



VECLL 菲益科

Vehicle Spy培训

—深圳市菲益科电子科技有限公司

联系人：卿建丰

电话：0755-83315358

手机：18025359068

Email Jeff.king@vecll.com

内容概览 – Part I

- 软件安装与配置
 - 软件安装和授权
 - Vspy平台配置
- 数据分析界面
 - 报文过滤
 - 报文发送和接收
 - 报文保存
- 数据库导入与信号解析
 - 数据库导入与编辑
 - 信号解析和处理



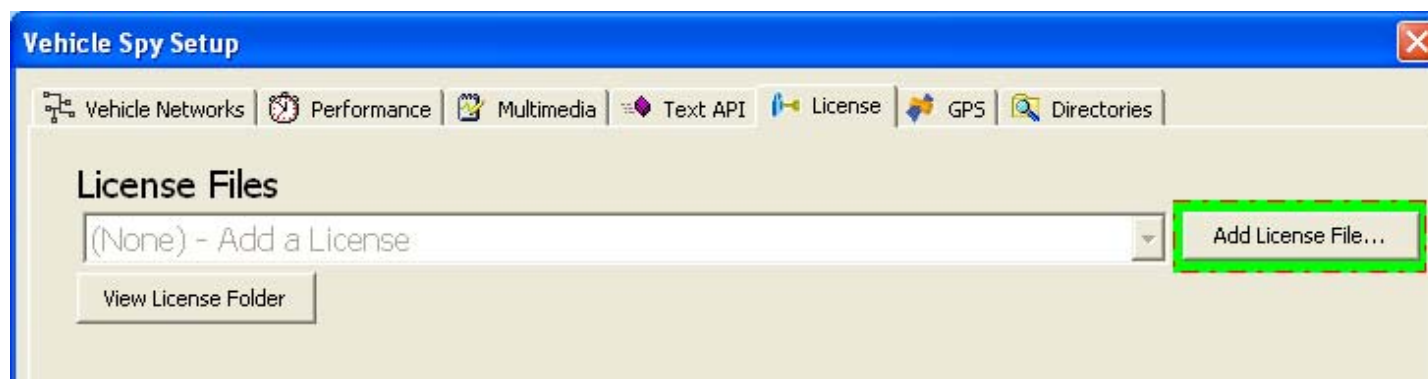
内容概览 - Part II

- 报文编辑与分析
 - 数据回放和过滤处理
 - 发送报文
 - 简单条件转发
- 数据保存和记录
 - PC记录报文
 - 离线数据记录
- 信号分析和处理
 - 信号曲线分析
 - 图形界面





- 1、从光盘中安装软件和驱动
- 2、导入Lic授权文件





- 1、建立Logon名称和Platform，系统自动建立文件夹
- 2、不同使用者、不同车型的数据和工程文件

The screenshot displays the Vspy configuration interface. At the top, there is a blue rounded rectangle labeled "Logon Name". Inside this rectangle, there is a dropdown menu currently showing "None" and a "New" button to its right. Below this, there is a blue bar labeled "Current Platform" containing a dropdown menu showing "(None)" and a "Setup" button with a database icon to its right. At the bottom, there is a button with a magnifying glass icon and the text "Data", which is the button mentioned in the text below.

点击右上角此按钮浏览



Spy Network → Messages

蓝色：变化较慢 灰色：持续变化 白色：无变化

Scroll：滚动显示报文 ΔT Time Abs：绝对时间

Pause：暂停 Save：一键保存缓存数据 Erase：清除缓存

New Spy Setup - Vehicle Spy 3

File Setup Vehicle Networks Measurement Embedded Tools Scripting and Automation Run Tools Help

Offline Desktop 1

Messages Editor Messages

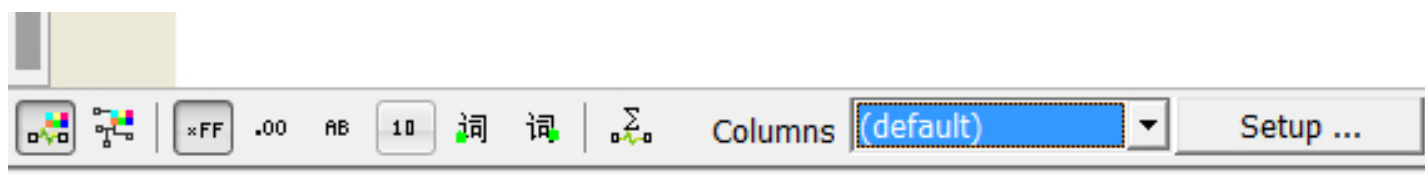
Filter Add

Scroll Changing Recent ΔT Time Abs Pause Save Erase

Filter	Count	Time	Tx	Er	Description	ArbId/Header	Len	DataBytes
Filter								
4767	4767	9.000 ms			HS CAN \$150	150	8	FE F7 00 00 FF FF 01
4767	4767	9.000 ms			HS CAN \$160	160	8	07 D0 00 00 02 AC F
2972	2972	14.000 ms			HS CAN \$165	165	8	27 1B 27 16 C1 27 1
2973	2973	18.000 ms			HS CAN \$170	170	8	00 00 28 2B 00 00 01
2973	2973	18.000 ms			HS CAN \$200	200	8	27 36 27 07 27 21 01
2973	2973	18.000 ms			HS CAN \$201	201	8	0B 19 00 00 27 10 01
2384	2384	20.000 ms			HS CAN \$211	211	8	FF FE 3E 00 00 02 01
4767	4767	9.000 ms			HS CAN \$215	215	8	27 10 27 10 27 10 2
954	954	51.000 ms			HS CAN \$217	217	8	00 00 00 00 A2 00 0
4770	4770	11.000 ms			HS CAN \$230	230	8	DD 00 F2 02 00 04 4

Networks

- HS CAN
- MS CAN
- SW CAN
- J1850 VPW
- ISO9141/KW2K
- LSFT CAN
- J1850 PWM
- J1708
- neoVI
- HS CAN2 (neoVI 3G)



数据格式 二进制 十进制 十六进制
缓存大小设置 默认50000条
Message显示格式



按照ID、Description、network等过滤
支持组合精确过滤，如711,710; 300-400
通配符星号(*)和问号(?), 模糊过滤

oll

☐ Changing

☐ Recent

☒ Time Abs

☐ Pause

☐ Save

☐ Erase

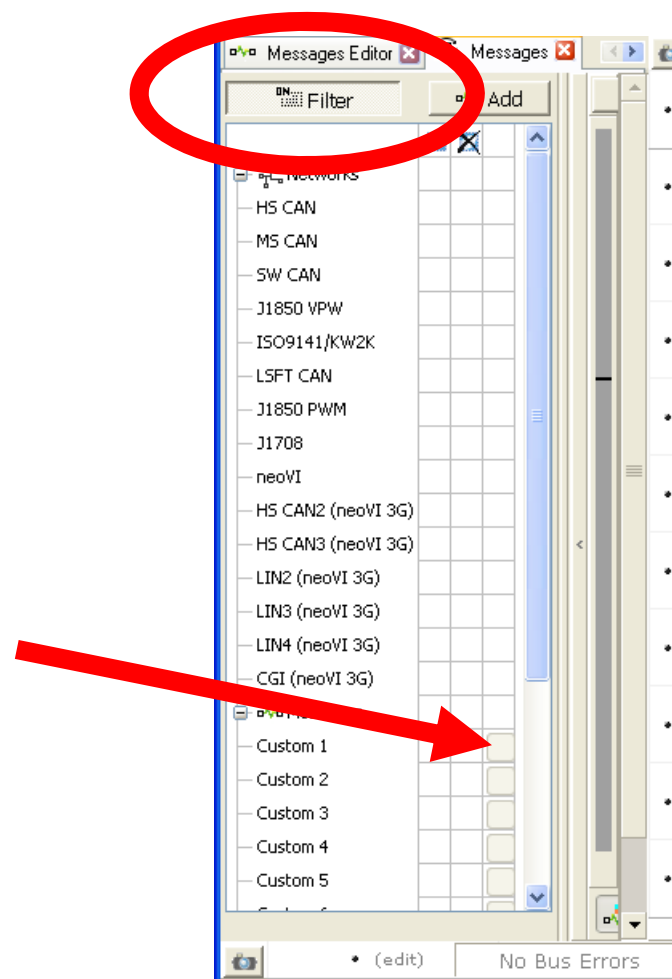
☐

Count	Time	Tx	Er	Description	ArbId/Header	n	DataBytes	Network
					41			
35388	11.000 ms			HS CAN \$41	41	8	00 60 00 00 00 00 00 00	HS CAN
7082	50.000 ms			HS CAN \$415	415	8	8C 00 20 00 00 00 00 3D	HS CAN
17698	22.000 ms			HS CAN \$417	417	8	00 00 00 00 00 00 00 00	HS CAN
387	898.000 ms			MS CAN \$541	541		45 02 00	MS CAN



左侧过滤器

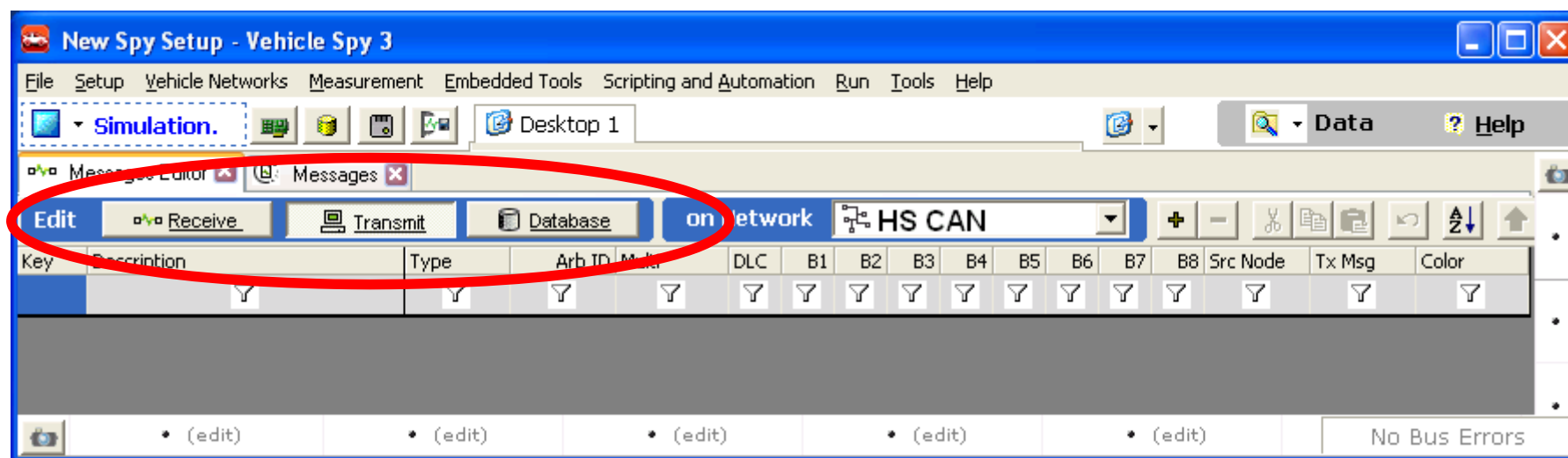
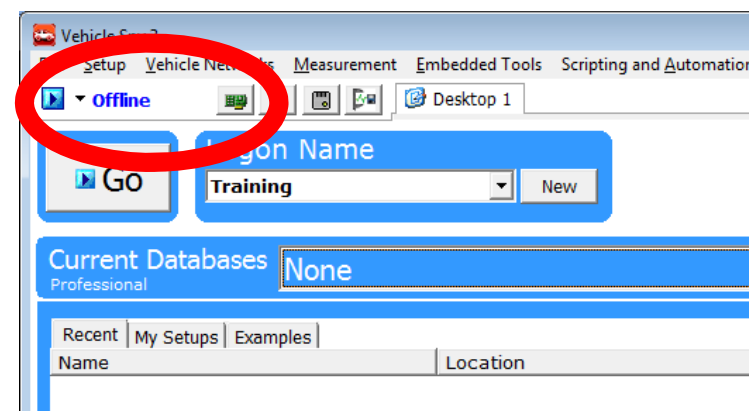
- 1、Filter按钮总开关
- 2、按网络过滤 ☒ ☐
- 3、Custom自定义过滤器
如：只看442、443、445
不看443





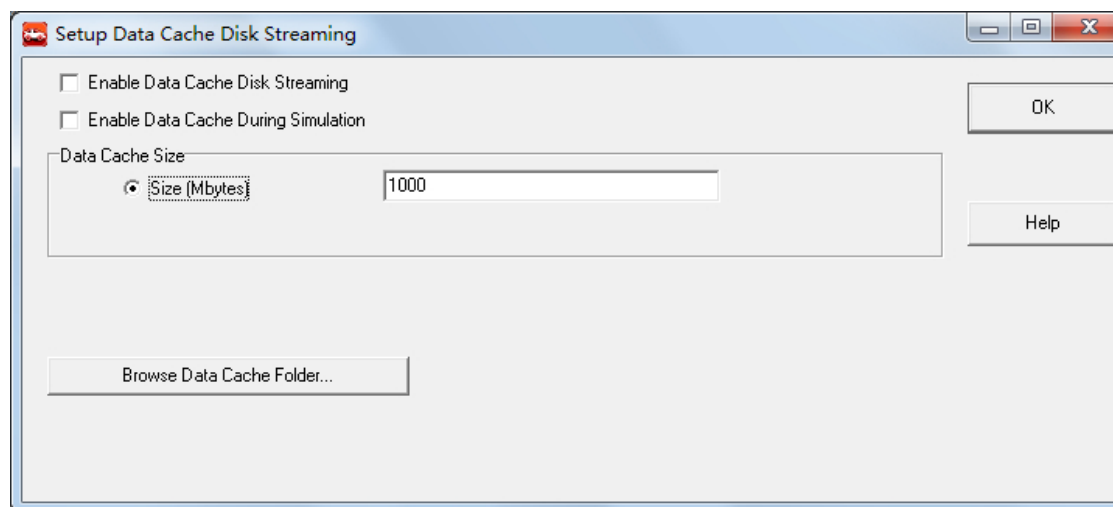
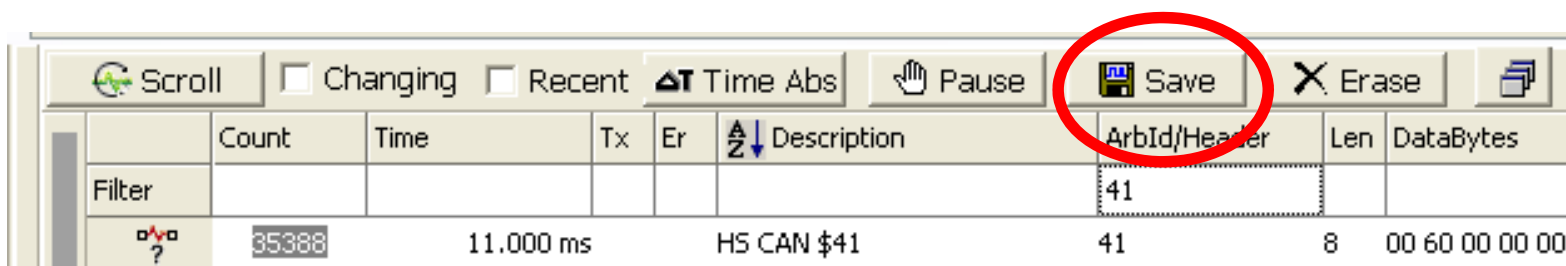
Spy Network → Message Editor

- 1、运行Run With Transmit, 接收报文
- 2、Transmit 编辑发送报文, 颜色
- 3、Tx Panel周期发送和信号赋值
- 4、解析优先级:
Receive > Transmit > Database



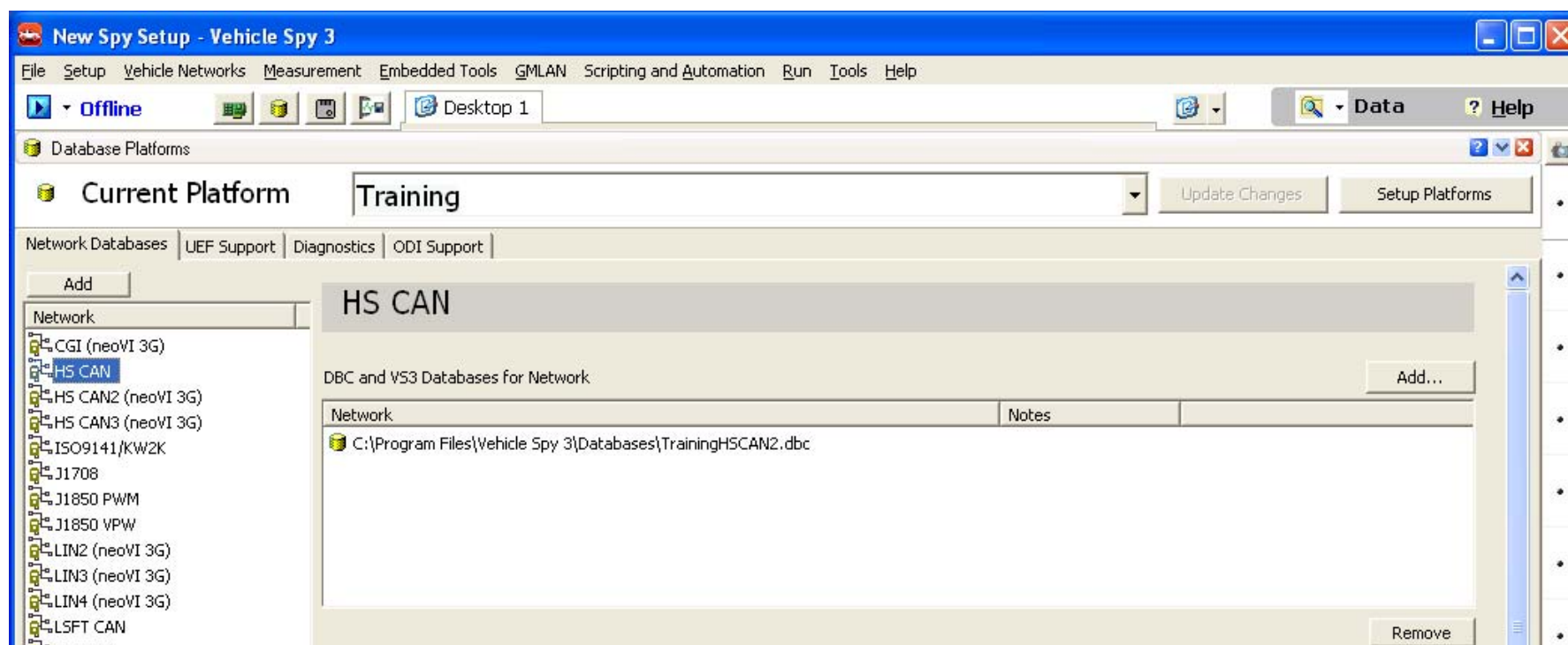


- 1、点击Save按钮，一键保存为CSV格式
- 2、Setup → Data Cache Disk Streaming
缓存所有数据，默认是1000M





- 1、选择Platform和通道,
- 2、导入DBC、LDF等数据库
- 3、Save Platform Changes

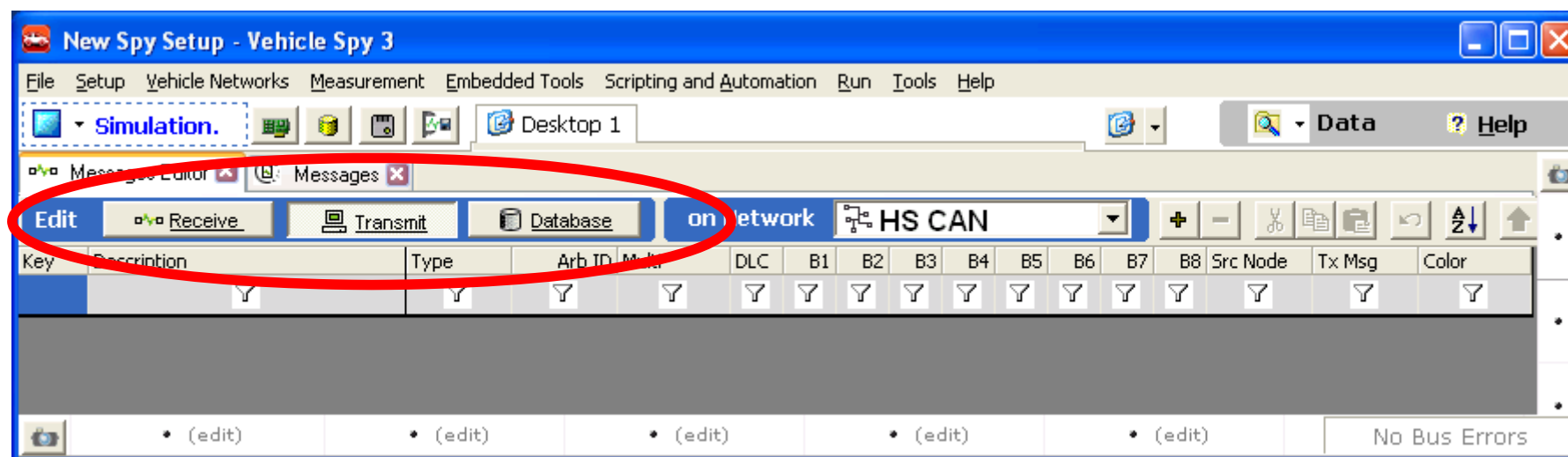




- 1、导入DBC在Database中，无法修改
- 2、Transmit和Receive中编辑，导出为DBC
- 3、LDF数据库 → LDF Editor



TRAINING.vs3





- 1、信号分逻辑、状态和模拟量
- 2、拖动和函数关系设定，范围，单位



TRAINING.vs3

Software interface showing CAN bus data and signal configuration.

Top Bar: Edit, Receive, Transmit, Database, on Network, HS CAN

Table 1: CAN Bus Data

Key	Description	Type	Arb ID	Multi	DLC	B1	B2	B3	B4	B5	B6	B7	B8	Src Node	Tx Msg	Color
n21	Cluster_Info	Std 11 bit	442	None	8										None	

Setup for Cluster_Info

Description: Cluster_Info, Source Node: (none), Color: Custom...

Message Filter Specification

CAN Type: Std 11 bit, Arbitration Identifier (Arb ID): 442, Length (DLC): 8, Ignore Tx Message: ☐

Signals in Message

Description	Type	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7	Byte 8
ParkingLampStatus	Digital	0	0	0	0	0	0	0	0
BrakeFluidLowTT	Digital	0	0	0	0	0	0	0	0
FuelLevelLowTT	Digital	0	0	0	0	0	0	0	0
ABS_ErrorTT	Digital	0	0	0	0	0	0	0	0
TracCtl_ErrorTT	Digital	0	0	0	0	0	0	0	0
Stab_Ctl_ErrorTT	Digital	0	0	0	0	0	0	0	0
Security_PATS_ActTT	Digital	0	0	0	0	0	0	0	0
Fuel_Level_Sensor	Analog	0	0	0	0	0	0	0	0
DTC_TT	Digital	0	0	0	0	0	0	0	0
PBrakeStatus	Digital	0	0	0	0	0	0	0	0
SeatbeltDriverTT	Digital	0	0	0	0	0	0	0	0
SeatbeltPassTT	Digital	0	0	0	0	0	0	0	0
AirbagModuleFailureTT	Digital	0	0	0	0	0	0	0	0

Edit Signal Dialog

Signal Type: Analog, Raw Value Type: Unsigned Integer

General | Scaling | Advanced

Start: Bit Position (0-2175): 16, Or: Byte (1-272): 3, Bit (7-0): 7

Length: Bits: 16, Or: Bytes: 2

☒ Big End First : Byte X > Byte (X+1) Motorola Format
☐ Little End First : Byte X < Byte (X+1) Intel Format

Format: 0.0, Min: 0, Max: 65535, Units: gal

OK, Cancel, Help

内容概览 - Part II

- 报文编辑与分析
 - 数据回放和过滤处理
 - 发送报文
 - 简单条件转发
- 数据保存和记录
 - PC记录报文
 - 离线数据记录
- 信号分析和处理
 - 信号曲线分析
 - 图形界面





VECLL 菲益科

Vspy基础培训 → 报文编辑与分析 → 数据回放与过滤处理



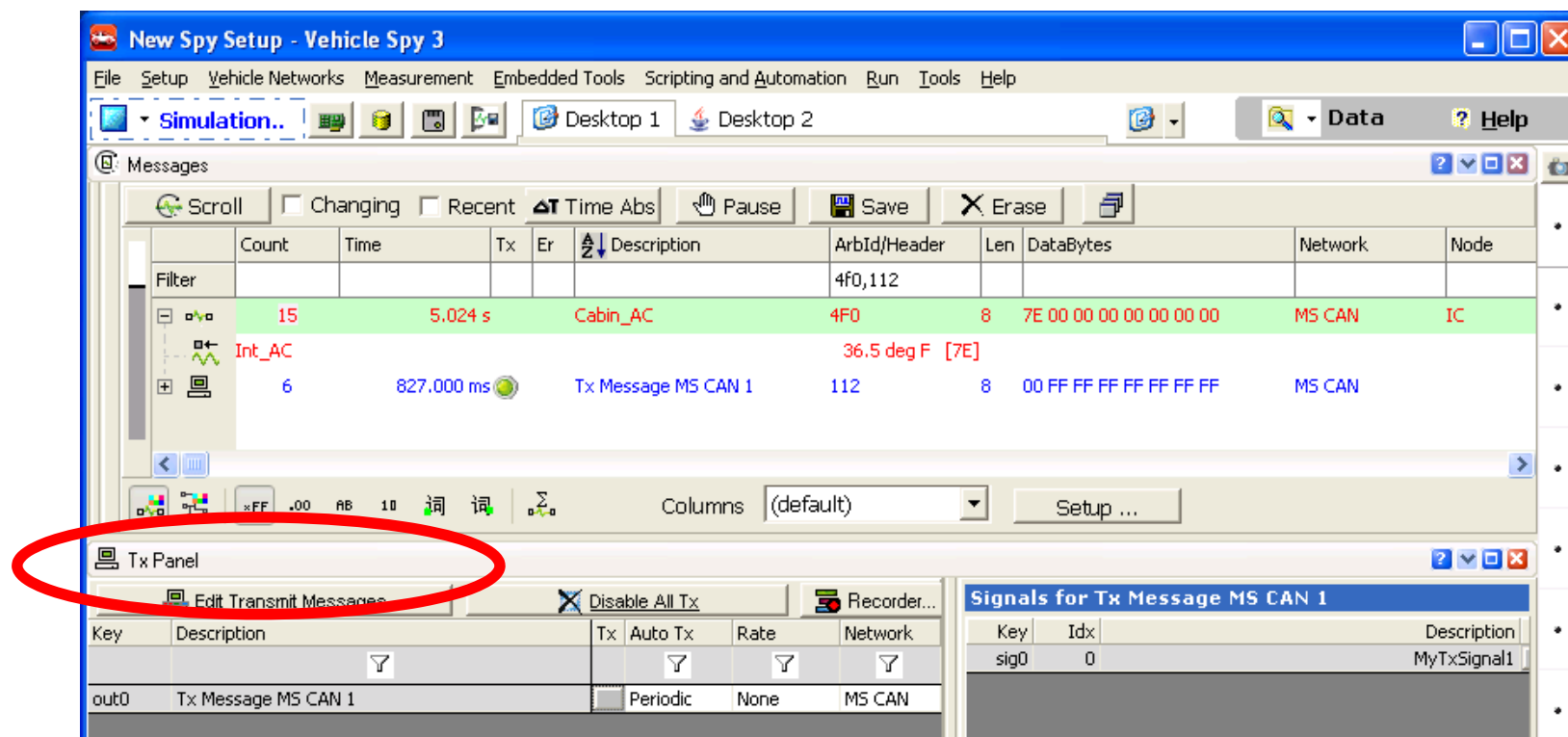
TRAINING.vs3

- 1、Simulation → Browse (.csv) 拖放
- 2、过滤后保存指定数据，CSV、VSB、BLF、ASC等

Messages										
Network Databases										
Function Blocks										
Application Signals										
Signal Plot										
Graphical Panels										
Tx P										
Add										
Scroll										
Details										
Expand										
9										
Time Abs										
Pause										
Save										
Erase										
Find P										
Filter	Count	Time	Tx	Er	Description	ArbId/Header	Len	DataBytes	Network	
+	548	6.000 ms			ABS_Info	FD	8	00 00 F0 06 00 00 00 00	HS CAN	
+	547	6.000 ms			ABS_Sensor_Values	FE	8	00 03 00 03 00 03 00 03	HS CAN	
+	4	1.003000 s			AC_Recirc_Status	3F1	8	0A 00 00 00 00 00 00 00	MS CAN	
+	4	1.003000 s			AC_Recirc_Status	3F1	8	0A 00 00 00 00 00 00 00	MS CAN	
+	33	102.000 ms			Cluster_Info	442	8	00 00 00 07 00 00 00 00	HS CAN	
+	33	102.000 ms			Cluster_Info	442	8	00 00 00 07 00 00 00 00	HS CAN	
+	4	1.003000 s			CoolingFanStatus	323	8	00 00 00 00 00 48 00 48	MS CAN	
+	13	252.000 ms			Data_10	714	8	00 00 00 07 00 00 00 00	HS CAN	
+	33	102.000 ms			Data_2	701	8	00 4B 00 00 1E 00 00 00	HS CAN	
+	13	252.000 ms			Data_3	702	8	00 02 00 02 00 02 00 02	HS CAN	
+	33	102.000 ms			Data_4	703	8	00 00 F0 06 00 00 00 00	HS CAN	
+	13	252.000 ms			Data_5	704	8	00 26 00 26 00 26 00 26	HS CAN	
+	33	102.000 ms			Data_6	710	8	00 0B 60 00 00 00 00 00	HS CAN	
+	13	252.000 ms			Data_7	711	8	00 72 1B F9 00 5F 00 00	HS CAN	
+	33	102.000 ms			Data_8	712	8	00 0F 00 00 2D 00 00 00	HS CAN	
+	66	50.000 ms			Data_9	713	8	13 00 00 00 00 00 00 00	HS CAN	
+	4	1.003000 s			Doors_Ajar	3AB	8	00 00 00 00 00 00 00 00	MS CAN	
+	160	21.000 ms			Eng_Ctl_Info	444	8	00 0F 00 00 89 00 00 00	HS CAN	
+	160	21.000 ms			Eng_Ctl_Info_2	445	8	00 48 00 00 00 00 00 00	HS CAN	
+	33	102.000 ms			HS CAN \$129	129	8	00 00 00 00 00 00 19 B1	HS CAN	
+	4	1.003000 s			Ign_SW_Stat	3D7	8	8A 00 00 00 00 00 00 00	MS CAN	
+	4	1.003000 s			Illum_Stat	3E0	8	00 00 00 00 00 00 00 00	MS CAN	



- 1、Spy network → Tx Panel
- 2、发送壹次和周期发送、周期开关
- 3、信号赋值并发送，特定函数发送（正弦、三角波、随机等）





- 1、Spy network → Message Editor
- 2、当收到某报文后发送指定报文



TRAINING.vs3

Vehicle Spy 3

File Setup Vehicle Networks Measurement Embedded Tools GMLAN Scripting and Automation Run Tools Help

Simulation... Desktop 1

Messages

Scroll Changing Recent Time Abs Pause Save Erase

Filter	Count	Time	Tx	Er	Description	ArbId/Header	Len	DataBytes	Network	Node
	381	501.000 ms			Hello	112	1	09	HS CAN	
HelloSignal1								9.0 mph [9]		
	188	1.002 s			Hello Again	113	2	09 C4	HS CAN	
HelloSignal2								2500.0 rpm [9C4]		
	188	1.002 s			VIN_Number	4FF	8	30 30 30 30 30 30 00 00	HS CAN	ECM

Columns (default) Setup ...

Messages Editor

Edit Receive Transmit Database on Network HS CAN

Key	Description	Type	Arb ID	Multi	DLC	B1	B2	B3	B4	B5	B6	B7	B8	Src Node	Tx Msg	Color
in0	VIN_Number	Std 11 bit	4FF	None	8									ECM	Hello Again	



- 1、File → Logon → VehicleScape DAQ
- 2、PC Logging-电脑自动记录
- 3、Standalone Logging-硬件离线记录



TRAINING.vs3

VehicleScape DAQ

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

Test Name: DAQ 1

Hardware Setup

On the Hardware view, you can modify the baud rate settings, as well as access other hardware-specific settings. **The hardware must be plugged in and powered to be able to use it.**

Edit hardware and network settings

Platform Setup

Current Platform: Setup Platforms... qing

Above is your currently loaded *platform*. A platform is a collection of all the loaded databases.

Network databases are used for normal bus traffic. These are usually **DBC** or **VSDB** files and are loaded in the Databases view.

Load DBC or VSDB files

HS CAN: HSCAN_DB.dbc
MS CAN: MSCAN_DB.dbc

Diagnostic databases are for protocols such as ISO 14229 or GMLAN, are loaded on the ECUs view, and are usually **ODX**, **MDX/GDX** or **A2L** files.

Load ODX, MDX/GDX or A2L files

MEP databases are for CCP and XCP communication. They are **A2L** files and are loaded on the MEP view.

Load A2L files for CCP/XCP

Extract and Export

Once you've completed using **standalone logging** you can export your data for analysis here.

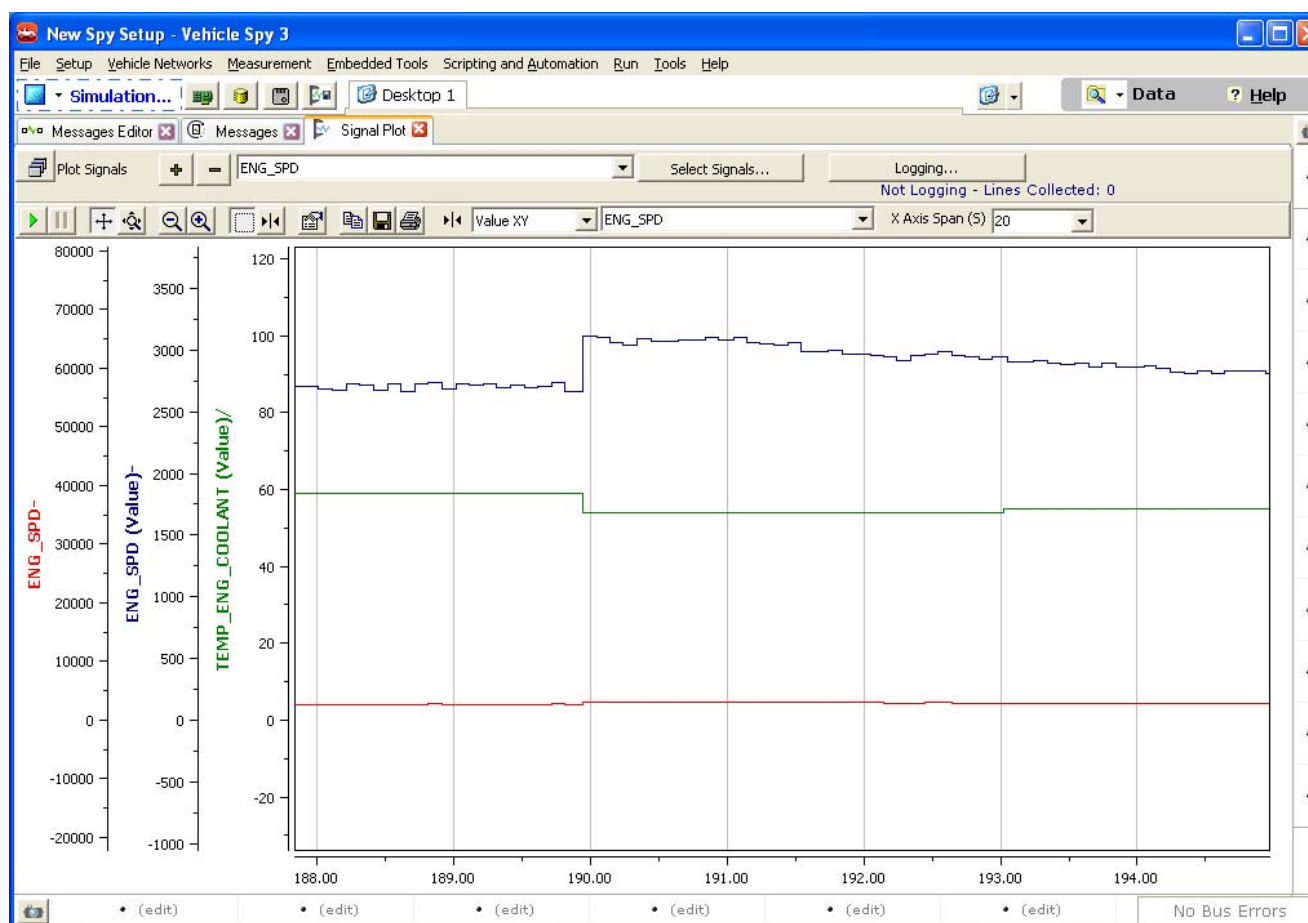
Extract and Export



- 1、信号曲线作图-信号组建立
- 2、信号曲线分析-测量和保存
- 3、信号Logging与保存CSV文件



TRAINING.vs3



内容介绍—实际操作和视频教程

- Function Block脚本语言
 - Function Block发送报文
 - Function Block长度、位赋值
 - Function Block逻辑控制(网关实现)
 - Function Block 回放功能
 - Function Block相互调用
- 图形界面Graphical Panel
 - 面板介绍
 - 面板编辑
- Vehicle Spy诊断功能介绍
- Vehicle Spy C code介绍

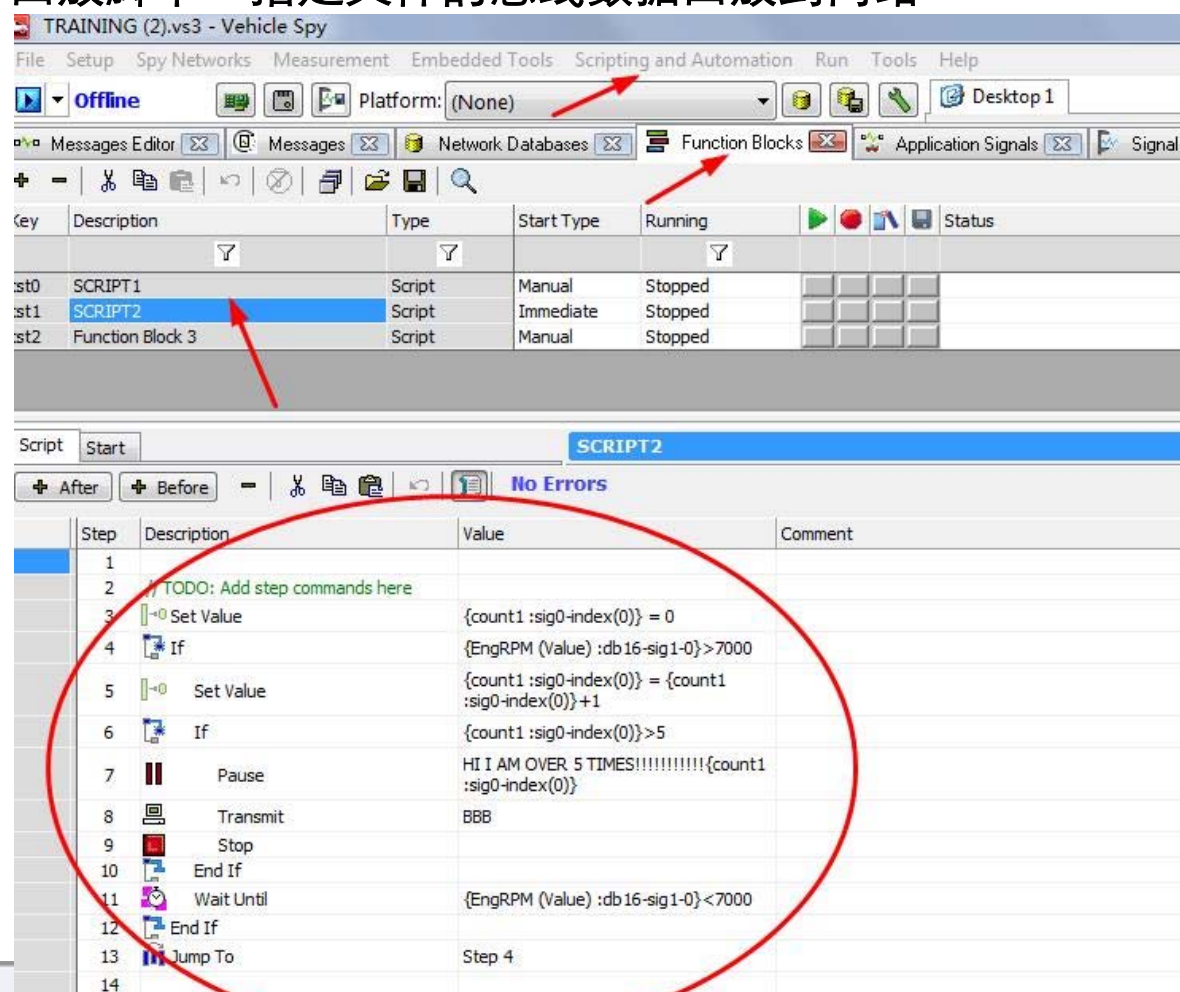




- 1、控制脚本--完成所有仿真和自动化测试
- 2、记录脚本--配置简单的数据记录
- 3、回放脚本—指定文件的总线数据回放到网络



TRAINING.vs3

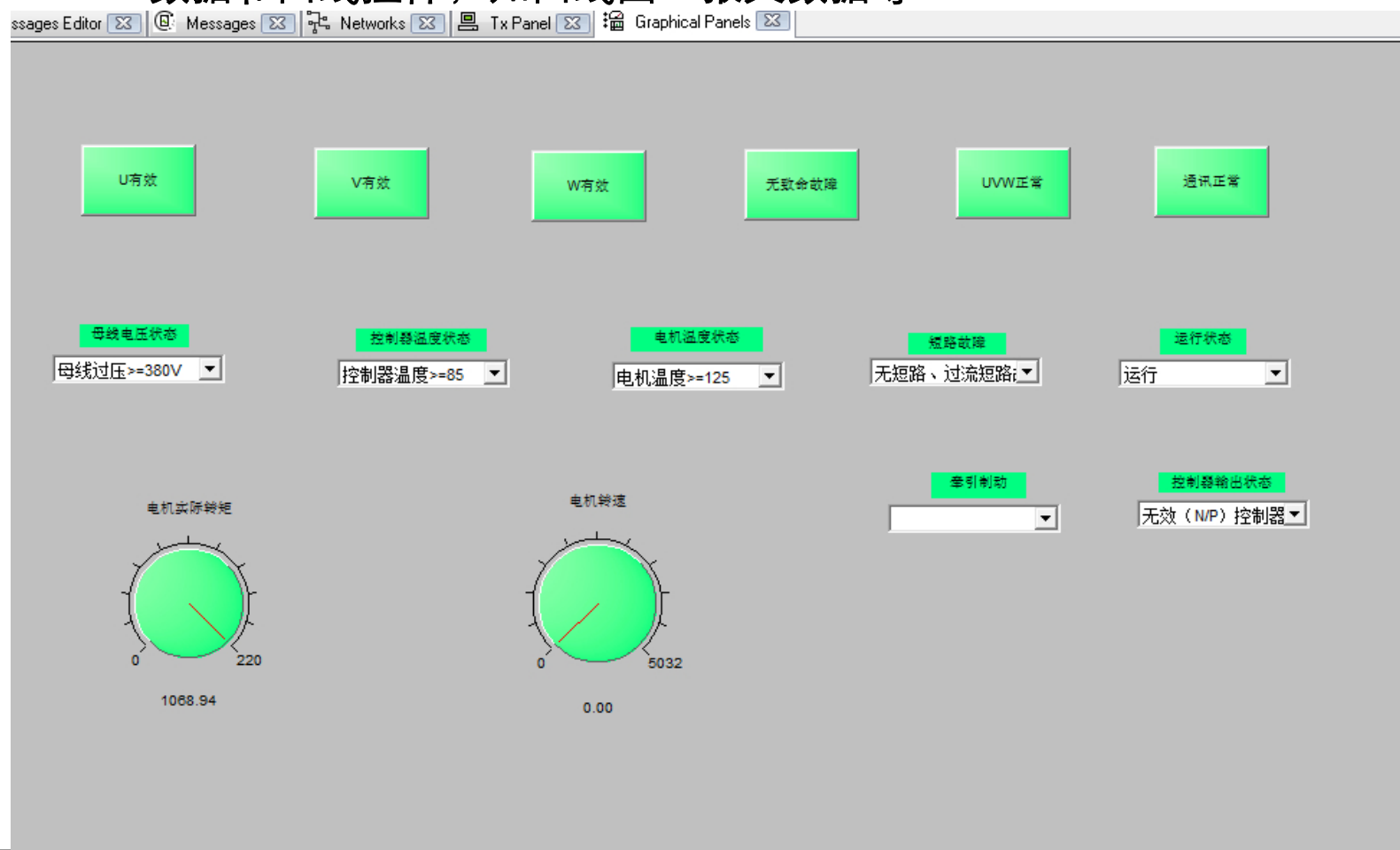




- 1、显示控件，如LED、文本、表盘等
- 2、控制控件，如发送按钮，脚本按钮，多选按钮等
- 3、数据和曲线控件，如曲线图、报文数据等



Graph Panel_tx.vs3



谢谢！

电话：0755-83315358

手机：18025359068

邮箱：jeff.king@vecll.com