Protocol Implementation Conformance Statement: Viper^{AX}

Date: August 8, 2011
Vendor Name: Cylon Controls
Product Name: Viper^{AX}
Product Model Number: Viper^{AX} (Small buildings), Viper^{AX} (Unlimited)
Application Software Version: 3.6.35 or higher
Firmware Revision: 3.6.35 or higher
BACnet Protocol Revision: 7

Product Description:

The Viper^{AX} BACnet OWS Supervisor provides the ability to view, monitor, and control BACnet devices and objects over IP or raw Ethernet, or through a BACnet router to any BACnet media. Devices, points, schedules, alarms, and logs can be learned and managed from Viper^{AX}.

BACnet Standardized Device Profile (Annex L):

☐ **BACnet Advanced Operator Workstation (B-AWS)**
☒ **BACnet Operator Workstation (B-OWS)**
☐ **BACnet Operator Display (B-OD)**
☐ **BACnet Building Controller (B-BC)**
☐ **BACnet Advanced Application Controller (B-AAC)**
☐ **BACnet Application Specific Controller (B-ASC)**
☐ **BACnet Smart Sensor (B-SS)**
☐ **BACnet Smart Actuator (B-SA)**

Additional BACnet Interoperability Building Blocks Supported (Annex K):

Data Sharing	Device & Network Management
DS-RP-A, B	DM-DDB-A, B
DS-RPM-A, B	DM-DOB-A, B
DS-WP-A, B	DM-DCC-B
DS-WPM-A,B	DM-RD-B
DS-COV-A	DM-TS-B
DS-V-A	DM-UTC-B
DS-M-A	DM-LM-A, B
	DM-ANM-A
	DM-ADM-A
	DM-ATS-A
	DM-MTS-A

Alarm & Event Management AE-N-A, AE-ACK-A AE-VN-A AE-AVN-A AE-VM-A AE-AS-A	**Trending** T-ATR-A T-V-A T-A-A
Scheduling SCHED-VM-A	**Network Management** NM-CE-A

Segmentation Capability:

Feature	Supported	Window size
Transmit Segmented Messages	yes	10
Receive Segmented Messages	yes	any

Standard Object Types Supported:

- The CreateObject and DeleteObject services are not supported, so no objects are dynamically creatable or deletable through BACnet service requests, although these objects are dynamically creatable and deletable through Niagara.
- No general range restrictions exist; however, certain specific applications may have specific range restrictions.
- All potentially available properties are listed for each object type.
- Optional properties are listed in *italics*. Not all instances support all optional properties.
- The Backup and Restore properties from Addendum 135-2008n are included as proprietary properties with proprietary property identifiers. Their behavior is identical to the behavior described in the addendum.
- Writable properties are listed in **bold**. Any range limitations are expressed in parentheses following the property name.

Object Type	Properties	
Device	Object_Identifier	*UTC_Offset*
	Object_Name	*Daylight_Savings_Status*
	Object_Type	*APDU_Segment_Timeout*
	System_Status	APDU_Timeout
	Vendor_Name	Number_Of_APDU_Retries
	Vendor_Identifier	***Time_Synchronization_Recipients***
	Model_Name	*Max_Master*
	Firmware_Revision	*Max_Info_Frames*
	Application_Software_Version	Device_Address_Binding
	Location	Database_Revision
	Description	*Configuration_Files*
	Protocol_Version	*Last_Restore_Time*
	Protocol_Revision	***Backup_Failure_Timeout***
	Protocol_Services_Supported	*Active_COV_Subsriptions*
	Protocol_Object_Types_Supported	***UTC_Time_Synchronization_Recipients***
	Object_List	*Time_Synchronization_Interval*
	Max_APDU_Length_Accepted	*Align_Intervals*
	Segmentation_Supported	*Interval_Offset*
	Max_Segments_Accepted	*Backup_Preparation_Time_proprietary*
	Local_Time	*Restore_Completion_Time_proprietary*
	Local_Date	*Restore_Preparation_Time_proprietary*
		Backup_And_Restore_State_proprietary

Data Link Layer Options:

☒ BACnet IP, (Annex J)
☒ BACnet IP, (Annex J), Foreign Device
☒ ISO 8802-3, Ethernet (Clause 7)
☐ ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
☐ ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) _____
☐ MS/TP master (Clause 9), baud rate(s): _____
☐ MS/TP slave (Clause 9), baud rate(s): _____
☐ Point-To-Point, EIA 232 (Clause 10), baud rate(s):_____
☐ Point-To-Point, modem, (Clause 10), baud rate(s): _____
☐ LonTalk, (Clause 11), medium: _____
☐ Other:

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) ☒Yes ☐ No

Networking Options:

☒ Router, Clause 6 – Routing configurations: Ethernet-IP
☐ Annex H, BACnet Tunneling Router over IP
☒ BACnet/IP Broadcast Management Device (BBMD)
Does the BBMD support registrations by Foreign Devices? ☒ Yes ☐ No

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

☒ ANSI X3.4	☐ IBM™/Microsoft™ DBCS	☒ ISO 8859-1
☒ ISO 10646 (UCS-2)	☐ ISO 10646 (UCS-4)	☐ JIS C 6226

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:
This product supports communications between BACnet and any third-party system to which Niagara can connect.