SecurityScorecard

Cyber Ratings: Partnering with Your Suppliers to Defend the Extended Attack Perimeter

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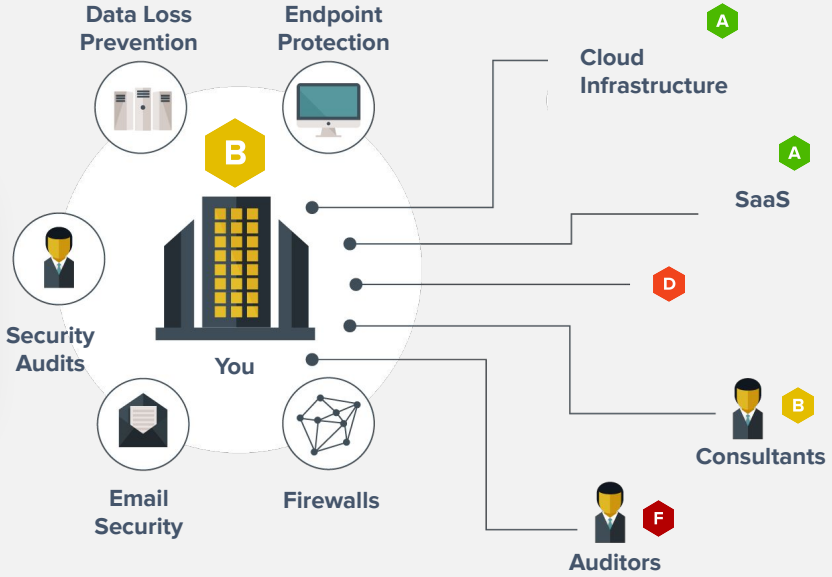
Cyber Ratings: What + Why

There is no gold standard to measure and communicate security performance

How do I understand and **communicate the value of my security program**?



How do I know if my third parties are diligent about protecting the data?

53% of organizations have experienced one or more data breaches caused by a third party (Ponemon Institute)

How Ratings Work

How Ratings Work

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1 Data Collection

- **Global sensor network** crawling the Internet from over 45 locations
- **25B+** vulnerabilities gathered per week and **500M+** malware infections per day (top 5 sinkhole)

2 Attack Surface Discovery

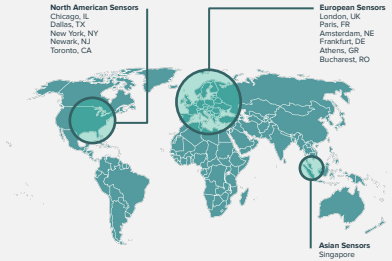
- Patented capabilities discover company attack surface
- Attribution of attack surface to any organization worldwide

3 ML-Powered Data Processing

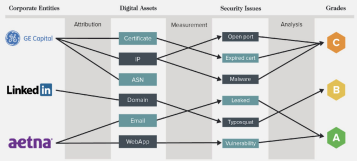
- Data processing engine aggregates signals to enhance accuracy
- Hundreds of risk factors over 10 security categories
- **ML based risk severity** model that learns from user feedback

4 Ratings

- **Fair, accurate, and predictive scoring model** with low scores 5x-7x more likely to breach
- **7 years** of historical data + user contributed data



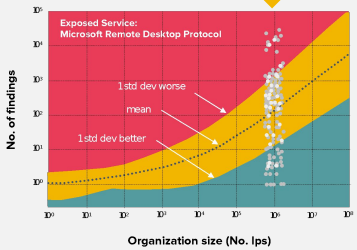
Automated Attack Surface Discovery Engine



U.S. Patent No. 10,560,474
"Entity IP Mapping"

U.S. Patent No. 10,515,328
"Non-intrusive techniques for discovering and using organizational relationships"

$$TS_{df} = \frac{\sum_i w_i \times g(FS_{df}) \times FS_{df}}{\sum_i w_i \times g(FS_{df})}$$



Meaningful Correlation with Breach Risk

Organizations with an F have **7.7x higher likelihood of breach** compared to organizations with a grade of A.

Study Parameters

Evaluation Period	3 Years
No. Data Breaches	2,228
No. Organizations	99,076

Supply Chain Use-Case

The Third Party Challenge

- Build vs. Buy decision has been made
  - Companies buy + outsource whenever possible
  - Average company relies on hundreds, if not thousands, of Vendors
- Vendors become extension of our attack perimeter when we:
  - Provision network access
  - Share sensitive data
- We don’t have the continuous visibility into + control over 3rd party security


You
Fourth Parties
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Third Party Attack Trends

- Attackers Target Company's Third Parties vs. Company directly
  - Exponential increase in entry points + potential attack vectors
  - Soft spots result from varying degrees of cyber competency
- Compromise Company via Third Party Privileges
  - Phishing Attack, Compromised Credentials, Remote Updates
- Third Party attacks ramping in terms of frequency and impact
  - SolarWinds, Colonial Pipeline and Kaseya

Challenges with Current VRM Approaches

- We use static measurements - cybersecurity is dynamic
- Outputs are subject to bias + self-serving outcomes
- Manual + human processes are plagued by human error
- Activities are time consuming + have in-person requirements
- Methods are expensive + lack scalability

Traffic Cop

- Map component of Rating to an Assessment Activity
  - EG. Top Level score and Questionnaire
- Create threshold that triggers activity + only trigger when crossed
  - EG. only send questionnaire if Top Level score falls below C
- Tailor activity to focus on findings or factors that tripped threshold
  - EG. If CVEs brought score below C, ask questions re: patching
- Right-sized, just-in-time Assessment Activities - avoid unnecessary

Collaborating + Engaging with Suppliers

- Invite Vendor to platform + to claim their scorecard
- Establish SLAs to govern relationship + embed in contract
  - Minimum grade requirement + ”No-Go” issues list
  - Remediation window for raising score + addressing issues
- Use rules + alerts to monitor for compliance and automate responses
- Track remediation progress + ensure compliance via History view

Automated Backlog Prioritization

- Organization has large vendor assessment backlog
- No time to perform inherent risk assessment that informs prioritization
- How do we ensure prioritization of High Critical + low security vendors?
- Sort backlog using grades (low to high) – asses low score vendors first
- Instant + low effort prioritization that guarantees prioritization goals

Streamlined Assessments

- Establish grade requirement for a supplier (must be above C)
  - Tailor requirement based on use-case + supplier type
- Pass / Fail supplier based on performance against requirement
- Leverage for high-volume + early stage assessments (RFP)
- Leverage for low risk suppliers (tailor effort to asses with risk posed)

Additional Ratings Use-Cases

Ratings Use-Cases

Executive Level Reporting

Enterprise Risk Management

Third Party Risk Management

Due Diligence

Service Providers

Compliance

Cyber Insurance

Regulatory Compliance Gap Analysis, Monitoring and Enablement for First and Third Parties

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- Identify controls that can be assessed from outside
  - *Does organization have patching program?*
- Map controls to relevant issue(s) in platform
  - *CVEs imply weak or missing program*
- Perform gap analysis against framework
- Identify remediations required for compliance
- Continuously monitor compliance on ongoing basis

Supported Frameworks:

- *CMMC*
- *PCI*
- *GDPR*
- *HIPAA*
- *ISO*
- *NIST (800-171, 800-53, 1.1)*
- *NERC*
- *NY DFS*
- *SIG (Core, Full & Lite)*
- *TISAX*

Enterprise “Self-Monitoring”

- Identify and track publicly facing assets - manage shadow IT
- Quantify and contextualize security issues using NIST
- Leverage IP-Level detail to drive remediation and automation
- Build dynamic + automated remediation plans via grade requirements
- Use grades to report to stakeholders + non-tech audiences (BOD)

ISACA-LA Member Offer

- All members entitled to Complimentary Enterprise Starter License:
  - Continuous Monitoring of own Organization
  - Continuous Monitoring of up to Five Third Parties
  - Existing Customers receive Five complimentary “Slots”
- Access to dedicated SecurityScorecard Customer Success Manager
- Preferred pricing on select Slot + Atlas bundles
- Sign-up via www.securityscorecard.com/isaca-la

Questions?

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Thank You!