

The Challenge of Sophisticated Fraud

FRAUD DETECT SYSTEM (FDS) is an evidence-based detection technology to automatically verify if a file or image is genuine. FDS provides evidence for fraudulent claims based on scientific methodologies.

Claims processing in the modern insurance space often remains a manual, inefficient and error prone operation. It can easily take a trained forensic expert 15 minutes to one hour per submitted claim document and might still be imprecise, leaving room for fraud in anything from 5% to 10% of all claims. On a global scale, this adds up to billions of dollars. Unfortunately, the business model of the insurance industry passes on this huge bill to the consumer.

The temptation for policyholders to commit fraud is associated with the low risk for legal repercussions. If a claims handler decides to investigate a claim further, the policyholder often drops the claim, whereas the insurer generally will not take further legal action as the value of the claim compared to collecting evidence and the cost of legal action is too high.

FDS Detects, Identifies and Alerts if a File is Fraudulent

FDS is a software solution for forensic authentication and fraud detection on digital files in seconds, using over 100 detection points to verify if documents are genuine or fraudulent.

FDS instantly determines whether a file is an unaltered

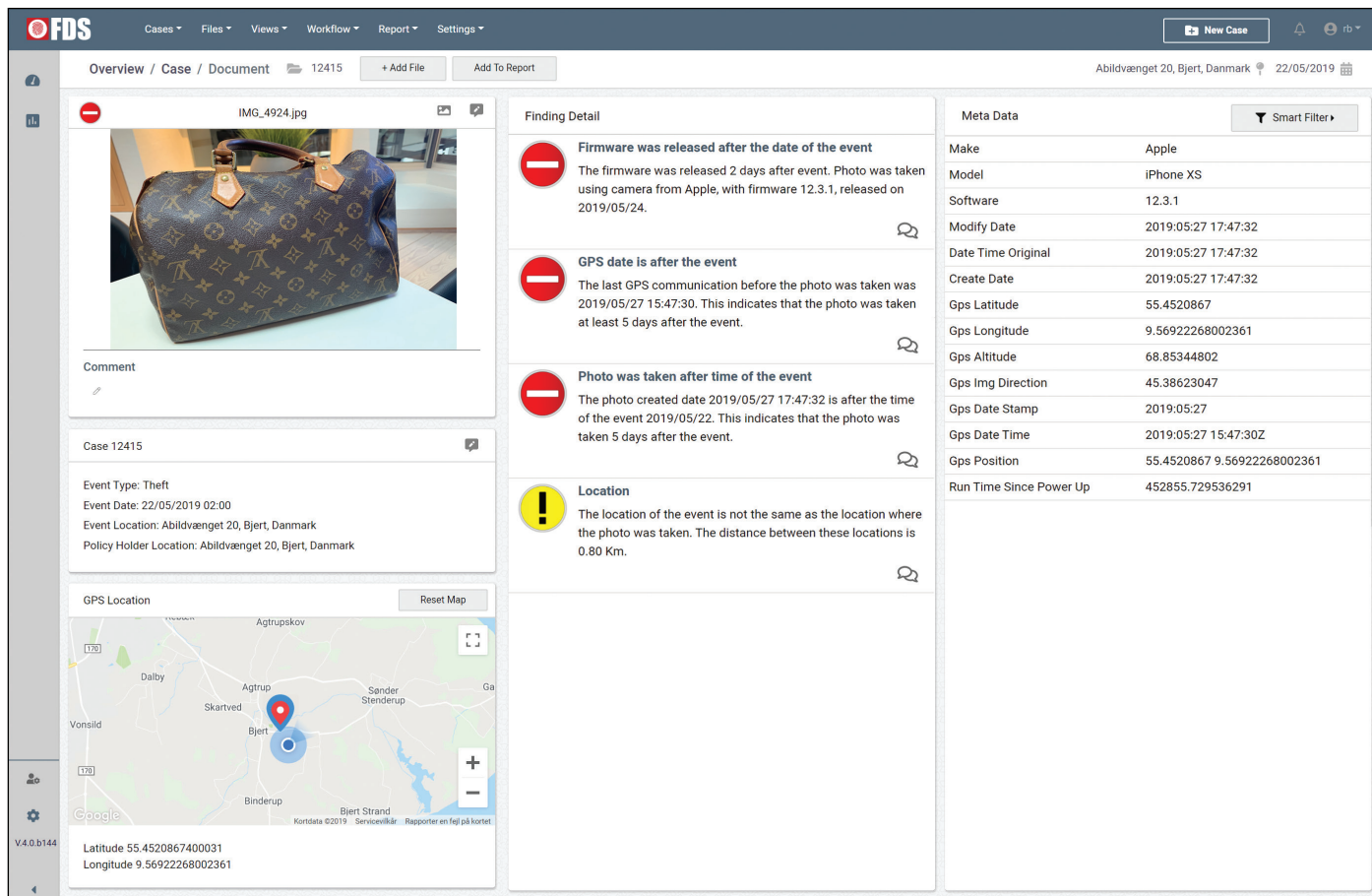
original, an original generated by a specific device, or is the result of manipulation via editing software, suspicious geo-location, bearings etc. and therefore may not be accepted as claims evidence. FDS can detect a multitude of files which include images, invoices, receipts, certificates, health records, employment contracts, warranties and other such documents.

Why is File Detection Technology Needed?

The ability to deal quickly with claims, is core for any insurance company to ensure high customer satisfaction scores, and at the same time reducing claims costs by offering efficient claim handling services. FDS supports efficient processing whether it is traditional in-house manual claims management or automated self-service, also known as "STP" or "Fast-track".

Traditional pattern-based fraud detect system is a common technology used in the insurance industry and gives a good indication of fraud patterns. However, it tends to give a number of false positives which are time consuming and costly to confirm.

FDS is an extra layer of detection on top of your existing fraud systems, such as business intelligence and AI solutions.



The screenshot displays the FDS web application interface. The top navigation bar includes 'Cases', 'Files', 'Views', 'Workflow', 'Report', and 'Settings'. The main content area is divided into several panels:

- Overview / Case / Document:** Shows the case ID '12415' and the document 'IMG_4924.jpg'.
- Image:** A photo of a brown Louis Vuitton bag.
- Comment:** A section for adding comments.
- Case 12415:** Details the event type as 'Theft', event date as '22/05/2019 02:00', event location as 'Abildvænget 20, Bjert, Danmark', and policy holder location as 'Abildvænget 20, Bjert, Danmark'.
- GPS Location:** A map showing the location of the event (Bjert) and the location where the photo was taken (Bjert Strand). The map includes a 'Reset Map' button and coordinates: Latitude 55.4520867400031, Longitude 9.56922268002361.
- Finding Detail:** A list of findings with red and yellow icons indicating the status of the detection.
 - Firmware was released after the date of the event:** The firmware was released 2 days after event. Photo was taken using camera from Apple, with firmware 12.3.1, released on 2019/05/24.
 - GPS date is after the event:** The last GPS communication before the photo was taken was 2019/05/27 15:47:30. This indicates that the photo was taken at least 5 days after the event.
 - Photo was taken after time of the event:** The photo created date 2019/05/27 17:47:32 is after the time of the event 2019/05/22. This indicates that the photo was taken 5 days after the event.
 - Location:** The location of the event is not the same as the location where the photo was taken. The distance between these locations is 0.80 Km.
- Meta Data:** A table showing various metadata points for the image.

Make	Apple
Model	iPhone XS
Software	12.3.1
Modify Date	2019:05:27 17:47:32
Date Time Original	2019:05:27 17:47:32
Create Date	2019:05:27 17:47:32
Gps Latitude	55.4520867
Gps Longitude	9.56922268002361
Gps Altitude	68.85344802
Gps Img Direction	45.38623047
Gps Date Stamp	2019:05:27
Gps Date Time	2019:05:27 15:47:30Z
Gps Position	55.4520867 9.56922268002361
Run Time Since Power Up	452855.729536291

Which one is real and which one is fake?

Amazon.com - Order 105-0991553-6652239

amazon.com

Final Details for Order #105-0991553-6652239
[Print this page for your records.](#)

Order Placed: January 18, 2018
Amazon.com order number: 105-0991553-6652239
Order Total: **\$339.79**

Shipped on January 19, 2018

Items Ordered	Price
1 of: Wilson Men's Pro Fit Complete Package Golf Set, Right Hand, Standard Sold by: Amazon.com Services, Inc. Condition: New	\$299.99

Shipping Address:	Item(s) Subtotal:
John Peterson 16283 AERONA WAY MIAMI, FL 33126-2849 United States	\$299.99
	Shipping & Handling: \$21.80

	Total before tax: \$321.79
	Sales Tax: \$18.00

Shipping Speed: Two-Day Shipping	Grand Total for This Shipment: \$339.79

Payment information

Payment Method:
Visa | Last digits: 8178

Billing address
John Peterson
16283 AERONA WAY
MIAMI, FL 33126-2849
United States

To view the status of your order, return to [Order Summary](#).

[Conditions of Use](#) | [Privacy Notice](#) © 1996-2019, Amazon.com, Inc. or its affiliates

https://www.amazon.com/gp/css/summary/print.html?ref=ppx_od_dt_b_invoice?ie=UTF8&orderID=105-0991553-6652239

Amazon.com - Order 105-0991553-6652239

amazon.com

Final Details for Order #105-0991553-6652239
[Print this page for your records.](#)

Order Placed: January 4, 2019
Amazon.com order number: 105-0991553-6652239
Order Total: **\$644.79**

Shipped on January 5, 2019

Items Ordered	Price
1 of: Wilson Men's Pro Fit Complete Package Golf Set, Right Hand, Standard Sold by: Amazon.com Services, Inc. Condition: New	<u>\$599.99</u>

Shipping Address:	Item(s) Subtotal:
John Peterson 16283 AERONA WAY MIAMI, FL 33126-2849 United States	<u>\$599.99</u>
	Shipping & Handling: \$21.80

	Total before tax: <u>\$621.79</u>
	Sales Tax: <u>\$23.00</u>

Shipping Speed: Two-Day Shipping	Grand Total for This Shipment: <u>\$644.79</u>

Payment information

Payment Method:
Visa | Last digits: 8178

Billing address
John Peterson
16283 AERONA WAY
MIAMI, FL 33126-2849
United States

To view the status of your order, return to [Order Summary](#).

[Conditions of Use](#) | [Privacy Notice](#) © 1996-2019, Amazon.com, Inc. or its affiliates

https://www.amazon.com/gp/css/summary/print.html?ref=ppx_od_dt_b_invoice?ie=UTF8&orderID=105-0991553-6652239

FDS highlights in red the areas where modifications have been made

Easy Deployment and Integration

Deployment of FDS is easy and agentless, which means no installation on end points. FDS is installed on a dedicated Microsoft Windows Server 2012 R2 or later either on-premise, in private cloud, or in public cloud.

FDS supports VM environments and can be easily supported by MSP's (Managed Service Providers). For smaller and mid-sized insurance companies the deployment is very easy and cost effective. For larger organizations the full scalability of FDS makes it possible for it to be deployed with multiple detection engines. This enables FDS to service global or highly distributed environments which handle large volumes of files. All functionalities are accessed through web browser.

The Detection Engine

FDS detects on submitted claim documents such as; images, word, excel, PDF's and films.



Images



PDF'S



Word & Excel



Videos

FDS provides evidence for fraudulent claims based on scientific methodologies. The FDS detection engine has all detection methods and features, including parametric options and setup stored in the database so they can be customized.

A Windows service inspects all meta-data of all files, including advanced deep inspection and analysis of all data inside PDF files, and it will even highlight where modifications in a PDF file have been made.

FDS supports Google API so the claims handler can easily see the policy holder's address, the address of the reported incident, and the GPS data location of submitted images. It is easy to compare, calculate and view on a map the distance between reported location and actual location.

FDS makes a fingerprint (several HASH values) of all files making it possible to alert if the same file has been submitted in previous inhouse cases. By using FDS Data Point, these fingerprints can be checked in a GDPR regulated environment on a centralized database of all participating insurance companies. Alerts are raised if the same claim, or part of it, has been used before.

For reverse image search, the FDS integration to TinEye will reveal if images have appeared on the internet before. FDS features an open RESTful Web API interface for easy integration with other insurance platforms and supports self-service or STP strategies.

Workflow Knowledge Management

Detected fraud is automatically assigned to the right team by the configurable FDS workflow engine. Dealing with fraudulent cases, FDS features knowledge management Q&A, where each detection method has multiple questions. This will support and teach the claims handler to investigate each detection further and ask the policy holder the correct follow up questions.

Cases inspected by claims handlers can be re-assigned by the Workflow Engine to the SIU's (Special Investigation Unit) for further inspection. All fraudulent cases can be documented further with evidence-based reports created for documentation in police or court cases.

