

# MEXCOMM Premium SMS API

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**Document Changes**

	<b>Date</b>	<b>Updates</b>	<b>By</b>
1.	17/07/2012	Remove contentsize MT param add in misc MT param (pg 9)	Fun
2.	18/09/2012	Add in new error code (pg10)	Fun
3.	02/01/2013	Change date format in receiving DN (pg13)	Fun

## Table of Content

1.0	Introduction .....	4
1.1	Initial Setup .....	4
2.0	Glossary .....	4
3.0	Receiving MO .....	5
3.1	Responding to a MO .....	6
4.0	Sending MT .....	7
4.1	HTTP Post/Get Parameters .....	7
4.2	Response Codes .....	12
5.0	Receiving DN .....	13
	APPENDIX A ASP CODE EXAMPLE .....	14
	APPENDIX B .....	15

# 1.0 Introduction

The objective of this document is to specify the communication protocols between 'Mexcomm Premium Gateway' (MPG) and external content provider who wish to use SMS to reach their users over HTTP connection.

It will guide you step-by-step from Initial Setup to successfully connected to Mexcomm Premium Gateway

Currently we support these message types:

- Normal Text (ASCII)
- UTF8 (8-bit UCS/Unicode Transformation Format)
- WAP SI
- Mono Ringtone
- Operator Logo
- Picture Message

For other types of SMS, it will be added soon in future.

## 1.1 Initial Setup

In order to get connected with Mexcomm Premium Gateway system, you need to fulfill these requirements

- i) A valid account to use Mexcomm Premium Gateway.
- ii) A web application to broadcast SMS via HTTP POST/GET

## 2.0 Glossary

Term	Definition
CP	Content Provider (Mexcomm partner)
HTTP	Hypertext Transfer Protocol
MO	Message Originator
MT	Message Terminator
DN	Delivery Notification

### 3.0 Receiving MO

In order to submit a MO message to CP, Mexcomm will send a HTTP GET request to CP HTTP server. Please refer to the table below for the parameters list.

Name	Type	Definition
Msisdn	Numeric	Mobile number of end user, in international format (eg. 60123456789)
Body	Char	Text body of the SMS, which includes your keyword. It is URLEncoded
Time	DateTime	Time stamp of the SMS received (i.e. yyyy-mm-ddhh:mm:ss).
Moid	Numeric	Unique Message ID that is tied to the SMS.
Shortcode	Numeric	Shortcode number of which the SMS is received
Telcoid	Numeric	ID to indicate each telco. Our Post-Sales Consultant will provide you the list telco ID for the country you're connecting to
Mtid	Numeric	*Only for Wap Pull service.

Your service keyword should have a minimum of 3 characters. Special characters (!, @, #, -, \* etc.) are not allowed.

This example illustrates on how we will send the request to your URL, via HTTP GET.

- <http://www.yoururl.com/receiver.aspx?msisdn=60123456789&body=RINGTONES&time=2010-08-0307%3a01%3a30&moid=12345&shortcode=33228&telcoid=7>

### 3.1 Responding to a MO

CP should keep track of the Moid for each MO transaction.

This value is needed when you want to reply the content back to the end user.

There are 3 options available when responding to a MO:

1. Displaying -1 in your HTML tag. CP will be responsible for sending the MT content back to the user by calling Mexcomm's Gateway HTTP API. Recommended for subscription services.**(For Indonesia (9386 shortcode), Vietnam and Malaysia (Umobile IOD Service), this option is not supported. CP is required to reply using the 4 parameters option below)**
2. Displaying 4 parameters in your HTML tag, in this order : Smstype, Msisdn, Body, Price. Recommend for Info On Demand services.

Example :

```
TEXT,60123456789,Thank%20you%20for%20subscribing%20to%20RINGTONE%20service,50
```

Note: Body field must be URL encoded

3. Displaying 5 parameters in your HTML tag, in this order : Smstype, Msisdn, Body, Price, WAP URL. Recommend for Info On Services, to return a Wap Push.  
Note: Body field and Wap URL field must be URL encoded.

For Indonesian gateway, please use this method for Wap Push services.

Example:

```
WPNK,60123456789,Thank+you+for+downloading+our+ringtone!,http%3a%2f%2fwww.mexcomm.com%2fhelloworld.mid
```

#### Things to take note of :

- Text body, Wap URL must be URL encoded properly as shown in the example.
- Other than the required HTML values, no other HTML tags are allowed as it will conflict with the actual HTML values
- For Malaysian Gateway, CP must also be responsible in handling BATAL, BATAL <keyword>, BATAL SEMUA, STOP, STOP <keyword> and STOP ALL requests for subscription services as this is a requirement from MCMC. Please terminate the end-users subscription immediately if found in your database.

## 4.0 Sending MT

### 4.1 HTTP Post/Get Parameters

Below are the parameters required when sending a HTTP POST/GET request to Mexcomm's Gateway API. All parameters are not case-sensitive.

Name	Type	Definition
User	Char	<b>Required*</b> Username that is assigned to your account
Pass	Char	<b>Required*</b> Password that is assigned to your account
Shortcode	Numeric	<b>Required*</b> Shortcode number of your service/keyword
Smstype	Char	<b>Required*</b> Message format of the SMS Normal Text – TEXT Unicode – UTF8 MonoRingtone – RTNK OperatorLogo – OLNK PictureMessage – PMNK WapPush – WPNK WapPull – WPBL MMS – MMS
Msisdn	Numeric	<b>Required*</b> Mobile number of end user, in international format (eg. 60123456789)  For MTTYPE=WPBL, you may leave this value as 0.

Body	Char	<p><b>Required*</b> <b>Uri-Encoded*</b></p> <p>Text body of the SMS that you wish to send to end user. It should be URL encoded.</p> <p>For ringtones, picture message, the value should be in binary format.</p> <p>If you're sending WAP/ MMS content, the value will be the title of the content.</p>
Price	Numeric	<p><b>Required*</b></p> <p>Set the value to the price intended to charge end user. Setting it to 0 will disable charging</p>
Moid	Numeric	<p><b>Required*</b></p> <p>For IOD service, please include the Moid value that is given to you. This is to facilitate message tracking for IOD services.</p> <p>For MTTYPE=WPBL, please provide your own value for this. Mexcomm will return the same value in MOID parameter via MOURL with additional MTID value for message tracking once transaction is processed.</p> <p>For normal push, you may leave this value as 0.</p>



TelcoId	Numeric	<p><b>Required*</b></p> <p>ID to indicate each telco. Our Post-Sales Consultant will provide you the list telco ID for the country you're connecting to.</p> <p>For MTTYPE=WPBL, you may leave this value as 0.</p>
Keyword	Char	<p><b>Required*</b></p> <p>Service/Keyword value that was assigned to your shortcode</p>
Url	Char	<p><b>Optional*</b> <b>Uri-Encoded*</b></p> <p>The WAP URL of the content. Optional for WAP Pushes or WAP Pull only</p> <p>This parameter is not supported for Indonesia gateway yet. To send Wap Push, please refer to '3.1 Responding to MO', option 3</p> <p>While Sending MMS, this value will be treated as the path of the zip file.</p>
Misc	Char	<p><b>Optional*</b></p> <p>For Thailand 4741XXX shortcode is <b>Mandatory</b>:</p> <p>Thank you message = TQ  Reminder = RM  Recurring = RE  To Send Singular MT = MTS  To Send Broadcast MT = MTB</p>

Following are some examples for sending MT to Mexcomm's URL via HTTP GET:-


Mexcomm Gateway API will generate a unique ID for reference and tracking purposes for every successful MT. Kindly refer APPENDIX A for sample code of retrieving unique ID for each transaction.

<b>Content</b>	Normal Text
<b>SmsType</b>	TEXT
<b>Original Text</b>	This is a sample MT
<b>URL Encoded</b>	This%20is%20a%20sample%20MT
<b>Sample API</b>	<a href="http://&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=TEXT&amp;msisdn=60123456789&amp;body=This%20is%20a%20sample%20MT&amp;price=500&amp;telcoid=7&amp;keyword=SAMPLE">http://&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=TEXT&amp;msisdn=60123456789&amp;body=This%20is%20a%20sample%20MT&amp;price=500&amp;telcoid=7&amp;keyword=SAMPLE</a>

<b>Content</b>	Unicode
<b>SmsType</b>	UTF8
<b>Original Text</b>	你好吗？
<b>Hex Code</b>	4F60597D5417FF1F
<b>Sample API</b>	<a href="http://&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=UTF8&amp;msisdn=60123456789&amp;body=4F60597D5417FF1F&amp;price=500&amp;telcoid=7&amp;keyword=SAMPLE">http://&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=UTF8&amp;msisdn=60123456789&amp;body=4F60597D5417FF1F&amp;price=500&amp;telcoid=7&amp;keyword=SAMPLE</a>

<b>Content</b>	Wap Push
<b>SmsType</b>	WPNK
<b>Content Title</b>	Bee
<b>Content URL</b>	http://yoururl.com/bee.gif
<b>Sample API</b>	<a href="http://&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=WPNK&amp;msisdn=60123456789&amp;body=Bee&amp;price=500&amp;telcoid=7&amp;URL=http%3a%2f%2fyoururl.com%2fbee.gif&amp;keyword=WAPPush">http://&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=WPNK&amp;msisdn=60123456789&amp;body=Bee&amp;price=500&amp;telcoid=7&amp;URL=http%3a%2f%2fyoururl.com%2fbee.gif&amp;keyword=WAPPush</a>

<b>Content</b>	Wap Pull ( <b>REDIRECT</b> user from wap site to Mexcomm URL)
<b>SmsType</b>	WPBL
<b>Content Title</b>	Hoo La La
<b>Content URL</b>	http://yoururl.com/hoolala.mid
<b>Sample API</b>	<a href="http://yoururl.com/hoolala.mid">&lt;MexcommWAPPULLServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=WPBL&amp;msisdn=0&amp;body=Hoo+La+La&amp;price=500&amp;telcid=0&amp;url=http%3a%2f%2fyoururl.com%2fhoolala.mid&amp;keyword=WAPPull&amp;moid=&lt;referenceID&gt;</a>

<b>Content</b>	MMS
<b>SmsType</b>	MMS
<b>Content Title</b>	Peekaboo
<b>Content URL</b>	http://www.myMMS.net/MMS/sample.zip
<b>Sample API</b>	<a href="http://www.myMMS.net/MMS/sample.zip">&lt;MexcommMMSServerURL&gt;?user=abc&amp;pass=123&amp;shortcode=37877&amp;smstype=MMS&amp;msisdn=60123456789&amp;body=Peekaboo&amp;price=30&amp;moid=0&amp;telcid=&lt;telcid&gt;&amp;keyword=ABC&amp;url=http%3a%2f%2fwww.myMMS.net%2fMMS%2fsample.zip</a>
<b>Remarks</b>	<p>Please ensure that the zip file contains all mms content which consist of SMIL, audio, text and etc. Maximum size of all attachment is 95kb. You may request a sample zip file for your perusal.</p> <p> sample.zip</p>

<b>Content</b>	Binary
<b>SmsType</b>	RTNK
<b>Sample API</b>	<a href="http://yoururl.com/hoolala.mid">&lt;MexcommMTServerURL&gt;?user=abc&amp;pass=abc123&amp;shortcode=33228&amp;smstype=RTNK&amp;msisdn=60123456789&amp;body=06050415811581024A3A58C0C0C0C0C0C4041EA716934D515610428AD08514568428A274214513A10A288D08514468428934C210515610428AD08514568428A274214511A10A289D08514468428934C210515610224AD0851256042892B42144936108249D085124E84289274214493A10A249D08512450000&amp;price=500&amp;telcid=7&amp;keyword=RINGTONES</a>

## 4.2 Response Codes

### SUCCESSFUL MT

```
<MEXCOMM><MSISDN>60123456789</MSISDN>  
<MSGID>987654321</MSGID>  
<STATUS>0000</STATUS>  
</MEXCOMM>
```

### FAILED MT

```
<MEXCOMM><MSISDN>60123456789</MSISDN>  
<MSGID>0</MSGID>  
<STATUS>0001</STATUS>  
</MEXCOMM>
```

A successful MT push will result in a status code of 0000.

In this example, 0001 denotes AUTHENTICATION FAILED, which means either username or password is incorrect. A complete listing of status codes is available in appendix B.

## 5.0 Receiving DN (Optional)

### Option I:

You may view messages sent and their statuses from Mexcomm's Dashboard. The URL is at <http://www.ezlynx.net/MexcommDashboard>. You may login to the page using the same username and password.

### Option II:

Mexcomm will send DN to CP DNURL via HTTP GET. Please refer to the table below for the parameters list.

Name	Type	Definition
Msisdn	Numeric	Mobile number of end user, in international format (eg. 60123456789)
Reason	Char	Description of the errorcode
Mtdate	DateTime	Time stamp of the SMS sent (i.e. dd-mon-yy hh.mm.ss.fff).
ErrorCode	Char	ErrorCode according to each telco
Shortcode	Numeric	Shortcode number of which the SMS is received
Telco	Char	Operator Name
Mtid	Numeric	Unique ID for each transaction

This example illustrates on how we will send the request to CP DN URL, via HTTP GET.

<http://www.yoururl.com/dnurl.aspx?DNSTATUS=SUCCESS&MTID=8191500331012345678&MSISDN=601212345678&SHORTCODE=33933&ERRORCODE=1&REASON=Successfully%20delivered&MTDATE=31-DEC-12%2003.03.35.190000%20PM&TELCO=DIGI>

## APPENDIX A ASP CODE EXAMPLE

Codes for getting response status from the XML tag

### ASP.NET C#

```
XmlDocument xmlDoc = new XmlDocument();
xmlDoc.LoadXml(xmlstring);
XmlElement element = xmlDoc.DocumentElement;
XmlNodeList msisdnNode = element.GetElementsByTagName("MSISDN");
XmlNodeList msgidNode = element.GetElementsByTagName("MSGID");
XmlNodeList statusNode = element.GetElementsByTagName("STATUS");
string msisdn = msisdnNode[0].InnerText;
string msgid = msgidNode[0].InnerText;
string status = statusNode[0].InnerText;
```

### ASP.NET VB

```
Dim xmlDoc As New XmlDocument()
xmlDoc.LoadXml(xmlstring)
Dim element As XmlElement = xmlDoc.DocumentElement
Dim msisdnNode As XmlNodeList = element.GetElementsByTagName("MSISDN")
Dim msgidNode As XmlNodeList = element.GetElementsByTagName("MSGID")
Dim statusNode As XmlNodeList = element.GetElementsByTagName("STATUS")
Dim msisdn As String = msisdnNode(0).InnerText
Dim msgid As String = msgidNode(0).InnerText
Dim status As String = statusNode(0).InnerText
```

## APPENDIX B

Error Code	Error Desc	Details
0001	AUTHENTICATION FAILED	Your username and password are incorrect.
0002	ACCOUNT SUSPENDED	Your account has been suspended. Please contact the administrator.
0003	IP NOT ALLOWED	Your IP is not allowed to send SMS. Please contact the administrator
0004	KEYWORD INVALID	Keyword provided is invalid for that shortcode, or is suspended. Please contact the administrator.
0005	INVALID SMS TYPE	Your SMS TYPE is not supported.
0006	EXCEEDED BODY LENGTH	Your SMS body has exceeded the limit 900
0007	INVALID TELCOID	Telcoid value is invalid. Please refer to the API for the telcoid list
0008	MISSING PARAMETER	One or more required parameters are missing.
0009 (Thailand Only)	INVALID PRICE CODE	Keyword price is not valid.
9999	INTERNAL SERVER ERROR	Please report to administrator.
407 (Malaysia Only)	INVALID SUBSCRIBER	Invalid subscriber for the service. Remove from subscriber list for that particular service.

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