# Welcome to Tech Day 2019

#### **Gateway Builder**

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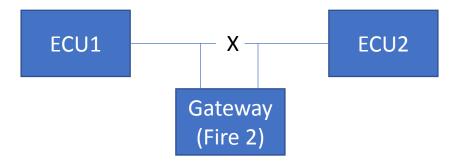
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What is a Gateway? A Gateway is a method to transfer messages from one communication bus to another.

Configuration #1 (intercept bi-directional messages and alter or select pass-through messages)



Configuration #2 (tap bi-directional messages and alter or select pass-through messages)







What is the Gateway Builder?

It is an easy to use drag & drop GUI application within Vehicle Spy Enterprise version that allows you to create complex CAN and LIN gateway functions that can be programmed into CoreMini of our hardware products.

Ethernet gateway forthcoming! Will be looking for beta testers in approx. 6 months.





Have you ever created a gateway using our Function Block Scripts?

Even though our scripting language is very easy to use it can take many hours to create a gateway and test.

	Notes	HSCAN-J1939-Signal Gateway  No Errors	
After 4 Before -   X 1 1 1 1 No Errors			
Step	Description	Value	Comment
1	// ID C9 from ECM		
2	- Set Value	{Engine Speed (Value) :out53-sig3-0} = {Engine Speed (190) (Value) :in42-sig3-0}	// ID C9 Engine Speed
3	[≱ If	{Engine Speed (190) (Value) :in42-sig3-0}>200	// ID C9 If Engine Speed > 200 set Engine Run Active
4	<b></b> ■ Set Value	{Engine Run Active (Value) :out53-sig2-0} = 1	
5	🔯 Else		
6	-0 Set Value	{Engine Run Active (Value) :out53-sig2-0} = 0	
7	📑 End If		
8	-0 Set Value	{Engine Speed Status (Value) :out53-sig4-0} = 0	// ID C9 Always set to normal engine speed status (0)
9	- Set Value	{Accelerator Actual Position Validity (Value) :out53-sig0-0} = 0	// ID C9 Always send valid accelerator actual position
10	- Set Value	{Accelerator Actual Position Validity (Value) :out51-sig4-0} = 0	// ID 191 Always send valid
11	-0 Set Value	{Accelerator Actual Position (Value) :out53-sig12-0} = {Accelerator Pedal Position 1 (91) (Value) :in41-sig9-0}	// ID C9 Accelerator Actual Position
12	- Set Value	{Accelerator Actual Position (Value) :out51-sig5-0} = {Accelerator Pedal Position 1 (91) (Value) :in41-sig9-0}	// ID 191 Accelerator Actual Position
13	- O Set Value	{Powertrain Brake Pedal Discrete Input Status Validity (Value) :out53-sig14-0} = 0	// ID C9 Always send valid Brake Pedal condition (0)
14	[≱ If	{Brake Switch (597) (Value) :in459-sig13-0}=1	// ID C9 If Brake Applied
15	-0 Set Value	{Powertrain Brake Pedal Discrete Input Status (Value) :out53-sig13-0} = 1	// ID C9 Set to brake applied
16	📜 Else		
17	<b></b> Set Value	{Powertrain Brake Pedal Discrete Input Status (Value) :out53-sig13-0} = 0	// ID C9 Else set to brake not applied
18	End If		
19	- Set Value	{Barometric Pressure Absolute (Value) :out61-sig0-0} = {Barometric Pressure (108) (Value) :in463-sig4-0}	// ID 4C1 Barometric Pressure
20	-0 Set Value	{Engine Coolant Temperature (Value):out61-sig2-0} = {Engine Coolant Temperature (110) (Value):in456-sig5-0}	// ID 4C1 Engine Coolant Temperature

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With our new Gateway Builder it creates the Function Block Scripts for you!!! Just drag & drop the Networks, Messages, or Signals from one network to the other. Click on the CoreMini button to program the stand-alone hardware.

Before we jump to the **live demo** please note the Gateway Builder supports CAN, CAN FD, LIN, ISO 15765-2, and OEM Specific (i.e. security protocols) networks and protocols.

#### Live demo will consist of:

**Network: HSCAN to MSCAN** 

Message: Condition, Rate, ArbID, CAN to CAN FD

Signal: Change to constant, change scaling, combine signals





# Start live demo



