Splunk for Fraud Detection
Behavioral Red Flags + Transactional Red Flags + Misuse and Abuse = Fraudulent Behavior Mitigation

- **Patterns of fraud** are often found across different silos of both structured and unstructured machine data.
- **Traditional anti-fraud tools** can’t scale, give a narrow view that leaves gaps and struggle with flexibility around machine data.
- **Splunk® Enterprise** helps with many needs of anti-fraud teams from fraud detection and monitoring, investigations, analytics and reporting, to enhancing your existing fraud tools.
- **Gain insight** into transaction and behavioral red flags over disjointed data sources.
- **Flexibility** to index relevant machine data across all data sources to search and correlate, making it easier to identify fraudulent patterns, so an organization can detect and alert on fraud in real time and act to prevent it before it adversely impacts the bottom line.

By indexing relevant machine data and searching and correlating on it to identify the patterns of fraud, an organization can detect fraudulent activity, alert teams in real time, and prevent it before bottom lines are impacted.

<table>
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<tr>
<th>Compliance</th>
<th>The act of conforming with mandates as required, often by a government or regulatory agency. Examples of industry compliance mandates include HIPAA and DCOI.</th>
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<tr>
<td>Fraud</td>
<td>A wrongful or criminal deception intended to result in financial or personal gain. Fraud often targets gaps in security.</td>
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<tr>
<td>Fraud Detection</td>
<td>Implementing a process and actions that protect customers and enterprise information, assets, accounts and transactions through the real-time, near-real-time or batch analysis of activities by users and other defined entities.</td>
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<tr>
<td>Security</td>
<td>The state of using tools and practices to protect against malicious intent to exploit and attack vulnerabilities to gain unauthorized access or use data.</td>
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Fraud has become a global problem, impacting organizations of all sizes, across industries. Fraudsters are increasingly sophisticated and successful, especially as commerce and financial transactions move online, where it's easier to evade detection, use stolen credit card information, impersonate individuals and take over online accounts. Many existing anti-fraud solutions don't have the capability to see every type of fraud, so potential red flags fall through the gaps.

Fraud detection and prevention is a big data challenge that organizations can use to implement process and actions based on fraudulent activity. As business moves online, the evidence of internal or external fraud often lie in the massive amounts of unstructured machine data, commonly log files, generated within business applications, IT infrastructure and security systems.

This data comes from multiple sources, such as web proxies, firewalls, authentication systems, transaction processing systems, payment and billing systems, databases, point of sale systems and operating systems.

Splunk solutions can combat different types of fraud across banking, financial, healthcare and other industries. The Splunk platform provides features and tools to assist with fraud detection, analytics, investigation and response.

Customize form-based dashboards with drilldowns to provide analysts easy access to targeted data for their investigative needs. The Splunk platform includes lookup tables and GUI-based editors to allow teams to easily manage and update lookups used to enrich data or to maintain blacklists and whitelists.
Summary dashboards provide high-level overviews, trend analysis statistics and workflow based reports to get ahead of fraudsters. The Splunk platform can be configured to ingest structured, unstructured or proprietary data. Splunk software can easily onboard a variety of data sources, providing the ability to join distinct data sources together to gain insight into sequence-based transactions.

Splunk also offers the flexibility to integrate and export data to other systems via scripting, alert actions and dynamic forms or drilldowns. The ability to pull historical reports for compliance requirements and to assist in fraudulent investigations.

**Unlock the Power of Machine Learning**

As fraudsters continue to adapt and utilize new methods, it is important to leverage machine learning and data science algorithms to fight fraud. Detecting anomalies and outliers through machine learning, utilizing adaptive thresholds and other advanced techniques are the next wave in fraud detection and prevention. Use Splunk’s Machine Learning Toolkit to examine outliers within your dataset for indicators of fraudulent activity.

**Healthcare**

Healthcare insurers process tens of millions of dollars of claims per quarter. The Splunk platform helps healthcare organizations get ahead of potential fraud trying to exploit those numbers by employing techniques to index, analyze, interpret and transform program, case management and EMR data. This helps detect potential instances of fraud and implement fraud monitoring programs. The platform offers insights to identify unusual trends, data anomalies and control breakdowns by developing repeatable tests, which in some cases even serve as early warning systems before fraud becomes material.

**Financial Services**

The banking and financial services industries are the hardest hit by fraud, according to a report. Financial institutions can use the Splunk platform to create rules that correlate possible fraud indicators across channels. This eliminates siloed, manually intensive and cumbersome investigation processes and provides a 360-degree view of cross-channel customer interactions. Analysts can see all customer activity in one place and look for anomalous changes in patterns in single or multiple channels that might indicate fraudulent activity.

**Public Sector**

Public sector organizations can use Splunk to reduce improper or fraudulent payments, improve operational health and enhance program integrity.

Ready to dig deeper into how machine data can improve fraud detection? See real-world examples and learn how much of an impact fraud has on our everyday lives in our free “Guide to Fraud in the Real World.”