

Coolwatcher 操作指导与参考

Coolwatcher User manual

(双语版)

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一、相关说明 (Foreword)

1.1 适用条件 (Suitable Condition)

工具/Tools	厂商版本/Manufacturer Revision	适用模组类型/Applicable Module Type
Coolwatcher	AT+CGMI/RDA_89xx	BC25/BC32/BC35-GR/BC95-B5R/BC95-B8R/BC65/BC92

1.2 相关下载 (Related to Download)

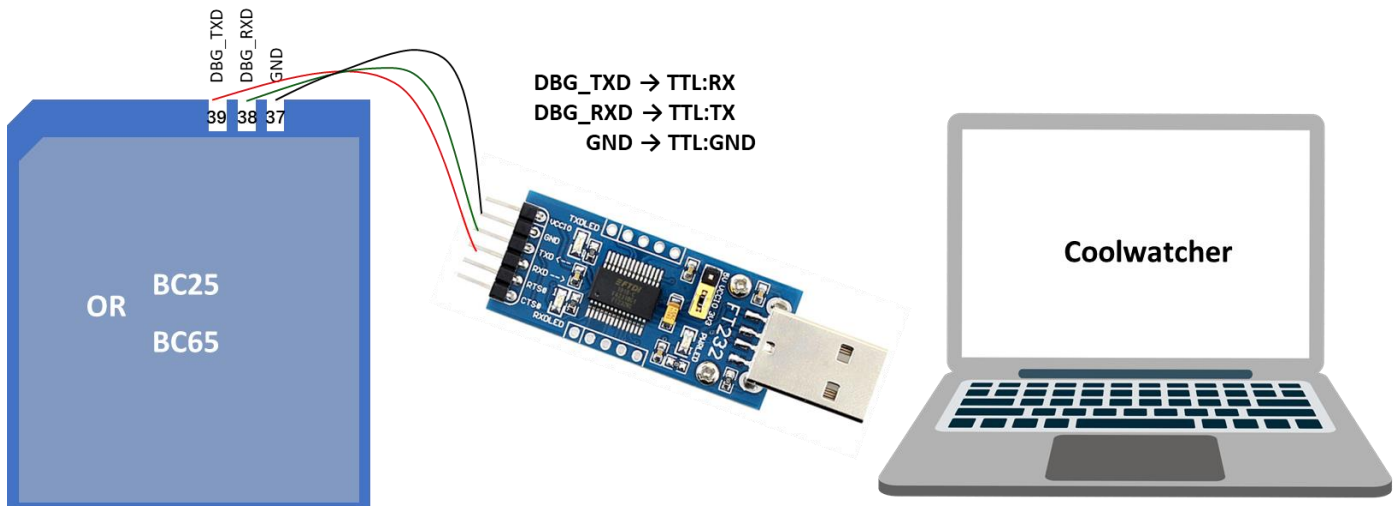
Coolwatcher	https://quectel123-my.sharepoint.cn/:u:/g/personal/ae-fae_dom_quectel_com_cn/EUj4DJBPD9VJrsdRa-DuIFYBTcNyLMrxoyu1EQgTvGShTA?e=QAqe4H
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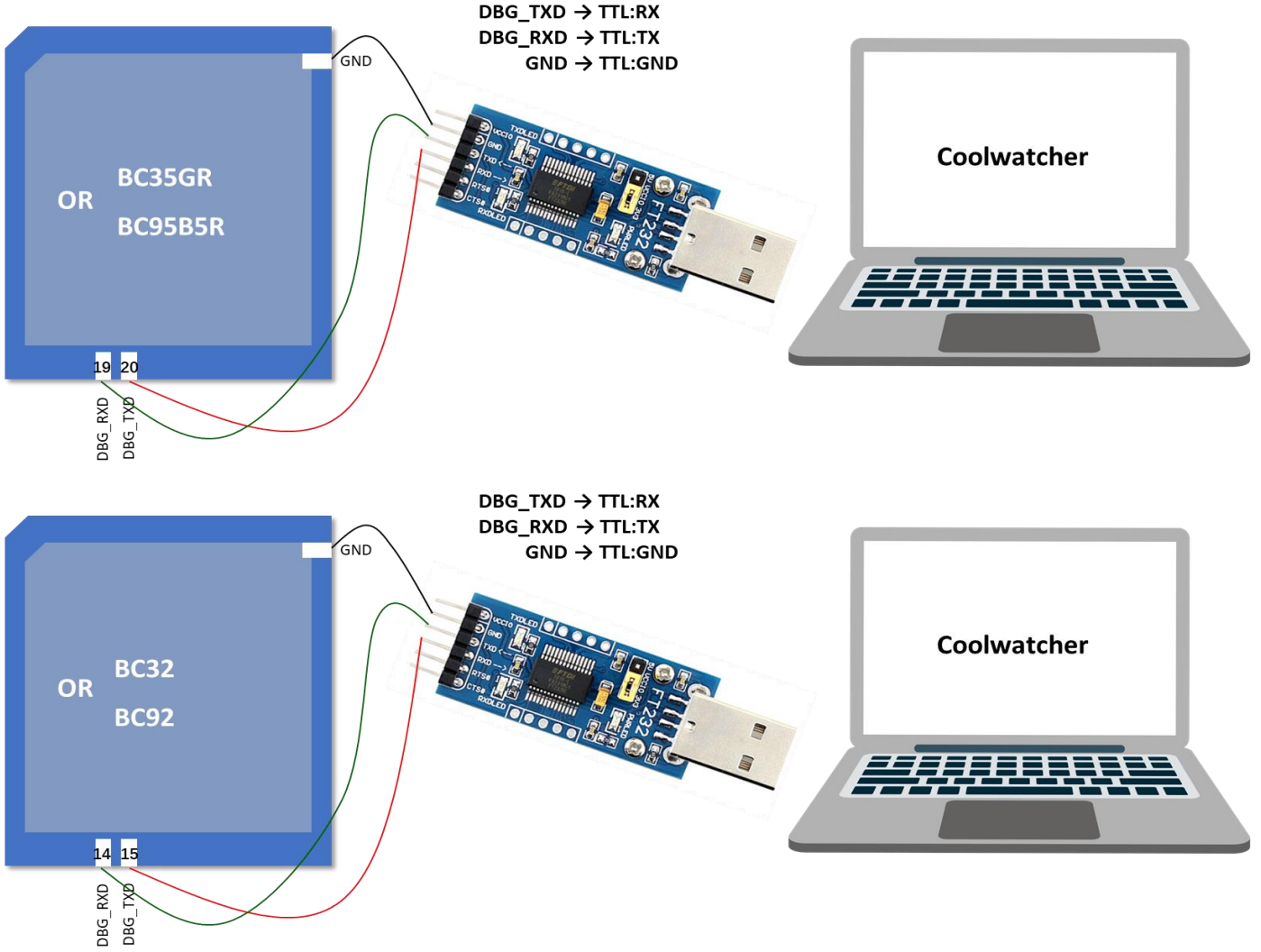
1.3 设备连接 (Device Connection)

如果模组已完成贴片或对单独对模组进行调试, 建议参考下面连接方式连接 Coolwatcher 并抓取 log; 注意, 海外版

本型号 BC65/BC92, Tx/Rx 与 TTL_Tx/TTL_Rx 无需交叉, 直连即可;

If the module has been welded or debugged separately, it is recommended that you connect to the Coolwatcher and grab the log as shown below. Note that the BC65/BC92 for overseas type, Tx/Rx and TTL_Tx/TTL_Rx directly connect, do not need to cross;





如果使用 RDA 模组对应的 TE-B, 请在“设备管理器→端口”选择第二个 COM 端口(XR21V1412 USB UART ChB);

If TE-B corresponding to RDA module is used, from "Device Manager → Ports" to select the second COM port(XR21V1412 USB UART ChB).

二、Coolwatcher 安装 (Installation)

Coolwatcher 绿色安装，解压后即可使用；在 \cooltools-win32_custom_P3.R2.0.0005 目录下，运行 coolwatcher_debughost.exe.

Coolwatcher is installation-free and can be used after decompression. Run coolwatcher_debughost.exe in the \cooltools-win32_custom_P3.R2.0.0005 path.



Coolwatcher icon

三、Coolwatcher 连接 (Connection)

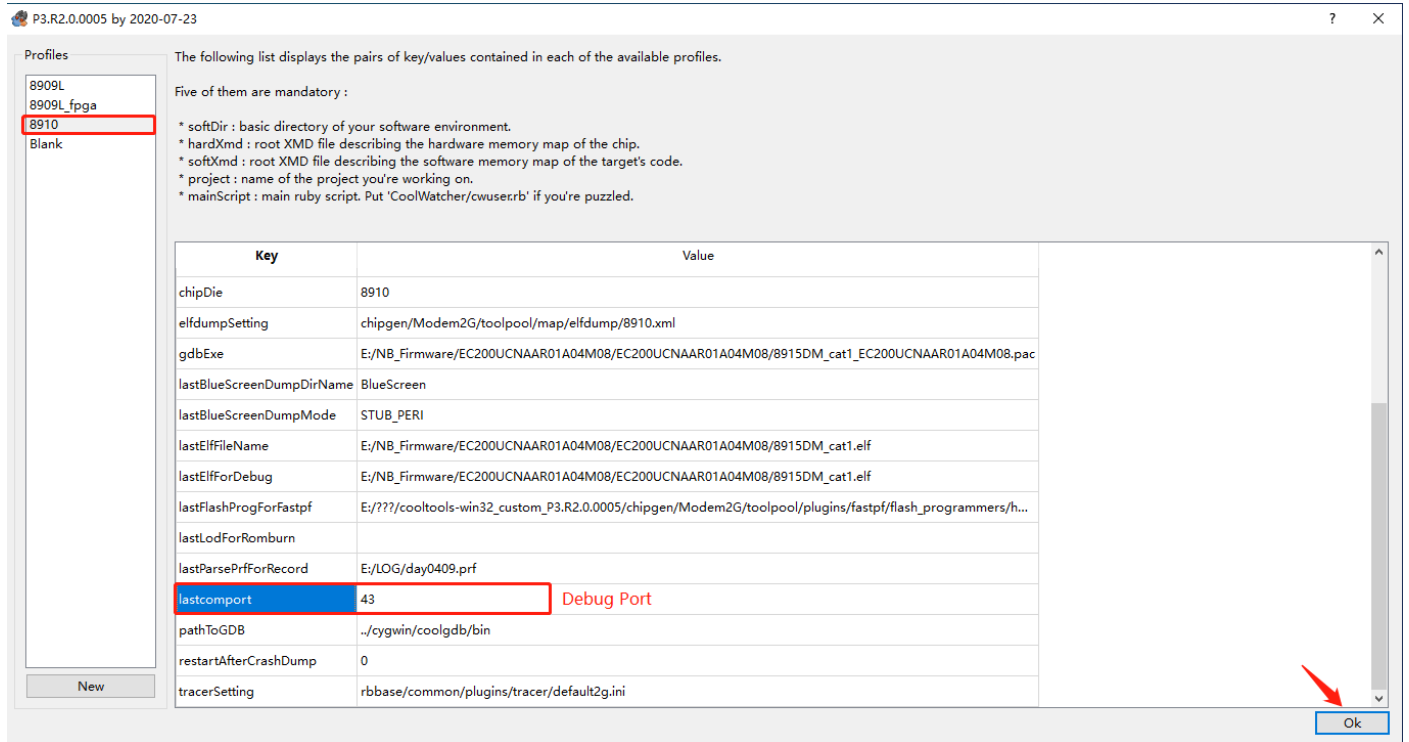
连接设备前,需通过主串口 UART 发送指令 `AT^TRACECTRL=1`, 使能 Debug 输出;建议抓取 Log 后,执行 `AT^TRACECTRL=0` 关闭;

Before connecting the device, run the `AT^TRACECTRL=1` via the main UART to enable debugging output. After capturing logs, to run `AT^TRACECTRL=0` to disable debug output.

AT^TRACECTRL=1

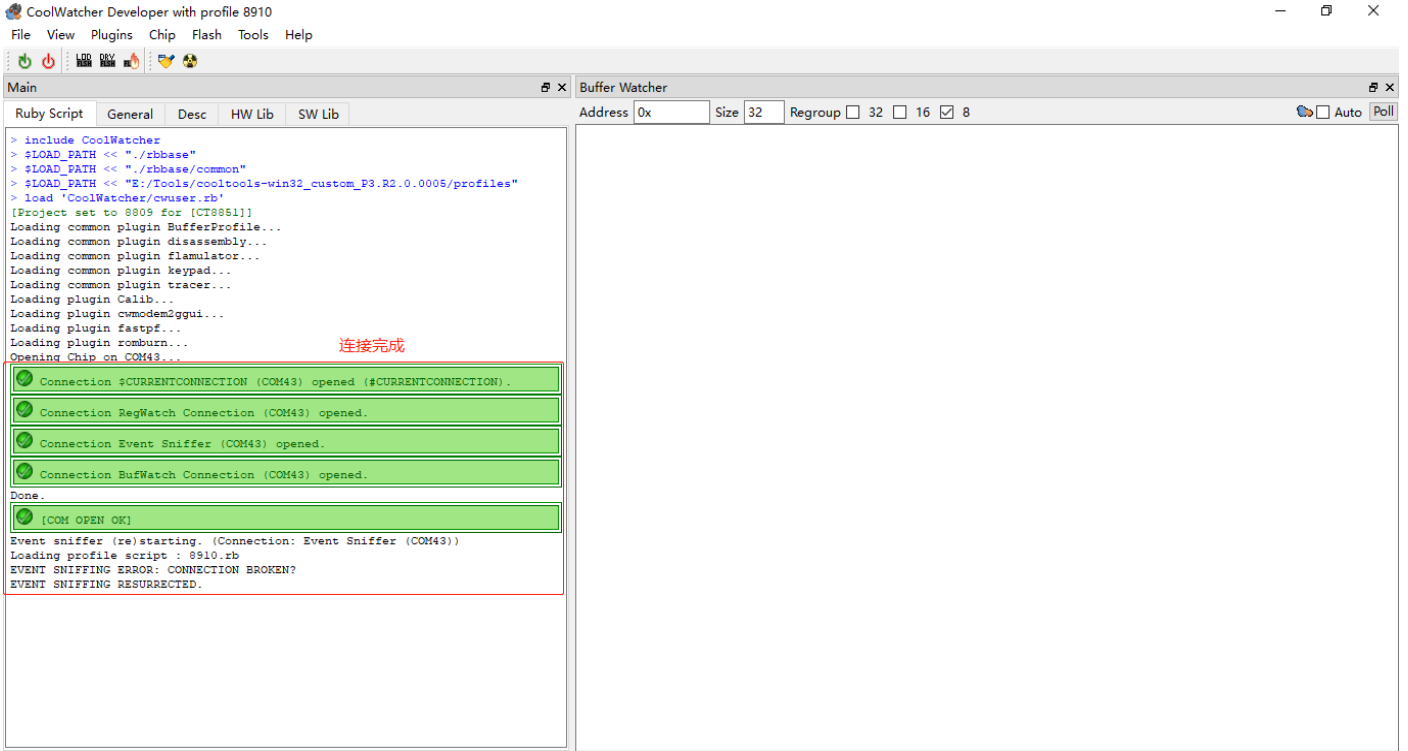
点击上述 Coolwatcher 图标, 然后弹出如下图所示配置窗口, Profiles 选择 "8910", lastcomport 选择对应的 debug port, 即可;

Click the Coolwatcher icon above, and then the configuration window as shown below pops up. Select "8910" for Profiles and the corresponding Debug port for lastcomport, then to click "OK";



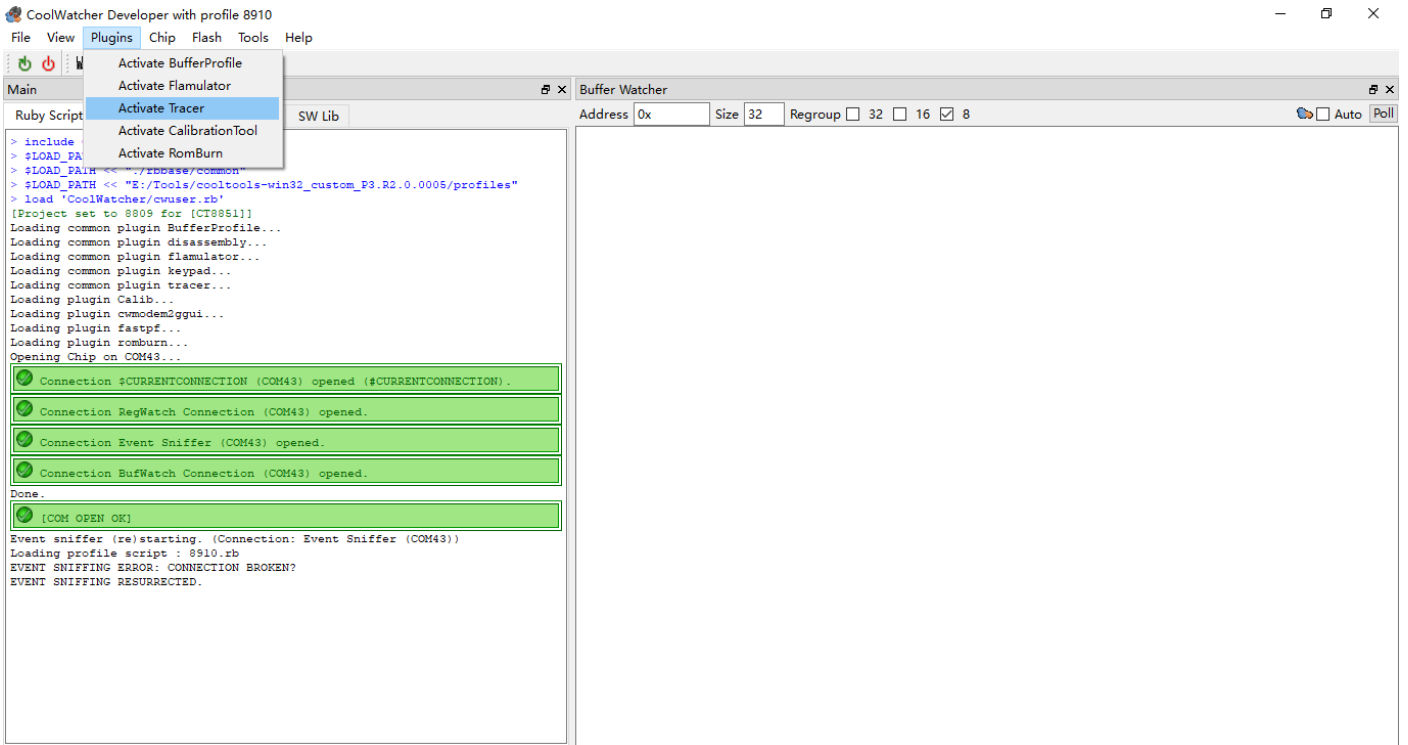
成功连接设备输出如下图所示消息;

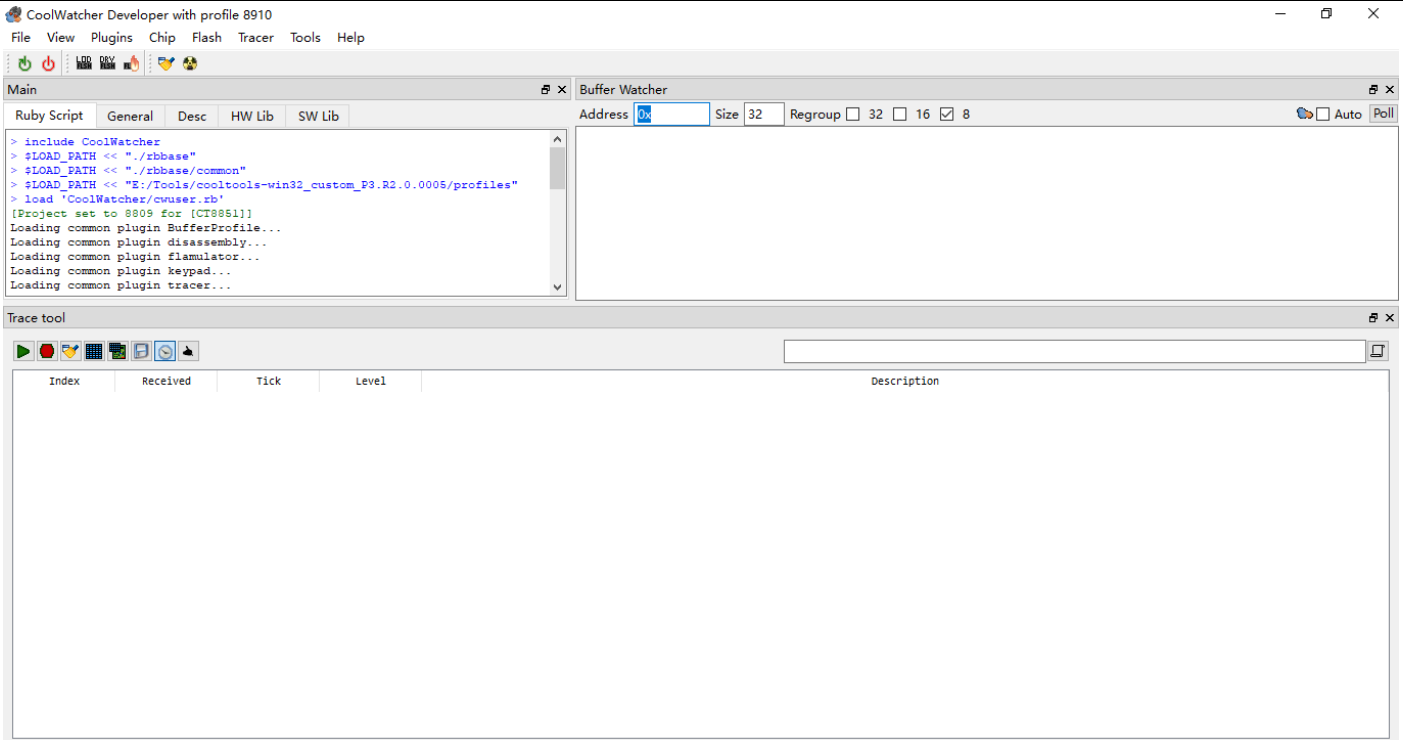
The message shown below is output after the device is successfully connected.



在选项栏中选择 “Plugins→Activate Tracer” ,如下图所示，打开日志跟踪窗口；

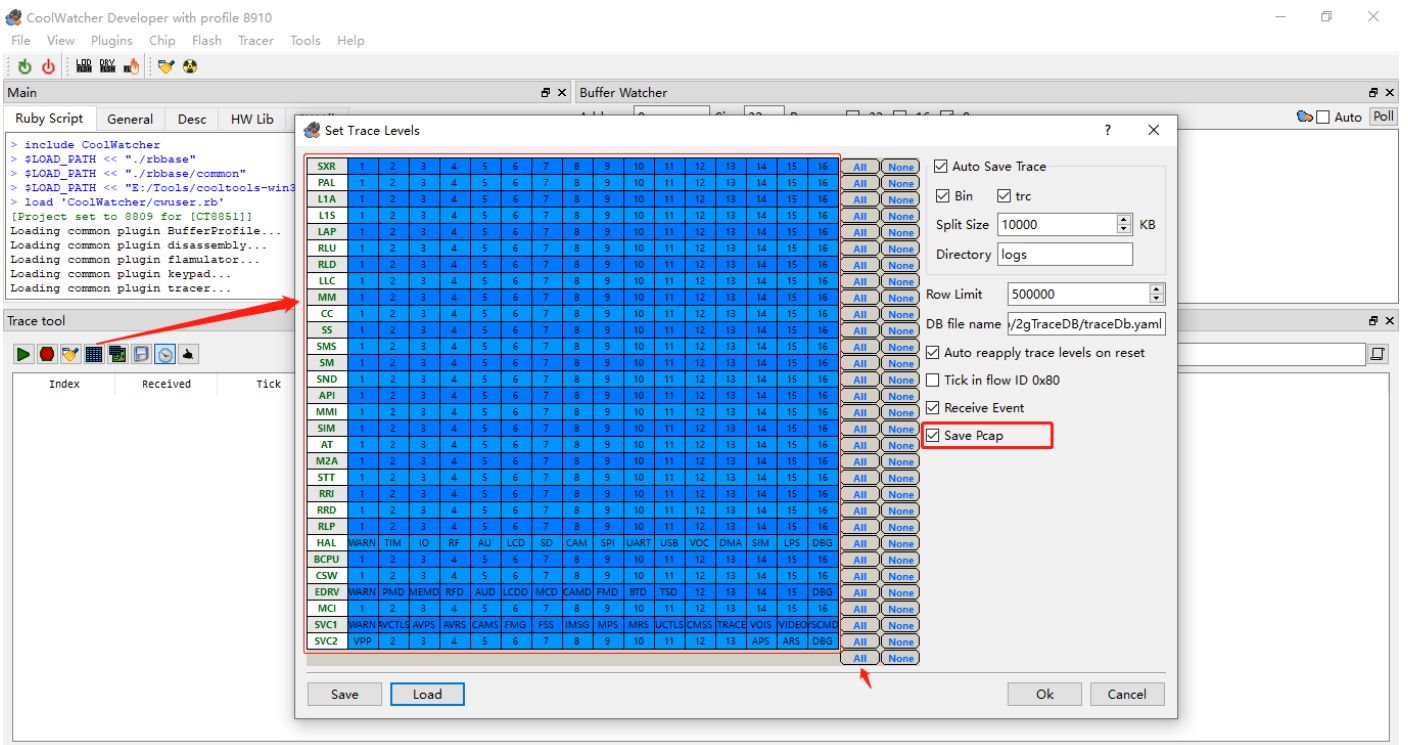
Select "Plugins→Activate Tracer" from the menu bar, as shown below, and open the log trace window.





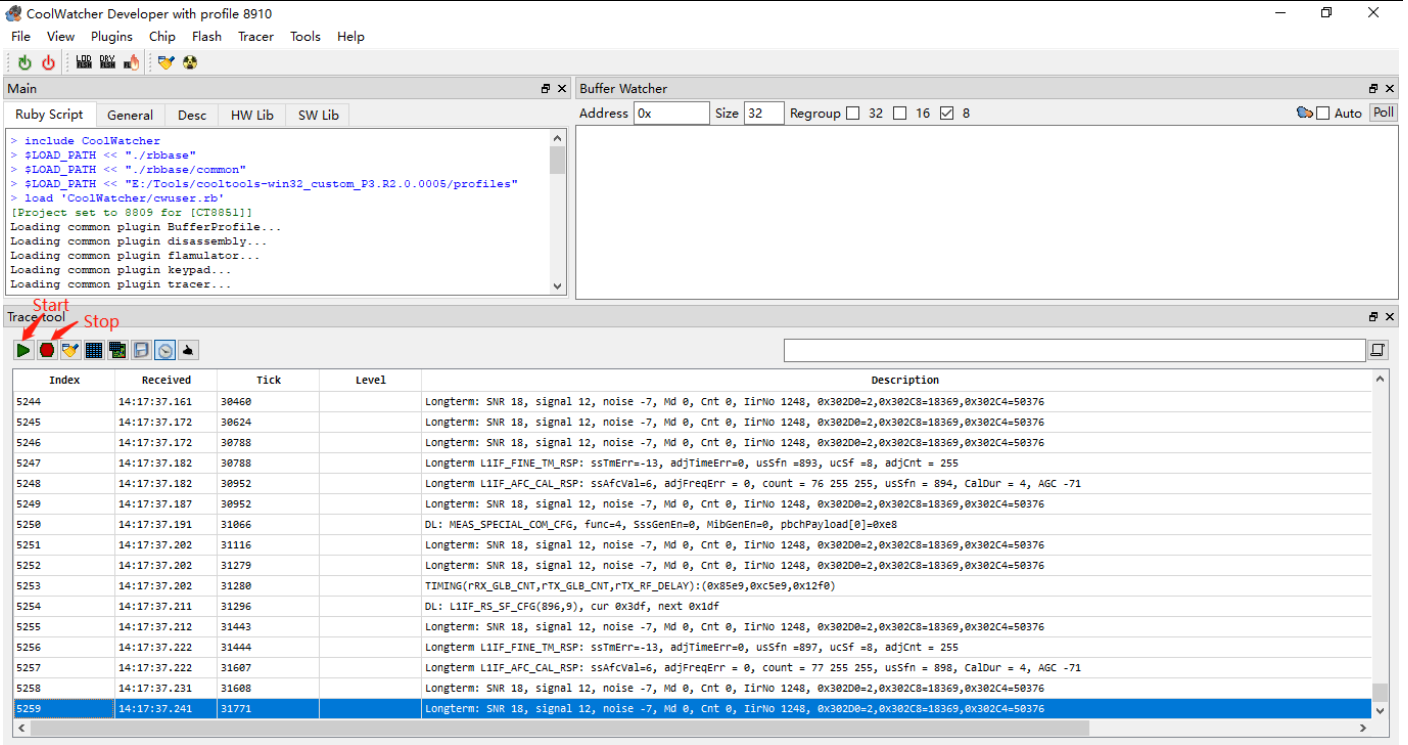
在选项栏中选择 “Tracer→Set Trace levels” ,或如下图所示图标，选择所有日志类型，并建议勾选 “Save Pcap” ；

Select "Tracer→Set Trace Levels" from the menu bar, or select all log types, and to select "Save Pcap". Then to click OK;



在选项栏中选择 “Tracer→Start Tracer/Stop Tracer” ,或如下图所示图标，开始跟踪日志或停止跟踪；

Choose "Tracer→Start Tracer/Stop Tracer" in the menu bar, or the icon as shown below, to Start tracing logs or Stop tracing.

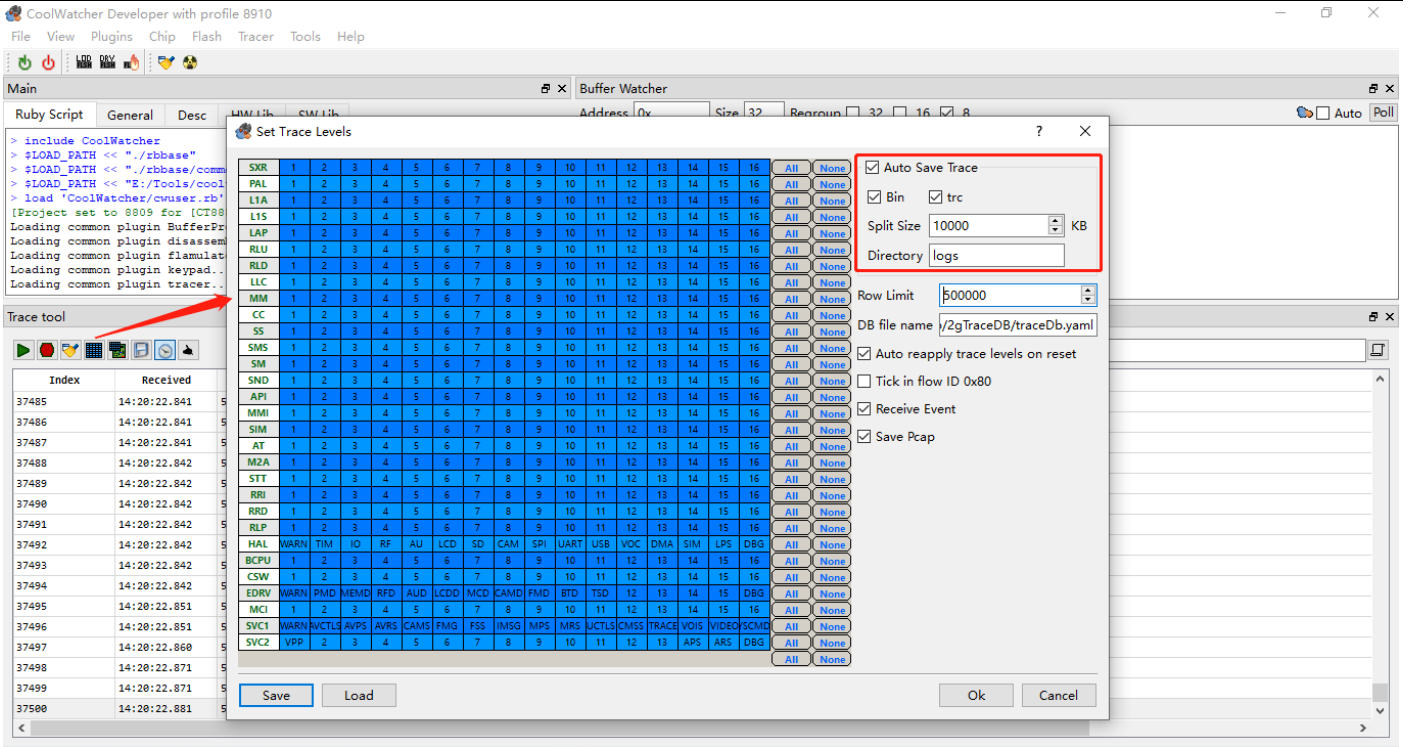


四、日志保存 (Save Log)

4.1 自动保存(Auto Save)

在选项栏中选择“Tracer→Set Trace levels”，或如下图所示图标，勾选自动保存，并设置保存路径；默认自动保存 log 路径\cooltools-win32_custom_P3.R2.0.0005\logs；其中\cooltools-win32_custom_P3.R2.0.0005\logs\cap 下保存为 Pcap 文件；

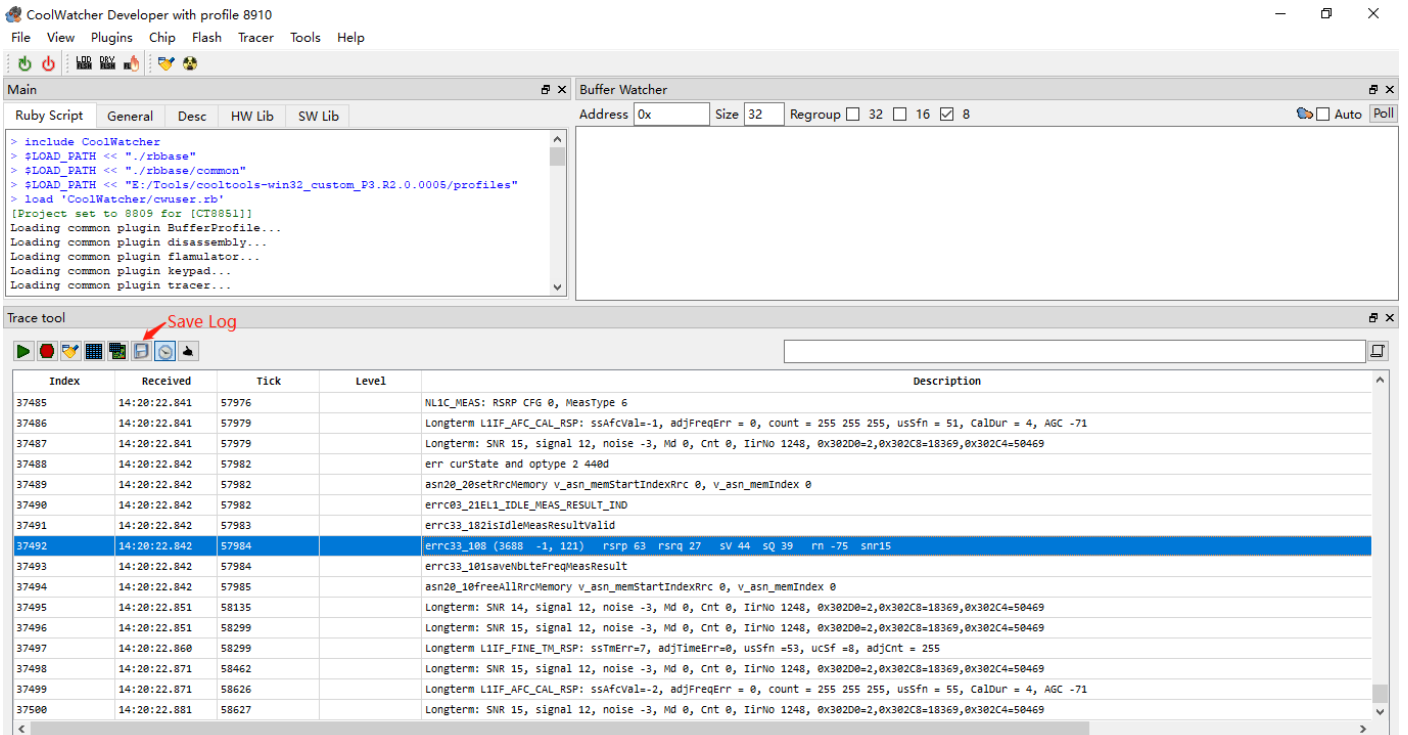
Select "Tracer→Set Trace Levels" in the menu bar, or the icon as shown below, select Auto Save, and Set the save path. By default, log path \coolTools-win32_custom_p3.r2.0.0005 \logs; Where \ cooltools-win32_custom_p3.r2.0.0005 \logs\cap is saved as Pcap file;



4.2 手动保存(Manual save)

也可以通过选项栏中选择 “Tracer→Save Trace”，或通过下图所示方式保存；

You can also choose “Tracer→Save” Trace from the menu bar, or Save the log as shown below.

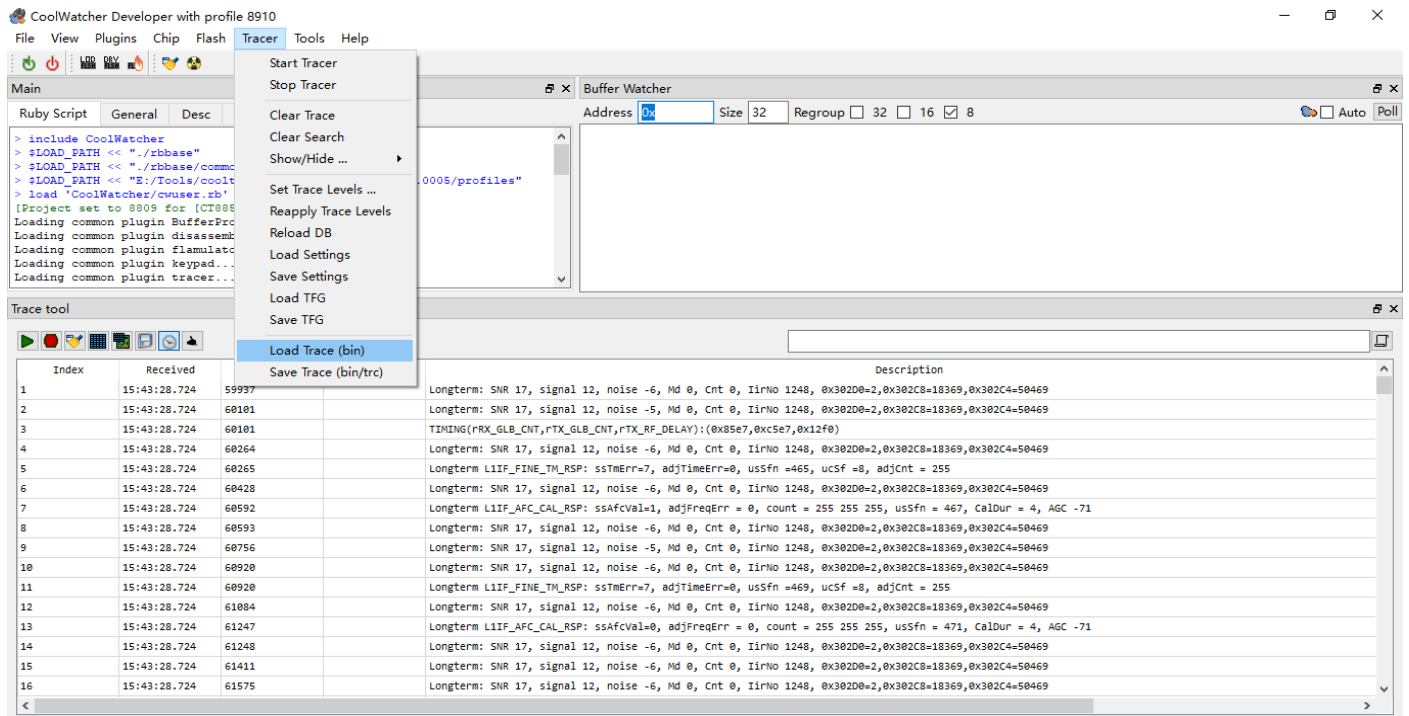


五、常见分析应用 (Common Analytical Application)

5.1 LOG 导入(Import Log)

目前常用 Notepad++或 UltraEdit 对获取的 Log 查看或分析;也可以通过 Coolwatcher 导入 Log;在选项栏中选择”Tracer →Load trace(bin)”, 选择对应的 xxx.bin 文件;

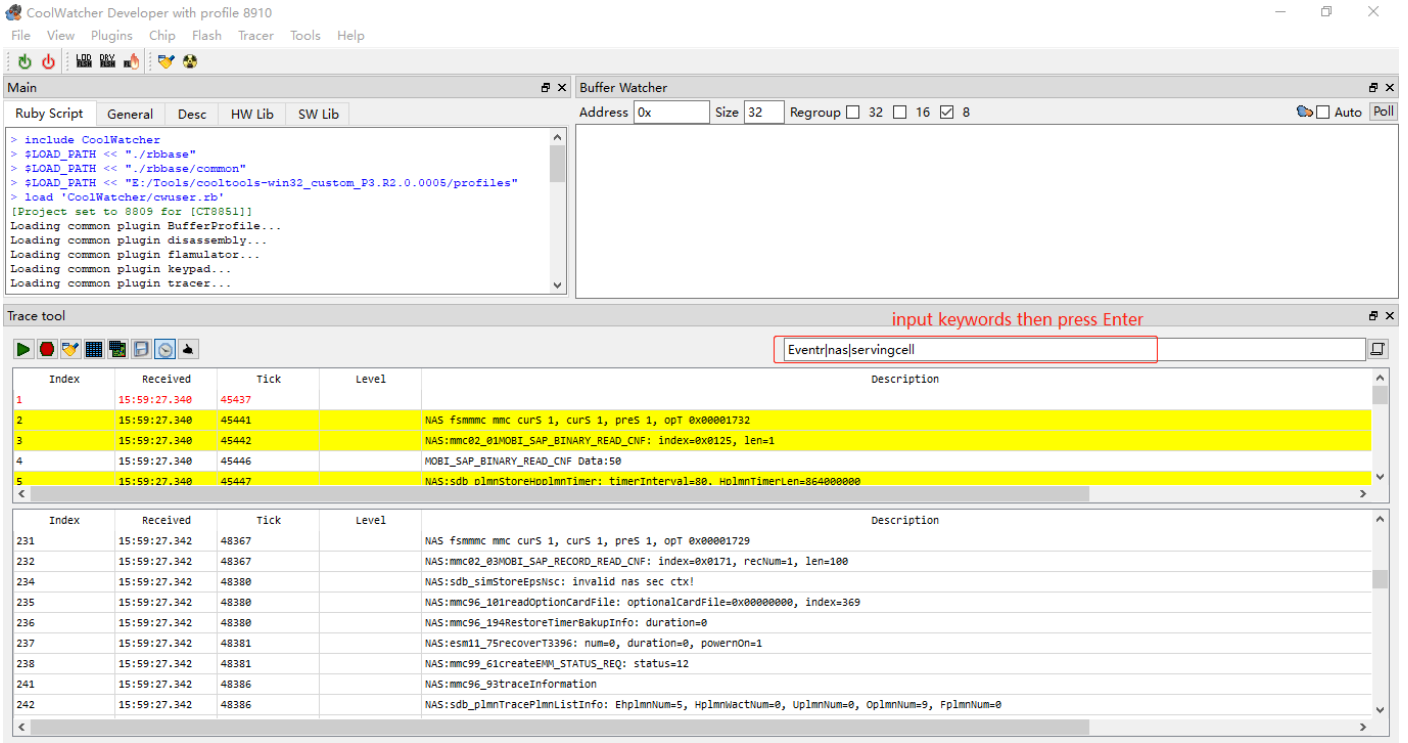
Currently Notepad++ or UltraEdit is commonly used to view or analyze the Log;You can also import logs using Coolwatcher; On the menu bar, choose “Tracer→Load Trace (bin)” and select the corresponding xxx.bin file.



5.2 LOG 过滤(Filter Log)

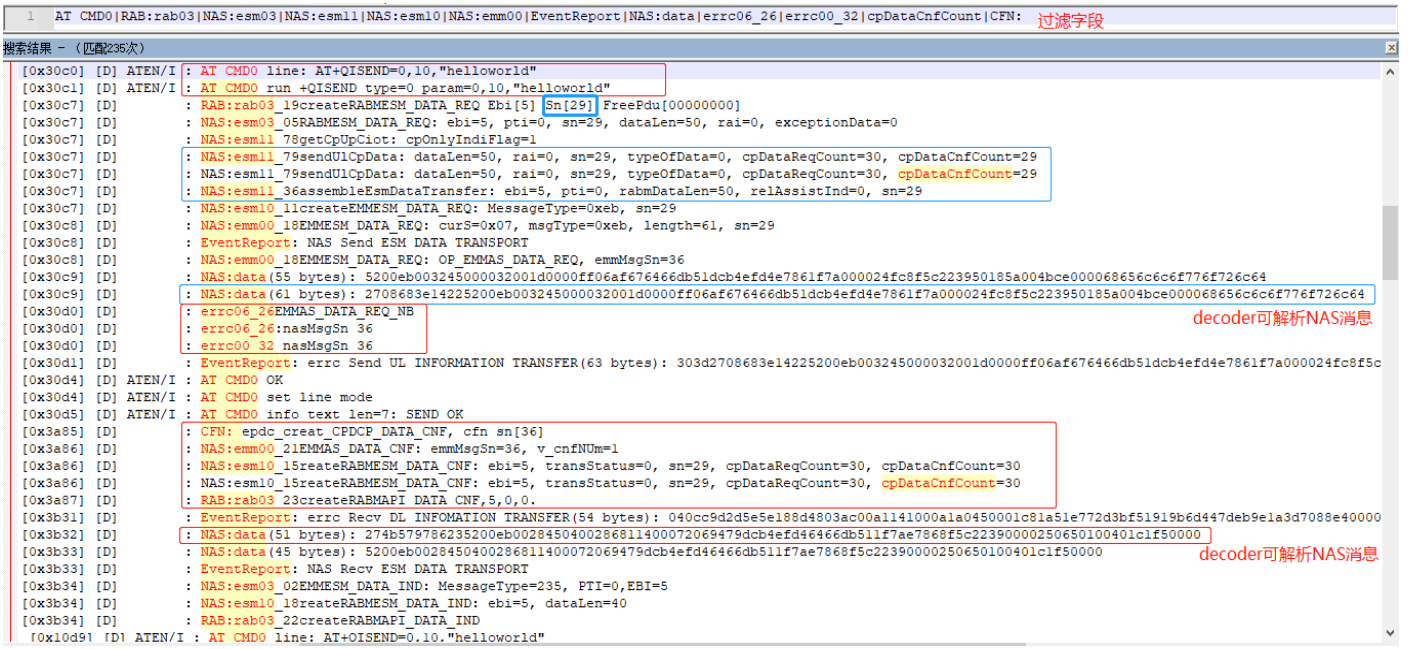
Coolwatcher 中 Log 过滤如下图所示, 输入过滤关键字后回车即可, 支持使用单竖线 “|” 正则方式过滤;

Coolwatcher Log filter as shown below, input filtering keywords then press Enter,and support the use of a single vertical bar “|” the regular filtering;



5.3 常用过滤关键字(Common filtering keyword)

Camp Cell	cell search Servcell frequency ServngRSRP
AT Command	AT CMD0
NAS/AS message	EventReport NAS:data
Data Analysis	AT CMD0 RAB:rab03 NAS:esm03 NAS:esm11 NAS:esm10 NAS:emm00 EventReport NAS:data errc06_26 errc00_32 cpDataCnfCount CFN:



5.4 导出 Pcap(Output Pcap)

在选项栏中选择 “Tracer → Set Trace levels” 并勾选 “Save Pcap”；默认保存路径：\cooltools-win32_custom_P3.R2.0.0005\logs\cap；Pcap 文件可以通过 Wireshark 对数据交互进行分析；

Select "Tracer→Set Trace Levels" from the menu bar, and to select "Save Pcap". Then to click OK; Pcap Default save path\cooltools-win32_custom_P3.R2.0.0005\logs\cap; Pcap can be analyzed using Wireshark for data interaction.

