COMMUNICATION DRIVER LIBRARY VERSION 12

VTScada supports most standard and many proprietary I/O protocols included in the base price of VTScada. If you don't see a driver you need, we can create it for you (Page 4).
New in V12: MQTT (with SparkPlug B), OPC UA Client, Veeder-Root, TeleBUS, MultiSpeak, and updates to the Motorola IP Gateway to support RTU redundancy.

DEVICES THAT HAVE BEEN USED WITH VTSCADA*

MANUFACTURER	MODEL(S)	PROTOCOL	NOTES
ABB	Variable Speed Drives, AC500 Series PLCs	Modbus	
	Totalflow Family	Enron Modbus	
	Totalflow computers & analyzers using DB2 Serial protocol	ABB Totalflow DB2	Via a third-party driver at an additional cost.
	AC500 Series PLCs	IEC-60870-104	
Allen-Bradley®	SLC 500, PLC-2, PLC-3, PLC-5, PLC-5-250 (Pyramid Integrator), Micrologix, CompactLogix®, ControlLogix®	DF1	MicroLogix 1400 can also be configured to DNP3.
		Ethernet/IP	
	Micro800 Programmable Controllers	Symbolic CIP	Symbolic CIP driver separately available from Trihedral.
Automation Direct	DL Family of PLCs, Click Family of PLCs, Productivity Family of PLCs	Modbus	VTScada driver allows native DL PLC addressing in our Modbus driver (e.g., V2105, C33, etc).
Cisco	Catalyst 2950 Series Switches	SNMP	
Control Microsystems / Schneider	Telesafe RTU Family, SCADAPack® RTU Family	Modbus	Supports access to time stamped data recorded by RTUs using the Data Logger (DL) functions.
	SCADAPack® RTU Family Using RealFLO®	Enron Modbus	
	SCADAPack® RTU Family	DNP3	
	Telesafe RTUs	DF1	
CSE Semaphore	TBox® RTU	Modbus	Supports to access time stamped data recorded by RTUs using Sample Tables and Chronologies.
	TBox® RTU Family Using TFlo®	Enron Modbus	
Davicom	DV-Mini, DV-208, DV-216	SNMP	
Digital Control Company (DCC) ®	DCC Pump Controllers	Modbus	
Eaton	PW9155 UPS	SNMP	
Flygt® (Xylem)	MultiSmart Pump Controller®	Modbus	Previously branded as MultiTrode® MultiSmart.
		DNP3	
	Flygt XPC2+ Pump Controller	Modbus	Modbus TCP
Foxboro®	C50 RTU	DNP3	
GE	D20/D200 RTUs	DNP3	
Gridsmart Technologies Inc.	Gridsmart V4	JSON	
Grundfos	CU 362 Devices	Modbus	
	CU 352 Devices	Modbus/BACnet	BACnet requires additional converter hardware.
Modicon / Schneider	Modicon 984 Family of PLCs, Modicon Compact Family of PLCs, Modicon Quantum Family of PLCs, Modicon TSX Family of PLCs	Modbus	
Motorola IP Gateway	Motorola ACE RTUs	Motorola® Ace Gateway API	VTScada supports RTU redundancy within the IP Gateway device.
MPE®	MPE Duplex Controller	Modbus	
NetControl	FastNest100	Serial	
		IEC-60870-104	
Phoenix Contact	AXC1050	IEC-60870-104	
Power Measurement Ltd.®	ION Series Meters	Modbus	
	ION Series Meters	DNP3	
RuggedCom / Siemens	RX1000 Router	SNMP	

MANUFACTURER	MODEL(S)	PROTOCOL	NOTES
Schlumberger®	Q1000 Meters	DNP3	
Schweitzer Engineering Laboratories, Inc (SEL Inc)	SEL-2030 Communications Processor	DNP3	
Sixnet®	Micro-Versa TRAC, Sixnet SixTRAC	Modbus	
Surfline 9015	9015	Modbus	With firmware feature enabled.
Thermo Fisher Scientific	AutoPILOT	Enron Modbus	
Woodward®	easYgen Series, EGCP-3, DTSC, DLSC-2, 723 PLUS, 733, 828	Modbus	

NATIVE DRIVER PROTOCOLS

DRIVER TAG TYPE	PROTOCOL	EXAMPLE DEVICE	NATIVE SERIAL	DIAL UP MODEM	NATIVE TCP/IP	TCP/IP TUNNEL	NATIVE UDP/IP	UDP/IP TUNNELED	VIRTUAL PLC	CONNECTION	MORE INFO
Allen Bradley DF1 Compatible PLC/RTU	Allen Bradley DF1	PLC2, PLC3, PLC5, SLC500	X	X		X		X	X	DH/DH+	DH/DH+ requires interface hardware. Supports Virtual PLC in PLC-2 mode only.
	Allen Bradley PCCC	PLC5, SLC500			X						
BACnet Driver	BACnet	BACnet Compliant Devices					X				
Bristol BSAP/IBP Driver & Network	Bristol BSAP	Bristol 33xx Series RTUs, ControWave RTUs	X	X		X		X			Separately available from Trihedral.
	Bristol IBP	Bristol ControWave RTUs					X				
CIP/ENIP Device	Allen Bradley CIP	CompactLogix®, ControlLogix®			X						
Calamp Diagnostic Driver	Calamp Diagnostic Driver Protocol	Calamp Integra, Integra TR, Viper and Phantom radios	X		X	X					
Campbell Scientific Array Driver	Campbell Scientific Array Protocol	CR10X and CR510 Data Loggers using array OS	X	X		X		X			
Campbell Scientific Pakbus Driver	Campbell Scientific Pakbus	CR200, CR800, CR850, CR1000, CR3000, CR5000 Data Loggers	X	X	X	X		X			Security features for native TCP/IP not implemented.
DDE Client	DDE (Dynamic Data Exchange)	MS Excel								DDE	Can act as DDE Client or Server.
Data Flow Systems RTU	DFS Protocol	Data Flow Systems® RTUs	X			X		X			Also works with DFS NIM.
Koyo DirectNET	Direct Net	PLC Direct® DL Family of PLCs	X	X		X		X			
DNP3 Compatible RTU	DNP 3.0	DNP 3.0 Compliant Devices	X	X	X	X	X	X			
Enron Modbus RTU	Enron Modbus®	Enron Modbus Compliant Devices	X	X	X	X		X			
Fisher ROC Driver	Fisher® ROC	ROC800, 800L, FloBoss™ 103, 107	X	X	X	X		X			
GE Series 90 Driver	General Electric® SNP, SNPX	GE Series 1 PLC, Series 5 PLC, Series 6 PLC, Series 90 PLC	X								No direct support for use on Ethernet to Serial converters.
	General Electric® SRTP	Series 90 PLC, RX3i PLC			X						
IEC 60870-5 Driver	IEC-60870-104	RTUs & PLCs from Various Manufacturers			X			X			
JSON/XML Driver	JSON	JSON Compliant Websites and Devices			X						Supports JSON retrieved over HTTP and HTTPS. Also supports XML (Read only).
MDS Diagnostic Driver	MDS Diagnostic Driver Protocol	MDS Radios	X								
Modbus Compatible Device	Modbus ASCII	Modbus ASCII Compliant Devices	X	X		X		X	X		
	Modbus PLUS	Modbus Plus Compliant Devices								Modbus Plus	Modbus PLUS requires additional interface hardware.
	Modbus RTU	Modbus RTU Compliant Devices	X	X		X		X	X		
	Open Modbus/TCP	Open Modbus/TCP Compliant Devices	X	X	X	X	X	X	X		See example devices on page 2.
Motorola ACE RTU	Modbus, M-OPC, DNP3, IEC	Moscad RTU Family, ACE Family			X						Requires MDLC IP Gateway device.

POWERFUL

DRIVER TAG TYPE	PROTOCOL	EXAMPLE DEVICE	NATIVE SERIAL	DIAL UP MODEM	NATIVE TCP/IP	TCP/IP TUNNEL	NATIVE UDP/IP	UDP/IP TUNNELED	VIRTUAL PLC	CONNECTION	MORE INFO
Motorola IP Gateway	Motorola® Ace Gateway API	Motorola ACE RTUs			X						Supports RTU redundancy within the IP Gateway device.
MQTT Client Driver	MQTT 3.1.1				X						V12. MQTT 3.1.1. Subscriber/Publisher. Requires 3rd-party MQTT server (a.k.a. Broker)
	SparkPlug B				X						
NMEA 0183 Driver	NMEA 0183	Serial GPS	X	X		X		X			Functions as talker and listener.
Omron FINS Driver	Omron® FINS	CS Series PLC, CJ Series PLC			X						
Omron Host Link PLC	Omron® Hostlink	C Series PLC, CS Series PLC, CJ Series PLC	X	X		X		X			
OPC DA Client	OPC® DA Client	OPC Servers for Various Products								OPC	Supports hundreds of 3rd party OPC servers.
OPC UA Client	OPC® UA - TCP - Binary 1.04	OPC Servers for Various Products			X	X					Doesn't use a Port tag. Port handling is built-in.
Opto22 Mux Driver	Optomux	Opto 22 Analog & Digital I/O Boards	X	X		X		X			Separately available from Trihedral.
Siemens S7 PLC	Siemens® ISO over TCP	S7 Series PLCs			X						
SNMP Managed Device	Simple Network Management Protocol (SNMP)®	Standardized Protocol for Thousands of Devices						X			
SNMP Agent	SNMP V1 or V2	Allows VTScada to Supply Data to a Networked Device					X				
SQL Data Query Driver	SQL Data Query (ODBC)	SQL Databases									
TeleBUS	TeleBUS	Control Microsystems SCADAPack RTU Family	X	X	X						Separately available from Trihedral.
Veeder-Root	Veeder-Root Serial Interface	TLS-300, TLS-350, and TLS-350R	X	X	X	X					

ENTERPRISE DATA SHARING TOOLS

These integrated components for sharing application history and services with third-party platforms are standard in VTScada Development Runtime Licenses.

Name	Protocol	Data	Configuration
ODBC	ODBC	History, Tag Parameters, Alarm History, Current Alarms	Internet Client Setup. Defined by SQL Queries.
OPC Server	OPC DA/Classic	Legacy tag values and I/O tags with Publish checked, Report by Exception. Output tags pass through changes and call Set()	OPC Server Setup tag.
OPC Client	OPC UA/DA	Allows VTScada apps to query live data from an OPC-compliant server (including VTScada apps with configured OPC servers).	OPC Client Setup tag.
Web Services	HTTP(S)/SOAP	History, Tag Parameters, Alarm History, Current Alarms. Custom interfaces can be added.	Internet Client Setup. Defined by SQL Queries.
REST	HTTP(S)	History, Tag Parameters, Alarm History, Current Alarms. Custom interfaces can be added.	Internet Client Setup. Defined by SQL Queries.
Multispeak	HTTP(S)/SOAP	Legacy tag values and I/O tags with Publish checked. Poll for and Report by Exception	Internet Client Setup. Application Properties.

NATIVE POLLING DRIVER

Integrated polling eliminates the need for a master PLC device reducing hardware costs, integration time, and points of failure.

VTScada simplifies device communications by automatically organizing scheduled polling cycles and communications channels.

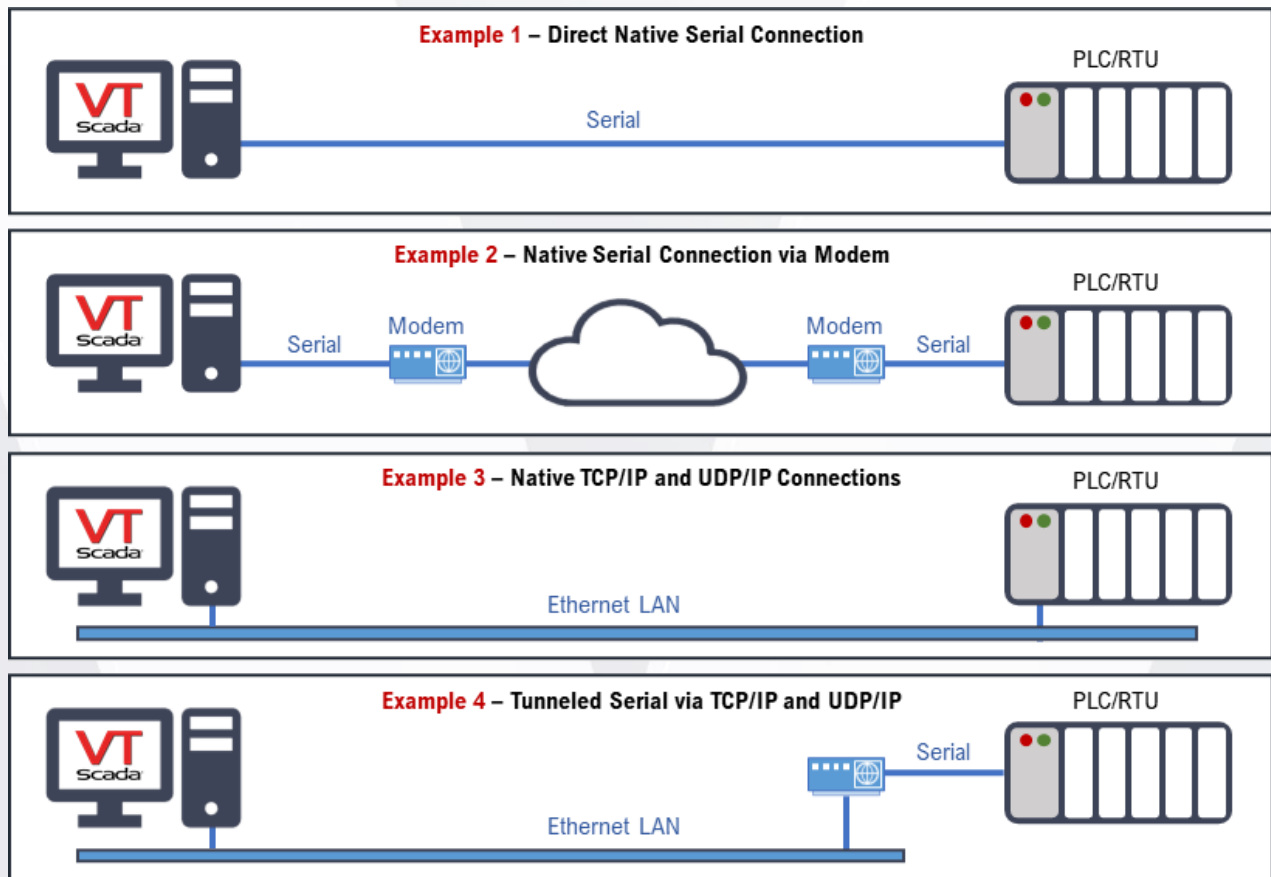Reduce the number of required radios by transmitting multiple protocols on a single communications link.

The Polling Driver is a standard component of VTScada Runtime and Development Runtime Licenses.

- Configure any number of polling groups.
- Select 'Fast Polling' rate for specific RTUs.
- Poll by external triggers, on schedule, or on command.
- Enable or disable polling in any polling driver.
- Display min, max, and average values.

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DRIVER CONNECTION DEFINITIONS

Term	Definition	Example
Native Serial	Driver supports native serial communication as defined in protocol standard document(s) on PC serial ports using VTScada "Serial Port" tags.	1
Modem	Driver supports native serial communication as defined in protocol standard document(s) over modems defined in the operating system.	2
Native TCP/IP	Driver supports native TCP/IP communication to devices as defined in the protocol standard document(s).	3
TCP/IP Tunnel	Driver supports tunneling of serial protocol via Ethernet connected TCP/IP to serial converters using VTScada "TCP/IP Port" tags.	4
Native UDP/IP	Driver supports native UDP/IP communication to devices as defined in the protocol standard.	3
UDP/IP Tunneled	Driver supports tunneling of serial protocol via Ethernet connected UCP/IP to serial converters using VTScada "UDP/IP Port" tags.	4
Other Connection	Driver supports device or protocol specific interface, or methodology not covered by above definitions (e.g. ODBC).	
Virtual PLC	Driver supports VTScada acting as a memory-mapped PLC or RTU that other devices can read from or write to.	

DRIVER CONNECTION EXAMPLES

Example 1 – Direct Native Serial Connection

Example 2 – Native Serial Connection via Modem

Example 3 – Native TCP/IP and UDP/IP Connections

Example 4 – Tunneled Serial via TCP/IP and UDP/IP

EASY TO TRY

Our free license, for industrial and personal applications up to 50 I/O, includes all communication drivers that are part of VTScada Runtime and Development Runtime licenses.

VTScada.com/LIGHT

NEW DRIVER DEVELOPMENT

If you don't see the device or protocol you are looking for, we can create custom drivers to meet your needs. New driver development prices are determined on a case-by-case basis.

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* Includes devices we have internally tested and that have been used by one or more customers. Trihedral does not guarantee any of the listed devices.

** XLReporter®, Dream Report®, Grundfos®, and e.RIS® feature integrated interfaces to VTScada.