

SMS 2 HTTP USER GUIDELINE

THIS DOCUMENT IS AIMED AT:

Grapevine Affiliate administrators and users who have been provisioned to use SMS 2 HTTP.

FEEDBACK:

Was this document useful? What can we do to make this user guide more useful and informative? Please email info@vine.co.za with your comments and feedback.

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*Note, you must be registered with Grapevine to log a support query. Version: 2.1 Date: 23 April 2010

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Abbreviations

- **CSV** Comma Separated Values
- GVI Grapevine Interactive
- HTTP Hypertext Transfer Protocol
- **SMPP** Short Message Peer-to-Peer Protocol
- URL Universal Resource Locator
- SMS Short Message Service

Definitions

Affiliate	A Company that is registered with Grapevine and has been provisioned to use one or more of its products or services.
Broadcast	In SMS-2-HTTP, a broadcast is a collection of messages sent out by an Affiliate to mobile phone users and the responses received by an Affiliate from mobile phone users.
Campaign	In SMS-2-HTTP, a campaign is a collection of messages sent out by an Affiliate to mobile phone users and the responses received by an Affiliate from mobile phone users.
CDATA	The term CDATA is used to indicate text that should not be parsed (interpreted) by the XML parser, for instance, characters like "<" and "&".

1 Introduction

1.1 What is the purpose of this manual?

To document:

- ✓ SMS-2-HTTP's web-based front-end which is used to view reports about SMS-2-HTTP campaigns
- ✓ the XML used by Affiliates to perform HTTP posts to SMS-2-HTTPGeneral Information

1.2 Introduction to SMS-2-HTTP

1.2.1 What is it?

SMS-2-HTTP is a web-based service that enables you to route SMS messages from customers to your company via Grapevine using XML over HTTP. You can then use your own application to extract and process the content of the SMS message.

1.2.2 Why use it?

Gathering information in large companies can be time consuming and costly, and effective marketing and research campaigns can end up being labour-intensive. With SMS-2-HTTP you can automatically gather information from customers via SMS and then extract, process, analyse and store it using your own applications.

You can use SMS-2-HTTP for a variety of applications, for instance: voting, competition entries, surveys, account notifications, support queries and promotions. SMS-2-HTTP is an effective way of coordinating the benefits of super-fast, easy-to-use mobile communication with in-house applications.

1.2.3 How does it work?

With SMS-2-HTTP, your company gets a dedicated short code, e.g. '34766', to which SMS messages can be sent. This code can then be advertised along with a service or promotion to which you want customers to respond by SMS.

You can select whether you want clients to send their SMS messages to a premium-rated short code or to a standard-rated long code. If you select a premium-rated short code, you earn revenue share on the service usage. Messages are sent to your server via an HTTP Post using Grapevine's SMS-2-HTTP application.



1.2.4 Features

- ✓ Reliable SMS-2-HTTP receiver
- ✓ Easy-to-use XML interface
- ✓ SMS concatenation
- ✓ Standard message format
- ✓ Automated data collection
- ✓ Short code revenue share
- ✓ Lower communication costs
- ✓ Multiple services from one short code

Example of a concatenated XML:

XML= <?xml version="1.0" encoding="UTF-8"?>

<gviSms>

<smsDateTime>2016-03-04T15:00:00</smsDateTime>

<gatewayldentifier>vodacomRx</gatewayldentifier>

<cellNumber>27712183747</cellNumber>

<smsLocation>34480</smsLocation>

</gviSms>

1.2.5 Replies

SMS-2-HTTP cannot send replies to a mobile phone. If you need a reply service, ask our support desk about the SMS Applink service. SMS AppLink is a Grapevine Interactive product that enables the transmission of SMS messages via secure HTTPS. Applications can post messages to SMS AppLink, and receive receipts and replies via a call-back POST. In this way, you can extract mobile numbers from the XML sent to you by SMS-2-HTTP and respond via AppLink.

1.2.6 Process diagram

An overview of the SMS-2-HTTP process flow is shown in the figure below:



2 Getting started

To get started, you must be registered as a Grapevine Affiliate.

2.1 How do I register?

- ✓ Contact Grapevine at info@vine.co.za. When you register as an Affiliate you must:
- ✓ specify the number to which people must send their SMSs. This can be a short code (premium-rated) or a long code with two extra digits (standard-rated)
- ✓ specify the URL on your server to which the SMS-2-HTTP service must post these messages
- ✓ code your web application to receive the SMSs at the URL that you specified when you registered (see 3. Conversion of SMS to XML)
- ✓ open your network's firewall to accept posts from the following IP addresses:
- o **196.37.44.90**
- o **196.35.76.123**

2.2 Where do I get my login information?

Grapevine will send you an email with the following user registration information:

- ✓ your username and password for the SMS-2-HTTP web application where you will view reports
- ✓ the URL for the SMS-2-HTTP web application
- ✓ confirmation of the short code you chose to which people must send their SMSs

You can log in to the SMS-2-HTTP web application using the username and password provided in the email.

Note: Click on the "Forgotten your password?" link to request a reminder of your login details. A reminder will be sent to the email account you used to register with SMS 2 HTTP.

3 Conversion of SMS to XML

The SMS-2-HTTP service converts an SMS message to XML using Grapevine's gviSms standard. The gviSms standard is simply the format of the XML as it will arrive on your server, including the tags embedded in the XML and what they mean. For instance, the <smsLocation> tag indicates the short code to which a customer sent an SMS. This tag is included because you may have more than one campaign running and therefore may be using more than one short code.

See the example below of the XML as it will arrive on your server and the explanations of the tags. This XML is what you must code your web application to receive and process.

```
<?xml version="1.0" encoding="UTF-8"?>
<gviSms>
        <smsDateTime>2005-09-08T10:06:03</smsDateTime>
        <gatewayIdentifier>ThreeRandVodaRx1</gate
        wayIdentifier>
        <cellNumber>27827891099</cellNumber>
        <smsLocation>35444</smsLocation>
        <content><![CDATA[Lindiwe Sisulu,
KZN]]></content> </gviSms>
```

TAG	DESCRIPTION				
gviSMS	The wrapper tag is mandatory. All other tags are enclosed in this tag.				
smsDateTime	The date and time when the original SMS arrived at GVI's SMS gateway. This i not the time the SMS was sent by the customer. It may however give an indication of long the message took to be transmitted to your server.				
gatewayldentifier	Identifies the network and the rate of the SMS. Grapevine has a list of short code rates from which you can choose. In the example above, you can see that the mobile phone number is a Vodacom number and therefore the network chosen will be for Vodacom. The rate in this example is R3; Cell C and MTN will also offer a R3 rate, e.g. ThreeRandCellCRx1.				
cellNumber	The number (in international MSISDN format) of the mobile phone that sent.				
smsLocation	The short code to which the SMS was sent.				
content	The message text of the SMS message, e.g. 'Unsubscribe'.				

4 The SMS-2-HTTP Home page

Using the URL sent to you by Grapevine when you were provisioned on the system, log in to the SMS-2-HTTP application. Below is an illustration of a demo Affiliate's Home page.

Username and password are case sensitive.



Welcome back, penny@vine.co.za

MY PROFILE	MY PRODUCTS
Ny Betalls RODOX RODOX Change your details	sms2http

Figure 2 - SMS-2-HTTP Home page

The SMS-2-HTTP Home page is a portal for the messaging services for which you are registered. On the Home page you have the options to:

- ✓ change your personal details,
- ✓ email Grapevine support with a query
- ✓ access SMS-2-HTTP reports

Note: Only emails from registered email addresses will be processed by support.

At the bottom of the Home page, you can see Grapevine's contact details.

What is a portal? A portal is a web site or web page that the owner positions as an entrance to other sites or pages on the internet, or other pages in a web application.

4.1 How do I change my personal details?

Tip: On your My Profile page you can change your password to something easier to remember than the password originally issued to you by Grapevine.

. . ..

To change your personal details:

1. On the Hor My Profile

First Name:	Penny	*
Last Name:	Doe	*
Login Name:	penny@vine.co.za	
Mobile Number:	073 1234567	*
Email Address:	penny@vine.co.za	*
Current Password:	•••••	*
New Password:	•••••	*
Confirm Password:	•••••	*

Figure 3 - Change personal details

- 2. Under My Profile, enter your personal details.
- 3. Click Update. A message will be displayed saying your changes have been updated. To exit this page, click the Back button in your browser.

Tip: If you want to exit the page without saving your changes, hit the Back button in your browser instead of clicking Update.

4.2 Sending Grapevine a support query

To email a support query to Grapevine:

- 1. In the application, on the right side of the page, click the Support tab.
- 2. From the Home page, on the purple Menu bar, click Support.

4.3 How do I access SMS-2-HTTP reports?

To view SMS-2-HTTP reports:

- 1. On the Home page, click SMS 2 HTTP.
- 2. In the VIEW REPORTS tab, click Inbound Message Report.



Welcome back, penny@vine.co.za

Figure 4 - Inbound Message Report

5 Reporting and analysis

To get to this page, see 4.3 How do I access SMS-2-HTTP reports.

Reports are useful to monitor the success of campaigns and to troubleshoot errors. You can also use them to analyse campaigns by exporting the data to a spreadsheet application like Excel. SMS-2-Email allows you to filter data so you can report on specific campaigns, mobile numbers and short codes over a specific period of time.

To view a report:

- 1. On the Home page, click SMS 2 HTTP.
- 2. In the VIEW REPORTS tab, click Inbound Message Report.
- 3. On the Inbound Message Reports page, fill in the report parameters. You can filter your results to select all messages:
 - a. sent to a particular short code
 - b. sent to a specific MSISDN

- c. containing specific content
- d. sent between specific dates and times
- 4. Click Run Report.
- 5. After running t Export to Excel export the results to an Excel spreadsheet to further analyse, sort and filter

Example: In the example below, we are searching for all messages sent this month containing the word 'subscrib libound Message Report

Short Code:							
Mobile Num	ber:						
		eg. 27	8212345	67			
Message Co	ontent:						
subscribe							
Select perio	od:						
O Today	This	month (D Last M	onth			
Custon	n Date						
Please defir	ne your da	ate range	with the fo	llowing	format: (y	yyy-mm- <mark>dd hh:</mark> r	nm)
From:	2010	- 03	- 25	00	: 00		
To	2010	- 03	- 25	08	50		
10.	2010	05	20	00	. 50		
Run Rep	oort	Clear					
				100100000000000000000000000000000000000			

Figure 5 - Inbound Message Report search parameters

In the results below, you can see all the messages containing the word 'subscribe' in the message body. In this example, the report extract shows all customers who unsubscribed this month. From the data you can see that customers have unsubscribed from different services as the short code is different. If customers had subscribed to the service in the specified time period, these messages

#	Current Status Time:	Short Code:	Msisdn:	Message:
1	2010-02-23 14:57:26	31370	27735334293	Unsubscribe
2	2010-02-14 20:41:47	31222	27827777438	Unsubscribe.
3	2010-02-10 18:49:51	36771	27723077978	Unsubscribe
4	2010-02-02 17:23:26	31378	27834570151	Unsubscribe

Figure 6 - Inbound Message Report output

6 FAQ's

6.1 Under which circumstances would the sent SMS create an error at GVI's server?

This could happen if the sender used a non-standard character in the SMS. In such cases, the message will still be processed and a suitable character set will be defined for that specific SMS.

6.2 What are 'standard' characters?

GVI's server accepts the following characters in incoming SMS messages:

space)	2	;	D	М	V	_	h	q	Z
!	*	3	<	E	Ν	W	-	i	r	{
"	+	4	=	F	0	X	a	j	s	1
#	,	5	>	G	Р	Y	b	k	t	}
\$		6	?	н	Q	z	с	1	u	~
%		7	Q	I	R	Ľ	d	m	v	
&	1	8	A	J	S	1	е	n	W	
•	0	9	В	К	Т]	f	0	x	
(1	(R:1.)	С	Ľ	U	^	g	р	У	
1		1								1

Figure 7: SMS-2-HTTP Home page

7 Support

If you need assistance, please ensure you have all the details of what you were doing in SMS-2-HTTP so that a support consultant can help you.

For assistance, please contact Grapevine: phone +27 21 702-3333 or email support@vine.co.za* *Note: Only emails from registered email addresses will be processed by support.