



Open Gateway

# Overview, use cases and case studies on the Device Roaming Status API

Telefónica Open Gateway

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**The Device Roaming Status API makes it possible to check the roaming status of a specific SIM-based device by using events from the operators' network.**

The Device Roaming Status granting you control over resource management during international roaming. Elevate the user experience by triggering tailored offers in travel scenarios and enhance security by swiftly identifying and addressing potentially fraudulent SIM card locations.

**Description**

01

# Features and Categorization

<b>CAMARA</b>	
<b>COUNTRIES</b>	
<b>SECTORS</b>	<p>MEDIA, ENTERTAINMENT &amp; XR</p> <p>TRANSPORT &amp; LOGISTIC</p> <p>FINANCIAL SERVICES &amp; INSURANCES</p> <p>ICT SERVICES</p>
<b>SERVICES</b>	LOCATION, IDENTITY



**Characteristics**

02

# Overview

## Characteristics of Device Roaming Status



### Enhanced User Experience

Understanding whether a user is in roaming empowers businesses to provide personalized services. For instance, travel-related apps can use this data to offer valuable information such as local network preferences, currency conversion rates, and data package recommendations to users visiting foreign countries. This not only improves the overall travel experience but also fosters customer loyalty.

### Cost Optimization

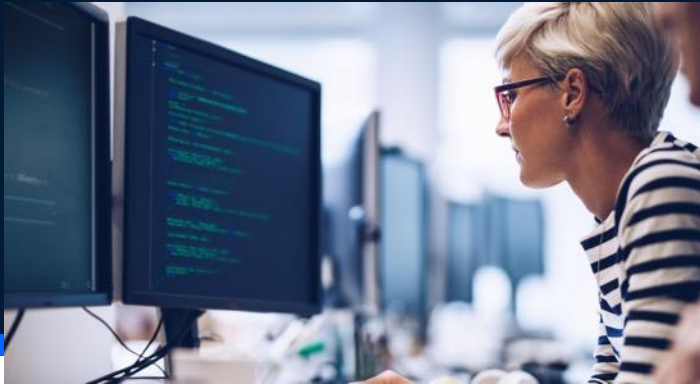
Determining when a user's SIM card enters or exits roaming status is crucial for you as an app developer. With this information, you can implement cost-saving measures, establish data routing rules, and notify customers about cost-effective roaming options. As a result, businesses can effectively reduce international roaming charges for their customers, a feature that resonates strongly in today's globalized world.

### Fraud Detection and Prevention

The API allows you to integrate information into your developments that enables you to activate fraud alerts to identify and mitigate suspicious activities related to SIM card roaming. It can automatically flag and respond to anomalies, such as unusual SIM card location changes or patterns, which assists you in proactively combating fraud and unauthorized usage. This feature enhances security and protects both you as a service provider and your users from potential fraudulent activities of security while making payments.

# Overview

## Characteristics of one standard Device Roaming Status



### Simplified Integration

With a standardized API, developers can seamlessly integrate device status roaming 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

Experience the power of unified access to telecommunications through our Device Roaming Status API. With smooth and uniform access to the function of knowing whether a user is or isn't in roaming, having this standardized information across operators through the use of a standard CAMARA API, our API provides a single point of entry, enabling effortless integration and utilization of telecommunications capabilities from multiple operators

### Elevate Your Development Experience

Our API is designed with you, the developer, in mind. We offer a hassle-free and enriching development experience that allows you to unlock the full potential of your creativity.



**Use Cases**

03

# Overview / Use Cases

## Avoid unexpected roaming charges

When it comes to managing your mobile expenses, every penny counts. Our API empowers you to **take charge of your roaming experience**, ensuring you never receive an unpleasant surprise on your phone bill. With real-time access to your SIM card's roaming status you're in control. Manage your data usage and explore cost-effective roaming options while traveling.



<p><b>OTHER RELATED APIs</b></p> <ul style="list-style-type: none"> <li><a href="#">Location Verification</a></li> <li><a href="#">SIM Swap</a></li> <li><a href="#">Number Verification</a></li> </ul>	<p><b>SECTOR</b></p>	<p>MEDIA, ENTERTAINMENT &amp; XR</p>	<p><b>DEVELOPER NEEDS</b></p> <ul style="list-style-type: none"> <li>• <b>User Retention:</b> Users are more likely to continue using an app that shields them from unwanted costs, potentially increasing retention and ongoing usage.</li> <li>• <b>Reduced Customer Support:</b> By preventing unexpected roaming charges, developers can reduce the customer support team's workload, as there will be fewer issues related to surprise charges to address.</li> <li>• <b>Regulatory Compliance:</b> Complying with consumer protection regulations related to roaming can prevent legal issues and fines, benefiting both developers and users.</li> </ul>
<p><b>SERVICE</b></p>	<p>LOCATION</p>		

# Overview / Use Cases

## Welcome roaming

"Welcome Roaming" is an interesting device status use case for businesses and government entities that wish to maintain an effective connection with their users when they are roaming. With this functionality, you can send alerts and share relevant information in a timely manner, ensuring that your messages reach users, even when they are outside their local area. Keep an open line of communication with your users, no matter where they are, to share vital information or important updates.

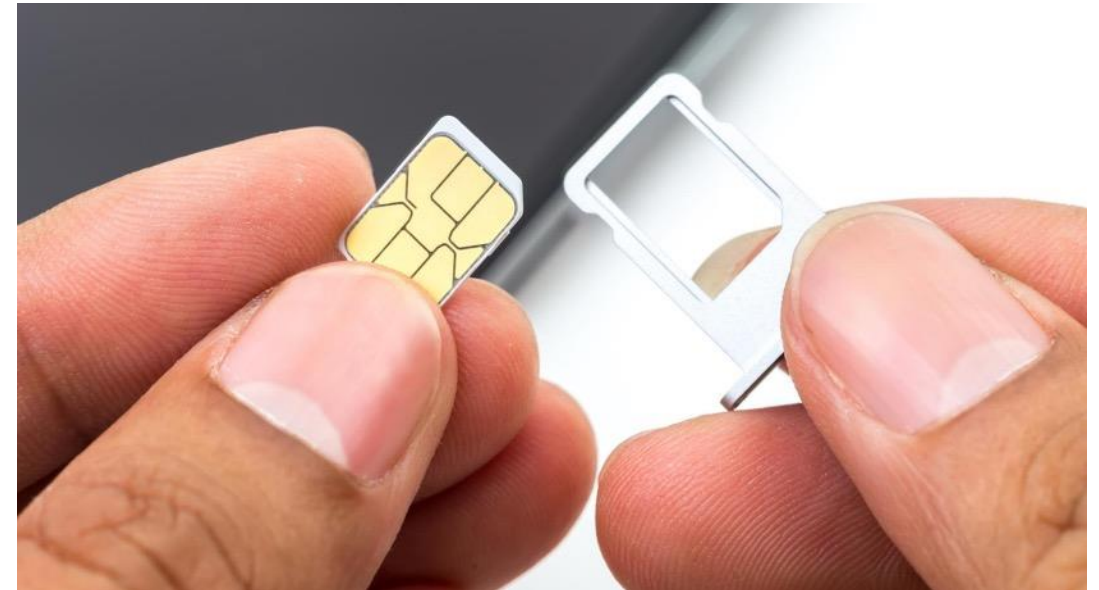


<p><b>OTHER RELATED APIs</b></p> <p><b>Location Verification</b></p>	<p><b>SECTOR</b></p>	<p>TRANSPORT &amp; LOGISTICS</p> <p>ICT SERVICES</p>	<p><b>DEVELOPER NEEDS</b></p> <ul style="list-style-type: none"> <li>• Continuous Communication with your clients: Keep an open line of communication with your users, no matter where they are, to share vital information or critical updates.</li> <li>• Personalized Experience: Offer a personalized experience to users on the go by providing them with location-specific and preference-based content.</li> <li>• Increased Engagement: Foster active user engagement by delivering valuable information while they are on the move....</li> </ul>
<p><b>SERVICE</b></p>	<p>LOCATION</p>		

# Overview / Use Cases

## Fraud Mitigation

The "Anti-Fraud Use Case" focuses on preventing and addressing fraudulent activities in banking transactions involving suspicious SIM cards that may be in a roaming state. Detecting suspicious SIM cards based on their state (roaming) is critical, allowing the detection of potentially fraudulent states, thus increasing transaction security and ensuring the integrity of user data.



<p><b>OTHER RELATED APIs</b></p> <p><a href="#">Location Verification</a></p> <p><a href="#">SIM Swap</a></p> <p><a href="#">Number Verification</a></p>	<p><b>SECTOR</b></p>	<p>FINANCIAL SERVICES &amp; INSURANCES</p>	<p><b>DEVELOPER NEEDS</b></p> <ul style="list-style-type: none"> <li>Enhanced Risk Assessment: The ability to identify devices in roaming allows for a more accurate assessment of the risk associated with transactions and suspicious activities.</li> <li>Easy Integration: Integrating the Device Roaming Status API into the application is generally straightforward, speeding up development and implementation.</li> <li>Loss Reduction: By detecting and preventing fraud in roaming transactions, the application helps reduce financial losses for the organization and users.</li> </ul>
<p><b>SERVICE</b></p>	<p>LOCATION</p>		

# Overview / Use Cases

## Insights users in roaming

This particular use case focuses on leveraging the Device Roaming Status API to gather essential data and create strategic insights regarding the actions and transactions of users while they are abroad. These insights grant businesses an enhanced understanding of their behaviour in other countries, empowering them to make informed decisions grounded in observed usage patterns and emerging trends.

These insights serve as a window into the intricacies of user behavior while abroad, shedding light on nuanced usage patterns and emerging trends. For instance, the insights may reveal popular travel destinations among international users, peak times of activity, preferences for specific services or apps, and even discrepancies in usage between different regions.



<p><b>OTHER RELATED APIs</b></p> <p><b>Location Verification</b></p>	<p><b>SECTOR</b></p> <p>TRANSPORT &amp; LOGISTICS</p> <p>MEDIA, ENTERTAINMENT &amp; XR</p> <p>ICT SERVICES</p>	<p><b>DEVELOPER NEEDS</b></p> <ul style="list-style-type: none"> <li>• Strategic Information: Insights provide strategic information that helps developers make informed decisions about updates and international expansions.</li> <li>• Competitive Differentiation: The ability to offer an app optimized for foreign users provides a competitive edge in the global market.</li> <li>• Identification of Expansion Opportunities: Detected usage patterns and trends can reveal opportunities to expand the app into new international markets.</li> </ul>
	<p><b>SERVICE</b></p> <p>LOCATION</p>	

**Case Studies**

04

# Overview / Case Studies

## VIVO y Daycoval

Security in banking transactions is critical to prevent fraud and provide peace of mind to your customers. Now, you have the ability to request the network to verify the location of a user's SIM card and even detect if it is in roaming, thanks to the Device Roaming Status API. This information gives you greater control over transaction risks.

Daycoval, one of the leading banks in Brazil, has successfully tested the capabilities of the Location Verification API to enhance the security of its application. Now, it can strengthen fraud prevention in its banking products by requesting the customer's location, provided that the user has previously granted consent.

Create safer Fintech applications with the capabilities offered by the network.



### PARTNERS



### SECTOR

FINANCIAL SERVICES & INSURANCES

**Getting Started**

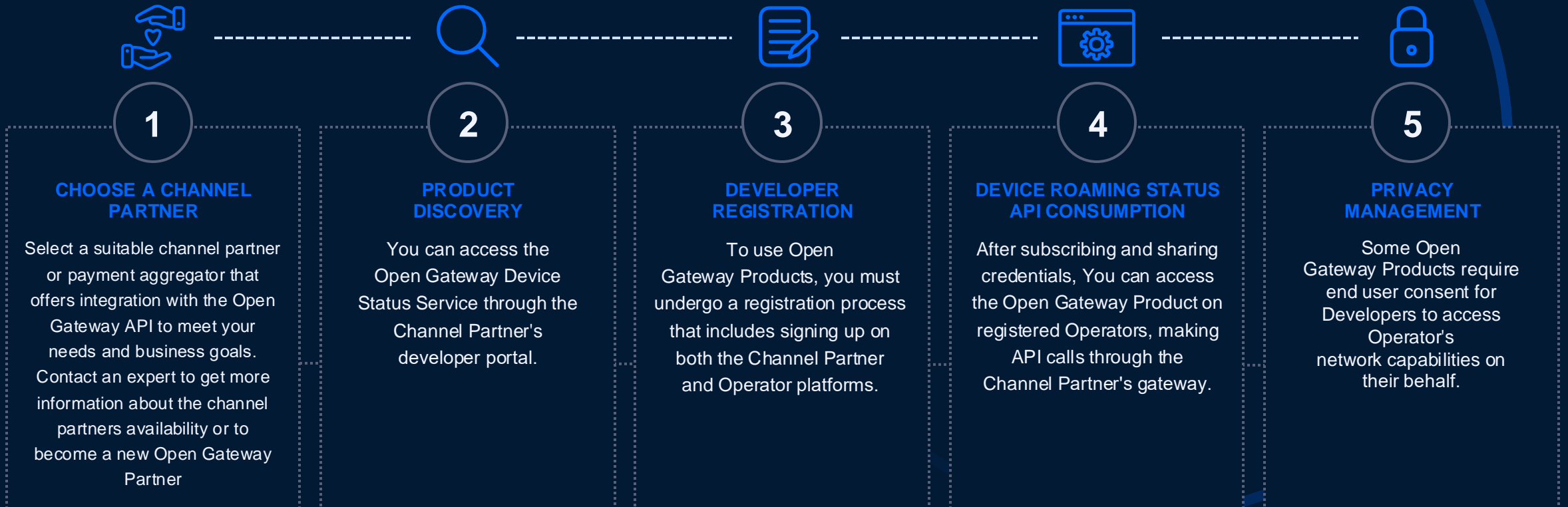
05



# Getting Started with Device Roaming Status 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 Roaming Status 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 Wednesdays
- 11:00 to 12:00 CET

 **Contributor ship & Mailing List**

✓ [Subscribe](#)

 **Device Roaming Status (Subproject)**

✓ [CAMARA Device Status GitHub](#)

**FAQs**

07

# Device Roaming Status API / FAQs

## What is the CAMARA Device Roaming Status API?

The CAMARA Device Roaming Status API is a standardized API that enables developers to integrate information about whether a device is in a roaming state or not.

## What are the possible use cases for the Device Roaming Status API?

Possible applications of the Device Roaming Status API encompass identifying fraud in global transactions, customizing services for users during roaming, and producing strategic reports regarding the behavior of users in roaming.

## Can the Device Roaming Status API help companies improve the user experience for roaming users?

Yes, by knowing a user's roaming status, companies can personalize the user experience, offer relevant services, and ensure optimal connectivity during roaming.

## ¿Does the Device Roaming Status API provide real-time information about the roaming status of devices?

Yes, the Device Roaming Status API typically provides real-time information about the roaming status of mobile devices, allowing decisions to be made based on current data.

## ¿Can the Device Roaming Status API help businesses avoid costly international roaming charges?

Yes, by detecting the roaming status of a device, the Device Roaming Status API allows businesses to take actions to avoid costly international roaming charges, such as notifying the user or automatically disconnecting services.

## What is the role of the GSMA in standardizing the device status API process?

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

## Device Roaming Status API / FAQs

### **What is the advantage of using the Device Roaming Status API in fraud detection?**

The Device Roaming Status API provides critical information for fraud detection, as roaming status can be a key indicator of suspicious activity. This helps prevent fraudulent transactions and protect users.

### **What are the advantages of customizing services for roaming users in terms of customer retention?**

Customizing services for roaming users enhances customer retention through tailored experiences, cost management, bill shock prevention, and increased relevance, fostering satisfaction and loyalty.

**Further  
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](#).

### Subscribe our newsletter

Find out all about the latest of Telefónica Open Gateway in our [newsletter](#).

### Contact our experts

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







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