

MEXCOMM BULK SMS API

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Document Changes

1.	Date	Version	Updates	By
	21/01/2008	2.0	<ul style="list-style-type: none"> • Wap push parameter amendment in Section 2.0 and Appendix B. • Ammendment in Appendix C. • Add in Section 3 on Formatting UDH Body. 	Sook Fun
2.	15/09/2009	2.1	<ul style="list-style-type: none"> • New error code – 0009 (Pg 14) 	Sook Fun
3.	10/03/2010	2.2	<ul style="list-style-type: none"> • Add in optional parameter - TELCO 	Sook Fun
4.	17/05/2010	2.3	<ul style="list-style-type: none"> • Do some corrections on MSISDN description under Section 2.0 and SMS status under Section 6.0. 	Sook Fun
5.	30/3/2011	2.4	<ul style="list-style-type: none"> • Adjustment on the response result XML syntax from
 to
 (Pg 6). 	Sook Fun

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1.0 Introduction

The objective of this document is to specify the communication protocols between 'Mexcomm Bulk Gateway' (MBG) and external content provider who wish to use SMS to reach their users over TCP/IP.

Currently we only support Normal Text (ASCII), UTF8 (8-bit UCS/Unicode Transformation Format) and RAWW Type (Own defined UDH).

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

1.1 Initial Setup

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

- i) A valid account to use Mexcomm Bulk Gateway.
- ii) A web application to broadcast SMS via HTTP POST/GET
- iii) Allow incoming IP for Mexcomm Bulk Gateway at port 7001

2.0 Sending Bulk SMS

In order to push Bulk SMS to MBG, you have to initiate a request via HTTP POST/GET method to this URL

<http://bulk.ezlynx.net:7001/BULK/BULKMT.aspx>

Parameter	Details	Example
User	Username that has been assigned to you during setup phase.	Mexcomm
Pass	The password that has associated to your MEXCOMM Account	Mexcomm123
Msisdn	Mobile Number that you want to send a message to (MSISDN must start with country code)	60128899001
Body (MUST URL Encoded)	The body text of the message.	Hello Mexcomm
smstype	Type of SMS. (Refer to Appendix B for details)	TEXT
*WAPURL (MUST URL Encoded)	*Applicable for WAP Push URL Only	http://www.mexcomm.net
*Sender (MUST URL Encoded)	Sender ID <i>(Please notice that Malaysia Maxis Prefix does not support Sender ID)</i>	MEXCOMM1234
*ServiceName	Once DN return, it will forward to your DN-URL	Mexcomm
**Telco	Specific local bulk provider base on MNP Maxis Celcom Digi	MAXIS

* Optional Parameters

** Optional Parameters and only available for Malaysia MSISDN

2.1 Sample Parameter

Single Recipient (With Sender)

<http://bulk.ezlynx.net:7001/BULK/BULKMT.aspx?user=XXXX&pass=XXXX&msisdn=60129900118&body=testing&smstype=TEXT&Sender=MEXCOMM&Telco=MAXIS>

Multiple Recipients (Without Sender). Separate each recipient with semi-colon (;)

<http://bulk.ezlynx.net:7001/BULK/BULKMT.aspx?user=XXXX&pass=XXXX&msisdn=60129900118;60129900119;60167788001&body=testing&smstype=TEXT>

Wap Push

<http://bulk.ezlynx.net:7001/BULK/BULKMT.aspx?user=XXXX&pass=XXXX&msisdn=60129900118&body=WapTitle&smstype=WAPPUSH&wapurl=http%3a%2f%2fwww.mexcomm.net>

2.2 Http Response Result

A response will return in tag format for each request initiated.

If the transaction is successfully received by MBG, you'll get a response like below:-

Single Recipient

```

HTTP/1.1 200 OK
Content-Length: 51
Content-Type: text/html

<MEXCOMM><STATUS>SUCCESS</STATUS><BR />
<SMS>1</SMS><BR />
<MSGID1>80121181818189900118+60129900118</MSGID1></MEXCOMM>
    
```

Multiple Recipients

```

HTTP/1.1 200 OK
Content-Length: 78
Content-Type: text/html

<MEXCOMM><STATUS>SUCCESS</STATUS><BR />
<SMS>3</SMS><BR />
<MSGID1>80121131313139900118+60129900118</MSGID1><BR />
<MSGID2>80121080808089900119+60129900119</MSGID2><BR />
<MSGID3>80121090909017788001+60167788001</MSGID3></MEXCOMM>
    
```

Fail Transaction

```

HTTP/1.1 200 OK
Content-Length: 41
Content-Type: text/html

<MEXCOMM><ERRORCODE>0005</ERRORCODE><BR />
<ERROR>INVALID SMS TYPE</ERROR></MEXCOMM>
    
```

Tag	Details	Example
STATUS	SMS Status	SUCCESS
SMS	Total of SMS sent	167
MSGID (length 20-25)	Unique transaction ID for this SMS tied with mobile number	80121002828289900881+60129900881
ERROR	Error Description(Refer to Appendix C)	INSUFFICIENT CREDIT

3.0 Formatting UDH Body

3.1 Operator Logo

The Mobile Operator Code (MOC) will be automatically inserted based on the telcoid parameter.

Example:

```
0605041582158200480E01014809B0001DFF780000A816CC000300F00001E00040003A00200
00000040001000F00000C00040001001F0000020094000192110000010094000192010000060
0B40001000F000008000A00013F0DC000081C0A0005409F8000071472000B7F83C000009402
00043F00C000004C14001F000380000027E800078E0F800
```

3.2 Mono Ringtone

Example:

```
06050415811581024A3A58C0C0C0C0C0C4041EA716934D515610428AD08514568428A27421
4513A10A288D08514468428934C210515610428AD08514568428A274214511A10A289D08514
468428934C210515610224AD0851256042892B42144936108249D085124E84289274214493A1
0A249D08512450000
```

Important Note:

If the ringtone length exceeds 1 SMS, you may need to delimit it with a ':' colon delimiter. Each part is limited to 140 octets

Example:

```
0B0504158115810003000201024A3A69CDDD9595D18DA1A5B1900401C8D8E4936289B1269
8618A30C49A628BB126984D8A26C49A618628C312698A2EC49A6156289B12698618A30C49
A628BB12698558A26C49A618628C312698A2EC49A6186289B12698618A30C49A628BB1269
8618A26C49A618628C312698A2EC49A6136289B12698618A30C49A628BB12:0B0504158115
8100030002026984D8A26C49A618628C312698A2EC49A6136289B12698618A30C49A628BB1
26984D8A26C49A618628C312698A2EC49A6156289B12698618A30C49A628BB12698558A26
C49A618628C312698A2EC49A6186289B12698618A30C49A628BB12698618A26C49A618628
C312698A2EC49A6136289B12698618A30C49A628BB1269
```

3.3 Picture Message Without Text

Example:

```
0B0504158A158A00030003013002010000481C01000AABAAAAAAAE28000D5F55555555
600000AAAAAAAE00001D557D5555555600003AAB83AAAEAAAA0000555700D557D5
560001AABE002AAAFEAE001F57F3001D5555DC54FAF980800EAAAAAE80F40E0040415555
560000E002080EAAAAB00000C0021803D555580000E00210007AAAAC0000604:0B0504158
A158A0003000302210003FD556000020E2100020FEAB8000300411801007F5D000300810801
004FFA00010181000100C07F0000830080000E00000007E10C00307E00000003838600E066
000000564181030183551002AE2000FE0F022AA155541C00057C03004AAA088F83FF800300
A54018D1FF40100100700018180003E00100F0001010000:0B0504158A158A00030003036000
100F
```

3.4 Picture Message With Text

Example:

0B0504158A158A00030003013002010000481C01000AABAAAAAAAAAAE28000D5F5555555555
600000AAAAAAAAAAAAE00001D557D55555555600003AAB83AAAEAAAA0000555700D557D5
560001AABE002AAAFEAE001F57F3001D5555DC54FAF980800EAAAAAE80F40E0040415555
560000E002080EAAAAB00000C0021803D555580000E00210007AAAAC0000604:0B0504158
A158A0003000302210003FD556000020E2100020FEAB8000300411801007F5D000300810801
004FFA00010181000100C07F00008300800000E00000007E10C00307E00000003838600E066
000000564181030183551002AE2000FE0F022AA155541C00057C03004AAA088F83FF800300
A54018D1FF40100100700018180003E00100F0001010000:0B0504158A158A00030003036000
100F00000465666768

Note:

Rich content(WAP Push) should also be formatted in UDH Binary mode.

Legend:

- Red Part:** 30 – format version (always set to 30)
02 – OTA bitmap indication
01 00 – Item length in hex indication (is always 01 00 hex equivalent to 256 bytes)
- Purple Part:** 00 – Message text type indication (Length is less or equal to 110 bytes)
00 04 – Item length in hex (Length = 4)

For sending 8-bit messages

Blue Part : UDH

Red Part : Picture Message type set

Purple Part : Text in the picture message

4.0 Credit Balance Enquiry

There are 2 ways for you to request your credit balance.

- i) Mexcomm Administrator Login Page
- ii) Initiate HTTP POST/GET to Mexcomm Bulk Gateway
 - <http://bulk.ezlynx.net:7001/BULK/CheckBalance.aspx>

Sample Parameter:-

<http://bulk.ezlynx.net:7001/BULK/CheckBalance.aspx?user=XXXX&pass=XXXX>

A response will return in tag format.

If the transaction is successfully received, you'll get a response like below:-

SUCCESSFUL RETRIEVED

```
HTTP/1.1 200 OK
Content-Length: 43
Content-Type: text/html
```

```
<MEXCOMM><STATUS>SUCCESS</STATUS>
<BALANCE>12310</BALANCE></MEXCOMM>
```

FAIL TO RETRIEVE

```
HTTP/1.1 200 OK
Content-Length: 43
Content-Type: text/html
```

```
<MEXCOMM><ERRORCODE>0001</ERRORCODE>
<ERROR>AUTHENTICATION FAILED</ERROR></MEXCOMM>
```

5.0 DELIVERY NOTIFICATION

DN will be forwarded to your DN-URL automatically if you have register ServiceName with Mexcomm, subject to SMSC traffic availability. You need to submit Server IP, Server Port, DN URL PATH and HTTP Method to Mexcomm in order to use this service.

YOUR DN-URL PATH SETTINGS

Server	Value
Server IP	202.99.99.99
Server Port	80
DN URL PATH	/Receive_DN.php
HTTP Method	Post/Get

DN HTTP PARAMETERS

Parameter	Value	Description
Status	R	Only R and F will be forwarded.
MsgID (length 20-25)	80121131313138899001	Unique transaction ID for this SMS
ServiceName	mexcomm	Service Name that registered with Mexcomm Bulk GW
MSISDN	60128899001	Phone Number of receiver

Please note that there will be no retry or resend on our side if your server fail to receive DN due to network / server problem.

6.0 BULK WEBSITE REPORT

For SMS transaction status and summary, you can check at

<http://www.ezlynx.net/MexcommDashboard>

SMS Status	Status Name	Description
S	Sent	<p>The message has successfully sent out and acknowledged by SMSC</p> <p>If the user's mobile has been switched off or out of coverage area, it will be pending delivery for up to 24 hours.</p>
R	Received	<p>The message has successfully received by the user's mobile.</p> <p>DN is not guaranteed because SMSC does not guarantee delivery report.</p>
F	Failed	<p>The message has been failed to send out. There would be no refund for prepaid user.</p> <p>This could be due to :</p> <ul style="list-style-type: none">- Mobile is out of coverage for more than 24 hours.- Mobile is switched off for more than 24 hours.- Mobile storage is full for more than 24 hours.- Mobile number does not exist or is barred by telco.

APPENDIX A ASP CODE EXAMPLE

```
Dim objXMLObject
Dim strReceivedData
Dim lngTimeout
Dim strURL
```

```
lngTimeout = 50000 ' In milliseconds
```

```
Set objXMLObject = CreateObject("Msxml2.serverXMLHTTP.4.0")
objXMLObject.Settimeouts lngTimeout , lngTimeout , lngTimeout, lngTimeout
```

```
strURL = "http://bulk.ezlynx.net:7001/BULK/BULKMT.aspx?user=XXXX&pass=XXXX
&msisdn =60129900118&body=4F60597D5417FF1F&smstype=UTF8&sender=Mexcomm123"
```

```
oXMLObject.Open "GET" , strURL , False
oXMLObject.Send
strReceivedData = oXMLObject.ResponseText
set oXMLObject = nothing
```

```
if InStr(strReceivedData , "SUCCESS") = 0 Then
    'do error code handling
    Response.end
else
    'do success code handling
    Response.end
end if
```



MEXCOMM BULK GATEWAY SYSTEM

Rev 2.3

APPENDIX B SMS TYPE

SMS TYPE	Description	Example
TEXT	Plain Text (160 char per sms)	Hello+ World (Hello World) URL Encoded Value
UTF8	Chinese Text (70 char per sms)	4F60597D5417FF1F (你好吗?) Unicode URL Encoded Value
RTNK *Future	Ring Tone need to be Hex-encoded RTTL format.	06050415811581024A3A58C0C0C0C0C0C0C04041EA716934D515610428AD08514568428A274214513A10A288D08514468428934C210515610428AD08514568428A274214511A10A289D08514468428934C210515610224AD0851256042892B42144936108249D085124E84289274214493A10A249D08512450000
OLNK *Future	Operator Logo needs to be Hex-encoded Bitmap format.	0605041582158200480E01014809B0001DFF780000A816CC00030F00001E00040003A00200000000040001000F00000C0004000101F00000200940001921100000100940001920100000600B4000100F000008000A00013F0DC000081C0A0005409F8000071472000B7F83C00000940200043F00C000004C14001F000380000027E800078E0F800
PMNK *Future	Picture Message need to be Hex-encoded Bitmap format.	0B0504158A158A00030003013002010000481C01000AABAAAAAA AAAE28000D5F555555555600000AAAAAEEEEEE00001D557D 5555555600003AAB83AAAEAAAA0000555700D557D5560001AAB E002AAAFEAE001F57F3001D5555DC54FAF980800EAAAAE80F 40E00404155555600000E002080EAAAAB00000C0021803D55558 0000E00210007AAAAC0000604:0B0504158A158A0003000302210 003FD556000020E2100020FEAB8000300411801007F5D00030081 0801004FFA00010181000100C07F00008300800000E00000007E1 0C00307E00000003838600E066000000564181030183551002AE2 000FE0F022AA155541C00057C03004AAA088F83FF800300A5401 8D1FF40100100700018180003E00100F0001010000:0B0504158A1 58A00030003036000100F
WAPPUSH	WAP PUSH for Phone	http%3a%2f%2fwww.mexcomm.net (http://www.mexcomm.net) URL Encoded Value

APPENDIX C

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	INSUFFICIENT CREDITS	You have run out of credits. Only applicable to prepaid accounts.
0005	INVALID SMS TYPE	Your SMS TYPE is not supported.
0006	EXCEEDED BODY LENGHT	Your SMS body has exceeded the limit 900
0007	INVALID MSISDN	Your MSISDN format is wrong.
0008	MISSING PARAMETER	One or more required parameters are missing.
0009	FILTERED MSISDN	The Content Provider shall not send marketing messages to a mobile customer who has requested not to receive any marketing messages.
0010	MAXIMUM MULTIPLE DESTINATION NUMBER EXCEEDED	* Applies only to multiple post URL The gateway only supports up to 20 multiple destinations per HTTP POST at the moment.
0011	SENDER MASKING IS NOT ALLOWED	Please register this sender ID with our administrator *subject to availability
9999	INTERNAL SERVER ERROR	Please contact administrator

- End of document -