Protocol Implementation Conformance Statement (PICS)

Tracer® Ensemble™

Date:	September 2016
Vendor Name:	Trane
Product Name:	Tracer Ensemble
Product Model Number	Tracer Ensemble
Application Software:	Version 5.1
BACnet Protocol Revision:	Revision 14
Product Description:	Tracer Ensemble is a server-based software application that provides facility managers an enterprise-wide view of their buildings and systems, via a web-based user interface. Tracer Ensemble supports advanced BACnet network configuration functionality, is fully customizable, and lets users perform daily operations such as: • Online scheduling • Alarm management • Troubleshooting • Status updates • Data analysis

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)	☐

Interoperability Building Blocks (Annex K)

Data Sharing	Supported
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)	☒
Advanced View-A (DS-AV-A)	☒
Modify-A (DS-M-A)	☒
Advanced Modify-A (DS-AM-A)	☒
Alarm and Event Management	**Supported**
Notification-A (AE-N-A)	☒
ACK-A (AE-ACK-A)	☒
Alarm Summary-A (AE-ASUM-A)	☒
Enrollment Summary-A (AE-ESUM-A)	☒
Information-A (AE-INFO-A)	☒
Alarm Summary View-A (AE-AS-A)	☒
Event Log View-A (AE-ELV-A)	☒
Event Log View and Modify-A (AE-ELVM-A)	☒
Advanced View Notifications-A (AE-AVN-A)	☒
Advanced View Modify-A (AE-AVM-A)	☒
View and Modify-A (AE-VM-A)	☒
View Notifications-A (AE-VN-A)	☒
Scheduling	**Supported**
View and Modify-A (SCHED-VM-A)	☒
Advanced View Modify-A (SCHED-AVM-A)	☒
Weekly Schedule-A (Sched-WS-A)	☒
Trending	**Supported**
View-A (T-V-A)	☒
Advanced View and Modify-A (T-AVM-A)	☒
Device Management Description	**Supported**
Dynamic Device Binding-A (DM-DDB-A)	☒
Dynamic Device Binding-B (DM-DDB-B)	☒
Dynamic Object Binding-B (DM-DOB-B)	☒
Automatic Device Mapping-A (DM-ADM-A)	☒
Automatic Network Mapping-A (DM-ANM-A)	☒
Time Synchronization-A (DM-TS-A)	☒
UTC Time Synchronization-A (DM-UTC-A)	☒
Manual Time Synchronization-A (DM-MTS-A)	☒
Device Communication Control-A (DM-DCC-A)	☒
Reinitialize Device-A (DM-RD-A)	☒
Backup and Restore-B (DM-BR-A)	☒
Object Creation and Deletion-A (DM-OCD-A)	☒

Segmentation Capability

Segmentation	Supported
Segmented Requests/ Window Size: Configurable	☒
Segmented Responses/ Window Size: Configurable	☒

Standard Object Types Supported

Object Type	Required Properties	Optional Properties Supported	Ability to Create	Ability to Delete
Device	• Object_Identifier • Object_Name • Object_Type • System_Status • Vendor_Name • Vendor_Identifier • Model_Name • Firmware_Revision • Application_Software_Version • Protocol_Version • Protocol_Revision • Protocol_Services_Supported • Protocol_Object_Types_Supported • Object_List • Max_APDU_Length_Accepted • Segmentation_Supported • APDU_Timeout • Number_Of_APDU_Retries • Device_Address_Binding • Database_Revision • Property List	• Max_Segments_Accepted • APDU_Segment_Timeout • Local_Time • Local_Date • UTC_Offset • Daylight_Savings_Status	No	No

Data Link Layer Options

Data Link Layer	Options
BACnet IP, (Annex J)	☒
BACnet IP, (Annex J), Foreign Device[(a)]	☒
ISO 8802-3, Ethernet (Clause 7), (10Base2, 10Base5, 10BaseT, Fiber)	☐
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): 9,600, 19,200, and 38,400	☐
MS/TP Slave (Clause 9), Baud Rate(s)	☐
Point-to-Point, EIA 232 (Clause 10), Baud Rate(s): 9,600, 19,200, and 38,400	☐
Point-to-Point, Modem (Clause 10), Baud Rate(s): 9,600, 19,200, and 38,400	☐
LonTalk, (Clause 11), Medium	☐
Other	☐

(a) Device can only register as a foreign device on another network device.

Device Address Binding

Is static device binding supported?	☐ Yes ☒ No
Binding is required for 2-way communication with MS/TP slaves and certain other devices.	

Networking Options

Router	☐
Annex H, BACnet Tunneling	☐
BACnet/IP Broadcast Management Device (BBMD)	☐
Does the BBMD Support Registrations by Foreign Devices?	☐

Character Sets

Indicating support for multiple character sets does not imply that all character sets are supported simultaneously.

ANSI X3.4 (UTF-8)	☒
IBM/Microsoft DBCS	☐
JIS C 6226	☐
ISO 10646 (UCS-4)	☐
ISO 10646 (UCS2)	☐
ISO 8859-1	☒

Network Security Options

Non-secure Device is capable of operating without BACnet Network Security	☒
Secure Device is capable of using BACnet Network Security (NS-SD-BIBB)[a]	☐
• Multiple Application-Specific Keys	☐
• Supports Encryption (NS-ED-BIBB)	☐
• Key Server (NS-KS-BIBB)	☐

(a) Bullet points are Secure Device options.

Additional Resources

Product support online:

- www.bacnetinternational.org
- www.trane.com

For further assistance, contact your local Trane sales office.

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