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# TRIDIUM NIAGARA 4.3

## BACNET SUPERVISOR PICS

### BACnet Protocol Implementation Conformance Statement

**Date:** November 21, 2017

**Vendor Name:** Tridium

**Product Name:** Niagara 4 BACnet Supervisor

**Product Model Number:** DR-S-BAC-AWS or DR-S-BAC-OWS with DRS-BAC-AWS-UP

**Application Software Version:** 4.3.58.22.3 or higher

**Firmware Revision:** 4.3.58.22 or higher

**BACnet Protocol Revision:** 14

#### Product Description:

The Niagara4 BACnet 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 Niagara4. Advanced management tasks such as backup and restore and object creation and deletion are also possible with the BACnet Supervisor.

#### BACnet Standardized Device Profile (Annex L):

- BACnet Cross-Domain Advanced Operator Workstation (B-XAWS)
- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Workstation (B-OWS)
- BACnet Operator Display (B-OD)
- BACnet Advanced Life Safety Workstation (B-ALSWS)
- BACnet Life Safety Workstation (B-LSWS)
- BACnet Life Safety Annunciator Panel (B-LSAP)
- BACnet Advanced Access Control Workstation (B-AACWS)
- BACnet Access Control Workstation (B-ACWS)
- BACnet Access Control Security Display (B-ACSD)
- BACnet Building Controller (B-BC)
- BACnet Advanced Application Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Actuator (B-SA)
- BACnet Smart Sensor (B-SS)
- BACnet Advanced Life Safety Controller (B-ALSC)
- BACnet Life Safety Controller (B-LSC)
- BACnet Advanced Access Control Controller (B-AACC)
- BACnet Access Control Controller (B-ACC)
- BACnet Router (B-RTR)
- BACnet Gateway (B-GW)

- BACnet Broadcast Management Device (B-BBMD)**
- BACnet Access Control Door Controller (B-ACDC)**
- BACnet Access Control Credential Reader (B-ACCR)**
- BACnet General (B-GENERAL)**

**Additional BACnet Interoperability Building Blocks Supported (Annex K):**

<p><b>Data Sharing</b>                  DS-RP-A, B                  DS-RPM-A, B                  DS-WP-A, B                  DS-WPM-A,B                  DS-COV-ADS-V-A                  DS-AV-A                  DS-M-A                  DS-AM-A</p>	<p><b>Device &amp; Network Management</b>                  DM-DDB-A, B                  DM-DOB-B                  DM-DCC-A                  DM-RD-A                  DM-TS-A                  DM-UTC-A                  DM-LM-A                  DM-BR-A,                  DM-ANM-A                  DM-ADM-A                  DM-ATS-A                  DM-MTS-A                  DM-OCD-A</p>
<p><b>Alarm &amp; Event Management</b>                  AE-N-A                  AE-ACK-A                  AE-INFO-A                  AE-ELV-A                  AE-VN-A                  AE-AVN-A                  AE-VM-A                  AE-AVM-A                  AE-AS-A                  AE-ELVM-A</p>	<p><b>Trending</b>                  T-ATR-A                  T-V-A                  T-AVM-A                  T-A-A                  T-AMVR-A</p>
<p><b>Scheduling</b>                  SCHED-VM-A                  SCHED-AVM-A                  SCHED-WS-A</p>	<p><b>Network Management</b>                  NM-CE-A</p>



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### Segmentation Capability:

Feature	Supported	Window size
Transmit Segmented Messages	yes	10
Receive Segmented Messages	yes	127

### 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.
- Writable properties are listed in **bold**. Any range limitations are expressed in parentheses following the property name.

Object Type	Properties																																																		
Device	<table border="0"> <tr> <td><i>Object_Identifier</i></td> <td><i>Number_Of_APDU_Retries</i></td> </tr> <tr> <td><i>Object_Name</i></td> <td><b><i>Time_Synchronization_Recipients</i></b></td> </tr> <tr> <td><i>Object_Type</i></td> <td><i>Max_Master</i></td> </tr> <tr> <td><i>System_Status</i></td> <td><i>Max_Info_Frames</i></td> </tr> <tr> <td><i>Vendor_Name</i></td> <td><i>Device_Address_Binding</i></td> </tr> <tr> <td><i>Vendor_Identifier</i></td> <td><i>Database_Revision</i></td> </tr> <tr> <td><i>Model_Name</i></td> <td><i>Configuration_Files</i></td> </tr> <tr> <td><i>Firmware_Revision</i></td> <td><i>Last_Restore_Time</i></td> </tr> <tr> <td><i>Application_Software_Version</i></td> <td><b><i>Backup_Failure_Timeout</i></b></td> </tr> <tr> <td><b><i>Location</i></b></td> <td><i>Active_COV_Subscriptions</i></td> </tr> <tr> <td><b><i>Description</i></b></td> <td><b><i>UTC_Time_Synchronization_Recipients</i></b></td> </tr> <tr> <td><i>Protocol_Version</i></td> <td><i>Time_Synchronization_Interval</i></td> </tr> <tr> <td><i>Protocol_Revision</i></td> <td><i>Align_Intervals</i></td> </tr> <tr> <td><i>Protocol_Services_Supported</i></td> <td><i>Interval_Offset</i></td> </tr> <tr> <td><i>Protocol_Object_Types_Supported</i></td> <td><i>Backup_Preparation_Time</i></td> </tr> <tr> <td><i>Object_List</i></td> <td><i>Restore_Completion_Time</i></td> </tr> <tr> <td><i>Max_APDU_Length_Accepted</i></td> <td><i>Restore_Preparation_Time</i></td> </tr> <tr> <td><i>Segmentation_Supported</i></td> <td><i>Backup_And_Restore_State</i></td> </tr> <tr> <td><i>Max_Segments_Accepted</i></td> <td><i>Last_Restart_Reason</i></td> </tr> <tr> <td><i>Local_Time</i></td> <td><i>Time_Of_Device_Restart</i></td> </tr> <tr> <td><i>Local_Date</i></td> <td><i>Restart_Notification_Recipients</i></td> </tr> <tr> <td><i>UTC_Offset</i></td> <td><i>Serial_Number</i></td> </tr> <tr> <td><i>Daylight_Savings_Status</i></td> <td><i>Property_List</i></td> </tr> <tr> <td><i>APDU_Segment_Timeout</i></td> <td></td> </tr> <tr> <td><i>APDU_Timeout</i></td> <td></td> </tr> </table>	<i>Object_Identifier</i>	<i>Number_Of_APDU_Retries</i>	<i>Object_Name</i>	<b><i>Time_Synchronization_Recipients</i></b>	<i>Object_Type</i>	<i>Max_Master</i>	<i>System_Status</i>	<i>Max_Info_Frames</i>	<i>Vendor_Name</i>	<i>Device_Address_Binding</i>	<i>Vendor_Identifier</i>	<i>Database_Revision</i>	<i>Model_Name</i>	<i>Configuration_Files</i>	<i>Firmware_Revision</i>	<i>Last_Restore_Time</i>	<i>Application_Software_Version</i>	<b><i>Backup_Failure_Timeout</i></b>	<b><i>Location</i></b>	<i>Active_COV_Subscriptions</i>	<b><i>Description</i></b>	<b><i>UTC_Time_Synchronization_Recipients</i></b>	<i>Protocol_Version</i>	<i>Time_Synchronization_Interval</i>	<i>Protocol_Revision</i>	<i>Align_Intervals</i>	<i>Protocol_Services_Supported</i>	<i>Interval_Offset</i>	<i>Protocol_Object_Types_Supported</i>	<i>Backup_Preparation_Time</i>	<i>Object_List</i>	<i>Restore_Completion_Time</i>	<i>Max_APDU_Length_Accepted</i>	<i>Restore_Preparation_Time</i>	<i>Segmentation_Supported</i>	<i>Backup_And_Restore_State</i>	<i>Max_Segments_Accepted</i>	<i>Last_Restart_Reason</i>	<i>Local_Time</i>	<i>Time_Of_Device_Restart</i>	<i>Local_Date</i>	<i>Restart_Notification_Recipients</i>	<i>UTC_Offset</i>	<i>Serial_Number</i>	<i>Daylight_Savings_Status</i>	<i>Property_List</i>	<i>APDU_Segment_Timeout</i>		<i>APDU_Timeout</i>	
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**Data Link Layer Options:**

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- BACnet IP, (Annex J), BACnet Broadcast Management Device (BBMD)
- ISO 8802-3, Ethernet (Clause 7)

**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: BACnet/IP-BACnet/IP and Ethernet-BACnet/IP
- Annex H, BACnet Tunneling Router over IP

**Character Sets Supported:**

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

- ISO 10646 (UTF-8)  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. Contact Tridium for a list of supported protocols.