

# **Direct Mail Service**

## **Operation Guide**

### **Product Documentation**



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# Operation Guide

## Overview

Last updated : 2020-09-21 14:34:55

## Overview

This document describes how to send an email by using Tencent Cloud Direct Mail Service (DMS).

### Complete required settings before emailing

Before using DMS to send an email, you need to complete required settings in the [DMS Console](#) first:

- [Setting sender domain](#)  
The sender domain is like an ID number during emailing. Each account must have a sender domain.
- [Creating email template](#)  
An email template is used to send template emails in the console and send batch emails through the `SendTemplatedMail` API.

### Send emails in two ways

- [Emailing in console](#)
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### Use statistics to improve your emailing effects

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### Monitor the email delivery status in real time

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# Emailing

## Emailing Through API

Last updated : 2020-09-21 14:34:55

### Sending Email Through API

You can also use TencentCloud API to send emails from any application. For more information, please see the [API documentation](#).

# Statistics

## Viewing Emailing Statistics

Last updated : 2020-09-21 14:34:55

### Viewing Emailing Statistics

The emailing data shows the requests, successes, and failures of emailing tasks.

In **Statistics > Emailing Data**, you can view the aggregated data of all sent emails, including the total number of tasks, numbers of successes, bounces, and invalid addresses, success rate, and invalid address rate.

You can click the **Domain Name** drop-down list to select a verified domain name to view its emailing statistics.

For more information on the statistics, please see [Statistics](#).

# Viewing Email Tracking Statistics

Last updated : 2020-09-21 14:34:55

## Viewing Email Tracking Statistics

Email tracking data shows information such as the numbers of opens, clicks, and spam reports of emails after they arrive at recipient addresses.

In **Statistics > Email Tracking Data**, you can view the aggregated data of all delivered emails, including the numbers of emails sent successfully, opens, unique opens, clicks, unique clicks, and spam reports.

You can click the **Domain Name** drop-down list to select a verified domain name to view its email tracking statistics.

For more information on the statistics, please see [Statistics](#).

# Monitoring and Alarming

## Getting Event Push

Last updated : 2020-09-21 14:34:56

### Getting Event Push

#### Create a URL

Event push is a channel to receive specific delivery results. After you use an API to initiate an emailing request to DMS, it will return the **request result** synchronously and return the **delivery result** and **other event results** asynchronously through event push.

When an event occurs, it will trigger DMS to send data (POST) to your configured URL. After receiving the data, you can parse out the event and corresponding data and perform subsequent operations.

Currently, the following events are supported: request, successful delivery, failed delivery, soft bounce, spam report, open, and click. For specific event message formats, please see [Event Push](#).

You can get an event push in the following steps:

1. Log in to the [DMS Console](#).
2. Click **Event Push** on the left sidebar and click **Add Push Rule**.
3. In the pop-up window for adding push rule, enter the configured URL that can correctly respond to GET and POST requests and return a 200 HTTP status code.
4. Click **Verify**. After the verification succeeds, click **OK**.

Note: currently, only one URL is supported for event push. You can perform corresponding operations after receiving the event push. If you want to add multiple URLs, please [submit a ticket](#) for assistance.

#### Verify the signature

To ensure that the message source is DMS, you can perform security verification for the POST data source (you can also skip the verification and directly parse the POST data).

Security verification can be performed as follows:

- Click **Send Key** to get the `APP KEY`, which DMS will send to your account email address.
- Parse the POST data to get the `token`, `timestamp`, and `signature`.

- Use the `APP KEY` , `token` , and `timestamp` to generate a `signature` and compare it with the `signature` in the POST data for verification (signature algorithm: [SHA-256](#)).

### Sample code in Python

```
import hashlib, hmac
def verify(appkey, token, timestamp, signature):
    return signature == hmac.new(
        key=appkey,
        msg='{} {}'.format(timestamp, token),
        digestmod=hashlib.sha256).hexdigest()
```

### Sample code in Java (dependent on [Apache Codec](#))

```
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;

import org.apache.commons.codec.binary.Hex;

public boolean verify(String appkey, String token, long timestamp,
    String signature) throws NoSuchAlgorithmException, InvalidKeyException {
    Mac sha256HMAC = Mac.getInstance("HmacSHA256");
    SecretKeySpec secretKey = new SecretKeySpec(appkey.getBytes(), "HmacSHA256");
    sha256HMAC.init(secretKey);
    StringBuffer buf = new StringBuffer();
    buf.append(timestamp).append(token);
    String signatureCal = new String(Hex.encodeHex(sha256HMAC.doFinal(buf
        .toString().getBytes())));
    return signatureCal.equals(signature);
}
```

### Sample code in PHP

```
function verify($appkey, $token, $timestamp, $signature) {
    $hash="sha256";
    $result=hash_hmac($hash, $timestamp.$token, $appkey);
    return strcmp($result, $signature)==0?1:0;
}
```

### Retry mechanism

If an error or timeout of URL access occurs, DMS will retry for up to six times. The shortest time intervals between the retries are 3 minutes, 10 minutes, 30 minutes, 1 hour, 6 hours, 12 hours, and 24 hours. This allows you to have enough time to repair the URL before the message gets lost.

If the retry limit is exceeded, DMS will discard the message.

A 200 status code should be returned within 3 seconds for each data parsing during event processing; otherwise, DMS will send the message again.