your partner in R&D

Testing tools for legacy protocols

DNP3 • IEC101 • IEC103 • IEC104 • ModBus • SPA-bus

- Currently supported protocols:
- ➢ DNP 3.0,
- IEC 60870-5-101 (balanced and unbalanced),
- IEC 60870-5-103,
- IEC 60870-5-104,
- ModBus,
- SPA-bus.

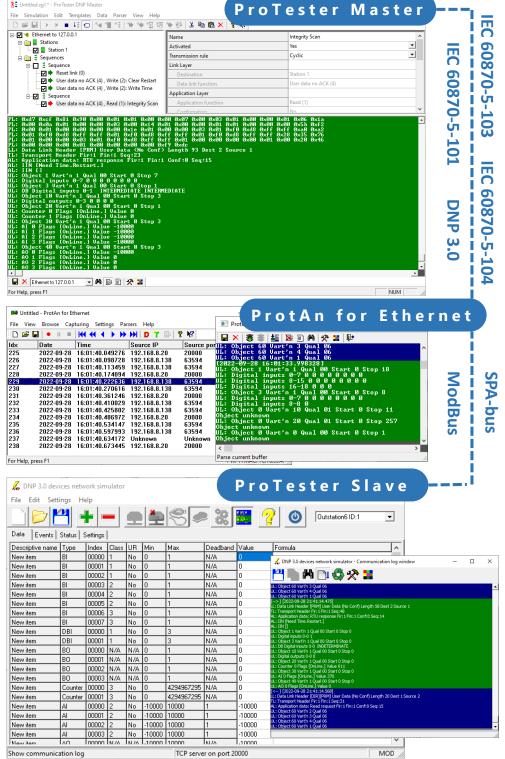
Common functionalities:

- Applicable on serial lines and Ethernet.
- Message exchange visualization with protocol layer filters.
- Extensive message logging.

ProTester Master - fully configurable behavior of master station including requests, responses, time dependencies, user actions unique features etc. compared to competitive tools available on the market.

ProtAn for Ethernet Industrial Protocols Analyzer.

ProTester Slave fully configurable behavior of slave station including data space definition, automatic and manual data changes, generation of events, time dependencies etc. - unique features compared to competitive tools available on the market.



www.infotech.pl products@infotech.pl

ProTester Master	🔲 Data view	>
Graphical view and editing of network configuration and transmitte	d Station: Station 2	-
message sequences.	🔲 Enable data filtering	Setup filter
Flexible configuration of test sequences:	Address Val	Je
 master queries, pre-defined or automatic master responses, configurable inter-message delays, configurable user prompts for test progress tracking. 	BI:0 1 DBI:0 1 BO:0 0 CN:0 77 AI:0 370)
 Multiple modes of operation for the defined message sequence: Cyclic transmission, one shot, step by step, User-defined or automatic link layer handling. 	AO:0 0	
 Extensive support of negative test cases: possibility of enforcing errors into master messages, possibility of overriding the contents of every message field. 		
 Statistics per each slave (queries, responses, errors). Selective data view. 		se
 ProTester Slave Excellent and easy to use simulator of communication performance f based on the user defined data maps. Simulation of data values and their quality can be driven manually, using Views of data values, events and device status. 	·	

🛴 DNP 3.0 devices netwo	rk simulator		– 🗆 X	(🖉 DNP 3.0) devices network simulator	r		– 🗆 X
File Edit Settings Help			File Edit	Settings Help				
		28 📕 💡 🚳	Outstation1 ID:1	- Data J Sur	7 💾 📥 mts Status Settings	<u>••</u>	1 ? 🚳 1	Outstation1 ID:1
Data Events Status Se	ttings			Link layer	Transport layer	Application layer	Internal indications	
		band Value Formula		Local	Local	Response Unsolicited response		Function not implemented
	0000 1 No 0 1 N/A 0000 1 No 0 3 N/A	1 t mod 2 1 t mod 4			E FIR	CON CON	Class 1 ready	Object unknown
	0000 N/A N/A 0 1 N/A	0		FCB	E FIN	SEQ 0 🗢 SEQ 16 🗢		Format error
	0000 3 No 0 4294967295 N/A	53 t		DFC	SEQ 0 🗢	Force response type		
	0000 2 No 0 10000 0	352 350+20^sin(T		Remote	Remote	Multifragment Multifragment	Class 3 ready	Event buffer overflow
New item AO C	0000 N/A N/A 0 10000 N/A	0		- FCV	SEQ 0 🜩		Timesync needed	Device busy
				FCB		Time: 28.09.2022 💌 19:34:11 🔶	Local	Configuration invalid
					Force errors		Device trouble	
					Omit fragment		Device restart	
🛴 DNP 3.0 devices netw	ork simulator		— C					
File Edit Settings He	lp							
Image: Constraint of the second sec						– – ×		
Data Events Status					Settings Help			
		Unsolicited reporting						
S	Vse UTC	Mode Disabled			″[──] _● ━	<u> </u>	- 🧭 🖉	Outstation1 ID:1
Addresses		Event delay [s] 5	Max event count 20	Data Eve	nts Status Settings			
Slave address	1	Default variations			Class 1 🗔	Class 2 🗳	Class 3 🗔	
Master address	2	Binary input	1 · Packed	DBI 0 val: 3	at: 19:37:29.241	Al 0 val: 350 at: 19:37:29.241 Al 0 val: 357 at: 19:37:28.246	CN 0 val: 387 at: 19:37 CN 0 val: 386 at: 19:37	29.241
Master IP addres	192 . 168 . 0 . 100	Binary input change	1 · Without time	DBI 0 val: 2	at: 19:37:28.246	Al 0 val: 369 at: 19:37:27.244	CN 0 val: 385 at: 19:37	:27.244
Master port	1 🚖	DB binary input	1 · Packed	DBL0 val: 1	: 19:37:28.246 at: 19:37:27.244	Al 0 val: 353 at: 19:37:26.238 Al 0 val: 350 at: 19:37:23.234	CN 0 val: 384 at: 19:37 CN 0 val: 383 at: 19:37	:25.222
Device parameters		DB binary input change	1 · Without time		: 19:37:27.244 at: 19:37:26.238	Al 0 val: 354 at: 19:37:22.235 Al 0 val: 370 at: 19:37:21.222	CN 0 val: 382 at: 19:37 CN 0 val: 381 at: 19:37	
Event class buffer size	100 🚖	Binary output status	1 · Packed	DBI 0 val: 3	: 19:37:26.238 at: 19:37:25.222	Al 0 val: 357 at: 19:37:20.224 Al 0 val: 350 at: 19:37:17.220	CN 0 val: 380 at: 19:37 CN 0 val: 379 at: 19:37	
Data link layer		Binary output control	1 - Control relay output block	k DBL0 val: 2	: 19:37:25.222 at: 19:37:24.224	Al 0 val: 352 at: 19:37:16.220 Al 0 val: 366 at: 19:37:15.191	CN 0 val: 378 at: 19:37 CN 0 val: 377 at: 19:37	:19.232
Data link mode	Without ACK	Counter	1 · 32-bit binary	DBI 0 val: 1	: 19:37:24.224 at: 19:37:23.234	Al 0 val: 361 at: 19:37:14.179 Al 0 val: 351 at: 19:37:13.182	CN 0 val: 376 at: 19:37 CN 0 val: 375 at: 19:37	18.220 17.220
Data link timeout [ms]	200 🚖	Counter change	1 · 32-bit binary without time		: 19:37:23.234 at: 19:37:22.235	Al 0 val: 350 at: 19:37:11.182 Al 0 val: 351 at: 19:37:10.176	CN 0 val: 374 at: 19:37 CN 0 val: 373 at: 19:37	:16.220 :15.191
Data link retries	1	Analog input	1 - 32-bit	BIOval:0 at DBIOval:3	: 19:37:22.235 at: 19:37:21.222	Al 0 val: 361 at: 19:37:09.178 Al 0 val: 366 at: 19:37:08.182	CN 0 val: 372 at: 19:37 CN 0 val: 371 at: 19:37	
Application layer		Analog input change	1 · 32-bit without time	DBI 0 val: 2	: 19:37:21.222 at: 19:37:20.224	Al 0 val: 352 at: 19:37:07.175 Al 0 val: 350 at: 19:37:04.180	CN 0 val: 370 at: 19:37 CN 0 val: 369 at: 19:37	
Application timeout [ms]	1000				: 19:37:20.224 at: 19:37:19.232	Al 0 val: 356 at: 19:37:03.184 Al 0 val: 370 at: 19:37:02.171	CN 0 val: 368 at: 19:37 CN 0 val: 367 at: 19:37	
		Analog output status	1 - 32-bit status	BL0 val: 1 at	: 19:37:19:232 at: 19:37:18:220	Al 0 val: 354 at: 19:37:01.167 Al 0 val: 350 at: 19:36:58.165	CN 0 val: 366 at: 19:37 CN 0 val: 365 at: 19:37	08.182
Application retries	1	Analog output control	1 · 32-bit block	BL0 val: 0 at	at 19:37:16.220 : 19:37:18.220 at: 19:37:17.220	Al 0 val: 350 al: 19:36:58,165 Al 0 val: 353 al: 19:36:57,173 Al 0 val: 369 al: 19:36:56,168	CN 0 val: 365 at: 19:37 CN 0 val: 364 at: 19:37 CN 0 val: 363 at: 19:37	
	TCP serv	er on port 20000				TCP server on port 2000	0	MOL

ProtAn

- Real-time analysis of Ethernet based communication with the following protocol parsers: DNP3, IEC 60870-5-104, Modbus, universal.
- Easy to set up.

www.infotech.pl products@infotech.pl