Date: March 27, 2007

Vendor Name: Delta Controls Inc.

Product Name: ORCAview

Product Model Number: DOW-333

Product Version: 3.33

BACnet Protocol Revision: 3

Product Description:

ORCAview is an industry leading operator workstation software package that combines an intuitive graphical user interface with powerful, easy-to-use facility management tools. Custom graphics allow facility managers to operate their buildings easily and efficiently by monitoring equipment status, alarms, and adjusting setpoints and schedules. Professional reports can be created for tenant billing and door access activity using powerful built-in reporting tools. Alarms can be E-mailed or paged to service personnel with the built-in Event Management System. The system language can be changed on-the-fly. Historical data for thousands of trend logs and events can be archived and retrieved with the optional SQL server based Delta Historian. Building system information can be integrated with business-level products using the optional Delta ODBC Driver.

BACnet devices from any vendor are automatically detected and integrated into the software, giving facility managers a single-seat of operation for all their systems. ORCAview uses BACnet IP to communicate over wide area networks including the Internet or intranets to any building or site. BACnet over Ethernet and BACnet MS/TP are used to communicate to local area networks. BACnet PTP may be used to connect to any Delta Systems Controller either directly or via modem for remote site-wide access.

BACnet Standardized Device Profile (Annex L):

☑ BACnet Operator Workstation (B-OWS)
☐ 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)

BACnet Interoperability Building Blocks Supported (Annex K):

BACnet Interoperability Building Block	Supported
Data Sharing	
Data Sharing-ReadProperty-A (DS-RP-A)	☑
Data Sharing-ReadProperty-B (DS-RP-B)	☑
Data Sharing-ReadPropertyMultiple-A (DS-RPM-A)	☑
Data Sharing-ReadPropertyMultiple-B (DS-RPM-B)	☑
Data Sharing-ReadPropertyConditional-A (DS-RPC-A)	☐
Data Sharing- ReadPropertyConditional-B (DS-RPC-B)	☐
Data Sharing-WriteProperty-A (DS-WP-A)	☑
Data Sharing-WriteProperty-B (DS-WP-B)	☑
Data Sharing-WritePropertyMultiple-A (DS-WPM-A)	☑
Data Sharing-WritePropertyMultiple-B (DS-WPM-B)	☑
Data Sharing-COV-A (DS-COV-A)	☑
Data Sharing-COV-B (DS-COV-B)	☑
Data Sharing-COVP-A (DS-COVP-A)	☐
Data Sharing-COVP-B (DS-COVP-B)	☐
Data Sharing-COV-Unsolicited-A (DS-COVU-A)	☑
Data Sharing-COV-Unsolicited-B (DS-COVU-B)	☑
Scheduling	
Scheduling-A (SCHED-A)	☑
Scheduling-Internal-B (SCHED-I-B)	☑
Scheduling-External-A (SCHED-E-B)	☑
Trending	
Trending-Viewing and Modifying Trends-A (T-VMT-A)	☑
Trending-Viewing and Modifying Trends-Internal-B (T-VMT-I-B)	☑
Trending-Viewing and Modifying Trends-External-B (T-VMT-E-B)	☑
Trending-Automated Trend Retrieval-A (T-ATR-A)	☑
Trending-Automated Trend Retrieval-B (T-ATR-B)	☑
Network Management	
Network Management-Connection Establishment-A (NM-CE-A)	☑
Network Management-Connection Establishment-B (NM-CE-B)	☑
Network Management-Router Configuration-A (NM-RC-A)	☐
Network Management-Router Configuration-B (NM-RC-B)	☐
Alarm and Event Management	
Alarm and Event-Notification-A (AE-N-A)	☑
Alarm and Event-Notification Internal-B (AE-N-I-B)	☑
Alarm and Event-Notification External-A (AE-N-E-B)	☑
Alarm and Event-ACK-A (AE-ACK-A)	☑
Alarm and Event-ACK-B (AE-ACK-B)	☑
Alarm and Event-Alarm Summary-A (AE-ASUM-A)	☑
Alarm and Event-Alarm Summary-B (AE-ASUM-B)	☑
Alarm and Event-Enrollment Summary-A (AE-ESUM-A)	☑
Alarm and Event-Enrollment Summary-B (AE-ESUM-B)	☑
Alarm and Event-Information-A (AE-INFO-A)	☑
Alarm and Event-Information-B (AE-INFO-B)	☑
Alarm and Event-LifeSafety-A (AE-LS-A)	☐
Alarm and Event-LifeSafety-B (AE-LS-B)	☐
Device Management	
Device Management-Dynamic Device Binding-A (DM-DDB-A)	☑
Device Management-Dynamic Device Binding-B (DM-DDB-B)	☑
Device Management-Dynamic Object Binding-A (DM-DOB-A)	☑
Device Management-Dynamic Object Binding-B (DM-DOB-B)	☑

BACnet Interoperability Building Block	Supported
Device Management-DeviceCommunicationControl-A (DM-DCC-A)	☑
Device Management-DeviceCommunicationControl-B (DM-DCC-B)	☑
Device Management-Private Transfer-A (DM-PT-A)	☑
Device Management-Private Transfer-B (DM-PT-B)	☑
Device Management-Text Message-A (DM-TM-A)	☐
Device Management-Text Message-B (DM-TM-B)	☑
Device Management-TimeSynchronization-A (DM-TS-A)	☑
Device Management-TimeSynchronization-B (DM-TS-B)	☐
Device Management-UTCTimeSynchronization-A (DM-UTC-A)	☑
Device Management-UTCTimeSynchronization-B (DM-UTC-B)	☐
Device Management-ReinitializeDevice-A (DM-RD-A)	☑
Device Management-ReinitializeDevice-B (DM-RD-B)	☐
Device Management-Backup and Restore-A (DM-BR-A)	☑
Device Management-Backup and Restore-B (DM-BR-B)	☐
Device Management-List Manipulation-A (DM-LM-A)	☑
Device Management-List Manipulation-B (DM-LM-B)	☑
Device Management-Object Creation and Deletion-A (DM-OCD-A)	☑
Device Management-Object Creation and Deletion-B (DM-OCD-B)	☑
Device Management-Virtual Terminal-A (DM-VT-A)	☐
Device Management-Virtual Terminal-B (DM-VT-B)	☐

Segmentation Capability:

Segmented Requests Supported	☑	Window Size:	CONFIGURABLE
Segmented Responses Supported	☑	Window Size:	CONFIGURABLE

Standard Object Types Supported:

Object-Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Analog Input	☑	☑	☑	Description, Device Type, Reliability, Min Pres Value, Max Pres Value, Update Interval, Resolution, COV Increment	Object Name, Present Value, Description, Reliability, COV Increment, Out of Service
Analog Output	☑	☑	☑	Description, Device Type, Reliability, Min Pres Value, Max Pres Value, Resolution, COV Increment	Object Name, Description, Present Value, Reliability, COV Increment, Relinquish Default, Out of Service
Analog Value	☑	☑	☑	Description, Reliability, COV Increment	Object Name, Description, Present Value, Units, Reliability, COV Increment, Out of Service
Averaging	☐	☐	☐		
Binary Input	☑	☑	☑	Description, Device Type, Reliability, Active Text, Inactive Text, COS Time, COS Count, COS Time, Reset	Object Name, Description, Present Value, Reliability, Polarity, Change of State Count, Out of Service
Binary Output	☑	☑	☑	Description, Device Type, Reliability, Active Text,	Object Name, Description, Present Value, Reliability,

Object-Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
				Inactive Text, COS Time, COS Count, COS Time Reset, Min On Time, Min Off Time	Polarity, Change of State Count, Relinquish Default, Min On Time, Min Off Time, Out of Service
Binary Value	☑	☑	☑	Description, Reliability, Active Text, Inactive Text	Object Name, Description, Present Value, Out of Service, Reliability
Calendar	☑	☑	☑	Description	Object Name, Description, Present Value, Date List
Command	☐	☐	☐		
Device	YES	N/A	N/A	Description, Location, APDU Seg Timeout, Time Synch Recipients, Max Segments Accepted, Max Master, Max Info Frames, Local Time, Local Date, UTC Offset, DST Status, Configuration Files, Last Restore Time, Backup Failure Timeout, Active COV Subscriptions	Object Name, Description, Location, Time Synch Recipients, UTC Offset, Backup Failure Timeout
Event Enrollment	☑	☑	☑	Description, Notification Class	Object Name, Description, Event Type, Event Parameters, Object Property Reference, Event Enable, Notification Class
File	☑	☑	☑	Description	Object Name, Description, File Type, File Size, Archive, Read Only
Group	☐	☐	☐		
Life Safety Point	☐	☐	☐		
Life Safety Zone	☐	☐	☐		
Loop	☑	☑	☑	Description, Reliability, Update Interval, Proportional Constant, Proportional Units, Integral Constant, Integral Units, Derivative Constant, Derivative Units, Bias, Maximum Output, Minimum Output, COV Increment	Object Name, Description, Present Value, Reliability, Out of Service, Action, Manipulated Var Ref, Controlled Variable Ref, , Controlled Var Units, Setpoint, Setpoint Ref, Proportional Constant, Integral Constant, Derivative Constant, Bias, Priority For Writing, COV Increment
Multi-state Input	☐	☐	☐		
Multi-state Output	☐	☐	☐		
Multi-state Value	☑	☑	☑	Description, Reliability, State Text	Object Name, Description, Present Value, Reliability, Out Of Service
Notification Class	☑	☑	☑	Description	Object Name, Description, Priority, Ack Required, Recipient

Object-Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
					List
Program	☑	☑	☑	Description, Reliability, Reason for Halt, Description of Hal	Object Name, Description, Present Value, Reliability, Program Change,
Schedule	☑	☑	☑	Description, Schedule Exceptions	Object Name, Description, Present Value, Effective Period, Weekly Schedule, Exception Schedule, List of Object Property References, Priority for Writing
Trend Log	☑	☑	☑	Description, Start Time, Stop Time, Log Device Object Prop, Log Interval, COV Resubscription Interval, Notification Threshold, Records Since Notification, Notification Class, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Log Enable, Start Time, Stop Time, Log Device Object Prop, Log Interval, COV_Resubscription Interval, Stop When Full, Buffer Size, Record Count, Notification Threshold, Notification Class, Event Enable,
Proprietary	☑	☑	☑		

Data Link Layer Options:

☑ BACnet IP, (Annex J)
☑ BACnet IP, (Annex J), Foreign Device
☑ 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): 9600, 19200, 38400, 76800
☐ MS/TP slave (Clause 9), baud rate(s):
☑ Point-To-Point, EIA 232 (Clause 10), baud rate(s): 9600, 19200, 38400
☑ Point-To-Point, modem, (Clause 10), baud rate(s): 9600, 19200, 38400
☐ LonTalk, (Clause 11), medium:
☐ Other:

Device Address Binding:

Is static device binding supported?   ☑ Yes   ☐ No
(Necessary for two-way communication with MS/TP slaves and certain other devices.)

Networking Options:

Router	☐
Annex H, BACnet Tunnelling	☐
BACnet/IP Broadcast Management Device (BBMD)	☐
Does the BBMD support registrations by Foreign Devices?	☐

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　　　　☐ JIS C 6226
☐ ISO 10646 (ICS-4)　　　　☐ ISO 10646 (UCS2)　　　　　☐ ISO 8859-1

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

Not applicable.