Measuring Browser Health

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About
About Security Scorecard

- Startup HQ in NYC
- VC Funded - GV, Sequoia, Nokia
- SaaS Platform
  - Scan the Internet
  - Attribute Findings
  - Grade Companies (>1 Million Companies)
- VRM, Cyber Insurance, Self Monitoring
About Me

- PhD in Physics
- Former User of *Gordon*
- Data Scientist Working in Cyber Security
Measuring Browser Health
Desktop Health

How can we measure the health of a cyber security program? How many vulnerable versions of software is a company running? How quickly does a company update software? What types of stories can we tell with the data we collect?
NIST Framework

Well known framework

Map analytics into this language
Our Model

**Protect:** The current fraction of browser clicks from an up-to-date browser when the company is in *steady state*

**Detect:** How long it takes for a company to have clicks from the latest browser after a new browser version is released

**Respond:** Length of time period between *detect* and *steady state*
Click Data
Fraction Up To Date

Smooth out click volume fluctuations

Apply smoothing to fraction up to date to remove noise
Steady State

3 criteria for Steady State

- velocity below threshold
- acceleration below threshold
- must be above 30 day median
When is a New Browser Version Released?
Typical Behavior
Interesting Behavior
Report
Thank You