

## Protect Yourself Against Payments Fraud: Invest in TANGO AIF™

The rapid increase in digital payments and changing consumer habits has resulted in the continuous evolution of fraud schemes that cheat consumers and payments institutions alike. The Tango AIF™ solution from Lusis Payments provides a comprehensive shield against payments fraud for both acquirers and issuers.

### Best Technology

At the heart of the Tango AIF solution lies the powerful combination of rules, Random Forest models, and neural network models using Deep Learning technology. Standard rules and model libraries are provided that can be fully evolved and extended to suit a specific customer environment.

Tango AIF technology results from a multi-year research programme between Lusis and leading Paris Universities and institutes to provide the most effective anti-fraud solution available.

Tango AIF is built using Lusis Payments' proven and highly scalable architecture and supports a wide range of operating systems and database technologies. Additionally, Tango AIF can be deployed on-premise or in the cloud. The massively parallel processing ensures that customers can deploy a comprehensive mix of rules and models without significant processing latencies. For example, a recent performance test conducted by a global bank, successfully demonstrated fraud screening using 40 rules on 50 million transactions with a per transaction latency of under 10 milliseconds. With Tango AIF there is no need to limit your protection due to excessive processing overheads.

### Ease of Integration

Deploying Tango AIF involves both the physical integration between Tango AIF and other platforms, and the integration of Tango AIF workflows into the operational procedures. Lusis has greatly simplified the integration task through the use of modern protocols and API standards that enable rapid connectivity with transaction sources, case management tools,

other fraud systems, and data repositories.

From an operations perspective, Tango AIF provides great flexibility in the choice of workflow configurations including;

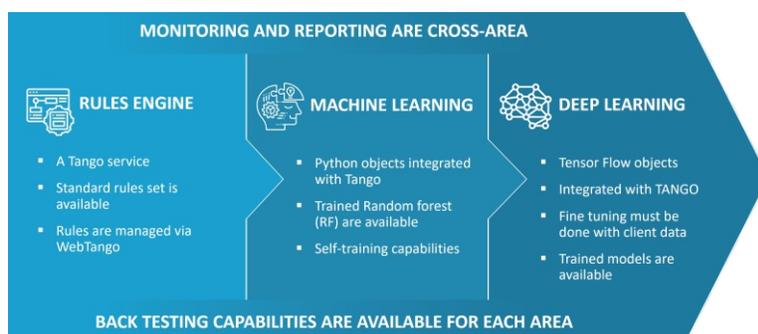
- Real-time / near real-time message screening, e.g. authorisation or online settlement messages,
- Batch-based screening enables the detection of fraud patterns in a wide variety of transaction records including authorisation logs, posting messages, chargebacks, etc.
- Time-based screening can be scheduled at multiple time intervals to check the data aggregates against configured thresholds

## Streamlined Operational Efficiency

The WebTango operator console provides a robust suite of task-oriented screens for the creation and validation of new rules and models, the promotion of approved rules and models into production, and the monitoring and reporting on potentially fraudulent events.

The system also provides a test transactions repository that enables analysts to create different libraries of transaction scenarios. These transaction sets can then be used with the built-in back-test system to validate new rules and models. The back-test results are displayed through intuitive screens that enable users to rapidly assess and enhance the model quality. Test results information includes graphical displays of the confusion matrix and the relative importance of all model features.

Version control is provided for all rules and models to ensure full change-audit transparency. Once approved, the rules and models can be automatically promoted into a secure production repository that prevents further changes to the approved artefacts.



## Powerful Rules

The TANGO AIF rules are easily created, validated and deployed using the WebTango console. Rules can be created using any combination of message fields and functions to access aggregate counter totals. Each rule can be assigned a unique score and either the maximum score or the sum of all scores used to determine the overall fraud rating. Multiple rules sets can be used to promote rule reuse and minimise the management overhead.

TANGO AIF provides complete control over the handling of suspicious transactions using a combination of automated and manual actions. The available actions include blocking or flagging a real-time message, terminal blocking, merchant blocking, card blocking, and case creation in an external case management system. The standard action types can be easily expanded as needed.

The rules engines work in a sender/receiver architecture to enable massive parallel computation for a better response time and load handling. Additionally, multiple rules engines can be used, each with a specified set of rules. This approach enables the use of multiple, pattern-specific, rules sets for greater accuracy and easier management.

Additionally, the rules engine appends a result vector to the transaction along with the fraud result code. The result vector details the return

code for each rule that was executed, the time spent evaluating each rule, and the global overhead. Consequently, it is very easy for analysts to optimise the computational costs against the effectiveness of the rules being deployed.

## Conclusion

TANGO AIF is the ultimate choice for comprehensive payment fraud protection. Whether you deploy TANGO AIF as a stand-alone application or integrate it with the Tango Payments Engine you are assured of immediate and significant cost savings.

One Lusis customer projected a seven-digit cost saving over three years from the use of TANGO AIF.

Lusis Payments has the depth of expertise and experience in fraud prevention and machine learning to ensure that your investment in TANGO AIF will continually adapt to evolving fraud patterns - protecting your profits and protecting your future.



*The Proven Advantage*

## Who is Lusis?

An international company, Lusis was incorporated in 1999 and provides Software and Technology for AI fraud and Payment Systems, Trading Platforms, Asset Management and Loyalty solutions. Lusis has offices in Europe, USA, Canada and Mexico.

## What We Do

Lusis provides software and services to all markets with particular strength within the global financial & payments industry built upon many years of experience in supporting clients in tackling the challenges of today's ever-changing world.

Lusis designs, develops, delivers and supports solutions that meet the diverse and ever-changing requirements demanded across the acquirer and issuer value chains. From online transaction processing, message switching and fraud monitoring through to loyalty programme deployment and cloud-based business services, the solutions deployed utilise Lusis' Tango platform foundation to align directly to the client's business process needs.

Uniquely, Lusis' solutions are not tied to any hardware set up or database. Our purpose is to enable business in a reliable, secure, low risk, highly performant environment. Using micro-service architecture Lusis brings a wholly modern and truly flexible proposition and implementation to the Fraud and Payments Ecosystem.

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