SANGFOR

IAM

SMS Authentication Troubleshooting Guide

Version 12.0.18

Change Log

Date	Change Description
Jul 10, 2019	Version 12.0.18 document release.

CONTENT

Chapter 1 Modem Troubleshooting

1.1 Process

1. Modem Connect SMS Center.
2. Modem login into SMS Center.
3. Send message.

1.2 Connect Troubleshooting

1. The modem as you can see in following picture, SIM card does not support hot swap.

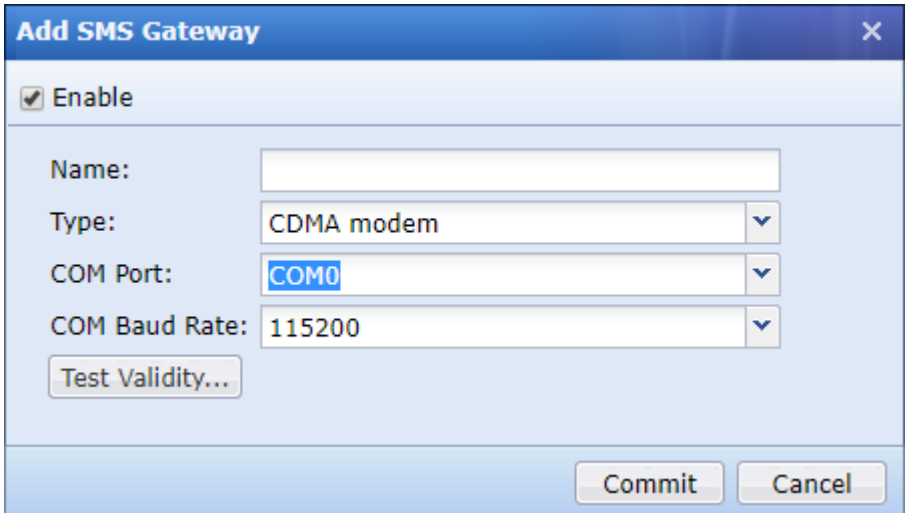
2. If SIM Card is GSM type, you can't insert it to CDMA Modem, the SIM card type must match with the modem.
3. If you see the error information [SMS_SP]sms server can not find MODEM!, please trouble as following:

   Check the status of modem light.

Light	Status	Description
Power	off	The device is not powered
	on	The device is powered
ACT	off	No data
	twinkle	Data communicate normal
Online	off	Modem is Not started or in hibernation
	twinkle	Modem is Standby or online

   Check the Baud rate and COM port.

The default Baud rate of CDMA Modem is 115200. Regarding to com port, if modem is connect to IAM, please check com0, if the modem is connect to external server, please choose com1 and other com port.



1.3 Login Troubleshooting

The best troubleshooting is unplug the sim card from modem,then insert it to you telephone to test whether it can send message.

1.4 Sending Troubleshooting

1. Check whether the charge is enough.
2. Check whether ISP block your account for send message frequently.
3. Check whether your sim card was limited in some region.

Chapter 2 HTTP Troubleshooting

2.1 GET/POST Method Troubleshooting

1. The first step is check whether IAM can connect to SMS Gateway Server, you can use **telnet** command to test.

```
Commands Supported by Console:
        cls[clear][ctrl+l]      Clear screen
        term[ctrl+c]            End the current program
        mii-tool                List connection status of network interface
        traceroute              Track packet forwarding path
        arp                     View ARP table
        ping                    Test connectivity of host
        ifconfig                View information of network interface
        route                   Display routing table
        ethtool                 View information of network adapter
        telnet                  Test connectivity of port
        proxydbg                proxy [debug ip address]
> telnet 39.104.141.71  8088
Resolving ...
39.104.141.71:8088 connect OK
```

2. Check document that SMS Gateway Server offered you, you can use wireshark to capture packet to check the format and parameter is correct.

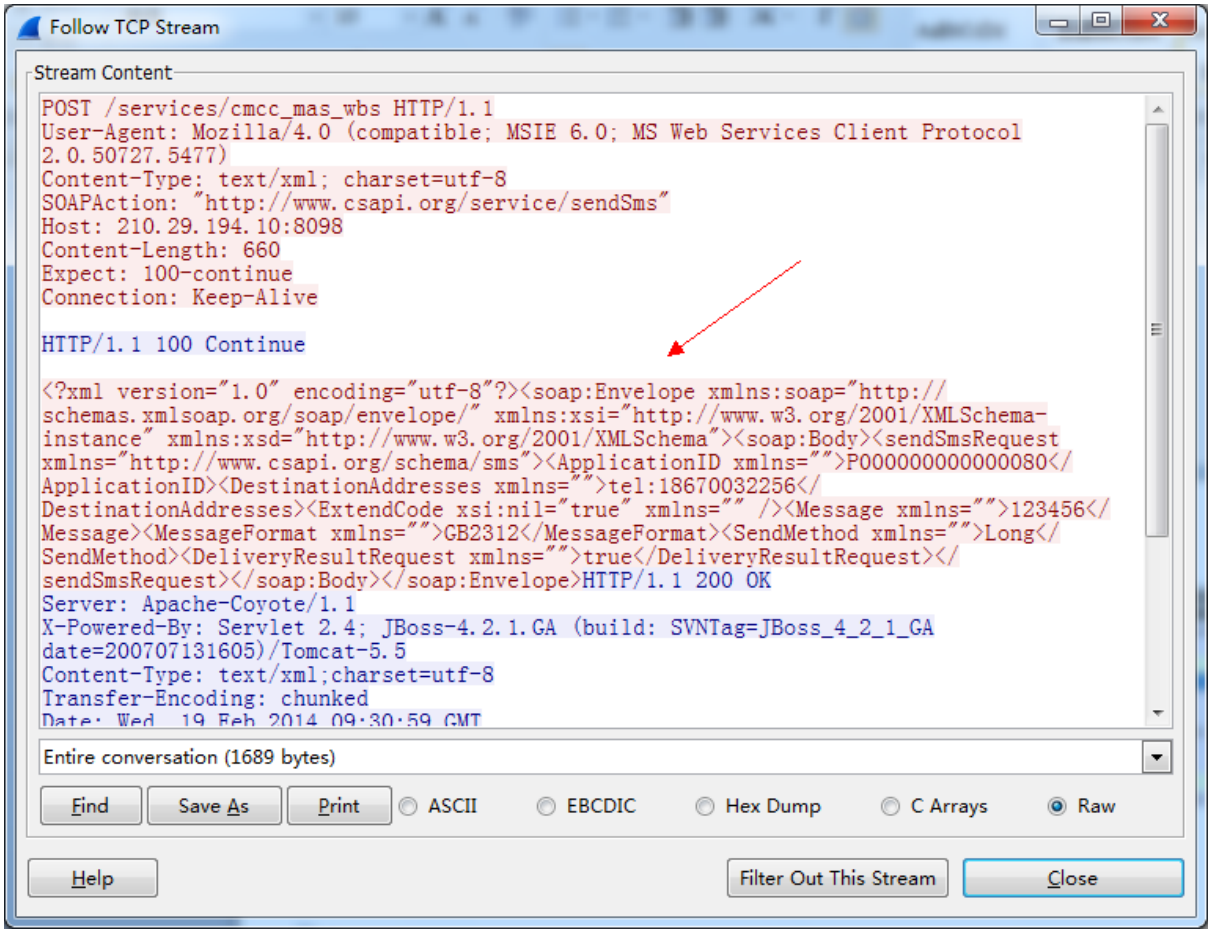
```
HTTP/1.1 200 OK
Cache-Control: private
Content-Type: text/xml; charset=UTF-8
Server: Microsoft-IIS/7.5
Set-Cookie: ASP.NET_SessionId=zu1xem551zyjbh55h3xflp21; path=/; HttpOnly
X-AspNet-Version: 2.0.50727
X-Powered-By: ASP.NET
Date: Wed, 10 Jul 2019 08:52:16 GMT
Connection: close
Content-Length: 219

<?xml version="1.0" encoding="utf-8" ?><returnsms>
 <returnstatus>Faild</returnstatus>
 <message>sign.....</message>
 <remainpoint>0</remainpoint>
 <taskID>0</taskID>
 <successCounts>0</successCounts></returnsms>GET /v2sms.aspx?
action=send&userid=945&timestamp=15626344369&sign=c1f41522911393eb8f28ca2ef3a7e0a5&mobile=8618867314419&content=test&sendTime=&extno= HTTP/1.1
Accept: */*
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http"
Host: 39.104.141.71:8088
Connection: close
```

2.1 Webservices Method Troubleshooting

1. Regarding to Webservices, SMS provider will always provide document and api file, we can capture packet to get more information.

1	0.000000	192.200.121.135	210.29.194.10	TCP	74	51180 > 8098 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=4 SACK_PERM=1 TSval=3147468 TSecr=0
2	0.049132	210.29.194.10	192.200.121.135	TCP	78	8098 > 51180 [SYN, ACK] Seq=0 Ack=1 Win=16384 Len=0 MSS=1452 WS=1 TSval=0 TSecr=0 SACK_PERM=1
3	0.049197	192.200.121.135	210.29.194.10	TCP	66	51180 > 8098 [ACK] Seq=1 Ack=1 Win=66240 Len=0 TSval=3147473 TSecr=0
4	0.049527	192.200.121.135	210.29.194.10	TCP	386	[TCP segment of a reassembled PDU]
5	0.138372	210.29.194.10	192.200.121.135	HTTP	91	HTTP/1.1 100 Continue
6	0.138577	192.200.121.135	210.29.194.10	HTTP/XM	726	POST /services/cmcc_mas_wbs HTTP/1.1
7	0.201201	210.29.194.10	192.200.121.135	TCP	318	[TCP segment of a reassembled PDU]
8	0.201202	210.29.194.10	192.200.121.135	TCP	71	[TCP segment of a reassembled PDU]
9	0.201281	192.200.121.135	210.29.194.10	TCP	66	51180 > 8098 [ACK] Seq=981 Ack=283 Win=65956 Len=0 TSval=3147488 TSecr=5060188
10	0.201586	210.29.194.10	192.200.121.135	TCP	486	[TCP segment of a reassembled PDU]
11	0.201586	210.29.194.10	192.200.121.135	TCP	68	[TCP segment of a reassembled PDU]
12	0.201587	210.29.194.10	192.200.121.135	HTTP/XM	71	HTTP/1.1 200 OK
13	0.201624	192.200.121.135	210.29.194.10	TCP	66	51180 > 8098 [ACK] Seq=981 Ack=710 Win=65528 Len=0 TSval=3147488 TSecr=5060188

2. Follow TCP Stream.



3. Then we can know what the format and parameter that SMS provider need to use.

<?xml version="1.0" encoding="utf-8"?><soap:Envelope
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><sendSmsRequest
xmlns="http://www.csapi.org/schema/sms"><ApplicationID
xmlns="">P000000000000080</ApplicationID><DestinationAddresses
xmlns="">tel:18670032256</DestinationAddresses><ExtendCode xsi:nil="true" xmlns="" /><Message
xmlns="">123456</Message><MessageFormat xmlns="">GB2312</MessageFormat><SendMethod
xmlns="">Long</SendMethod><DeliveryResultRequest
xmlns="">true</DeliveryResultRequest></sendSmsRequest></soap:Body></soap:Envelope>

4. Then we can replace some parameter to our variable,such as following.

<?xml version="1.0" encoding="utf-8"?><soap:Envelope
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"><soap:Body><sendSmsRequest
xmlns="http://www.csapi.org/schema/sms"><ApplicationID
xmlns="">P000000000000080</ApplicationID><DestinationAddresses
xmlns="">tel:$$MOBILE_NUM$$</DestinationAddresses><ExtendCode xsi:nil="true" xmlns=""
/><Message xmlns="">$$SMS_CONTENT$$</Message><MessageFormat
xmlns="">GB2312</MessageFormat><SendMethod
xmlns="">Long</SendMethod><DeliveryResultRequest
xmlns="">true</DeliveryResultRequest></sendSmsRequest></soap:Body></soap:Envelope>