Telefónica

Open Gateway

Overview, use cases and case studies on the Number Verification API

Telefónica Open Gateway

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Description, Features, and Categorization

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Number Verification facilitates the security of the user identity and credentials

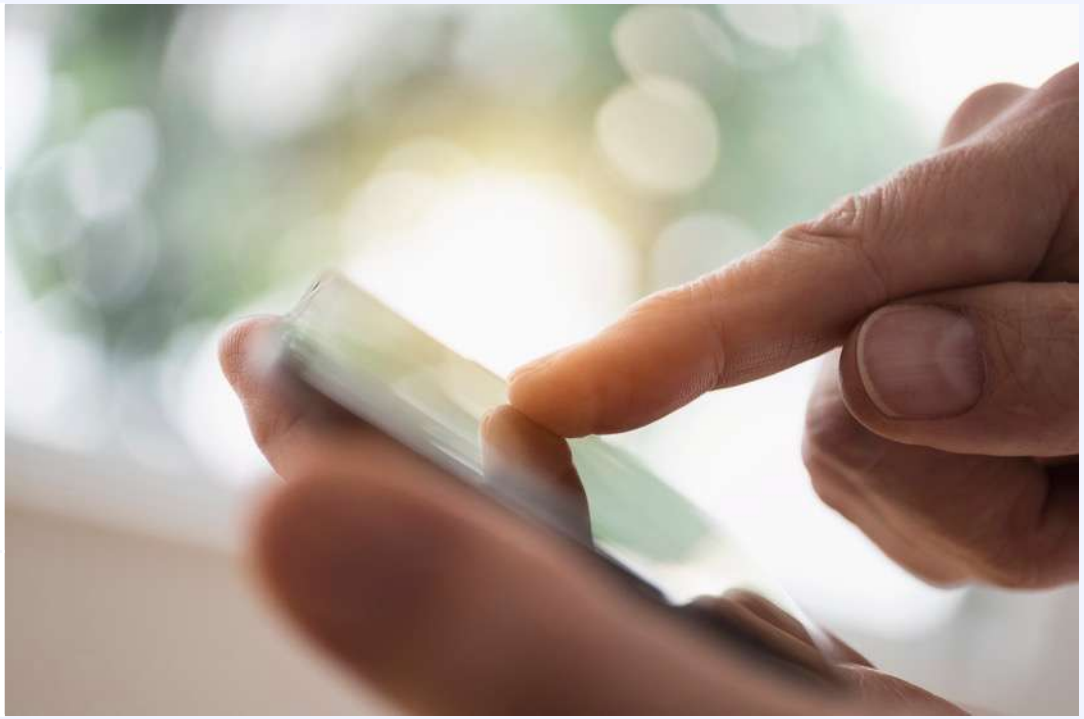
Employing transparent mechanisms, the service solves the authentication of users based on their mobile number, providing a factor of authentication of possession (“what the user has”), without aggressive friction mechanisms like SMS OTP.

Number Verification API provides you a more secure, convenient and reliable way to access digital services. Your users will experience a better and transparent experience when getting registered or logged in your application.

The usage of standard API and mechanisms accelerates the integration of the services, also ensuring a homogeneous and future-proof solution along Operators and regions.

Features and Categorization

CAMARA	✓
COUNTRIES	
SECTORS	E-COMMERCE & RETAIL MEDIA, ENTERTAINMENT & XR FINANCIAL SERVICES & INSURANCES
SERVICIOS	IDENTITY



Characteristics of Number Verification

02

Overview

Characteristics of Number Verification

Enhanced User Experience

With Number Verification, users can **validate their phone number in a registration** process and **automatically get logged** in following app interactions. In comparison with SMS OTP, Number Verification avoids user having to get out of the app and manually introduce a complex code, **all happens transparently** for them employing the information of their connection.

Universal reach

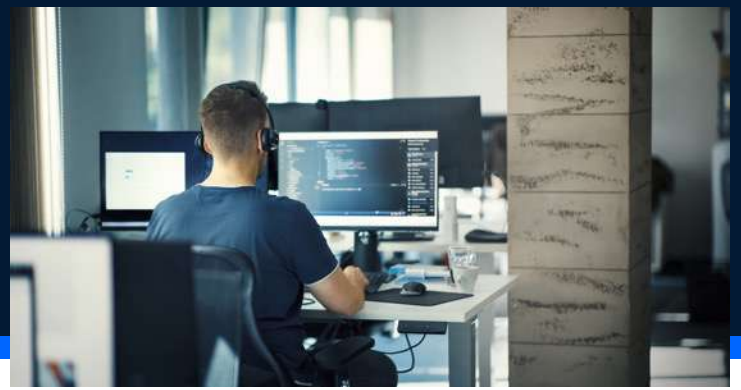
Using **standard telco operator mechanisms** to authenticate the use connection allows the service to adapt to a wide range of devices. Works on **any internet enabled mobile device** connected to carrier mobile data network, even when roaming (even in Wi-Fi if a temporal network transition is allowed).

Security and privacy

The key aspect for an antifraud service is the user's data security. Avoiding manual mechanisms and providing a trusted network-based mechanism to validate the identity of the users provides the required security for sectors like fintech and banking, enhancing the range of services that they can provide to their online users.

Overview

Characteristics of one standard Number Verification API



Simplified Integration

With a standardized API, developers can seamlessly integrate number verification into their applications without the need for custom implementations for each telco operator. This simplifies the development process and reduces the time-to-market.

Uniform Access to Telco Capabilities

The standardized API provides uniform access to other telco capabilities, such as payment processing, subscription management, and user authentication, through a single interface. This ensures consistency and versatility across different operators and markets.

Enhanced User Experience

The standardized CAMARA Number Verification API fosters a consistent and reliable authentication experience for users regardless of the telco operator involved. This uniformity enhances the power of the applications unifying the authentication experience.

Use Cases

03

Overview / Use Cases

App onboarding

Social media applications employ phone number as a identity when registering new users.

SMS OTP is widely used to prove that the user is in possession of the mobile device associated with the mobile number used for registration. The application can instead request a seamless authentication of the mobile device via the Number Verification API, verifying the phone number possession and providing a confirmation to the app that it can be employed as a valid identifier for that user. Other APIs can even improve security, like SIM SWAP.

OTHER RELATED APIs

SIM Swap

SECTOR	MEDIA, ENTERTAINMENT & XR
SERVICE	Identity

DEVELOPER NEEDS

- Secure validation of user identity
- Optimized and transparent user experience without manual processes
- Higher onboarding conversion rate

Overview / Use Cases

App login and transactions

Login process in certain mobile applications requires a manual process where users need prove the possession of the device that they registered in the application (Level Of Authentication 2 or LOA2). Additionally, certain applications also require such LOA2 to proceed with transactions, like a money transference in a bank application. SMS-OTP are the most employed method, allowing the application to validate that the user is employing the registered mobile phone to execute the transaction (possession). Number Verification, through the silent authentication process, allows to validate transactions with no interactions from the user (e.g. copy-paste of code).

OTHER RELATED APIs

Location Verification

SIM Swap

SECTOR	FINANCIAL SERVICES & INSURANCES
SERVICE	Identity

DEVELOPER NEEDS

- Frictionless login process
- Optimized and transparent user experience without manual processes
- Higher conversion rate in transactions
- More secure validation of critical processes

Overview / Use Cases

Application password recovery

Password recovery often require complex processes, which include remembering certain personal data or accessing to other app, like email, which can be hard to complete for certain people like seniors. By employing the network as the identity to start the password recovery, developers ensure that users can easily access again to their services.

OTHER RELATED APIs

SECTOR	E-COMMERCE & RETAIL
SERVICE	Identity

DEVELOPER NEEDS

- Easy and secure password recovery process
- Optimized and transparent user experience without manual processes

Start using Number Verification API!

04

Getting Started with Number 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.

1

CHOOSE A CHANNEL PARTNER

Select a suitable channel partner or Carrier Billing API that offers integration with the Open Gateway API to meet your needs and business goals.
Contact an Open Gateway expert to get more information about the channel partners availability or to become a new Open Gateway Partner.

2

PRODUCT DISCOVERY

You can access the Open Gateway Number Verification Service through the Channel Partner's developer portal.

3

DEVELOPER REGISTRATION

To use Open Gateway Products, you must undergo a registration process that includes signing up on both the Channel Partner and Operator platforms.

4

NUMBER VERIFICATION API CONSUMPTION

After subscribing and sharing credentials, You can access the Open Gateway Product on registered Operators, making API calls through the Channel Partner's gateway.

Documentation

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Official Number Verification CAMARA API Documentation

Over 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 Thursday
- 8:30 to 9:30 CET

Contributor ship & Mailing List

✓ Subscribe

CCB (Subproject)

✓ CAMARA Number Verify GitHub

FAQs

06

API Number Verification / FAQs

What is the CAMARA Number Verification API?

The CAMARA Number Verification API is a standardized API that provides a mechanism to automatically verify whether a user is interacting via a device that has a SIM card associated with a certain phone number (MSISDN). This means that the user doesn't have to interact with any element or enter any kind of credential or one-time password (OTP).

What is the Unified API Access feature of the CAMARA Number Verification API?

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

How does Number Verification simplifies the access to applications?

Number Verification avoids the usage of external tools or manual mechanisms like SMS one-time password when registering, login or validating transactions in mobile apps, enhancing the user experience with a higher overall conversion rate.

How does the CAMARA Number Verification API provides security for users and applications?

Number Verification employs network mechanisms to validate the connection of the user's device, ensuring that the application is running in the terminal associated with the phone number which identifies the user. Since no manual interaction is required or external applications, not only the experience but also the security are increased.

How complex is the integration of Number Verification in an application?

Number Verification service is based on OAuth2 AuthCode standard mechanism, for authentication, and the standardized Open Gateway API Number Verification, which easily provides a true/false response based on the phone number included by the user.

What is the role of the GSMA in standardizing the Number Verification service?

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

Other relevant information

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Discover more

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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