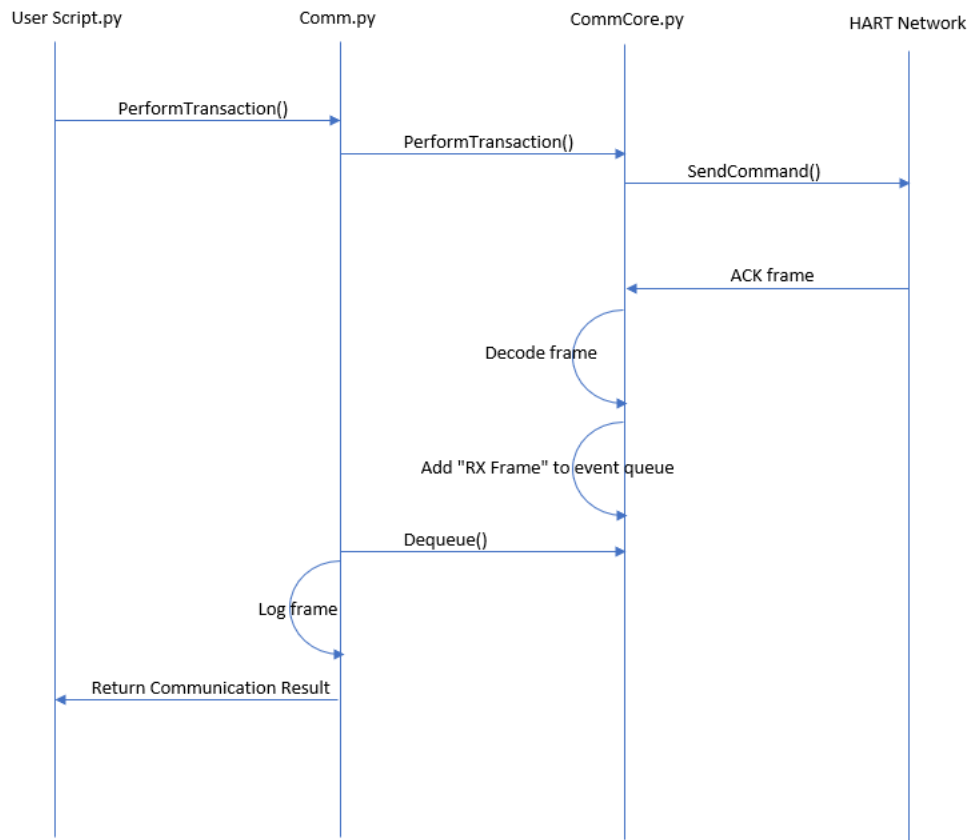




The Master Machine is a PC Linux or Windows. Since RS232 port is no more installed on last PC, on the market there are a lot of HART modems USB.

On the master machine run the python interpreter and a user script which import PyHART modules.



The user script call the PerformTransaction() function, this is forwarded through Comm.py till CommCore.py that send the request of the transaction on the HART network.

CommCore.py runs a thread that listen to the network, decodes bytes rebuilds HART frames passing on the loop. It is able to understand if a frame is a request form the other master, if a frame is a burst message, if there is a response for the other master or for itself.

Each decoded frame, is added to an event queue. Comm.py runs a thread that continuously access the queue and gets all frames. Comm.py logs all frames and in addition, if the frame is the response for the master, returns communication result, transmit and received packets to the user script.

Transmitted frame is added to the event queue by CommCore.py as soon as the frame is sent over serial port.