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# SMS Engine Basic Edition

version 5.2

## Manual for System Integrator and Software Developer

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## **ACKNOWLEDGEMENT**

We like to extend our appreciation to Mr. Lai Yong Sing (a student of UNIVERSITY PUTRA MALAYSIA) who has contributed to the development of the SMS Engine Basic Edition (version 5).

## **REVISION HISTORY**

| <b><i>EDITION</i></b> | <b><i>ISSUED DATE</i></b>          | <b><i>REMARK</i></b>                                    |
|-----------------------|------------------------------------|---|
| 1 <sup>st</sup>       | 28th of April, 2006                | Draft release   |
| 2 <sup>nd</sup>       | 22 <sup>nd</sup> of July, 2006     | Date, time of message received by SMSC                  |
| 3 <sup>rd</sup>       | 11 <sup>th</sup> of October, 2006  | Release version 3.6                                     |
| 4 <sup>th</sup>       | 8 <sup>th</sup> of December, 2006  | System Requirement, Linux and PHP                       |
| 5 <sup>th</sup>       | 13 <sup>th</sup> of December, 2006 | Release version 3.9                                     |
| 6 <sup>th</sup>       | 8 <sup>th</sup> of August, 2007    | E-mail address of support revised                       |
| 7 <sup>th</sup>       | 24 <sup>th</sup> of July, 2008     | Release version 5                                       |
| 8 <sup>th</sup>       | 31 <sup>st</sup> of December, 2008 | Added "Frequently Asked Questions" and "Knowledge Base" |
| 9 <sup>th</sup>       | 9 <sup>th</sup> of January, 2009   | Version 5.2 is released                                 |

## **INTRODUCTION**

MOBITEK SMS Engine is part of the SMS Gateway Development Kit (SMS GDK). SMS GDK is completely free of any registration, licensing or deployment fees. It may be deployed freely for use with any software built by software developer or integrated by system integrator, whether the software is commercial or not. It is given for free when GSM modem is purchased. Therefore, MOBITEK System Sdn. Bhd. does not provide any support nor training to system integrator or software developer (SI/SD) on the use of MOBITEK SMS Engine.

**SMS Engine** is a Windows application that sends and receives SMS. System integrator and software developer (SI/SD) do not need to write any code to build a SMS Gateway. The **SMS Engine** uses MS Access database – “SMSEngine5.mdb” to store incoming SMS, and to check if there is any pending SMS to be send out. SI/SD only needs to insert record into database to send out SMS, and retrieve record from database to read SMS. The **SMS Engine** has taken care all SMS transactions.

## **FEATURE of SMS ENGINE BASIC EDITION**

1. **Rapid Development:** no need to waste time in developing a programme to handle incoming and outgoing SMS. Install the SMS Engine, establish connection with the database – “**SMSEngine5.mdb**” in order to send and receive SMS.
2. **SIM Unlock:** enter the PIN, and the SMS Engine will unlock the SIM card.
3. **Polling:** set the frequency of database polling – this will control the speed of the sending and receiving SMS.
4. **Delivery Status Report:** a report will accompany with each outgoing SMS to report whether the SMS is delivered or not.
5. **Routing:** able to configure multiple mobile number prefixes (by comma separated). For example, if the GSM modem uses *Maxis* SIM card, in order to enjoy low SMS rate, outgoing SMS can be routed to these mobile numbers with prefixes “**+6012,012,+6017,017,+60142,0142**”
6. **Direction:** to speed-up the broadcast, SMS Engine can be configured to send SMS only.
7. **Re-branding:** SI/SD can change the name of the SMS Engine.
8. **Query Balance:** if prepaid is used, the credit balance can be queried.
9. **Reload:** if prepaid is used, a top-up can be performed.

## **REQUIREMENT**

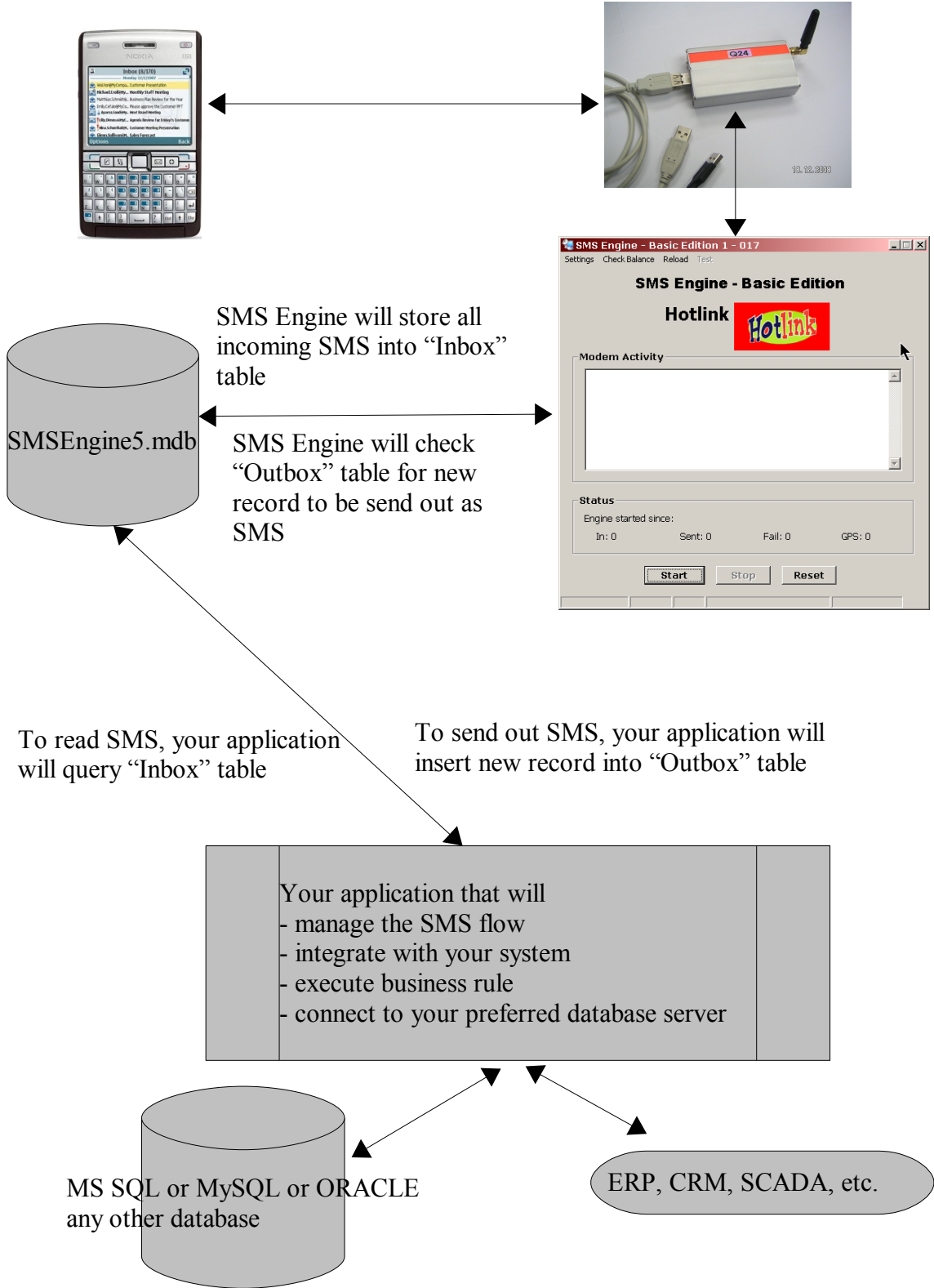
1. SI/SD must posses knowledge of:-
  - a) Database programming (ODBC, OLEDB, ADO, ADO.net);
  - b) SQL statement;
2. GSM modem **Type SGDK** supplied by MOBITEK Sysyem
3. SIM card
4. PC running on any one of these operating systems:-
  - a) *Windows 2000* Service Pack 4
  - b) *Windows XP Home / Pro* Service Pack 2 or later
  - c) *Windows Server 2003* Service Pack 1 or later

**NOTE: MS Access is NOT compulsory in order to run SMS Engine Basic Edition**

## **LIMITATION**

1. SMS cannot be longer than 160 characters length.
2. SMS must be in text format, cannot be in Chinese, Arabic, etc.
3. *Windows Vista* is not tested.

**FLOW CHART**



## INSTALLATION

1. Read the installation guide in the CD to install and configure the GSM Modem.
2. Run "Setup.exe" (from CD) to install the SMS Engine.

**WARNING:** There is no download link on our web site, please make a duplicate copy of the CD.

## CONFIGURATION

1. Click on **Setting** then choose **SMS Modem Setting**.



## 2. Configure the modem.

**SMS Modem Setting**

**SIM Setting**

SIM Card No. [0176096718] PIN [ ]

**Modem**

COM Port [2] Poll [5] seconds

Delivery Status Report

**Routing**

Enable

Pre-fix of mobile number (seperated by comma):  
[+6012,012,+6017,017,+60142,0142]

**Direction**

2 way  
 1 way- Read SMS  
 1 way- Send SMS

[Save Setting] [Exit]

**SIM Setting**

SIM Card no: also known as MSISDN  
 PIN: to unlock SIM operator depending on the number

**Modem**

COM: Enter the port number which the GSM Modem is connected to the PC

Poll: Set how frequent the SMS Engine should access the database. If you set it to 3 seconds, then the SMS Engine will read incoming SMS, store into Inbox and query the Outbox to send out SMS in every 3 seconds.

Delivery Status Report: If checked, SMS Engine will check for the report for each outgoing SMS.

**Routing**

Check "Enable" to instruct SMS Engine to route outgoing SMS according to the prefixes. It accepts 1 prefix or more prefixes (seperated by comma).

E.g. The modem uses Maxis SIM card, to enjoy low SMS rate, the outgoing SMS must only be send to mobile numbers having these prefixes:  
**+6012,012,+6017,017,+60142,0142**

Uncheck "Enable" to send SMS to all numbers.

**Direction**

Set the GSM modem to 2 way, 1 way read only, or 1 way send only. If you set it to 1 way read, the SMS Engine will only read incoming SMS and will not send out.

## 3. When configuration is finished, click "Save Setting" button.

4. To start the SMS Engine, click "Start" button.

The screenshot shows the 'SMS Engine 1 - 717-6096718' window. It features a menu bar with 'Settings', 'Check Balance', 'Reload', and 'Test'. The main area displays 'SMS Engine Hotlink' with a logo. Below this is a 'Modem Activity' section with a scrollable text area. At the bottom, there is a 'Status' section showing 'Engine started since:' with four counters: 'In: 0', 'Sent: 0', 'Fail: 0', and 'GPS: 0'. Below the status are three buttons: 'Start', 'Stop', and 'Reset'.

**Check Balance**  
To check credit balance of your account

**Reload**  
To reload or top-up your account

**Test**  
To send out a test SMS to see if SMS Engine is properly configured

**Fail**  
Fail Message will increase one if the SMS Engine fail to send out a message

**GPS**  
This feature is not available. It is only available for Modem Type VTDK. Please contact us if you are interested.

**Sent**  
Sent Message will increase one if the SMS Engine sent out a message

**In**  
Incoming Message will increase one if the SMS Engine receive a message

**Start**  
Engine will check the "outbox" table for any outgoing SMS to be send out and any incoming SMS will be insert into "inbox table"

**Stop**  
To stop the SMS Engine

**Rest**  
To reset all counters to 0

## **DATABASE STRUCTURE**

1. Database name: SMSEngine5.mdb

**NOTE: You do not need to install MS Access**

2. Only 2 tables can be used for integration:-

- a) Inbox – SMS Engine stores incoming SMS
- b) Outbox – SMS Engine will retrieve records and send out SMS

**WARNING: DO NOT touch other tables. If you do so, then SMS Engine will fail to run properly**

3. Only 2 tables can be used for integration, Inbox and Outbox.

## **INBOX TABLE**

To read incoming SMS, SI/SD's application connects to the database, query the Inbox table where status of the message is "New". After the query, SI/SD's application change the status from "New" to "Read" or "Old".

| <b>Field name</b> | <b>Data Type</b> | <b>Description</b>   | <b>Remarks for System Integrator</b>   |
|-------------------|------------------|--|--|
| MsgID             | Long             | Incoming SMS unique identifier key.  | Auto number. Reserved. Do not modified.  |
| Message           | Text (255)       | Incoming SMS. Maximum of 160 characters.   | Reserved. Do not modified.   |
| Mobile            | Text (50)        | Sender Mobile number of incoming SMS .   | Reserved. Do not modified.   |
| Status            | Text (50)        | Status of incoming SMS.  | Status = "New" for new SMS<br>System integrator can changed it to "Read", "Old" etc. |
| StatusID          | Text (50)        | Incoming SMS status identifier key.  | Default is "0". System integrator can assigned a status ID.                          |
| DateTime          | Date/Time        | Date and time of incoming SMS received by SMSC. It is <b>NOT</b> the date, and time of the PC. | Reserved. Do not modified.   |
| Modem             | Text (50)        | Modem that receives incoming SMS.  | Reserved. Do not modified.   |

**WARNING: All fields are reserved. System integrator cannot rename nor delete the fields or else the SMS Engine will malfunction.**

**Green coloured field: System integrator can change the field value (but not the the field name)**

### **To read all new SMS**

**Select \* from Inbox where Status = 'New'**

### **To change the status of new SMS to "read"**

**Update Inbox Set Status = 'Read' Where Status = 'New'**

or

**Update Inbox Set Status = 'Read' Where MsgID = 'ID of the message that SI/SD is processing'**

Alternatively, SI/SD can update the field "StatusID" after processing the message

**Update Inbox Set StatusID = 'Processed' Where MsgID = 'ID of the message that SI/SD is processing'**

## **OUTBOX TABLE**

To send out SMS, SI/SD's application inserts a new record into "Outbox" table.

### **To send out SMS**

**Insert into Outbox (Message, Mobile, DateTimeQueue, Status) values**

**('Hello!', '0163311600', mm/dd/yyyy hh:mm am, 'P')**

**NOTE: The SMS Engine will send out SMS if the date and time of the message is current (or earlier than current time) and the status is 'P'.**

| <b>Field name</b> | <b>Data Type</b> | <b>Description</b>   | <b>Remarks for System Integrator</b>    |
|-------------------|------------------|--|---|
| MsgID             | Long             | Outgoing SMS unique identifier key.  | Auto number. Reserved. Do not modified. |
| MsgRef            | Integer          | Message reference given by the SMSC  | Reserved. Do not modified.              |
| ModemID           | Text (5)         | Modem that sends out SMS.  | Reserved. Do not modified.              |
| Message           | Text (255)       | Outgoing message. Maximum of 160 characters.   | Value required to send out SMS.         |
| Mobile            | Text (50)        | Recipient's mobile number  | Value required to send out SMS.         |
| DateTimeQueue     | Date/Time        | Date and time of outgoing SMS queued to be send. Format should be <b>mm/dd/yyyy hh:mm am</b> | Value required to send out SMS.         |
| DateTimeSent      | Date/Time        | Date and time of outgoing SMS being sent.  | Reserved. Do not modified.              |
| SentStatus        | Text (1)         | Status of outgoing SMS<br>'S' – Sent<br>'R' – Retry<br>'P' – Pending                         | Reserved. Do not modified.              |
| DateTimeDevlier   | Date/Time        | Date and time of outgoing SMS being delivered to recipient.                                  |   |
| DeliveryStatus    | Text (1)         | 'D' – delivered<br>'F' – fail to deliver<br>'U' – unknown status                             | Reserved. Do not modified.              |
| Lock              | Yes/No           | Record is locked while being processed.  | Reserved. Do not modified.              |

**WARNING: All fields are reserved. System integrator cannot rename nor delete the fields or else the SMS Engine will malfunction.**

**Green coloured field: System integrator can change the field value (but not the the field name)**

## **TERMS AND CONDITIONS OF SUPPORT**

1. All GSM modems purchased from us comes with free e-mail support during warranty period (12 or 3 months).
2. We support matters related to modem, and the SMS Gateway Development Kit .
3. Support does not cover technical issues such as programming (e.g. how do I write a VB programme to send out SMS) and integration (e.g. how do I write a VB programme that talks to a database).
4. Response time to your e-mail is within 3 working days (subject to operating hours, public holidays, trainings). If you require telephone support, on-site support, and immediate response time, please write to us to obtain a quote of "Premium Support Plan".
5. All e-mail must contain the following information:
  - a) Company name
  - b) Invoice number (can also be obtained from the white label located at the back of the modem)
  - c) Description of problem (if available, attach with log file, scree capture, etc.)Send it to [support2007@mobitek.com.my](mailto:support2007@mobitek.com.my)
6. If the modem that you had purchased is more than 12 or 3 months, please sign-up for our "Annual Support Programme" to extend the support period for another 12 months. For more information, please visit our web site: [http://www.mobitek.com.my/SMSGDK/Annual\\_Support\\_Programme.html](http://www.mobitek.com.my/SMSGDK/Annual_Support_Programme.html)

## **APPENDIX 1 – LINUX AND PHP**

**SMS Engine Basic Edition** requires *Windows* OS. The recommended system architecture for *Linux and PHP*, as follows:-

- set up a Windows PC connected to your Linux machine via LAN or TCP/IP
- install **SMS Engine Basic Edition** on Windows PC
- on Linux PC, configure **ODBC Data Source Name (DSN)** that connects to the SMS Engine database, *SMSEngine5.mdb*, on the Windows PC
- on Linux PC, the PHP code will be:

```
<?php
$conn=odbc_connect(DSN, '', '');
if (!$conn)
    {exit("Connection Failed: " . $conn);}

//to send out SMS, the SQL command is
$sql="INSERT ....";

//or to read SMS, the SQL command is
$sql="SELECT ....";

$rs=odbc_exec($conn,$sql);
odbc_close($conn);
?>
```

## APPENDIX 2 – FREQUENTLY ASKED QUESTIONS

| ID  | QUESTION  | ANSWER  |
|-----|---|---|
| 180 | Is SMS Engine - Basic Edition customizable?   | The database (SMSEngine.mdb) -- yes, provided that you do not modify the schema or structure of existing tables in the database. The programme (SMSEngine.exe) -- NO.   |
| 159 | Do I need to have MS Access installed in order to use SMS Engine - Basic Edition?   | No. You do not need to install MS Access software in order to use the Engine.   |
| 77  | Instead of using MS Access database "SMSEngine3.mdb", could we use SMS Engine - Basic Edition to connect to our database directly ?         | Refer to page 3 of the manual of SMS Engine 3 ( <a href="http://www.mobitek.com.my/SMSGDK/MOBITEK%20SMS%20Engine%20version%203.pdf">http://www.mobitek.com.my/SMSGDK/MOBITEK%20SMS%20Engine%20version%203.pdf</a> ), you can use your own database. Treat "SMSEngine3.mdb" as temporary database, or as a cache.  |
| 150 | Can SMS Engine version 3 send and read SMS in Chinese characters? We tried, but it appears as question marks (???) on the receiver's phone. | SMS Engine version 3 does not support Chinese characters. We recommend SMS Engine - Enterprise Edition to you. It can send and receive Chinese SMS. It is not part of the SMS Gateway Development Kit. License fee is payable. For more information, please to our web site (link)  |
| 141 | How we can track the response time of each SMS transaction (ie. from Incoming SMS to Outgoing SMS) while using SMS Engine?                  | Compare "DateTime" field of Inbox table with "DateTimeDeliver " field of Outbox. If you compare "DateTime" field of Inbox table with "DateTimeSent " field of Outbox, then you may get "time shown in the Outbox is earlier than the Inbox which does not make sense". Outbox - DateTimeSent is PC's time Outbox - DateTimeDeliver is CELCO's time Inbox - DateTime is CELCO's time Therefore, you need to compare CELCO's time with CELCO's time. And not CELCO's time with PC's time.   |
| 140 | How to calculate / track the speed of sending SMS while using SMS Engine?   | Sort the "DateTimeSent" field in ascending order, take the time difference between 2 records (SMS), continue to do so, then sum the difference and divide by total number of records.   |
| 139 | Can I install all the kits (SMS Engine, SMS API, CLISMS, MobiGATE), and run / use all of them at the same time?                             | Please note that you can only choose to use one of the development kits because you only have 1 modem. You cannot run SMS Engine, CLISMS, SMS API all at the same time because there is only 1 modem. 1 kit will occupy 1 modem. So if you run other kits, they will not work.  |
| 125 | Does SMS API version 5 and SMS Engine v3 support sending and receiving of SMS more than 160 characters?                                     | Concatenated SMS SMS has a maximum length of 160 characters. It is a GSM standard. Only certain phones can support sending and receiving concatenated SMS (1 SMS having more than 160 characters) because the phone's firmware can do it. And not all hand phones support it. Concatenated SMS works like this: The firmware of the mobile phone breaks down a long message into smaller parts and sends each of them as a single SMS message. When these SMS messages reach the destination, the firmware of the recipient mobile phone will combine them back to one long message. The drawback of concatenated SMS is that it is less widely supported by all hand phones. However, please note that the rate for sending a concatenated SMS does not equal to 1 SMS, the CELCO (Maxis, Digi, Celcom) will still charge you for the x number of SMS. Work-Around SMS API and SMS Engine does not support concatenated SMS. However it is still able to receive concatenated SMS in its original form, ie. it does not join them together. Likewise the GSM modem that we are selling Wavecom Fastrack and iTegno also do not join them together. A work-around is you can write a software that acts like a hand phone's firmware. Do a test by sending concatenated SMS to the GSM modem, call the "ReadSMS" function, you will notice that each SMS will contain at least 2 "@" in the first 7-8 characters of each SMS. When your software encounters at least 2 "@" in first 7-8 characters, then do not display to end-user. Call the "ReadSMS" function again. If it contains 2 "@" in first 7-8 characters, and belongs to the same sender, then wait again, do not display to end-user. Repeat, until you wait for x second. And if there are no more incoming SMS, then your software will remove the "funny" characters, and join all messages together, and finally display to end-user as 1 message. |
| 78  | What is the maximum number of SMS that can be sent at one time using SMS Engine ? Could it exceed 1000?                                     | The limit of "Outbox" is the size of database. You can insert 2,000 records into "Outbox". It is queued, and then processed by SMS Engine one at a time to be send out as SMS. The SMS sending speed is depends on: GSM network traffic - if it is New Year Eve, it will have a lot of traffic, then the SMS sending will be slow. GSM network signal - if the location where modem is placed has weak GSM network signal, then the SMS sending will be slow. Internetwork traffic - sending of SMS within the same network is faster than different network. SMS software -  |

| ID | QUESTION   | ANSWER   |
|----|--|--|
|    |  | if the software is only concentrating in one task, that is to send out SMS, then it will be fast. Generally, the speed of sending out SMS via GSM modem is minimum 5 SMS per minute and maximum is 10 SMS per minute. To increase the speed, you can increase the number of GSM Modem.   |
| 43 | The MOBITEK SMS Engine version 3, can we modify or customize the code for this? We are actually using MySQL. | The SMS Engine is a Windows application, the source code is not available for you to modify. Please refer to page 3 of the manual ( <a href="http://www.mobitek.com.my/SMSGDK/MOBITEK%20SMS%20Engine%20version%203.pdf">http://www.mobitek.com.my/SMSGDK/MOBITEK%20SMS%20Engine%20version%203.pdf</a> ). You can treat the Access database as a temporary storage, and read all incoming SMS in Inbox table from the Access (SMSEngine3.mdb), then copy over to your MySQL database, then delete all records inside the Inbox table. |

## APPENDIX 3 – KNOWLEDGE BASE

| <b>ID</b> | <b>Problem</b>   | <b>Solution</b>   |
|-----------|--|---|
| 8         | 1. SMS Engine - Basic Edition not able to connect with modem 2. SMS Engine - Enterprise Edition has this error -- "modem is not connected to GSM network"  | 1. Make sure the SIM lock is disabled. Use your mobile phone to disable the SIM lock . 2. Make sure the modem is connected to the right COM port. Make sure that you have credit balance in your SIM card to send out SMS. 3. Make sure the red LED light is blinking. 4. Make sure there is network signal, remove SIM card from modem, insert into your mobile phone, and check signal strength with your mobile phone. 5. If you are using a USB adapter / converter, try not using it. Conenct modem with serial port. 6. USB or Serial port of PC maybe defective, try the modem with another PC. SIM card maybe defective, try another SIM card. If you are using 128k or 3G SIM card, try using non-3G SIM card. |
| 19        | When I start SMS engine 5 , the message is Report delivery is turning on, GPS is Off, SMS engine is running. Normally, I can receice incoming SMS but when I click the Test and key in some phone number, it doesn't work. Sim card is working fine with enough credit and sms can be sent using normal phone. May i know any possibility why this happen?   | 1. Please stop the engine, click "Setting" and check the following:- routing -- is it checked "All" box direction -- is it checked "2 way". 2. Please do not type "012-222111000", please type without "dash".Eg. "012-222111000" < WRONG "012222111000" < RIGHT 3. Please do not exceed 160 characters   |
| 14        | How to auto start and connect to the GSM modem when the server is restarted ? We need the SMS sending to be performed 24 x 7. We notice that once there is a restart event to the server, the SMS engine will have to be started and connected manually. Is there a way to overcome this ?   | The free SMS Engine version 3 not able to auto-start. Not suitable for 24x7, nor for mission critical. We recommend SMS Engine-Enterprise Edition.  |
| 13        | Assuming I have a list of 1,000 SMS pending to be sent in the SMS database, the SMS Engine successfully sends 200 SMS, then fail to send the next 100, then successful again, then fail again. The success rate is inconsistent. After resetting those failed 'F' SMS to pending 'P', some of them can be sent successfully, but some of them cannot. There is no problem either in the recipient number or the message; but the sending is just not consistent. Does it have anything to do with the device ? | Try setting the polling time to longer interval. Eg. from 1 second to 10 second. For large SMS volume (> 500 SMS per day), Wavecom Fastrack is better than iTegno. Wavecom Fastrack is more expensive than iTegno.  |
| 12        | *** SMS Engine version 3 *** 03/03/2008 10:45:38 AM Error Location: frmSMSEngine-SendSMS0 Modem: 1 Error Number: 3021 Error Description: Either BOF or EOF is True, or the current record has been deleted. Requested operation requires a current record  | This problem happens in version 3.6. The problem is fixed in version 3.7. Please upgrade to the latest SMS Engine.  |
| 10        | How we can track the response time of each SMS transaction (ie. from Incoming SMS to Outgoing SMS) while using SMS Engine?   | Compare "DateTime" field of Inbox table with "DateTimeDeliver" field of Outbox. If you compare "DateTime" field of Inbox table with "DateTimeSent" field of Outbox, then you may get "time shown in the Outbox is earlier than the Inbox which does not make sense". Outbox - DateTimeSent is PC's time Outbox - DateTimeDeliver is CELCO's time Inbox - DateTime is CELCO's time Therefore, you need to compare CELCO's time with CELCO's time. And not CELCO's time with PC's time.   |
| 9         | How to calculate / track the speed of sending SMS while using SMS Engine?  | Sort the "DateTimeSent" field in ascending order, take the time difference between 2 records (SMS), continue to do so, then sum the difference and divide by total number of records.   |
| 4         | We encoutered problem in sending SMS using mobitek?SMS Engine. The message is stuck in the outbox (in smsEngine.mdb) with status ='P'.? However, there's no? problem with receiving. FYI, it is installed on a server running Windows Server 2003.   | 1) Please refer to page 5 of the "SMS Engine Guide for System Integrator.pdf" (located in the SMS GDK CD): To send out SMS, SI/SD's application insert a new record with the following SQL statement: Insert into Outbox (Message, Mobile, DateTimeQueue, Status) values ('Hello!', '0163311600', 11/11/2004 8:00am, 'P') The SMS Engine will send out SMS if the date and time of the message is current (or earlier than current time) and the status is 'P'. Please check the column "DateTIme Queue", and ensure the date and time is current. 2) Please refer to page 3 of the "SMS Engine Guide for System Integrator.pdf": Please make sure the direction of engine is   |

| <b>ID</b> | <b>Problem</b>   | <b>Solution</b>  |
|-----------|--|--|
|           |  | set to "2 way".  |
| 6         | I have tested out the itegno modem with SMS engine program, but only can work with DIGI sim card. I tried 012, 019 sim card but all are failed to connect. | Make sure the SIM lock is disabled. Use your mobile phone to disable the SIM lock . Make sure the modem is connected to the right COM port If you are using iTegno, make sure the green light of the modem (iTegno) is blinking. If you are using iTegno, make sure the door is closed. Make sure that you have credit balance in your SIM card to send out SMS. If you are using Wavecom, make sure the red LED light is blinking   |
| 24        | How do we determine the increase the speed of sending SMS once the data is in the outbox table?  | The speed of sending out SMS depends on: 1. polling 2. direction If you want to have fast broadcast time, set polling to 1 sec (interval of checking the database), direction to "1 way". The "DateTimeSend" is the system time (time of the PC/machine).  |
| 25        | We noticed that the your outbox table uses the LIFO system to send the SMSes. Can we have FIFO instead ?   | The sending is based on the "DateTimeQueue". We do not implement any FIFO or LIFO (this could be the sorting done automatically by Access). A record with "DateTimeQueue = 23/7/2007 10:00am" will be sent first then follow by "DateTimeQueue = 23/7/2007 10:01am" If both records having the same "DateTimeQueue = 23/7/2007 10:00am", then who is first to be send out depends on how Access sort it. Suggestion, if you want to control the queue, then your need to specify the "DateTimeQueue". Place the first message with the earliest time, then last message at the latest time. Eg. if you have 1,000 messages, then record no. 1 "DateTimeQueue = 23/7/2007 10:01am" record no. 2 "DateTimeQueue = 23/7/2007 10:02am" record no. 3 "DateTimeQueue = 23/7/2007 10:03am" ... record no. 1000 "DateTimeQueue = 23/7/2007 10:01am + 1000 seconds" |
| 26        | Would it be possible to send the SMS using the MsgID rather than the MsgRef ?  | Value of "MsgID" automatically generated by Access when you insert a record. Value of "MsgRef" is given by CELCO (Maxis, Digi, or CELCOM). Suggestion, if you want to control the queue, then your need to specify the "DateTimeQueue". Place the first message with the earliest time, then last message at the latest time.  |

## **APPENDIX 4 – RELEASE NOTE**

| <b>Version</b> | <b>Features</b>  |
|----------------|--|
| 1.1            |  |
| 1.2            |  |
| 3.0            | Support devliery status report   |
| 3.0            | Routing to send SMS to designated TELCO  |
| 3.0            | Direction: 2 way, 1 way send, 1 way read   |
| 3.0            | Able to enter PIN to unlock SIM LOCK   |
| 3.0            | Support multiple GSM modems  |
| 3.0            | Using MDAC 2.8   |
| 3.5            | Using "MobitekSMSAPI3.dll" version 3.11.1  |
| 3.5            | Using MDAC 2.8 SP1   |
| 3.9            | Added "014" prefix in routing  |
| 5.0            | Added "Check Balance"  |
| 5.0            | Added "Reload"   |
| 5.0            | Added "Test"   |
| 5.0            | "GPS" table is removed from "SMSEngine5.mdb"<br>It is only available in Type VTDK  |
| 5.0.2          | Detect MDAC version  |
| 5.0.3          | "Stop" will not automatically reset counter  |
| 5.1            | Revised the rule to update delivery status; match "MsgRef" and "Mobile" and "DeliveryStatus=null"  |
| 5.1            | To fix bug -- incorrect date conversion  |
| 5.2            | By revising the rule to update delivery status, the routing logic has to be revised accordingly to handle "+6" prefix.<br>Solution: Revised the routing logic, using comma delimited instead of check box selection. |