

PROGRAM ST\_TCPDEServer

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VAR
DEDefs : ARRAY[ 0..1 ] OF TCPDEXCHNODEDEFS; (* Data exchange node definitions *)
TCPSEServer : TCPDataExchServer; (* TCP data exchange server *)
TxBuffer : ARRAY[ 0..7 ] OF UINT; (* Tx buffer *)
RxBuffer : ARRAY[ 0..7 ] OF UINT; (* Rx buffer *)
DiAcq : SysGetPhrDI; (* Digital input acquisition *)
DoMng : SysSetPhrDO; (* Digital output management *)
TxBCompare : ARRAY[ 0..7 ] OF UINT; (* Tx buffer compare *)
i : INT; (* Ausiliary variable *)
END_VAR

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1 (* ***** *)
2 (* PROGRAM "ST_TCPDEServer" *)
3 (* ***** *)
4 (* Usage example of TCPDataExchServer function block. *)
5 (* ----- *)
6
7 (* ----- *)
8 (* INITIALIZATION *)
9 (* ----- *)
10 (* Program initialization *)
11
12 IF (SysFirstLoop) THEN
13
14     (* Define the data exchange areas. *)
15
16     DEDefs[0].NodeID:=1; (* Node ID *)
17     DEDefs[0].MsgID:=16#1234; (* Message identifier *)
18     DEDefs[0].TxBuffer:=ADR(TxBuffer); (* Tx buffer address *)
19     DEDefs[0].TxLength:=SIZEOF(TxBuffer); (* Tx buffer length *)
20     DEDefs[0].RxBuffer:=ADR(RxBuffer); (* Rx buffer address *)
21     DEDefs[0].RxLength:=SIZEOF(RxBuffer); (* Rx buffer length *)
22
23     (* Define the data exchange areas. *)
24
25     DEDefs[1].NodeID:=2; (* Node ID *)
26     DEDefs[1].MsgID:=16#4567; (* Message identifier *)
27     DEDefs[1].TxBuffer:=ADR(TxBuffer); (* Tx buffer address *)
28     DEDefs[1].TxLength:=SIZEOF(TxBuffer); (* Tx buffer length *)
29     DEDefs[1].RxBuffer:=ADR(RxBuffer); (* Rx buffer address *)
30     DEDefs[1].RxLength:=SIZEOF(RxBuffer); (* Rx buffer length *)
31
32     TCPSEServer.Connections:=2; (* Accepted connections *)
33     TCPSEServer.Port:=10000; (* Peer port *)
34     TCPSEServer.SpyOn:=TRUE; (* Spy command *)
35     TCPSEServer.DEDefs:=ADR(DEDefs); (* Data exchange definitions *)
36 END_IF;
37
38 (* ----- *)
39 (* GESTIONE DATA EXCHANGE SERVER *)
40 (* ----- *)
41 (* Gestione data exchange server. *)
42
43 TCPSEServer(); (* Eseguo gestione server *)
44 TCPSEServer.Enable:=TRUE;
45
46 (* ----- *)

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47 (* ESEGUO APPOGGIO I/O *)
48 (* ----- *)
49 (* Eseguo lettura ingressi logici. *)
50
51 DiAcq.Address:=255; (* Module address *)
52 DiAcq.Mode:=DI_8_LL; (* Acquisition mode *)
53 DiAcq(); (* Digital input acquisition *)
54 TxBuffer[0]:=TO_UINT(DiAcq.Value); (* Digital input value *)
55
56 (* Eseguo gestione uscite logiche. *)
57
58 DoMng.Address:=255; (* Module address *)
59 DoMng.Mode:=DO_8_LL; (* Management mode *)
60 DoMng.Value:=RxBuffer[0]; (* Digital ouput value *)
61 DoMng.Mask:=16#00000000; (* Output mask *)
62 DoMng(); (* Digital output management *)
63
64 (* ----- *)
65 (* COMANDO TRASMISSIONE DATI *)
66 (* ----- *)
67 (* Se variazione valore da trasmettere ne forzo trasmissione. *)
68
69 IF NOT(DEDefs[0].TxData) THEN
70     FOR i:=0 TO 7 DO
71         IF (TxBuffer[i] <> TxBCompare[i]) THEN
72             TxBCompare[i]:=TxBuffer[i]; (* Tx buffer compare *)
73             DEDefs[0].TxData:=TRUE; (* Tx data send *)
74         END_IF;
75     END_FOR;
76 END_IF;
77
78 (* [End of file] *)
79

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