Disclaimer Notice

How to Choose an SMS Service Provider (SMS Gateway Provider, SMS Reseller, SMS Broker)?

Introduction

This article discusses 13 questions that you should ask yourself when choosing an SMS service provider. An SMS service provider is a business entity that provides SMS messaging services but is not a mobile network operator. It acts as a middleman between mobile network operators and SMS service users. An SMS service provider signs agreements with a lot of mobile network operators to obtain their permission to exchange SMS messages with their mobile networks, and offers an interface for users to send and receive SMS messages. Some of the interfaces are very simple to use since they hide most of the technical details of SMS messaging. Some others are more powerful that support more features. SMS service providers are also known as SMS gateway providers, SMS resellers or SMS brokers. This is because:

- **SMS gateway provider**. An SMS service provider provides an SMS gateway for its users to send SMS messages to. This SMS gateway will then route the SMS messages to another SMS gateway or SMSC.
- **SMS reseller / SMS broker**. SMS service providers buy a large amount of SMS messages from a lot of wireless carriers at a low price per SMS message. They then sell the SMS messages at a price higher than the cost.

More information about SMS service providers can be found in the "SMS Service Providers (SMS Gateway Providers, SMS Resellers, SMS Brokers)" section of our SMS tutorial. Links to the web site of some SMS service providers and a comparison between their SMS messaging services are available in "Comparison Table of SMS Service Providers (SMS Gateway Providers, SMS Resellers, SMS Brokers)".

1. How much does it cost to send 1 SMS message?

Cost of service is an important factor that you need to consider when choosing an SMS gateway provider for your SMS application. Typically, SMS gateway providers can be divided into 2 categories in terms of how they require you to pay for their SMS service:

- **Credit-based**
  You purchase a number of credits from the SMS gateway provider. Sending one SMS message will cost you one or more credits, depending on the country you send the SMS message to. For example, sending an SMS text message to India might cost you one credit while sending an SMS text message to the United States might cost you two credits.
- **SMS-based**
  You purchase a number of SMS messages from the SMS gateway provider. The cost for sending one SMS message is the same for all destinations. For example, if you purchase ten SMS messages, you can send at most ten SMS messages no matter the destination is India or the United States.

In general:

Cost per credit (credit-based payment) < Cost per SMS message (SMS-based payment)

So, is credit-based payment always better? Not definitely. Let's take a look at the following

example:

SMS gateway provider A (Credit-based payment): Cost per credit = US $0.06

SMS gateway provider B (SMS-based payment): Cost per SMS message = US $0.1

	SMS gateway provider A	***SMS gateway provider B***
To country X	(Suppose 1 credit is required.) Cost per SMS message = $0.06	Cost per SMS message = $0.1
To country Y	(Suppose 3 credits are required.) Cost per SMS message = $0.06 * 3 = $0.18	Cost per SMS message = $0.1

From the above table, you can see that if your SMS messaging application targets on country X, you should choose SMS gateway provider A since sending an SMS message to country X with SMS gateway provider A is cheaper. Similarly, if your SMS messaging application targets on country Y, you should choose SMS gateway provider B. If your SMS messaging application targets both countries, then of course you should route all SMS messages destined for country X to SMS gateway provider A, and those destined for country Y to SMS gateway provider B.

For most of the SMS gateway providers, the cost for sending one SMS message decreases with your purchasing amount. For example, the pricing structure of SMS gateway provider B and SMS gateway provider C might be like this:

Number of SMS messages purchased	***SMS gateway provider B***	***SMS gateway provider C***
1 to 10,000	Cost per SMS message = $0.1	Cost per SMS message = $0.09
10,001 to 20,000	Cost per SMS message = $0.08	Cost per SMS message = $0.08
>=20,001	Cost per SMS message = $0.06	Cost per SMS message = $0.07

For the above table, you can see that if you plan to purchase 1 to 10,000 SMS messages at a time, you should choose SMS gateway provider C since its cost per SMS message is lower. But if you plan to purchase more than or equal to 20,001 SMS messages at a time, you should choose SMS gateway provider B.

2. Are there any hidden costs?

A few SMS gateway providers do not write clearly all the fees involved in the pricing page of their web site. They hide some of the fees so that their SMS messaging service looks cheaper. When you go checkout, you may find that some additional fees are required. For example,

setup fees.

3. Are there any minimum purchase requirements or monthly minimum usage requirements?

Some SMS gateway providers have a minimum purchase requirement. For example, an SMS gateway provider might require you to buy 1,000 credits or more each time. If you are not sure whether your SMS application will be a success, an SMS gateway provider with no minimum purchase requirement will be your choice. You can start by purchasing a small amount of SMS messages or credits. Later as your SMS application gets more users, you can purchase more.

Usually SMS gateway providers do not have any monthly minimum usage requirements. Monthly minimum usage requirement is more common in SMS messaging services provided by mobile network operators. For example, a mobile network operator might only provide SMS messaging services to customers that have a monthly traffic of, say at least 50,000 SMS messages.

If your SMS application has a very small amount of SMS traffic, an SMS gateway provider with no monthly minimum usage requirement will be your choice. For example, if your SMS application is a remote monitoring system that sends an SMS alert to the system administrator whenever it finds any server is not responding, you should choose an SMS gateway provider that does not have any monthly minimum usage requirements. This is because the servers being monitored should be running properly most of the time and the remote monitoring system seldom sends an SMS message.

4. Will the purchased credits or SMS messages expire after a certain period?

For some SMS gateway providers, the credits or SMS messages purchased can only be used within a certain period. After which the credits or SMS messages will expire and cannot be used any more. If you choose an SMS gateway provider that imposes such restriction, you should be more conservative when estimating the amount of SMS traffic of your SMS application.

5. How good is the SMS gateway provider's network coverage?

Network coverage is an important factor you need to consider, since it is possible that an SMS gateway provider cannot deliver SMS messages to your SMS application's targeted countries or mobile operators. You can very often find a detailed list of the supported countries and mobile operators on the web site of an SMS gateway provider.

However, it should be noted that the network coverage web page may not be updated. Even if it is updated, some SMS gateway providers cannot guarantee that you can definitely send SMS messages to a mobile operator listed on their network coverage web page. This is due to the fact that an SMS message may be routed to other gateways not controlled directly by the SMS gateway providers themselves.

In addition, it should be noted that for some SMS gateway providers, SMS messages cannot reach mobile phone numbers that have been ported between mobile operators.

Many SMS gateway providers give new users a few free SMS messages. You can use them to test the SMS gateway provider's network coverage.

6. How good is the SMS gateway provider's network quality?

A few SMS gateway providers offer a very low price per SMS message, but their network quality is poor and an SMS message may not reach its destination, or it may only reach the destination after a long delay. So, remember to test an SMS gateway provider's network quality. Many SMS gateway providers offer a small amount of free SMS messages to new users. You can use them to test the network quality.

Some SMS gateway providers offer several message routing options. You can decide whether to route SMS messages through more reliable but more expensive networks, or less reliable but cheaper networks.

7. Is the protocol / interface you intend to use supported by the SMS gateway?

Protocols / interfaces commonly supported by SMS gateway providers for sending and receiving SMS messages include:

- **HTTP**. It is the most commonly supported protocol for sending and receiving SMS messages. It is very simple to use.
- **HTTPS (HTTP + SSL encryption)**. Data transmitted over HTTP is not secure. If you do not want your data to be seen by others on the Internet, you should use HTTPS instead. With HTTPS, data are encrypted before transmitting over the Internet, thus protecting the data from eavesdropping.
- **XML over HTTP / HTTPS**. One or more SMS messages are put in an XML file and uploaded to the SMS gateway provider's server. XML over HTTP / HTTPS is a better choice than HTTP / HTTPS for sending bulk SMS messages since it enables the submission of a large amount of SMS messages in a single HTTP request.
- **SMTP (email to SMS / SMS to email)**. Choose SMTP if you want to send or receive SMS messages in the form of email.
- **FTP**. One or more SMS messages are put in a text file and uploaded to the SMS gateway provider's FTP server. Like XML over HTTP / HTTPS, FTP is a better choice than HTTP / HTTPS for sending bulk SMS messages since it enables the submission of a large amount of SMS messages in a single upload.
- **SMPP**. The SMPP protocol is usually used by advanced users. It is a binary protocol for communicating with SMSCs (SMS centers) and SMS gateways. SMPP is suitable for sending and receiving bulk SMS messages.

An SMS gateway provider usually supports only a subset of the above protocols / interfaces. A few SMS gateway providers also provide their users a COM object free of charge. You can integrate the COM object into your ASP pages or Microsoft Windows-based programs (COM is a Microsoft technology) and call the methods of the COM object to submit SMS messages to the SMS gateway.

8. Is the SMS gateway provider's API well documented and easy to use? Is there any sample code provided?

Well-documented APIs (Application Programming Interfaces) and sample code are invaluable to developers. They can help save a lot of development time.

One good use of the API documentation during the SMS gateway provider selection process is to check whether an SMS gateway provider supports a particular feature required by your SMS application. For example, to find out whether an SMS gateway provider supports the sending of concatenated SMS messages, you can check the API documentation to see if there is a description of the commands and parameters for sending concatenated SMS messages.

Some SMS gateway providers require you to register an account or make a purchase before you can download the API documentation or sample code from their web site. Such SMS gateway providers are less preferable.

9. What payment options does the SMS gateway provider offer?

Very often SMS messages or credits are purchased from a web site. So, most SMS gateway providers support online credit card payment. Some also accept PayPal, check payment, direct deposit or wire transfer.

10. Is it easy to manage your account? Can you easily check the number of credits or SMS messages left in your account?

Most SMS gateway providers provide a web-based account management system. The basic functions of the account management systems provided by different SMS gateway providers are more or less the same. For example, most of them allow you to check the number of credits/SMS messages left in your account and buy new credits/SMS messages online. The difference is in ease of use. Some SMS gateway providers offer an account management system that is easy to use and learn. The user interface is clean and intuitive. The menu items are well organized. Plenty of hints and tips are available. Some wizards are provided to guide users through a process step by step. These features help you work more efficient and make fewer errors.

Some SMS gateway providers' account management system supports more features than the others. Here are some examples:

- **Access via HTTPS (HTTP + SSL encryption)**. Some account management systems are accessible via HTTPS. With an HTTPS connection, the data transmitted between your computer and the web server over the Internet is encrypted. So, your data (for example, the user name and password you entered in the login page) is protected from eavesdropping.
- **IP locking**. Some account management systems allow you to associate a few IP addresses to your account. Only computers with those IP addresses can send or receive SMS messages via the SMS gateway provider. This feature enhances your account's security.
- **Low credits/SMS messages alert**. Some account management systems will send a text message to the email address or mobile phone number you specified when the number of remaining credits/SMS messages in your account is lower than a certain value.
- **Detailed reports**. Some account management systems provide detailed reports of the SMS

messages sent and received. You can request reports of a certain day or date range. The reports usually include fields such as the total number of SMS message sent or received, the date and time that an individual SMS message was sent or received, and the originating/recipient mobile phone number. Some account management systems also allow you to download a report as a CSV (Comma Separated Values) file or Microsoft Excel file, which can be imported into a spreadsheet program to do things such as generating charts from the data.

- **Sub users management**. Some account management systems allow you to add sub users to your account. You and the sub users share the same account but they use their own user name and password. You, as the administrator, can view reports of the SMS messages sent and received by a certain sub user. The ability to add sub users is particularly useful to large companies where many applications or staff members need to send or receive SMS messages.

- **SMS message routing options**. Some SMS gateway providers offer several message routing options that can be set or changed with their account management system. For example, an SMS gateway provider might allow you to specify:

  - whether to route SMS messages at a certain cost (sometimes you may not want to allow your staff members to send SMS messages to destinations that cost too many credits),

  - whether to route SMS messages to a certain destination (suppose your company sets up an SMS messaging system for staff members to contact clients in the UK, you may want to disable the sending of SMS messages to other countries),

  - which network to route SMS messages through (do you want to route SMS messages through more reliable but more expensive networks, or less reliable but cheaper networks?).

11. Does the SMS gateway provider provide any free SMS messages for testing?

Needless to say, you must test an SMS gateway thoroughly before you can know whether it is suitable for your SMS application. As mentioned earlier, you should test whether you can successfully send SMS messages to or receive SMS messages from your targeted countries, mobile operators or mobile phone numbers through the SMS gateway provider. You should also test the SMS gateway provider's network quality.

It will be great if the SMS gateway provider provides some free SMS messages for testing. However, it won't cost you too much even if you pay for the testing SMS messages yourself, suppose that the SMS gateway provider does not require a minimum purchase of, say, 100,000 SMS messages.

12. Does your SMS application require 2-way SMS messaging services?

SMS messaging services can be grouped into two categories: 1-way and 2-way. 1-way SMS messaging services allow you to send SMS messages, while 2-way SMS messaging services allow you to send and receive SMS messages. All SMS gateway providers provide 1-way SMS messaging services. However, only some of them provide 2-way SMS messaging services. The reason is that it is technically more difficult for an SMS gateway provider to enable its users to receive SMS messages than to send SMS messages.

13. How good is the SMS gateway provider's support service?

A good SMS gateway provider should have a support team that has a complete understanding of its system. The team members should be able to answer and tackle all sorts of questions and problems. In particular, they should be familiar with compatibility issues related to different mobile network operators. The support service's quality is a reflection of the company's quality. To find out how good an SMS gateway provider's support service is, one way is to email a question to the support team. Then ask yourself the following questions:

- Do they reply?
- How long does it take for them to reply?
- Does the reply answer your question well?
- Are they familiar with the topic?
- Ask some follow-up questions. Do they have patience? Does the reply answer your question well?

Most SMS gateway providers provide support service by email. If you prefer telephone support service, you should choose an SMS gateway provider that provides a customer support phone number.