

LTE QLog Linux&Android

User Guide

LTE Module Series

Rev. LTE_QLog_Linux&Android_User_Guide_V1.0

Date: 2015-06-02



Our aim is to provide customers with timely and comprehensive service. For any assistance, please contact our company headquarters:

Quectel Wireless Solutions Co., Ltd.

Office 501, Building 13, No.99, Tianzhou Road, Shanghai, China, 200233

Tel: +86 21 5108 6236

Mail:info@quectel.com

Or our local office, for more information, please visit:

<http://www.quectel.com/support/salesupport.aspx>

For technical support, to report documentation errors, please visit:

<http://www.quectel.com/support/techsupport.aspx>

Or Email: Support@quectel.com

GENERAL NOTES

QUECTEL OFFERS THIS INFORMATION AS A SERVICE TO ITS CUSTOMERS. THE INFORMATION PROVIDED IS BASED UPON CUSTOMERS' REQUIREMENTS. QUECTEL MAKES EVERY EFFORT TO ENSURE THE QUALITY OF THE INFORMATION IT MAKES AVAILABLE. QUECTEL DOES NOT MAKE ANY WARRANTY AS TO THE INFORMATION CONTAINED HEREIN, AND DOES NOT ACCEPT ANY LIABILITY FOR ANY INJURY, LOSS OR DAMAGE OF ANY KIND INCURRED BY USE OF OR RELIANCE UPON THE INFORMATION. ALL INFORMATION SUPPLIED HEREIN IS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

COPYRIGHT

THIS INFORMATION CONTAINED HERE IS PROPRIETARY TECHNICAL INFORMATION OF QUECTEL CO., LTD. TRANSMITTABLE, REPRODUCTION, DISSEMINATION AND EDITING OF THIS DOCUMENT AS WELL AS UTILIZATION OF THIS CONTENTS ARE FORBIDDEN WITHOUT PERMISSION. OFFENDERS WILL BE HELD LIABLE FOR PAYMENT OF DAMAGES. ALL RIGHTS ARE RESERVED IN THE EVENT OF A PATENT GRANT OR REGISTRATION OF A UTILITY MODEL OR DESIGN.

Copyright © Quectel Wireless Solutions Co., Ltd. 2015. All rights reserved.

About the Document

History

Revision	Date	Author	Description
1.0	2015-06-02	Arno WANG	Initial

Quectel
Confidential

Contents

About the Document	2
Contents	3
Figure Index	4
1 Introduction	5
2 Tool Package	6
3 Introduction on Port	7
4 Parameters of Log Tool	8
5 How to Use the Tool	9
5.1. Operation Procedure	9

Quectel
Confidential

Figure Index

FIGURE 1: START THE PROGRAM.....	9
FIGURE 2: END THE PROGRAM.....	10

Quectel
Confidential

1 Introduction

This document mainly introduces how to use the “QLog_L1_Linux” tool to catch log data from the module in Linux and Android systems.

This module is applicable to Quectel LTE series modules.

Quectel
Confidential

2 Tool Package

The log tool package includes an executable file and a configuration file.

The files in tool package are shown as below:

- QLog_L1_Linux
- diag_start.dat

The “QLog_L1_Linux” is the executable file of Quectel log tool. The “diag_start.dat” is a parameter configuration file.

NOTE

You must get the permission to run this program before operating Quectel log tool.

3 Introduction on Port

Before using log tool, you have to ensure that USB driver of the module has been installed successfully in your system. After the module has been connected to the system, the system will list the corresponding ports. The tool catches log data from the DM port. The ports and the descriptors of devices corresponding to the system are listed as below:

- ttyUSB0-----DM port
- ttyUSB1-----NEMA port
- ttyUSB2-----AT port
- ttyUSB3-----Modem port
- ttyUSB4-----Wireless Ethernet Adapter port

NOTE

The descriptors of device files listed above are under the assumption that HOST is not connected to other USB virtual port devices. i.e., HOST is only connected to Quectel module.

You can input the following command under the terminal descriptor to query whether the device file exists.

```
ls -al /dev/ttyUSB*
```

4 Parameters of Log Tool

Log program can specify the operating parameters in the command line, the detailed parameters are illustrated as below.

Table 1: Description of Command Parameters

Number	Parameter	Optional/Non-optional	Description
1	-p <port>	Optional	Specify the port, the default port is ttyUSB0, <port> can be specified as ttyUSB*, refer to Diag port (this module is the DM port)
2	-b <baudrat>	Optional	Specify the baudrate, default is 115200, can be set as 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600
3	-m <size>	Optional	Specify the max size to save a single file Unit: MB, default is 20MB
4	-c <cache>	Optional	Specify the size of the buffer, unit: KB, default is 64KB, can be set between 0-1024
5	-s <path>	Optional	Specify the path to save the log data file, default is "qxdmlog" created under the current directory
6	-f <filename>	Optional	Specify the name of the filter configuration file, default is "diag_start.dat"

5 How to Use the Tool

This chapter main introduces the procedure of using Quectel log tool.

Quectel log tool can catch log data from the module in real time and save it into any directory of HOST (the program will create “qxdmlog” under the current directory by default to save the log). The log data can be used to analyze the abnormality of the module.

5.1. Operation Procedure

Put the program and configuration file into a directory of the HOST. For example, the current directory is “workspace”, you should switch to the “workspace”, and then operate log tool.

```
cd workspace //Enter into the directory of the program
./QLog_L1_Linux //Operate log tool (You need to get the permission)
```

The following figure shows how to start the program:

```
root@arno-OptiPlex-790:/home/arno# cd workspace/
root@arno-OptiPlex-790:/home/arno/workspace# ./QLog_L1_Linux
Q_LOG: start to catch log, configuration file<diag_start.dat>, log directory<./qxdmlog/qxdmlog_20140110134346/>
Q_LOG: port[/dev/ttyUSB0] found!
Q_LOG: change </dev/ttyUSB0> mode ok!
Q_LOG: port[/dev/ttyUSB0] connected!
Q_LOG: log file(./qxdmlog/qxdmlog_20140110134346/20140110134346.bin)
Q_LOG: receive(94.77KB), tick(10s), 9.48KB/s
Q_LOG: receive(4.45KB), tick(10s), 0.44KB/s
Q_LOG: receive(4.28KB), tick(10s), 0.43KB/s
Q_LOG: receive(4.59KB), tick(10s), 0.46KB/s
Q_LOG: receive(4.42KB), tick(10s), 0.44KB/s
Q_LOG: receive(4.33KB), tick(10s), 0.43KB/s
Q_LOG: receive(121.82KB), tick(10s), 12.18KB/s
Q_LOG: receive(4.50KB), tick(10s), 0.45KB/s
Q_LOG: receive(4.72KB), tick(10s), 0.47KB/s
Q_LOG: receive(4.59KB), tick(10s), 0.46KB/s
stoplog
Q_LOG: program is coming to the end...
Q_LOG: stop catching log, directory<./qxdmlog/qxdmlog_20140110134346/>.
Q_LOG: end of program!
```

Figure 1: Start the Program

If you want to end the program, please input the command below:

```
stoplog //End the program
```

```
root@arno-OptiPlex-790:/home/arno# cd workspace/  
root@arno-OptiPlex-790:/home/arno/workspace# ./QLog_L1_Linux  
Q_LOG: start to catch log, configuration file<diag_start.dat>, log directory<./qxdmlog/qxd  
mLog_20140110134346/>  
Q_LOG: port[/dev/ttyUSB0] found!  
Q_LOG: change </dev/ttyUSB0> mode ok!  
Q_LOG: port[/dev/ttyUSB0] connected!  
Q_LOG: log file(./qxdmlog/qxdmlog_20140110134346/20140110134346.bin)  
Q_LOG: receive(94.77KB), tick(10s), 9.48KB/s  
Q_LOG: receive(4.45KB), tick(10s), 0.44KB/s  
Q_LOG: receive(4.28KB), tick(10s), 0.43KB/s  
Q_LOG: receive(4.59KB), tick(10s), 0.46KB/s  
Q_LOG: receive(4.42KB), tick(10s), 0.44KB/s  
Q_LOG: receive(4.33KB), tick(10s), 0.43KB/s  
Q_LOG: receive(121.82KB), tick(10s), 12.18KB/s  
Q_LOG: receive(4.50KB), tick(10s), 0.45KB/s  
Q_LOG: receive(4.72KB), tick(10s), 0.47KB/s  
Q_LOG: receive(4.59KB), tick(10s), 0.46KB/s  
stoplog  
Q_LOG: program is coming to the end...  
Q_LOG: stop catching log, directory<./qxdmlog/qxdmlog_20140110134346/>.  
Q_LOG: end of program!
```

Figure 2: End the Program