



Configuration Guide

For SMS Portal Authentication

EAP Controller

1910012280 REV1.0.0

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1 Overview

On the latest EAP Controller (V2.5.1 or above), we newly developed a powerful portal feature: SMS Portal. To help users easily understand and enjoy the new feature, this configuration guide detailedly introduces what SMS Portal is and how to configure SMS Portal.

1.1 SMS Portal Introduction

In SMS Portal authentication, users can use their mobile phones to get a verification code via text message, and enter the received code to pass authentication.

The following introduces the main advantages of SMS Portal, which may help you determine when or whether you should choose SMS Portal on your network.

- Convenient For Customers

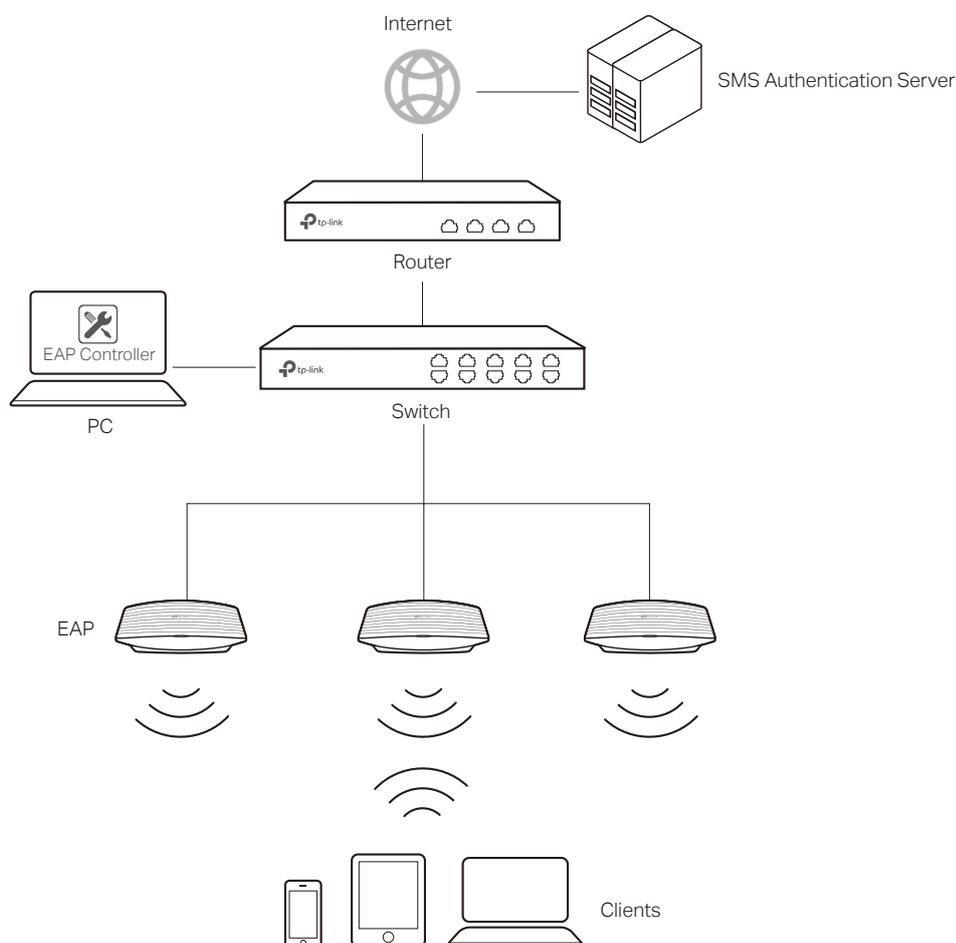
Nowadays almost everyone takes a mobile phone when go outside. SMS Portal directly uses the phone number for authentication without additional registration account or information required. The authentication process is very simple for customers. Customers only need to get a verification code using their mobile phones and provide the received code on the authentication page.

- Real-Name Authentication

Nowadays the United States, Germany, Britain, Australia, China and some other countries require users to provide a valid proof of identity and contact information to buy phone numbers. If your country requires users to provide proof of identity to access the network, SMS Portal is a good choice. Because SMS Portal authentication can verify the validity of users' identity by verifying their mobile phone numbers.

1.2 Network Topology for SMS Portal

The following figure shows the network topology for SMS Portal.



1.3 SMS Authentication Process

The process of accessing the internet via SMS Portal authentication is as follows:

- 1) Users connect to the SSID for SMS Portal and obtain the SMS authentication page.
- 2) On the authentication page, users enter their phone numbers and click the **Get Code** button.
- 3) The verification code will be sent to users' mobile phones. Users enter the received verification code to log in.
- 4) After authenticated, users will be redirected to the authentication result page.
- 5) When the authentication times out, users need to complete the step 2) to step 4) again to pass the authentication.

2 Configure SMS Portal

The configuration overview is as follows:

- 1) Upgrade EAPs and EAP Controller.
- 2) Get a Twilio account.
- 3) Adopt EAPs and create SSID in EAP Controller.
- 4) Configure SMS Portal in EAP Controller.

2.1 Upgrade the Firmwares

To get the newly developed SMS Portal feature, make sure that both of your EAPs and EAP Controller are upgraded to the latest versions:

- EAP: The latest version which supports SMS Portal.
- EAP Controller: V2.5.1 (or above) for Windows and V2.5.3 (or above) for Linux.

Go to the download center <http://www.tp-link.com/en/support/download-center> and search your EAP models and EAP Controller. Then download the latest upgrade files one by one and upgrade the EAPs and EAP Controller using the proper downloaded files.

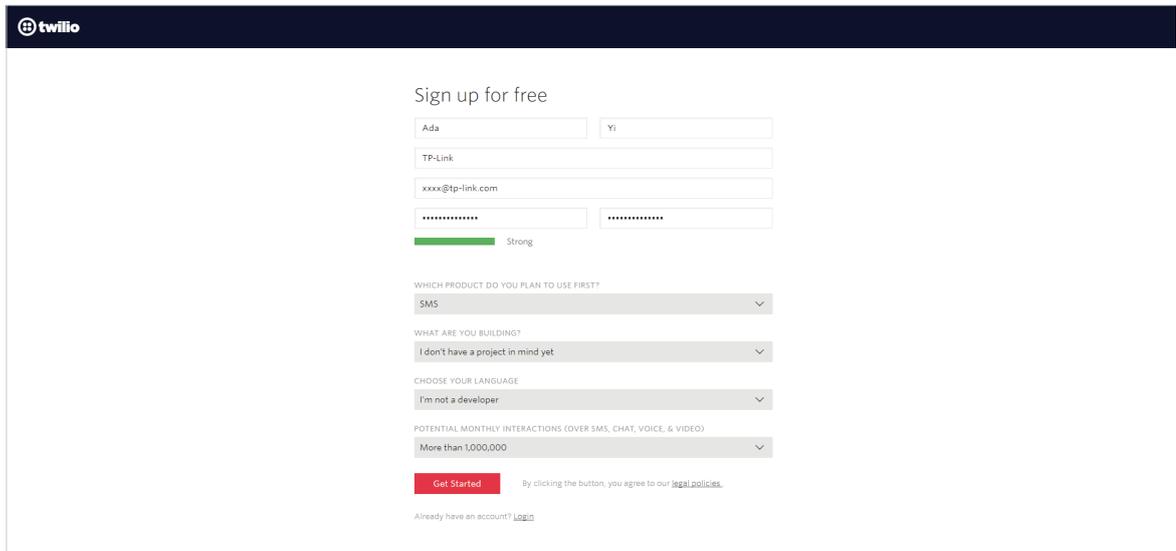
2.2 Get a Twilio Account

To use SMS Portal, you first need to get a Twilio account.

Twilio service is not free. When you test the SMS Portal feature the first time, you can get a free Twilio Trail account. However, the free Twilio Trail account can only provide SMS Portal service for the phone number which is used to register this Trail account. So if you are ready to use this feature, you need to update your Trail account.

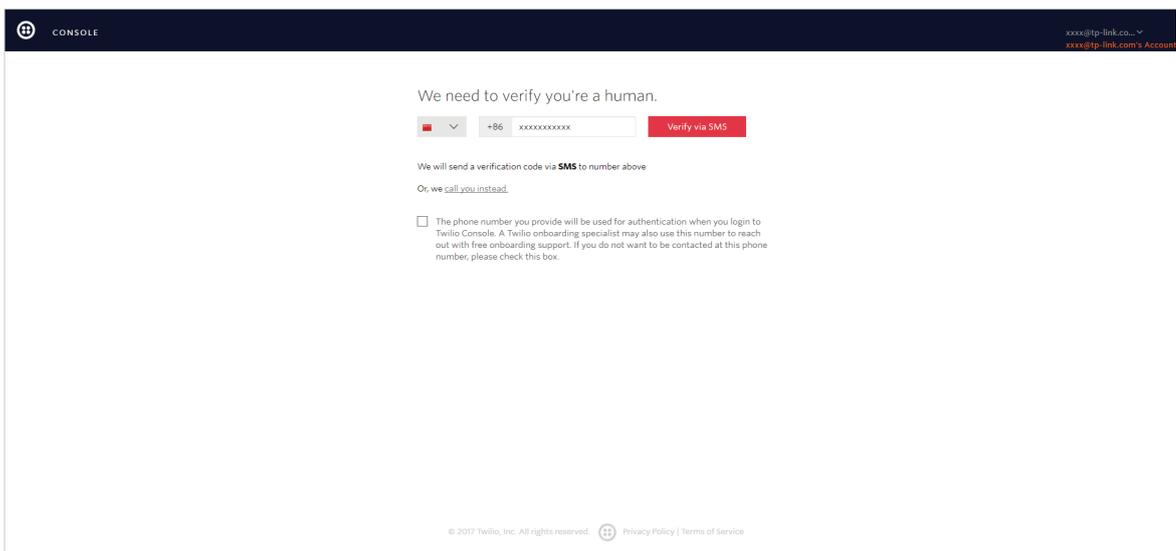
The following introduction takes a free Twilio Trial account as an example. Follow the steps below to get a Twilio Trail account:

- 1) Go to www.twilio.com/try-twilio and enter the required information to create a new account. Then click **Get Started**.



The screenshot shows the Twilio sign-up page. At the top left is the Twilio logo. The main heading is "Sign up for free". Below this are several input fields: a name field containing "Ada", a "Yes" checkbox, a "TP-Link" field, an email field containing "xxxx@tp-link.com", and two password fields. A strength indicator shows a green bar and the word "Strong". Below the passwords are four dropdown menus: "WHICH PRODUCT DO YOU PLAN TO USE FIRST?" (SMS), "WHAT ARE YOU BUILDING?" (I don't have a project in mind yet), "CHOOSE YOUR LANGUAGE" (I'm not a developer), and "POTENTIAL MONTHLY INTERACTIONS (OVER SMS, CHAT, VOICE, & VIDEO)" (More than 1,000,000). At the bottom is a red "Get Started" button with the text "By clicking the button, you agree to our [legal policies](#)." Below the button is a link: "Already have an account? [Login](#)".

- 2) Enter your telephone number and click **Verify via SMS**. Twilio will send you a verification code.



The screenshot shows the Twilio verification page. At the top left is the Twilio logo and the word "CONSOLE". At the top right is the user's email address "xxxx@tp-link.com" and a link to "xxxx@tp-link.com's Account". The main heading is "We need to verify you're a human." Below this is a phone number input field with a dropdown menu showing "+86" and a "Verify via SMS" button. Below the phone number field is the text "We will send a verification code via **SMS** to number above" and "Or, we [call you instead](#)." Below this is a checkbox with the text "The phone number you provide will be used for authentication when you login to Twilio Console. A Twilio onboarding specialist may also use this number to reach out with free onboarding support. If you do not want to be contacted at this phone number, please check this box." At the bottom is the copyright notice "© 2017 Twilio, Inc. All rights reserved." and links for "Privacy Policy" and "Terms of Service".

- 3) Enter the received verification code and click **Submit**.

CONSOLE

xxxx@tp-link.co...
xxxx@tp-link.com > Account

We need to verify you're a human

Please enter the verification code we sent to your phone. If you didn't receive a code, you can [try again](#)

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- 4) After sign up successfully, you will be redirected to the home page.

CONSOLE

Search

UPGRADE

xxxx@tp-link...
Trial Restrictions

Home

Dashboard

Billing

Usage

Settings

Upgrade

Console Dashboard

Account Summary

ACCOUNT SID AC042986c5a3e122819374d5c148754cb2

AUTH TOKEN

[Account Details](#)

News & Tips

Where in the world is Twilio?
Interested in testing the latest phone numbers added to the platform? Learn more about [phone numbers in developer preview](#)

All Twilio Products

Communications Cloud

Programmable SMS
Build intelligent SMS logic and apps in web applications over local, toll-free, and short-code numbers globally from one API.

Programmable Voice
Twilio's voice application stack combines the power of advanced call control, global connectivity, and RESTful APIs. It's an all-in-one phone call powerhouse designed for instant scale, flexibility, and cost-effective communications.

Programmable Video
Build in-app voice and video with cloud infrastructure and powerful SDKs. Everything you need to build with WebRTC.

Programmable Chat
Full-featured chat SDKs for mobile and web. Twilio's iOS, Android and JavaScript SDKs give you everything you need to add rich messaging to any app.

- 5) In the **Console Dashboard > Account Summary** section, you can find the **ACCOUNT SID** and **AUTH TOKEN**, which will be used in the EAP Controller configurations later.

Console Dashboard

Account Summary

ACCOUNT SID AC042986c5a3e122819374d5c148754cb2

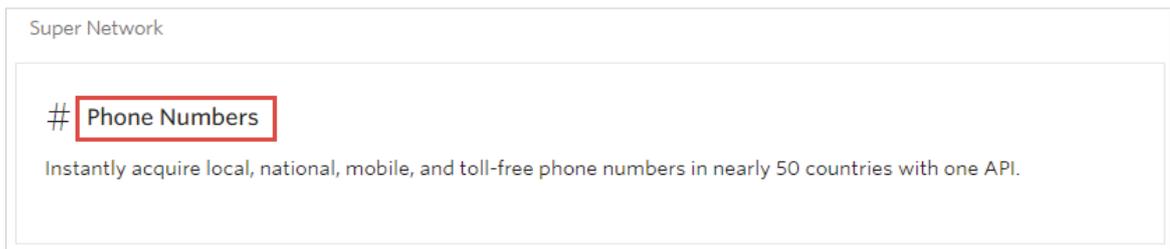
AUTH TOKEN

[Account Details](#)

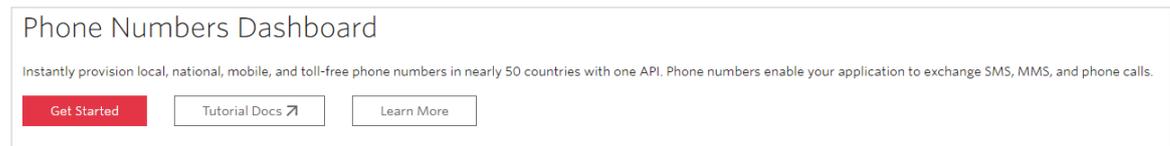
Note:

To copy AUTH TOKEN to the EAP Controller, you first need to click to display the token.

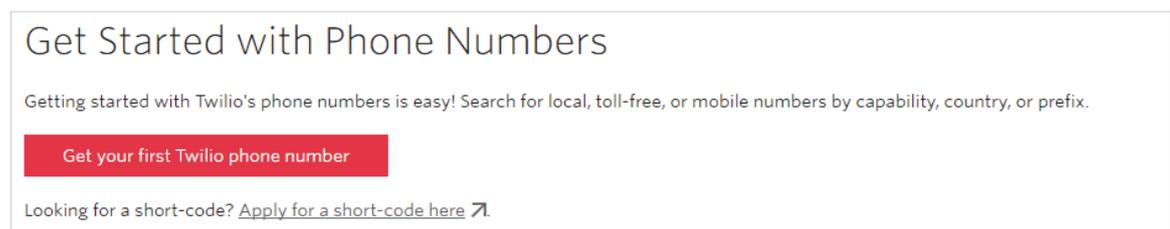
- 6) In the **Console Dashboard > All Twilio Products > Super Network** section, click **Phone Numbers**.



- 7) The following page will appear. Click **Get Started**.



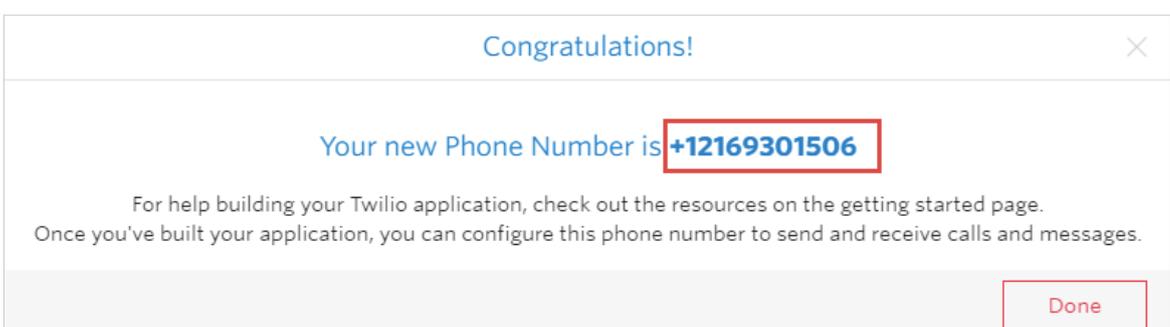
- 8) The following page will appear. Click **Get your first Twilio phone number**.



- 9) The following window will pop up. Click **Choose this Number**.



- 10) You will get a new phone number. This phone number will be used in the configurations later. Click **Done**.



2.3 Adopt EAPs and Create SSID in EAP Controller

Follow the steps below to adopt EAPs and create an SSID for SMS Portal. For detailed instructions about how to adopt EAPs and create SSID, refer to the User Guide for EAP Controller, which can be downloaded on the website <http://www.tp-link.com/en/download/EAP-Controller.html>.

- 1) Go to the **Access Point** page and adopt the EAPs on your network.

AP Name	MAC Address	IP Address	Status	Model	Hardware Version	Firmware Version	Client Number	Download	Upload	Action
ea2351.06.22.52	ea2351.06.22.52	192.168.0.254	Connected	EAP225-Outdoor	1.0	1.0.0 Build 20170726 Rel. 75520	0	99.93 K	0 Bytes	

- 2) Go to **Wireless Settings > Basic Wireless Setting** and create and SSID for SMS Portal.

ID	SSID Name	Security	SSID Isolation	Portal	Access Control Rule	Rate Limit	Action
1	SMS-Portal	None	disable	disable	None	disable	

Note:

To ensure the EAP Controller can communicate with the SMS servers, you need to set correct default gateway and DNS for your PC that is installed with the EAP Controller.

2.4 Configure SMS Portal in EAP Controller

Follow the steps below to configure SMS Portal:

- 1) Go to **Wireless Control > Portal** and click **Add a New Portal**.

ID	Portal Name	SSID	Authentication Type	Action
No entries.				

- 2) The Portal configuration page will pop up.

- 3) In the **Basic Info** section, specify the portal name and select SSID and Authentication Type. Copy the **Twilio SID**, **Auth Token** and **Phone Number** from the Twilio website to this page one by one. Then specify other parameters according to your needs.

The screenshot shows the 'Add a New Portal' configuration page, specifically the 'Basic Info' section. The form includes the following fields and values:

- Portal Name: SMS-Portal
- SSID: SMS-Portal
- Authentication Type: SMS
- Twilio SID: AC042986c5a3e122819374d5c1487
- Auth Token: 3c5d562b777c5baa20840f93f9e3a5
- Phone Number: +12169301506 (E.g., +17704505791)
- Maximum Users: 5 (0-10, 0 means no limit)
- Authentication Timeout: 1 Hour
- Pre-set Country Code: (E.g., +1, optional)
- Redirect: Enable
- Redirect URL: (empty field)

Note:

Twilio SID and **AUTH Token** can be found in the **Console Dashboard > Account Summary** section, and **Phone Number** can be found in the **Console Dashboard > Super Network > Phone Numbers** section. For details, refer to [Get a Twilio Account](#).

- 4) In the **Login Page** section, customize the login page for SMS portal authentication.

The screenshot shows the 'Login Page' configuration page. It includes the following settings:

- Background: Picture
- Background Picture: Choose (Maximum image size is 2MB; an aspect ratio of 5:3 is best; supported formats are jpg, bmp, gif, png, jpeg)
- Logo Picture: Choose (Maximum image size is 2MB; an aspect ratio of 1:1 is best; supported formats are jpg, bmp, gif, png, jpeg)
- Welcome Information: Welcome to our hotel (1-31 characters)
- Copyright: Copyright 2017 (1-200 characters)
- Input Box: #4abcd5 (RGB value)
- Input Box Color: (Color picker)
- Button: (Image preview)

A preview of the login page is shown on the right, with tabs for PC, Mobile Phone, and Tablet PC. The mobile view shows a 'Welcome to our hotel' message, a phone number input field (+86), a verification code input field, and a 'Log In' button.

- 5) In the **Advertisement** section, you can upload advertisement pictures according to your needs.

The screenshot shows the 'Advertisement' configuration page. It includes the following settings:

- Advertisement: Enable
- Picture Resource: Upload (1-5)
- Advertisement Duration Time: (empty field) seconds (1-30)
- Picture Carousel Interval: (empty field) seconds (1-10)
- Allow Users To Skip Advertisement: Enable

An 'Apply' button is located at the bottom left.

- 6) Click **Apply**.

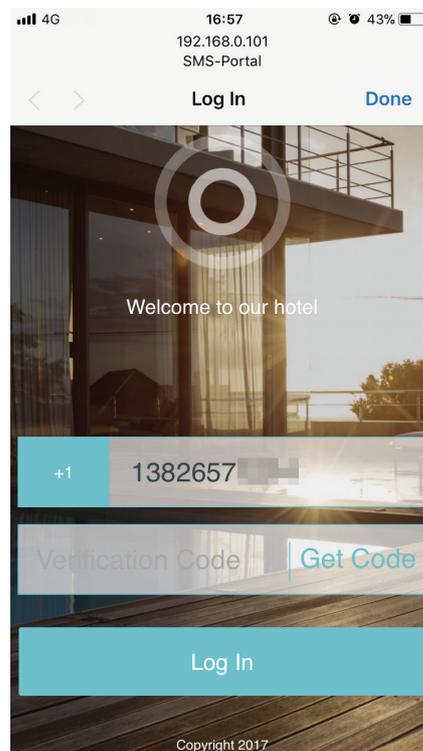
3 Test the Configuration Result

After all configurations are completed, you can follow the steps below to test whether SMS Portal works normally.

 **Note:**

The free Trail account can only provide SMS service for the mobile phone which is used to register the Trail account. So make sure that the following testing is on the mobile phone used for Trail account register.

- 1) Enable the Wi-Fi feature of your mobile phone.
- 2) Search and connect to the SSID for SMS Portal.
- 3) The default web browser on the mobile phone will pop up and the authentication page will appear.

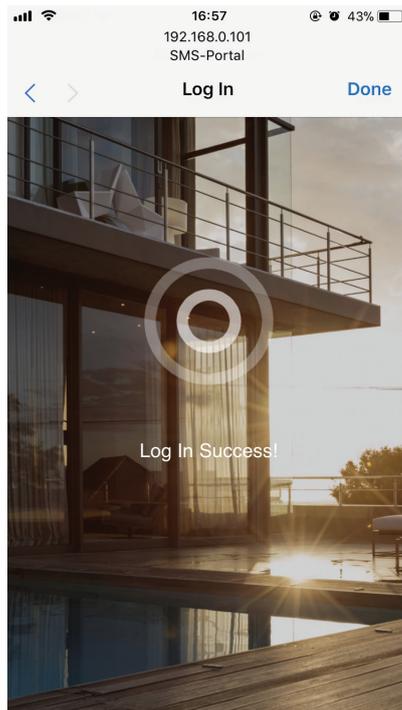


 **Note:**

Generally, the web browser pops up automatically. But if the web browser does not pop up, you can manually launch the web browser and visit any http website. Then the authentication page will appear.

- 4) Select your country, enter your mobile phone number and click **Get Code**.
- 5) You will receive a verification code on your mobile phone. Enter the code on the authentication page and click **Log In**.

6) After authenticated, you will be redirected to the authentication result page.

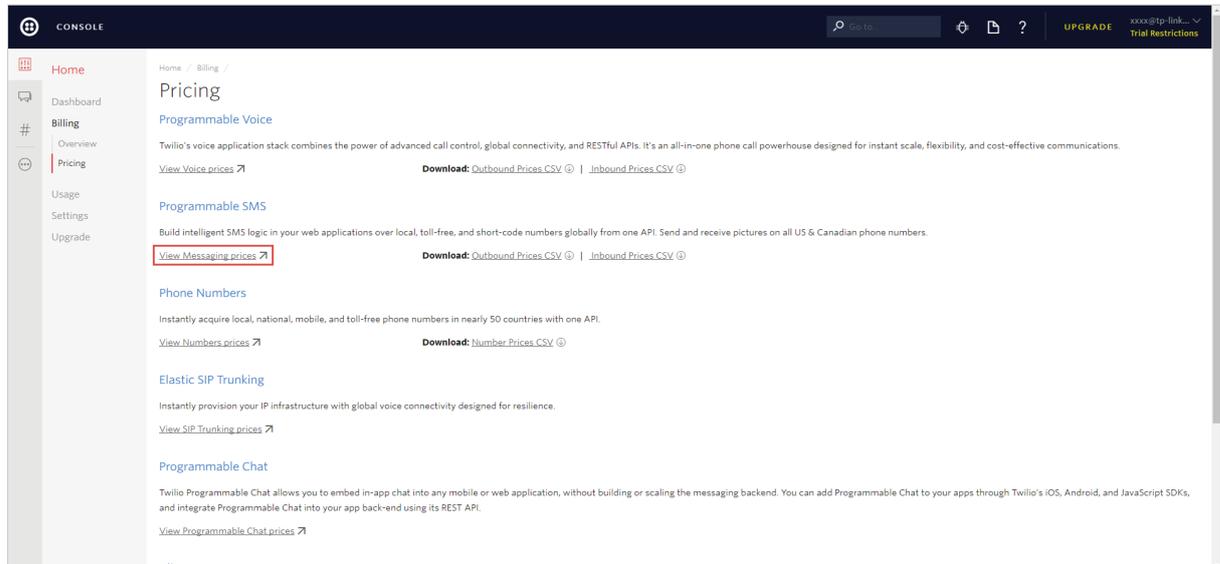


If all the steps above are completed, the SMS Portal feature works normally.

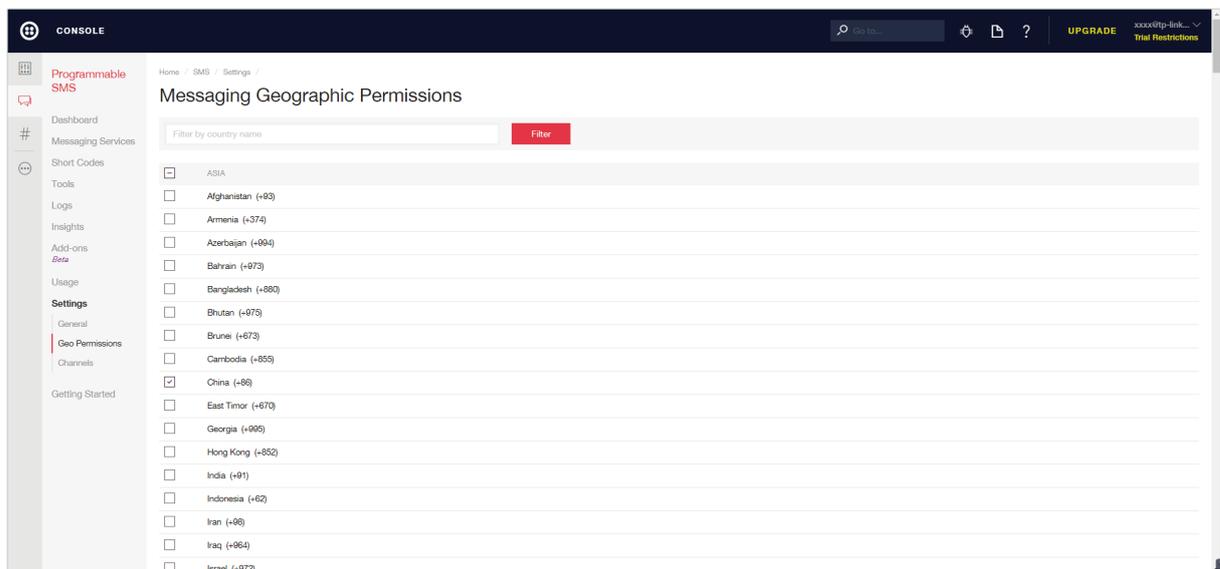
4 Upgrade the Trail Account

If you have determined to start to use SMS Portal, you need to upgrade your Trail account.

The SMS service is not free. To view the pricing for SMS service, you can go to **Billing > Pricing** and click **View messaging prices**.

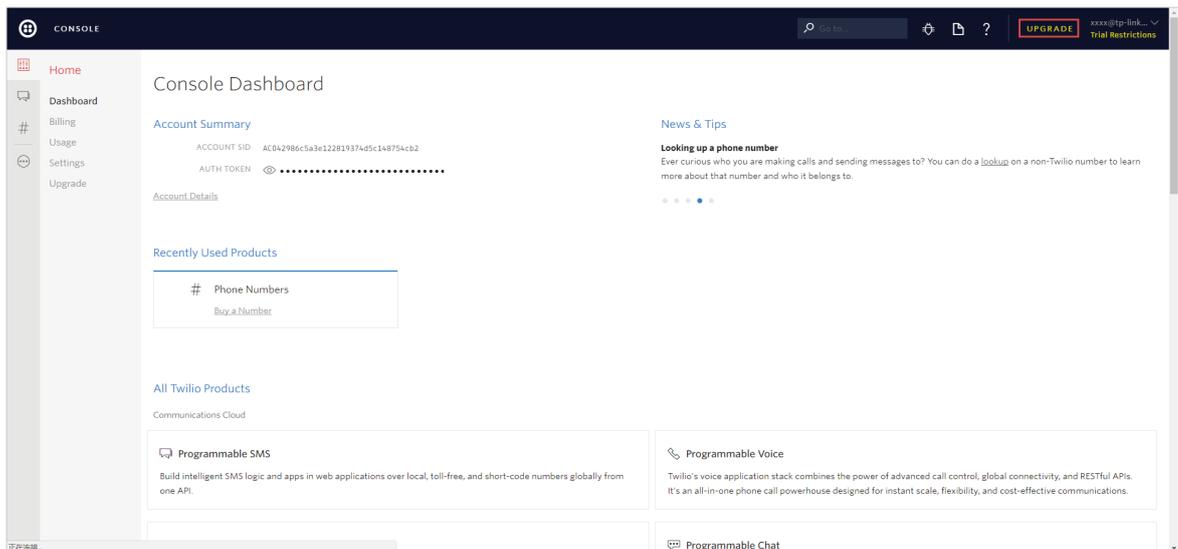


The SMS service is available in most regions. To view these regions, you can go to **Programmable SMS > Settings > Geo Permissions**. On this page, you can also configure which regions are allowed to use your SMS service.

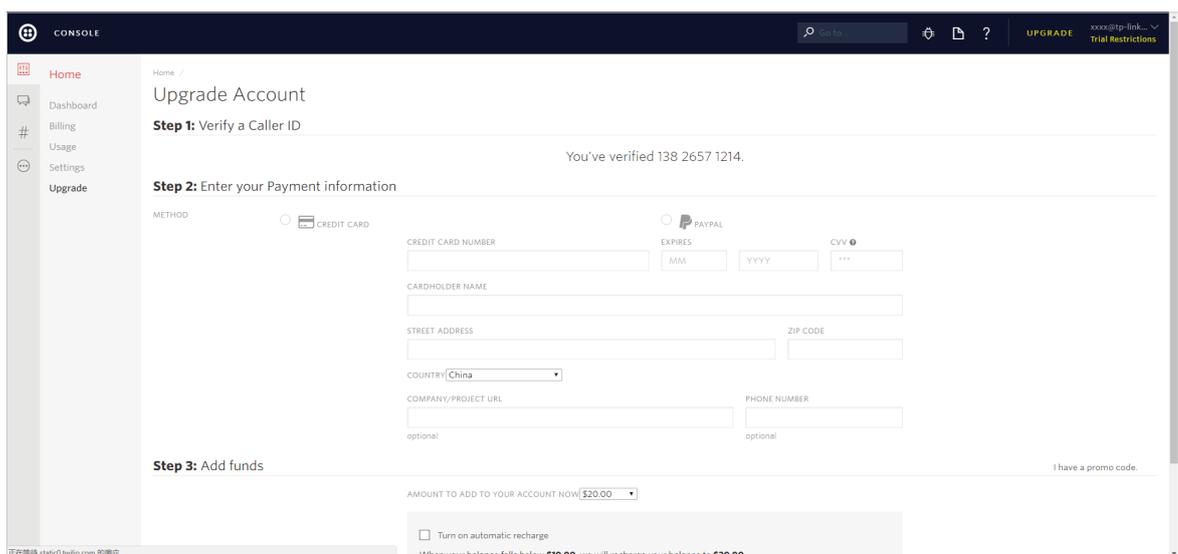


To upgrade your Trail account, follow the steps below:

- 1) Click **UPGRADE** at the top right corner.



- 2) The following page will appear. Provide your payment information and add funds to your account. Then you can use the Twilio service normally.



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