

MOBITEK™ CLISMS

version 5

Manual for System Integrator

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1. MANUAL REVISION HISTORY

EDITION	ISSUED DATE	REMARK
1 st	13 th of August, 2007	Initial release
2 nd	28 th of November, 2008	Added new section "SMS ALERT WHEN UPS RUNNING ON BATTERY"
3 rd	23 rd of September, 2009	Updated the section "CONFIGURING PRTG Traffic Grapher TO CALL CLISMS.EXE" with new version of PRTG
4 th	15 th of September, 2010	<ul style="list-style-type: none"> • Version 5.2 released • New section added – "CONFIGURING UPSMAN"
5 th	4 th of August, 2014	<ul style="list-style-type: none"> • Added "16. HOW TO TRIGGER SMS ALERT WHEN SERVER IS REBOOTED"

2. COPYRIGHT

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5. ACKNOWLEDGEMENT

We like to extend our appreciation to the following person for their contribution in revising this manual:-

1. Mr. Muhamad Faezudin bin Hairuddin, UNIVERSITY SAINS MALAYSIA

6. INTRODUCTION

Programme: Command Line Interface SMS (“CLISMS”)

API TYPE: COMMAND LINE INTERFACE (“CLI”) for Windows only

File Name: CLISMS.exe

Version: 5.2

Requirements:

1. System integrator, and software developer (“SI/SD”) must possess knowledge in using command line interface, or shell command in Windows command prompt environment.
2. Any software applications that can call external programme, or shell out to CLISMS.exe such as:
 - 2.1 Network monitoring programme – OpManager, IPServerCheck, PRTG, etc.
 - 2.2 Anti-virus programme
 - 2.3 Firewall programme
 - 2.4 Windows Services
3. The operating system must be *Windows OS* (98, ME, 2000, XP, 2003, 2008, Vista)

Command Line Interface SMS (“CLISMS”) is part of the **SMS Gateway Development Kit (“SMS GDK”)**. System integrator, and software developer can choose any development kit in the **SMS GDK** to build their own SMS Gateway.

7. RELEASE HISTORY

1. Version 5.0
 - a) Supports USSD where SI/SD can check credit balance, and reload credit.
2. Version 5.1
 - a) Will re-initialize modem if it fails to do so.
3. Version 5.2
 - a) Allow to send 1 message to a maximum of 3 mobile numbers.

8. INSTALLATION

1. Run the “setup.exe”
2. By default, the “CLISMS.exe” will be installed in “C:\” or to the designated path as specified in the installation process.
3. If necessary (e.g. in Windows Vista), configure “CLISMS.exe” to run in administrator mode.

9. COMMANDS

Commands can be executed through:

- Windows command prompt
- a software application that allows you to call CLISMS.EXE, and passing the parameters.
- Java programme

1. To send out SMS

```
clisms.exe /port=2 /to=0162211600 /msg=Alert
```

- "port" is the COM port where the GSM modem is connected
- "to" is the mobile number of the recipient (one number only)
- "msg" is the SMS to be sent out (160 character limit, and in text format only)

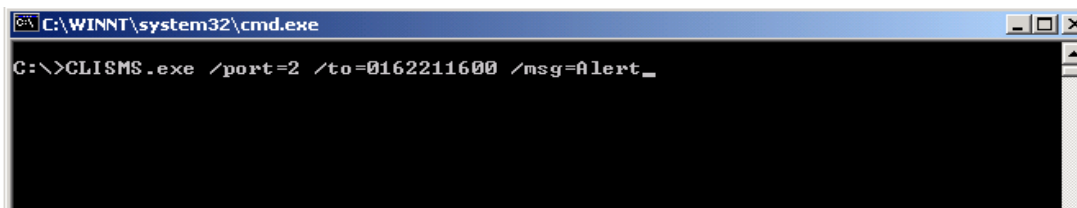


Illustration 1: CLISMS

2. To send 1 SMS to 3 numbers (maximum)

```
clisms.exe /port=2 /to=0162211600,0128877111,0197878101 /msg=Alert
```

- "port" is the COM port where the GSM modem is connected
- "to" is the mobile number of the recipient, maximum 3 numbers only, number is separated by comma
- "msg" is the SMS to be sent out (160 character limit, and in text format only)

3. To check credit balance of HOTLINK

```
clisms.exe /port=2 /ussd=*122#
```

4. To check credit balance of DIGI

```
clisms.exe /port=2 /ussd=*126#
```

5. To check credit balance of XPAX

```
clisms.exe /port=2 /ussd=*124#
```

6. To top-up credit of HOTLINK

```
clisms.exe /port=2 /ussd=*111*14 digit PIN code#
```

7. To top-up credit of DIGI

```
clisms.exe /port=2 /ussd=*123*reload coupon serial number#
```

8. To top-up credit of XPAX

```
clisms.exe /port=2 /ussd=*122*16 digit reload code#
```

Responses for all the above commands will be logged in a text file called "Log.txt". It is located at the same directory of "CLISMS.exe".

10. SUITABLE SITUATIONS

CLISMS is suitable for use in the following situations:-

1. when SI/SD wants to quickly enable their own software applications, or system to send out SMS alerts;
2. to send SMS alert to administrator when server is down, virus is detected, or network intrusion (the network monitoring programme detects the server is down, and call CLISMS.exe);
3. to send SMS alert when Windows service fails to run;
4. to send SMS alert when UPS is running on battery, that is no power supply.

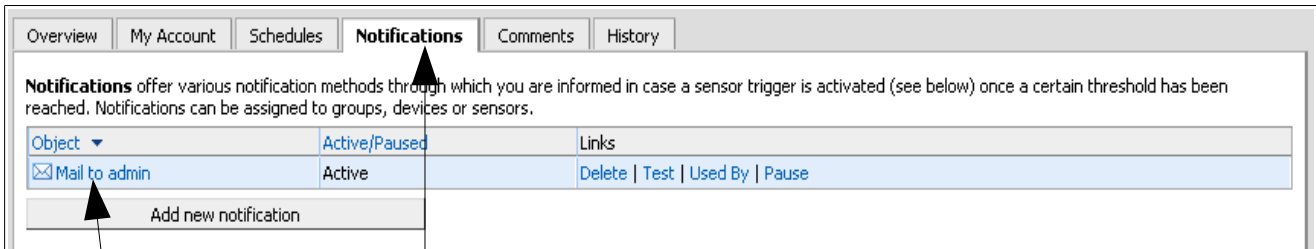
11. BENEFITS

The benefits to system integrator, and software developer in using **CLISMS** are:

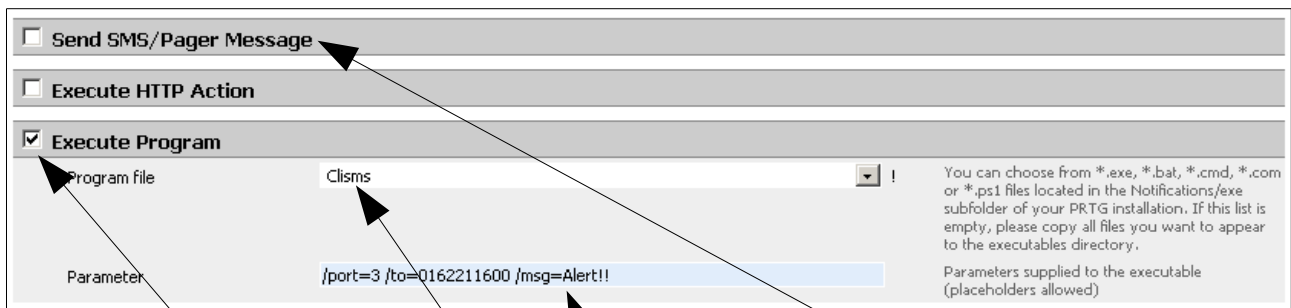
1. rapid development of a SMS Alert programme;
2. can decide who should receive outgoing message, when to send, what to send;
3. integrate *SMS Alert function* with existing software applications that support calling external programme;
4. **open source** (VB6), SI/SD can modified **CLISMS** to incorporate business rules, and process flow.

12. CONFIGURING NETWORK MONITORING TOOL

This section will explain how to use CLISMS with a network monitoring tool such as PRTG Traffic Grapher (<http://www.paessler.com/prtg>). When PRTG detects an event, it will send out SMS via CLISMS.



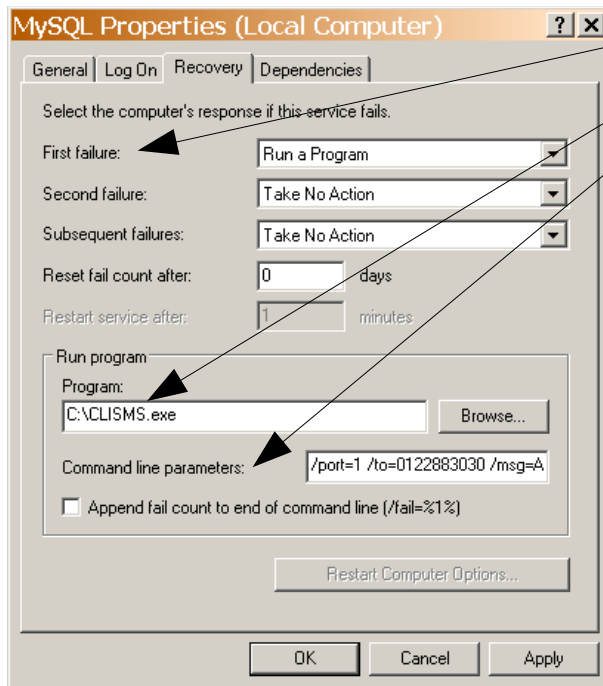
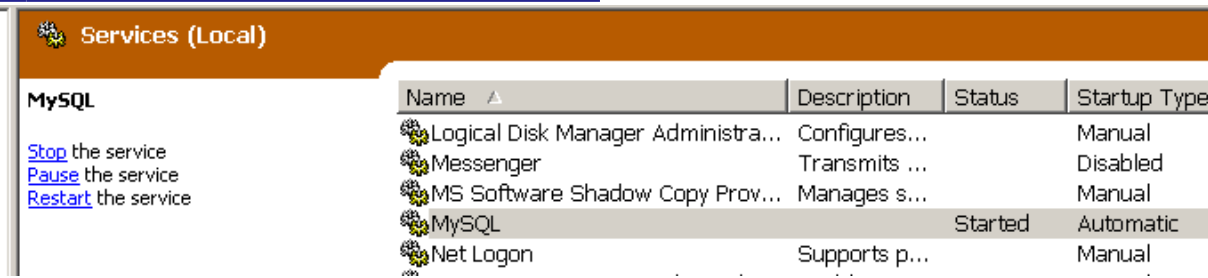
- Click on the **Notifications**.
- Click on the **Mail to admin**.



- Check the "Execute Program". (**DO NOT** select the **Send SMS/Pager Message** check box)
- In "Program file:", enter "**CLISMS**", or the location of the CLISMS.exe
- In "Parameters:", enter "**/port=3 /to=0162211600 /msg=Alert**"

Result: After configuration is done, when the sensor is triggered, a notification will be sent through SMS.

13. CONFIGURING WINDOWS SERVICE



- At "First failure:", select "Run a Program".
- At "Program:", enter "C:\CLISMS.exe"
- At "Command line parameters", enter "/port=1 /to=0122883030 /msg=Alert"

When MySQL service fails, a SMS alert will be send out to 0122883030 with message "Alert".

14. CONFIGURING UPS MONITORING TOOL

This section will guide you how to configure the UPS to send SMS alert when there is no power supply and UPS is running on battery.

Each UPS manufacturer provides their own UPS software. In this example, the UPS manufacturer is Power Kinetics , and the UPS model is BlackoutBusterTX (<http://www.powerkinetics.com.my/blackoutseries.htm>), refer to illustration 1.

The UPS software is “Powersoft TX version 1.12”, refer to illustration 2. The UPS software can be downloaded from <http://jst.cc/download.html>

The end result is like this – when there is no power supply, the UPS will run on battery and will shut down the PC in 5 minutes time. Then 4 minutes before shutting down PC, UPS will call CLISMS to send SMS alert to the hand phone number 0163311600 with message “UPS running on battery”.



Illustration 2: BlackoutBuster TX

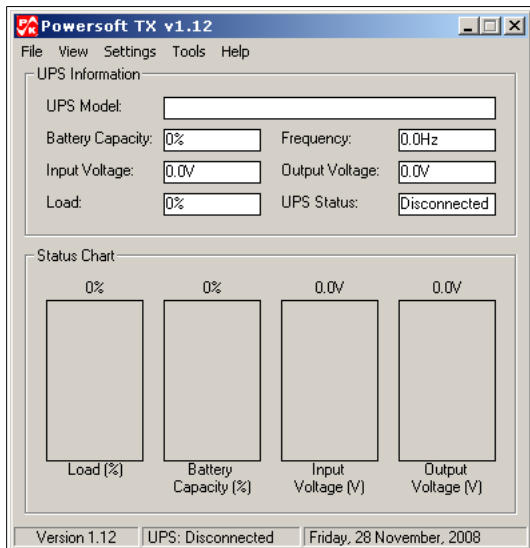


Illustration 3: Powersoft TX version 1.12

First, configure Powersoft TX to shut down PC when running on battery:-

1. To configure Powersoft TX with CLISMS, click on “Settings > Configuration”
2. At “Battery Low Shutdown”, select “Shutdown in (s)”, enter “180”. This means when there is no power and UPS running on battery until low lever battery, the UPS will shut down the PC in 3 minutes
3. At “Battery Shutdown”, check “Enable System Shutdown”, and enter “5”. This means 5 minutes before battery runs dry, UPS will shut down the PC.
4. Click “OK” to save setting.

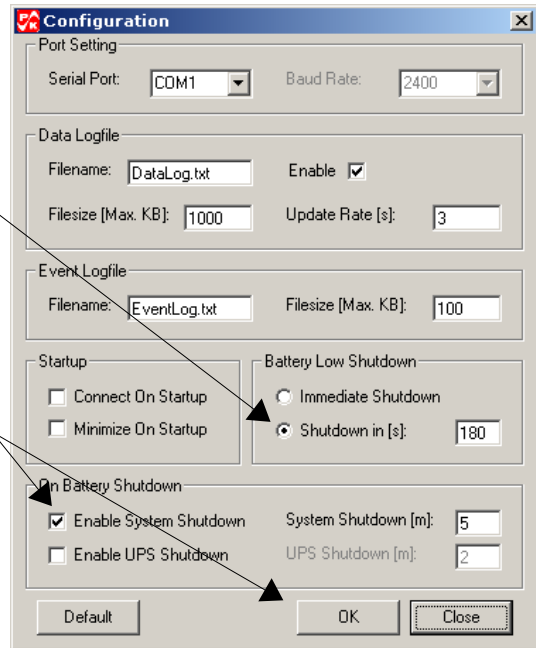


Illustration 4: Configuration

Next, configure the Powersoft TX to call CLISMS:-

1. Then click on "Tools > Special".
2. Check "Enable Job #1", enter "4", then at "Path" select the file "sms.bat".
3. Use text editor (notepad), copy the following and save as "sms.bat":-

```
clisms /port=2 /to=0163311600  
/msg=UPS running on battery!  
echo "sent"
```

4. Click "OK" button to save setting.

The end result is like this: when there is no power supply, the UPS will run on battery and will shut down the PC in 5 minutes time. Then 4 minutes before shutting down PC, UPS will call CLISMS to send SMS alert to the hand phone number 0163311600 with message "UPS running on battery".

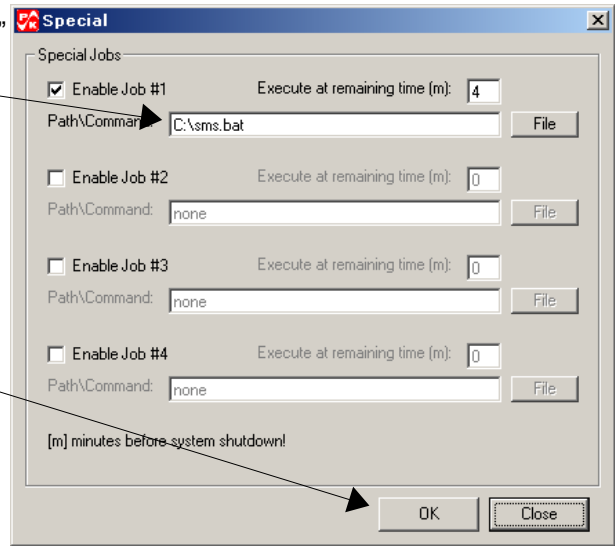


Illustration 5: Calling sms.bat

15. CONFIGURING UPSMAN

UPSMAN is a software written by GENEREX (www.generex.de). UPSMAN is a UPS management software. UPSMAN communicates with Unterinterruptible Power Supplies (UPS) and other devices via serial, USB or network interfaces in order to receive status information and measurement data.

Here is an illustration of configuring CLISMS with UPSMAN

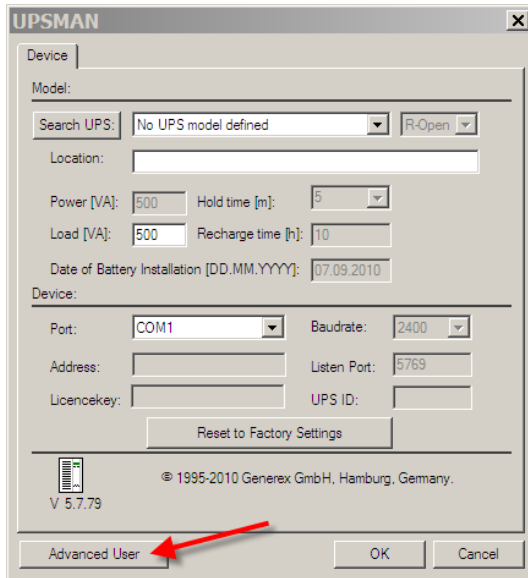


Illustration 6: Click on "Advance User"

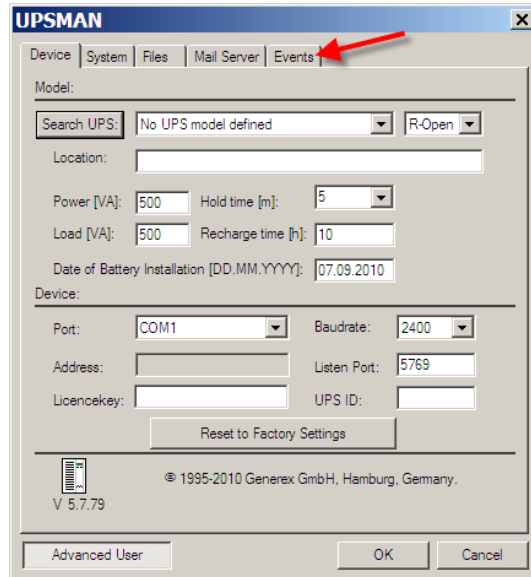


Illustration 7: Click on "Events" tab

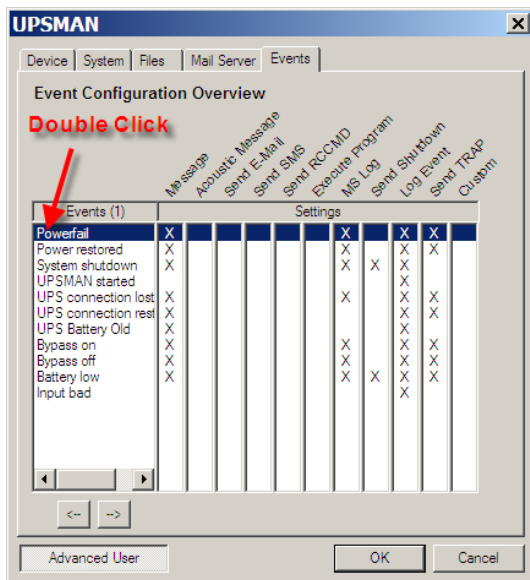


Illustration 9: Double click on "Powerfail"

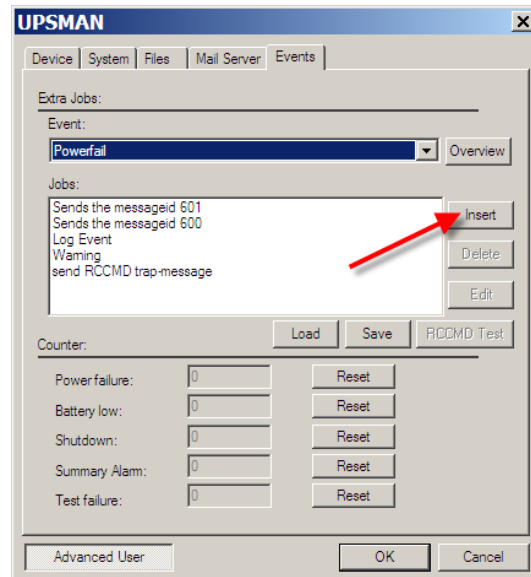


Illustration 8: Click on "Insert"

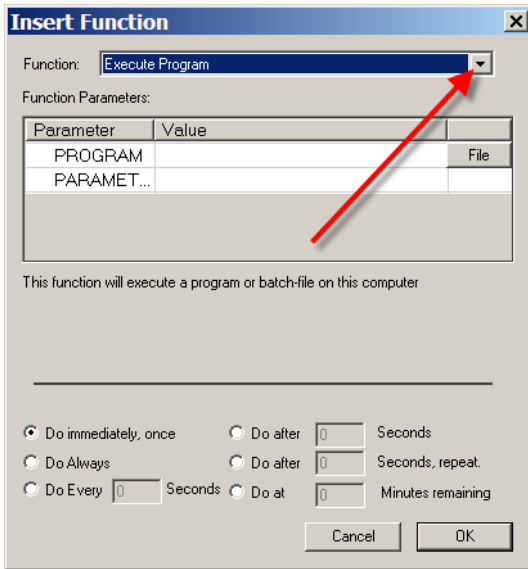


Illustration 10: Select "Execute Program"

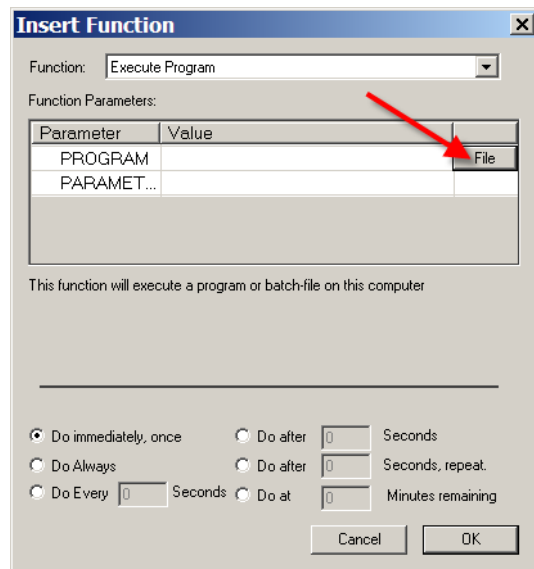


Illustration 11: Click on "File"

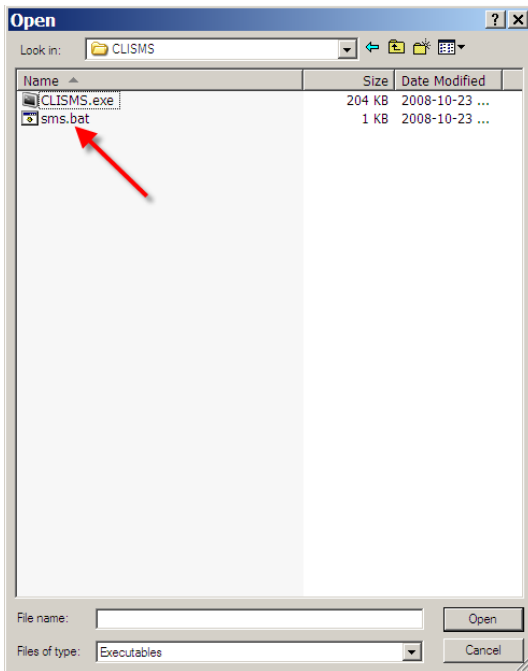


Illustration 12: Select file "sms.bat"

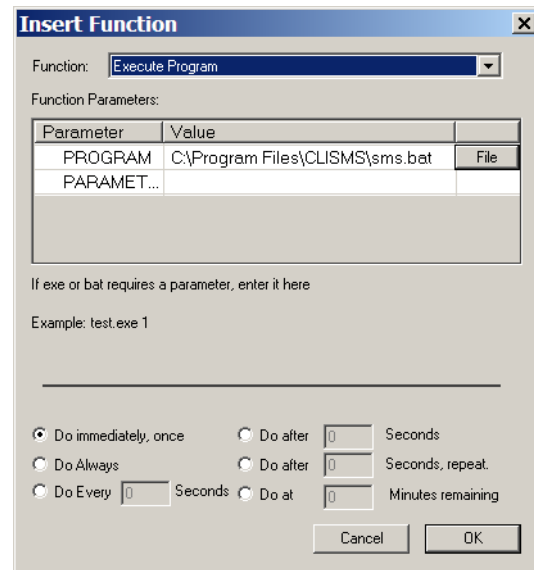


Illustration 13: "sms.bat" contains command and parameter for CLISMS.exe

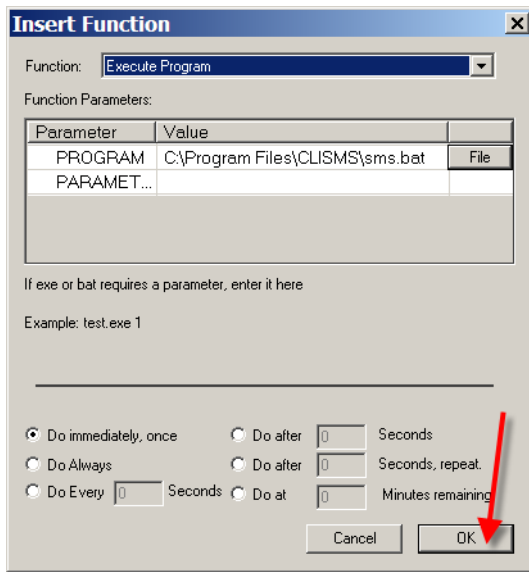


Illustration 14: Click "OK"

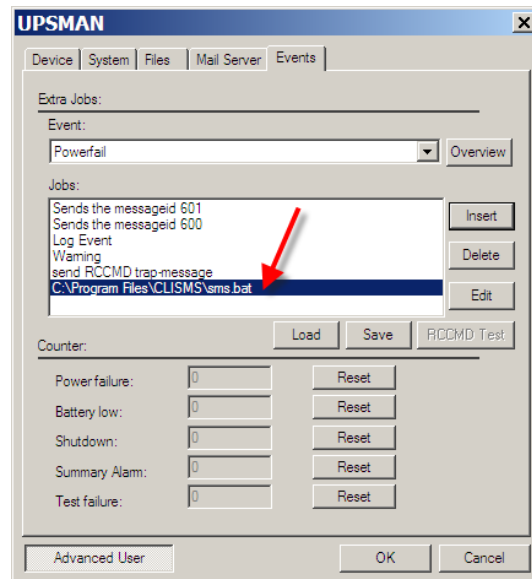


Illustration 15: When there is a power failure, sms.bat will be executed, and SMS will be send out

```

sms.bat contains:-

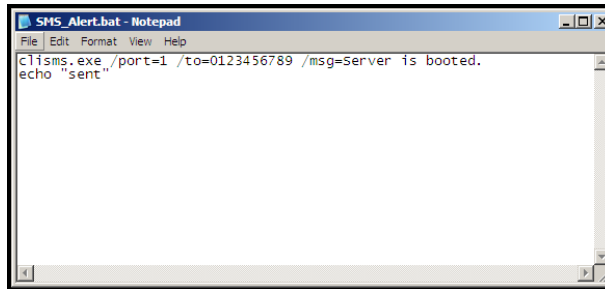
clisms /port=2 /to=0162211600 /msg=Alert! Power failure!
echo "sent"
    
```

16. HOW TO TRIGGER SMS ALERT WHEN SERVER IS REBOOTED

SMS Alert can be triggered after the server is booted with the help of script. Script contain a list of instruction for a computer. By taking advantages of this we create a script which will send SMS to designed number. This Script contain a command on sending specific message to receiver via CLISMS application and it is set to run right after the server is successfully booted.

Instruction:-

1. Install “CLISMS.exe” located inside SMS Gateway Development Kit CD, manual for installing can be read inside the CD
2. Create a new notepad files copy and paste these code inside the notepad.



```
clisms.exe /port=1 /to=0123456789 /msg=server is booted.
echo "send"
```

- * rename port number to the port number used by the GSM Modem
- * rename the number to your own number

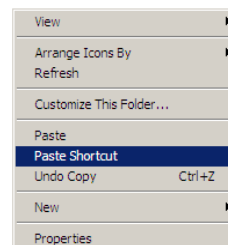
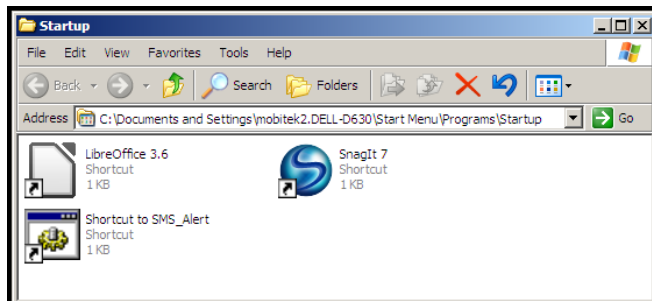
3. Save it inside the same folder of CLISMS (default is C:\Program Files\MOBITEK\CLISMS)



- * make sure the file name has “.bat” at the end (exp: “SMS_Alert.bat”)
- * make sure the file is save as type “All Files”
- * Leave the encoding to ANSI

4. Copy the files and paste it as shortcut to startup folder.

- * Window XP: “C:\Documents and Settings\%username%\Start Menu\Programs\Startup”



5. You're done! Now every times the computer booted it will run the SMSAlert.bat which will send SMS Alert to your number.

17. TERMS AND CONDITIONS

1. **CLISMS** is given free of charge. It is completely free of any registration, licensing or deployment fees. It may be deployed freely for use with any third-party software, whether for commercial purpose or not. **Therefore, no warranty nor support is provided.**
2. **CLISMS** must be used together with the GSM Modem supplied.
3. MOBITEK System Sdn. Bhd. shall not be held liable for any loss or damaged as a result of using **CLI SMS**.

18. TERMS AND CONDITIONS OF SOURCE CODE

Acknowledgement: Mr. Muhamad Faezudin Bin Hairuddin (student of UNIVERSITY SAINS MALAYSIA) has contributed to the development of this source code and programme.

1. You are allowed to use, modify, distribute, this VB code for free.
2. This source code is provided on "as-is" basis. **No warranty nor support** is provided on the use of the code.
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