# NIAGARA<sup>AX</sup> 3.6 BACNET AWS SUPERVISOR PICS



# **BACnet Protocol Implementation Conformance Statement**

Date: August 8, 2011 Vendor Name: <u>Tridium</u> Product Name: <u>Niagara AX Supervisor with AWS Listing</u> Product Model Number: <u>DR-S-BAC-AWS</u> Application Software Version: 3.6.35 or higher Firmware Revision: 3.6.35 or higher BACnet Protocol Revision: 7

#### **Product Description:**

The Niagara AX BACnet AWS 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 Niagara AX. Advanced management tasks such as backup and restore and object creation and deletion are also possible with the BACnet AWS Supervisor.

**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-A,B                  |
| DS-WPM-A,B   | DM-RD-A,B                   |
| DS-COV-A, B  | DM-TS-B                     |
| DS-COVU-A, B | DM-UTC-B                    |
| DS-V-A       | DM-LM-A, B                  |
| DS-AV-A      | DM-BR-A,B                   |
| DS-M-A       | DM-ANM-A                    |
| DS-AM-A      | DM-ADM-A                    |
|              | DM-ATS-A                    |
|              | DM-MTS-A                    |
|              | DM-OCD-A                    |

| Alarm & Event Management | Trending           |
|--------------------------|--------------------|
| AE-N-A                   | T-ATR-A            |
| AE-ACK-A                 | T-V-A              |
| AE-VN-A                  | T-AVM-A            |
| AE-AVN-A                 | T-A-A              |
| AE-VM-A                  |                    |
| AE-AVM-A                 |                    |
| AE-AS-A                  |                    |
| AE-ELVM-A                |                    |
| Scheduling               | Network Management |
| SCHED-VM-A               | NM-CE-A            |
| SCHED-AVM-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.

| <b>Object Type</b> | Properties                      |                                      |  |  |
|--------------------|---------------------------------|--------------------------------------|--|--|
|                    | Object_Identifier               | UTC_Offset                           |  |  |
|                    | Object_Name                     | Daylight_Savings_Status              |  |  |
|                    | Object_Type                     | APDU_Segment_Timeout                 |  |  |
| Device             | 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:**

#### **Device Address Binding:**

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

#### **Character Sets Supported:**

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

| 🗵 ANSI X3.4         | $\Box$ IBM <sup>TM</sup> /Microsoft <sup>TM</sup> 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. Contact Tridium for a list of supported protocols.

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