CAS-2700-35
Passive REST Client (XML, JSON, CSV) to BACnet IP Server

Description

The Passive REST Client Gateway receives REST requests containing data in XML, JSON, or CSV format. This data can contain most data types (character strings, floating point values, binary values, etc) The Gateway then serves the data as BACnet IP data points.

The Gateway receives REST requests on its Web Server port. The data is then parsed and stored internally. When a remote system requests data, this data is served in a form that is appropriate to the protocol.

The Gateway requires configuration for setting up the serving tasks to make BACnet IP data points.

Specifications (If Hardware)

- **UL and ULc approved**
- 10/100BaseT with RJ-45 connector
- 1x RS232 Port
- 1x RS485 Port (Different Models have additional ports)
- 2MBytes flash memory, 8MBytes of SDRAM
- Power: 5-24VDC
- Operating Temperature: 0 to 70 C
- Dimensions: 4.2" x 3.25" x 1"
- LEDs: Link, Speed/Data, Power

Max Nodes Supported (If Applicable)

Gateway Mode	Nodes	Comments
Client	Multiple	*The Gateway can receive POSTs from multiple devices.*
Server	Multiple	*The Gateway can serve the BACnet IP data to multiple devices that request the data.*

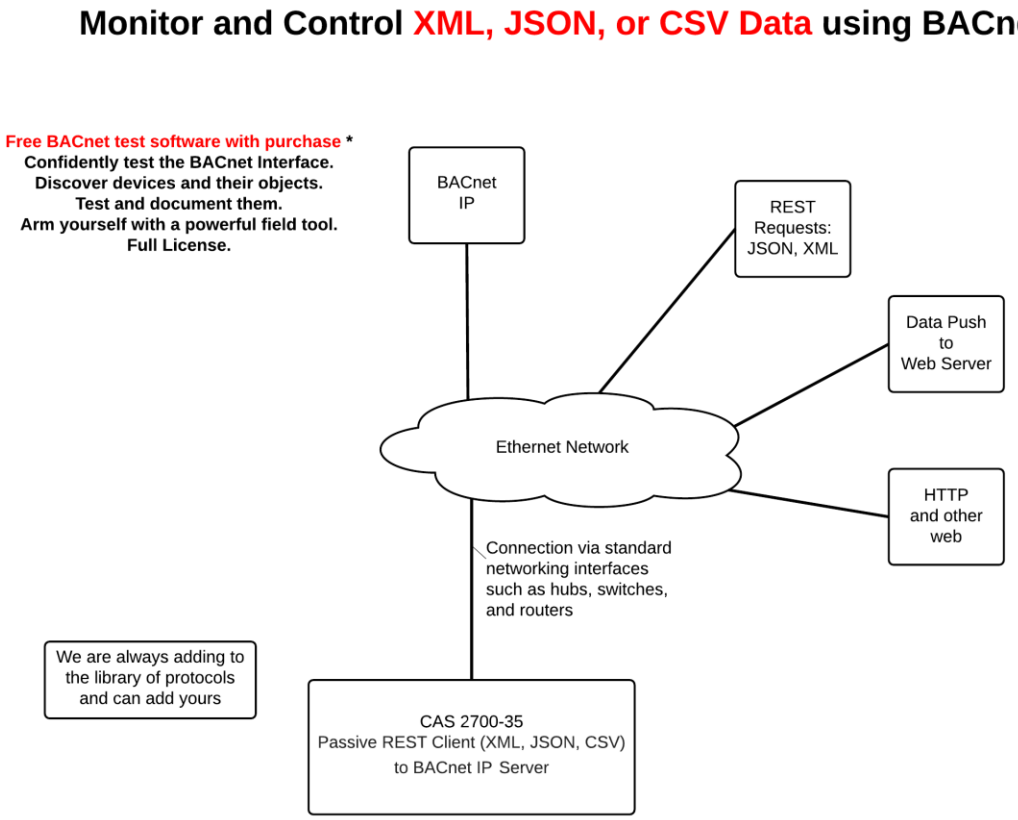
Connection Information - Port 0: Not Used

Connection type:	**RS485** (Jumper change to RS232)
Baud Rates:	**9600**; 19200 Baud
Data Bits:	**8**
Stop Bits:	**1**
Parity:	**None**
Hardware interface:	N/A
Multidrop Capability	Yes

Connection Information - Port 1: Not Used

Connection type:	**RS232**
Baud Rates:	Driver Supports : 1200, 2400, 4800, **9600**; 19200Baud
Data Bits:	Driver Supports : 7,**8**
Stop Bits:	Driver Supports : **1**,2
Parity:	Driver Supports : Odd, Even, **None**
Hardware interface:	N/A
Multidrop Capability	No

Connection Diagram



Driver Operation

The Gateway's Web Server is open on port 80. When the driver receives a REST command that contains the proper the settings and parameters, the packet is processed and the data is parsed and extracted and stored internally, and a confirmation packet is sent in response. The REST command (act=set_value) can be sent via XML, JSON, or CSV.

For a full list of Rest Commands, please visit the following link:
http://www.chipkin.com/documentation/casgateway/docs/restserver.htm

For the set_value command, please visit the following link:
http://www.chipkin.com/documentation/casgateway/docs/restserver.htm#3-act-set-value

The driver reports operating stats and issues on a web page and can maintain a log that can be uploaded by HTTP or FTP.

Configuration

Via Web Page. Configure IP settings, Node ID's, and other parameters. The names are used to form the names of the BACnet objects and populate the web page showing current values.

Use can specify

BACnet: Device instance number, device name.

Support

This driver was developed by Chipkin Automation Systems (CAS). CAS are proud to provide support for the driver. For support please call CAS at (866) 383-1657.

Revision History

Date	Resp	Format	Driver Ver.	Doc. Rev.	Comment
2014 Dec 16	ACF		0.01	0	Created