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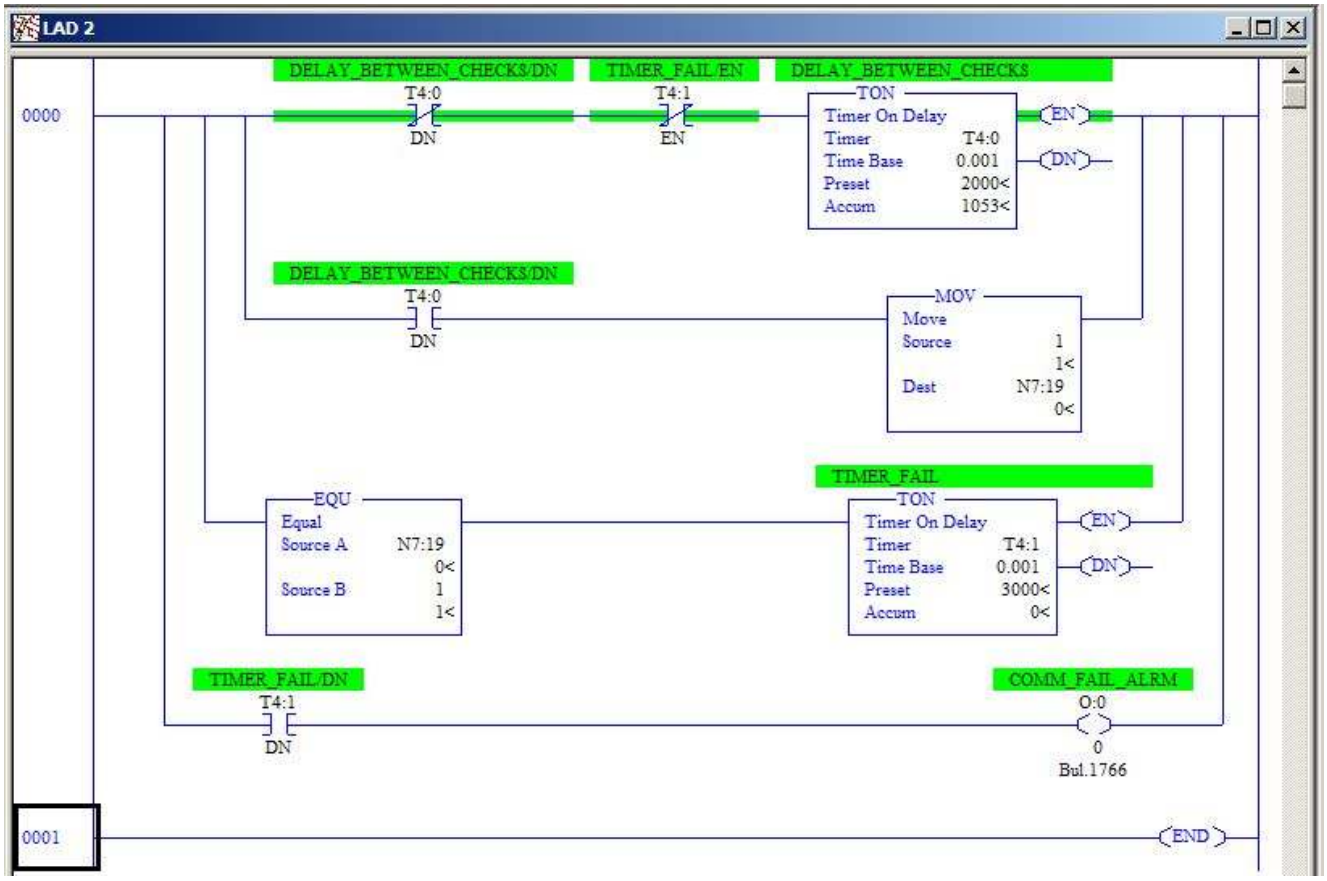
Programming Tip
UIO Communication Alarm

This one rung of PLC code will repeatedly check for good Ethernet communication with the UIO.

It is based on the assumption there is no EDI distributor drive named 'U' (EDI_POS element 19). On each scan of the EDI_Net network, the UIO checks for a response from all 20 possible distributors. In this case, distributor 'U' will not be found so the UIO will write a zero to element 19. If the PLC had forced a 1 to element 19, it would be overwritten with a 0 on this scan. If it stays at 1, an alarm bit is raised.



To make this work, Timer 1 causes a 1 to be written to element 19. It then turns on Timer 2. If Timer 2 expires because element 19 remains at 1, the Alarm will fire. Timer 1 then starts the check again.

Each timer is preset for 2 seconds although some setups may require Timer 2 to be preset to a higher value, usually no more than 3.5 seconds.

Of course, any unused distributor position may be used in place of element 19.