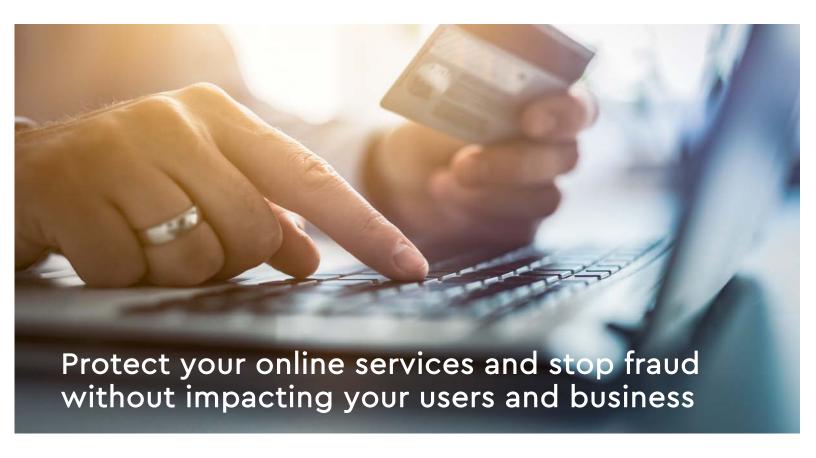
# .Cleafy



Today, attacks to online services are becoming more and more sophisticated. Attacks are leveraging new attack techniques and vectors that compromise online services on the enduser side, by infecting their web and mobile devices. These advanced attacks allow fraudsters to easily hijack credentials, tamper transactions and perform payment frauds.

Cleafy protects online services against targeted attacks from compromised endpoints without impacting your users and business, by combining deterministic malware detection with passive behavioral and transactional risk analysis. Cleafy's innovative threat detection and protection technology provides the missing capability of most fraud management solutions: the ability to validate the integrity of the application at all layers and from end to end.

"Cleafy continuous threat detection presents a logical approach to securing online transactions as fraud rates, particularly those driven by automated software bots and based on advanced techniques, relentlessly climb. Cleafy also provides unique threat protection capabilities that enhance safe transactions from infected endpoints."

- Eric Ogren, Senior Security Analyst, 451 Research

## .Cleafy



CONTINOUS, REAL-TIME **RISK ASSESSMENT & ADAPTIVE RESPONSE** 

REAL-TIME, HISTORICAL +& PREDICTIVE THREAT VISIBILITY











HISTORICAL, REAL-TIME & PREDICTIVE THREAT VISIBILITY



### Traditional fraud management solutions don't work

Traditional solutions don't work in the face of rapidly evolving attacks, since they fail to detect new frauds before they are replicated at scale. Attack campaigns will be in full swing before malware is identified and characterized (if ever), and before signatures and matching rules are implemented or banking accounts are blacklisted. The situation is exacerbated as fraudsters, in order to escape detection, leverage polymorphic malwares and different botnets over time.

#### Cleafy changes the game

Cleafy's deterministic malware detection, combined with multi-entity behavioral analysis and cross-session correlation, makes it possible to identify and characterize attack campaigns from the early stages, even if the malware changes over time and different networks of infected endpoints are leveraged. Cleafy's unmatched predictive threat visibility enables an effective threat prevention process and supports an adaptive threat response approach.

## .Cleafy

### Passive and transparent monitoring



- Passive monitoring of application traffic smooth integration with content delivery infrastructure (e.g. ADC, API GW) – zero touch of application backend infrastructure
- Client-less approach no agents to be deployed or code instrumentation required controls are automatically delivered without requiring changing application code
- Fully transparent to end users no impact on either end-user experience or endpoint performance – no impact on content delivery

### Deterministic malware detection and protection



- Patented Full Content Integrity (FCI) technology for clientless, real-time integrity checking at application, communications (API) and device level
- Automatic extraction of threat evidence (i.e. malicious web-injects and apps) to get insights on attacker infrastructure (C&C) and tactics, techniques & procedures (TTPs)
- Web console for historical, real-time & predictive threat visibility intuitive query language supporting discovery - out-the-box and custom dashboards and reports

#### Comprehensive fraud management



- Real-time correlation of indicators of compromise (IOCs) from malware detection, user
  & endpoint behavioral analytics (UEBA) and transactional risk analysis (TRA)
- Deterministic malware detection of Man-in-the-Browser (MITB), Man-in-the-Middle (MITM), BOT, RAT-in-the-Browser, app overlay, app repackaging and other techniques
- Extensive transactional risk analysis, including new/recent or blacklisted bank account, unusual payment amount, suspicious user location and anomalous payee

#### Aligned to adaptive security



- Customizable, real-time risk scoring and tagging system based on +50 out-of-the-box tags and on custom tags (e.g. for session enrichment and threat classification)
- Out-of-the-box correlation and risk propagation and customizable modeling rules and automated actions (e.g. notifications, invoking of external hooks and threat responses)
- Patented Dynamic Application Encryption (DAE) technology for protection against MITB/MITM attacks to enable safe transactions, even from infected endpoints

#### Open, scalable and cloud-ready



- Lightweight yet highly scalable architecture supporting continuous monitoring of multiple applications (entire perimeters) and millions of users and sessions per day
- Open architecture and comprehensive set of APIs (+150) proven integrations with Transaction Monitors (e.g. RSA AAOP, SAS Fraud Manager) and SIEMs (e.g. Splunk)
- Flexible deployment models, including on-premise and over-the-cloud also available as SaaS option

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## Cleafy Fraud Manager for Financial Services

#### Reduce online frauds



- Detect 100% of today's attacks, including Account Takeover (ATO) and Automatic Transfer Systems (ATS)
- Get insights on user experience when under attack and prevent attacks from infected endpoints
- Implement an adaptive, risk-based approach and minimize customer friction

#### Improve operational efficiency



- Reduce false positives by +90% and avoid being overloaded by too many open cases
- Improve forensic analysis and investigation by shortening analysis time from days to hours
- Understand the potential risk of each attack campaign and improve security posture accordingly

#### Make security a business opportunity



- Deliver higher-quality services without impacting application development & operations
- Achieve compliance with security requirements and industry regulations (e.g. EBA/PSD2)
- Accelerate digital transformation initiatives without compromising security

## Cleafy's promise to you

Cleafy's today protects millions of users of major corporate and retail banks, payment services, online lenders and other companies offering critical services.

Cleafy delivers measurable benefits in terms of reduced online frauds, improved operational efficiency and the ability to make security a business opportunity.

#### Our offer to get you started

Contact us at info@cleafy.com:

- Verify how smoothly Cleafy is integrated with your delivery architecture without any change to your apps
- Learn how easily Cleafy can be adopted and immediately provide its benefits
- Discuss the available options to quickly validate Cleafy technology in a POC

## **About Cleafy**

Cleafy is a leading provider of fraud management solutions against today's most advanced attacks to online services, thanks to patented threat detection & protection technology. Cleafy effectively enables continuous application monitoring, real-time risk assessment and an adaptive approach to security.

Read more about Cleafy at cleafy.com