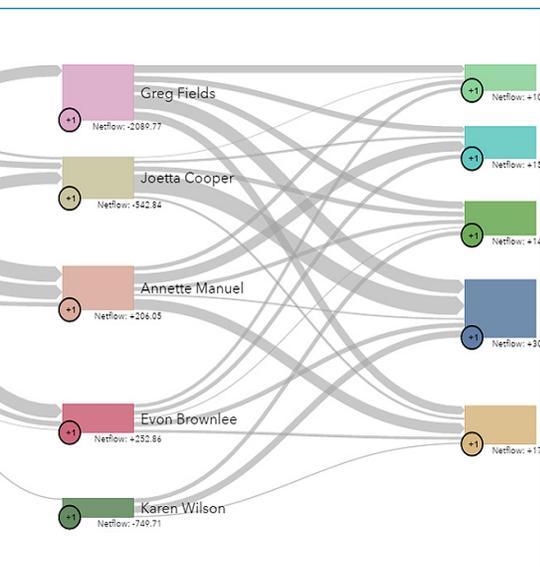# SAS® Anti-Money Laundering

Amid rising regulatory expectations, help your analysts make faster decisions

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THE POWER TO KNOW®

What does SAS® Anti-Money Laundering do?

SAS Anti-Money Laundering helps you take a risk-based approach to monitoring transactions for illicit activity to comply with anti-money laundering (AML) and counterterrorist financing (CTF) regulations. It uses a combination of behavioral and peer-based analytics techniques that lead to improved detection accuracy.

Why is SAS® Anti-Money Laundering important?

SAS Anti-Money Laundering allows financial institutions to safeguard their reputations and avoid fines and penalties associated with noncompliance. Its standard analytics routines can monitor for known money laundering risks, and behavioral analytics monitors for abnormal behaviors. With authoring flexibility, firms can quickly adapt to new regulatory expectations and emerging risks.

For whom is SAS® Anti-Money Laundering designed?

SAS Anti-Money Laundering is designed for AML and CTF compliance departments within financial institutions – regardless of size.

In an era of rising regulatory expectations and associated costs, firms are keen to investigate suspicious activity as efficiently as possible. To be more efficient, firms need more accurate monitoring, and want to see the holistic view of activity for the subject in question. This allows analysts to make better decisions more quickly.

To keep up with evolving regulations and exposures, SAS Anti-Money Laundering helps your firm automatically monitor customers and counterparties for potential money laundering or terrorist financing behavior, document the decision process, and file pre-populated regulatory reports with the appropriate authorities.

Working closely with our customers, we've developed an end-to-end AML solution that covers all steps involved in AML processes across all key areas – including suspicious activity monitoring, customer due diligence, watch-list filtering and investigations case management.

Be transparent: It's become increasingly important for institutions to be able to explain to regulators, examiners and auditors their strategies for monitoring and prioritizing risks. If your existing monitoring strategies are difficult to defend, explain, validate and optimize, from a model risk perspective, this lack of transparency puts your institution at risk and makes it hard to gain efficiencies. Black-box algorithms are a thing of the past; enterprise model risk practices – requiring statistical methods, data validation and effective challenge of scenario settings and strategies – are now expected from AML practitioners. SAS provides an open box (transparent) environment that clearly explains how alerts are generated, and provides the analytical tools to analyze the distribution of data and efficacy of monitoring strategies.

Empower your analysts: Given the demand for trained personnel, improving your institution's productivity is vitally important. While other AML systems' rules authoring may be difficult to modify, SAS provides an out-of-the-box interface to empower users with the

ability to change, author and test scenarios quickly. This streamlined user interface makes crucial information more readily available to analysts so they can quickly document cases and move work items through the decision-making process.

Understand your subjects: We're also helping institutions more efficiently manage their workload by aggregating multiple alerts for a client or counterparty to an entity view of behavior. Instead of working transactions and alerts, the system presents a queue of scored entities for review. This helps your analysts and investigators quickly understand the full view of behavior for the entity, and eliminates redundant tasks.

Gain an enterprisewide view: For institutions that want to monitor multiple subsidiaries or lines of business from a central system, the solution deploys an enhanced structure for managing alerts and investigations centrally while preserving data security. Using this multitenant approach, you can reduce your cost of compliance and gain a holistic view of risk exposure across your enterprise.

Benefits

Ease of use. With a streamlined user interface, analysts and investigators can make determinations faster and much more efficiently. Users can quickly navigate between objects. Bookmarks at the top of the page mean only one or two clicks to navigate. And with split screens, determinations can be made on two separate objects.

Faster strategy validation. High-performance visualization tools significantly reduce the time required to analyze data, visualize patterns, consider monitoring strategies and validate scenario deployments. Scenario run times are reduced from hours to minutes. Performing "above the line" and "below the line" simulation of scenarios in rapid succession minimizes the time required to validate and optimize monitoring strategies.

Alert quality and accuracy. The ability to file timely and accurate SARs is compounded by high false-positive rates generated by rules-based systems. Can you really afford a bigger staff to handle growing alert volumes? Our segmentation strategies can help your firm further refine the accuracy of your monitoring strategies and improve your SAR conversion rates. Our segmentation strategies work with behavioral scenarios that identify unusual patterns for an entity, or behavior that deviates significantly from its peers. This approach has proven to improve SAR conversion rates fourfold for a midsize institution.

Visualization of the flow of funds. Visualize the flow of funds between the focal entity and other entities of interest. The Sankey diagram for tracking the flow of funds allows users to see the debits and credits, as well as variations in volumes of funds, between entities.
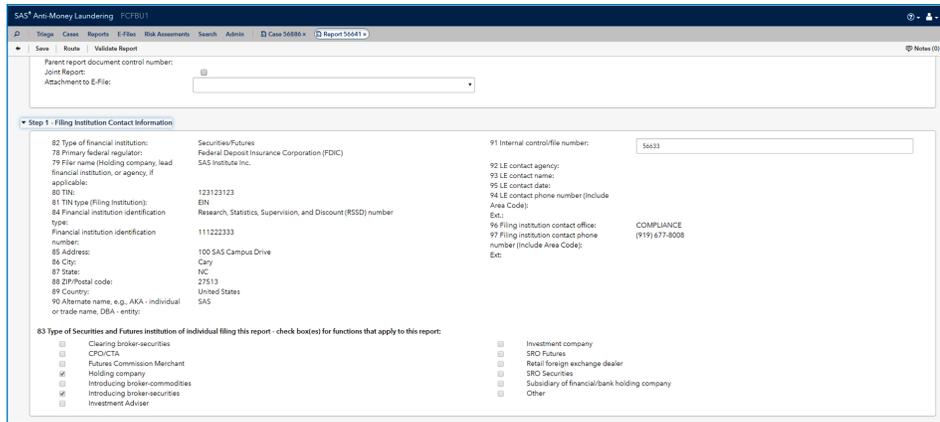

Figure 1. Gain efficiencies with pre-population of regulatory reports; enhanced validation reduces the number of errors with e-filing.
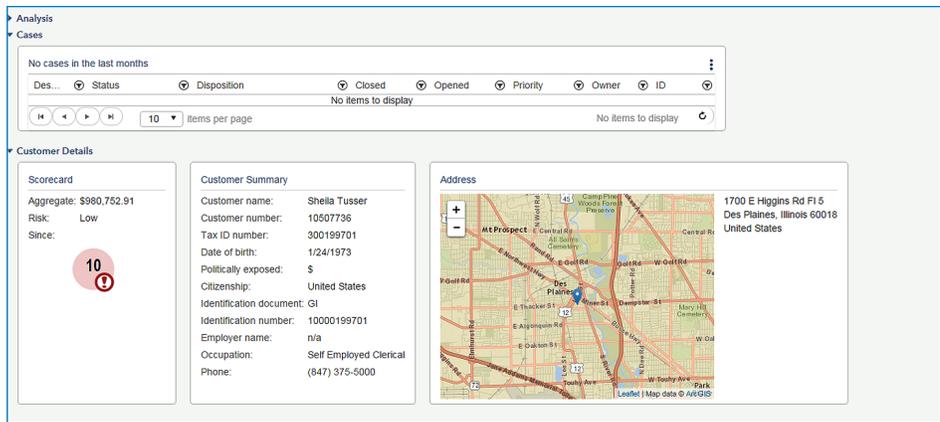

Figure 2. Users can view the details of an entity alert. The solution provides specific and persistent user views of data for efficient access to profile information.
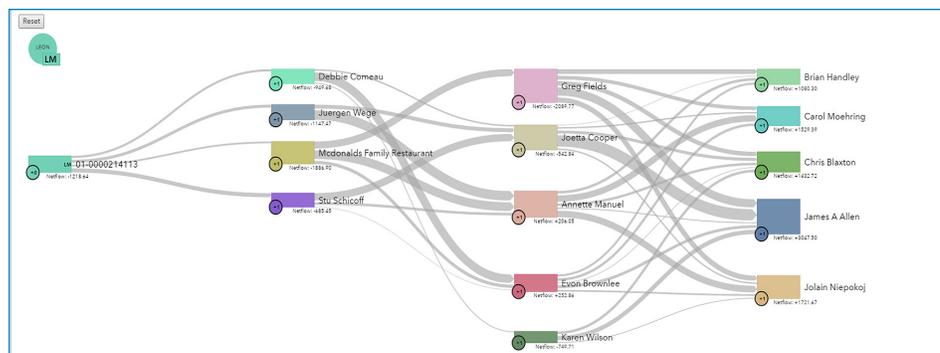

Figure 3. The Sankey diagram for tracking the flow of funds allows users to see the debits and credits, as well as variations in volumes, of funds between entities.

Capabilities

If your monitoring systems aren't flexible enough to monitor new lines of business or a new portfolio of clients, you're putting your firm at risk. SAS monitoring techniques are openly documented and backed by proven statistical methodologies for scenario deployment. We've designed our data model to be extendable and flexible to adapt to new lines of business, new client types or emerging risks.

It's also integrated with SAS visualization tools to identify emerging risks and patterns that may not be covered under existing strategies. You can perform rapid authoring and simulation of scenarios in memory against very large data volumes to provide more accurate estimation and simulation of operational impacts.

Data management

With SAS you can manage a wide variety of data challenges – from efficient processing of big data to accessing and integrating legacy sources – all in a single platform, with in-memory and in-database performance improvements. Our financial services data model supports multiple data types (nonmonetary event data, geographic data, risk lists,

third-party data, associate data and a variety of customer information data) in addition to transaction data.

High-performance analytics and visualization

With SAS High-Performance Analytics, your firm can gain economies of scale and remarkable business value through rapid time to insights from big data. You'll have an infrastructure to quickly test hypotheses, pose new questions and simulate scenarios in the analytical process – all with the end result of making better, faster and more accurate decisions. A scenario builder enables testing, tuning and simulating scenarios in seconds, not hours, to improve scenario efficacy and adhere to model governance best practices.

Suspicious activity monitoring and reporting

The solution provides an array of capabilities to monitor and report on suspicious activity. It includes an easy-to-use, point-and-click interface to create and modify scenarios and risk factors. Users can create customized routing rules for workload distribution. Scenarios can be simulated and validated so that the results in the "sandbox" can be placed into the production alert generation process. And specific views of data are persisted throughout the user experience with flexible suppression capabilities.

Watch-list matching

The Watch List feature reduces regulatory risk with unique fuzzy matching algorithms, intelligent scoring and alert consolidation to generate high-quality hits with low false positives. End-to-end coverage is provided through:

- Enterprisewide watch-list coverage.
- Multijurisdictional screening across business units.
- Individual and entity party linking.
- Integrated investigations.

Sanctions and other watch lists can be imported to identify persons, organizations or high-risk jurisdictions that represent regulatory risks.

Key Features

Data management
- Single platform with in-memory and in-database performance improvements.
- Transaction records map transaction, account, customer and household dimensions.
- Core schema for preparing data for nightly batch analysis.
- Knowledge center data schema supports data retention and investigation.
- Multiple data types (nonmonetary event, geographic, risk lists, third-party, associate and a variety of customer information) in addition to transaction data.

High-performance analytics and visualization
- Rapid access to customer, account and transaction data.
- Ability to visualize emerging risks.
- Visually create customer segments for behavior monitoring.

Suspicious activity monitoring and reporting
- Open box environment for end-user authoring and modification of scenarios.
- Combines scenario conditions with risk factors to provide greater context.
- Status scenarios that generate alerts based on list matches.

Watch-list matching
- Enterprisewide coverage; multijurisdictional screening across business units.
- Individual and entity party linking and integrated investigations.
- Ability to import sanctions/watch lists to find persons, organizations or high-risk jurisdictions.
- Fuzzy matching logic for accurate entity matches.
- Option to work transaction, party or counterparty matching lists as alerts or cases.
- Combines functionality with Dow Jones and World-Check services.

Investigation and alert management
- Support for "four eyes" approval of case decisions.
- Web-based interface.
- Efficient access to profile information.
- Specific and persistent user views of data.
- Aggregated alerts at the entity level for a holistic view of risk.
- Triggering transactions explain activity.
- Bulk actions can be performed on alerted entity and case queues.
- A flat (one-click) navigation feature enables fast and efficient decision making.

Peer group anomaly detection
- Compare an entity's current behavior to its historical behavior and behavior of peers.
- Include multiple peer groups.
- Detect outliers both above and below expected behavior.

Search
- Index and analyze data quickly.
- Search comments and attachments.

Multitenant architecture
- Single installation serves multiple customers by segregating data.
- Separate schemas within a database for partitioning data.
- Each schema can have its own AGP process.
- One web application for all schemas.
- Simplified implementation.

Investigation and alert management

Through a web-based interface, investigators gain a holistic view of work items. Instead of working with multiple widgets, use Entity Triage to aggregate all of the alerts for a subject into one work item so the investigator can make faster and more accurate decisions. Users can also disposition groups of alerts centered on an entity. This enables more informed and efficient triage – and more timely risk mitigation.

The solution has a knowledge center database that's easily accessible and serves as the system of record for regulatory and auditing purposes.

Peer group anomaly detection

Historically, institutions used risk designations for segmented monitoring, for example, "money remitters." It's no longer acceptable to treat an entire group of customers as "high risk" or "de-risking." With SAS, institutions can further segment these groups based upon transactional behavior, with the goal of comparing peers that actually should behave similarly.

SAS in-memory visualization techniques allow data scientists to build peer segments more quickly using proven clustering algorithms. Our approach combines both subjective and quantitative segmentation using proven clustering techniques so the system provides more accurate coverage and increased conversion rates.

Search

The enhanced Search function allows analysts to retrieve information from case notes, attachments and other fields available to the system. This capability exploits Solr, an open source standard known for its scalability and ease of use.

Figure 4. With the web-based triage queue interface, all alerts are aggregated into one work item for faster and more accurate decisions.

Figure 5. Based on an open source standard, an enhanced search function allows analysts to retrieve information from case notes, attachments and other fields available to the system.

Multitenant architecture

The solution's architecture is designed so that a single installation of the software serves multiple subsidiaries or jurisdictions by segregating the data. This feature reduces the IT support costs of managing multiple subsidiaries, improves sharing of information and preserves data security.

To learn more about SAS Anti-Money Laundering, download white papers, view screenshots and see other related material, please visit sas.com/aml.

To contact your local SAS office, please visit: sas.com/offices

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