



API OVERVIEW

Overview, use cases and case studies on the Device Location Verification API

Telefónica Open Gateway

March 04, 2024

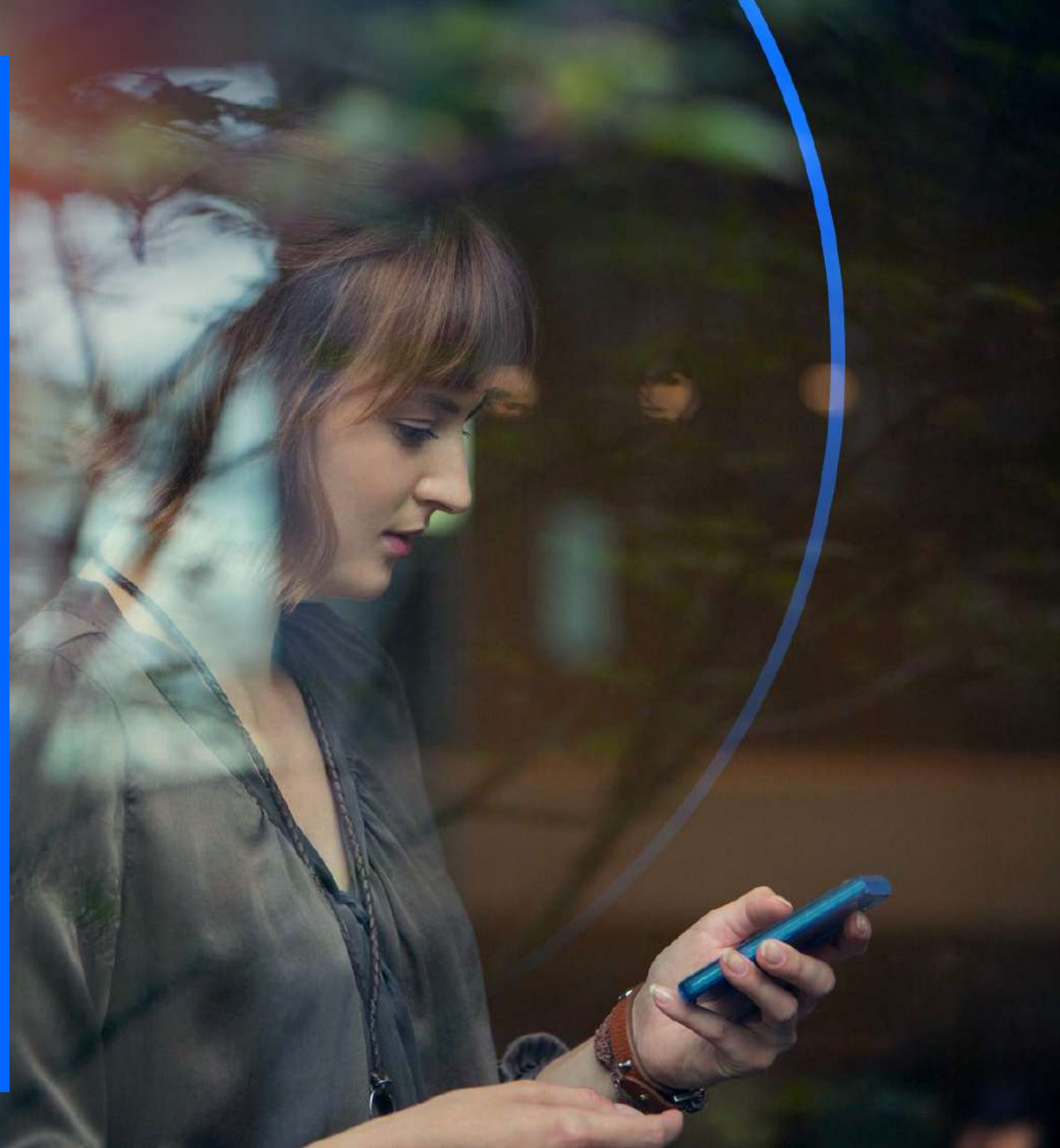


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Description

01

With the Device Location Verification API, you can verify the geographical location of a given SIM-based device.



It verifies whether the device is within a requested geographical area specified by the center and the radius of a circle.

This functionality helps you keep sensitive applications and services under control by allowing or denying transactions, enabling or disabling functionalities, etc., based on the verification of the location. It also enables you to target users to communicate

specific circumstances of the service, advertising applications, etc.

The Device Location Verification API connects the digital and physical worlds, since everything happens somewhere.

Features and Categorization

CAMARA	
COUNTRIES	
SECTORS	<ul style="list-style-type: none">FINANCIAL SERVICES & INSURANCESE-COMMERCE & RETAILMEDIA, ENTERTAINMENT & XRTRANSPORT & LOGISTICSICT SERVICESTRAVEL & HOSPITALITYMARKETING BASED ON DATA
SERVICIOS	LOCATION



Characteristics of Device Location Verification API

02

Overview

Characteristics of Device Location Verification API



Easy access to location information

This API provides you with an easy and fast way to validate the geographical location of your customers. Accessing this information is very significant because it helps you keep your service under control, and it enables a set of interesting features for your service, like anti-fraud strategies, personalization, advertising, etc.



Free from GPS theft

The verification of the location is performed based on the network information that the Telco operator manages to provide their mobile phone service. So, this verification is free from device impersonation and GPS theft or emulation.



Prevent from Identity risks

You can combine this API with other complementary APIs like Number Verification, Device Swap or Know Your Customer - Match to enforce the security of your service and enhance the user experience. This set of APIs helps you minimize the risks related to Identity and keep your service under control.

Overview

Characteristics of one Standard Device Location Verification API



Simplified Integration

With this standardized API, you can seamlessly integrate the Location Verification functionality into your service without the need for custom implementations for each telco operator. This simplifies the development process and reduces the time-to-market.

Footprint for your Identity Service

The standardized API provides you a uniform access to different telco companies. This enhances the footprint of your business and ensures consistency and versatility across different operators.

Use Cases

03

Overview / Use Cases

Fraud prevention in location-dependent transactions

Digitalization of transactions is becoming widespread. This trend leads to have the digital and physical worlds unconnected. But digital activity happens in real physical places. So, this API **helps you connect both worlds and enforce security** by verifying that the device of the customer is really where the transaction is happening.

For example, when a customer is paying at a POS, or withdrawing money from an ATM, you can verify whether the customer is in the geographical zone where the POS or ATM are. So, any location-dependent transaction can be verified in this way to reduce risks related to account takeover and other types of identity fraud.



OTHER RELATED APIs

[Device Status](#)

[SIM Swap](#)

[Number Verification](#)

[Know Your Customer - Match](#)

SECTOR

FINANCIAL SERVICES & INSURANCES

E-COMMERCE & RETAIL

SERVICE

LOCATION

DEVELOPER NEEDS

- The pretended location is known but there may not be actual GPS coordinates available or they are not reliable.
- Need for qualified input to better detect fraud and enforce security of the transactions.
- Enhance the experience of customers by protecting them from fraud and unpleasant situations.

Overview / Use Cases

Delivery of special services in big events

The organizers of large sporting, music or entertainment events can provide their audience with special digital services. They can decide to provide these services on site or even after the event having a proof of life they were there.

Examples of these special services are Augmented Reality experiences, access to private Web/App zone of the event, eligibility for special fan experiences, access to premium content during and after the event, etc.



<p>OTHER RELATED APIs</p> <ul style="list-style-type: none"> Device Status SIM Swap Number Verification Know Your Customer - Match 	<p>SECTOR</p>	<p>SOCIAL & CUSTOMER ENGAGEMENT</p> <p>MEDIA, ENTERTAINMENT & XR</p>	<p>DEVELOPER NEEDS</p> <ul style="list-style-type: none"> • Check whether the customer is eligible for a special service because they are/were in the specific site. • Personalization of services. • They need to validate location of customers, but they do not have access to their GPS coordinates (no App available, no App installed, avoid UX friction, etc.) • Offer to their customers the most value from their purchase.
	<p>SERVICE</p>	<p>LOCATION</p>	

Overview / Use Cases

Fraud detection and prevention in gaming, retail and delivery

Gaming Platforms are representative of business that can need to verify where their service is being used from.

Soft launches, launches restricted to specific regions or countries, detection of fraud based on fake location, accounts that have been taken over, etc. are examples of use cases for gaming platforms.

Other business related to distribution and delivery of goods and services give services that are also location-dependent. So, they may need to validate where their fleet and/or customers are.



<p>OTHER RELATED APIs</p> <ul style="list-style-type: none"> Device Status SIM Swap Number Verification Know Your Customer - Match 	<p>SECTOR</p>	<p>SOCIAL & CUSTOMER ENGAGEMENT</p> <p>MEDIA, ENTERTAINMENT & XR</p> <p>E-COMMERCE & RETAIL</p>	<p>DEVELOPER NEEDS</p> <ul style="list-style-type: none"> Protect the business strategies (geographical plans for new releases, pricing, etc.). Protect their customers from risk of account take over. Protect the service delivery from uncontrolled demand due to fraud. Provide customers with fair conditions to access to products according to their purchase and service conditions.
<p>SERVICE</p>	<p>LOCATION</p>		

Overview / Use Cases

Drones and IoT

A drone operator company wants to plan a flight for which they will lose visual line of sight, but the drone must be kept controllable and predictable.

A company operating a bicycle loan system (or other means of mobility) wants to double check the location of their vehicle fleet.

The GPS may not be enough due to temporary failures, fraud or lack of coverage indoors.



OTHER RELATED APIs

[Device Status](#)

[SIM Swap](#)

[Number Verification](#)

[Know Your Customer - Match](#)

SECTOR

IOT

SERVICE

LOCATION

DEVELOPER NEEDS

- Company needs their objects (“things”) to be traceable and controllable.
- Need to avoid objects from being stolen or misused.
- The GPS may not be enough due to fraud, temporary failures, or lack of coverage indoors.

Case Studies

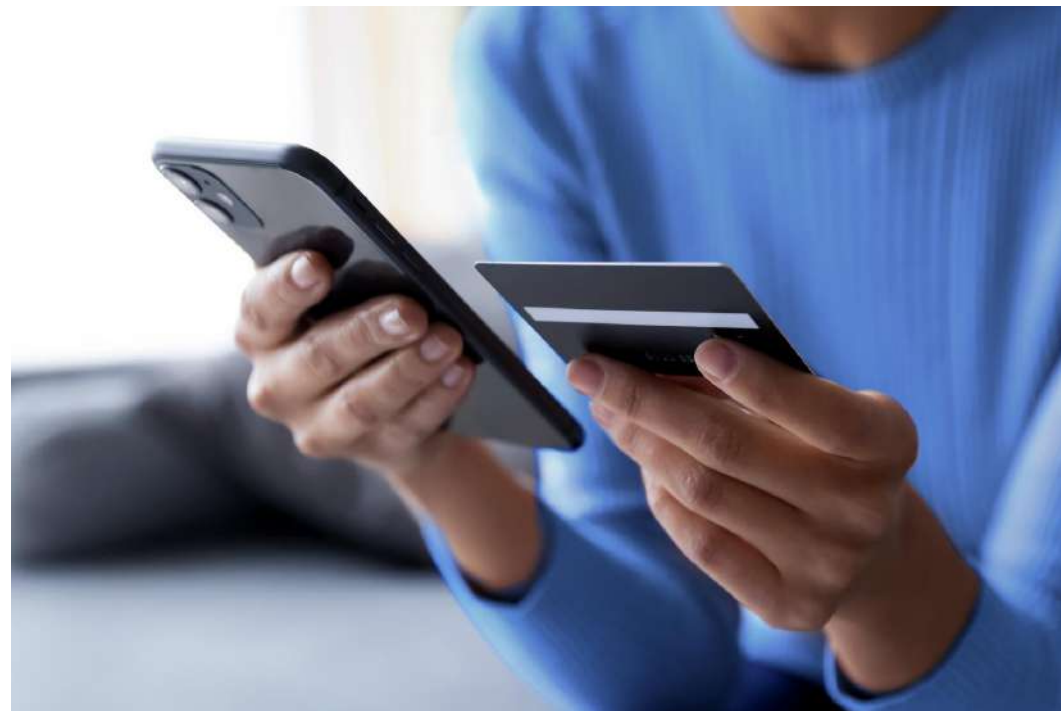
04

Overview / Case Studies

VIVO y Daycoval

Daycoval is one of the most recognized financial companies in Brazil, with more than 13 billion dollars in assets. Thanks to Open Gateway, it has begun to collaborate with Vivo, Telefónica's operator in Brazil, to explore the benefits that telco APIs can have to improve the user experience in its digital services.

Some points where banking applications can make relevant improvements are the registration procedures, opening new accounts, and ordering new services or transactions. Thanks to the integration of Device Location Verification API, Daycoval can ask Vivo to verify the location of its users to automate steps when carrying out different operations. This allows the development of new, more intelligent and efficient fintech services, increasing customer satisfaction.



PARTNERS



SECTOR

FINANCIAL SERVICES & INSURANCES

Overview / Case Studies

Ericsson y Vonage

There is nothing more exciting than live football matches, and being able to offer fans all kinds of exclusive content or extras while watching games in the stadium itself, takes the user experience to new heights.

Ericsson and Vonage join forces to offer developers the possibility of integrating new Open Gateway APIs, such as Device Location Verification API, to verify a user's location and be able to offer them this type of content, such as the replay of a goal, extra content such as lineups or scores, or see the game from different angles. This allows us to develop new premium applications and functionalities that enrich the user experience.



PARTNERS



SECTOR

SOCIAL & CUSTOMER ENGAGEMENT

MEDIA, ENTERTAINMENT & XR

Overview / Case Studies

Ericsson y Vonage

Parcel delivery using drones requires reliable location control to ensure real-time location of devices with maximum security. Also, planned flights need ensure that the drone flies according to plan.

Ericsson and Vonage are teaming up to offer developers the ability to integrate Open Gateway solutions to improve their users' experience in Open Gateway applications.

By integrating the Device Location Verification API, it is possible to incorporate the advanced capabilities of the network to verify the position of a drone quickly and easily. Thus, it is possible to develop new applications for the control of drone fleets with maximum safety.



PARTNERS



SECTOR



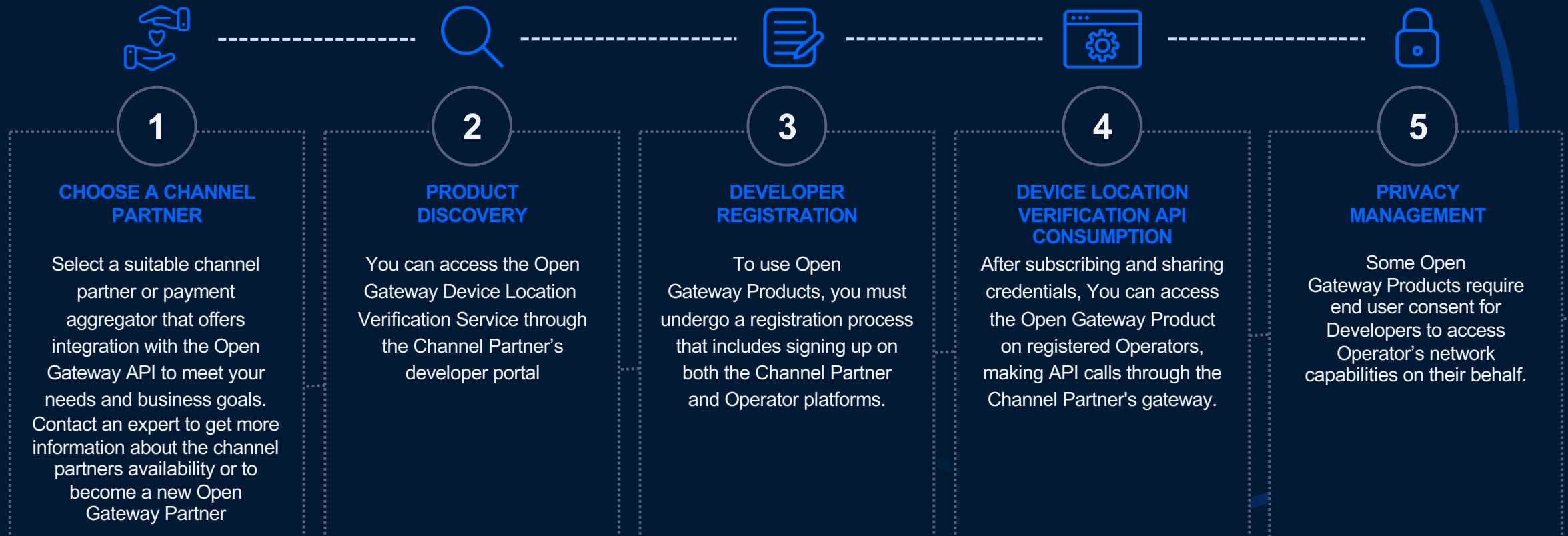
**Start Using
Device Location
Verification API**

05

Getting Started with Device Location Verification API

Harness the power of Open Gateway and seamlessly integrate our API services into your app

Follow these initial steps for seamless API services to Developers within Channel Partners' environments, including Operators API Services integration for a cohesive product experience and efficient collaboration among stakeholders.



Documentation

06

Official Device Status CAMARA API Documentation

About CAMARA

CAMARA is an open-source project within Linux Foundation to define, develop and test the APIs. CAMARA works in close collaboration with the GSMA Operator Platform Group to align API requirements and publish API definitions and APIs. Harmonization of APIs is achieved through fast and agile created working code with developer-friendly documentation. API definitions and reference implementations are free to use (Apache2.0 license).

Camara is supported by:



Meetings

- Regular Virtual Meetings
- Bi-weekly on Tuesdays
- 09:00 to 10:00 CET

Contributor ship & Mailing List

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FAQs

07

FAQs / Device Location Verification API

What is the CAMARA Device Location Verification API?

The CAMARA Device Location Verification API is a standardized API that enables developers to verify whether a SIM based device is in a certain geographical area defined by the coordinates (latitude-longitude) and a radius (in Km).

What is the Unified API Access feature of the CAMARA Device Location Verification API?

Unified API Access provides a single, standardized API for accessing telco capabilities across different network operators, simplifying integration for developers.

What types of services can benefit from Device Location Verification integration?

A wide range of industries are interested in improving their services by verifying the location of their customers. Industries like Financial Services & Insurances, Social & Customer Engagement, IoT, Media, Entertainment & XR, can shape the features of their services using location information provided by this API.

How can businesses benefit from using Device Location Verification API?

By using Device Location Verification API, companies can connect the physical and digital worlds, since everything happens somewhere. Companies can evaluate fraud risk of a transaction, registration or operation by verifying that they are happening where they are supposed to be happening.

Companies can also enable or disable specific features of their services according to the location of their clients. Also, companies can take marketing actions once the location of their customers is verified.

FAQs / Device Location Verification API

What is the role of the GSMA in standardizing the Device Location Verification process?

The GSMA plays a key role in setting standards and guidelines for Device Location Verification, ensuring consistency and interoperability across the industry.

Do users need to sign up for Device Location Verification?

Device Location Verification API is usually available to be used for all customers of MNOs. But consent from them must be retrieved. This is done following the authorization flow when the developer sends the first API request.

What security measures does Device Location Verification employ to protect user data?

When using Device Location Verification, safe and reliable authentication and authorization procedures are followed to control the access to the API and to retrieve the consent of the end user.

How does Device Location Verification help in identity fraud prevention and in protection of customers?

There are several kinds of fraud that can be tackled and blocked by using the Device Location Verification API, since it lets you validate that customers using a service are where they are supposed to be. This can be used not only in the financial industry, but also in the delivery of any digital service (gaming, streaming, etc.).

The business of the company is then protected, and the customers themselves are protected from being affected by fraudulent actions.

How does Device Location Verification help in personalization of services?

A company can personalize the way their services are delivered according to the location of their customers.

For example, companies can differentiate or adapt their services from city to city or personalize the service while the customers are travelling. A company can also personalize the delivery of physical goods and services (food delivery, parcel delivery, home help services, etc.), and can deliver special services in specific events that occur in specific places.

**Other relevant
information**

08

Further information

Join our Developer Hub

Join the [Telefónica Open Gateway Developer Hub](#) to test our APIs, develop use cases with the power of the network and improve user experiences.

Enroll our Partner Program

If you are interested in the potential of Telefónica Open Gateway and you are willing to collaborate with us, you can [enroll our exclusive Partner Program](#).

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Contact our experts

If you have any questions about the initiative, don't hesitate to [contact our experts](#).





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