

Disclaimer

- The primary purpose of this session is to inform and provide information to the audience. The views, information, or opinions expressed during this presentation and/or its associated/referenced materials are solely those of the individuals and/or organizations involved and do not necessarily represent those of Tridium, its affiliates or its employees.
- With respect to this presentation and the information and materials presented, Tridium makes no warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.
- Tridium is not responsible for and does not verify the accuracy or reliability of any of the information contained herein. Results referenced, if any, may vary and past performance is not indicative of, and Tridium does not guarantee, future results. This information does not constitute professional or other advice or services and is presented for informational purposes only.





How Niagara Supports the Changing Design Environment







Moderator



Paul Maximuk
Newcomb and Boyd





Erin DeFrieze Stantec



Matthew Turk Newcomb and Boyd



Michael McMahon Newcomb and Boyd



Donny Walker Newcomb and Boyd

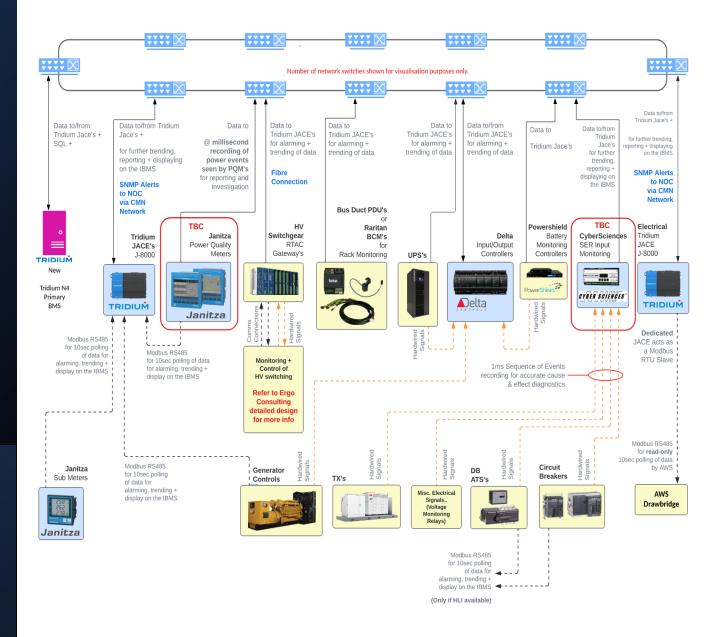


Division 25 and OT Standards

Why is this necessary?

What advantages do we have in the Niagara Environment?

- 1. Consistency across the portfolio
- 2. Ensures accuracy of the programming
- 3. Responsibility Matrix



Division 25 and OT Standards

Developing Standards to Supplement the Division 25 specifications:

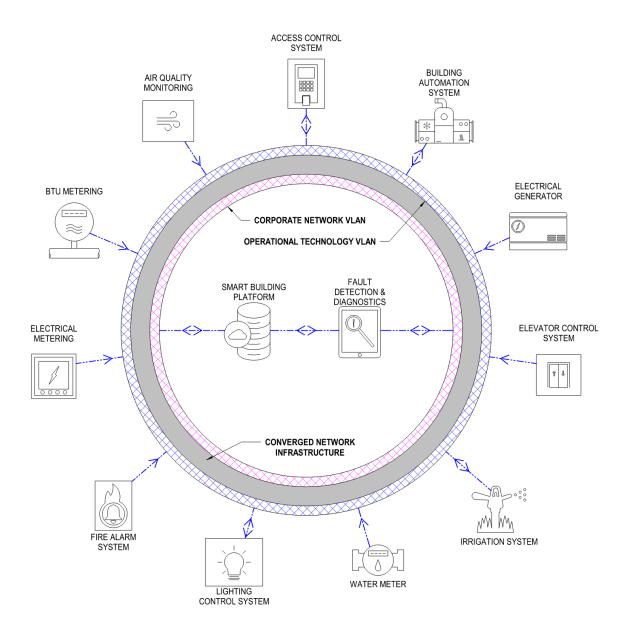
What:

- 1. Point naming
- 2. Tagging
- 3. Data Collection and Aggregation
- 4. Protocol Standards
- 5. Cybersecurity Considerations
- 6. Cloud Storage



1 Table of Contents

1. Sc	Scope of Document3					
2. Joi	oining References					
3. Wo	Workbench Palettes required4					
4. Set	4. Setup Supervisor to/from JACE connections4					
5. JA	CE Config Folder Setup5					
5.1	Typical Folder Setup5					
5.2	Typical Device Folder Setup5					
5.3	Home Folder Setup6					
5.4	Drivers Device Points Folder Setup7					
5.5	Setup of EquipmentName BQL Expr Block8					
5.6	Setup of Schedule Import from Supervisor10					
6. Ala	arm Service and Extensions Setup					
7. JA	CE Schedule Setup					
8. JA	CE Export PointTags Setup13					
9. Init	tial Join on JACE to Supervisor14					
10.	ExportTags PointTag15					
10.1	Manually Adding Export PointTag to JACE points15					
10.2	Copy and Paste of "PointTag" extension17					
10.3	Adding Export PointTag to JACE Control Points using "Program Services"					
10.4	Setting Existing Export PointTag Parameter "StationSlotPath" on Control Points					
10.5	Setting Existing Export PointTag Parameter "SupervisorStation" on Control Points					
11	Join ExportTags20					
12.	PxViewTag21					
12.1	Adding PxViewTag21					
12.2	PxViewTag ORD Replacement Examples23					
12.3	Validating the PxViewTag26					
13.	History Extension Setup					
13.1	Adding History Extension					
14.	HistoryImportTag29					
14.1	Adding HistoryImportTag29					
15.	Word Index					





DIVISION 14 LEVEL 3	DIVISION 22	UNIT HEATER	TERMINAL UNIT	DIVISION 23 FAN COIL UNIT	HVACIDOC CONTROLLER	AIR HANDLING UNIT	DIVISION 27 MULTILAYER SWITCH	DIVISION 25	ELECTRICAL METER	SION 26 LIGHTING CONTROL PANEL	DIVISION 28	DIVISION 32
LEVEL 2		UNIT HEATER	TERMINAL UNIT	FAN COIL UNIT	HVAC/DDC	AIR HANDLING UNIT			ELECTRICAL METER	LIGHTING CONTROL PANEL		LEVEL 2
ELEVATOR CONTROL PANEL	WATER METER	UNIT HEATER	TERMINAL UNIT	FAN COIL UNIT	HVAC/DDC	AIR HANDLING UNIT	<u></u> j;;;;;;;;;	SMART BUILDING PLATFORM	ELECTRICAL METER		FIRE ALARM SYSTEM	IRRIGATION CONTROLLER
LEVEL 1					INDOOR AIR QUALITY SENSOR		11 (ACCESS CONTROL PANEL	LEVEL 1

	OPERATIONS TECHNOLOGY - EQUIPMENT DETAIL SCHEDULE						
EQUIPMENT TYPE	COMMUNICATION PROTOCOL	FLOOR	SHEET SERIES	SPECIFICIATION REFERENCE	INTEGRATION SPECIFICATION REFERENCE		
ACCESS CONTROL PANEL	REST API	LEVEL 1	SECURITY	281000	250000, 252000, 253800		
AIR HANDLING UNIT	BACnet IP	LEVEL 1-12	MECHANICAL	230663	250000, 252000, 253500		
AUTOMATIC TRANSFER SWITCH	BACnet IP	ROOF	ELECTRICAL		250000, 252000, 253600		
BTU METERING	BACnet IP	ROOF	MECHANICAL	230663	250000, 252000, 253500		
CHILLER	BACnet IP	ROOF	MECHANICAL	236433	250000, 252000, 253500		
DEDICATED OUTSIDE AIR SYSTEM	BACnet MS/TP	ROOF	MECHANICAL	230663, 238219	250000, 252000, 253500		
ELECTRICAL METER	BACnet IP	LEVEL 1-ROOF	ELECTRICAL		250000, 252000, 253600		
ELEVATOR CONTROL PANEL	BACnet IP	LEVEL B1	ARCHITECTURAL	142100, 142150	250000, 252000, 253200		
FAN COIL UNIT	BACnet MS/TP	LEVEL 1-12	MECHANICAL	230663, 238219	250000, 252000, 253500		
FIRE ALARM SYSTEM	BACnet IP	LEVEL 1	FIRE PROTECTION		250000, 252000, 253800		
GENERATOR	BACnet IP	LEVEL 1	ELECTRICAL		250000, 252000, 253600		
HVAC/DDC CONTROLLER	BACnet IP	LEVEL 1-12	MECHANICAL	230663	250000, 252000, 253500		
INDOOR AIR QUALITY SENSOR	BACnet MS/TP / MODBUS RTU	1,4,10	MECHANICAL	253905	250000, 252000		
INDUCT AIR QUALITY SENSOR	BACnet MS/TP / MODBUS RTU	LEVEL 12	MECHANICAL	253905	250000, 252000		
IRRIGATION CONTROLLER	BACnet IP	LEVEL 1	LANDSCAPING		250000, 252000, 253300		
LIGHTING CONTROL PANEL	BACnet IP	LEVEL 1-12	ELECTRICAL		250000, 252000, 253600		
OUTDOOR AIR QAULITY SENSOR	BACnet MS/TP / MODBUS RTU	ROOF	MECHANICAL	253905	250000, 252000		
SMART BUILDING PLATFORM	MULTIPLE SEE SECTION 251500	LEVEL 1	OPERATIONAL TECH	251500	250000, 252000		
TERMINAL UNIT	BACnet MS/TP	LEVEL 1-12	MECHANICAL	230663	250000, 252000, 253500		
UNIT HEATER	BACnet MS/TP	LEVEL 1-12	MECHANICAL	230663	250000, 252000, 253500		
VFD	BACnet MS/TP	LEVEL B2, B1, ROOF	MECHANICAL	230526	250000, 252000, 253500		
WATER METER	BACnet IP	LEVEL 1	PLUMBING	230663	250000, 252000, 253400		

EQUIPMENT TYPE	I/O WIRING	IP NETWORK CABLING	PROPRIETARY WIRING	SERIAL CABLING
ACCESS CONTROL PANEL	DIVISION 28	DIVISION 27	DIVISION 28	NA
AIR HANDLING UNIT	DIVISION 23	DIVISION 27	DIVISION 23	DIVISION 23
AUTOMATIC TRANSFER SWITCH	DIVISION 26	DIVISION 27	DIVISION 26	NA
BTU METERING	DIVISION 23	DIVISION 27	DIVISION 23	DIVISION 23
CHILLER	DIVISION 23	DIVISION 27	DIVISION 23	DIVISION 23
DEDICATED OUTSIDE AIR SYSTEM	DIVISION 23	DIVISION 27	DIVISION 23	DIVISION 23
ELECTRICAL METER	DIVISION 26	DIVISION 27	DIVISION 26	NA
ELEVATOR CONTROL PANEL	DIVISION 14	DIVISION 27	DIVISION 14	DIVISION 14
FAN COIL UNIT	DIVISION 23	NA NA	DIVISION 23	DIVISION 23
FIRE ALARM SYSTEM	DIVISION 28	DIVISION 27	DIVISION 28	NA
GENERATOR	DIVISION 26	DIVISION 27	DIVISION 26	NA
HVAC/DDC CONTROLLER	DIVISION 23	DIVISION 27	DIVISION 23	DIVISION 23
INDOOR AIR QUALITY SENSOR	NA	NA NA	NA NA	DIVISION 23
INDUCT AIR QUALITY SENSOR	DIVISION 23	NA NA	DIVISION 23	DIVISION 23
IRRIGATION CONTROLLER	DIVISION 32	DIVISION 27	DIVISION 32	NA
LIGHTING CONTROL PANEL	DIVISION 26	DIVISION 27	DIVISION 26	NA
OUTDOOR AIR QAULITY SENSOR	DIVISION 23	NA NA	DIVISION 23	DIVISION 23
SMART BUILDING PLATFORM	NA	DIVISION 27	NA NA	NA
TERMINAL UNIT	DIVISION 23	NA	DIVISION 23	DIVISION 23
UNIT HEATER	DIVISION 23	NA	DIVISION 23	DIVISION 23
VFD	DIVISION 23	NA	DIVISION 23	DIVISION 23
WATER METER	DIVISION 22	DIVISION 27	DIVISION 22	DIVISION 22





