Global SIM Link

Service Overview

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1 Service Overview

When going global, IoT enterprises face some challenges:

- Difficulties in cross-region processes: Physical SIM cards need to be purchased across regions, and the network status of the destination cannot be tested remotely at the production place.
- Difficulties in network access: Due to the complexity and diversity of networks and protocols, the development workload of migrating devices to the cloud is heavy, and global access is difficult.
- Difficulties in global expansion: To integrate global services, enterprises need to negotiate and interconnect with multiple carriers around the world.
- High roaming fees: Enterprises prefer to use the local tariff standards of the country where devices are located to reduce costs.

Huawei Global SIM Link (GSL) provides cellular IoT data bound to IoT devices and a data management platform that allows users to query data and manage SIM cards, enabling one-click access and global reachability. It helps open up new market for enterprises with simplified processes and reduced cost.
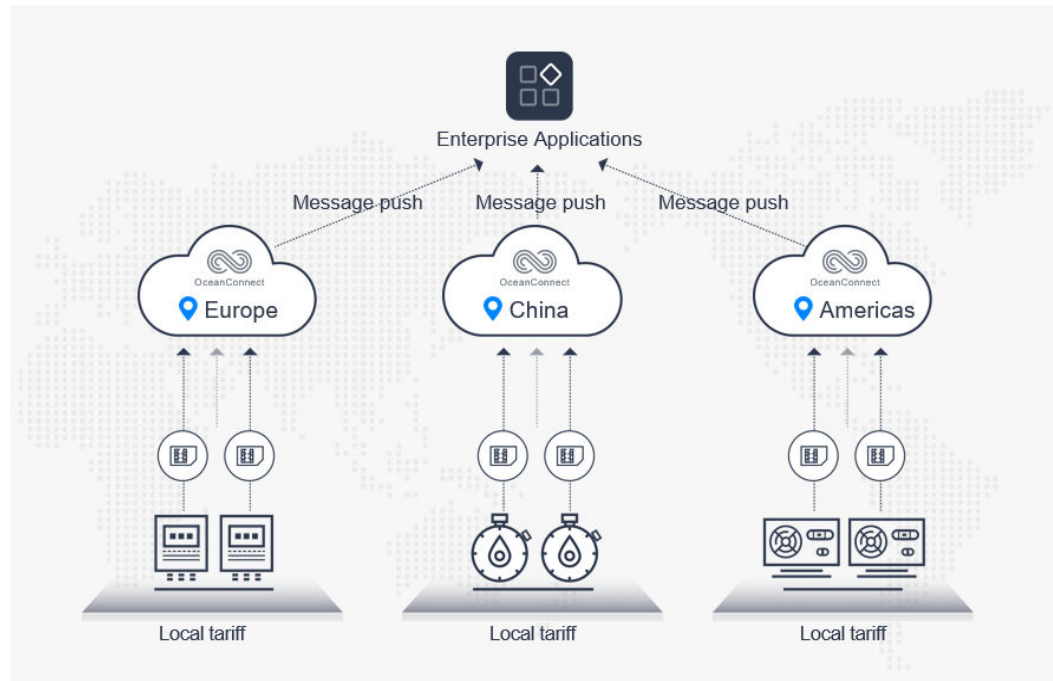
For example, an automobile manufacturer in a country needs to negotiate with carriers in different countries in advance to purchase physical SIM cards. Interconnection and integration tests on the destination network are also time-consuming and difficult. With GSL, manufacturers provide data plans with standardized specifications for different regions, reducing the workload to manage a bunch of SIM cards in different countries and regions. Distributors and end users can use local network resources in a more convenient way without worrying about the situation that devices cannot connect to the Internet because they are in different countries or regions.

Accessing GSL

You can access the GSL console (website) to manage your resources. For details, see **User Guide**.

- If you have registered an account with Huawei Cloud, log in to the **management console** and choose **IoT** > **Global SIM Link** in the navigation pane.
- If not, **register** a Huawei ID, enable Huawei Cloud, and complete **enterprise real-name authentication**.

2 Advantages

Global Coverage

Enterprises can purchase SIM card plans through Global SIM Link (GSL) to quickly migrate devices to the cloud and connect global devices. Currently, GSL provides services for more than 100 countries and regions around the world. Huawei cooperates with more than 80 carriers around the world to provide plans from multiple carriers in a country, allowing competitive network quality and tariffs.

Lower Cost

SIM card data and lifecycle management help enterprises flexibly control costs.

Intelligent Management

GSL provides a stable and powerful platform to manage global IoT data, which allows users to query data as well as manage data plans and SIM card lifecycle.

One-Stop Quick Business Construction

GSL is a public cloud-based SaaS service for enterprises, which allows them to implement one-stop solution selection, procurement, development, interconnection, commissioning, rollout, and upgrade. It helps enterprises simplify manufacturing process, control generation, operation, and maintenance costs, and improve competitiveness.

GSL provides functions such as global access, abnormal connection check, and notifications of data waste, helping multinational enterprises manage devices and SIM cards worldwide, which greatly improves efficiency and reduces costs.

3 Application Scenarios

IoV

Automotive enterprises use IoT devices to report vehicle data to the IoT platform so that they can monitor vehicle status in real time.

With GSL, automotive enterprises can learn about and manage the data usage of vehicles in real time and launch marketing policies accordingly, such as data reward and separate charging. Comprehensive online vehicle services and various in-vehicle applications are also provided based on that.

In addition, IoV enterprises can sell vehicles to different countries or regions and use local data tariffs to reduce operation costs.

Logistics

Cross-border logistics refers to the planning, implementation, and control management process of the effective flow and storage of physical goods and information on both sides of the customs border. Compared with the domestic logistics data that is relatively complete, cross-border logistics data is difficult to obtain because multi-party collaboration is involved.

Logistics enterprises use IoT devices to report logistics data to the IoT platform, helping customers learn about goods and vehicle status in real time.

Meters

The meter industry uses IoT platforms to provide services such as remote meter reading and online payment.

With GSL, enterprises can obtain the SIM card status and data usage, check meter running status, and identify fault causes online, reducing onsite maintenance workload.

4 Billing Details

This section describes the billing details of Global SIM Link (GSL), including enterprise authentication, specifications, billing items and billing modes, pricing, changing plan, inactive period, renewal, unsubscription, arrears, expiration, and precautions.

Enterprise Authentication

GSL is available only to Huawei Cloud-certified enterprises. For details, see **Enterprise Real-Name Authentication**.

Specifications

Service price is determined by the IoT data plan specifications. For details, see **Pricing Details**.

Table 4-1 Specifications

Specifications	Description
IoT physical SIM card types	Physical SIM cards are classified into SMD SIM and plug-in SIM. For details, see **Introduction**. ● SMD SIM: SMD SIM (5 mm x 6 mm) and SMD SIM (2 mm x 2 mm). ● Plug-in SIM: common SIM (25 mm × 15 mm), micro SIM (15 mm × 12 mm), and nano SIM (12 mm × 9 mm). **NOTE** By default, card plans are purchased by year. Once a plan is purchased, its carrier and specifications cannot be changed.
IoT data plans	The IoT data plan specifications determine the monthly data quota and the plan price.

Specifications	Description
Cellular network types (physical SIM cards)	- China Mobile IoT SIM cards only support 4G networks. - China Telecom IoT SIM cards only support 4G networks. - China Unicom IoT SIM cards support both 3G and 4G networks. - IoT SIM cards of carriers outside the Chinese mainland only support 4G networks.

Billing Items and Billing Modes

Table 4-2 GSL billing

Billing Mode	Billing Item	Billing Details
Yearly (traditional physical SIM card)	Yearly plan	- Billing rule: You need to make one-off payment for one-year data fees when placing orders. The billing cycle is by calendar month for China Telecom, China Mobile, and carriers outside the Chinese mainland. China Unicom bills from the 27th of the previous month to the 26th of the current month. - Renewal rule: The expiration date of each card is calculated separately. It is the end of the 12th billing cycle, which starts from the month when the card is activated. To renew a card, submit the request for renewal one month before the expiration date. - If no forward data pool is created: The data of each physical card is calculated separately. When the data is used up, the network connection is cut off and the quota is restored in the next month. - If a forward data pool is created: Activated physical cards in the pool share data. When used data exceeds the total data of the cards in the pool, all cards are automatically disconnected from the network and the quota is restored in the next month.

Billing Mode	Billing Item	Billing Details
Pay-per-use	• Monthly service fee of a backward data pool • Data fee of a backward data pool	• After a backward data pool order is placed, fees are charged based on the activation status of cards in the backward data pool and the total data used by cards in the pool in each month. • Monthly service fee of a backward data pool is charged based on the total number of in-use and suspended cards in the pool in the current month. If a card is activated or an activated card is deregistered, the service fee of the card is still charged in the current month. • The data fee of a backward data pool is charged based on the total data used by cards in the pool in each month.

Pricing

For details about the pricing of data plans, see **Product Pricing Details**.

Changing a Plan

Physical SIM cards: Plans cannot be changed.

Inactive Period

Physical SIM card:

- Carriers in the Chinese mainland: Generally, the inactive period is six months. If an IoT SIM card is not activated within six months after being registered, it will be activated automatically on the first day of the seventh month.

- Carriers outside the Chinese mainland: No inactive period. The test period is six months. If an IoT SIM card is not activated within six months after being registered, it will be activated automatically on the first day of the seventh month.

Renewal

You can renew physical SIM cards by order or SIM card. For details, see **Orders and Renewal**.

Unsubscription

Physical SIM cards cannot be returned.

Arrears

Ensure that the balance in your Huawei Cloud account is sufficient to cover any upcoming charges. If a fee deduction fails due to insufficient balance, your

account will be in arrears, which will affect the normal use of services. If the balance is 0, the service can still be used. For details about fee deduction, see **Table 4-2**.

Huawei Cloud sets **retention periods**.

If your account is in arrears but is still in the retention period,

- all of your backward data pool resources are unavailable, and SIM cards in the backward data pool will be suspended.
- only the view permission on the GSL console is left.

Expiration (After Retention Period)

If you fail to pay the outstanding amount when the retention period ends, your IoTDA resources will be released and all your SIM cards and data plan resources on GSL will be deleted.

Precautions

GSL provides data only for Internet access. It does not support voice and SMS.

5 Permissions Management

If you need to assign different permissions to employees in your enterprise to access your Global SIM Link (GSL) resources, IAM is a good choice for fine-grained permissions management. IAM provides identity authentication, permissions management, and access control, helping you securely access your Huawei Cloud resources.

With IAM, you can use your Huawei Cloud account to create IAM users, and assign permissions to the users to control their access to specific resources.

If your Huawei Cloud account does not need individual IAM users for permissions management, then you may skip over this section.

IAM can be used for free. You pay only for the resources in your account. For details about IAM, see **IAM Service Overview**.

GSL Permissions

New IAM users do not have any permissions assigned by default. You need to first add them to one or more groups and attach policies or roles to these groups. In this way, the users can inherit permissions from the groups and perform operations on specific cloud resources.

📖 **NOTE**

- Because of the cache, it takes about 10 to 15 minutes for the GSL system-defined policies to take effect after being granted to users and user groups.
- Log out of the GSL console after granting the system-defined policies and then log in again.
- After system-defined policies are granted, IAM users need to **obtain a new token** before calling GSL APIs.

Table 5-1 lists all the system-defined policies supported by GSL.

Table 5-1 GSL system-defined policies

Policy Name	Description	Policy Type	Dependencies
GSL FullAccess	All permissions for GSL	System-defined policy	None

6 SLA Indicators

Indicator	Value
IoT SIM card delivery	10 working days
Renewal order processing	3 working days (renewal must be performed before the 20th day of each month)
Fixed information configuration for China Telecom	5 working days
Fixed information configuration for China Unicom	7 working days
Fixed information configuration for China Mobile	6 weeks
China Mobile SIM unbinding	3 working days
China Telecom SIM unbinding (upper limit reached)	3 working days
Forward data pool creating	5 working days
Batch transfer	5 working days

7 Disclaimers

See **GSL Service Statement**.

8 Concepts

2-in-1 SIM

Traditional physical SIM cards that support common SIM and micro SIM.

3-in-1 SIM

Traditional physical SIM cards that support common SIM, micro SIM, and nano SIM.

SMD SIM

IoT SIM cards that are mounted by welding and designed for machines, and have all the functions of traditional SIM cards. The SMD packaging process enables the IoT card chip to be directly welded to the module, implementing tight and firm physical connection and reliable interface communication.