

FRACTALS

Smart solutions for fighting fraud



“Authentic and Fractals are modern, open products which come with powerful out-of-the-box functionality.”

– Cal (Israel Credit Cards Ltd.)

Staying ahead of global fraud is a never-ending battle. As the diverse market for electronic payments grows so does the potential for damaging fraud attacks.

Innovation in payments is matched by innovation among fraudsters who constantly update their methods to maximize their profits. Fraud is now an international business and criminal gangs seek out the weakest targets for the easiest returns.

Every day, banks, payment processors and merchants protect their customers, their reputation and their bottom line from fraud using Fractals from NCR.

For more information, visit us at ncr.com.





Flexible and efficient fraud detection

Fractals is a smart, self-learning fraud detection and prevention solution. It combines self-learning analytical models with user-defined rules to give you an exceptionally high fraud detection rate with a low false positive ratio. Flexible, scalable and easily configurable, it is suitable for organizations of any size.

Fractals gives you enterprise-level fraud detection. With Fractals you can protect all channels, all accounts and all payment types from a single platform. You can monitor both card-present and card-not-present transactions. You can also assess individual transactions as well as historical and aggregated behaviour across multiple accounts or groups of accounts.

Fractals enables you to enrich your fraud screening capabilities by incorporating data from the widest possible range of sources. In addition to the usual transactional information, you can include data from other internal systems and fraud-scoring models. Fractals also lets you take advantage of information provided by specialist third parties, so you can validate the device, IP address and geo-location of the payment source.

When deployed with Authentic or other suitable payments processing engines, Fractals enables real-time, in-flight fraud blocking. It also has near real-time and batch detection modes.

You can also augment Fractals' fraud prevention capability by deploying MySpend from NCR, which allows your customers to provide fast confirmation of fraudulent activity from their mobile phones. Fractals also uses Message Mapper, and its simple point-and-click configuration, to manage integration with internal or external systems.

Smart, self-learning strategies

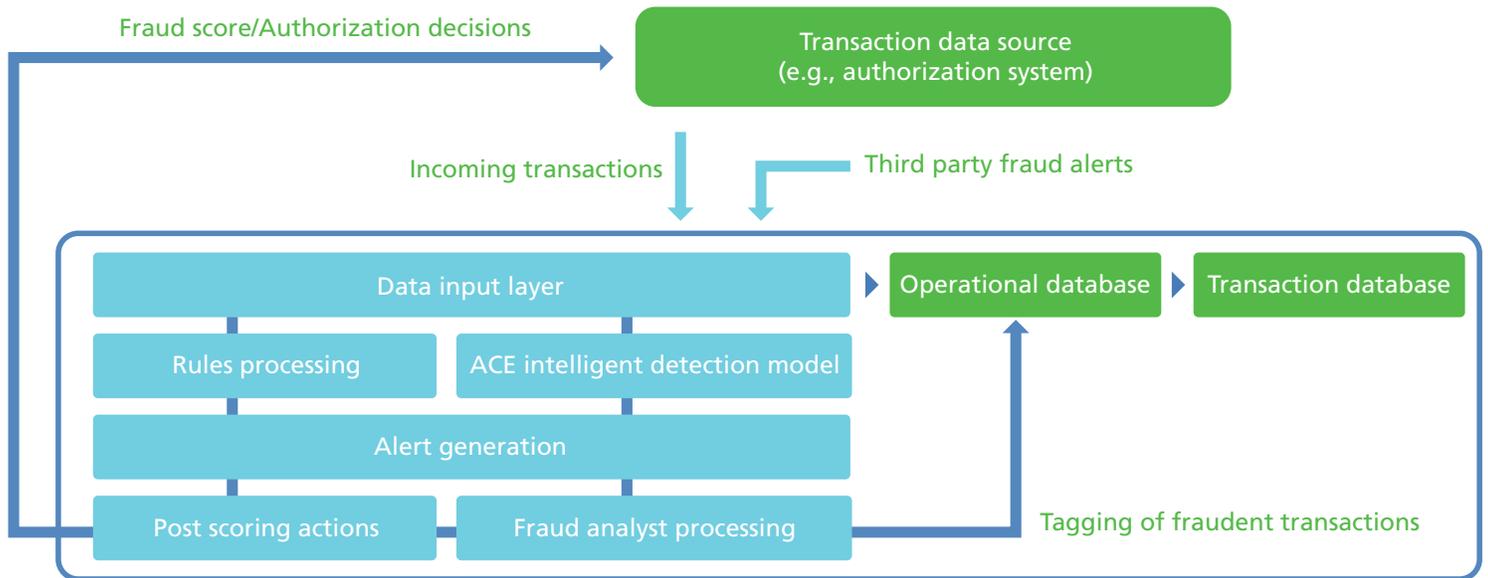
Fractals comprises three broad components.

Fractals Adaptive Classification Engine

Fractals' high fraud detection rate is made possible by its use of next-generation analytics. Using Bayesian statistical analysis and proprietary inference techniques, the Adaptive Classification Engine provides fully automated, intelligent fraud detection.

The Adaptive Classification Engine can detect even the most subtle changes in fraud trends, enabling it to identify new fraud types as soon as they are activated and prevent them spreading further. The Adaptive Classification Engine's fraud model includes strategies that self-adjust as transactions are tagged as fraudulent, which enables it to learn new fraud patterns as they appear.

By constantly updating themselves, these self-learning models enable Fractals to keep up with even the most innovative of fraudsters, while minimising input the required from your fraud analysts. The high rates of fraud detection achieved by the Adaptive Classification Engine also make you less dependent on the Rules Engine.



Fractals Rules Engine

The Fractals rules engine enables you to define the rules which are used to score each transaction and determine whether it should be authorized, declined or reviewed.

You access the rules engine through a browser-based interface and define, create, test, evaluate and deploy rules without coding or programming. Fractals' graphical rule workbench also makes it easy to express complex and varied rules, and update them rapidly in response to changing threats. You can deploy new or updated rules with immediate effect or schedule them to be activated at a set time.

Post-scoring actions allow you to define automatic responses according to the outcome of the Adaptive Classification Engine or rules engine. If 'in flight' fraud prevention is needed, Fractals can return the appropriate response to the requesting system. Alternatively, Fractals can trigger an SMS message to be sent to your customers, or change the account status in your card management system to block further transactions.

Alert Management

Once the Adaptive Classification Engine or the rules engine has identified a suspicious transaction, Fractals gives your fraud analysts the following support:

Alert queue management – a flexible, configurable mechanism for queuing alerts. Alerts can be grouped by common fraud score features, such as product type or transaction amount. Each analyst's queue can be linked to one or more alert groups, which provides a high degree of configurability to meet operational needs.

Alert handling – a browser-based interface for processing alerts. It provides fraud analysts with the data and analytical tools to fully understand cardholder or merchant behaviour patterns.

“What is really different with Fractals is that we can manage our fraud risk exposure across mobile POS, e-commerce, and traditional retail channels with a single system.”

– North American Bancard

Why NCR?

NCR Corporation (NYSE: NCR) is the global leader in consumer transaction technologies, turning everyday interactions with businesses into exceptional experiences. With its software, hardware, and portfolio of services, NCR enables more than 550 million transactions daily across retail, financial, travel, hospitality, telecom and technology, and small business. NCR solutions run the everyday transactions that make your life easier.

NCR is headquartered in Duluth, Georgia with over 30,000 employees and does business in 180 countries. NCR is a trademark of NCR Corporation in the United States and other countries. The company encourages investors to visit its web site which is updated regularly with financial and other important information about NCR.

Fractals at a glance:

- Industry-leading fraud detection for issuers, acquirers, PSPs, merchants and ISOs
- Self-learning models that continuously adjust to changing fraud patterns
- Easily configurable rules to create bespoke risk management strategies
- Multi-channel, multi-currency, multi-hierarchy and multi-organization protection
- Real-time transaction monitoring and in-flight fraud prevention
- Transaction-level monitoring and aggregated behavioral analysis
- Integrated external data including IP geo-location, address verification and device identification
- PA-DSS certified and penetration tested
- Open system providing user feedback on scoring decisions and analysis
- Performance metrics including alert rates, case detection rates, and false positive ratios

Fractals benefits:

- Respond quickly, easily and efficiently to changing fraud patterns
- Reduce fraud losses and protect your corporate reputation
- Minimize false positives to maintain strong customer relationships
- Create bespoke, granular and targeted risk management strategies
- Shorten time to market with easy deployment and integration
- Generate cost savings and economies of scale from a single, scalable, automated solution
- Liberate fraud analysts to focus on alert management and customer service
- Release countermeasure analysts to handle value-added tasks such as strategy development, trend analysis and business intelligence

NCR continually improves products as new technologies and components become available. NCR, therefore, reserves the right to change specifications without prior notice.

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