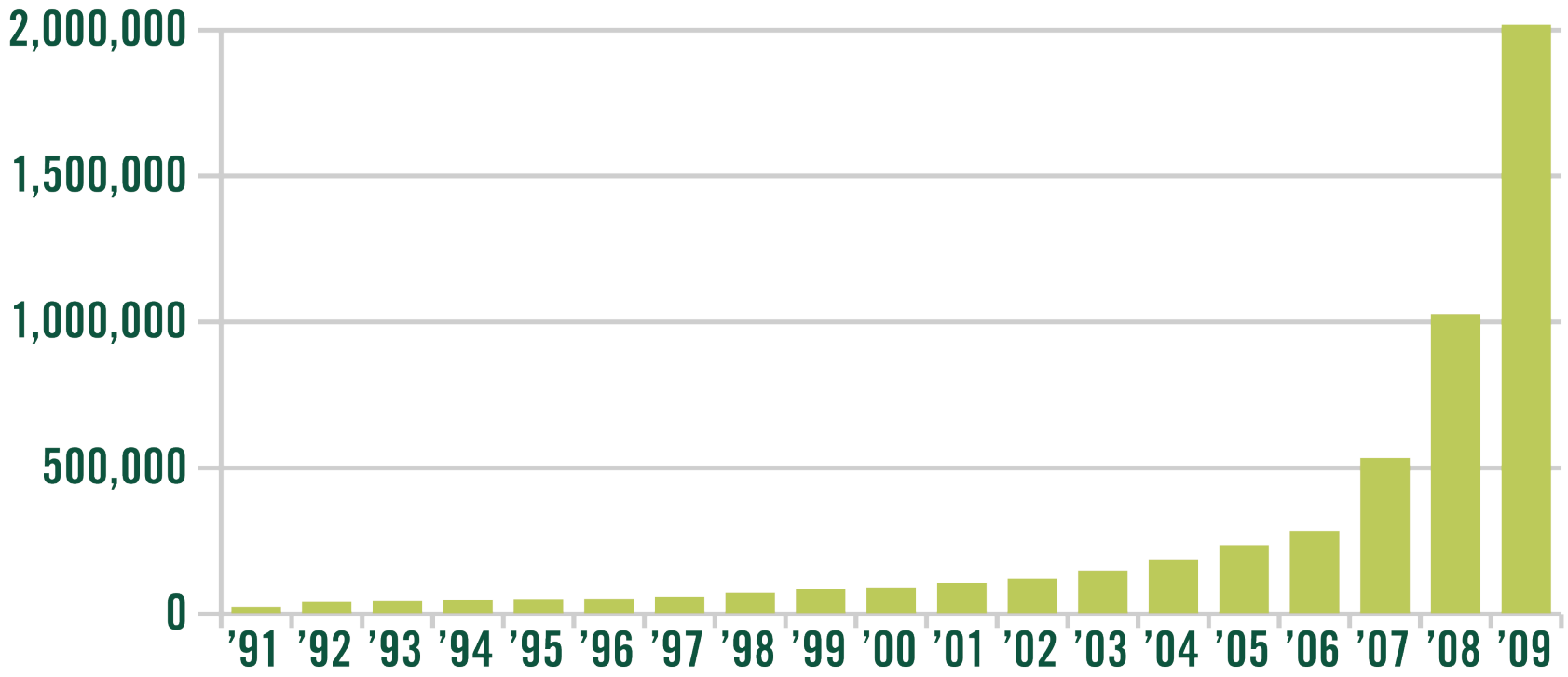
Problem Scope



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Under the hood

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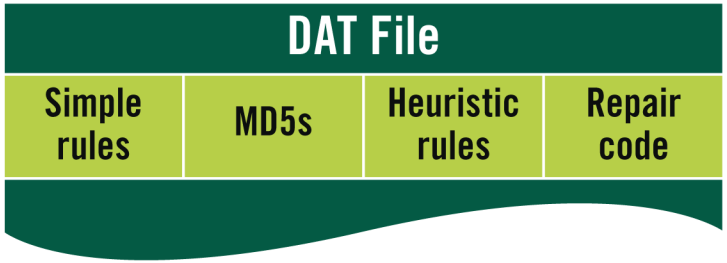
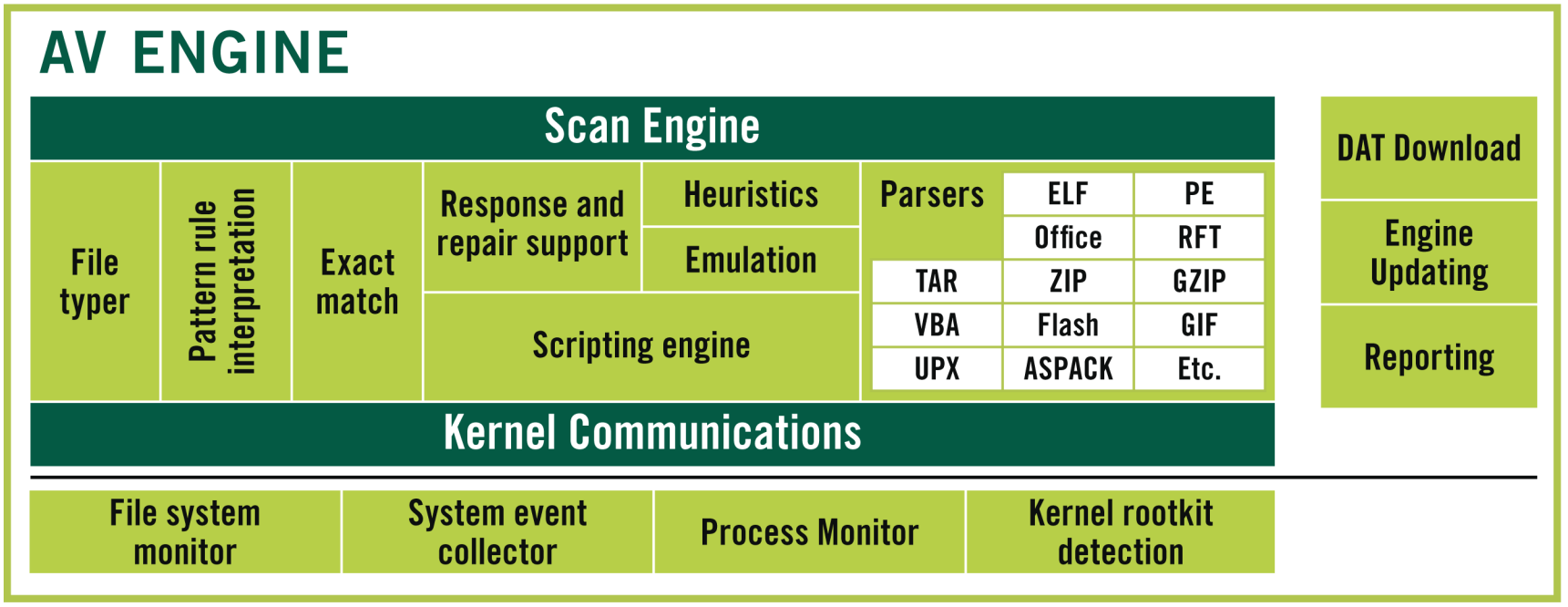
Under the hood





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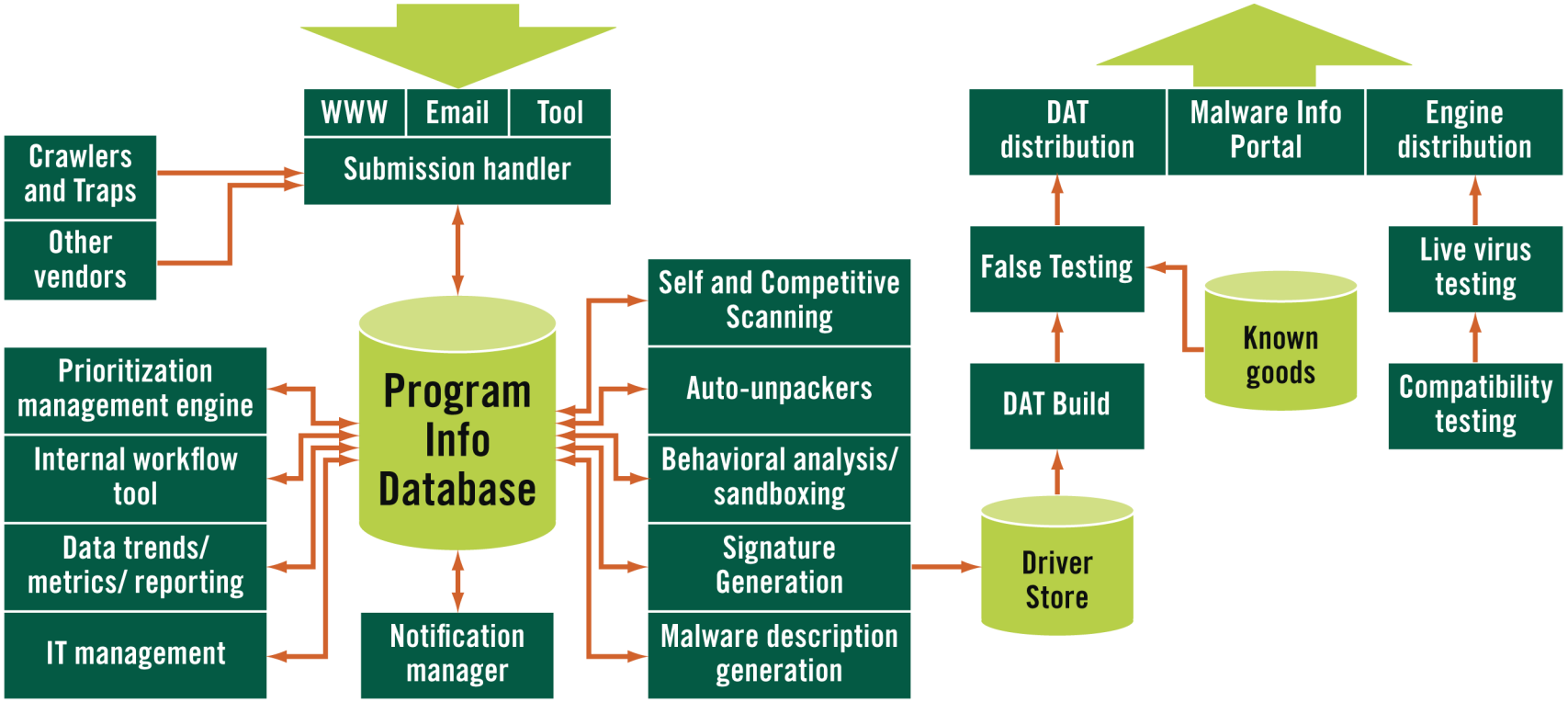
Typical automation



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A researcher's todo list

- Help prioritize samples
- Figure out who should be dealing w/ samples
- Run some samples, see what they do
- Get someone to reverse engineer this sample
- Write a description of functionality
- Write a generic detector for that botnet
- Write repair code to wipe that botnet
- Produce a special DAT for BigCo
- Let BigCo know what happened to them
- Write some automation to make life easier

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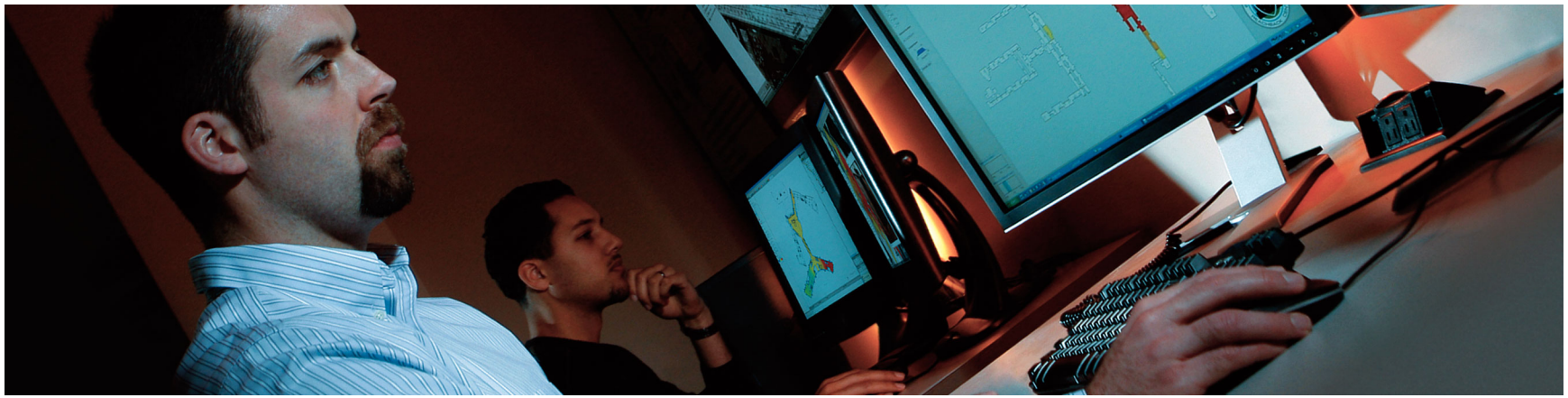
Common problems

- False positives
- Seeing enough malware
- Performance
- Operational scale
- Cleaning up infections
- The testing problem
- Bad guys disabling your product
- Server-side polymorphism
- Getting coverage quickly



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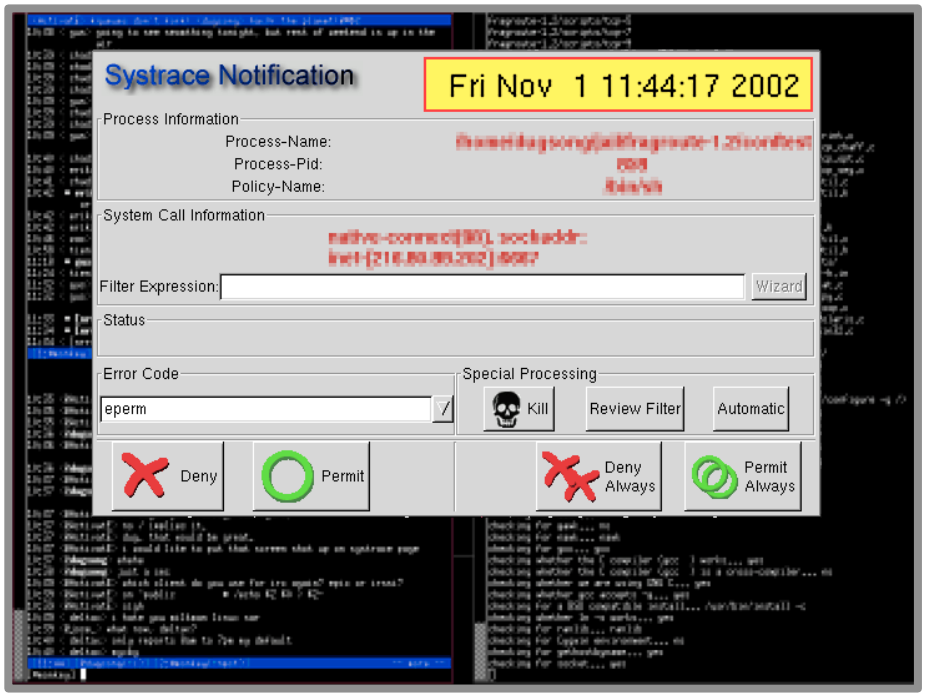
Comparatives are broken

- Testing fake malware
- Testing old malware
- Not using products in the wild
- Vendors skewing the sample set

- IEEE is tackling this problem



TOMORROW'S TECHNOLOGY TODAY

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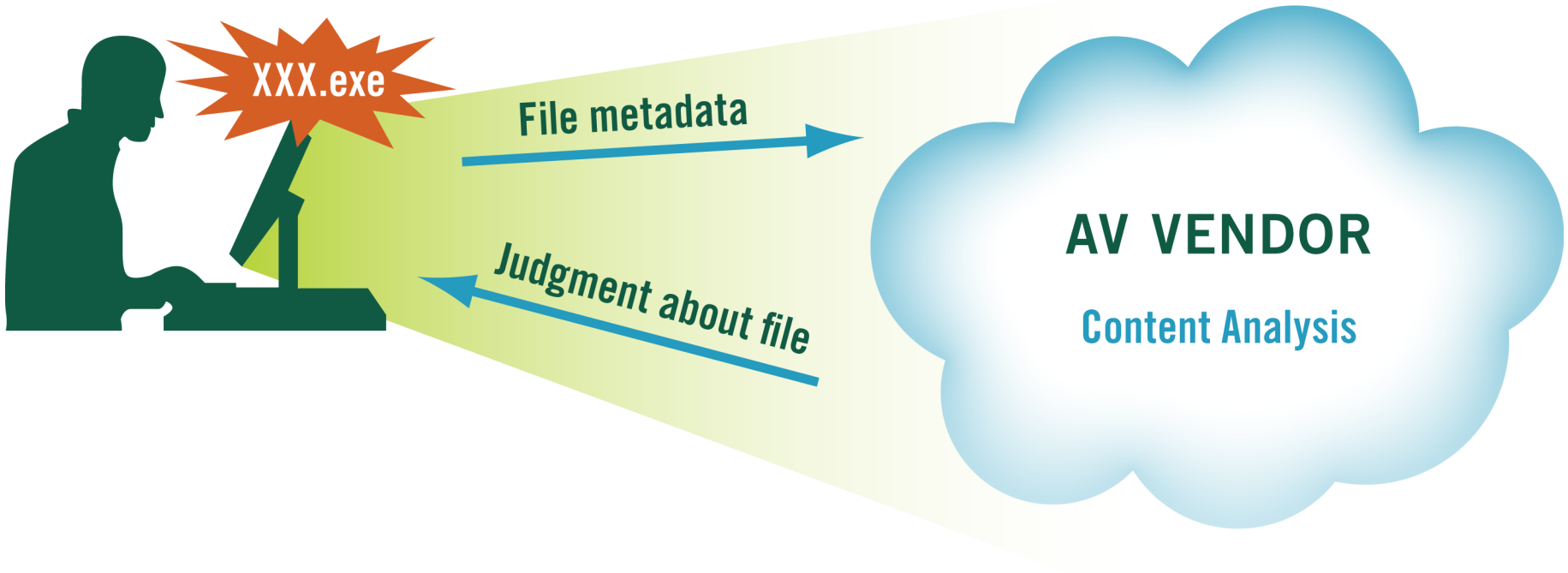
Generic Cloud AV



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Program classification

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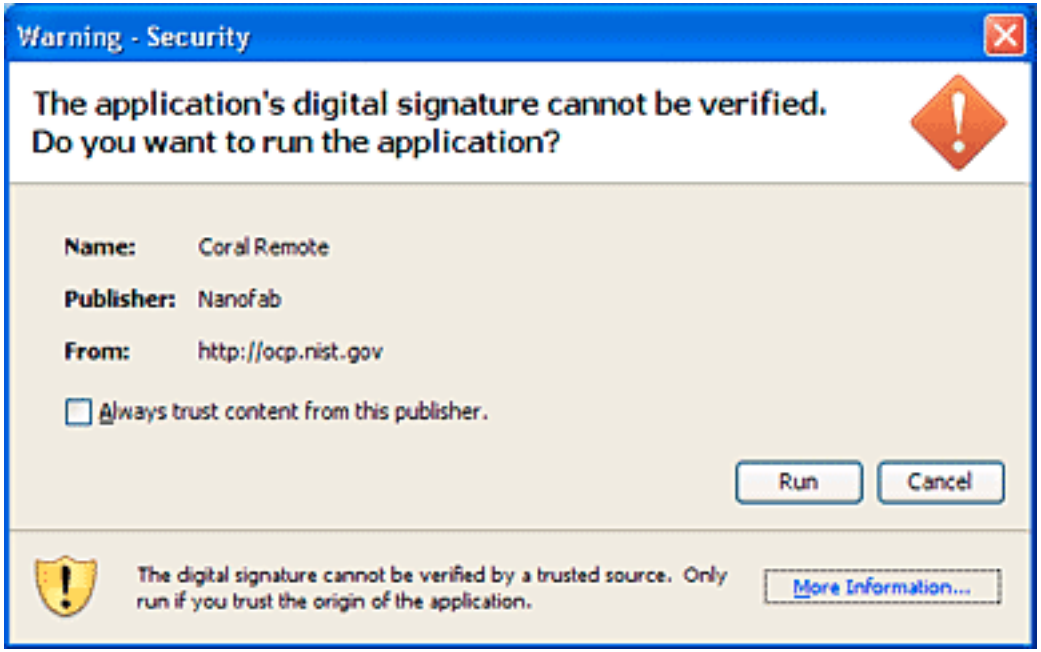
The packer problem

- Industry can white-list packers
- Digital signatures when exceptions are needed
  - Vendors will whitelist/blacklist PKI creds, not just programs
- Dispute process for bad signatures



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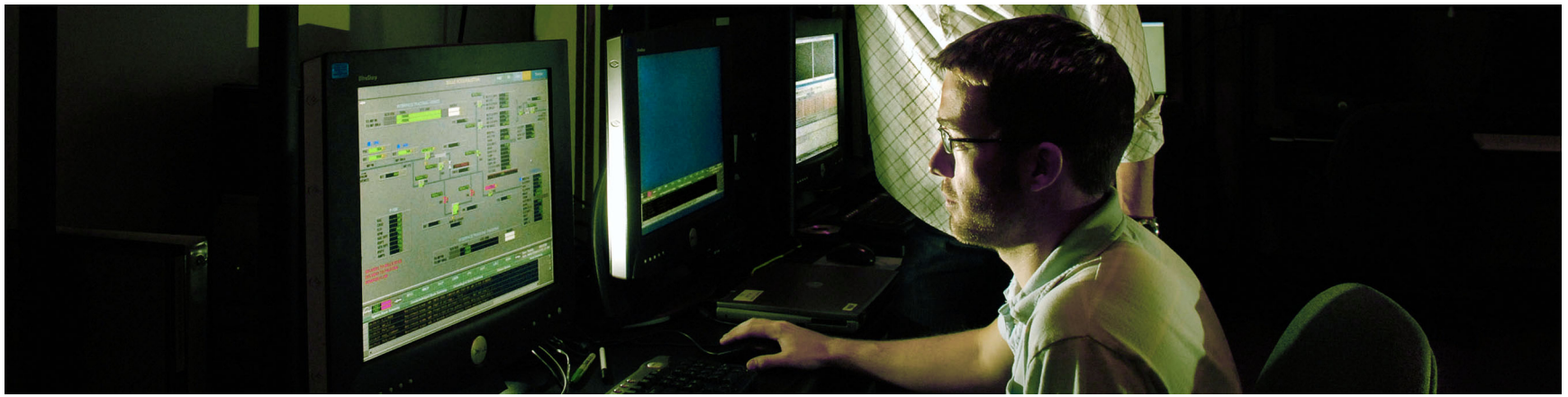
Problems revisited

- False positives
- Seeing enough malware
- Performance
- Operational scale
- Cleaning up infections
- The testing problem
- Bad guys disabling your product
- Server-side polymorphism
- Getting coverage quickly



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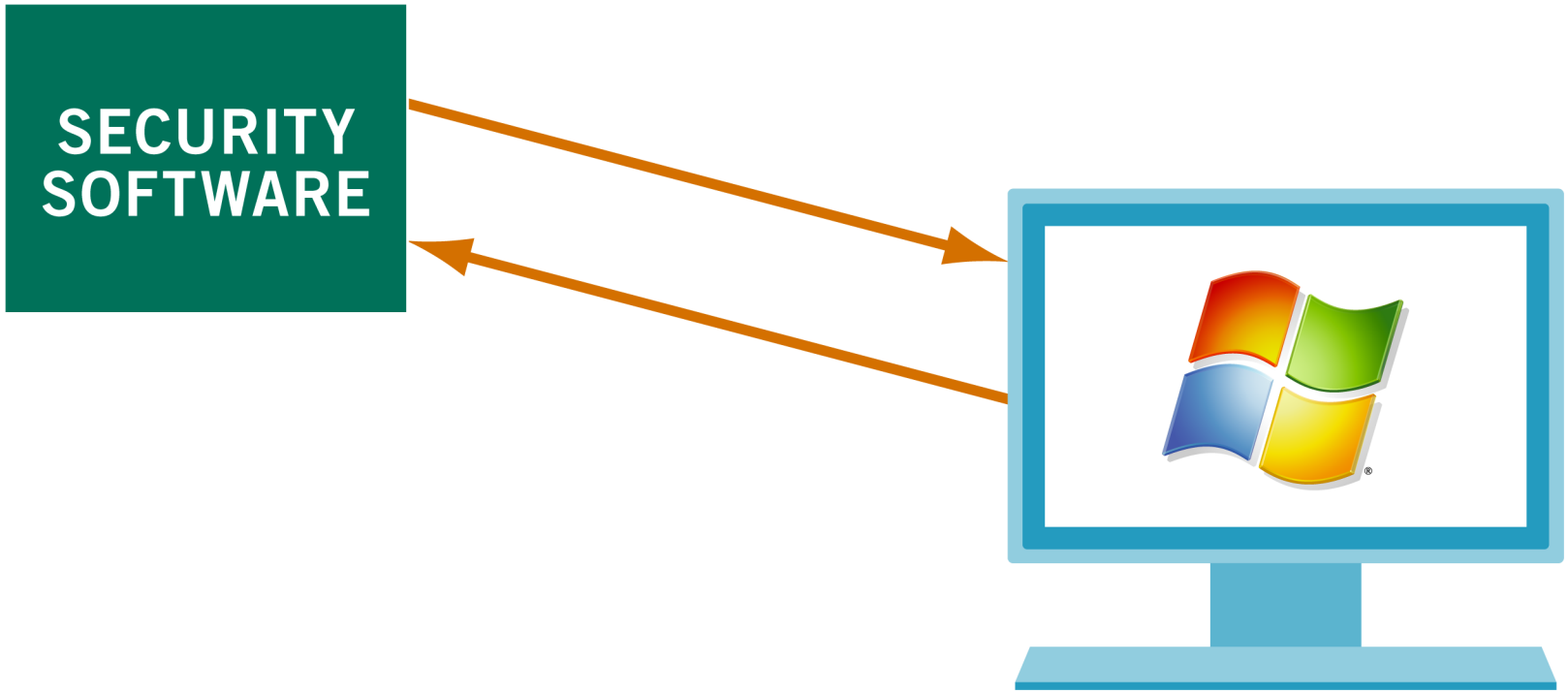
Virtualization



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Change will be slow

- Enterprise forklifts are difficult
- Changes in operational process are tough
- Consumers buy based on brand, not quality
- Change often needs to come in new revenue streams
  - Cloud-based audit
  - Automatic machine clean-up

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Thank you!

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