BACnet Protocol Implementation Conformance Statement

Date: <u>Aug 29, 2013</u> Vendor Name: <u>I-Controls, Inc</u> Product Name: <u>iCos</u> Product Model Number: <u>4.0</u> Applications Software Version: <u>iCOSApp Pro V1.00</u> Firmware Revision: <u>iCOSBACnet Pro V1.00</u> BACnet Protocol Version: <u>1</u> BACnet Protocol Revision: <u>6</u>

Product Description:

iCos 4.0 is a Windows-based user interface software that provides monitoring and configuration of connected BACnet controllers.

User designed graphics allow BMS managers to supervise and operate buildings easily and efficiently by monitoring equipment status, alarms, adjusting setpoints and schedule.

iCos 4.0 supports BACnet IP, as well as Modbus, OPC and other protocols.

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)
- □ Other BACnet Device (B-Oth)

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

| Data Sharing | ReadProperty-A | DS-RP-A |
|--------------|-------------------------|----------|
| | ReadProperty-B | DS-RP-B |
| | ReadPropertyMultiple-A | DS-RPM-A |
| | WriteProperty-A | DS-WP-A |
| | WritePropertyMultiple-A | DS-WPM-A |
| | View-A | DS-V-A |
| | Modify-A | DS-M-A |

| Alarm & Event Management | Alarm and Event - Notification-A | AE-N-A |
|-----------------------------|--|-----------|
| | Alarm and Event - ACK-A | AE-ACK-A |
| | Alarm and Event - Information - A | AE-INFO-A |
| | Alarm and Event – Alarm Summary - A | AE-ASUM-A |
| | Alarm and Event - Enrollment Summary - A | AE-ESUM-A |
| | Alarm and Event - Alarm Summary View-A | AE-AS-A |
| | Alarm and Event - View and Modify-A | AE-VM-A |

| | Alarm and Event - View Notifications-A | AE-VN-A |
|--------------------------------|---|------------|
| Scheduling | Scheduling - A | SCHED – A |
| | Scheduling - View and Modify-A | SCHED-VM-A |
| | | |
| Trending | Trending - Viewing and Modifying Trends - A | T-VMT-A |
| | Trending - View-A | T-V-A |
| | | |
| | Dynamic Device Binding-A | DM-DDB-A |
| Device & Network Management | Dynamic Device Binding-B | DM-DDB-B |
| | Dynamic Object Binding-B | DM-DOB-A |
| | Manual Time Synchronization-A | DM-MTS-A |
| | Reinitialize Device-A | DM-RD-A |

Segmentation Capability:

| Segmented requests supported | <u>NO</u> | Window Size |
|---------------------------------|-----------|-------------|
| □ Segmented responses supported | <u>NO</u> | Window Size |

Standard Object Types Supported:

An object type is supported if it may be present in the device. For each standard Object Type supported provide the following data:

- 1) Whether objects of this type are dynamically creatable using the CreateObject service
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service
- 3) List of the optional properties supported

4) List of all properties that are writable where not otherwise required by this standard

- 5) List of proprietary properties and for each its property identifier, datatype, and meaning
- 6) List of any property range restrictions

| Object Type | Properties | |
|-------------|------------------------------|---------------------------------|
| Device | Object_Identifier | Protocol_Revision |
| | Object_Name | Protocol_Service_Supported |
| | Object_Type | Protocol_Object_Types_Supported |
| | System_Status | Obejct_List |
| | Vendor_Name | Max_APDU_Length_Accepted |
| | Vendor_Identifier | Segmentation_Supported |
| | Model_Name | Local_Time |
| | Firmware_Revision | Local_Date |
| | Application_Software_Version | APDU_Timeout |
| | Location | Number_Of_APDU_Retries |
| | Description | Device_Address_Binding |
| | Protocol_Version | Datavase_Revision |

Data Link Layer Options:

| □ MS/TP master (Clause 9), baud rate(s): <u>AUTO, 9600, 19200, 38400, 76800</u> |
|---|
| □ 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.) \Box Yes \Box No

Networking Options:

 Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
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/UTF-8 | |
|---------------------|--|
| □ ISO 10646 (UCS-2) | |

 $\Box IBM^{\text{TM}}/\text{Microsoft}^{\text{TM}} DBCS$ $\Box ISO 10646 (UCS-4)$

□ ISO 8859-1 □ JIS C 6226

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports: