

ALERTON VLX-Platinum / VLX

BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

Date: 01/07/2015

Vendor Name: Alerton

Product Name: VLX-Platinum

Product Model Number: VLX-Platinum, VLX

Applications Software Version: VLX-Platinum Controller 2.6, VLX Controller 2.6

Firmware Revision: VLX-Platinum Loader 2.6 **BACnet Protocol Revision:** 4

Product Description:

The Alerton BACtalk VLX/EXP assembly is a scalable equipment controller that consists of a VLX base unit and from one to eight input/output (I/O) expansion modules (EXPs). The VLX executes DDC, hosts local automation features, and makes operational status and control data available as BACnet objects and properties. The VLX/EXP assembly appears as a single BACnet device.

BACnet Standardized Device Profile (Annex L):

- BACnet Advanced 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)

List all BACnet Interoperability Building Blocks Supported (see Annex K):

DS-RP-A,B	AE-N-I-B	SCHED-I-B	T-VMT-I-B	DM-DDB-A,B
DS-RPM-A,B	AE-N-E-B	SCHED-E-B	T-VMT-E-B	DM-DOB-B
DS-WP-A,B	AE-ACK-B		T-ATR-B	DM-DCC-B
DS-WPM- B	AE-ASUM-B			DM-PT-A,B
DS-COV-B	AE-ESUM-B			DM-TS-B
DS-COVU-B	AE-INFO-B			DM-UTC-B
				DM-RD-B
				DM-BR-B
				DM-OCD-B

Segmentation Capability:

- Able to transmit segmented messages Window Size 1
- Able to receive segmented messages Window Size 1

Standard Object Types Supported:

Device

Dynamically Creatable:	No	
Dynamically Deletable:	No	
Optional Properties Supported:	Location	
	Description	
	Local_Time	
	Local_Date	
	Daylight_Savings_Status	
	UTC_Offset	
	APDU_Segment_Timeout	
	Max_Segments_Accepted	
	Max_Master	
	Max_Info_Frames	
	Configuration_Files	
	Last_Restore_Time	
	Backup_Failure_Timeout	
	Active_COV_Subscription	
Writable Properties:	Object_Name	Limit: 255 characters
	Location	Limit: 255 characters
	Description	Limit: 255 characters
	APDU_Segment_Timeout	Range: 1000...60000
	APDU_Timeout	Range: 1000...60000
	Number_Of_APDU_Retries	Range: 0...16
	Backup_Failure_Timeout	Range: Unsigned16
	Proprietary 1115	Range: 0...1
	Proprietary 1116	Range: Valid BACnetCalendarEntry
	Proprietary 1117	Range: Valid Time
	Proprietary 1118	Range: Valid BACnetCalendarEntry
	Proprietary 1119	Range: Valid Time
Proprietary Properties:	aler-devinfo (512)	Datatype: Octet String Purpose: Diagnostics.
	aler-dst-mode (1115)	Datatype: Enumerated

aler-dst-start-date (1116)	Purpose: DST mode. Datatype: BACnetCalendarEntry
aler-dst-start-time (1117)	Purpose: DST start date. Datatype: Time
aler-dst-end-date (1118)	Purpose: DST start time. Datatype: BACnetCalendarEntry
aler-dst-end-time (1119)	Purpose: DST end date. Datatype: Time
	Purpose: DST end time.

Analog Input

Dynamically Creatable:	No	
Dynamically Deletable:	No	
Optional Properties Supported:	Description Reliability COV_Increment	
Writable Properties:	Present_Value Description Units COV_Increment Out_of_Service	(writable when out-of-service) Limit: 255 characters Range: REAL
Proprietary Properties:	n/a	

Analog Output

Dynamically Creatable:	No	
Dynamically Deletable:	No	
Optional Properties Supported:	Description Reliability COV_Increment	
Writable Properties:	Present_Value Description Units COV_Increment Relinquish_Default Out_of_Service	Range: REAL Limit: 255 characters Range: REAL Range: REAL

Proprietary Properties: n/a

Analog Value

Dynamically Creatable: No
Dynamically Deletable: No
Optional Properties Supported: Description
Reliability
Priority_Array
Relinquish_Default
COV_Increment

Writable Properties: Present_Value Range: REAL
Description Limit: 255 characters
Units
COV_Increment Range: REAL
Relinquish_Default Range: REAL
Out_of_Service

Proprietary Properties: n/a

Binary Input

Dynamically Creatable: No
Dynamically Deletable: No
Optional Properties Supported: Description
Reliability
Active_Text
Inactive_Text

Writable Properties: Present_Value (writable when out-of-service)
Description Limit: 255 characters
Out_of_Service

Proprietary Properties: n/a

Binary Output

Dynamically Creatable: No
Dynamically Deletable: No
Optional Properties Supported: Description

Reliability
 Active_Text
 Inactive_Text
 Minimum_On_Time
 Minimum_Off_Time

Writable Properties:

Present_Value
 Description
 Minimum_On_Time
 Minimum_Off_Time
 Out_of_Service

Limit: 255 characters

Range: Unsigned32

Range: Unsigned32

Proprietary Properties:

n/a

Binary Value

Dynamically Creatable:

No

Dynamically Deletable:

No

Optional Properties Supported:

Description
 Reliability
 Active_Text
 Inactive_Text
 Priority_Array
 Relinquish_Default

Writable Properties:

Present_Value
 Description
 Relinquish_Default

Limit: 255 characters

Proprietary Properties:

n/a

Calendar

Dynamically Creatable:

Yes

Dynamically Deletable:

Yes

Optional Properties Supported:

Description

Writable Properties:

Object_Name
 Description
 Date_List

Limit: 255 characters

Limit: 255 characters

Proprietary Properties: n/a

Event Enrollment

Dynamically Creatable: Yes
 Dynamically Deletable: Yes
 Optional Properties Supported: Description

Writable Properties: Object_Name Limit: 255 characters
 Description Limit: 255 characters
 Notify_Type Limit: Alarm|Event
 Event_Parameters
 Object_Property_Reference
 Event_Enable Range: BACnetEventTransitions
 Notification_Class Range: Unsigned

Proprietary Properties: n/a

File

Dynamically Creatable: No
 Dynamically Deletable: No
 Optional Properties Supported: Description

Writable Properties: File_Size (Files 5, 1024, 2048) Range: 0
 Archive

Proprietary Properties: n/a

Notification Class

Dynamically Creatable: Yes
 Dynamically Deletable: Yes
 Optional Properties Supported: Description

Writable Properties: Object_Name Limit: 255 characters
 Description Limit: 255 characters
 Priority Range: Unsigned
 Recipient_List
 ACK_Required

Proprietary Properties: n/a

Program

Dynamically Creatable: No
 Dynamically Deletable: No
 Optional Properties Supported: Description
 Reson_for_Halt
 Description_of_Halt
 Program_Location
 Instance_of

Writable Properties: Program_Change

Proprietary Properties: aler-diagnostics (513) (Prog 0 and 1024 only)

Schedule

Dynamically Creatable: Yes
 Dynamically Deletable: Yes
 Optional Properties Supported: Description
 Weekly_Schedule
 Exception_Schedule

Writable Properties: Object_Name Limit: 255 characters
 Description Limit: 255 characters
 Effective_Period
 Weekly_Schedule
 Exception_Schedule
 Schedule_Default
 List_of_Object_Prop_Ref
 Priority_for_Writing Range: 1..16

Proprietary Properties: aler-datetime-of-next-non-null-cmd (1021) Datatype: DateTime
 Purpose: next non-null cmd
 aler-datetime-of-next-active-cmd (1022) Datatype: DateTime
 Purpose: next active cmd
 aler-datetime-of-next-cmd (1027) Datatype: DateTime
 Purpose: next cmd

Trend log

Dynamically Creatable:	Yes	
Dynamically Deletable:	Yes	
Optional Properties Supported:	Description	
	Start_Time	
	Stop_Time	
	Log_Device_Object_Property	
	Log_Interval	
	Notification_Threshold	
	Records_Since_Notification	
	Last_Notify_Record	
	Notification_Class	
	Event_Enable	
	ACKed_Transitions	
	Notify_Type	
	Event_Time_Stamps	
Writable Properties:	Object_Name	Limit: 255 characters
	Description	Limit: 255 characters
	Log_Enable	
	Start_Time	
	Stop_Time	
	Log_Device_Object_Property	
	Log_Interval	Range: 100...10000000 for internal property, 400..10000000 for external property
	Stop_When_Full	
	Record_Count	Range: 0
	Notification_Threshold	Range: Unsigned32
	Notification_Class	Range: Unsigned
	Event_Enable	
	Notify_Type	Limit: Alarm Event
	Buffer_Size	Range: 1..65536
Proprietary Properties:	n/a	

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, EIA-485 ARCNET (Clause 8), baud rate(s) _____
- MS/TP master (Clause 9), baud rate(s): 9.6K, 19.2K, 38.4K, 76.8K
- 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): 38.4K
- 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 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
 - BACnet IP to/from Ethernet
 - BACnet IP to/from MS/TP
 - Ethernet to/from MS/TP
- 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:

Not a gateway

