



MyMobileAPI
mymobileapi.com

Windows Service Usage

TABLE OF CONTENTS

Assumptions	3
Database Structure	4
Database	5
User Table.....	5
Queue Table	6
Sent Table.....	7
Reply Table	8
Shortcode Table	9
Example 1	10
Example 2.....	10
Error Logging.....	11
Issue 1 - Not sending:.....	11
Issue 2 - Not receiving status updates or replies:.....	11



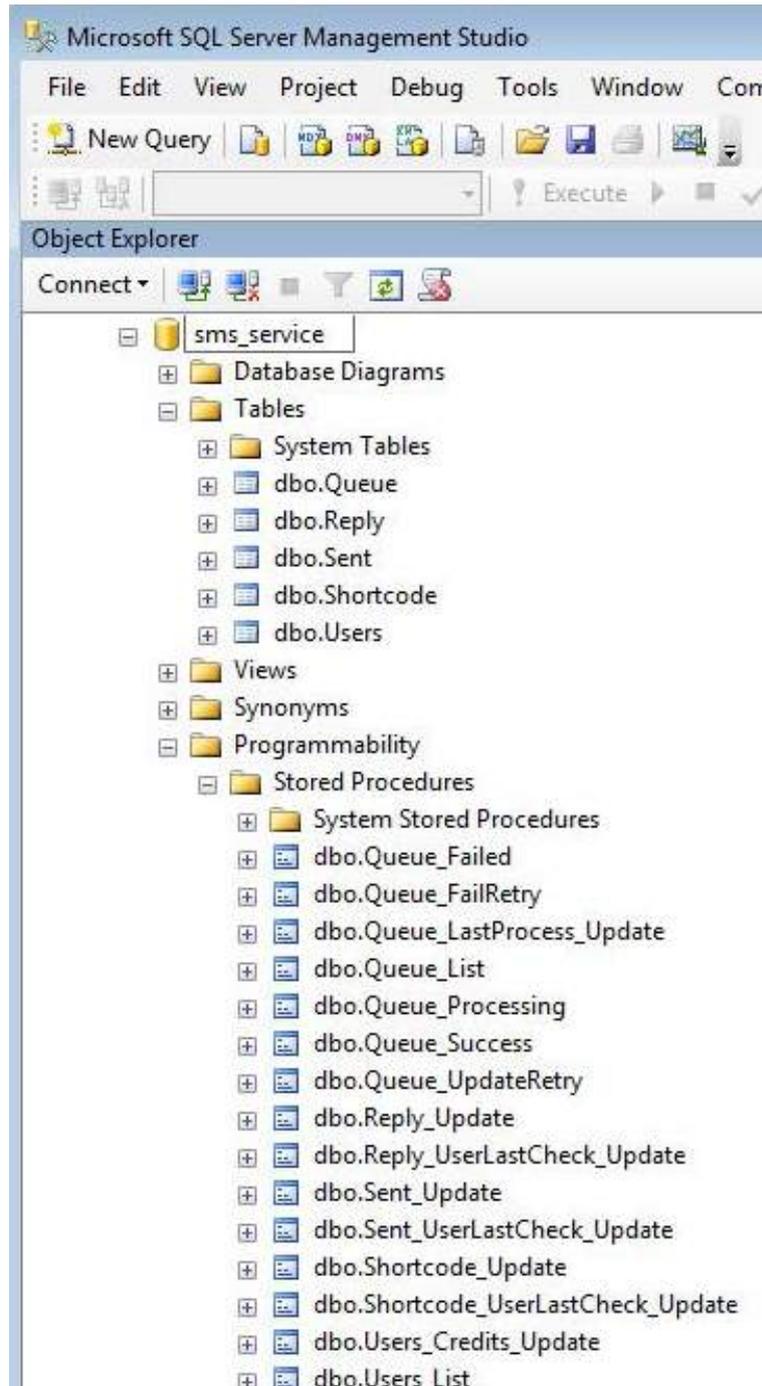


ASSUMPTIONS

The Windows Service and Database have been installed. Refer to the Windows Service Installation Guide for installation instructions https://www.mymobileapi.com/data/WindowsService_InstallationGuide.pdf

DATABASE STRUCTURE

The following explains the database and its tables and stored procedures installed as part of the Windows Service installation instructions.



DATABASE

User Table

Column	Description
UserID	Auto number. The user needs to exist on the SMS Gateway.
Username	The Username of the user on the SMS Gateway
Password	The Password of the user on the SMS Gateway
Credits	The number of SMS's remaining on the account
Active	If set to False the service will not monitor the account for any changes or send your messages
SendStartHour	This depicts when the service should start monitoring this account to send. If set to 5 then any time after 5:00 will be included.
SendEndHour	This depicts when the service should stop monitoring this account to send. If set to 17 then any time before 17:59 will be included.
GetRepliesInterval	Value in minutes. How often the system will check the gateway for new replies. If set to "0" it won't perform this operation.
GetDRInterval	Value in minutes. How often the system will check the gateway for new DR's (Delivery Receipts). If set to "0" it won't perform this operation.
GetSCInterval	Value in minutes. How often the system will check the gateway for new incoming shortcode (premium number) entries. If set to "0" it won't perform this operation.
ProcessQueueInterval	Value in seconds. How often the system will check the QUEUE table for new data to send for UserID X. If set to "0" it won't perform this operation.
MaxRepliesID	Internal value – do not touch
MaxDRID	Internal value – do not touch
MaxSCID	Internal value – do not touch
LastProcessReplies	A date depicting when last the service checked for replies. Internal value – do not touch
LastProcessDR	A date depicting when last the service checked for DR's. Internal value – do not touch
LastProcessSC	A date depicting when last the service checked for shortcodes. Internal value – do not touch
LastProcessQueue	A date depicting when last the service checked for data to send. Internal value – do not touch

Queue Table

This table defines when and what should be sent.

Column	Description
ID	Auto number. Used by the service.
UserID	Used by the service to determine if the data needs to be sent based on the rules for this user
Type	"SMS"
SenderID	This is where the sms will originate from. This may or may not be allowed depending on the settings on the SMS Gateway, country/network restrictions etc. Default = "Repliable"
NumTo	Where the sms will be sent
Data1	Message Text
Data2	
Flash	False
SendDatetime	This is the time you want the message to be sent. The message is only sent to the SMS Gateway once this field is greater than the current time.
Priority	The higher the priority the quicker the service will process this message.
Retrycount	Internal value. Starts at "-1" If it has failed after 3 attempts it gets removed and inserted into the SENT table with status "RETRYCOUNT EXCEEDED"
CostCentre	This can be used to do reporting on which business units sent messages
CustomerID	This value is purely for integration with your software. You can write data to the field which you can then use later to query. EG: If you have an application writing its own unique IDS's (GUID's) you will easily be able to tie the data back to your system.

The following fields must be populated for data to be sent successfully

- a. UserID
- b. Numto
- c. Data1

Sent Table

The sent table contains the exact same structure as the QUEUE table with the following exceptions:

Column	Description
SubmittedDatetime	When the SMS was submitted to the SMS Gateway
StatusDatetime	When the status was altered from the SMS Gateway
Status	The status of the message. For successfully submitted messages this can be "DELIVRD", "UNDELIV", "EXPIRED", "UNKNOWN"

Reply Table

This table contains all the incoming messages.

Column	Description
ReplyID	Determined by the SMS Gateway. Internal use.
ID	The corresponding ID in the SENT table (matches to an outgoing message)
UserID	The user that sent the message
ReceivedData	The incoming data
ReceivedDatetime	When the reply was received
OptOut *	If the message contains keywords indicating the client wishes to opt out then this field is set to 1 (True), else 0 (False)
CustomerID *	A user defined value that can be used for matching. Any status updates or replies relating to this message will be marked with the same CustomerID

**Fields can only be used in the most recent version of the Windows Service. Please contact support for more information*

Shortcode Table

This table contains all the incoming messages from shortcodes (premium numbers).

Column	Description
ID	Determined by the SMS Gateway. Internal use.
UserID	The user that sent the message
Shortcode	The shortcode number eg: 31234
Keyword	If the shortcode operates from a keyword then it would display it, otherwise blank
NumFrom	The number the message originated from
Data	The incoming data
Received	When the reply was received

Example 1

Careful configuration of the USERS table will let the service control how messages are being sent. The example below show such a situation.

Two user accounts with the same **Username** can be inserted into the USERS tables. Resulting in **Userid** 1 and 2 . The **Userid** record can be configured so that **Userid** 1 is restricted to sending between 8:00 and 17:59, and **Userid** 2 from 0:00 to 23:59. This allows, for example, to write important messages to **Userid** 2 which will be sent at any time of the day and bulk messages to **Userid** 1 restricting them to business hours only.

Due to the architecture of the system new columns can be added to any table for customisation. This will allow the storage of more data against each outgoing message and is useful for specific business requirements. When making these customisations, ensure that the stored procedures that refer to these tables are also updated so that data from the QUEUE will be added to the SENT tables, etc.

Example 2

The system monitors the QUEUE table based on the USERS table.

The system collects the data from the QUEUE table and once submitted to the gateway removes it and inserts the data into the SENT table.

The status in the SENT table will be "SUBMITTED". If there was an issue with the data it will still submit it, remove it from the QUEUE and insert into the SENT table. The status could vary from "data1 invalid" to "number invalid" depending on whether the data was correct.

ERROR LOGGING

The Windows Service creates a folder in the "C:\windows\system32\logging" for logging errors. Each "part" of the service creates a file which is time stamped to the hour.

Issue 1 - Not sending:

1. Is there a record in the Users table?
 - a. Is the "Active" field = 1 (true)
 - b. Is the current time (hour) greater than the SendStartHour and less than or equal to SendEndHour
 - c. Is the ProcessQueueInterval greater than 0 (field is based on seconds to poll the QUEUE table)
 - d. Is the LastProcessQueue field changing its time
2. Is there data in the QUEUE table?
3. Check the logging folder

The sending process selects from the QUEUE table, then increases the RetryCount field in the QUEUE table by 1 to show an attempt.

On success the item is:

1. First deleted from the SENT table (precautionary measure, 0 rows should be effected)
2. Inserted into the SENT table from the QUEUE table with status "SUBMITTED"
3. Deleted from the QUEUE table

On failure the item is:

1. First deleted from the SENT table (precautionary measure, 0 rows should be effected)
2. Inserted into the SENT table from the QUEUE table with a status description ("NUM invalid")
3. Deleted from the QUEUE table

If the item is attempted 3 times it will be moved by a background thread with status "RETRY EXCEEDED".

Issue 2 - Not receiving status updates or replies:

1. If there is a record in the Users table?
 - a. Is the **GetDRInterval** positive (value is minute based)
 - b. Is the **GetRepliesInterval** positive (value is minute based)
 - c. Is the **LastProcessReplies** and LastProcessDR timestamps changing