



目录

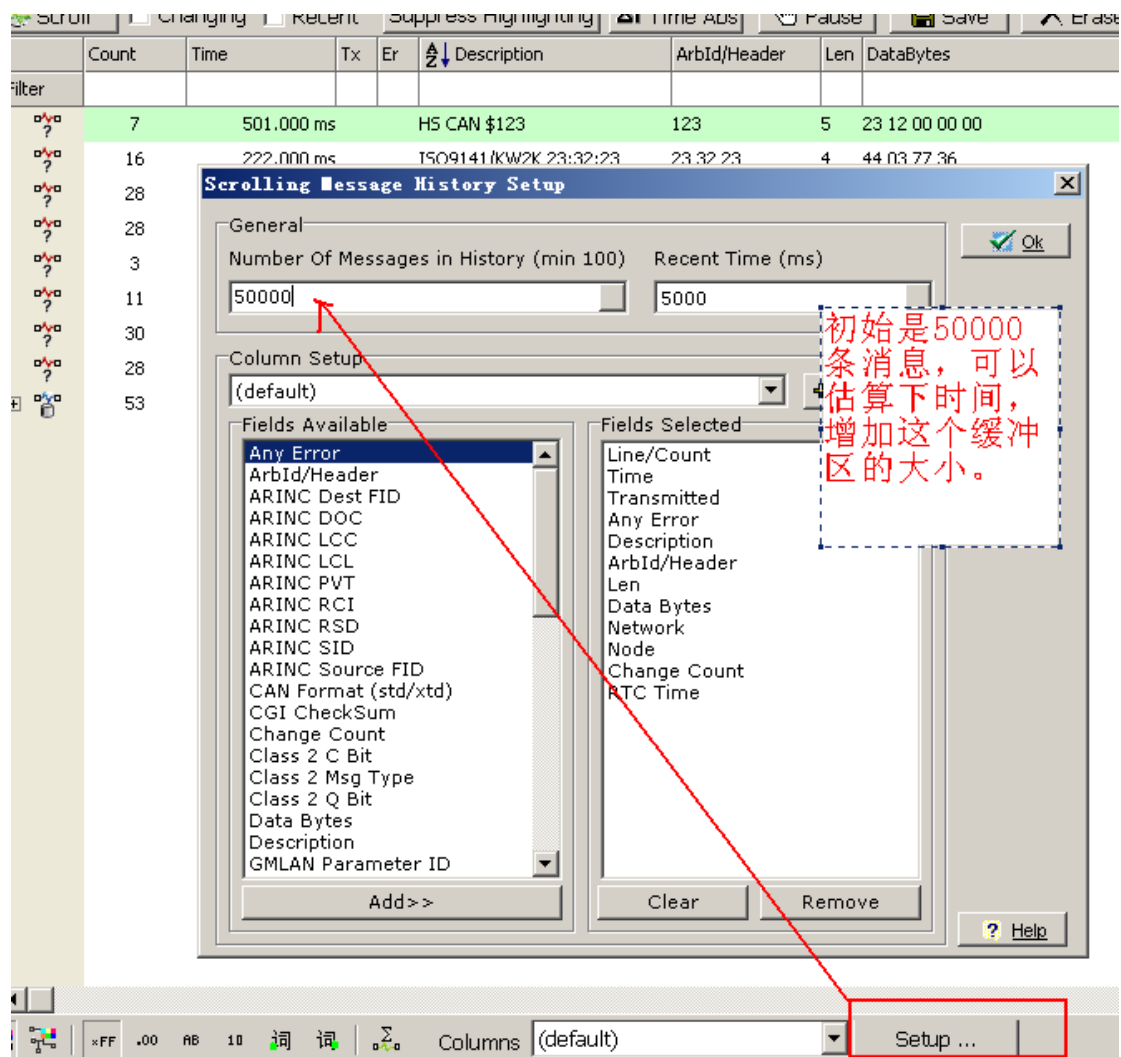
VSpy3 中记录数据的方法	2
方法一.在 message 界面点击 Save 按钮	2
方法二.Data Cache Disk Streaming 自动记录，不需要编写脚本。	3
方法三.Capture 类型 functionBlock 脚本	4
方法四.我们极力推荐使用更便捷的数据记录界面 VehicleScapeDAQ	7

VSpy3 中记录数据的方法

方法一.在 message 界面点击 Save 按钮

注：可以通过 ArbID 或 Description 等过滤，例如输入 7*， 或者输入 ‘Eng ‘来筛选一批报文。

也可以把 message view 的缓冲设置大些。



随后用 save 来保存缓冲区里的消息。

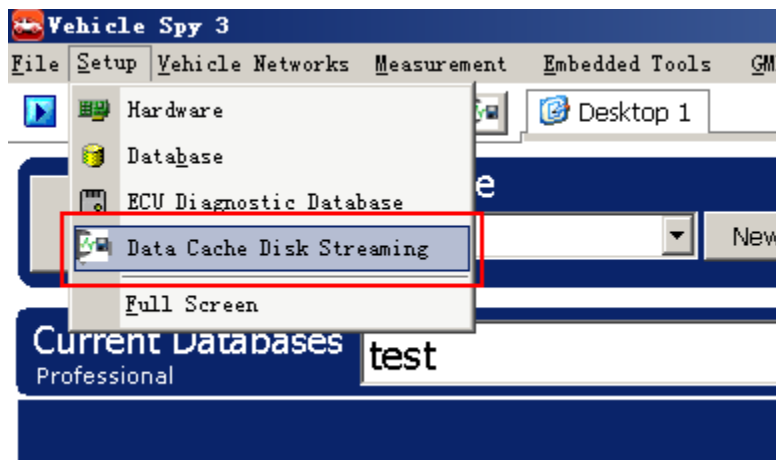


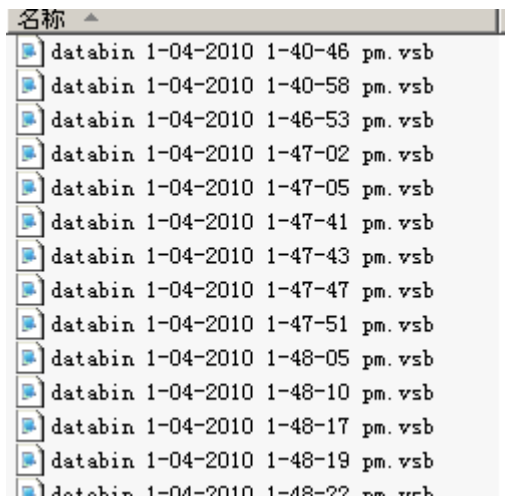
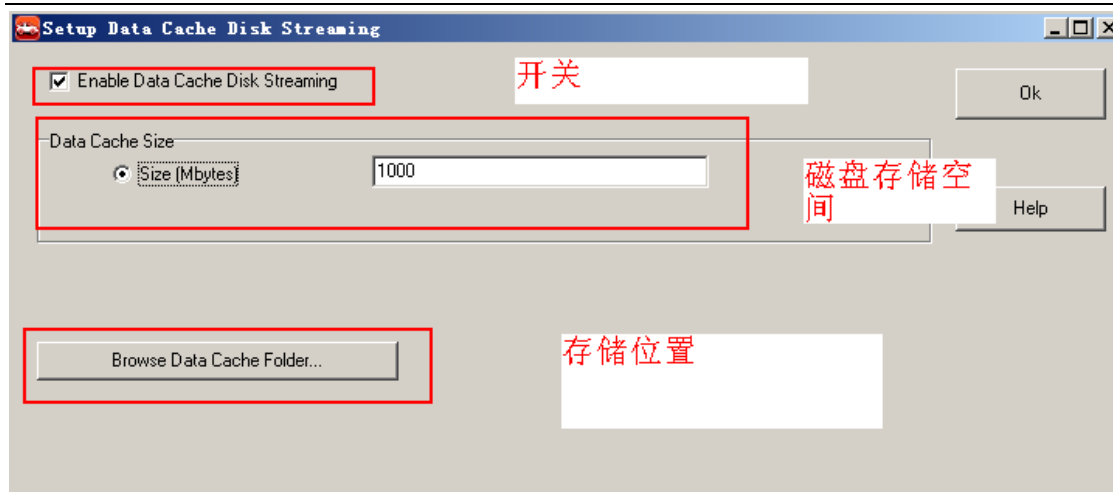
Header	Len	DataBytes	Network
	5	23 12 00 00 00	H5 CAN

方法二.Data Cache Disk Streaming 自动记录，不需要编写脚本。

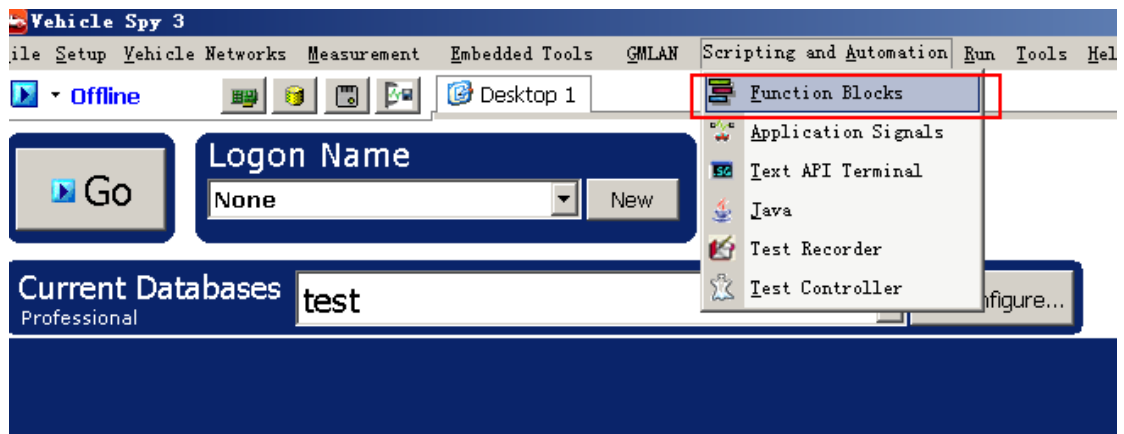
在指定的存储位置，会自动为每次运行过程记录所有数据。每次运行后，自动增加一个记录文件，记录格式为.vsb，文件名是运行的时间。

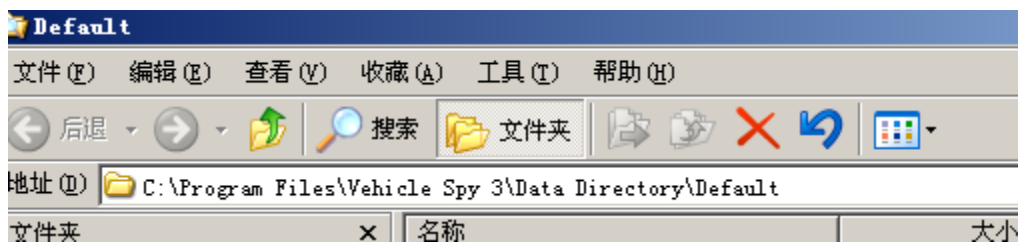
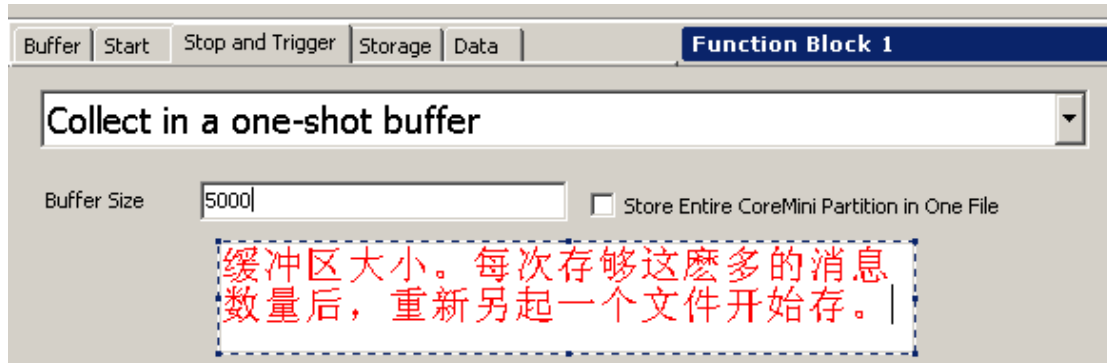
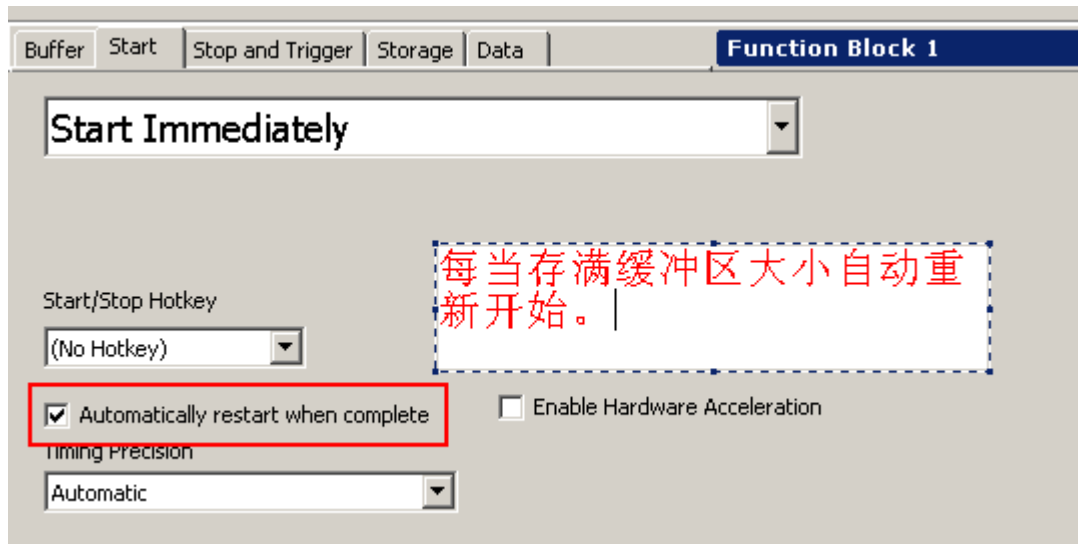
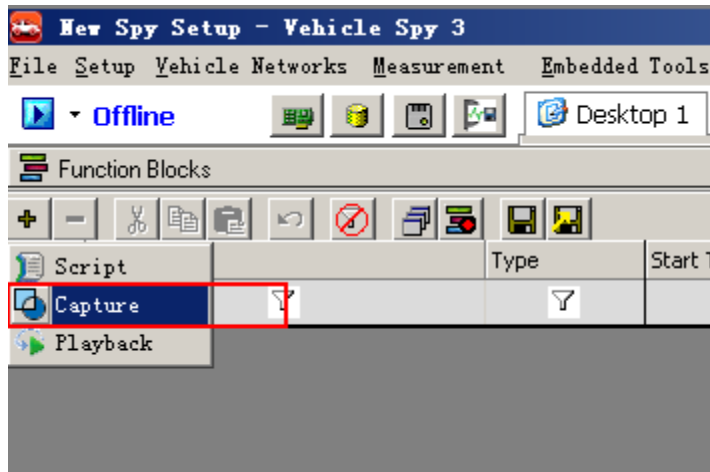
读取和回放时，需要用 file->review buffer 来读取，读取之后就可以手动点方法一中的 Save 转存为.csv (excel 格式)





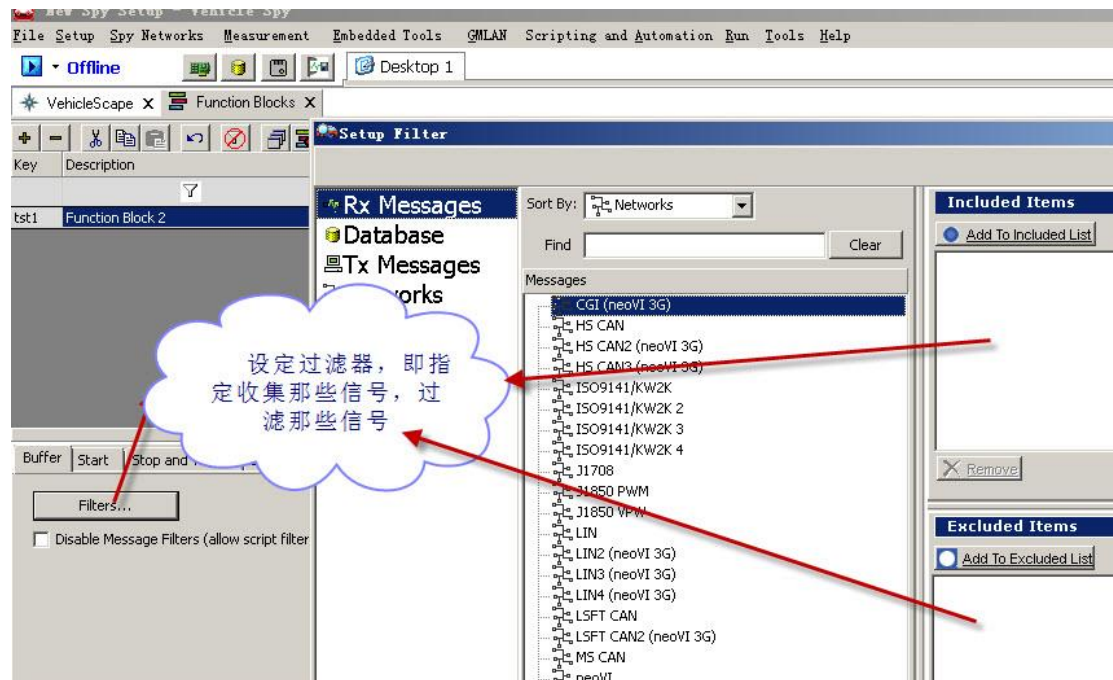
方法三.Capture 类型 functionBlock 脚本







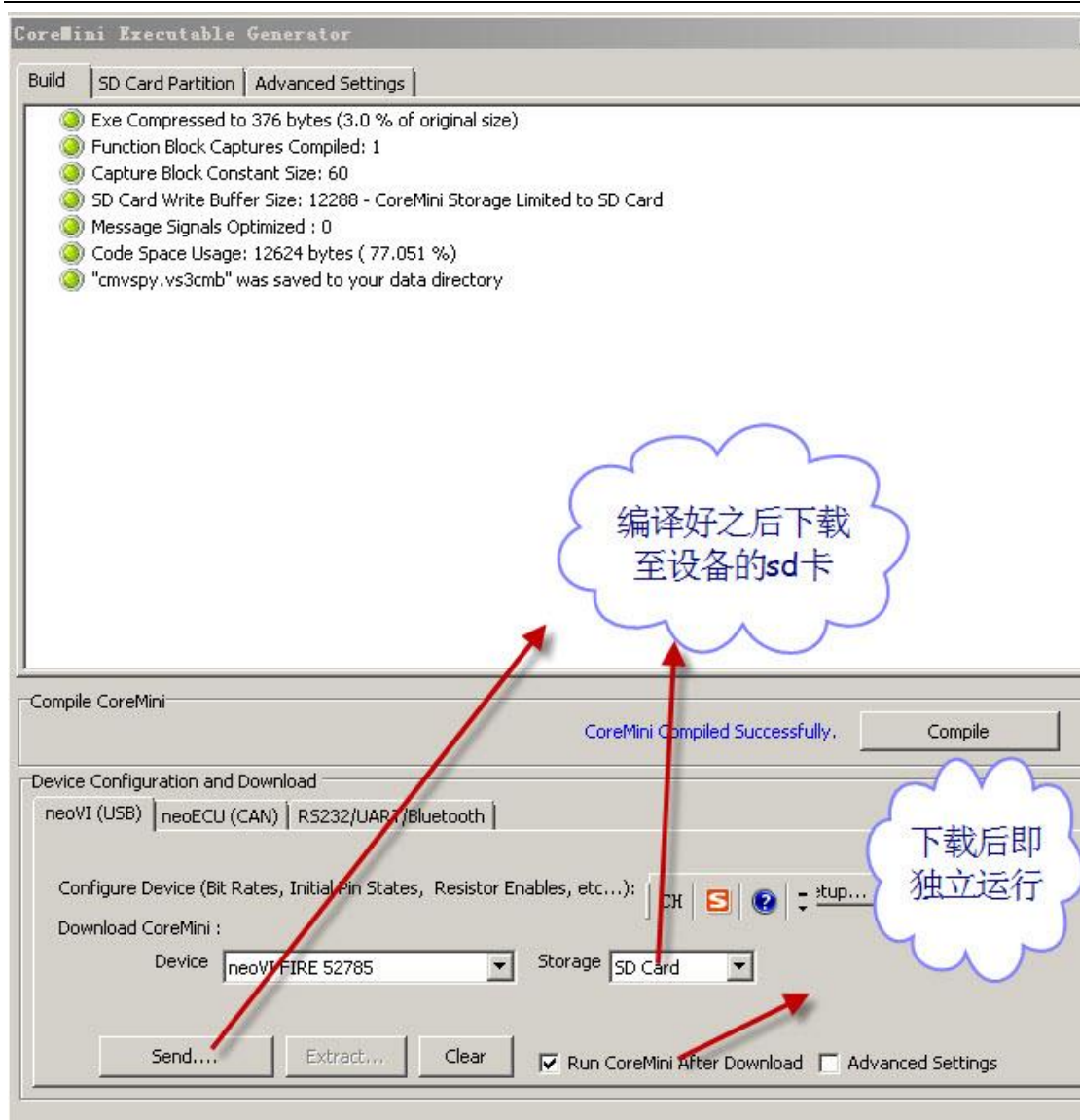
在这个数据目录下，就可以得到若干个 csv 文件，每个 csv 文件中有 5000 条消息。注意它存储的时候是每 5000 条消息存一次文件，如果不足 5000 就不写入文件。



这时候，已经可以运行脚本将数据存储存储在电脑上了。

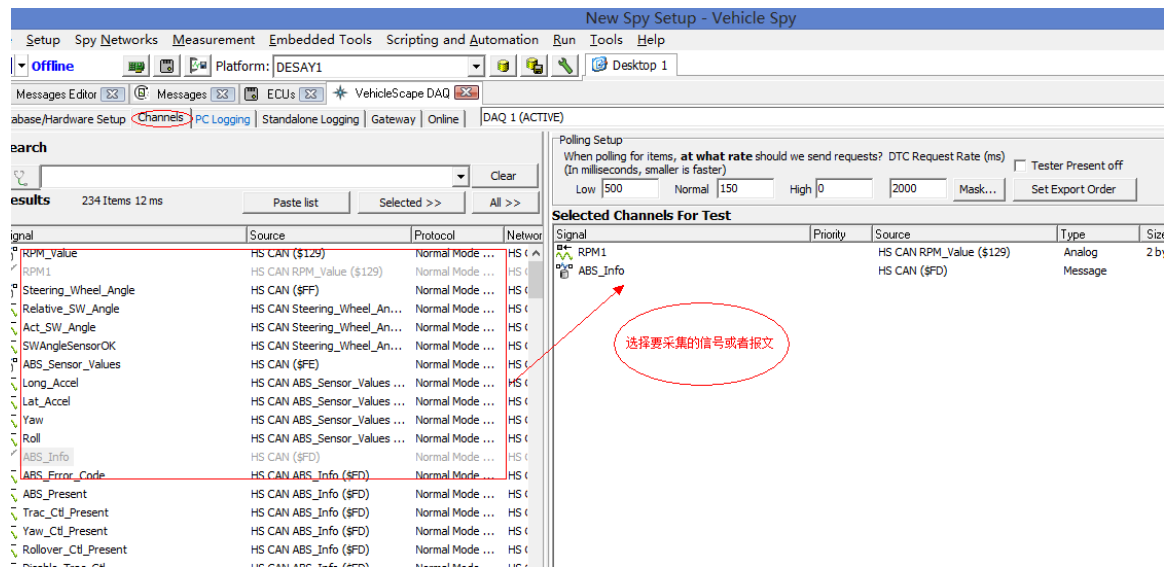
也可以将上述脚本下载到 FIRE/RED 的存储卡中，进行离线数据采集。
关于 standalone （脱离电脑独立运行的模式）：

写完脚本以后，打开 tools-> utilities-> CoreMini concole



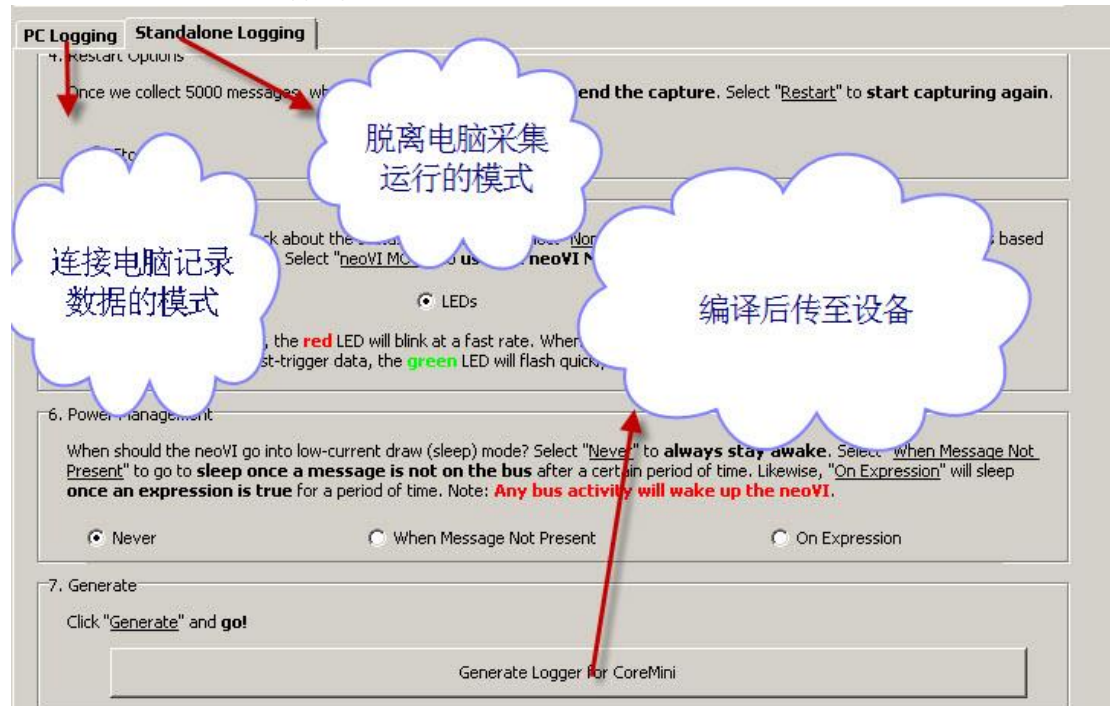
方法四.我们极力推荐使用更便捷的数据记录界面 VehicleScapeDAQ

Measurement->VehicleScapeDAQ 然后选择如下的 tab 页面:



选择要采集的信号或者报文

然后选择 standalone Logging:



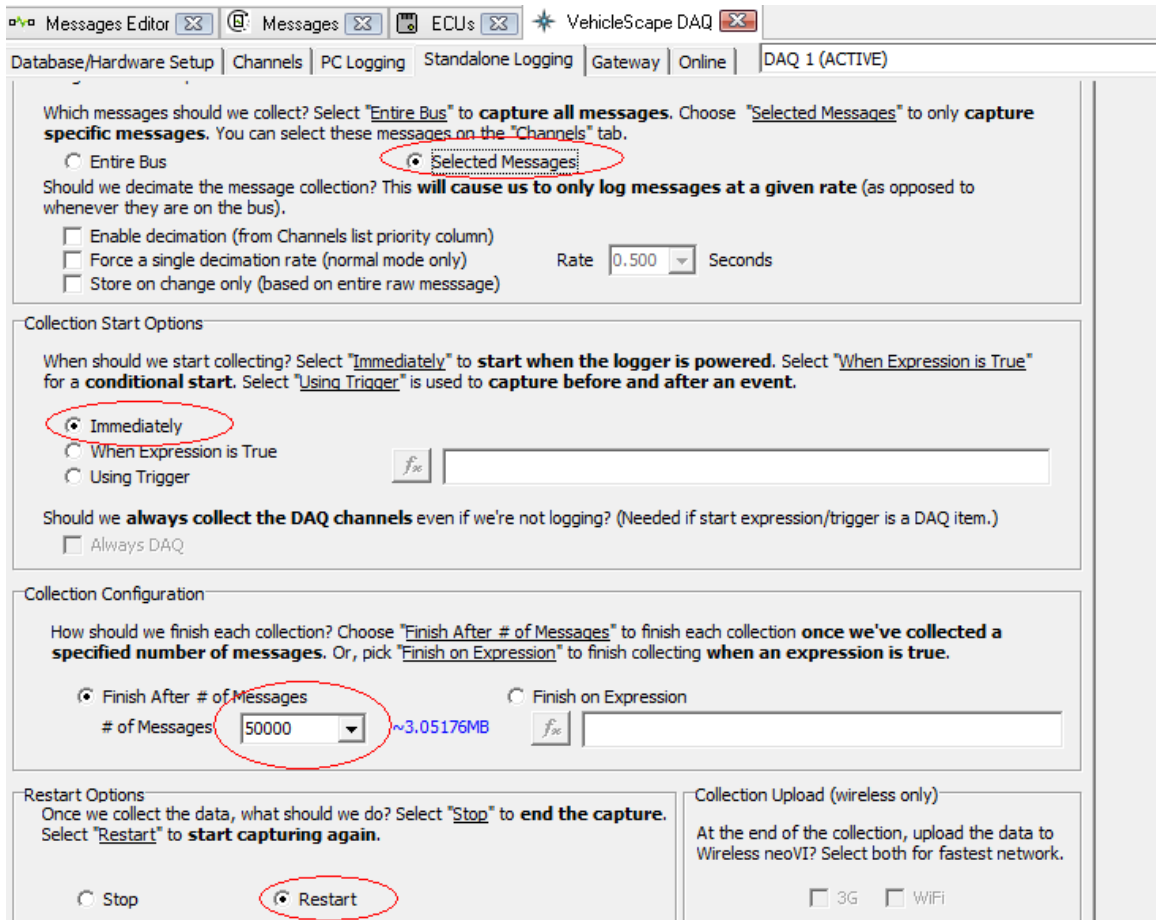
连接电脑记录数据的模式

脱离电脑采集运行的模式

编译后传至设备

注意：该页面的 PC logging 是记录到电脑上，standalone logging 也是脱离电脑运行（记录到 sd 卡上），编译后传到设备的 SD 卡上，这里您只要通过界面设置就可以完成数据采集的设置了。

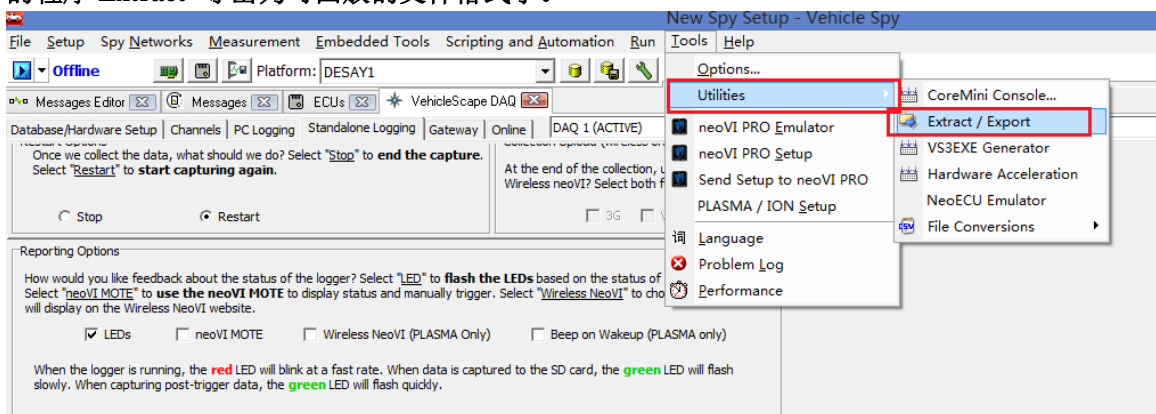
一般选择如下的默认设置：



或者选择 Force a single decimation rate, 实现按时间定时采集, 例如 rate 改为 1second, 则所有报文采集都为 1 秒一次。

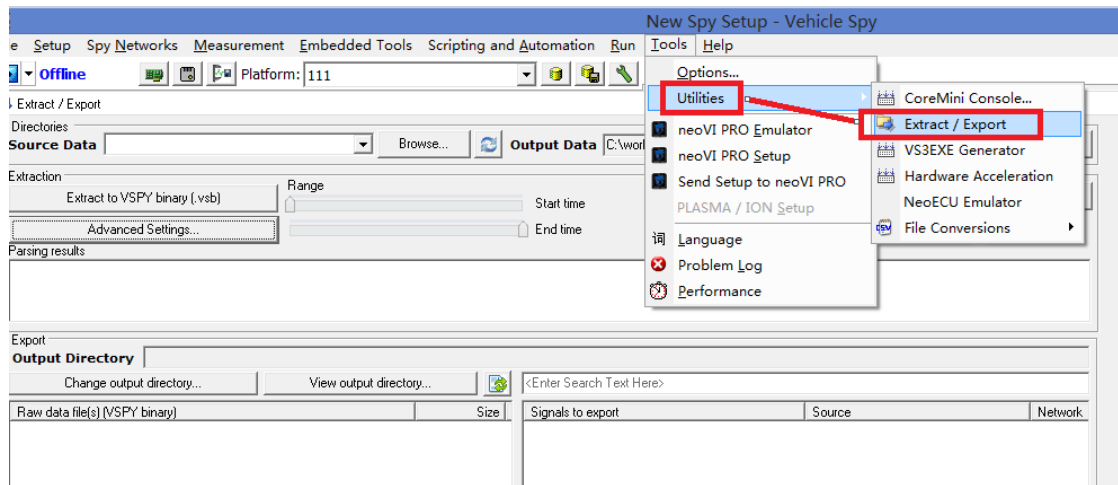
同样道理, 点击 Generate 编译并生成脚本, send 至 FIRE 的 SD 卡中, 实现自动记录。

如果数据采集到 SD 卡里之后, 将 SD 卡取出, 连接读卡器接到电脑的 USB 口, 通过如下的程序 Extract 导出为可回放的文件格式了。

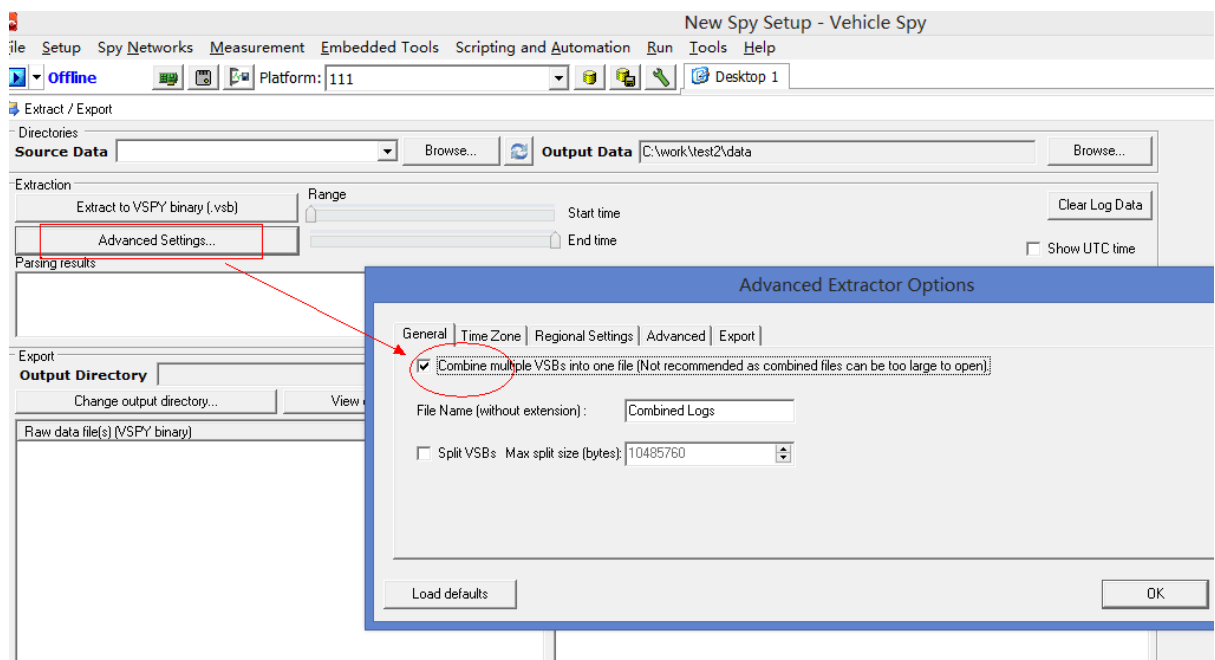




如下是用的 3.6.0.45 版本，在使用离线的方式将数据记录到 SD 卡后，需要将 SD 卡取出并加到读卡器中，插入电脑的 USB 口，点击 Tools-> utilities-> Extract/Export 界面来导出：



通过如下的勾选 combined 功能，可以导出汇总的大文件。



您在分析大数据时，很大的数据是不能直接回放的。首先要使用 file->review buffer 打开数据，然后筛选另存数据。

回放相应的数据后，可以再次将数据按照条件进行采集：

使用 FIRE 离线采集，本身是可以设置数据过滤的：

在设置脚本选择报文的时候，要指定要采集的报文：



VehicleScope DAQ

Database/Hardware Setup Channels PC Logging Standalone Logging Gateway Online DAQ 1

Search: 206 Items 8 ms

Signal	Source	Protocol	Network
Steering_Wheel_Angle	HS CAN (\$FF)	Normal Mode ...	HS CAN
Relative_SW_Angle	HS CAN Steering_Wheel_An...	Normal Mode ...	HS CAN
Act_SW_Angle	HS CAN Steering_Wheel_An...	Normal Mode ...	HS CAN
SWAngleSensorOK	HS CAN Steering_Wheel_An...	Normal Mode ...	HS CAN
ABS_Sensor_Values	HS CAN (\$FE)	Normal Mode ...	HS CAN
Long_Accel	HS CAN ABS_Sensor_Values ...	Normal Mode ...	HS CAN
Lat_Accel	HS CAN ABS_Sensor_Values ...	Normal Mode ...	HS CAN
Yaw	HS CAN ABS_Sensor_Values ...	Normal Mode ...	HS CAN
Roll	HS CAN ABS_Sensor_Values ...	Normal Mode ...	HS CAN
ABS_Info	HS CAN (\$FD)	Normal Mode ...	HS CAN
ABS_Error_Code	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
ABS_Present	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Trac_Ctl_Present	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Yaw_Ctl_Present	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Rollover_Ctl_Present	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Disable_Trac_Ctl	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Disable_Stab_Ctl	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Tire_Size_Setting	HS CAN ABS_Info (\$FD)	Normal Mode ...	HS CAN
Wheel_Speeds	HS CAN (\$FC)	Normal Mode ...	HS CAN
RFWheelSpeed	HS CAN Wheel_Speeds (\$FC)	Normal Mode ...	HS CAN

Selected Channels For Test

Signal	Priority	Source	Type
ABS_Info		HS CAN (\$FD)	Mess
Wheel_Speeds		HS CAN (\$FC)	Mess
PCM_Info		HS CAN (\$3AA)	Mess

VehicleScope DAQ

Database/Hardware Setup Channels PC Logging Standalone Logging Gateway Online DAQ 1

Messages Histogram Bus Query

Setup the format of the file name. This is also your **collection name**.
Collection 1 Append Time and Date to file name

Message Collection Options

Which messages should we collect? Select "Entire Bus" to capture all messages. Choose "Selected Messages" to only capture specific messages. You can select these messages on the "Channels" tab.

Entire Bus Selected Messages

Should we decimate the message collection? This will cause us to only log messages at a given rate (as opposed to whenever they are on the bus).

Enable decimation (from Channels list priority column)
 Force a single decimation rate (normal mode only) Rate: 0.500 Seconds
 Store on change only (based on entire raw message)

Collection Start Options

When should we start collecting? Select "Immediately" to start when the logger is powered. Select "When Expression is True" for a conditional start. Select "Using Trigger" is used to capture before and after an event.

Immediately When Expression is True Using Trigger



Collection Start Options

When should we start collecting? Select "Immediately" to **start when the logger is powered**. Select "When Expression is True" for a **conditional start**. Select "Using Trigger" is used to **capture before and after an event**.

Immediately 采集触发条件，可以按条件触发或者选择Immediately直接开始采集
 When Expression is True
 Using Trigger

Should we **always collect the DAQ channels** even if we're not logging? (Needed if start expression/trigger is a DAQ item.)
 Always DAQ

Collection Configuration

How should we finish each collection? Choose "Finish After # of Messages" to finish each collection **once we've collected a specified number of messages**. Or, pick "Finish on Expression" to finish collecting **when an expression is true**.

Finish After # of Messages 结束条件，可以按照条数结束，或者条件结束
 Finish on Expression

of Messages: 50000 ~3.05176MB

Restart Options

Once we collect the data, what should we do? Select "Stop" to **end the capture**. Select "Restart" to **start capturing again**.

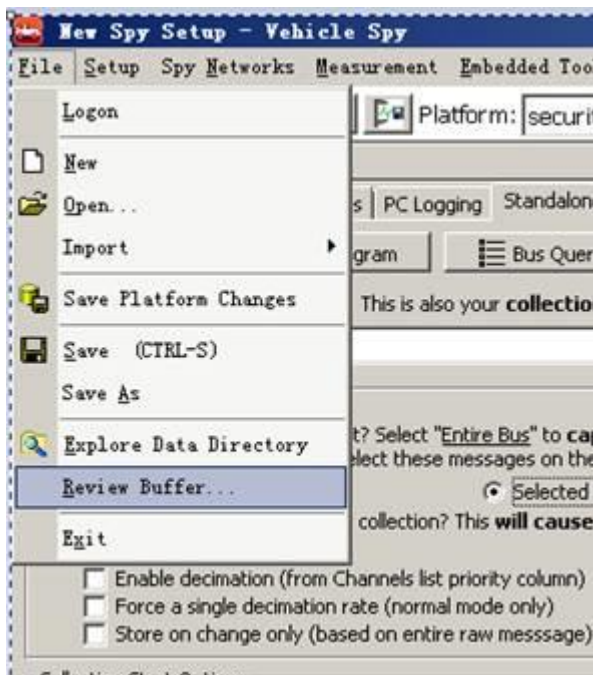
Stop Restart 存储完成一个文件后重新启动脚本，进行连续判断和存储

Collection Upload (wireless only)

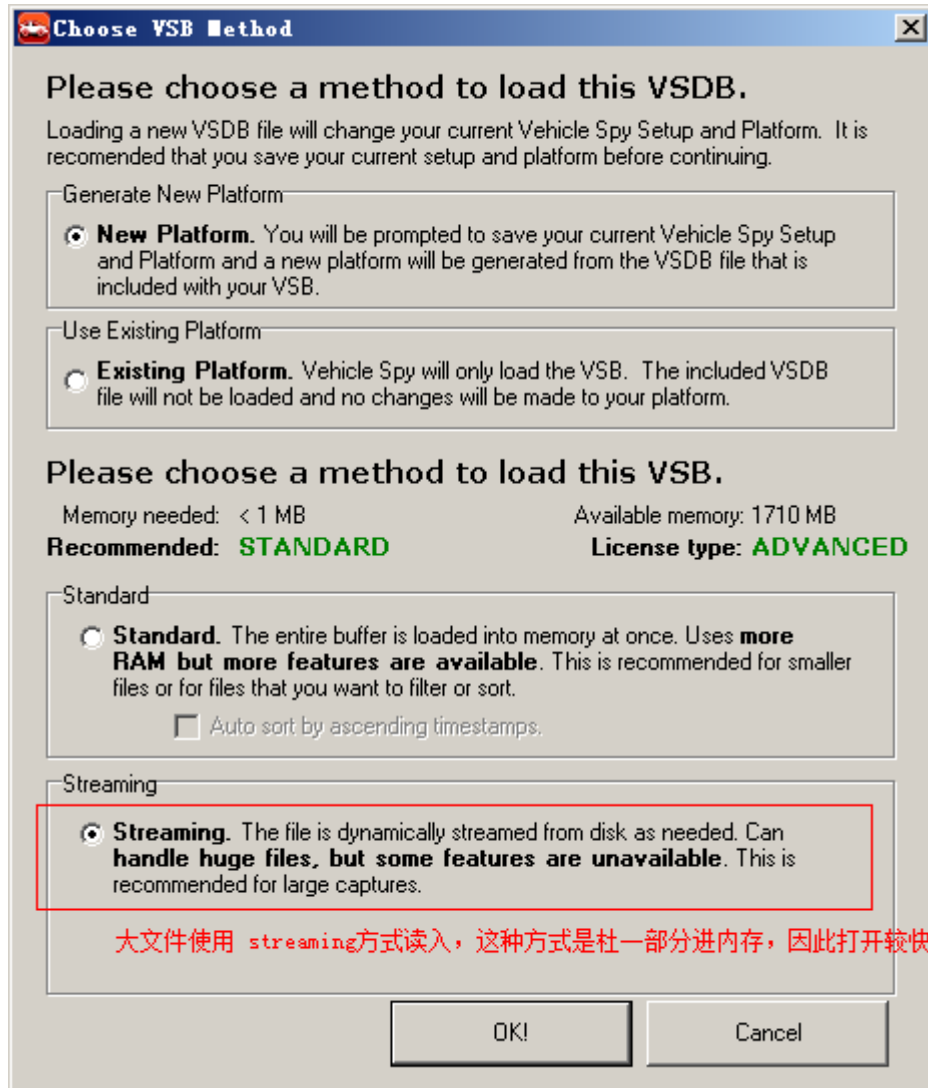
At the end of the collection, upload the data to Wireless neoVI? Select both for fastest network.

USB WIFI

如果数据量很大，可以使用 review buffer 打开数据文件：



使用 streaming 方法打开大文件（如果按键为灰色，说明是 VSpy3 的较低级版本，您可以连接 FIRE 硬件一起打开数据即可）



打开后，过滤，筛选小文件，进行时间和周期的分析



Filter	Line	Time	Tx	Er	Description	Arbid/Header	Len	Data bytes	Network	Node	ChangeCnt	RTC Time
	44996	30.993 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	44999	31.013 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45002	31.011 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45005	31.010 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45008	30.995 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45011	30.989 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45014	31.010 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45017	30.995 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45020	31.011 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45023	31.010 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45026	30.995 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45029	30.967 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45032	31.011 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45035	31.010 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45038	30.996 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45041	31.011 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45044	31.011 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45047	30.995 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45050	31.011 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15
	45053	30.966 ms			aaaaMessage H5 CAN 2	222	5	12 22 22 22 22	H5 CAN			2013/08/21 15:15:15

输入报文, 或者报文地址, 例如22, 33, 44, 55

进行时间和周期的分析