NavigateWorx

NR500 Series
Industrial Cellular VPN Router

Application Note 040

AT Over IP

Version: V1.0.0
Date: Jul 2019
Status: Confidential

Directory

1. Introduction

1.1 Overview

This document contains information regarding the configuration and use of IP Over IP.

This guide has been written for use by technically competent personnel with a good understanding of the communications technologies used in the product, and of the requirements for their specific application.

1.2 Compatibility

This application note applies to:
Models Shown: NR500 series.
Firmware Version: V1.1.0(ddcaac4) or newer
Other Compatible Models: None

1.3 Version

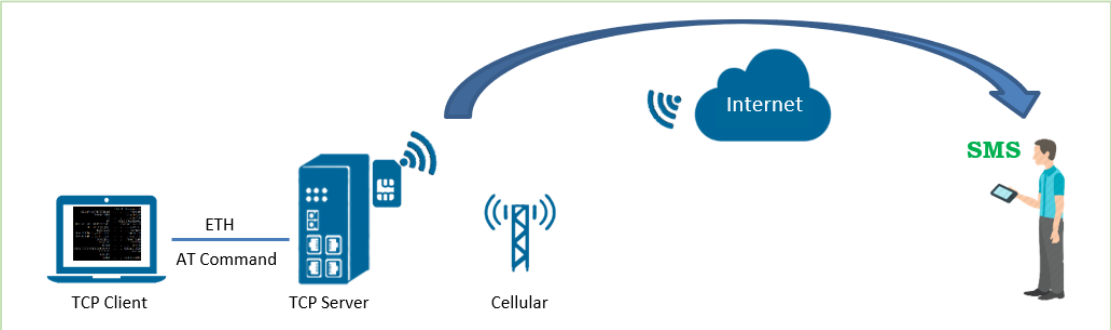
Updates between document versions are cumulative. Therefore, the latest document will include all the content of previous versions.

Release Date	Doc. Version	Firmware Version	Change Description
2019/07/04	V1.0.0	V1.1.0(ddcaac4)	First released

1.4 Corrections

Appreciate for corrections or rectifications to this application note, and if any request for new application notes please email to: **support@navigateworx.com**

2. Topology



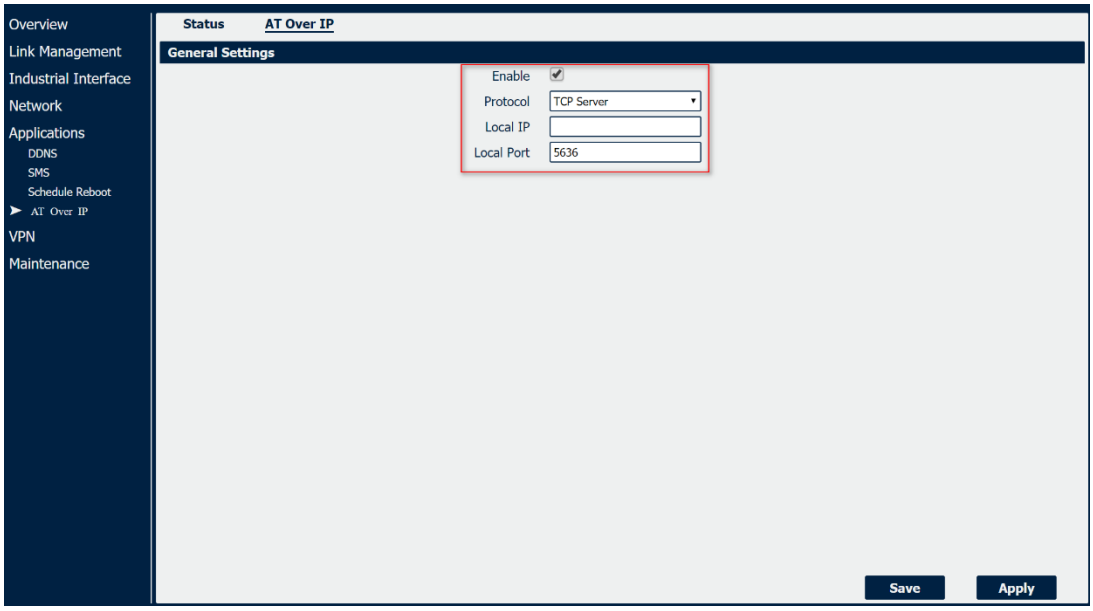
1. NR500 Pro runs as TCP Server and connected to Internet via SIM card.
2. PC as TCP Client and connect to NR500 Pro via ethernet cable.
3. PC send AT Command to control the module of NR500 Pro to do some action.

Note: This application note will show how to use the AT Command via TCP connection to control module to send PDU mode SMS message.

3. Configuration

3.1 NR500 Pro Configuration

1. Go to **Application>AT Over IP**, enable AT Over IP feature like below:



2. Click Save>Apply.

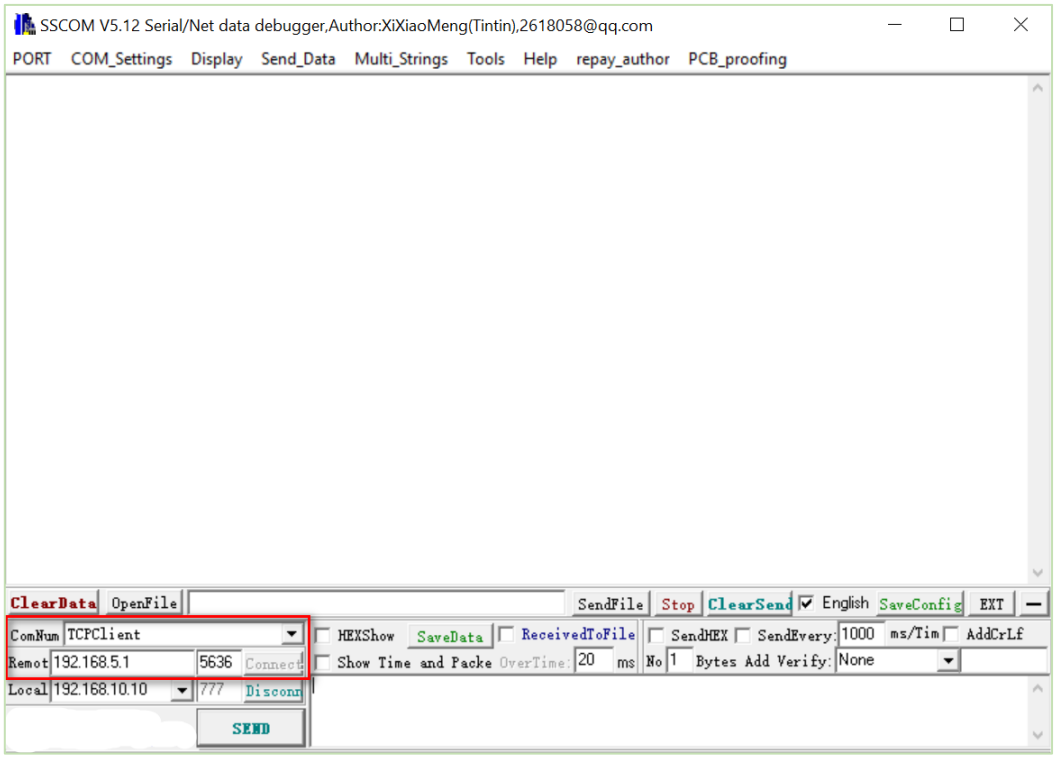
4. Testing

Send the content "TEST" to the mobile phone under PDU mode as an example. Below is the AT Command and Content need to be sent one by one to the router.

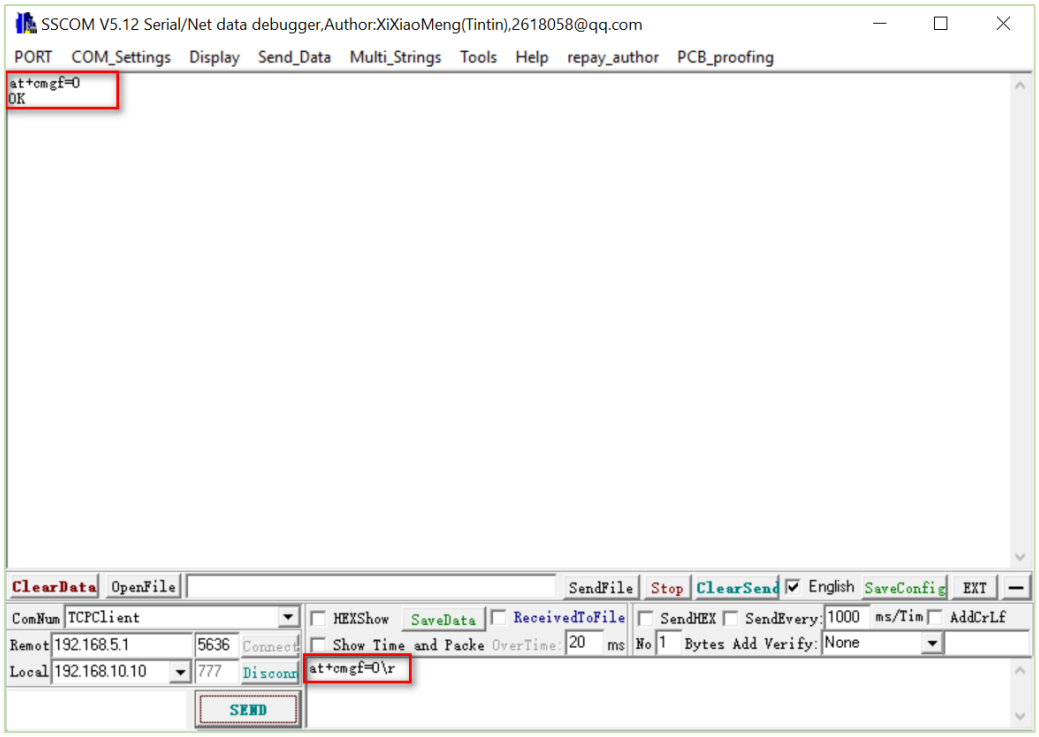
a. at+cmgf=0\r
b. at+cmgs=17\r
c. 0001000BA15119852081F0000004D4E2940A
d. 1a

Note: "\r" means the keyboard "Enter"; Option "c" is the content need to be sent under PDU mode; Option "d" is the ending code need to be sent with HEX.

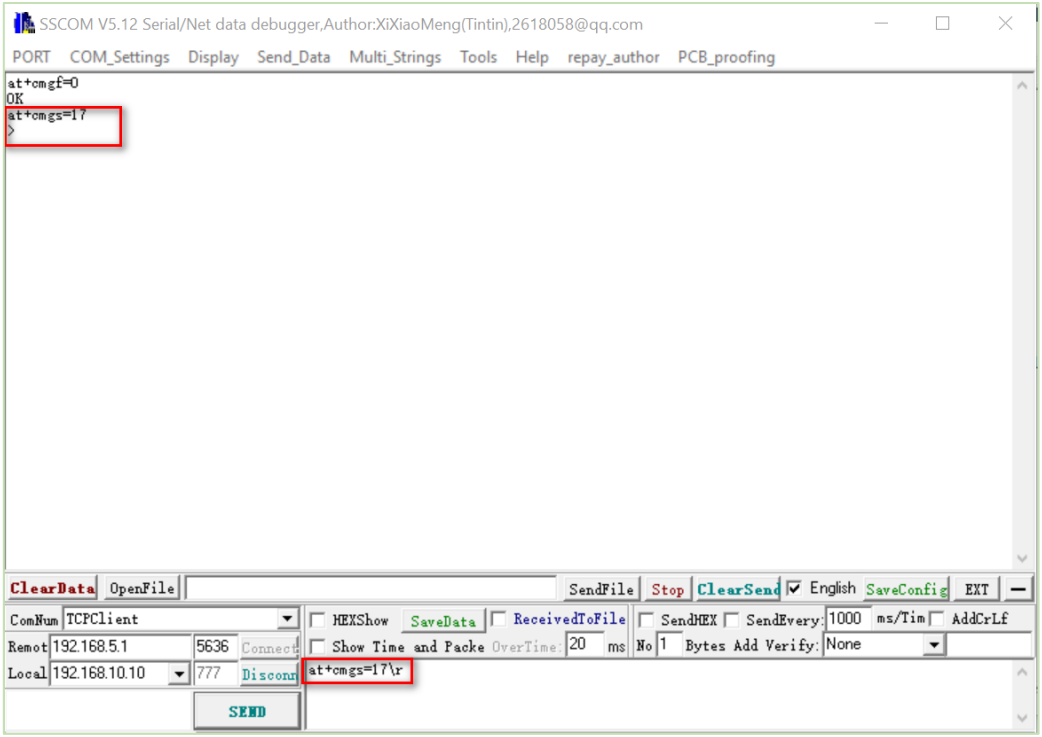
1. Run SSCOM software as TCP client and connect the NR500 router(TCP Server), like below:



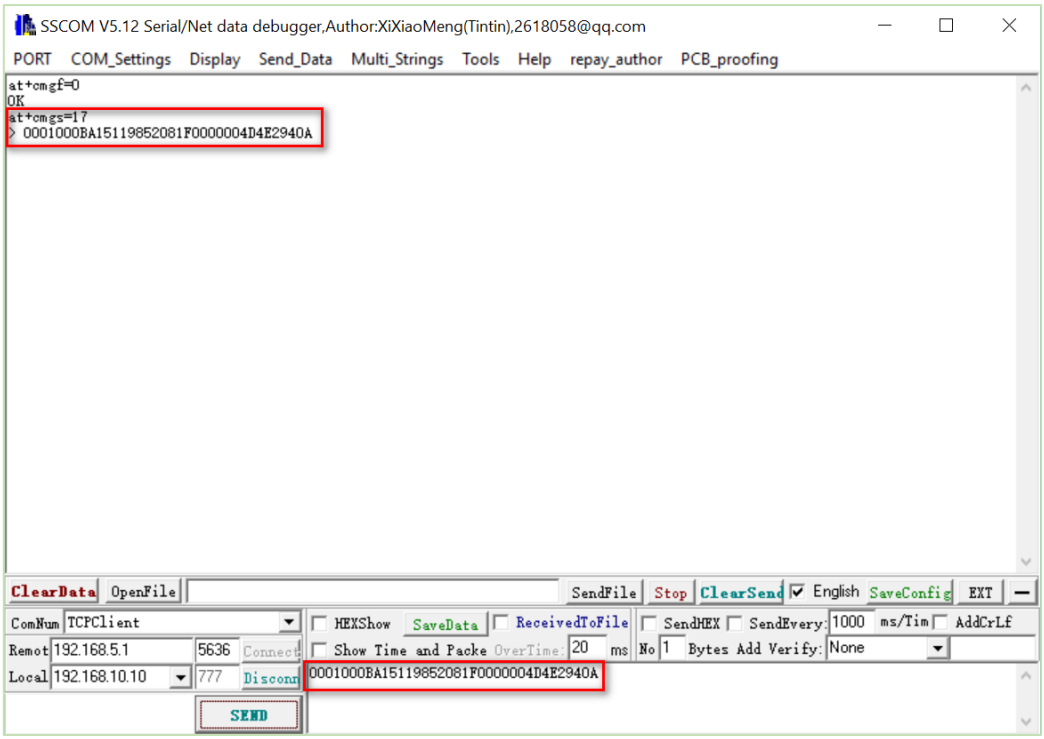
2. Send the AT command “at+cmgf=0\r” to make sure under PDU mode.



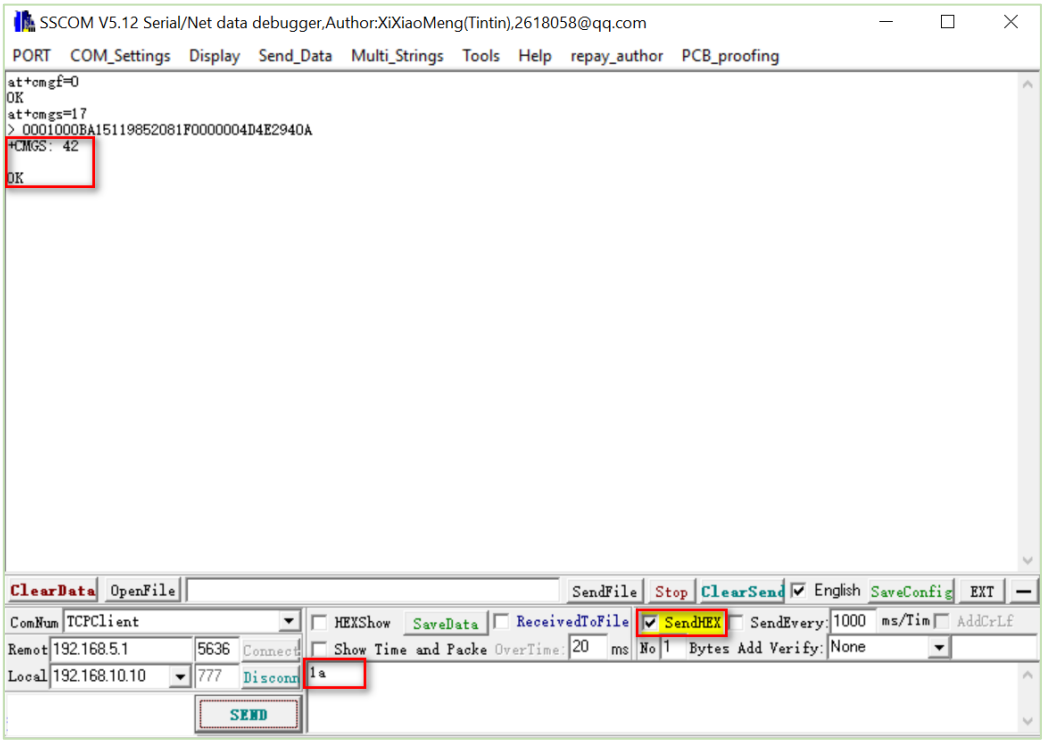
3. Send the AT command “at+cmgs=17\r” to start to send the content.



4. Send to content.



5. Send the ending code "1a" with HEX, reply "OK" means send out the SMS successfully.



6. Test successfully, the mobile phone can receive the SMS message.