The following describes briefly how to use the common features of the Vehicle Gateway.

Collecting Data:

To determine the mode that the gateway sends data on the CANopen Network, set the Event Timer of the corresponding PDO. By default, TX PDO4 sends the multiplexed vehicle data. The object number of the Event Timer is Index 0x1803 SubIndex 5. If you want the data to be sent only on a change of state, set this object to a 0. If you want to send the data on a periodic basis, set this value to the number of msec between parameters that you want. Note that this is the time between individual parameters and that the whole list of parameters will be sent one after another. There are approximately two hundred parameters mapped into PDO 4. This means that if the event timer is set to 10msec it will transmit an individual parameter at an interval of approximately every 2 seconds.

Identifying Faults:

If a timeout occurs on the MTU or DinBus connection or an MTU Fault changes state, an emergency message is generated. The format of the emergency message is as follows (see also the CANopen specs DS301):

Byte	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
Meaning	Error Code (LSB)	Error Code (MSB)	Error Register	Vehicle Bus Status	MTU Fault Code (LSB)	MTU Fault Code (MSB)	MTU Fault Active	Reserved

Error Code Definition:

0xFF00	MTU Fault Code Change (there has been a change in the MTU fault codes)
0xFF01	MTU Bus Status Change (there has been a change in the MTU connection status)
0xFF02	DinBus Bus Status Change(there has been a change in the DinBus connection status)

Error Register:
See CANopen Specs.

Vehicle Bus Status:
This is a Bit Mapped byte that describes the status.

Bit #	7	6	5	4	3	2	1	0
Meaning	DinBus Error Offline	DinBus Error Crc			MTU Error Offline			MTU Fault

MTU Fault Code:
See MTU Manuals