

# HCLTech fraud risk management

Prevent fraud from eroding your margins



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Get the most out of your network assets—protect them from fraud. Enhance your revenues and shield your customers, resources and business from unwarranted fraudulent activities.

## Stop fraud in its tracks

HCLTech Fraud Risk Management is a robust and highly scalable solution that evolves with fraudsters' techniques and adapts to your business and services. The solution has built-in intelligence, which helps you preempt fraud and stay one step ahead of fraudsters. It performs advanced behavior analysis and detects anomalous or suspicious behaviors, immediately raising alarms and opening cases to mitigate risk, analyzes historical data to uncover broader fraudulent behavior patterns and protects your customers, systems, services, and more importantly, your brand.



Fraud matters

# 2-6%

estimated revenue loss of telco operators attributed to fraud and revenue leakage<sup>1</sup>



HCLTech Fraud Risk Management gathers and normalizes data from all diverse and relevant sources, and uses it to detect inconsistencies in usage and behavior to ferret out suspected cases of fraud. It offers extensive data mining and intelligence capabilities that provide insights on fraud risk and long-term trends within the business. This robust fraud mitigation solution is backed by years of experience in developing fraud and revenue assurance solutions. It has an intuitive graphical user interface (GUI) and relies on an open platform that enables you to deploy specialized

packages and customize the solution based on new and future business requirements.

Part of the HCLTech Revenue Intelligence portfolio, the HCLTech Fraud Risk Management solution helps you detect fraudulent activities across your network, before they become a significant financial liability.

HCLTech Fraud Risk Management provides effective protection against:

- Subscription fraud
- IRSF
- Content theft
- Account takeover and equipment fraud
- On-your-premises equipment (PBX, VoIP) compromise
- Machine-to-machine (M2M) compromise and abuse
- eCommerce, mCommerce and content fraud
- Bypass, SIM gateway fraud, flat-rate services abuse
- Prepaid services fraud
- Insider fraud

<sup>1</sup>RAG RAFM Survey 2020

## Review the three steps to mitigate fraud

### 1. Collect data

Collect and correlate data from all of the usual sources and any other internal or external sources of data that might prove useful with HCLTech Fraud Risk Management. The product normalizes and enriches this data to prepare it for detection and analysis. In addition, the data collection layer provides the extract, transform and load function for specialized data stores used by business intelligence and analytical components of the solution. These features enable the detection and analysis you need to anticipate fraudulent activities and prepare you for future fraud instances.

### 2. Use fraud detection and analysis

HCLTech Fraud Risk Management automatically profiles network asset use, and recognizes many key fraudulent behavior patterns, which helps isolate anomalies and raise alarms in real time. It also tracks changes to customer or service information, looking for unusual or unauthorized activities. Using a rich set of configurable detection and analysis features, HCLTech Fraud Risk Management can identify all major industry fraud risks.

Examples of detection by built-in techniques include:

- Repeated calls to known IRSF destinations, countries and number ranges
- Unusual activation of additional lines on a subscriber's account, or unexplained upgrades of customer equipment, signifying a potential account takeover
- Radical changes in calling habits, coupled with excessive calling to high-cost destinations, possibly indicating PBX or VoIP equipment compromise
- Immediate roaming following activation, a common symptom of subscription fraud
- Rapid purchases of content, apps or merchandise, signifying possible content or eCommerce fraud
- Excessive outgoing on-network calls with a large spread of destination numbers, indicating bypass or SIM gateway fraud

## Realize your fraud situation

Thinning profits? It could be fraud. And, you may not even be aware of it. Of all the industries, communications, media and entertainment is among the most susceptible to fraudulent activities. 5G accelerate digitization of services across different sectors and phones have become a common authentication point for many financial or ecommerce services. Telecom services can be both the point of attack to initiate fraud as well as the victim of fraud. Any fraud—whether it's account takeover fraud, IoT fraud, International Revenue Share Fraud (IRSF), content theft, VoIP equipment compromise or subscription fraud—eats into your revenue and profits. And now, fraudsters are using more sophisticated technologies to perpetrate crimes. Even with existing fraud management systems in place, there could be weaknesses in your network that fraudsters could penetrate. As a communications service provider, it's important to be in control of your network assets and certain they are not being misused. With real-time fraud detection, you can close loopholes, increase your revenues and keep fraudsters in check.

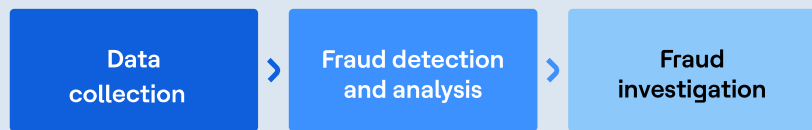


Figure 1: Prevent fraud in three simple steps

## Artificial intelligence fighting fraud

HCLTech's advanced fraud detection introduces correlation driven by machine learning and automation to accelerate detection and reduce business impact of new fraud patterns. Extending analytics into larger non-traditional data repositories we enrich subscriber fraud profiles to discover new suspicious behaviors and stop fraud rapidly, before it creates significant financial loss.

New built-in FRM features support analytical data flows, as well as supervised and unsupervised machine learning techniques. We combine deterministic rule-based analytics with predictive statistics to support detection of an ever increasing scope of fraud types. Powerful data visualization tools enable your staff to leverage insights and results generated by multiple analytical models provided.

Artificial intelligence is a powerful, transformative technology that can amplify human capabilities, but also presents risks. We assist our customers by establishing robust, ethical systems that align with HCLTech's AI Ethical principles or the customers' own ethical principles.

User-configured patterns and rules accelerate the detection of new fraud scenarios, in addition to the many prepackaged methods included in the solution. The possibilities are endless.

HCLTech Fraud Risk Management creates individual customer profiles, and a rules-based expert system aggregates all alarms for you and makes a determination of whether they represent sufficient evidence to warrant opening a fraud case. The solution uses machine learning

against the archive of previous cases to learn behaviors and provides a scoring of new cases, detecting risk due to as-yet unidentified indicators of potential fraud. This scoring is effectively keeping up with the evolution of fraud in your network, lending credence to a case.

With the explosive growth in traffic and data volumes, the nearly unlimited scalability of this solution enables you to handle almost anything that comes your way, without having to discard data or throttle analysis.

### 3. Investigate

HCLTech Fraud Risk Management comes with an intuitive graphical user interface (GUI) that provides efficient distribution of cases to analysts, case prioritization and investigation support. Immediate access to all relevant information, including xDR event details, subscriber or customer information, system findings and other detailed information, enables the analyst to conduct a thorough investigation to assess whether the case represents actual risk. Counteractions may also be invoked by the analyst or automatically under conditions specified by the system administrators. The GUI provides a high degree of flexibility to enable users to perform their responsibilities in the most efficient and effective manner.

To support case investigation and tune results produced by the system, the solution provides an extensive library of reports and dashboards.

HCLTech Fraud Risk Management provides powerful actionable information—business insight to monitor results and learn important new trends. The drill-down capability can provide insight on what your customer is doing and enable you to make better informed decisions for improved business outcomes. Predefined and user-defined reporting is available, and is designed to match each user's responsibility level.

#### Service offer

HCLTech Solution Lifecycle Services for the communication and media industry help you realize the full value of your solutions, from planning and assessment through to testing deployment, operation and nearly continuous improvement. Each service area leverages proven processes and best practices to balance capital expenditures and operating expenses (OPEX) and reduce risk, while keeping your projects on time and your operations running smoothly.

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#### Unlock your business potential

Address new fraud vulnerabilities as they arise. HCLTech Fraud Risk Management brings an open architecture that enables you to accommodate new business models, new fraud types and consequently new detection techniques.

#### Realize the full value of your solutions environment

HCLTech services offer a proven way for guiding you through your transformational journey:

- **Consulting**—Solution Consulting Services help define business transformation and translate strategies into actionable solutions
- **Implementation**—Complete project lifecycle services lower implementation risks across design, development, customization and network and system integration with HCLTech Solution Implementation Services
- **Management**—A comprehensive portfolio of Solutions Management Services can increase the operational efficiency of your existing solutions, including reactive, proactive, operational and enhancement services
- **Outsourcing**—A variety of sourcing options are designed to improve business agility while reducing your OPEX, including IT and infrastructure outsourcing, application management and business process outsourcing

TOP  
5

Fraud types accounted for > 50% of all fraud losses<sup>2</sup>



Get the confidence you need to handle fraud quickly and cost-efficiently. The solution is highly scalable and ready to cope with exploding data volumes. Focus on expanding your market share without worrying about fraudsters getting the better of you.

Protect your business against unknown risks. Fraudsters are constantly changing their methods. With data mining and analytical capabilities supplementing the direct knowledge embedded in its rule-based system, HCLTech Fraud Risk Management can help you discover hidden fraud indicators that are buried in your data. HCLTech Fraud Risk

Management supplies an event/call archive facility that is used to store all events for use while investigating a case or later performing your off-line analysis. You have an option to implement a long term event archive using a compatible Hadoop data base (not included in product license). Manage huge data volumes cost-efficiently combining low cost open source big data technology with HCLTech product-driven fast analytical performance.

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#### Help ensure access to uninterrupted innovation

**Get best-of-breed fraud management hosted in HCLTech selected cloud; shorten the time to value and remove the need for investing in software and the resources to support the platform**

HCLTech Fraud Risk Management (FRM) delivered in the as-a-service (aaS) model is hosted in HCLTech selected cloud. It tackles new fraud threats due to 5G technology and IoT platform as well as many of the most common traditional fraud types relevant for telecommunications service providers such as:

- Subscription fraud
- International Revenue Share Fraud (IRSF)
- Bypass, SIM gateway fraud
- Domestic premium rate services
- Prepaid services fraud
- Flat-rate services abuse
- On-premises equipment (PBX, VoIP) compromise

<sup>2</sup>CFA Fraud Loss Survey 2019

A fully managed solution removes the need for investing in software and the resources to support the platform. This also shortens the time taken to deploy and start offering services to your end users.

HCLTech FRM delivered in the aaS model provides out-of-the-box configuration including:

- **Data model:** Event/entity types covering typical communication provider services (mobile, fixed and others).
- **Data collection:** File transfer on cloud repositories through VPN for event/entity data loading. RAW events format needs to be normalized into the predefined format by mediation or by prefeeder application.
- **Fraud detection:** Predefined set of alarms and case types. Additional alarms/cases configured by business users using pattern detection rules and alarm analysis rules.
- **Actions:** Predefined set of actions (that is, suspension) and file- based integration; file transfer through VPN to request suspensions to CRM.

**Included services**

To enable you with HCLTech FRM access, HCLTech delivers the following services:

- **Onboarding services:** Professional services aiming at integrating the HCLTech FRM platform with the service provider interfaces
- **Managed services:** Professional services aiming at guaranteeing the service continuity of the HCLTech FRM

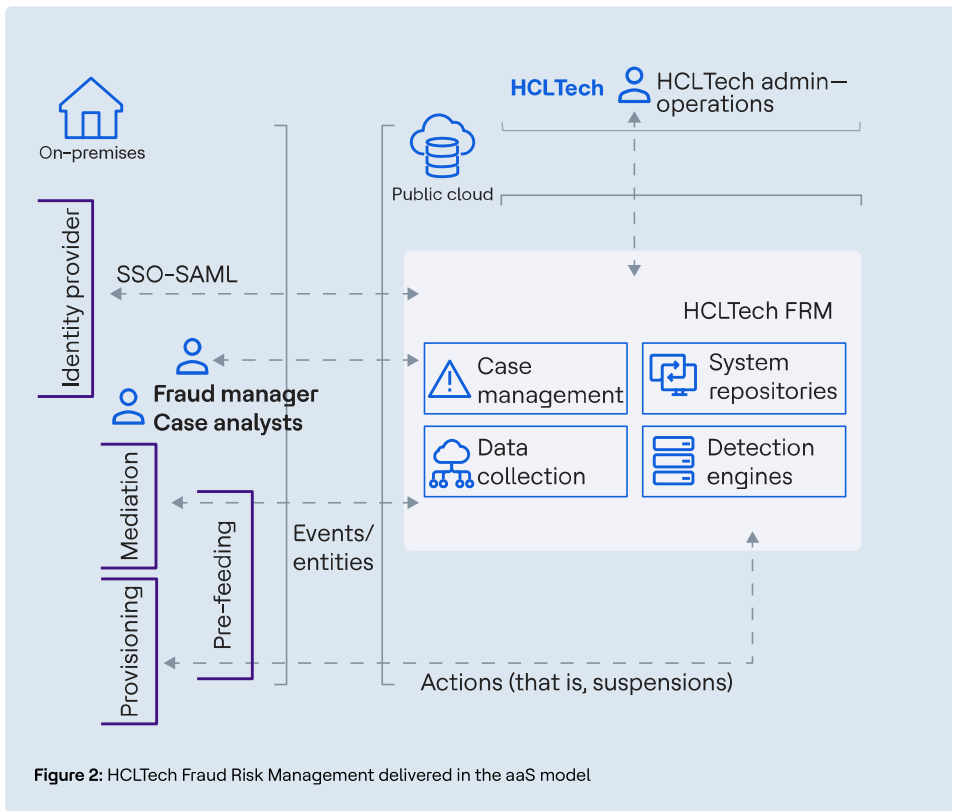


Figure 2: HCLTech Fraud Risk Management delivered in the aaS model

**Onboarding services from HCLTech**

The following onboarding services are provided by HCLTech:

- Kickoff and business user training
- Collection tests (aka unit tests)
- Initial platform sizing, HCLTech software installation and configuration in HCLTech selected data center (production and test environments)
- Integration and E2E tests with customer back ends
- Support during the customer acceptance phase
- Support for additional fraud rules configuration
- Go live

**Managed services**

HCLTech operates the HCLTech FRM delivered in the aaS model and, as part of the operations, provides services such as:

- Service monitoring and support
- Incident management
- Service and performance management
- Security
- Data backup and retention
- Scheduled maintenance
- Service governance and monthly reporting

## HCLTech Communication Technology Group

HCLTech Communication Technology Group is dedicated to creating vertical solutions for the communications and media industry. With over 30 years of experience in the industry, we have over 50 solutions, over 1,500 active contracts and more than 300 telco customers in 160 countries. We provide software and services that enable your digital transformation, automate your operations and help you grow your business with innovative cloud-native network solutions and digital, 5G-ready services.

### 5 reasons to choose HCLTech FRM delivered in the AAS model



Faster time to market of new deployments



Scalable and highly available instances



Subscription model that provides pay-per-use flexibility



Fully managed environment to focus on core business



Secure deployment to protect sensitive data



# HCLTech | Supercharging Progress™

HCLTech is a global technology company, home to more than 218,000 people across 59 countries, delivering industry-leading capabilities centered around digital, engineering, cloud and AI, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG and Public Services. Consolidated revenues as of 12 months ending September 2024 totaled \$13.7 billion. To learn how we can supercharge progress for you, visit [hcltech.com](https://hcltech.com).

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