

Intrepid Control Systems, Inc.

Example Scripts for Wireless Data Logger

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1. Introduction:

Wireless data loggers (neoVI PLASMA/neoVI ION) can log many types of data. The neoVI PLASMA/neoVI ION does this by using Core Mini proprietary executable that runs within the logger VNET Module (network adapter card). The script runs independently of the Android OS, and it's highly flexible to allow for making requests, initiating network management and calibration sessions, and more.

This document gives some examples to explain how to write script and upload to wireless neoVI data logger to log data for different scenarios.

2. Scripts for Wireless Data Logger

2.1 Script 1: Log Entire Bus messages without any start condition

2.1.1 Objective:

- To start data logging immediately.
- Collect Entire bus messages.
- Create collection of 50000 messages.

2.1.2 Procedure:

Launch Vspy and create new Platform or select existing from current platform list. (Please refer the [Script 1.vs3zip](#) file)

2.1.2.1 Upload DBC file:

- Select 'Setup' tab → [Network database](#).
- Select HS CAN from Networks column on the left.
- Add .dbc file to this network, from a tab 'Add' on the right.
- Save the Platform Changes.
- Same way you can add DBC and VS3 database for other network

2.1.2.2 Configure [VehicleScape DAQ](#):

Select Measurements → VehicleScape DAQ → Standalone Logging → Messages

VehicleScape DAQ Network Databases

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**.

Entire Bus Collection ① ☒ Append Time and Date to file name ②

Message Collection Options ③

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

☒ Entire Bus ④ ☐ Selected Channels Advanced Options...

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 Expression

☒ {SECOND}>=0 ☐ OR neoVI MIC button press ☐ OR neoVI MOTE / Push Button Pendant on MISC 5 button press

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

☐ Always DAQ ⑤

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 ☐ Finish on Expression

of Messages 50000 ~3.05176MB ☒ {SECOND}>=0

Restart Options ⑥

Once we collect 50000 messages, what should we do? Select "Stop" to **end the capture**. Select "Restart" to **start capturing again (will wait for start expression)**. Select "Force Restart" to **restart regardless of the start expression**.

☐ Stop ☒ Restart ☐ Force Restart

Collection Upload (wireless only) ⑦

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

☒ 3G ☒ WIFI

Figure 1.a: Settings for Script 1

- Collection name: Write a Collection name in collection name box (Figure 1.a(1)) (Default name will be Collection 1) and check the box on its side to append Date & Time to the file name (Figure 1.a (2)). So it will create collection by selected name with date and time.
- Message collection option (Figure 1.a (3)): Select 'Entire bus' option. So it will log entire message present on bus.
- Collection start option (Figure 1.a (4)):
 - Select 'when Expression is true'
 - Click on ☒ tab. It will open 'Select start Expression' window.

- Go in 'Misc' and select 'Second' property from Time category of list from the right side block (Figure 2 (2)).
- Double click on selected property it will come in Expression block on top of window (Figure 2 (1)).
- Set expression 'Second >=0'. This Expression is always true type expression .hence it is equivalent to immediate condition. We can also use other always true type expression.
- Click on OK option

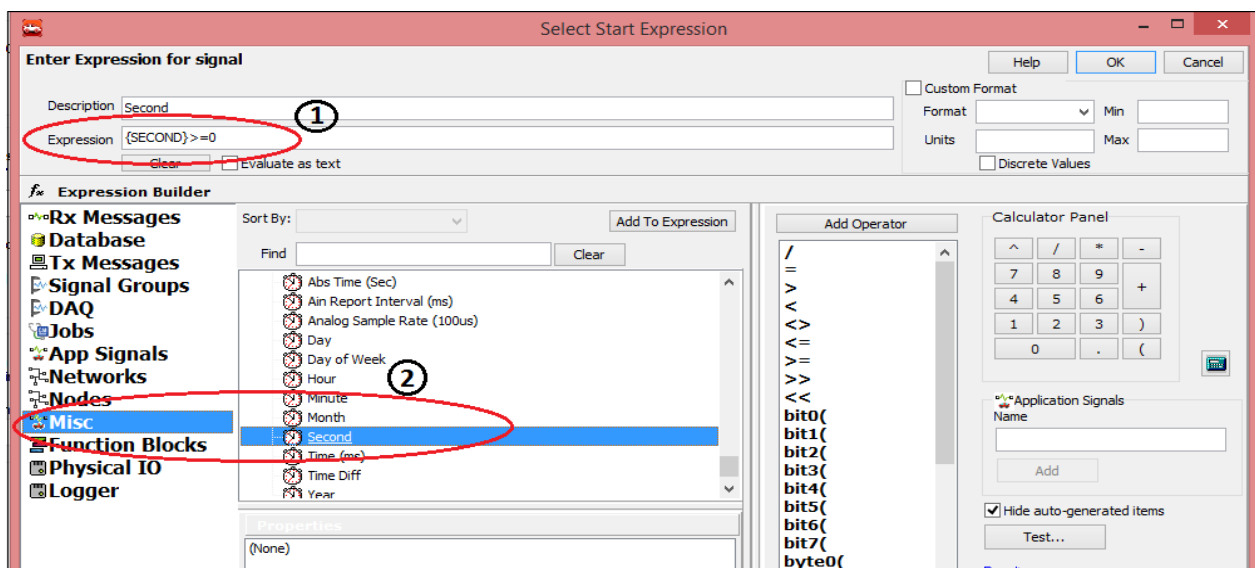


Figure 2: Settings for Collection Start expression

Note: Upload data at the end of collection option is not applicable for 'immediate' option. Hence here we selected 'when Expression is true' option and written condition equivalent to immediate.

- Collection configuration (Figure 1.a (5)): Select 'Finish after # of messages' option → select # messages 50000. Here we can set number of messages as per requirement.
- Restart option (Figure 1.a (6)): Select 'Restart' option. So it will restart logging after completion of collection. It will again check for start collection expression for restart logging.
- Collection upload (Figure 1.a (7)): Check box of 3G and WiFi option as per availability or select both.
- Reporting option (Figure 1.b (8)): Check box of 'LED' option. It will give process status on LEDs of device.
- Power management (Figure 1.b (9)): Select 'Never' option. So device will not go in sleep mode.
- Generate (Figure 1.b (10)): Select 'Generate decoding database', 'Transfer to SD card' and check box of 'generate for wireless device' (Figure 1.b (11)).

Reporting Options (8)

How would you like feedback about the status of the logger? Select "LED" to **flash the LEDs** based on the status of the capture. Select "neoVI MOTE" to **use the neoVI MOTE** to display status and manually trigger.

☒ LEDs ☐ neoVI MOTE ☐ Beep on Wakeup (PLASMA only)

When the logger is running, the **red** LED will blink at a fast rate. When data is captured to the SD card, the **green** LED will flash slowly. When capturing post-trigger data, the **green** LED will flash quickly.

Power Management (9)

☐ Disable all logger TX'ing on this:

When should the neoVI go into low-current draw (sleep) mode? Select "Never" to **always stay awake**. Select "When Message Not Present" to go to **sleep once a message is not on the bus** after a certain period of time. Likewise, "On Expression" will sleep **once an expression is true** for a period of time and "On No Bus Activity" will sleep **once the bus is quiet**. Note: **Any bus activity will cause the neoVI to stay awake or wake up!**

☒ Never ☐ When Message Not Present ☐ On Expression ☐ On No Bus Activity

Generate (10)

Vehicle Spy can generate a database that will **decode all the data logged** by this setup. It does this by combining the databases you currently have loaded. **If you want this**, check "Generate decoding database" and then choose if you'd like the database to "Transfer to SD card" or just "Save to local file system". Then, click "Generate" and **go!**

☒ Generate decoding database ☒ Transfer to SD card ☐ Save to local file system

☐ Enable video logging

☒ Generate for Wireless Devices (11)

Generate (12)

Advanced Options... Clean

Figure 1.b: Settings for Script 1

2.1.2.3 Create wivi file:

- To create .wivi file of all configuration. Click on **Build** tab (Figure 1.b (12)) on VehicleScape DAQ.
- It will open the 'Coremini Executable Generator' window.
- Make sure that coremini compiled without error (Figure 3 (1)).
- Click on 'Export wivi file' option (Figure 3 (2)). It will export wivi file then Save file in destination folder
- Upload the file to device from wivi server and check output.

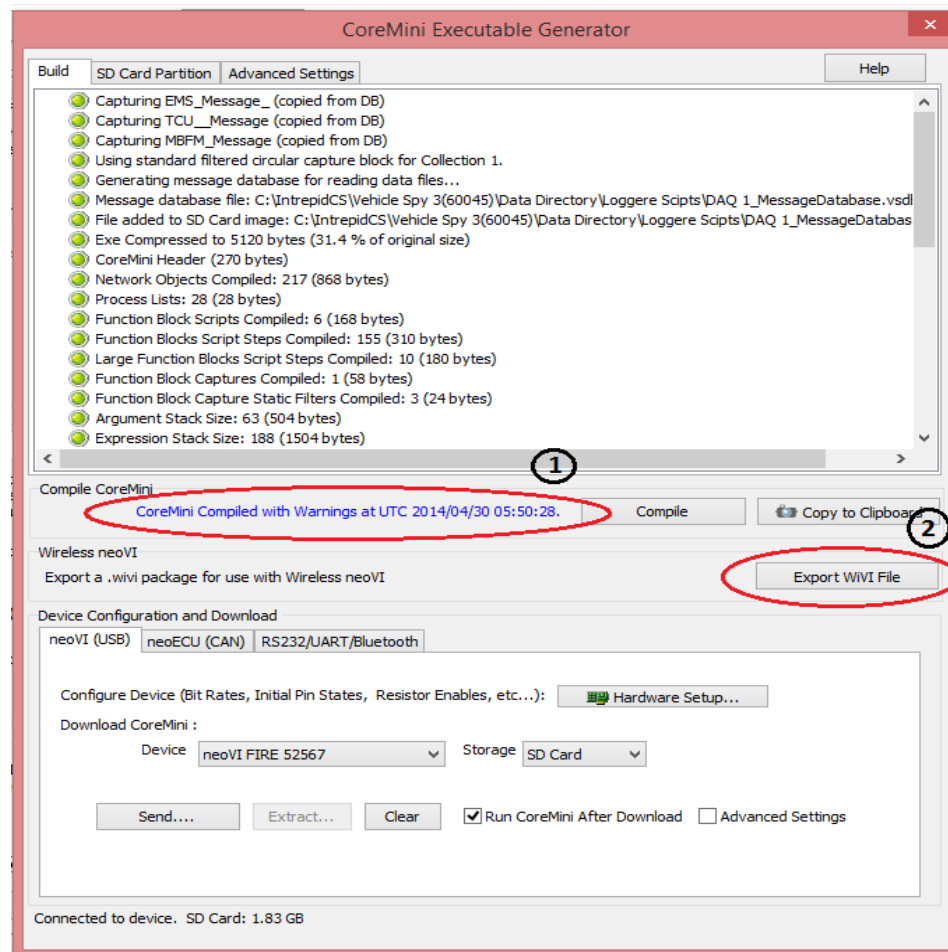


Figure 3: Settings for compiled Wivi file

Note: Refer Script1.vs3zip file for details.you can Create .wivi file and upload in to device. Check output with simulator ([Simulator.vs3zip](#) file).

2.2 Script 2: Log selected messages on condition. Sleep condition active. Upload data to server.

2.2.1 Objective:

- To start data logging as on particular message comes on bus and stop logging after 1min.
- Collect selected messages.
- Device should go in sleep mode if no message present on bus.
- Upload collection on server before sleep mode.

2.2.2 Procedure:



Launch Vspy and create new Platform or select existing from current platform list.

(Please refer the [Script 2.vs3zip](#) file)

2.2.2.1 Upload DBC file:

- Select 'Setup' tab → Network database.
- Select HS CAN from Networks column on the left.
- Add .dbc file to this network, from a tab 'Add' on the right.
- Save the Platform Changes.
- Same way you can add DBC and VS3 database for other network.

2.2.2.2 Copy messages from database to receive message list:

- Go in Spy networks → Messages Editor. It will open Message Editor Window.
- Select  **Database** tab and Copy message from database message list.
- Select  **Receive** tab and paste. It will paste message in receive messages list.

2.2.2.3 Create Application signal as a timer

- Go in Scripting and automation → Application signal.
- Click on '+' button (Figure 4 (1)). It will create new application signal.
- Write description 'Timer' to application signal.
- Select signal type as analog.
- Select 'This value is timer' (Figure 4 (2)).
- Select Timer type as a 'Down Timer' and Time Resolution to 'millisecond'

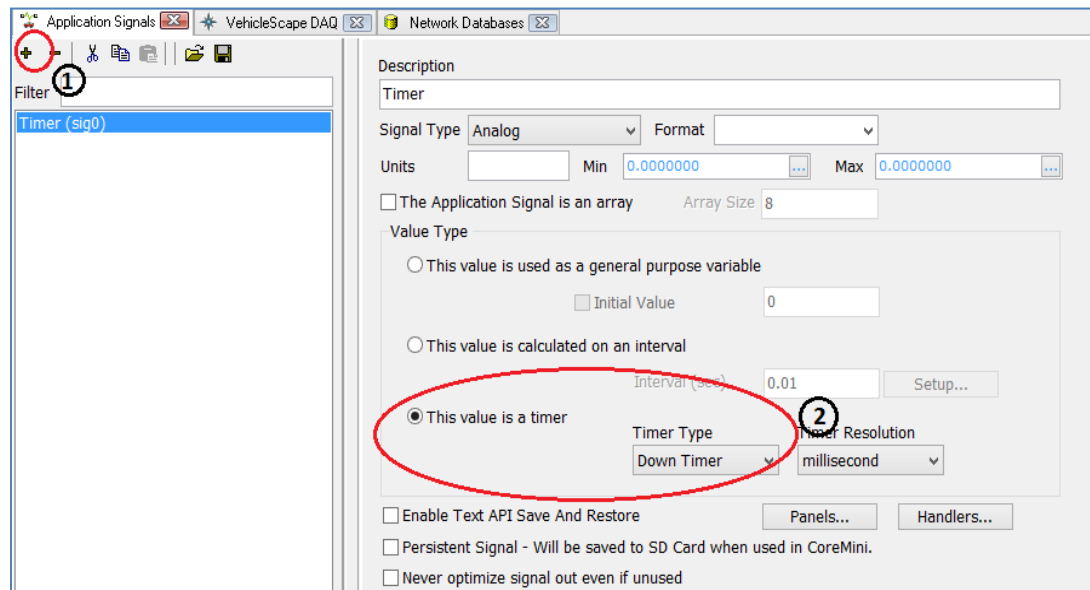


Figure 4: Application signal setting as a Down timer

2.2.2.4 Configure VehicleScape DAQ:

1. Select Measurements → VehicleScape DAQ

2. Select Channels:

Here we can select particular messages which you have to log.

- Go in VehicleScape DAQ → channels.
- Double click on messages from message list at left side of window.
- It will display selected messages on 'Selected channels for test' block (Figure 5(1)).
- Keep polling setup as default.

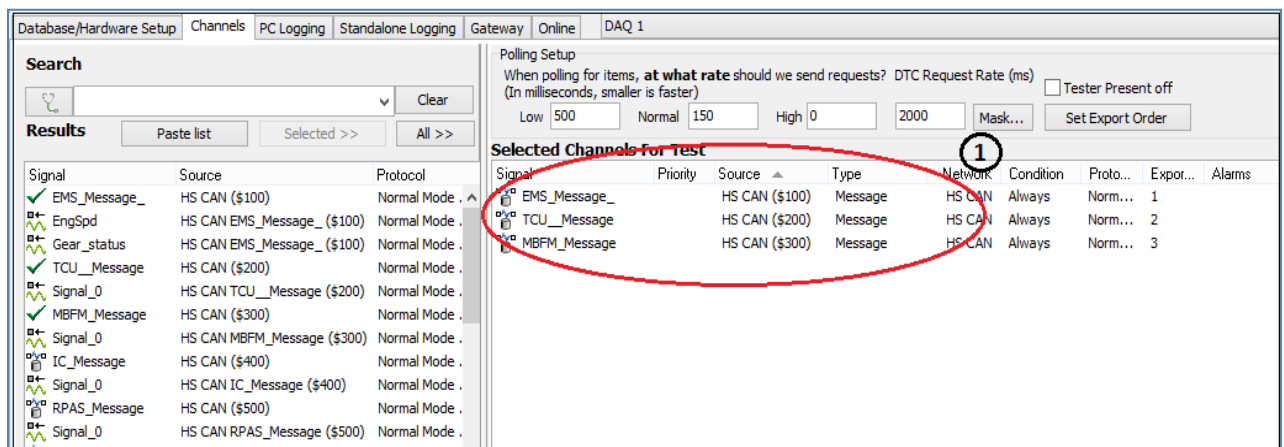



Figure 5: Selected messages.

3. Standalone Logging:

Figure 6.a: Settings for Script 2

- Go in VehicleScape DAQ → Standalone Logging → Messages.
- Collection name: Write a Collection name in collection name box (Figure 6.a (1)) (Default name will be Collection 1) and check the box on its side to append Date & Time to the file name (Figure 6.a (2)). So it will create collection by selected name with date and time.
- Message collection option (Figure 6.a(3)): Select 'Selected channels' option. So it will log only that channels which is selected in channel tab.
- Collection start option (Figure 6.a (4)):
 - Select 'when Expression is true'
 - Click on  tab. It will open 'Select start Expression' window.

- Click on 'Rx Messages' (Figure 7 (1)) and select 'Present' property (Figure 7 (2)) from property list then double click on 'TCU_message'(Figure 7 (3)). It will come in Expression block on top of window (Figure 5. (4)).
- Click on OK option

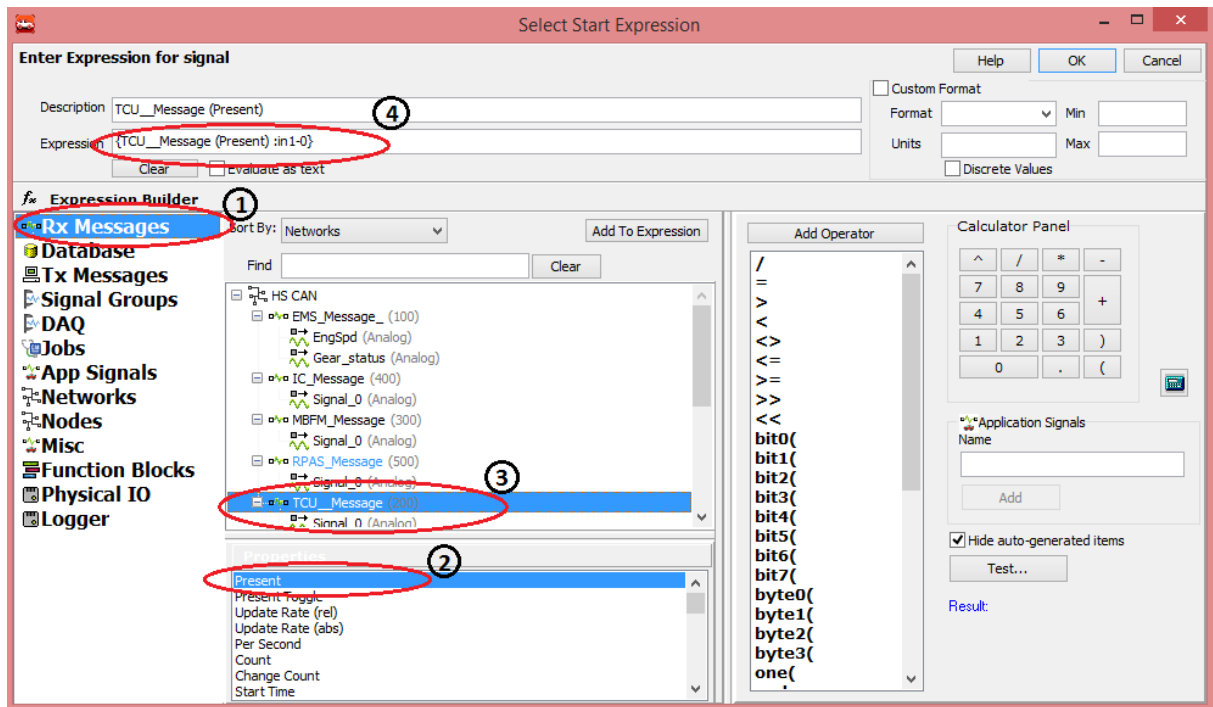



Figure 7: Expression Builder to give an expression for start on expression

- Collection configuration (Figure 6.a (5)):
 - Select 'Finish on expression' option.
 - Click on  tab. It will open 'Select start Expression' window.
 - Click on 'App signals' and double click on 'Timer' application signal. it will come in Expression box on top of window .
 - Write {Timer :sig0-index(0)}=1 in expression box.
 - Click on OK option.
 - So here we will set timer value in function block and timer is down timer so it will start decreasing. So logger will stop collecting messages after Timer value reach to 1.

Reporting Options ⑧

How would you like feedback about the status of the logger? Select "LED" to **flash the LEDs** based on the status of the capture. Select "neoVI MOTE" to **use the neoVI MOTE** to display status and manually trigger.

☒ LEDs ☐ neoVI MOTE ☐ Beep on Wakeup (PLASMA only)

When the logger is running, the **red** LED will blink at a fast rate. When data is captured to the SD card, the **green** LED will flash slowly. When capturing post-trigger data, the **green** LED will flash quickly.

Power Management ⑨

☐ Disable all logger TX'ing on this:

When should the neoVI go into low-current draw (sleep) mode? Select "Never" to **always stay awake**. Select "When Message Not Present" to go to **sleep once a message is not on the bus** after a certain period of time. Likewise, "On Expression" will sleep **once an expression is true** for a period of time and "On No Bus Activity" will sleep **once the bus is quiet**. Note: **Any bus activity will cause the neoVI to stay awake or wake up!**

☒ Never ☐ When Message Not Present ☐ On Expression ☐ On No Bus Activity

Generate ⑩

Vehicle Spy can generate a database that will **decode all the data logged** by this setup. It does this by combining the databases you currently have loaded. **If you want this**, check "Generate decoding database" and then choose if you'd like the database to "Transfer to SD card" or just "Save to local file system". Then, click "Generate" and **go!**

☒ Generate decoding database ☐ Enable video logging

☒ Transfer to SD card ☐ Save to local file system

☒ Generate for Wireless Devices ⑪

⑫

Figure 6.b: Settings for Script 2

- Restart option (Figure 6.a (6)): Select 'Restart' option. So it will restart logging after completion of collection. It will again check for start collection expression for restart logging.
- Collection upload (Figure 6.a (7)): Check box of 3G and WiFi option as per availability or select both.
- Reporting option (Figure 6.b (8)): Check box of 'LED' option. It will give process status on LEDs of device. Also check box of 'Beep on wakeup (PLASMA only)' option. So it will give beep when device will wakeup.
- Power management (Figure 6.b (9)):
 - Select 'On no bus activity' option. So device will go in sleep mode when no message present on bus.
 - Wake mode: Select 'Normal' option.
 - Check box of start new file on waking up.
- Generate (Figure 6.b (10)): Select 'Generate decoding database', 'Transfer to SD card' and check box of 'generate for wireless device'(Figure 6.b (11))

2.2.2.5 Create Function block:

- Go in scripting and automation → Function blocks.

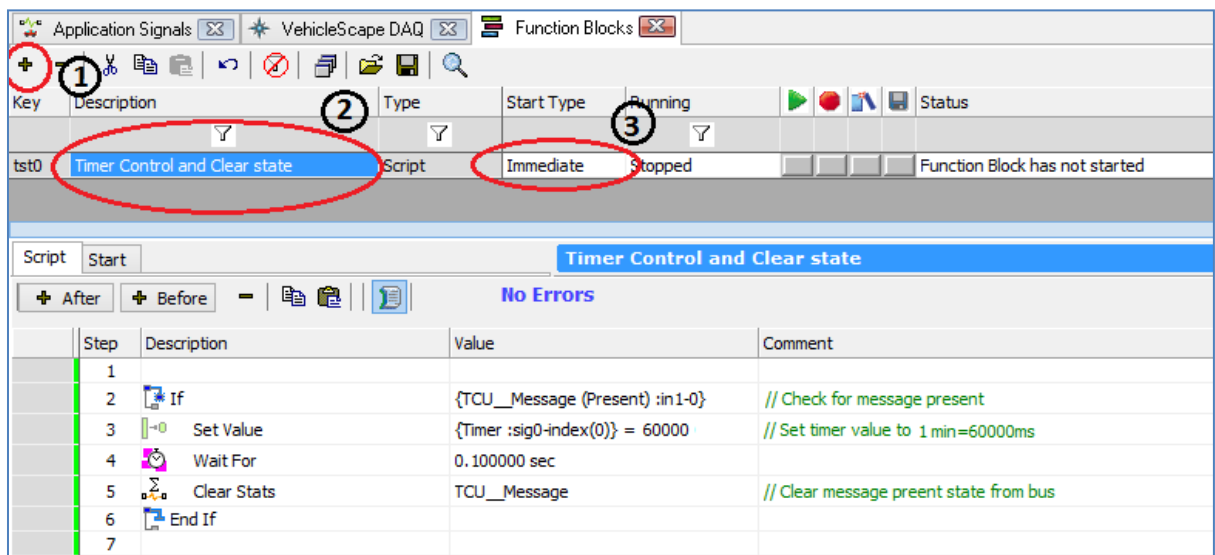



Figure 8: Function block script for Collection.

- Click on '+' option on left side (Fig. 8 (1)). Select 'script' option.
- It will create new function block. Write description in description box (Fig. 8 (2)).
- Make sure start type is Immediate (Fig. 8 (3)).
- In script,
 - Write logic to check for TCU_message present.
 - Click on Description column. It will show list of commands. Select 'If' Command.
 - Double click on Value column in same row. It will pop up 'Enter Expression' window. Select 'Rx Messages' → 'Present' property from property list and then double click on 'TCU_message' from message list. So it will display '{TCU_message (Present): in1-0}' in expression block.
 - Press OK.
 - You can add comment in comment column.
 - So here if condition will check for TCU_message is present on bus or not.

- Set timer value to 1 min i.e. 60000ms.
 - On next line, same way Select 'set value' from command list.
 - Select app signal in 'Enter expression' window. Set value to 60000.
 - So here as TCU_Message will come on bus 'If' condition become true and then it will set timer value to 6000ms.
 - Here we have selected Timer application signal as down timer so it will start decreasing.
- Clear stats of 'TCU_message' present
 - Select 'Clear stats' command in next line. Select 'Clear stats for one message' in 'Select message to clear stats' window. Select TCU_message in message list.
 - Press Ok.
 - It is used to clear message present status on bus. So when 'if' loop condition will recheck then it will not get previous message present status. So it will check for next TCU_message present on bus.
- Here we have not used 'Stop' condition at last, so it will continuously run the function block.

2.2.2.6 Create .wivi file:

- To create .wivi file of all configuration click on  **Generate** tab (Figure 6.b (12)) on VehicleScape DAQ.
- It will open the 'Coremini Executable Generator' window.
- Make sure that coremini compiled without error (Figure 9 (1)).
- Click on 'Export wivi file' option (Figure 9 (2)). It will export wivi file then Save file in destination folder
- Upload the file to device from wivi server and check output.

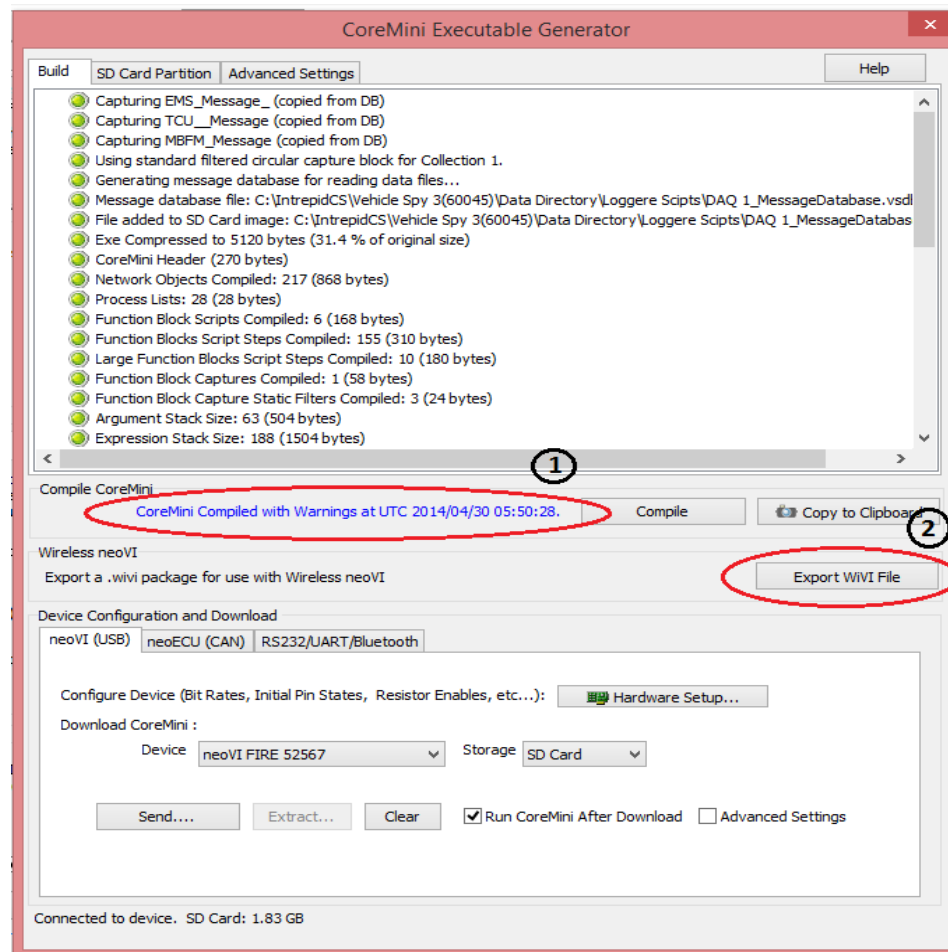


Figure 9: Settings for compiled Wivi file

Note: Refer Script2.vs3zip file for details. You can Create .wivi file and upload in to device. Check output with simulator ([Simulator.vs3zip](#) file similar to simulator file for Script 1).

2.3 Script 3: Log DTC and DID Response. Update collection on server periodically.

2.3.1 Objective:

- To log DTC and DID response for selected ECU.
- Updated collection on server for every ECU after 1 hour

2.3.2 Procedure:

Launch Vspy and create new Platform or select existing from current platform list. (Please refer the [Script 3.vs3zip](#) file)

2.3.2.1 Upload DBC and .gmd file:

- Select 'setup' tab → Network database.
- Select HS CAN from Networks column on the left.
- Add .dbc file to this network, from a tab 'Add' on the right.
- Save the Platform Changes.
- Same way you can add DBC and VS3 database for other network.
- To import .gmd , Select 'Diagnostic' tab and browse the .gmd file.

2.3.2.2 To Import .odx or .cdd file.

- Select 'setup' tab → ECU diagnostic database.
- Click on 'Import' button (Figure 10 (1)).
- To Import .odx file: Select Import → ISO 14229(UDS) → ODX/PDX → Select the ODX file from PC.
- To Import .cdd file: Select Import → KWP 2000 → CDD → select the .cdd file from PC. For this example script 3 we don't have .cdd file.

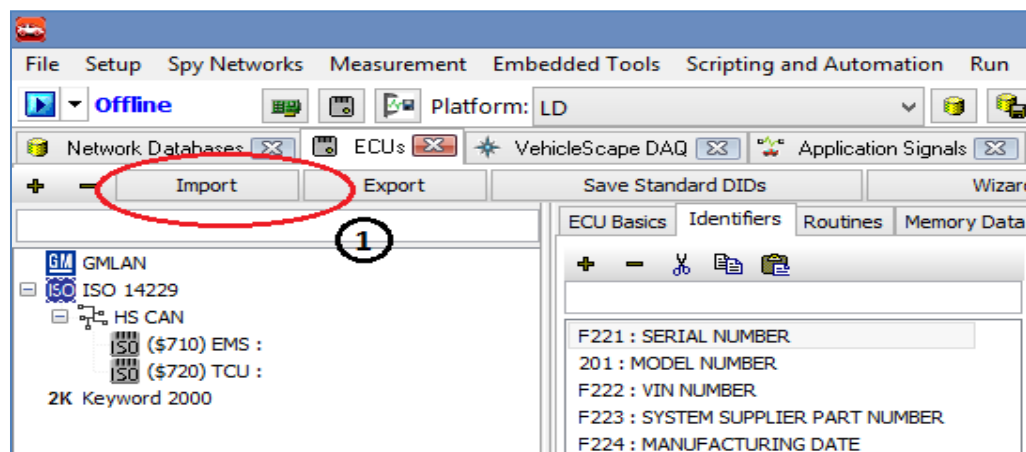


Figure 10: Settings to Import a .odx or .cdd file

2.3.2.3 Create Application signal to trigger collection start for all ECUs.

- Go in Scripting and automation → Application signal.
- Click on '+' button (Figure 11(1)). It will create new application signal.
- Write description to application signal. Here write description as 'DID and DTC request trigger'
- Select signal type as analog.
- Select value type as 'This value is used as a general purpose variable'. Check box Initial value to zero.

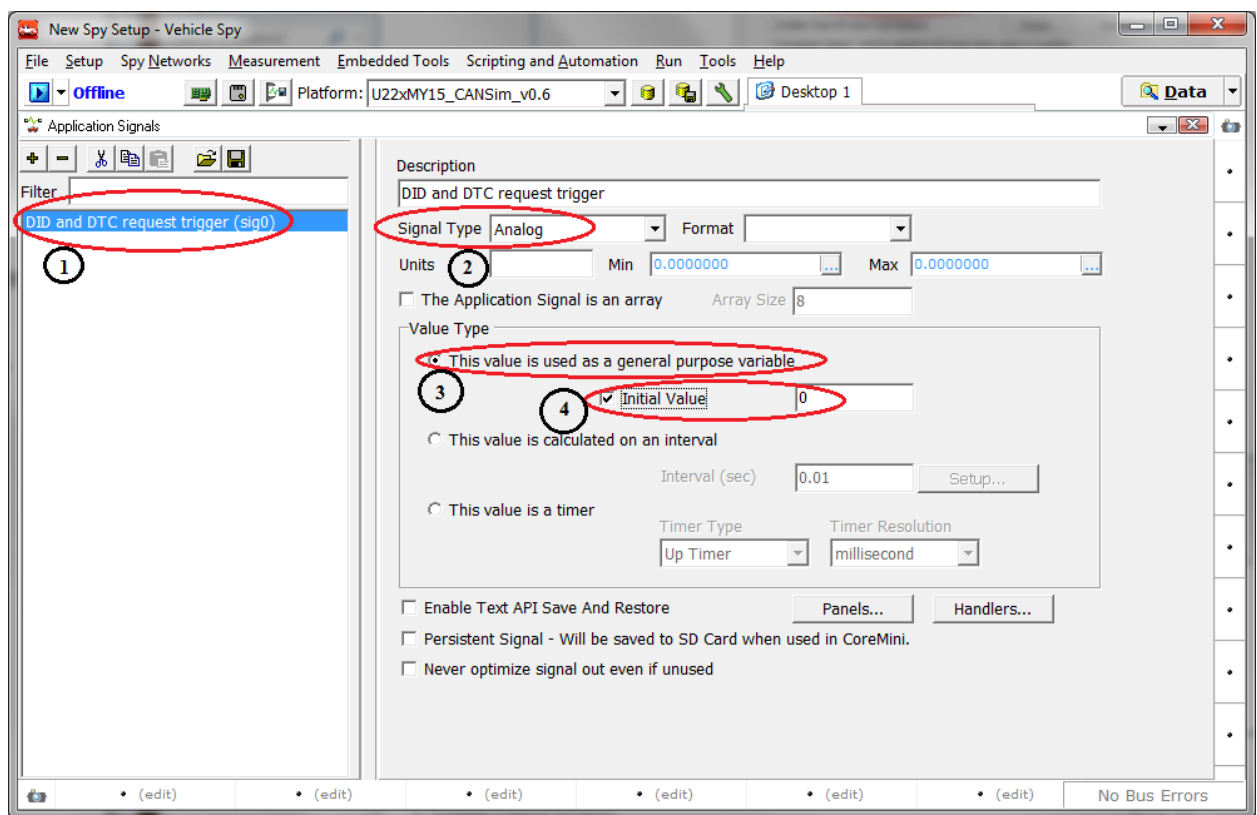


Figure 11: Application signal for the trigger.

2.3.2.4 Configure VehicleScape DAQ:

Select Measurements → VehicleScape DAQ → Standalone Logging

- Create 1 more collection by pressing '+' button.

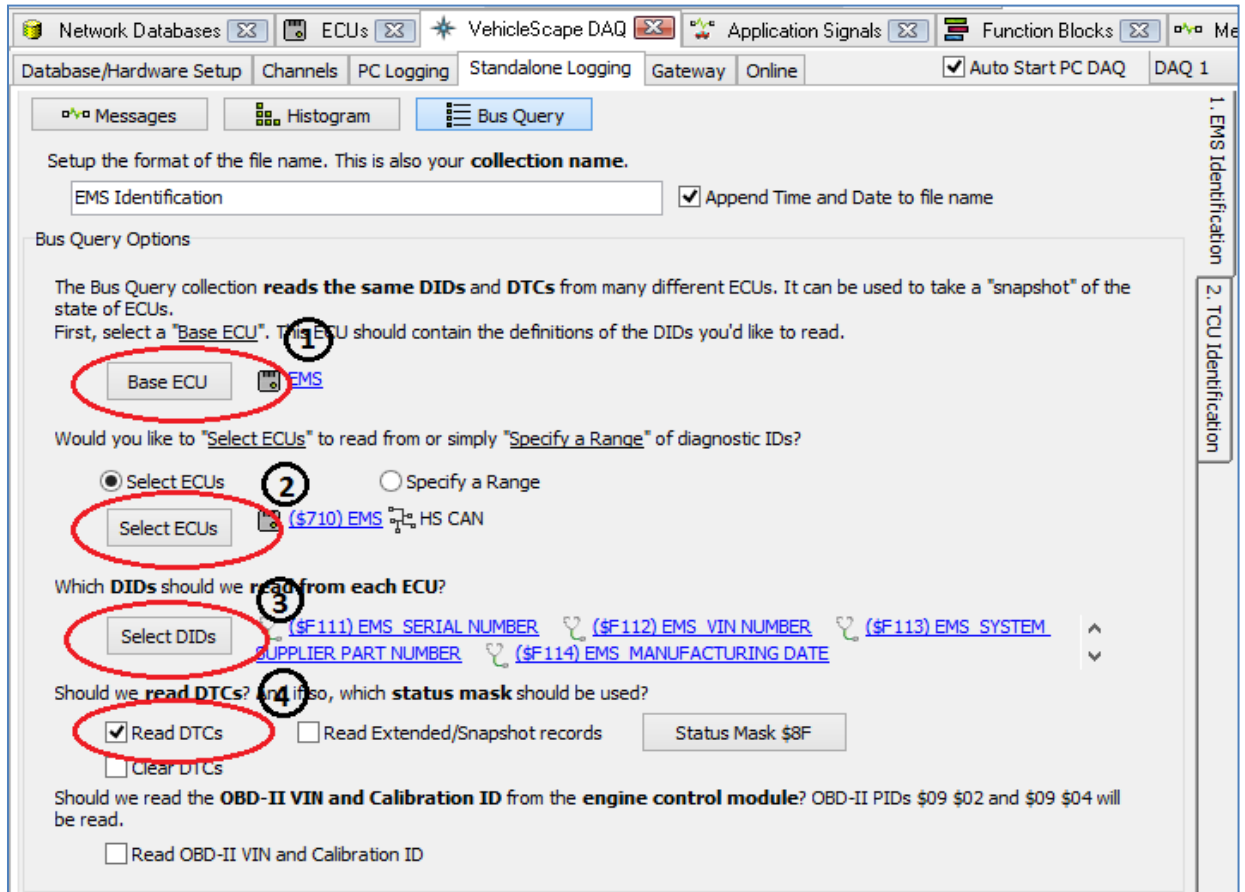


Figure 12.a: VehicleSpy configuration for Bus Query

- Write Collection name as 'EMS Identification' for first collection and 'TCU Identification' for second collection and 'TCU Identification'.
- Check the box on its side to append Date & Time to the file name.
- Bus Query option:
 - Base ECU (Figure 12.a (1)): Select base ECU which contains the definition of DID's. Here select EMS ECU for first collection and TCU ECU for second collection.

- Select ECU (Figure 12.a (2)): Select ECU To which have to send DID request. Here select EMS ECU for first collection. TCU ECU for second collection.
- Select DID (Figure 12.a (3)): Select DID requests from DID list of ECU.
- Check box of 'Read DTCs' for both collections.

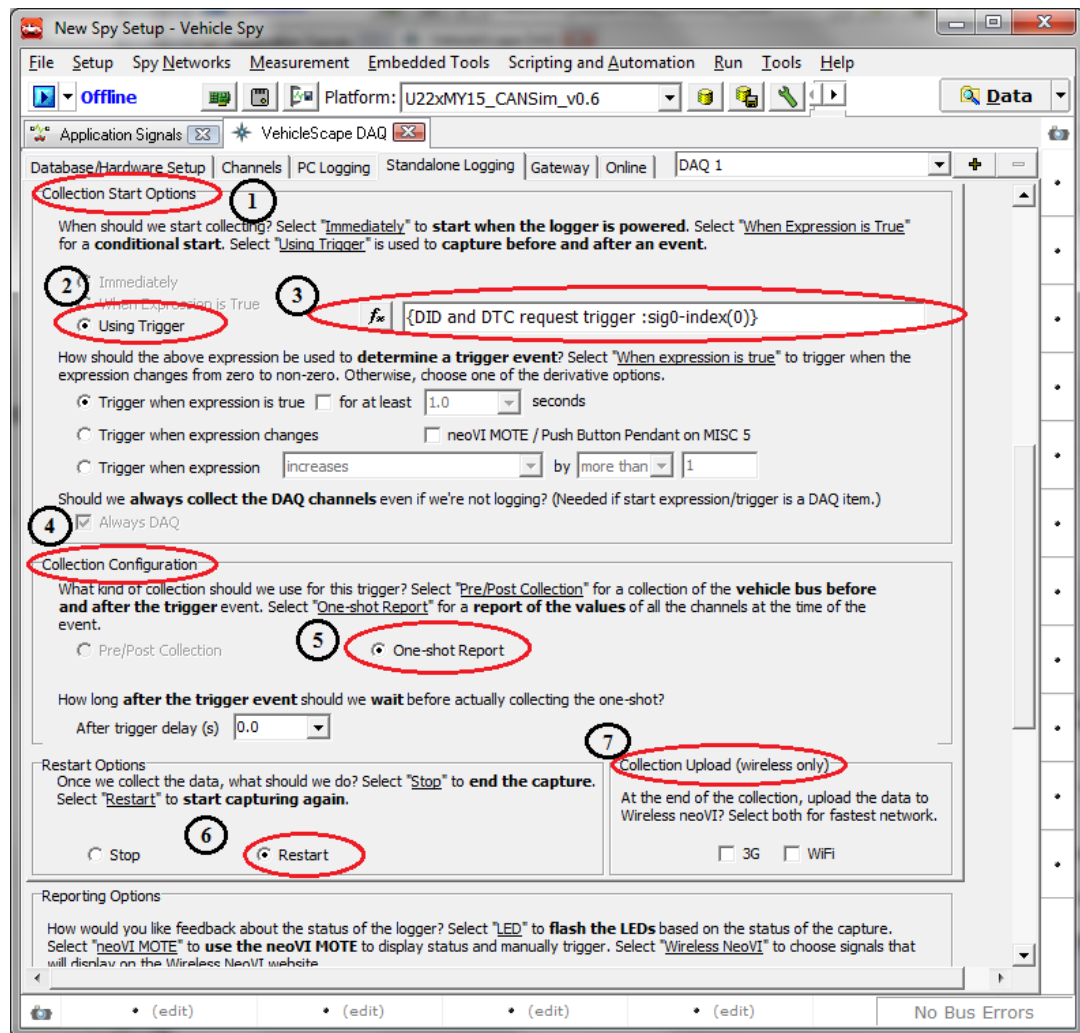



Figure 12.b: VehicleSpy configuration for collection options

- Collection start option (Figure 12.b (1)):
 - Select 'Using Trigger Expression' option(Figure 12.b (2)).
 - Click on  tab(Figure 12.b (3)). It will open 'Select start Expression' window.
 - Click on 'App signals' and double click on 'DID and DTC request trigger' application signal. It will come in Expression box on top of window.
 - Set value '{DID & DTC request trigger :sig0-index(0)}=1' in expression box for first collection. Click on OK option. Select 'Trigger when expression is true'

- Same way set value ‘{DID & DTC request trigger :sig0-index(0)}=2’ for second collection.
- It will start collection for ‘EMS Identification’ when application signal value becomes 1 and for ‘TCU Identification’ when application signal value becomes 2.
- Collection configuration (Figure 12.b (4)): Select ‘One shot report’ for all collections. (Figure 12.b (5))
- Restart option (Figure 12.b(6)): Select ‘Restart’ option for all collections. So it will restart logging after completion of collection. It will again check for start collection expression for restart logging.
- Collection Upload (Figure 12.b (7)): Check box of 3G and WiFi option as per availability or select both for all collections.

Reporting Options (8)

How would you like feedback about the status of the logger? Select "LED" to **flash the LEDs** based on the status of the capture. Select "neoVI MOTE" to **use the neoVI MOTE** to display status and manually trigger.

☒ LEDs ☐ neoVI MOTE ☐ Beep on Wakeup (PLASMA only)

When the logger is running, the **red** LED will blink at a fast rate. When data is captured to the SD card, the **green** LED will flash slowly. When capturing post-trigger data, the **green** LED will flash quickly.

Power Management (9)

☐ Disable all logger TX'ing on this:

When should the neoVI go into low-current draw (sleep) mode? Select "Never" to **always stay awake**. Select "When Message Not Present" to go to **sleep once a message is not on the bus** after a certain period of time. Likewise, "On Expression" will sleep **once an expression is true** for a period of time and "On No Bus Activity" will sleep **once the bus is quiet**. Note: **Any bus activity will cause the neoVI to stay awake or wake up!**

☒ Never ☐ When Message Not Present ☐ On Expression ☐ On No Bus Activity

Generate (10)

Vehicle Spy can generate a database that will **decode all the data logged** by this setup. It does this by combining the databases you currently have loaded. **If you want this**, check "Generate decoding database" and then choose if you'd like the database to "Transfer to SD card" or just "Save to local file system". Then, click "Generate" and go!

☒ Generate decoding database ☒ Transfer to SD card ☐ Save to local file system

☐ Enable video logging ☒ Generate for Wireless Devices (11)

(12)

Figure 12.c: VehicleSpy configuration for Reporting and Generation

- Reporting option (Figure 1(8)): Check box of ‘LED’ option. It will give process status on LEDs of device.
- Power management (Figure 1 (6)): select ‘Never’ option.

- Here we have to send DID and DTC request to both ECUs after every 1 hour. So Need to write script to control DID and DTC requests


2.3.2.5 Create Function block:

- Go in scripting and automation → Function blocks.
- Click on '+' option on left side (Fig. 7 (1)). Select 'script' option.
- It will create new function block. Write description in description box as 'DID and DTC Trigger Control' (Fig. 7 (2))
- Make sure start type is 'Immediate' (Fig. 7 (3)).
- In script(Refer Figure 10),
 - Set 'DID and DTC request trigger' application signal value to 1(refer script 2 for set value command). So 'Start collection condition' for first collection will satisfy. So device will send DID and DTC request on bus.
 - Same way set 'DID and DTC request trigger' application signal value to 2 for other collection.
 - Set 'Wait for' command to 1 hour (3600 sec).
 - Then it will again jump on first step. So process will be continuing after every one hour.

Script Start DID and DTC Trigger control				
No Errors				
Step	Description	Value	Comment	
1	Set Value	{DID and DTC request trigger :sig0-index(0)} = 1	// Trigger for EMS Identification	
2	Wait For	1.000000 sec	// Delay	
3	Set Value	{DID and DTC request trigger :sig0-index(0)} = 2	// Trigger for TCU Identification	
4	Wait For	3600.000000 sec	// Wait for 1 Hrs	
5	Jump To	Step 1		
6				

Figure 13. Function Block for the triggers.

2.3.2.6 Create wivi file:

- To create .wivi file of all configuration click on  **Generate** tab (Figure 12.c (12)) on VehicleScape DAQ.
- It will open the 'Coremini Executable Generator' window.
- Make sure that coremini compiled without error (Figure 14 (1)).
- Click on 'Export wivi file' option (Figure 14 (2)). It will export wivi file then Save file in destination folder
- Upload the file to device from wivi server and check output.
- Device will send request for DID and DTC for both ECU and it will upload on server after every one hour.

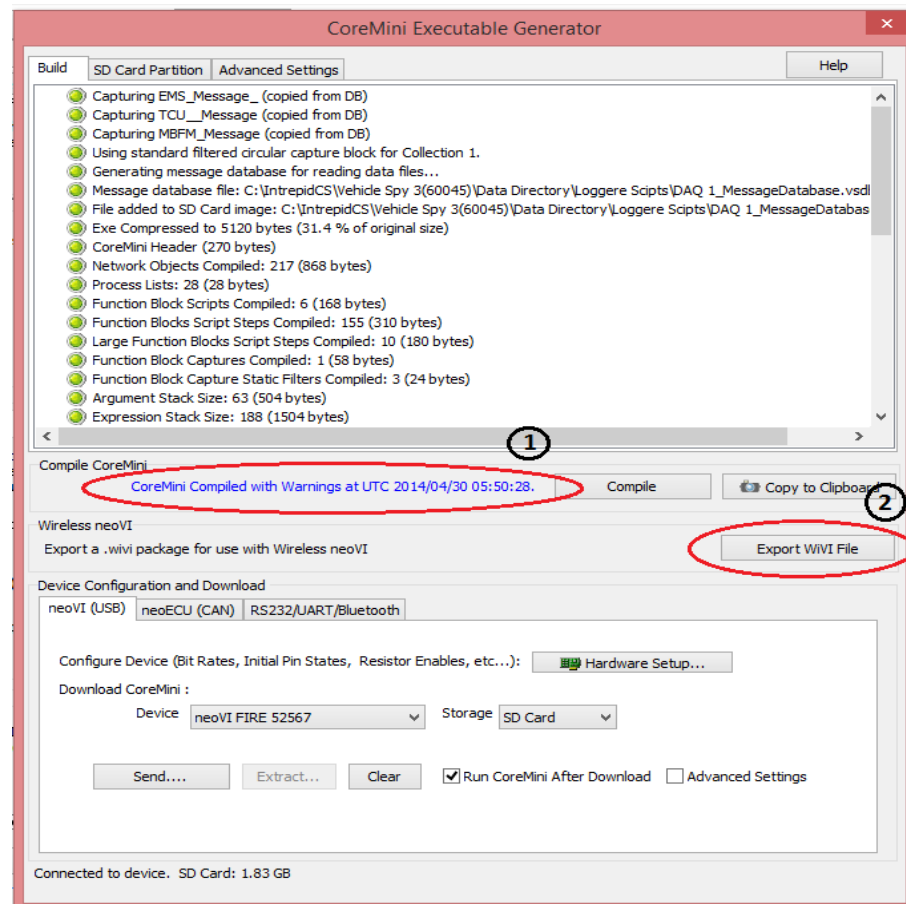


Figure 14: Settings for compiled Wivi file

Note: Refer Script3.vs3zip file for details. You can Create .wivi file and upload in to device. Check output with simulator ([Simulator.vs3zip](#) file similar to simulator file for Script 1).

2.4 Script 4: Log selected messages before and after a trigger

2.4.1 Objective:

- To start data logging as on EngSpd signal value becomes 150 Rpm.
- Collect selected messages.
- Collect 200 messages before and 200 messages after trigger.

2.4.2 Procedure:



Launch Vspy and create new Platform or select existing from current platform list.

(Please refer the [Script 4.vs3zip](#) file)

2.4.2.1 Upload DBC file:

- Select 'Setup' tab → Network database.
- Select HS CAN from Networks column on the left.
- Add .dbc file to this network, from a tab 'Add' on the right.
- Save the Platform Changes.
- Same way you can add DBC and VS3 database for other network.

2.4.2.2 Copy messages from database to receive message list:

- Go in Spy networks → Messages Editor. It will open Message Editor Window.
- Select  **Database** tab and Copy message from database message list.
- Select  **Receive** tab and paste. It will paste message in receive messages list.

2.4.2.3 Configure VehicleScape DAQ:

Select Measurements → VehicleScape DAQ

Select Channels:

Here we can select particular messages which you have to log.

- Go in VehicleScape DAQ → channels.
- Double click on messages from message list at left side of window.
- It will display selected messages on 'Selected channels for test' block (Figure 15 (1))
- Keep polling setup as default.

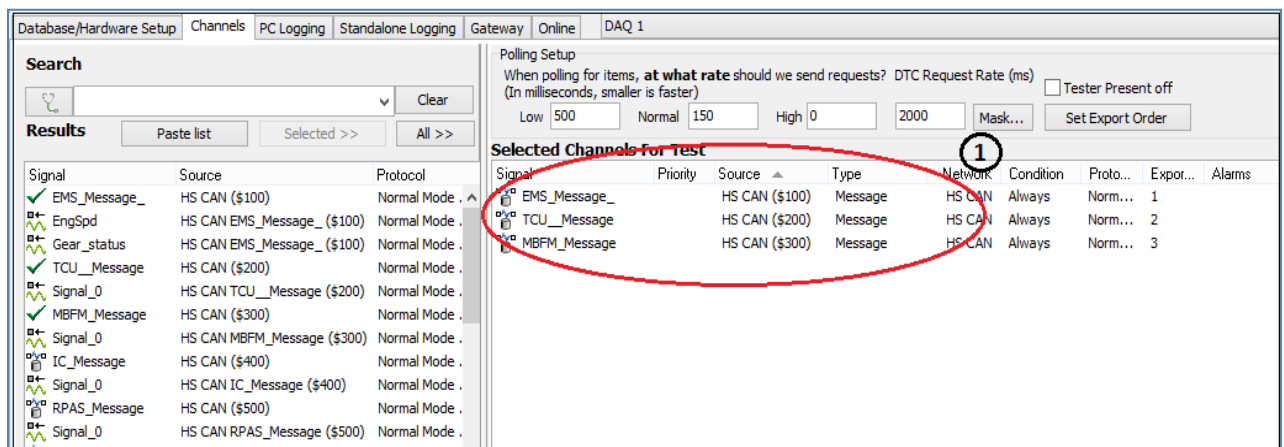


Figure 15: Selected messages.

Standalone Logging:

- Go in VehicleScape DAQ → Standalone Logging → Messages.

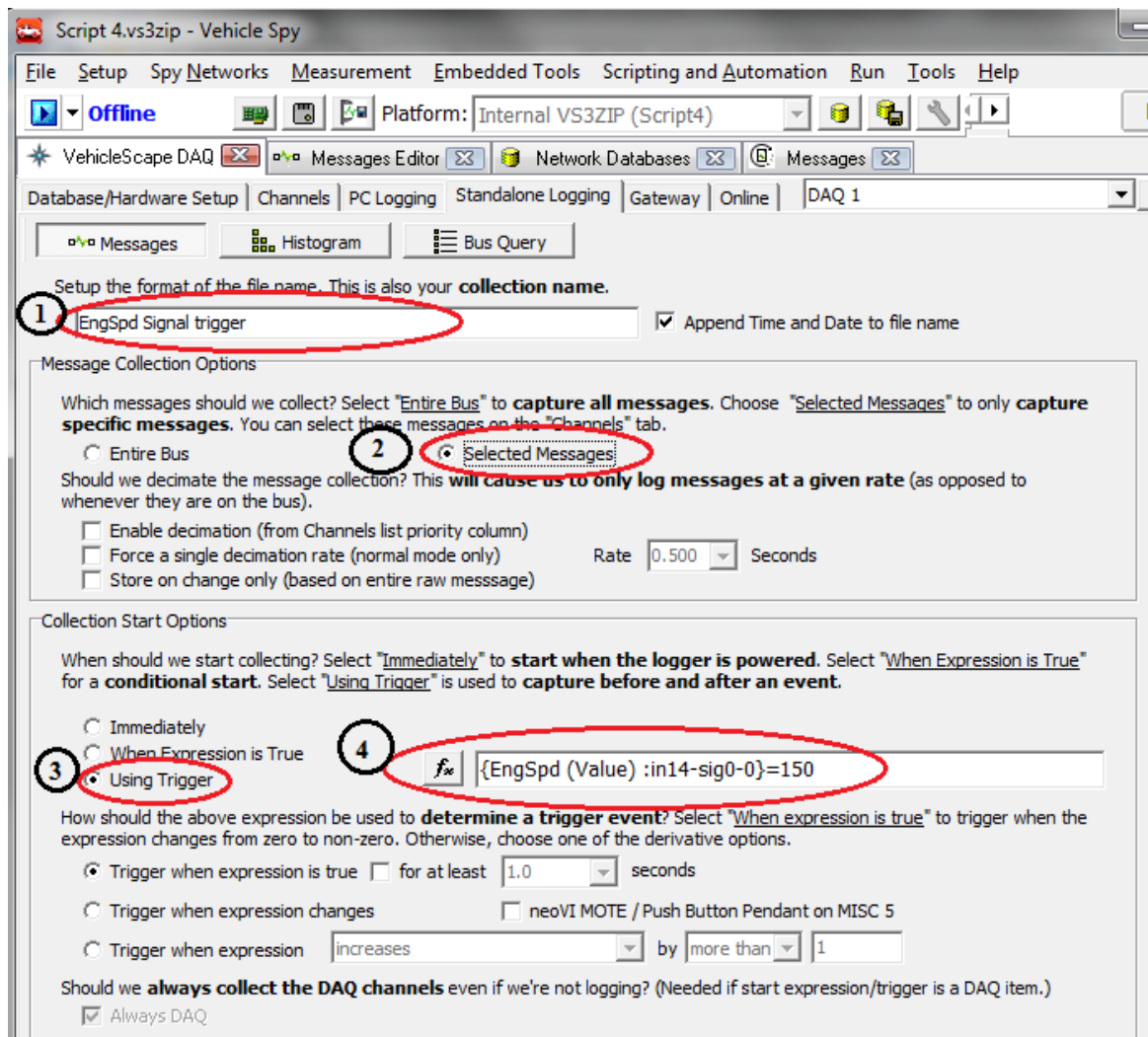



Figure 16.a Configuration for collection for data logging as on EngSpd signal value

- Collection name: Write a Collection name 'EngSpd signal Trigger' in collection name box (Figure 16.a (1)) (Default name will be Collection 1) and check the box on its side to append Date & Time to the file name. So it will create collection by selected name with date and time.
- Message collection option (Figure 16.a (2)): Select 'Selected channels' option. So it will log only that channels which is selected in channel tab.

- Collection start option:
 - Select 'Using Trigger Expression' (Figure 16.a (3)): Click on  tab. It will open 'Select start Expression' window. (Figure 16.a (4))
 - Click on 'Rx Messages' (Figure 17 (1)) and select 'Value' property (Figure 17 (2)) from property list then double click on 'EngSpd' Signal (Figure 17(3)). It will come in Expression block on top of window then set expression as '{EngSpd (Value) :in14-sig0-0}=150' (Figure 167(4)).
 - Click on OK option.
 - Select 'Trigger when expression is true'

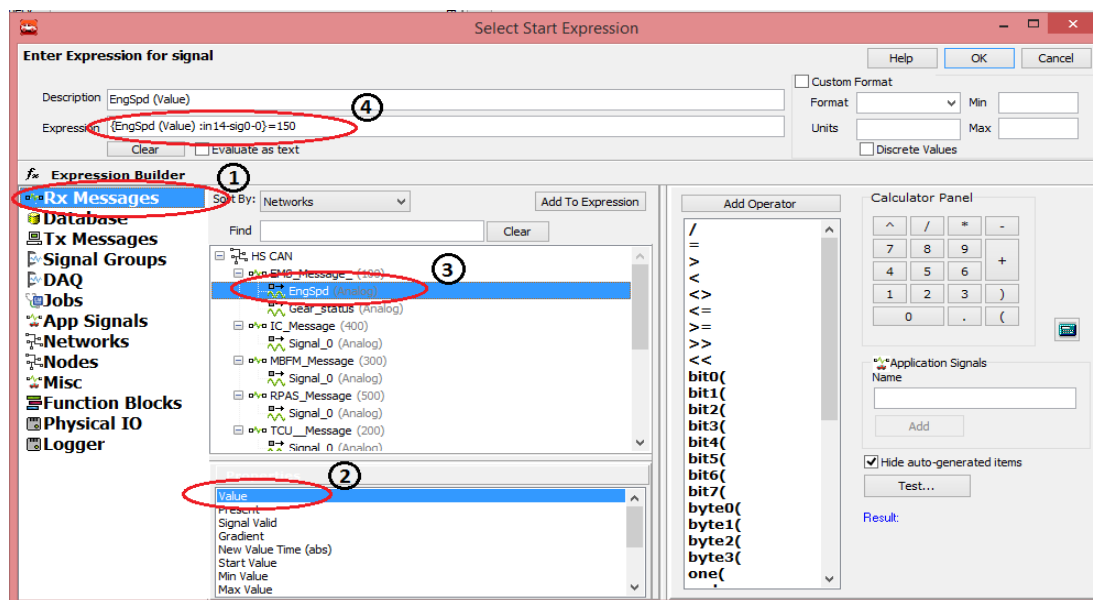


Figure 17: Selection of expression for start logging option

Collection Configuration

What kind of collection should we use for this trigger? Select "Pre/Post Collection" for a collection of the **vehicle bus before and after the trigger** event. Select "One-shot Report" for a **report of the values** of all the channels at the time of the event.

5 ☒ Pre/Post Collection ☐ One-shot Report

☐ Stop on expression ☐ changing Timeout sec

Configure "Pre-Trigger" mode. First, select your card size. Then, choose the way you'd like to define your buffer. Finally, select your "Messages Before Trigger" and "Messages After Trigger". All of these will **affect your maximum number of captures**.

6 Card Size # of Trigger Events (Maximum): 1728

7 ☐ By time ☒ By number of messages

Messages Before Trigger

Messages After Trigger

Restart Options

Once we collect 1728 trigger events, what should we do? Select "Stop" to **end the capture**. Select "Restart" to **start capturing again (will erase oldest capture)**.

8 ☐ Stop ☒ Restart

9 **Collection Upload (wireless only)**

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

☒ 3G ☒ WiFi

Figure 16.b: Configuration for Collection of messages

- Collection configuration
 - Select 'Pre/Post collection' option (Figure 16.b (5))
 - Select card size 32GB for plasma (Figure 16.b (6))
 - Select 'By number of messages' (Figure 16.b (7)) and Set Messages before Trigger to 200 and Messages after Trigger to 200. So it will log 200 messages before trigger and 200 messages after trigger condition.
- Restart option (Figure 16.b (8)): Select 'Restart' option. So it will restart logging after completion of collection. It will again check for start collection expression for restart logging.
- Collection upload (Figure 16.b (9)): Check box of 3G and WiFi option as per availability or select both.

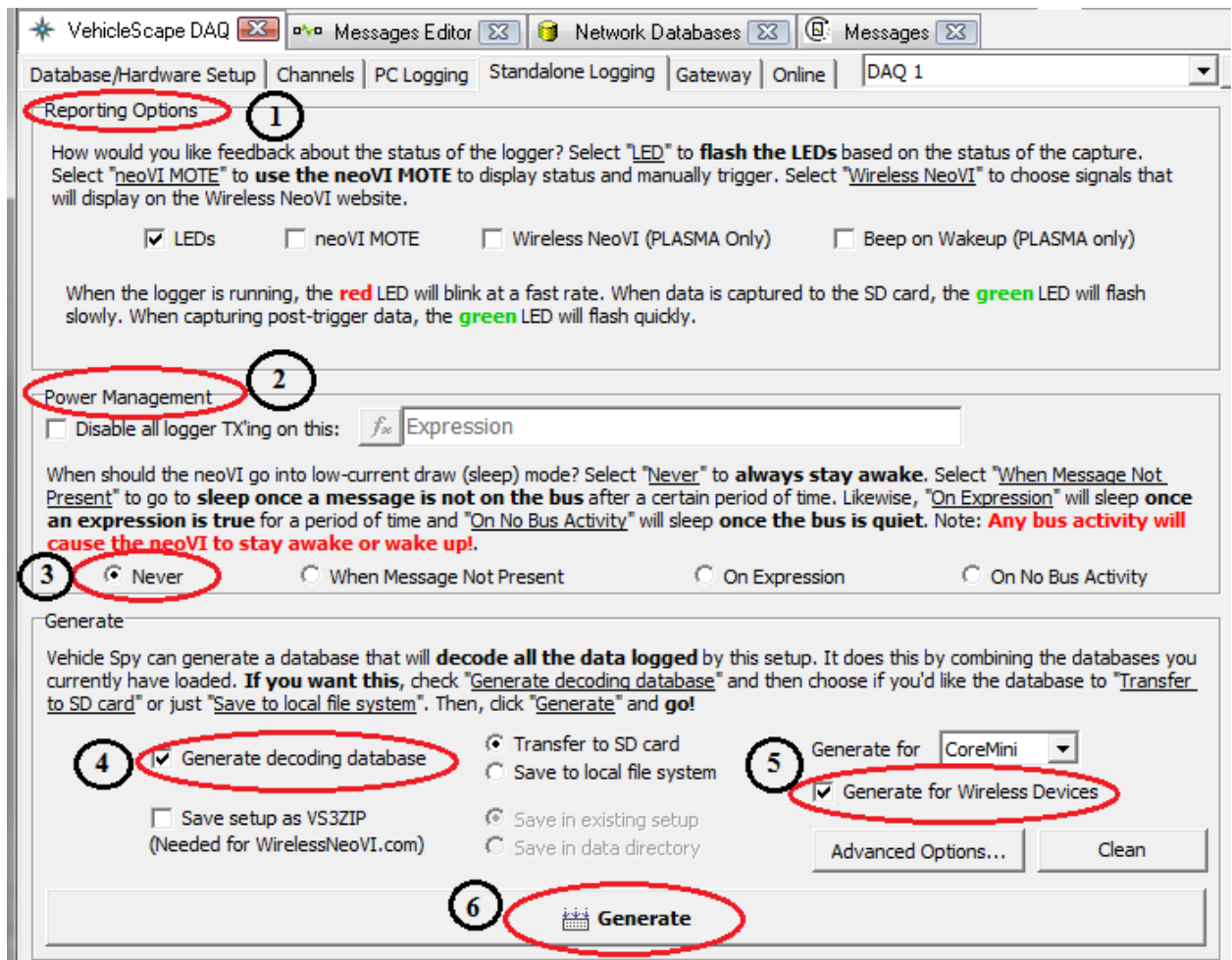



Figure 16.c: Configuration for Reporting and Generation

- Reporting option (Figure 16.c (1)): Check box of 'LED' option. It will give process status on LEDs of device. Also check box of 'Beep on wakeup (PLASMA only)' option. So it will give beep when device will wake up.
- Power management (Figure 16.c (2)): Select 'Never' option (Figure 16.c (3)). So it will never go in sleep mode.
- Generate (Figure 16.c (4)): Select 'Generate decoding database', 'Transfer to SD card' and check box of 'generate for wireless device' (Figure 16.c (5))

2.4.2.4 Create wivi file:

- To create .wivi file of all configuration click on  **Generate** tab (Figure 16.c (6)) on VehicleScape DAQ.
- It will open the 'Coremini Executable Generator' window.
- Make sure that coremini compiled without error (Figure 18 (1)).
- Click on 'Export wivi file' option (Figure 18 (2)). It will export wivi file then Save file in destination folder
- Upload the file to device from wivi server and check output.

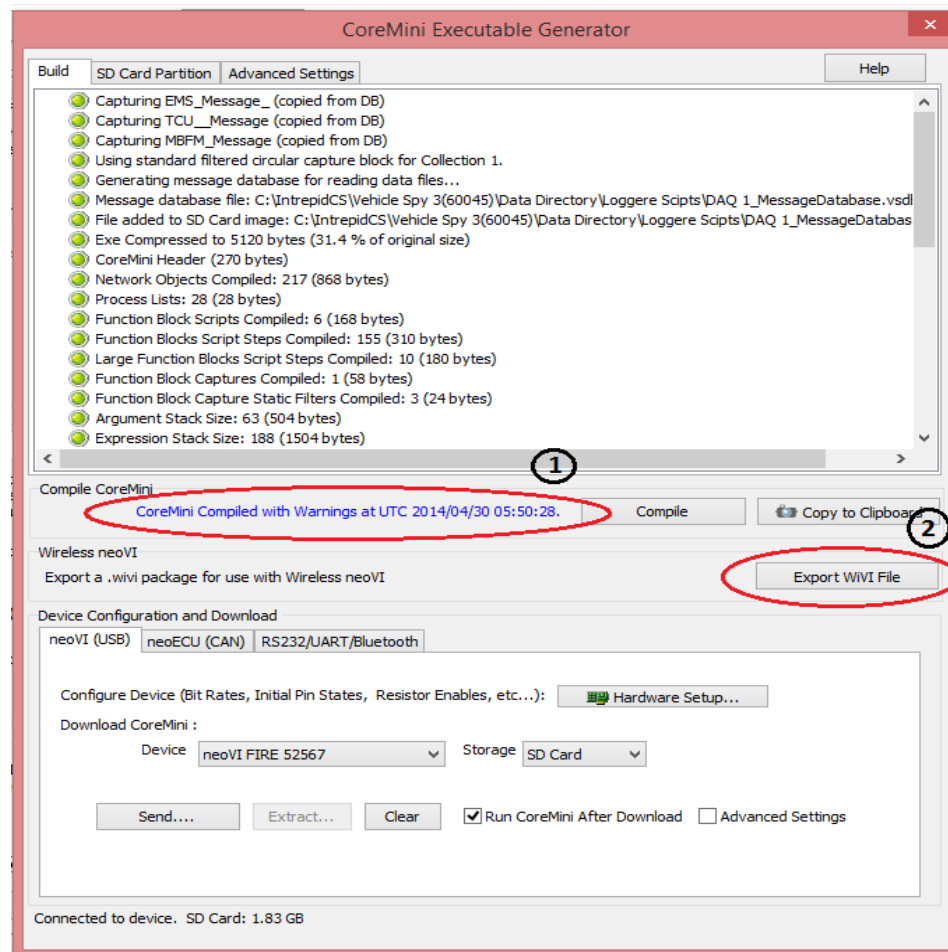
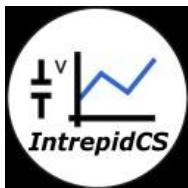


Figure 18: Settings for complied Wivi file

Note: Refer Script4.vs3zip file for details. You can Create .wivi file and upload in to device. Check output with simulator ([Simulator.vs3zip](#) file similar to simulator file for Script 1).

3. Contact Us:



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