



go anywhere communication and data transfer



Ultra eSAM

SMS USER GUIDE



INTRODUCTION

The eSAM and Ultra eSAM modems can receive and respond to SMS Messages using the 4G Mobile Network. This capability can be used to monitor the modem, and to send it commands remotely.

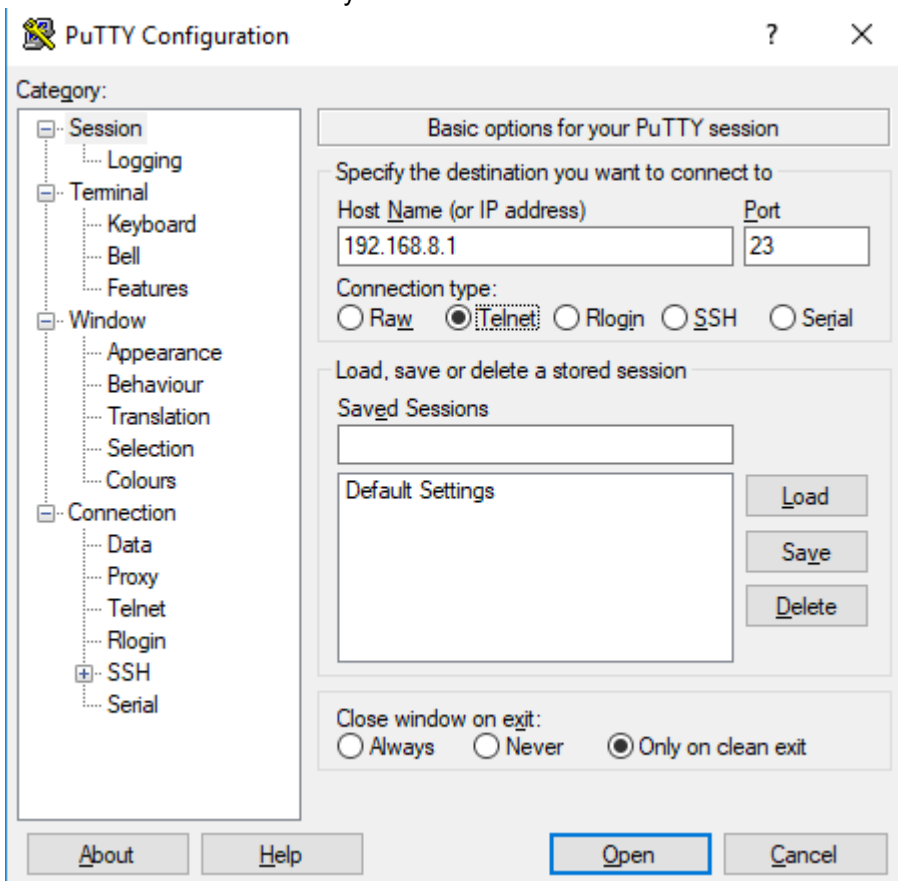
This document will cover some of the basic commands offered by the eSAM, and will explain how to configure the eSAM for SMS Operation

CONFIGURATION

Most Versions of the eSAM Modem are configured to respond to SMS out of the box – however, for security reasons some firmware versions are configured not to respond to SMS by default.

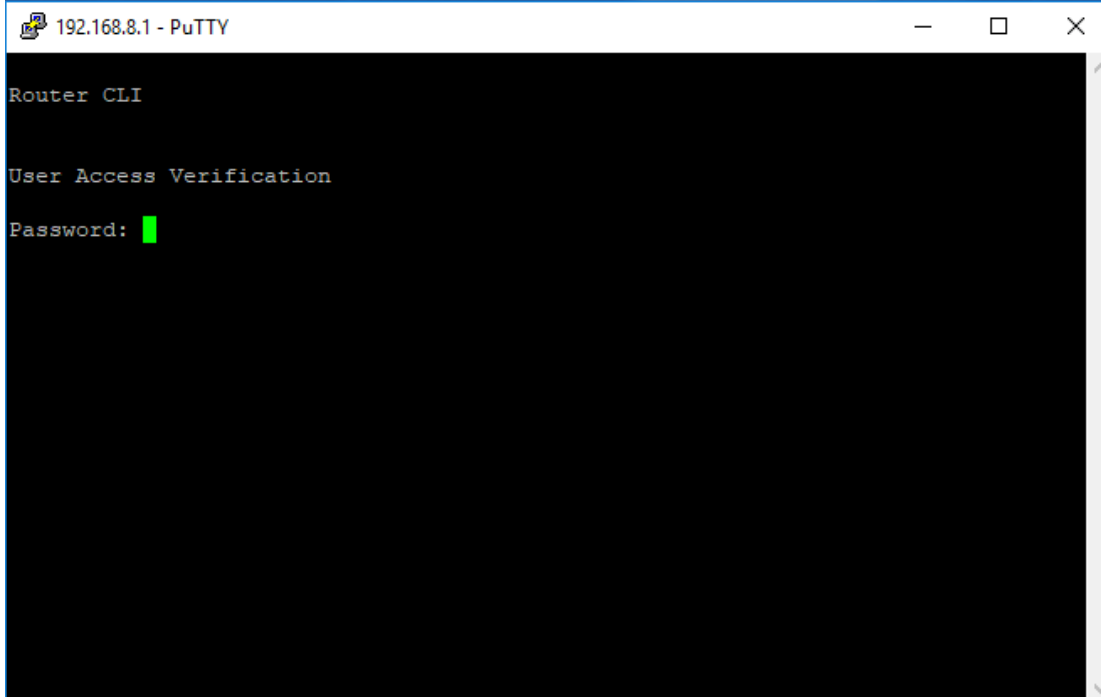
If your eSAM does not respond to SMS Messages, you can follow these instructions to manually enable SMS operation.

1. Connect the eSAM to your computer using the ethernet port on the modem. The modem should now be accessible using your web browser at the 192.168.8.1 IP Address, or at whichever IP address you configured this eSAM to use.
2. Install a suitable telnet client onto your computer. For this example, we will be using PuTTY, a freely available SSH and Telnet Client
3. Enter the IP Address of your modem into the 'Host Name' Field and select Telnet as the Connection type. Set the Port to 22 if it isn't already set.



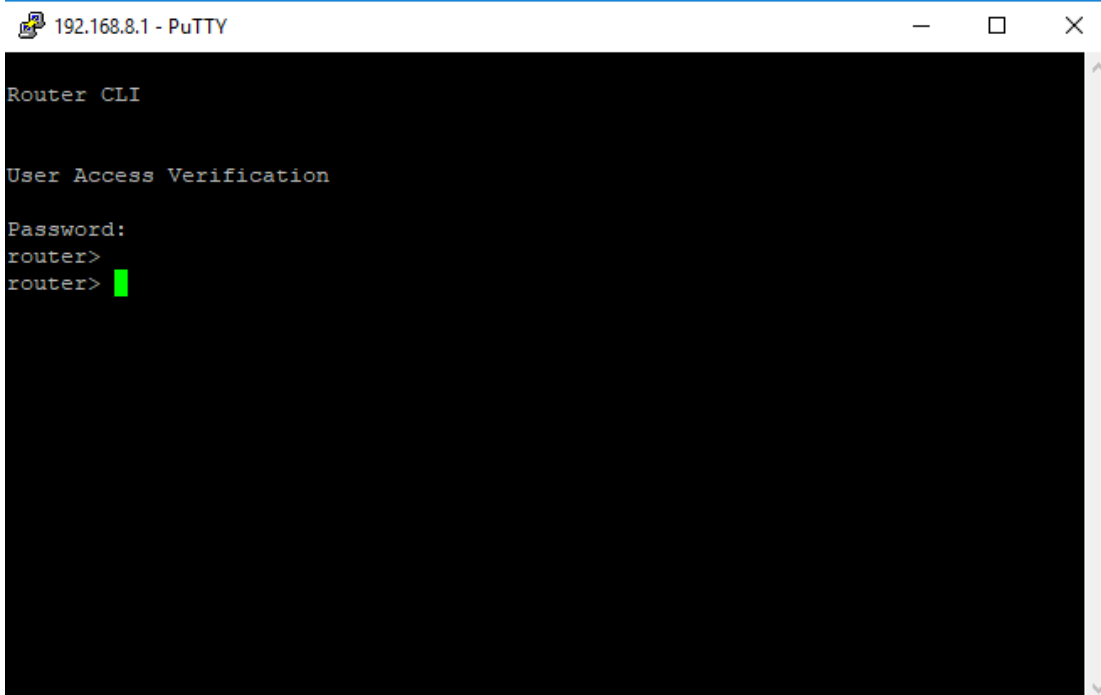
Once these parameters are entered, press 'Open' to open the connection

4. If all these settings are correct, you will be presented with a Telnet connection to your eSAM Modem



```
192.168.8.1 - PuTTY
Router CLI
User Access Verification
Password: █
```

5. Enter 'super' as the password, and then press enter

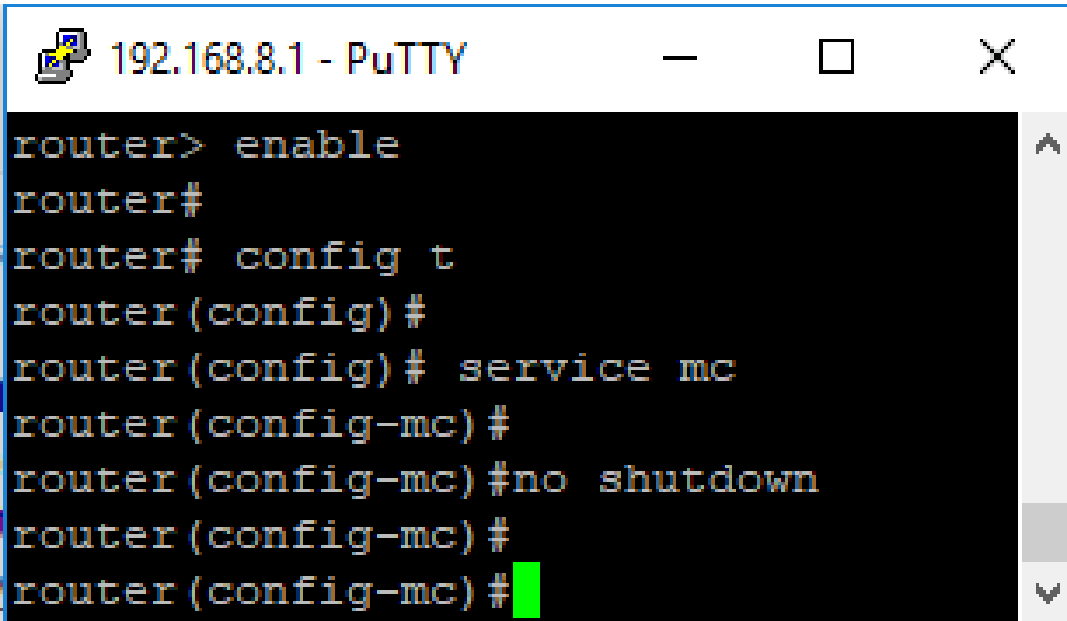


```
192.168.8.1 - PuTTY
Router CLI
User Access Verification
Password:
router>
router> █
```

The modem should respond with the 'router>' command prompt. We can now enter the commands to enable SMS Service.

- Type 'enable' and press enter
- Type in 'config t' and press enter
- Now, type 'service mc' and press enter
- Finally, type 'no shutdown' and press enter

Once you enter these commands into the Telnet window your screen should look like this:

A screenshot of a PuTTY terminal window titled "192.168.8.1 - PuTTY". The terminal displays the following commands and prompts:

```
router> enable
router#
router# config t
router(config)#
router(config)# service mc
router(config-mc)#
router(config-mc)#no shutdown
router(config-mc)#
router(config-mc)#
```

The cursor is at the end of the last line. The terminal has a black background and a white cursor. The window title bar shows standard minimize, maximize, and close buttons.

6. Type 'exit' and press enter three times to quit the terminal. Your modem is now enabled for SMS control.

TESTING YOUR MODEMS MOBILE ACCESS

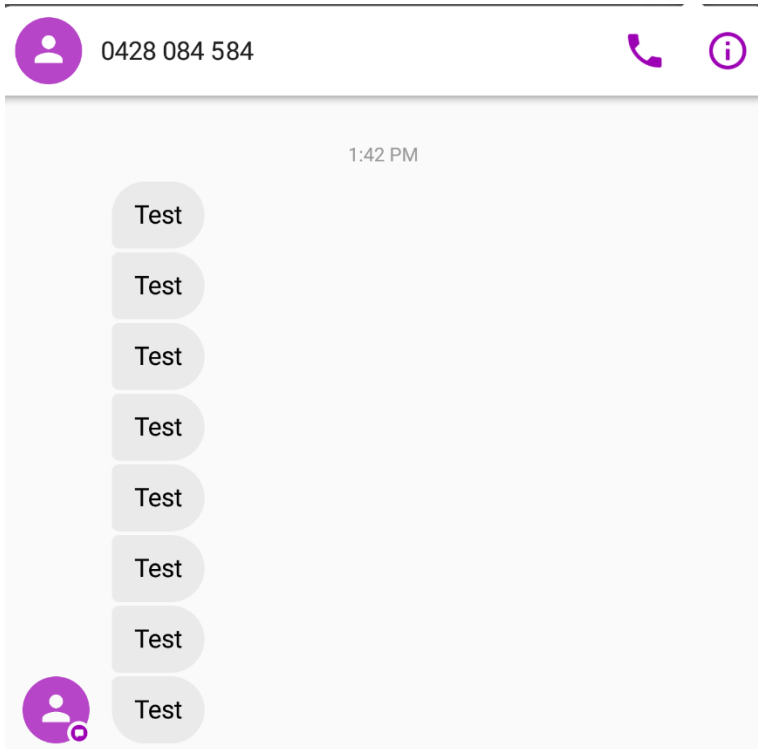
If your eSAM is configured with a data-only SIM Card, or if it doesn't have SMS Messaging enabled on its account, it will not be able to respond to SMS Messages.

You can send test messages from the eSAM using the DIDO Application, which is also used to send alerts based on the eSAM's GPIO Inputs. Enter the following configuration into the Applications=> DIDO Window, with the 'SMS Num' Field containing your mobile Number

| | |
|-------------------------|--|
| DIDO Service | <input type="button" value="Enable"/> <input type="button" value="Disable"/> |
| Trigger Settings | |
| GPI | LOW ▼ |
| Filtering | 100 * (*100ms) |
| Alarm Settings | |
| GPO Enable | <input checked="" type="radio"/> Enable <input type="radio"/> Disable |
| Alarm Action | LOW ▼ |
| Power On Status | LOW ▼ |
| Recover Time | 10 * s |
| Keep On | 100 * (*100ms) |
| SMS Enable | <input checked="" type="radio"/> Enable <input type="radio"/> Disable |
| SMS Num | <input type="text"/> * |
| SMS Msg | Test * |

The eSAM should send you a test text message, letting you know what its mobile number is.

To stop the eSAM from sending repeat messages, disable the DIDO Service when you are finished.

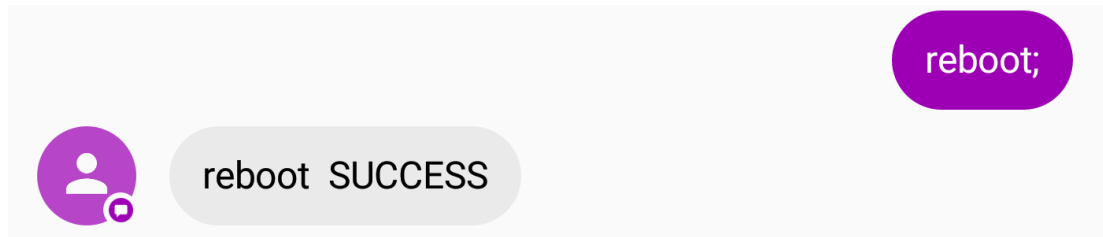


Now that you have the eSAM's mobile number, you can send it SMS messages with commands for it to execute.

REBOOT THE eSAM REMOTELY

To reboot the eSAM Remotely, send it an SMS Message with the text 'reboot;'. The eSAM will respond that it has understood the message.

| Command | Effect |
|---------|--------------------------|
| reboot; | Reboot the eSAM Remotely |



QUERY THE eSAM'S STATUS

To receive a message with the eSAM's current network status, you can send it one of the following messages:

| Command | Effect |
|-----------------|--|
| interface;show; | Display the status of the network interfaces |
| modem;show; | Display the status of the 4G Modem |

modem;show;

(1/3)

Modem Status Information

name:SIERRA-MC7304

vendor_id:1199

product_id:68c0

number:356853053777951

card:0

csq:31

nettype:

MODIFY THE MODEM CONFIGURATION

It is possible to remotely enable and disable the modem configuration using SMS. This has the same effect as changing the Modem settings under the Network>Modem Screen of the web interface

| Command | Effect |
|-------------------------|-----------------------------|
| modem;enable;rulename; | Enable modem configuration |
| modem;disable;rulename; | Disable modem configuration |
| modem;delete;rulename; | Delete Modem Configuration |

modem

| Interface Name | APN | Service Code | Username | Simcard | Operation | | | |
|----------------|---------------|--------------|----------|---------|-----------|-----|----|-----|
| 0 | telstra.ex... | ---- | card | ---- | Mod | Del | En | Dis |

[Add](#) [Refresh](#)

MODIFY THE LAN IP

You can remotely change the internal network IP Address of the modem using the lan;modify command

| Command | Effect |
|-----------------------------|---|
| lan;modify;ip1;ip2;ip3;ip4; | Changes the internal IP address(s) of the modem |

| | | |
|------------------|---|----------------------|
| Host Name | <input type="text" value="router"/> | * Max length is 32 |
| IP1 | <input type="text" value="192.168.8.1/24"/> | * eg. 192.168.8.1/24 |
| IP2 | <input type="text"/> | |
| IP3 | <input type="text"/> | |
| IP4 | <input type="text"/> | |
| Loopback Address | <input type="text"/> | eg. 10.1.1.1/24 |

M2M

You can remotely enable, disable and configure the M2M Parameters of the modem. These parameters are used to configure the cloud connection.

| Command | Effect |
|-------------------------|-------------------------|
| m2m;enable; | Enable the M2M |
| m2m;disable; | Disable the M2M |
| m2m;modify;IP;Port;...; | Configure M2M remotely. |

M2M Service

Basic Settings

Server IP or Domain

* Max length is 64

Server Port

* 1-65535

Status

disconnected

ADD TRUSTED PHONE NUMBERS

For security reasons, it is desirable to limit who can update the Modem Configuration using SMS. To do this, we use these commands send through SMS.

| Command | Effect |
|----------------------|---------------------------------|
| mc;add;phone_num; | Add a trusted phone number |
| mc;delete;phone_num; | Delete a trusted phone number |
| mc;clear; | Clear the trusted phone numbers |

ADD/REMOVE MASQ

It is possible to add or remove masq (masquerade) from interfaces.

| Command | Effect |
|------------------------|--------------------------------------|
| masq;add;interface; | Sets an interface as the masquerade |
| masq;delete;interface; | Deletes an interface from masquerade |

MASQ

| Interface | Operation |
|-----------|-----------|
| modem | Delete |

