



Mobile TD/TTC/LTE

PC Tools for TD/TTC/LTE

Bridge Communication UserGuide

V1.0

Document Conventions

	Note: Provides related information or information of special importance.
 Caution	Caution: Indicates potential damage to hardware or software, or loss of data.
	Warning: Indicates a risk of personal injury.

Document Status

Doc Status: Bridge Communication User Guide	Technical Publication:
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1 Preface

CatStudio Bridge Communication is a feature of Communication module. It can do connection between two Devices, and transfer the data to each other.

Just now, we only support one group of Bridge.

For example:

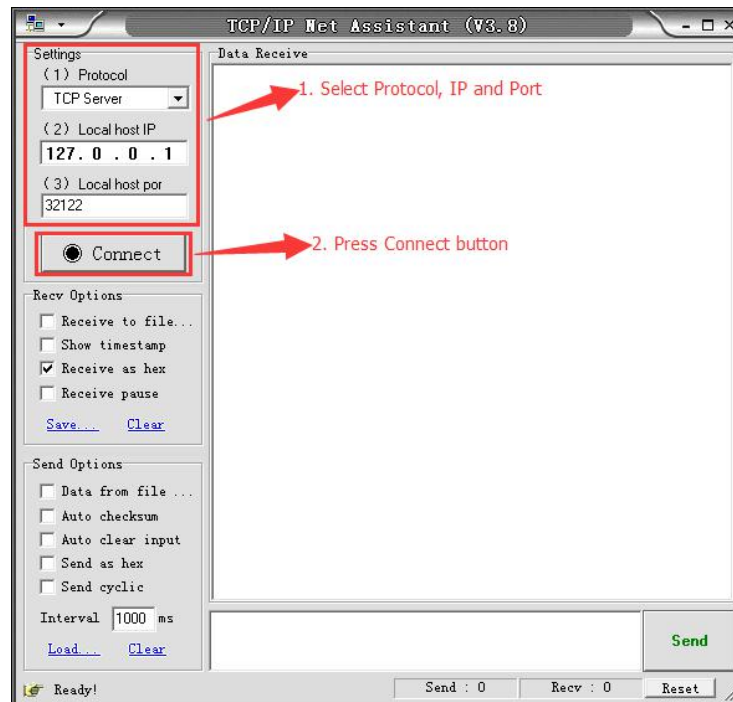
We connect to one TCP tools by Device 3, connect to ASR Modem interface by Device1, Device1 is bridge to Device3.

If we send 'AT' command in TCP tool, Device3 will transfer the string to Device1, Device1 write to Modem interface, and then Device1 can response the echo to Device3.

2 How to do Bridge

2.1 Setting in TCP tool

1. We use TCP/IP Net Assistant Tool for example;
2. Select to TCP Server;
3. Input the IP address and port;
4. Do Connect.

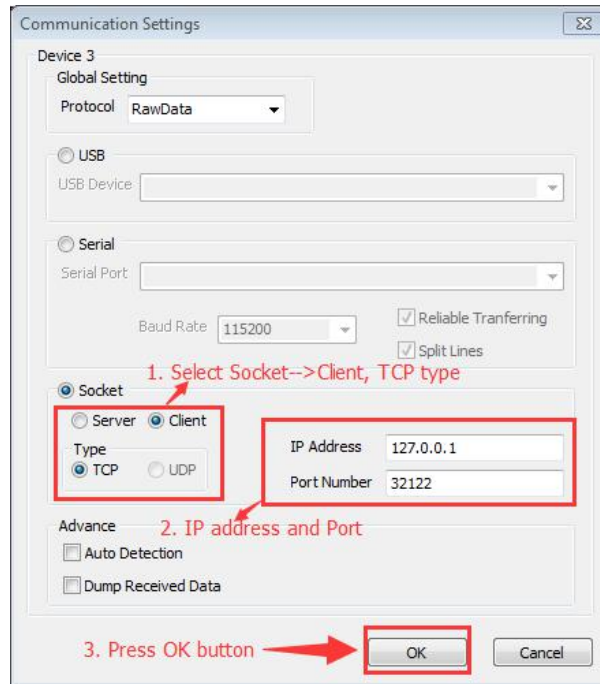


2.2 Setting in Communication Settings Dialog

2.2.1 Device 3 setting

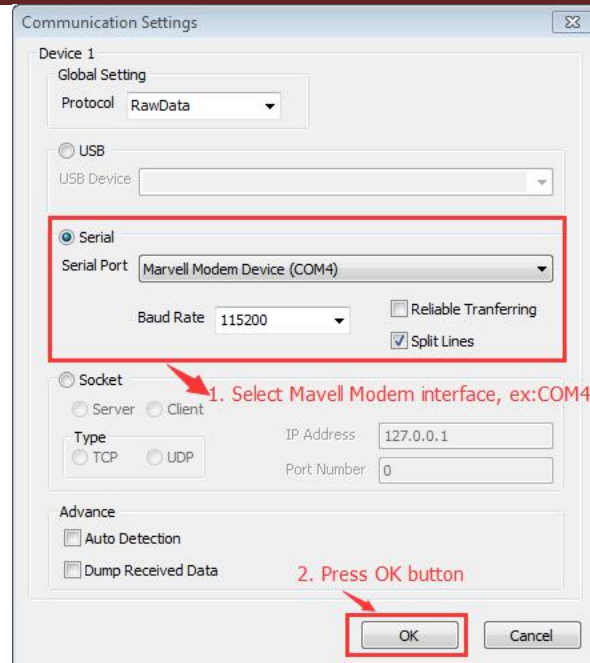
1. Select TCP Client in Socket.
2. Input IP address and port number;

3. Press OK button.



2.2.2 Device 1 setting

1. Choice ASR Modem Interface in Serial;
2. Baud Rate:115200;
3. Press OK button;



2.2.3 Bridge Setting

1. Select the two Devices, ex: Device1 and Device3;
2. Choice Bridge checkbox;

The screenshot shows the 'Device Communication' window with the following configuration:

- Device 0:** Marvell DIAG USB Device. USB selected. Settings button.
- Device 1:** Marvell Modem Device (COM4). Serial selected. RawData button. Settings button.
- Device 2:** Marvell ADB. USB selected. AdbData button. Settings button.
- Device 3:** 127.0.0.1 : 32122. TCP Server selected. RawData button. Settings button.
- Device 4:** Marvell DIAG USB Device. USB selected. Diag button. Settings button.
- Bridge:** The 'Bridge' checkbox is checked. Below it, the text 'No Bridge Devices' is displayed. The 'Bridge' dropdown is set to 'Device 1' and the 'To' dropdown is set to 'Device 3'.

Red annotations on the image include:

- A red box around the 'Bridge' checkbox with an arrow pointing to it and the text '2. Select Bridge checkbox'.
- A red box around the 'Device 1' and 'Device 3' dropdowns with an arrow pointing to them and the text '1. Chioce the two devices'.

At the bottom, there is a status bar with icons for Device 1, Device 2, Device 3, and Device 4.

2.2.4 Check the setting

1. If Bridge success, Device list will be disable;
2. If Bridge success, information will be Bridge the two Devices success.
3. If users re-connect one of the Bridge Devices, the Bridge connection will disconnect.

Device Communication

☐ Device 0
Marvell DIAG USB Device
USB Diag Settings

☒ Device 1
Marvell Modem Device (COM4)
Serial RawData Settings

☐ Device 2
Marvell ADB
USB AdbData Settings

☒ Device 3
127.0.0.1 : 32122
TCP Server RawData Settings

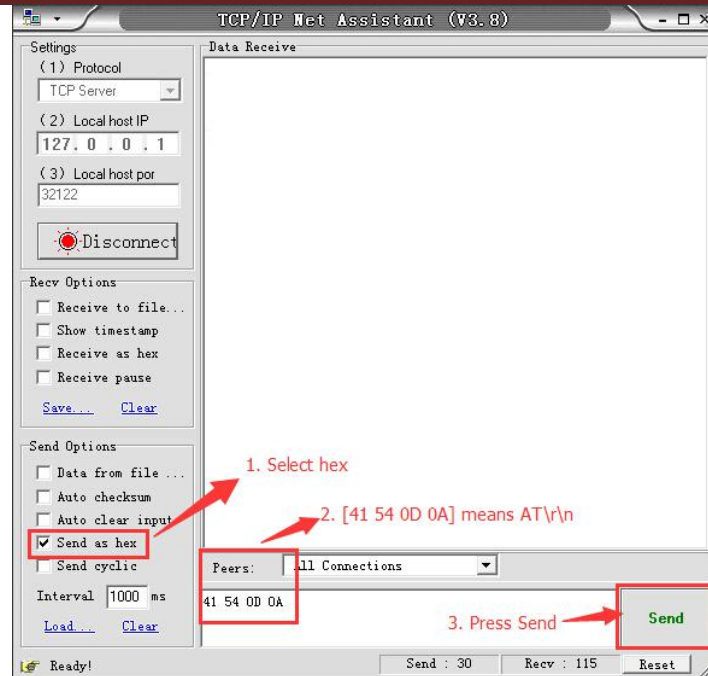
☐ Device 4
Marvell DIAG USB Device
USB Diag Settings

☒ Bridge
Bridge the two Devices success.
Bridge Device 1 To Device 3

0 Device 1 Device 2 Device 3 Device 4

2.3 Send AT command by TCP tool

1. Select Send as Hex;
2. Input hex data: 41 54 0D 0A; (It means 'AT' in ASCII)
3. Do Send.



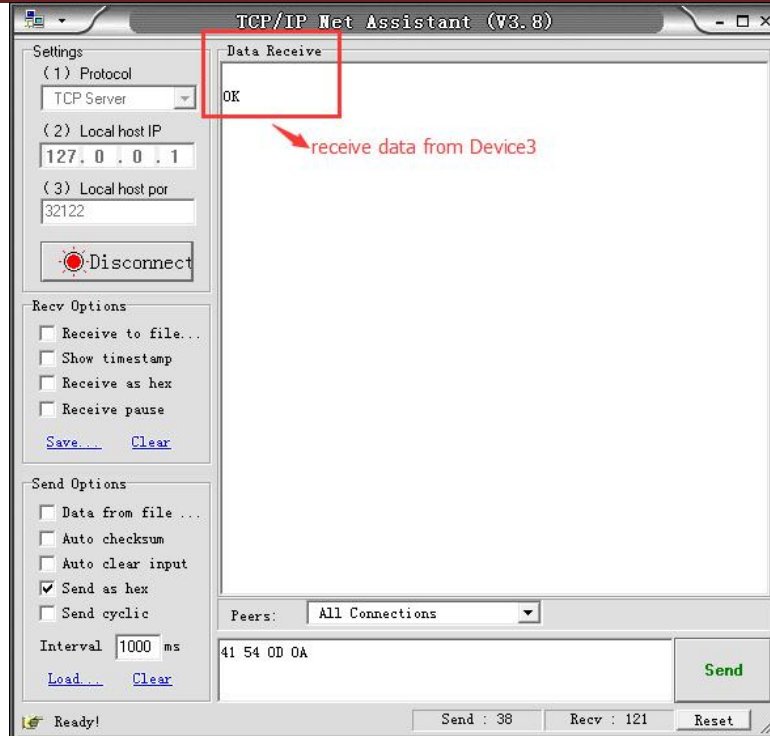
2.4 Check log in LogViewer

Index	Cat1	Cat2	Cat3	Data	Data Hex	Length	PC Time Stamp	Comm Device
40				AT	41 54	2	17:33:01.574	Device 3
41				OK	4F 4B	2	17:33:01.578	Device 1

Index40: Device3 receive data length is 2, and the Hex data is 0x41 0x54;
Index41: Device1 receive data length is 2, and the Hex data is 0x4F 0x4B;

2.5 Check the response in TCP tool

In TCP tool's Data Receive area, user will send 'OK' string.



3 Appendix

3.1 Report issues

Please visit webs: <http://support.asrmicro.com>.

Or contact Marvel FAE/AE

Or please send email to lianghuxu@asrmicro.com with "PC Tools User Doc Issue/Update: ..." title

Or submit an issue at CQ web: <http://sh2-cq01.asrmicro.com/cqweb/login>.

3.2 Update this document

Please send updated document to lianghuxu@asrmicro.com with "PC Tools User Doc Issue/Update: ..." title for merging, and you will receive merged latest version.

3.3 *Revision History*

Rev	Description	Date
1.00	Initial version	2015-05-06