

MeiG_LTE Debug Tool

_Linux_User Guide_V1.1

File Name: MeiG_LTE Debug Tool_Linux_User Guide_V1.1

Version: V1.1

Company: MeiG Smart Technology Co.,Ltd

Release Date: 2021-01-29



IMPORTANT NOTICE

COPYRIGHT NOTICE

Copyright © MeiG Smart Technology Co., Ltd. All rights reserved.

All contents of this manual are exclusively owned by MeiG Smart Technology Co., Ltd (MeiG Smart for short), which is under the protection of Chinese laws and copyright laws in international conventions. Anyone shall not copy, spread, distribute, modify or use in other ways with its contents without the written authorization of MeiG Smart. Those who violated will be investigated by corresponding legal liability in accordance with the law.

NO GUARANTEE

MeiG Smart makes no representation or warranty, either express or implied, for any content in this document, and will not be liable for any specific merchantability and applicable or any indirect, particular and collateral damage.

CONFIDENTIALITY

All information contained here (including any attachments) is confidential. The recipient acknowledges the confidentiality of this document, and except for the specific purpose, this document shall not be disclosed to any third party.

DISCLAIMER

MeiG Smart will not take any responsibility for any property and health damage caused by the abnormal operation of customers. Please fulfill the product according to the technical specification and designing reference guide which defined in the product manual. MeiG Smart has the right to modify the document according to technical requirement with no announcement to the customer.

About the Document

History

Revision	Date	author	Description
V1.0	2020-04-21		Created, Initial Version
V1.1	2021-01-29		Modify the description

Contents

IMPORTANT NOTICE	2
About the Document.....	3
Contents.....	4
1 Introduction	5
2 How to use the debug tool under Linux OS.....	5
2.1 Cross compilation chain	5
2.2 How to use the debug tool.....	5
2.3 System integration of debug tool	7

1 Introduction

This document mainly introduces how to capture the debug log under Linux OS.

This document is applicable to MeiG LTE series modules

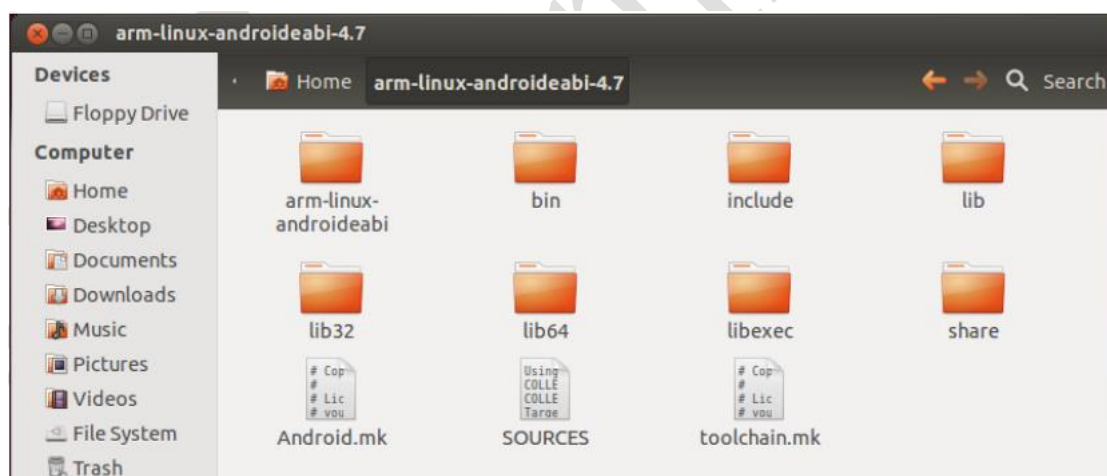
MeiG Linux debug tool is used in scenarios during customer debugging or later maintenance. This document follows customer adaptation flow: from the cross-compilation chain, how to use the LOG tool, and system integration to introduce the use cases.

2 How to use the debug tool under Linux OS

2.1 Cross compilation chain

Since the Linux system may run on a variety of CPU architectures, the cross-compilation chain used is even more diverse. Therefore, customer needs to inform MeiG about the cross-compilation chain information in advance.

If MeiG does not have the specified corresponding cross-compilation environment; the customer needs to provide it to MeiG, then MeiG will release the debug tool accordingly.



2.2 How to use the debug tool

After obtaining the cross-compilation chain, the debug tool will be provided to the customer as shown in the figure below, where “diaggrabpro” is the executable program and “DIAG.cfg” is the configuration file.

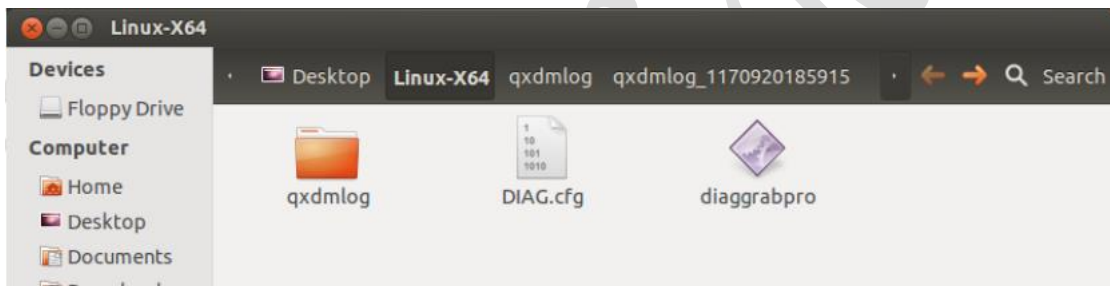


It can be run through the command line on the client's host, as shown in the following figure:

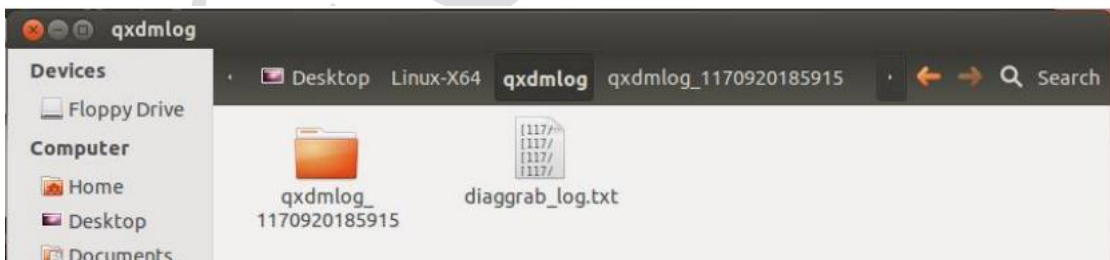
```

root@ubuntu: /home/zhangyile/Desktop/Linux-X64
root@ubuntu:/home/zhangyile/Desktop/Linux-X64# ./diaggrabpro -c DIAG.cfg -start
DIAGGRAB: run mode 0
DIAGGRAB: configuration file(DIAG.cfg)
DIAGGRAB: port[/dev/ttyUSB0] found!
DIAGGRAB: change </dev/ttyUSB0> mode ok! ret_val: 0
DIAGGRAB: port[/dev/ttyUSB0] connecting...
DIAGGRAB: port[/dev/ttyUSB0] connected!
DIAGGRAB: ++++++
DIAGGRAB: config file <DIAG.cfg>, size<3295>
DIAGGRAB: -----
DIAGGRAB: Log startted, config<DIAG.cfg>, log dir<./qxdmlog/qxdmlog_1170920185915/>
DIAGGRAB: log file(./qxdmlog/qxdmlog_1170920185915/1170920185915.qmdl)
DIAGGRAB: recvd(220787), tick(3), 73595B/S
DIAGGRAB: recvd(85988), tick(3), 28662B/S
DIAGGRAB: recvd(94528), tick(3), 31509B/S
DIAGGRAB: recvd(128915), tick(3), 42971B/S
DIAGGRAB: recvd(78505), tick(3), 26168B/S
    
```

The corresponding LOG is saved in the directory where the tool is located, so you must ensure that the flash partition where the LOG tool is located has enough storage space and has read and write permissions. The following figure shows the created LOG holding path.



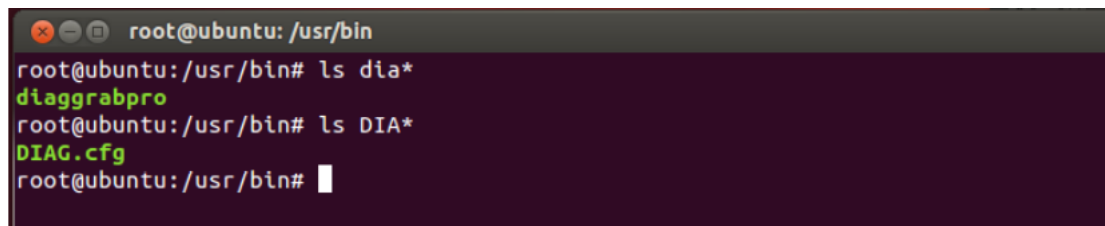
In the LOG save directory qxdmlog, the related LOGs are listed according to time, as shown in the figure below:



Customer can send the log to MeiG to analysis.

2.3 System integration of debug tool

If customer needs to integrate the debug tool into the main control system, they need to provide the corresponding cross-compilation chain according to section 2.1, and MeiG provides the corresponding tools. During system integration, customer needs to package the tools into the file system and ensure that the partition where they are located has enough storage space. As shown in the following figure, it is an example of integrating the debug tool into the /usr/bin directory:

A terminal window screenshot showing a root user at an Ubuntu machine in the /usr/bin directory. The user runs 'ls dia*' and 'ls DIA*', which return 'diaggrabpro' and 'DIAG.cfg' respectively. The terminal has a dark background with light-colored text.

```
root@ubuntu: /usr/bin
root@ubuntu:/usr/bin# ls dia*
diaggrabpro
root@ubuntu:/usr/bin# ls DIA*
DIAG.cfg
root@ubuntu:/usr/bin#
```

Customer needs to integrate these two files as shown in the figure into the selected directory.