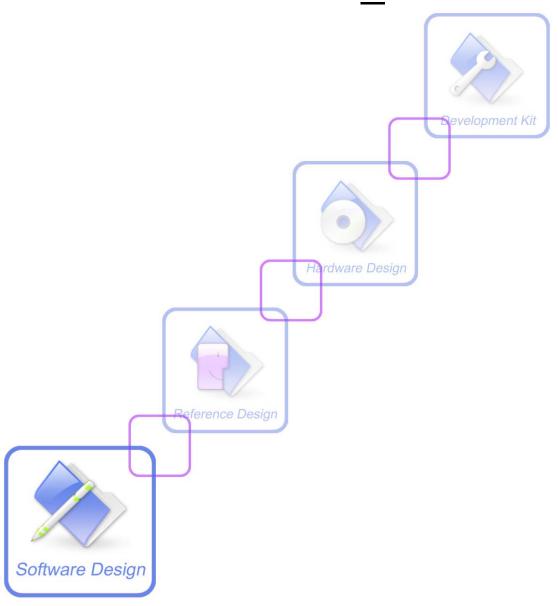


SIM900_MMS_AT Command Manual_V1.00





Document Title:	SIM900 MMS AT Command Manual
Version:	1.00
Date:	2010-11-15
Status:	New
Document Control ID:	SIM900_MMS_AT Command Manual_V1.00

General Notes

SIMCom offers this information as a service to its customers, to support application and engineering efforts that use the products designed by SIMCom. The information provided is based upon requirements specifically provided to SIMCom by the customers. SIMCom has not undertaken any independent search for additional relevant information, including any information that may be in the customer's possession. Furthermore, system validation of this product designed by SIMCom within a larger electronic system remains the responsibility of the customer or the customer's system integrator. All specifications supplied herein are subject to change.

Copyright

This document contains proprietary technical information which is the property of SIMCom Limited., copying of this document and giving it to others and the using or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights reserved in the event of grant of a patent or the registration of a utility model or design. All specification supplied herein are subject to change without notice at any time.

Copyright © Shanghai SIMCom Wireless Solutions Ltd. 2010



Version History

Version	Chapter	What is new
V1.00	Origin	



1 Introduction

This document presents the AT command of MMS operation for SIM900. This document can apply to the same series of the modules which contain MMS function, like SIM900, SIM900D, SIM900B and SIM900A.

1.1 Features

- 1. SIM900 supports sending and receiving MMS only through HTTP protocol.
- 2. Unicode (both little endian and big endian) and UTF8 are character sets supported and ASCII is supported only for English and numerals.
- 3. The maximum data size of an MMS is 300 Kbytes...
- 4. The maximum size of an image file is 300 Kbytes.
- 5. The maximum size of a text file is 15360 bytes.
- 6. The maximum number of files to be enclosed is 10.
- 7. It is necessary to input text data into modem with header of Unicode (both little endian and big endian, "FF FE" is the header for Unicode little endian and "FE FF" is the header for Unicode big endian)
- 8. It includes "MMS PUSH" in "+CMTI: …" when the received short message is a MMS push message (either M-Notification.ind or M-Delivery.ind ^[2]).
- 9. If the current received MMS push message is a concatenated message, it will include ",<m>,<n>" after "MMS PUSH". <m> is the total number of the parts of the concatenated message and <n> is the index of the current part in the whole concatenated message. For example: + CMTI: "SM",1,"MMS PUSH",2,1. In the URC, 2 means the concatenated push message include two parts and 1 means the current message is the first part. When all the parts of the concatenated push message have been received, it will prompt "+CMTI: ..." URC with "MMS PUSH" and without ",<m>,<n>". For example: +CMTI: "SM",1,"MMS PUSH"
- 10. X-profile parameters need to be configured for some MMS server, or some problems like image compression error may occur, also the x-profile address which is not configured by default should be set according to the customer's own hardware environment.
- 11. The output text from the modem is encoded with little endian Unicode, but the head of Unicode is omitted.

1.2 Reference

- [1] SIM900 AT Commands Set
- [2] wap-209-mmsencapsulation-20020105-a



1.3 Glossary

MMS	multimedia short message
URL	Uniform Resource Locator
UART	Universal Asynchronous Receiver and transmitter
PDU	Protocol Data Unit



2 AT commands

2.1 AT+CMMSCURL

AT+CMMSCURL	Set the URL of the mms center
Test Command AT+CMMSCURL= ?	Response +CMMSCURL: "URL" OK Parameter See Write Command
Read Command AT+CMMSCURL?	Response +CMMSCURL: <mmscurl> OK Parameter See Write Command</mmscurl>
Write Command AT+CMMSCURL= <mmscurl></mmscurl>	Response OK or ERROR or +CME ERROR: <err> Parameter <mmscurl> The URL of the mms center.</mmscurl></err>
Reference	Note

2.2 AT+CMMSPROTO

AT+CMMSPROTO	Set the protocol parameter and MMS proxy
Test Command	Response
AT+CMMSPROTO	+CMMSPROTO: "(0-255).(0-255).(0-255)",(0-65535)
=?	
	OK
	Parameters
	See Write Command
Read Command	Response
AT+CMMSPROTO	+CMMSPROTO: <gateway>,<port></port></gateway>
?	
	OK



	Parameters See Write Command
Write Command	Response
AT+CMMSPROTO	OK
= <gateway>,<port< th=""><th>or</th></port<></gateway>	or
>	ERROR
	or
	+CME ERROR: <err></err>
	Parameters
	< Gateway> IP address of MMS proxy.
	< Port > Port of MMS proxy.
Reference	Note

2.3 AT+CMMSCID

AT+CMMSCID Se	t the network parameters for MMS
Test Command	Response
AT+CMMSCID=?	+CMMSCID: (1-3)
	OK
	Parameter
	See Write Command
Read Command	Response
AT+CMMSCID?	+ CMMSCID: <value></value>
	OK
	Parameter
	See Write Command
Write Command	Response
AT+CMMSCID=	OK
<value></value>	or
	ERROR
	or
	+CME ERROR: <err></err>
	Parameter
	<value> network parameters, refer to AT+SAPBR</value>
Reference	Note



2.4 AT+CMMSSENDCFG

AT+CMMSSENDCF	G Set the parameters for sending MMS
Test Command AT+CMMSSENDC FG =?	Response + CMMSSENDCFG: (0-6), (0-3),(0,1), (0,1),(0-2),(0-4)
	ок
	Parameter
	See Write Command
Read Command	Response
AT+CMMSSENDC FG?	+CMMSSENDCFG:
rg:	<valid>,<pri>,<sendrep>,<readrep>,<visible>,<class></class></visible></readrep></sendrep></pri></valid>
	ОК
	Parameter
	See Write Command
Write Command	Response
AT+CMMSSENDC	ОК
FG=[<valid>][,<pri >][,<sendrep>][,<re< th=""><th>or ERROR</th></re<></sendrep></pri </valid>	or ERROR
adrep>][, <visible>][,</visible>	
<class>]</class>	+CME ERROR: <err></err>
	Parameter
	< valid > The valid time of sent MMS
	0 1 hour
	1 12 hours 2 24 hours
	3 2 days
	4 1 week
	5 maximum
	6 Not set (default)
	<pre><pri> Priority</pri></pre>
	1 normal
	2 highest
	3 Not Set (default)
	<sendrep> Whether it need deliver report</sendrep>
	<u>0</u> No (default)
	1 Yes < readrep> Whether it need receive report
	<u>0</u> No (default)



	1 Yes
	<visible> Whether it need show the sender address</visible>
	0 hide the sender address
	1 show the sender address even if it is a secret address
	2 Not set (default)
	<class> The class of the MMS</class>
	0 Personal
	1 Advertisement
	2 Informational
	3 Auto
	4 Not set (default)
Reference	Note
	Refer to [2]

2.5 AT+CMMSEDIT

AT+CMMSEDIT Enter or exit edit mode	
Test Command	Response
AT+CMMSEDIT=?	+CMMSEDIT: (0,1)
	OK
	Parameter
	See Write Command
Read Command	Response
AT+CMMSEDIT?	+CMMSEDIT: <mode></mode>
	O.V.
	OK
	Parameter
	See Write Command
Write Command	Response
AT+CMMSEDIT=<	OK
mode>	or
	ERROR
	or
	+CME ERROR: <err></err>
	Parameter VIII de la
	<mode> Whether it allows to edit MMS 0 Not allow to edit MMS</mode>
	0 1 (00 m 10 () 0 0 0 0 1 1 1 1 1 1 2 1
	1 Allow to edit MMS
Reference	Note



It includes adding and deleting receipt, downloading and deleting files, downloading title to edit MMS.

2.6 AT+CMMSDOWN

AT+CMMSDOWN	Download the file data or title from UART
Test Command AT+CMMSDOWN =?	Response +CMMSDOWN: "PIC", (1-307200), (5000-), "NAME" +CMMSDOWN: "TEXT", (1-15360), (2000-), "NAME" +CMMSDOWN: "TITLE", (1-40), (2000-) OK
Read Command AT+CMMSDOWN ?	Response ERROR
Write Command AT+CMMSDOWN = <type>,<size>, <time>[,<name>]</name></time></size></type>	Response CONNECT or ERROR or +CME ERROR: <err></err>
	Parameters <type> A string parameter which indicates type of downloaded data "TITLE": mms title data "TEXT": mms text data "PIC": mms image data <size> Size in bytes of the data to be downloaded. <time> Maximum time in milliseconds to download data. <name> The file name of the image or the text to be downloaded, including extended name. The default name for image is "image<m>.jpg" and the default name for text is "text<n>.txt". <m> and <n> are in the range of 0~255</n></m></n></m></name></time></size></type>
Reference	 Note It is strongly recommended to set the time long enough to download all the file data and make sure that the real size of the file to download is not bigger than <size>.</size> The maximum size of <name> is 40 Bytes and only ASCII code is recognized for <name>.</name></name>



2.7 AT+CMMSDELFILE

AT+CMMSDELFIL	E Delete the file of the edited MMS by file index
Test Command	Response
AT+CMMSDELFI	OK
LE=?	
Write Command	Response
AT+CMMSDELFI	OK
LE= <fileindex></fileindex>	or
	ERROR
	or
	+CME ERROR: <err></err>
	Parameter
	< fileIndex> The index of the file to be deleted in the MMS. Refer to
	+CMMSVIEW
Reference	Note
	This command is valid when it is allowed to edit MMS

2.8 AT+CMMSSEND

AT+CMMSSEND S	Start mms sending		
Test Command	Response		
AT+CMMSSEND=	+CMMSSEND: "ADDRESS"		
?			
	OK		
Write Command	Response		
AT+CMMSSEND	OK		
= <address></address>	or		
	ERROR		
	or +CME ERROR: <err></err>		
	Parameter		
	<address> a string parameter which indicates address of recipients.</address>		
Execution Command	Response		
AT+CMMSSEND	OK		
	or		
	ERROR		
	or		
	+CME ERROR: <err></err>		



Reference	Note		
	It is not allowed to input <address> when it not allowed to edit MMS</address>		

2.9 AT+CMMSRECP

AT+CMMSRECP	Add recipients
Test Command AT+CMMSRECP= ?	Response +CMMSRECP: "ADDRESS" OK
Read Command AT+CMMSRECP?	Response +CMMSRECP: the list of <addr>s OK Parameter See Write Command</addr>
Write Command AT+CMMSRECP= <addr></addr>	Response OK or ERROR or +CME ERROR: <err></err>
	Parameter <addr> a string parameter which indicates phone number or email address of recipients. The maximum length of the string is 40.</addr>
Reference	Note The maximum of recipients is 20 and this command is valid only when it is allowed to edit MMS

2.10 AT+CMMSCC

AT+CMMSCC Add copy recipients		
Test Command	Response	
AT+CMMSCC =?	+CMMSCC: "ADDRESS"	
	OK	
Read Command	Response	
AT+CMMSCC?	+CMMSCC: the list of <addr>s</addr>	
	OK	

	Parameter		
	See Write Command		
Write Command	Response		
AT+CMMSCC= <ad< th=""><th colspan="2">ОК</th></ad<>	ОК		
dr>	or		
	ERROR		
	or		
	+CME ERROR: <err></err>		
	Parameter		
	<addr></addr>	a string parameter which indicates phone number or email	
		address of copy recipients. The maximum length of the	
		string is 40.	
Reference	Note		
	The maximum of copy recipients is 20 and this command is valid only		
	when it is not allowed to edit MMS		

2.11 AT+CMMSBCC

AT+CMMSBCC Add Secret Recipients			
Test Command	Response		
AT+CMMSBCC =?	+CMMSBCC: "ADDRESS"		
	ок		
Read Command	Response		
AT+CMMSBCC?	+CMMSBCC: the list of <addr>s</addr>		
	av.		
	OK		
	Parameter		
	See Write Command		
Write Command	Response		
AT+CMMSBCC=<	ОК		
addr>	or		
	ERROR		
	or		
	+CME ERROR: <err></err>		
	Parameter		
	<addr> a string parameter which indicates phone number or email</addr>		
	address of secret recipients. The maximum length of the		
	string is 40.		
Reference	Note		
	The maximum of secret recipients is 20 and this command is valid only		
	when it is allowed to edit MMS		



2.12 AT+CMMSDELRECP

AT+CMMSDELREC	CP Delete recipients		
Test Command	Response		
AT+CMMSDELRE	+CMMSDELRECP: "ADDRESS"		
CP =?			
	OK		
Write Command	Response		
AT+CMMSDELRE	ОК		
CP = <addr></addr>	or ERROR or		
	+CME ERROR: <err></err>		
	Parameter		
	<addr> a string parameter which indicates phone number or email</addr>		
	address of recipient. The maximum length of the string is		
	40.		
Execution Command	Delete all the recipients		
AT+CMMSDELRE	Response		
CP	OK		
Reference	Note		
	This command is valid when it is allowed to edit MMS		

2.13 AT+CMMSDELCC

AT+CMMSDELCC	Delete copy recipients	
Test Command AT+CMMSDELCC =?	Response +CMMSDELCC: "ADDRESS"	
	OK	
Write Command AT+CMMSDELCC = <addr></addr>	Response OK or ERROR or +CME ERROR: <err></err>	
	Parameter <addr> a string parameter which indicates phone number or email address of copy recipients. The maximum length of the string is 40.</addr>	
Execution Command AT+CMMSDELCC	Delete all the copy recipients Response	

	ОК
Reference	Note
	This command is valid when it is allowed to edit MMS

2.14 AT+CMMSDELBCC

AT+CMMSDELBCC	Delete secret recipients	
Test Command AT+CMMSDELBC C=?	Response +CMMSDELBCC: "ADDRESS" OK	
Write Command AT+CMMSDELBC C = <addr></addr>	Response OK or ERROR or +CME ERROR: <err> Parameter <addr></addr></err>	
Execution Command AT+CMMSDELBC C	string is 40. Delete all the secret recipients Response OK	
Reference	Note This command is valid when it is allowed to edit MMS	

2.15 AT+CMMSRECV

AT+CMMSRECV Receive MMS		
Test Command	Response	
AT+CMMSRECV=	+CMMSRECV: (range of <index>)</index>	
?		
	OK	
Write Command	Response	
AT+CMMSRECV=	+CMMSRECV:	
<index></index>	'' <sender>'',''<time>'',''<subject>'',<size><cr><lf></lf></cr></size></subject></time></sender>	
	list of <fileindex,name,type,filesize><cr><lf></lf></cr></fileindex,name,type,filesize>	
	OK	
	or	
	ERROR	
	or	

SIN 1900 IVIVIS AT Comminant ivianual		
	+CME ER	RROR: <err></err>
	Parameters	S
	<index></index>	The index of the push message saved in the SIM message box.
	<sender></sender>	The address of the sender
	<time></time>	The time to receive the MMS
	<subject></subject>	the title of the MMS
	<size></size>	The size of the MMS
	<fileindex,< th=""><th>x,name,type,filesize> The index, name and size of every file</th></fileindex,<>	x,name,type,filesize> The index, name and size of every file
		included in the MMS. The types are defined as following.
		2 text
		3 text/html
		4 text/plain
		5 image
		6 image/gif
		7 image/jpg
		8 image/tif
		9 image/png
		10 smil
Reference	Note	10 Simi
resolution of the second of th	• This co	command is valid only when it is not allowed to edit MMS and affer for MMS will be clear up. So it is recommended to save IMS in the buffer before receiving MMS. ecceived MMS is just saved in the buffer but not saved in the

2.16 AT+CMMSVIEW

AT+CMMSVIEW Get the MMS into buffer and show the information		
Test Command	Response	
AT+CMMSVIEW=		
?	OK	
Execution Command	Response	
AT+CMMSVIEW	+CMMSVIEW: <mmstype>, "<sender>", "<receipts>", "<ccs>",</ccs></receipts></sender></mmstype>	
	" <bccs>", "<datetime>","<subject>",<size><cr><lf>list of</lf></cr></size></subject></datetime></bccs>	
	<fileindex, filesize="" name,=""><cr><lf></lf></cr></fileindex,>	
	OK	
	or	
	ERROR	
	or	



+CME ERROR: <err> Parameters <mmstype> The type of MMS Received mms Sent mms Unsent mms <sender> The address of th sender <receipts> List of recipients, Separated by ";" List of copy recipients, Separated by ";" <ccs> <bccs> List of secret recipients, Separated by ";" <datetime> The time of receive MMS <subject> The title of MMS Data size of MMS <size>

2.17 AT+CMMSREAD

AT+CMMSREAD Read the given file of the MMS in the buffer		
Test Command	Response	
AT+CMMSREAD=	OK	
?		
Write Command	Response	
AT+CMMSREAD=	+CMMSREAD: <name> <datsize></datsize></name>	
<fileindex></fileindex>	File content	
	OK	
	Parameters	
	<fileindex></fileindex>	the index of the file to be read from the MMS in the
		buffer, i.e. the parameter <fileindex> in</fileindex>
		"AT+CMMSRECV" and "AT+CMMSVIEW"
	<name></name>	the file name to be read
	<datsize></datsize>	the size of the file to be read.
Reference	Note	
	If the file type	is text, the character set of the output text is Unicode little
	endian withou	t the header "FF FE".

2.18 AT+CMMSRDPUSH

AT+CMMSRDPUSH Read the information of the MMS PUSH message	
Test Command	Response
AT+CMMSRDPUS	+CMMSRDPUSH: (range of <index>)</index>
H =?	



	OK	
Write Command	Response	
AT+CMMSRDPUS	+CMMSRDPU	SH:
H = <index></index>	2," <sender>","</sender>	<pre><subject>","<transaction>","<location>","<time>",</time></location></transaction></subject></pre>
	class>, <size></size>	
	ОК	
	or	
	+ CMMSRDPU	USH: 6, " <receiver>","<time>",<status></status></time></receiver>
	OK	
	or	
	+ CMMSRDPU	USH: 255
	OK	
	or	
	+CME ERROR	?: <err></err>
	Parameters	
	_	eter of the response should be 2 or 6, or the other type of
	the MMS PDU.	(9)
		2 m-notification-ind ^[2] . To inform the contents of a
		received MMS
		6 m-delivery-ind ^[2] . A delivery report
		255 unknown MMS PDU
	<index></index>	The index of the push message saved in the SIM
		message box.
	<sender></sender>	The address of the sender
	<receiver></receiver>	The address of the receiver
	<subject></subject>	The title of the MMS The X-Mms-Transation-ID ^[2] of the received MMS
	<transaction></transaction>	The X-Mms-Content-Location ^[2] of the received MMS
	<class></class>	The X-Mms-Class ^[2] of the received MMS
	Class/	0 Personal
		1 Advertisement
		2 Informational
		3 Auto
	<time></time>	Date and time of the received push message.
	<size></size>	The size of the MMS
	<status></status>	The status of the sent MMS
		0 Expired
		1 Retrieved
		2 Rejected
		3 Defered

	4 Unrecognized
Reference	 Note This command is valid only when it is not allowed to edit MMS and the buffer for MMS will be clear up. So it is recommended to save the MMS in the buffer before receiving MMS. The received MMS is just saved in the buffer but not saved in the flash.

2.19 AT+CMMSUA

AT+CMMSUA Set User Agent		
Test Command	Response	
AT+CMMSUA=?	+CMMSUA: "UserAgent"	
	ОК	
	Parameter	
	See Write Command	
Read Command	Response	
AT+CMMSUA?	+CMMSUA: <ua></ua>	
	OK	
	Parameter	
	See Write Command	
Write Command	Response	
AT+CMMSUA	OK	
= <ua></ua>	or	
	ERROR or	
	+CME ERROR: <err></err>	
	Parameter	
	<ua> string type user agent name</ua>	
Reference	Note	

2.20 AT+CMMSPROFILE

AT+ CMMSPROFILE Set User Agent Profile		
Test Command	Response	
AT+CMMSPROFI	+CMMSPROFILE: "UserAgentProfile"	
LE=?		

	OK	
	Parameter See Write Command	
Read Command AT+CMMSPROFI LE?	Response +CMMSPROFILE: <uaprofile> OK</uaprofile>	
	Parameter See Write Command	
Write Command AT+CMMSPROFI LE = <uaprofile></uaprofile>	Response OK or ERROR or +CME ERROR: <err> Parameter <uaprofile> string type user agent profile</uaprofile></err>	
Reference	Note	

2.21 AT+CMMSTIMEOUT

AT+ CMMSTIMEOUT Set MMS Timeout		
Test Command	Response	
AT+	+CMMSTIMEOUT: (10-1000),(10-1000)	
CMMSTIMEOUT		
=?	OK	
	Parameters	
	See Write Command	
Read Command	Response	
AT+	+CMMSTIMEOUT: <send timeout="">,<recv timeout=""></recv></send>	
CMMSTIMEOUT?		
	OK	
	Parameters	
	See Write Command	

Write Command	Response	
AT+CMMSTIMEO	ОК	
UT= <send< th=""><th>or</th><th></th></send<>	or	
timeout>, <recv< th=""><th>ERROR</th><th></th></recv<>	ERROR	
timeout>>	or	
	+CME ERROR: <	err>
	Parameters	
	<send timeout=""></send>	Send timeout time, integer type, in milliseconds.
	<recv timeout=""></recv>	Receive timeout time, integer type, in
		milliseconds.
Reference	Note	

2.22 AT+CMMSSTATUS

AT+ CMMSSTATUS Get MMS Status		
Test Command	Response	
AT+ CMMSSTATUS =?	ОК	
	Parameter	
	See Write Command	
Read Command	Response	
AT+CMMSSTATUS?	+CMMSSTATUS: <status></status>	
	OK	
	or	
	ERROR	
	or	
	+CME ERROR: <err></err>	
	Parameter	
	<status> status of MMS action</status>	
	MMS_IDLE	
	MMS_DOWNLOADING	
	MMS_DOWNLOADED	
	MMS_SENDING	
	MMS_RECEIVING MMS_RECEIVED	
	MMS_READING	
	MMS_READING_PUSH	
Reference	Note	
Reference	Note	



2.23 AT+CMMSINIT

AT+CMMSINIT initialize MMS Function		
Test Command	Response	
AT+CMMSINIT=?	ОК	
	Parameter	
	See Write Command	
Execution Command	Response	
AT+CMMSINIT	OK	
	or	
	ERROR	
	or	
	+CME ERROR: <err></err>	
	NO Parameter	
Reference	Note	
	When first entering the MMS function, this command must be executed.	

2.24 AT+CMMSTERM

AT+CMMSTERM Exit MMS Function	
Test Command	Response
AT+CMMSTERM=	OK
?	
	Parameter
	See Write Command
Execution Command	Response
AT+CMMSTERM	OK
	or
	ERROR
	or
	+CME ERROR: <err></err>
	NO Parameter
Reference	Note
	When exiting the MMS function, this command must be executed.

2.25 AT+CMMSSCONT

AT+CMMSSCONT Save MMS Context

SIM900 MMS AT Comm	and Manual A company of SIM Tech
Test Command AT+ CMMSSCONT =?	Response OK
	Parameter See Write Command
Read Command AT+ CMMSSCONT?	Response +CMMSSCONT: <mode> +CMMSCID: <value> +CMMSCURL: <value> +CMMSUA: <value> +CMMSPROFILE: <value> +CMMSPROTO: <value> +CMMSPROTO: <value> +CMMSSENDCFG: <value> +CMMSTIMEOUT: <value>,<value></value></value></value></value></value></value></value></value></value></mode>
	Parameter See Write Command
Execution Command AT+ CMMSSCONT	•
	Parameter <mode> 0 saved, the value from NVRAM 1 unsaved, the value from RAM For other parameters, see the related command.</mode>
Reference	Note



3 Supported unsolicited result codes

3.1 Summary of CME ERROR Codes

Final result code +CME ERROR: <err> indicates an error related to mobile equipment or network. The operation is similar to result code ERROR. None of the following commands in the same Command line should be executed. Neither ERROR nor OK result code will be returned. The following <err> is just the additional <err> code for MMS. About other <err> codes, please refer to [1].

Code of <err></err>	Meaning
171	MMS task is busy now
172	The mms data is oversized
173	The operation is overtime
174	There is no mms receiver
175	The storage for address is full
176	Failed to find the address
177	The connection to network is failed
178	Failed to read push message
179	This is not a mms push message
180	Gprs in not attached
181	Tepip stack is busy
182	The mms storage is full
183	The box is empty
184	Failed to save mms
185	It is in edit mode
186	It is not in edit mode
187	No content in the buffer
188	Not find the file
189	Failed to receive MMS
190	Failed to read mms
191	Not M-Notification.ind ^[2]
192	The mms inclosure is full
193	Unknown



4 Examples

SIM900_MMS module provides MMS solution which communicates via HTTP protocol.

Unicode (little endian and big endian) and UTF8 character set are supported, also ASCII is only supported for English and numerals. SIM900_MMS module can send JPG format pictures. When receiving the title, text and picture data of MMS, module can create a MMS file automatically. You can make phone number or e-mail address as MMS destination.

4.1 Initialization

AT+CMMSINIT //First entering the mms function, this command must be executed.

OK

4.2 Configuration

Before sending or receiving MMS, please configure parameters as following.

AT+CMMSCURL="mmsc.monternet.com" //Set the MMS center URL without "http://"

OK

AT+CMMSCID=1 //Set bearer context id

OK

AT+CMMSPROTO="10.0.0.172",80 //Set the IP address and port of MMS proxy to

"10.0.0.172" and 80.

OK

AT+CMMSSENDCFG=6,3,0,0,2,4 //Set the parameter for the MMS PDU to send. This

is unnecessary to set. About the details of these

parameters, please refer to [2].

OK

4.3 Active bearer profile

AT+SAPBR=3,1,"Contype","GPRS" //Set bearer parameter

OK



AT+SAPBR=3,1,"APN","CMNET"

OK

AT+SAPBR =1,1 //Active bearer context

OK

AT+SAPBR=2,1

+SAPBR: 1,1,"10.89.193.1"

OK

4.4 Send MMS

AT+CMMSEDIT=1 //Enter edit mode to edit MMS

OK

AT+CMMSDOWN="PIC",12963,20000 //Download an image whose size is 12963 Bytes and

the maximum latency time for downloading is 20000 ms. It is recommended to set the latency time as long as enough to download all the data in the latency

time.

CONNECT //This means it is ready to receive data from UART.

And DCD has been set to low.

......//Receive data from UART without echo.

Note: data flow is from module serial port to module buffer; these data are ready for sending

latter.

OK //This means all data has been received over, and

DCD is set to high.

AT+CMMSDOWN="TITLE",3,5000 //Download a title for the MMS, it is not necessary to

download a title for the MMS.

CONNECT //It is similar with downloading an image.

... ...

OK // data is received here, for example, is "hua"

AT+CMMSDOWN="TEXT",5,5000 //Download a text whose size is 5 Bytes and the

maximum latency time is 5000 ms. Same as downloading an image, it is recommended to set the

latency time long enough.

CONNECT //It is similar to the previous downloading operations.

....

Note: here, if the data is in Unicode (big endian) format, it must begin with "FE FF"; if the data is in Unicode (little endian) format, it must follow with "FF FE". For example, the data



is " $00\ 31\ 00\ 32\ 00\ 33\ 00\ 34$ " in big endian format, then before sending, it should be encode to "FE FF $00\ 31\ 00\ 32\ 00\ 33\ 00\ 34$ ".

```
OK
                                         // data, for example is "ilove"
AT+CMMSRECP="13918181818"
                                        //Add the first recipient.
OK
                                        //Successfully to add a recipient.
Note: following AT commands in italics are optional
AT+CMMSCC="13564545454"
                                       // add copy address
OK
AT+CMMSBCC="simcom@sim.com"
                                      // add secret email address
AT+CMMSDELBCC
                                      // delete BCC address
OK
AT+CMMSDELCC
                                      // delete CC address
OK
                                     // add email address as secret destination
AT+CMMSCC="simcom@sim.com"
OK
AT+CMMSVIEW
+CMMSVIEW:
2, "", "13918181818","", "simcom@sim.com", "2003-01-01,12:07:18", "480055004100", 13054
1,"image1.jpg", 7, 12963
2,"text0.txt", 4, 5
OK
AT+CMMSDELFILE=2
OK
Note: here, TEXT data of MMS is cancelled, that's" text0.txt".
AT+CMMSVIEW
+CMMSVIEW:
2, "", "13918619573", "", "inviolet@163.com", "2003-01-01,12:07:18", "480055004100", 13007
1,"image1.jpg", 7, 12963
OK
Note: here you can see that the second part of MMS has been cancelled.
AT+CMMSSEND
                                      // send MMS
                                       // sending, serial port will not respond to any AT
. . . . . .
```

command



OK // sent successfully

AT+CMMSEDIT=0 //Exit from edit mode and the MMS in buffer will be

cleared up.

OK

4.5 Receive MMS

+CMTI: "SM",3,"MMS PUSH" //received a MMS push message

AT+CMMSEDIT=0 //exit edit mode. It is not allowed to receive MMS in

edit mode.

OK

AT+CMMSRECV=3 //Receive the MMS from the MMS proxy

+CMMSRECV: "+8613818181818", "2008-05-02, 03:38:12","", 26670

1, "image0.jpg",7,26625

OK //Successfully receives the MMS and the MMS includes

the file "image0.jpg" whose size is 26625 Bytes. The sender is "+8613818181818". The size the MMS body

is 26670 Bytes.

AT+CMGD=3 //Delete the MMS push message.

OK

4.6 Receive MMS when the MMS push message is a concatenated message

+CMTI: "SM",1,"MMS PUSH",2,1 //receive the first part of a concatenated MMS push

message which includes two parts

+CMTI: "SM",2,"MMS PUSH",2,2 //receive the second part of a concatenated MMS push

message which include two parts

+CMTI: "SM",1,"MMS PUSH" //receive all the parts of the concatenated MMS push

message

AT+CMMSEDIT=0 //exit edit mode. It is not allowed to receive MMS in

edit mode.

AT+CMMSRECV=1 //Receive the MMS from the MMS proxy

+ CMMSRECV: "+85266097746", "2009-04-15, 10:41:21", "", 49

1,"text0.txt",4,7

OK

AT+CMGD=1 //Delete the MMS push message and all the parts of the

concatenated MMS push message will be deleted.

OK



4.7 Read a file of MMS

AT+CMMSREAD=1 //The parameter 1 is the index of the file in the MMS.

Please refer to the response of AT+CMMSRECV=3.

+CMMSREAD: "image0.jpg", 26625 //Include file name and size

.....//The data of the file "image0.jpg"

OK //All the data of the file has been read over

4.8 Exit MMS function

AT+CMMSTERM // Exiting the MMS function

OK

Contact us:

Shanghai SIMCom Wireless Solutions Ltd

Addr: Building A, SIM Technology Building, No.633, Jinzhong Road, Changning

Disdrict, Shanghai P.R. China 200355

Tel: +86 21 3252 3300 Fax: +86 21 3252 3301 URL: <u>www.sim.com/wm</u>