

NS2024

APRIL 15 - 17 | ANAHEIM, CA

Niagara Connected: Faster, Simpler

Niagara Integrations for Small and Mid-Sized Commercial Buildings



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**Tridium, Senior OEM Sales
Representative**



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**75F
Software Engineer**



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**Belimo,
Manager Digital
Ecosystem**

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ONE OEM'S JOURNEY TO SCALABLE INTEGRATED PROJECT DELIVERY

Nick Prill

75F

Opportunities in the Small/Medium Building Space

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Owners

Good energy-management is a financial slam-dunk for __% of owners?

Owners

Good energy-management is a financial slam-dunk for __% of owners?

85% of commercial buildings <200K sq. ft. don't have a BAS.

- U.S. Energy Information Administration

Owners – Hierarchy of Needs



Owners – Hierarchy of Needs



Building is Habitable

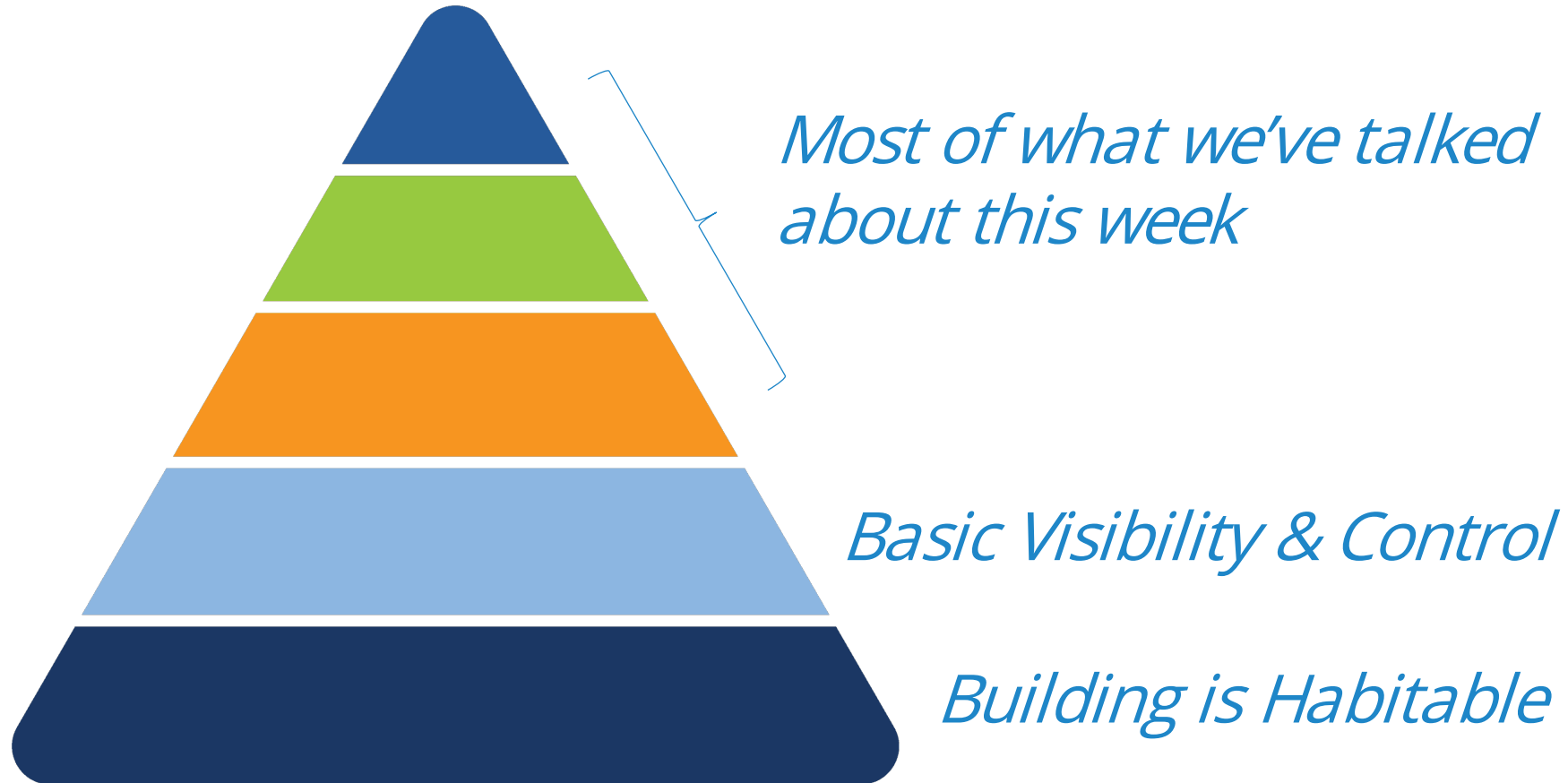
Owners – Hierarchy of Needs



Basic Visibility & Control

Building is Habitable

Owners – Hierarchy of Needs



Integrators

How many accounts could we open up if we could simplify 1 or 2 project delivery steps?

Integrators

Are there projects we can complete without our most senior technical staff?

OPPORTUNITIES IN THE SMALL-TO-MEDIUM BUILDING SPACE

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CHALLENGES IN THE SMALL-TO-MEDIUM BUILDING SPACE

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THE LAST 10%



THE LAST 10%



THE LAST 10%



THE LAST 10%



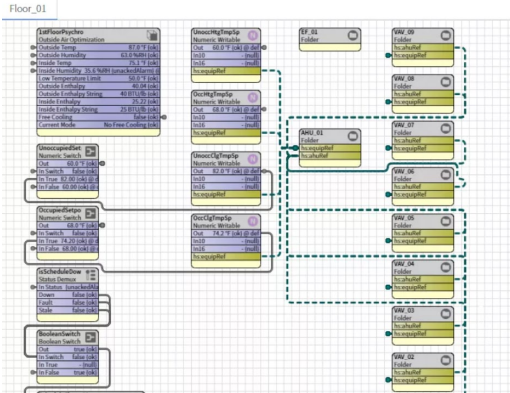
THE LAST 10%



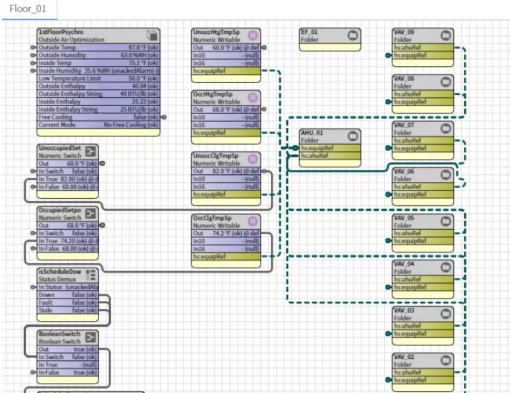
THE LAST 10%



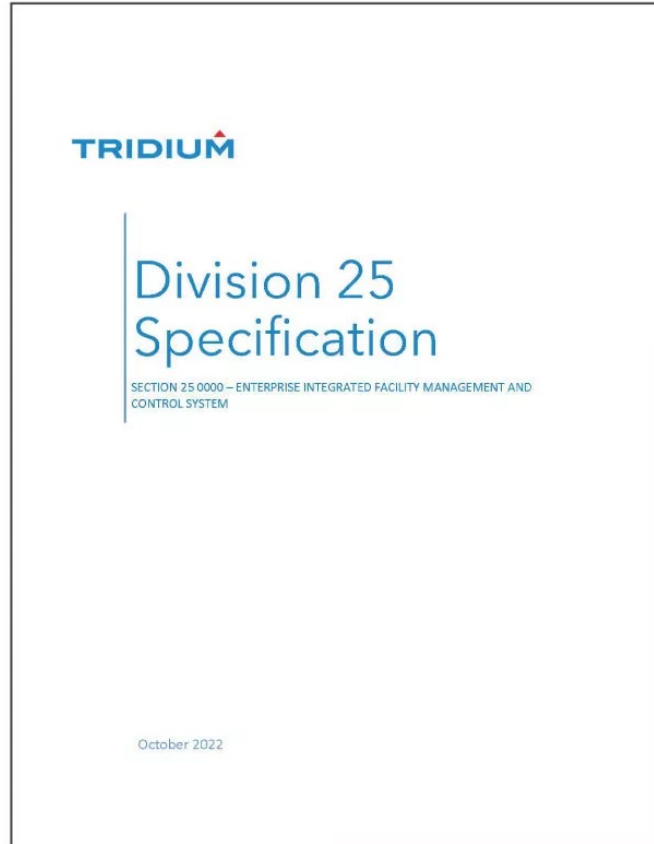
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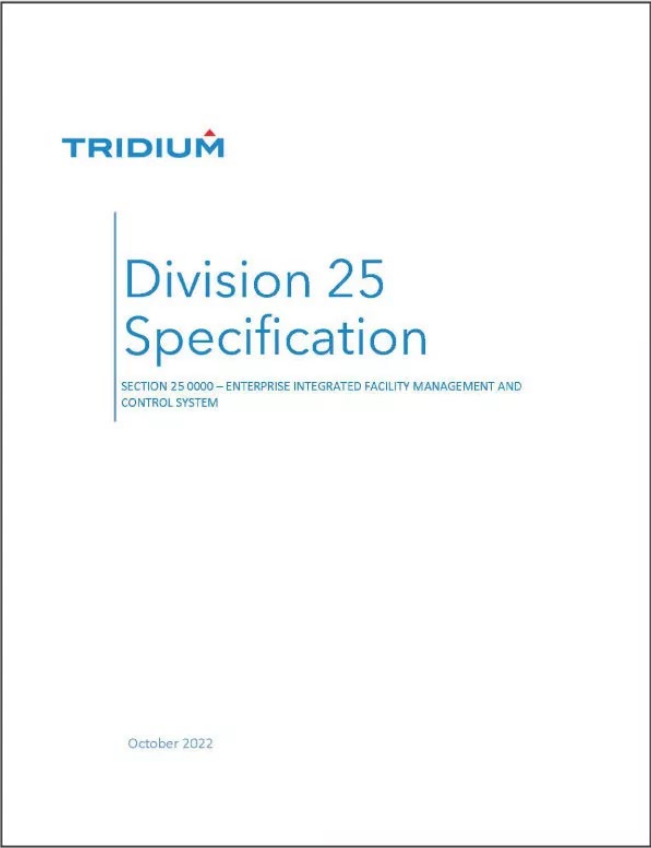
THE LAST 10%



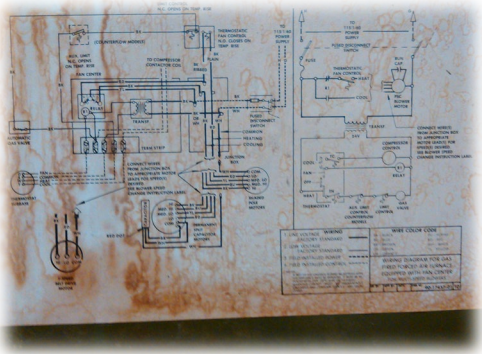
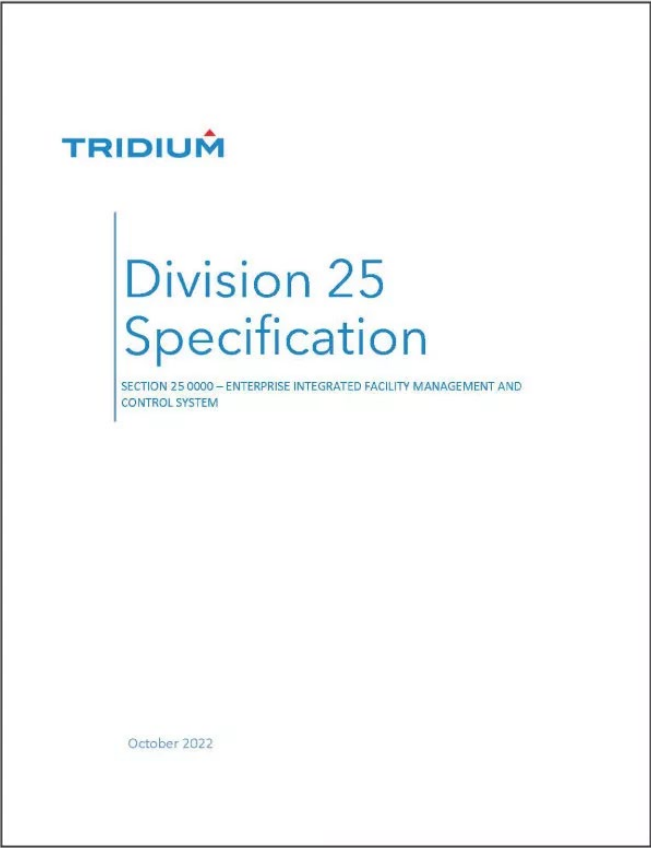
WHO'S SELLING THE SOLUTION?



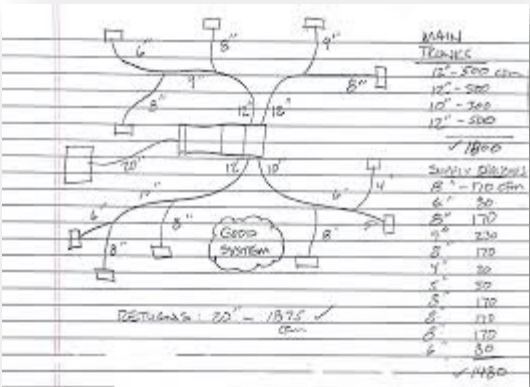
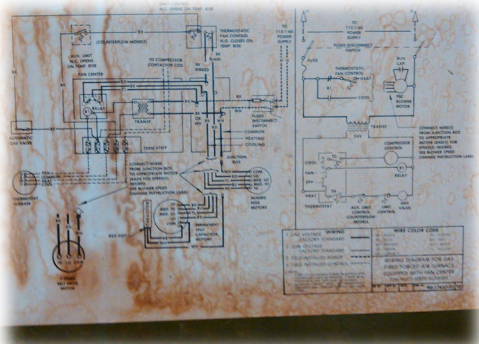
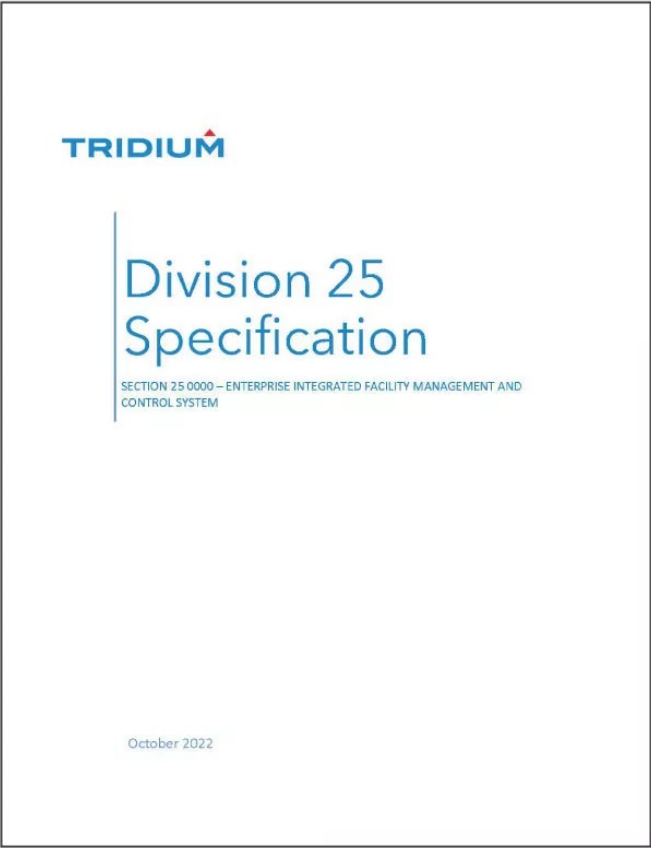
WHO'S SELLING THE SOLUTION?



WHO'S SELLING THE SOLUTION?



WHO'S SELLING THE SOLUTION?



WHAT WE'VE LEARNED

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OUR CORE PRODUCT



OUR CORE PRODUCT

75F Renatus › Getting Started › FAQs

FAQ: Can I use a SmartNode to control a chiller plant?



Matt Blount

Updated 4 months ago

No, a SmartNode will not control your Chiller plant. At this time 75F devices are designed to control nearly any air

OUR LAST 10%: STANDARDS + PRO SERVICES

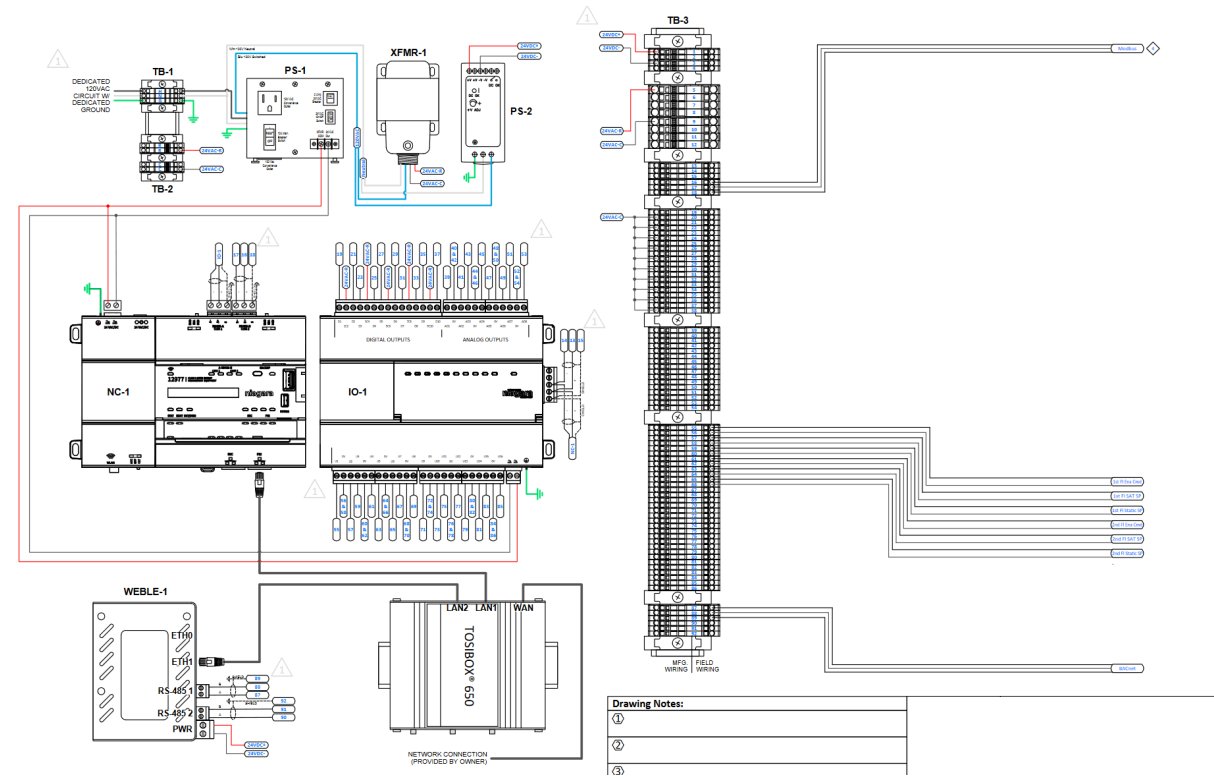


OUR LAST 10%: STANDARDS + PRO SERVICES

POINTS LIST - 75F CUSTOM CONTROL PANEL							
TB Point	Panel Point	Wire Label	Point Name	I/O Type	Device Range	Device Mfg.	Device Model #
1-2	24VDC +	24VDC +	24VDC +	-	-	75F	PS-2
3-4	24VDC -	24VDC -	24VDC -	-	-	75F	PS-2
5-8	24VAC R	24VAC R	24VAC R	-	-	75F	XFMR-1
9-12	24VAC C	24VAC C	24VAC C	-	-	75F	XFMR-1
13	JACE RS485-A COM1	Not Used	NRIO Comm (Internal to Panel)	-	-	-	-
14							
15							
16	JACE RS485-B COM2	Modbus	Modbus Comm (to CCU)	RS-485	COMM	75F	3X-ND-C1W-X
17							
18							
19 / 20	DO1		Spare				
21 / 22	DO2		Spare				
23 / 24	DO3		Spare				

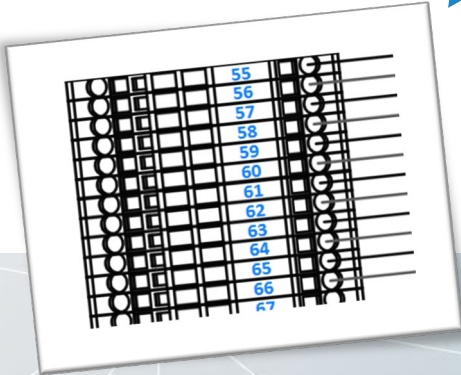
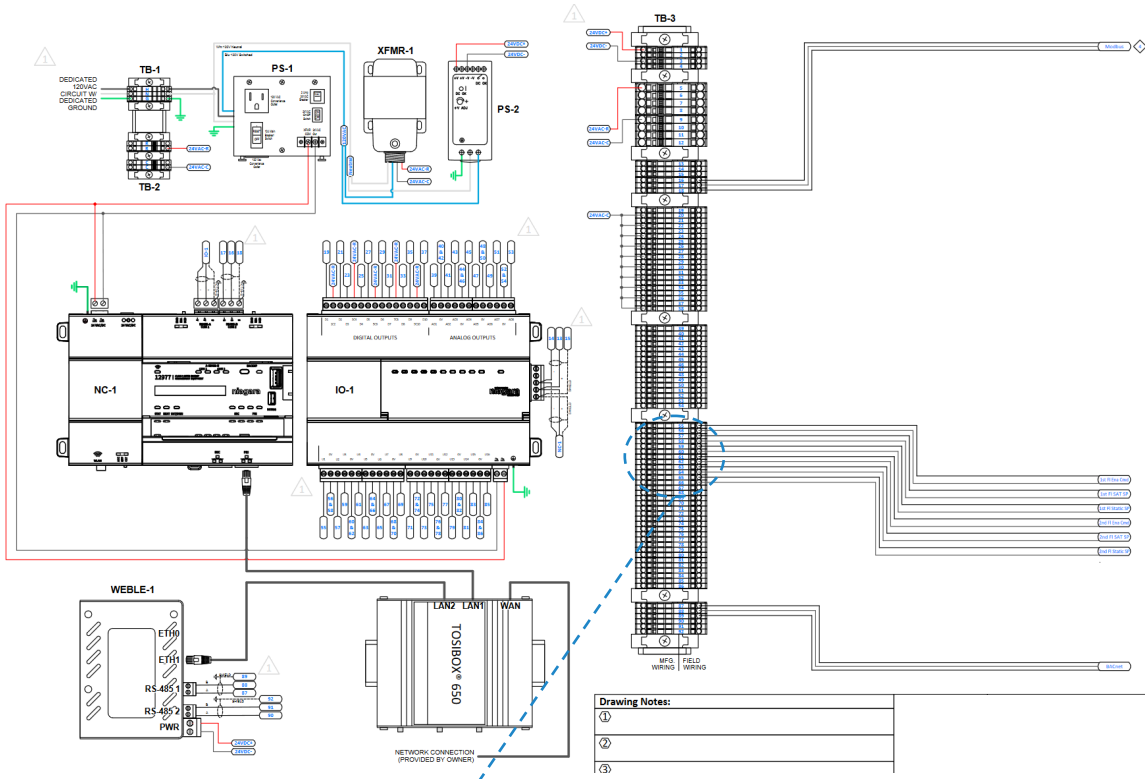
57 / 58	UI2	1st FI SAT SP	1st Floor Supply Air Temp Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-1 GTW 1ST, AO1)
59 / 60	UI3	1st FI Static SP	1st Floor Duct Static Pressure Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-1 GTW 1ST, AO2)
61 / 62	UI4	2nd FI Ena Cmd	2nd Floor Enable Command	Digital	CC = ENABLE	75F	7X-CC-K7K-X (CCU-2 GTW 2ND, RLY 3)
63 / 64	UI5	2nd FI SAT SP	2nd Floor Supply Air Temp Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-2 GTW 2ND, AO1)
65 / 66	UI6	2nd FI Static SP	2nd Floor Duct Static Pressure Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-2 GTW 2ND, AO2)
67 / 68	UI7		Spare			-	
69 / 70	UI8		Spare			-	
71 / 72	UI9		Spare			-	

85 / 86	UI16		Spare				
87	WEBLE-1 RS485-A	BACnet	BACnet Comm (to RTU-1)	RS-485	COMM	BY OTHERS	RTU-1 BACnet Card
88							
89							
90	WEBLE-1 RS485-B		Spare				
91							
92							



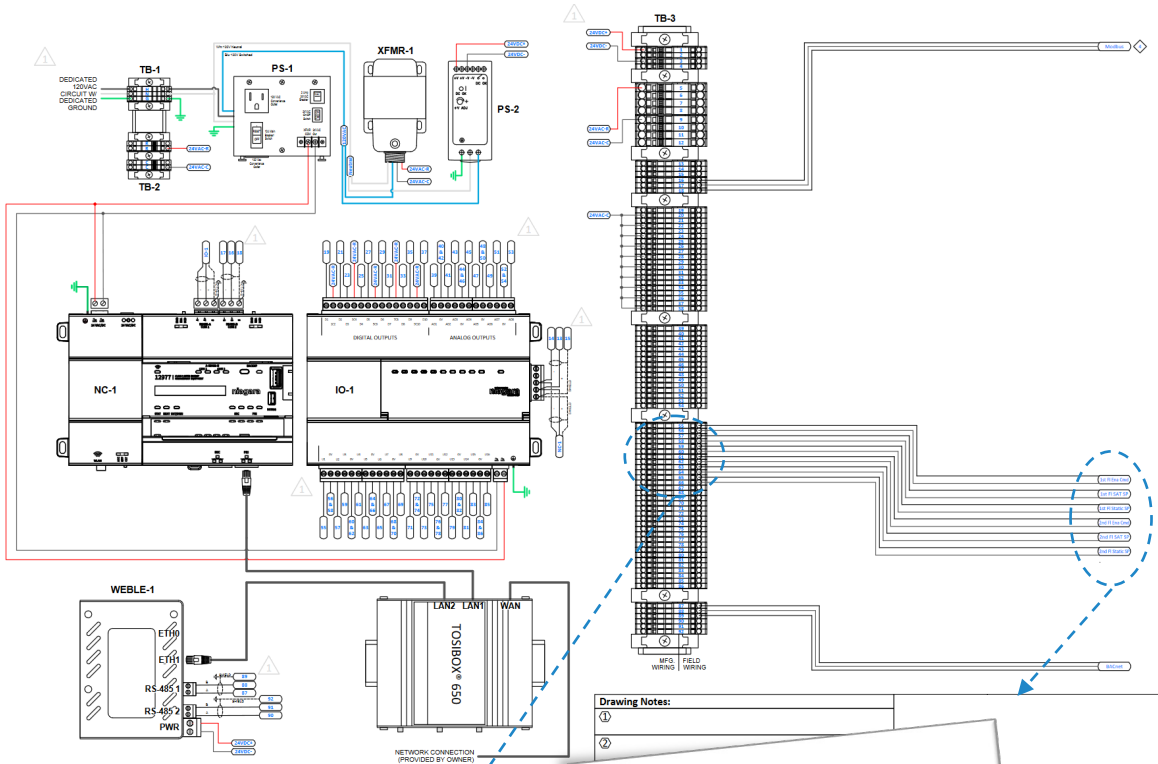
OUR LAST 10%: STANDARDS + PRO SERVICES

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3-4	24VDC -	24VDC -	24VDC -	-	-	75F	PS-2
5-8	24VAC R	24VAC R	24VAC R	-	-	75F	XFMR-1
9-12	24VAC C	24VAC C	24VAC C	-	-	75F	XFMR-1
13	JACE RS485-A COM1	Not Used	NRIO Comm (Internal to Panel)	-	-	-	-
14							
15							
16	JACE RS485-B COM2	Modbus	Modbus Comm (to CCU)	RS-485	COMM	75F	3X-ND-C1W-X
17							
18							
19 / 20	DO1		Spare				
21 / 22	DO2		Spare				
23 / 24	DO3		Spare				
25 / 26	UI1	1st FI SAT SP	1st Floor Supply Air Temp Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-1 GTW 1ST, AO1)
27 / 28	UI2	1st FI Static SP	1st Floor Duct Static Pressure Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-1 GTW 1ST, AO2)
29 / 30	UI3	2nd FI Ena Cmd	2nd Floor Enable Command	Digital	CC = ENABLE	75F	7X-CC-K7K-X (CCU-2 GTW 2ND, RLY 3)
31 / 32	UI4	2nd FI SAT SP	2nd Floor Supply Air Temp Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-2 GTW 2ND, AO1)
33 / 34	UI5	2nd FI Static SP	2nd Floor Duct Static Pressure Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-2 GTW 2ND, AO2)
35 / 36	UI6		Spare			-	
37 / 38	UI7		Spare			-	
39 / 40	UI8		Spare			-	
41 / 42	UI9		Spare			-	
43 / 44	UI10		Spare			-	
45 / 46	UI11		Spare			-	
47 / 48	UI12		Spare			-	
49 / 50	UI13		Spare			-	
51 / 52	UI14		Spare			-	
53 / 54	UI15		Spare			-	
55 / 56	UI16		Spare			-	
57 / 58	UI17		Spare			-	
59 / 60	UI18		Spare			-	
61 / 62	UI19		Spare			-	
63 / 64	UI20		Spare			-	
65 / 66	UI21		Spare			-	
67 / 68	UI22		Spare			-	
69 / 70	UI23		Spare			-	
71 / 72	UI24		Spare			-	
73 / 74	UI25		Spare			-	
75 / 76	UI26		Spare			-	
77 / 78	UI27		Spare			-	
79 / 80	UI28		Spare			-	
81 / 82	UI29		Spare			-	
83 / 84	UI30		Spare			-	
85 / 86	UI31		Spare			-	
87	WEBLE-1 RS485-A	BACnet	BACnet Comm (to RTU-1)	RS-485	COMM	BY OTHERS	RTU-1 BACnet Card
88							
89							
90	WEBLE-1 RS485-B		Spare				
91							
92							

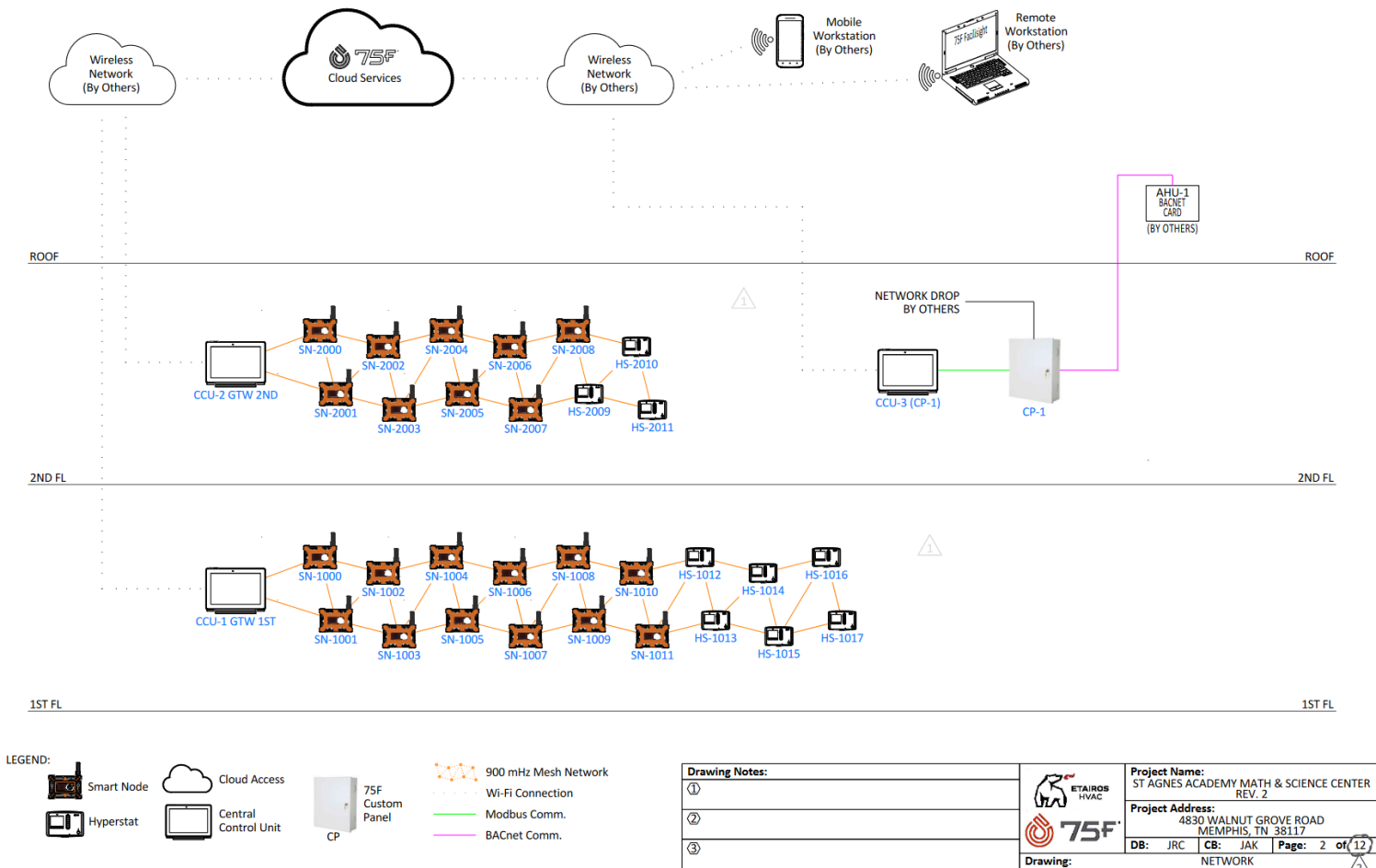


OUR LAST 10%: STANDARDS + PRO SERVICES

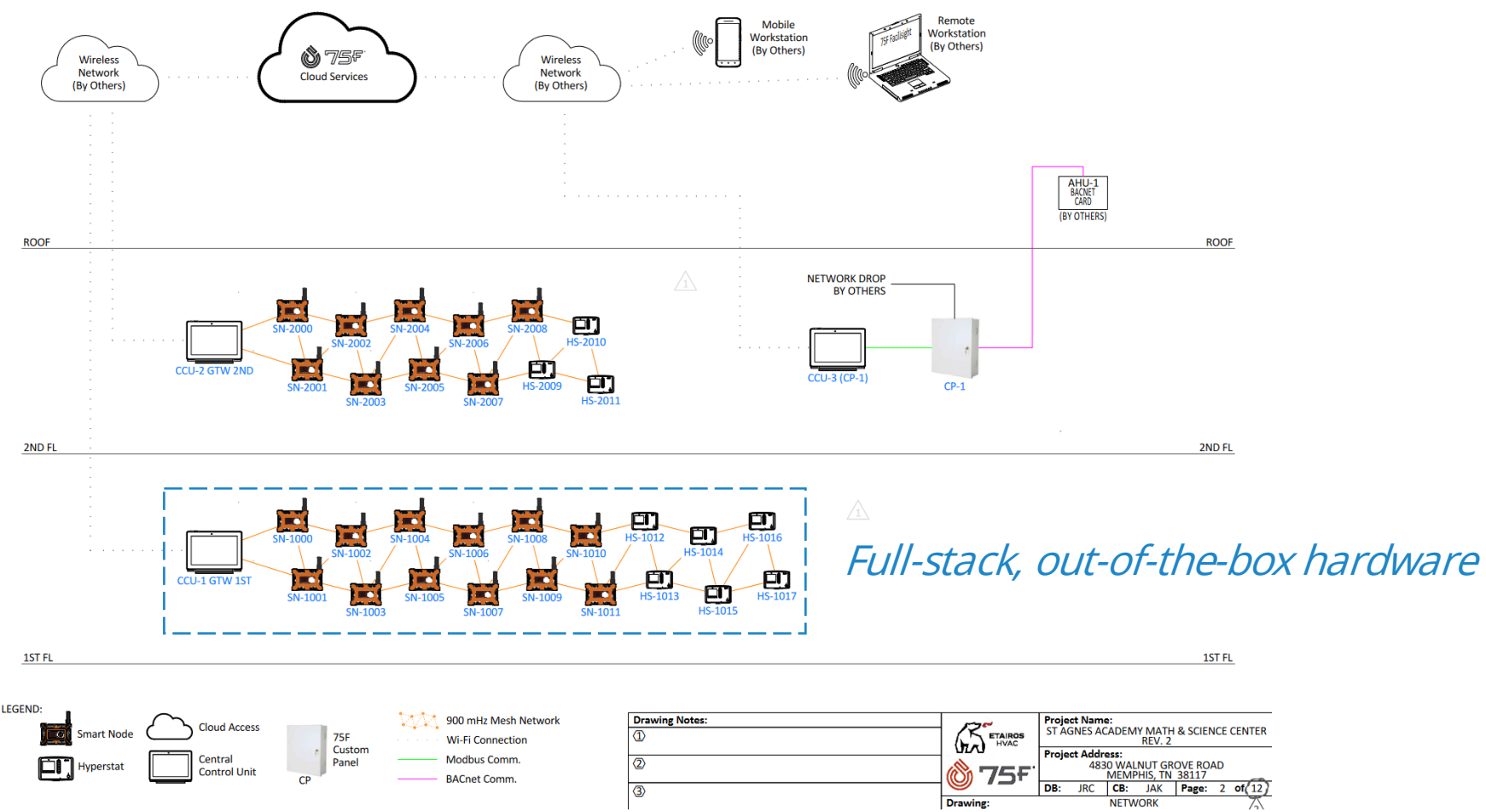
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13	JACE RS485-A COM1	Not Used	NRIO Comm (Internal to Panel)	-	-	-	-
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23 / 24	DO3		Spare				
25 / 26	UI1	1st FI SAT SP	1st Floor Supply Air Temp Setpoint	Voltage (2-Wire)	0-10VDC = 0-100%	75F	7X-CC-K7K-X (CCU-1 GTW 1ST, AO1)
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35 / 36	UI6		Spare			-	
37 / 38	UI7		Spare			-	
39 / 40	UI8		Spare			-	
41 / 42	UI9		Spare			-	
43 / 44	UI10		Spare			-	
45 / 46	UI11		Spare			-	
47 / 48	UI12		Spare			-	
49 / 50	UI13		Spare			-	
51 / 52	UI14		Spare			-	
53 / 54	UI15		Spare			-	
55 / 56	UI16		Spare			-	
57 / 58	UI17		Spare			-	
59 / 60	UI18		Spare			-	
61 / 62	UI19		Spare			-	
63 / 64	UI20		Spare			-	
65 / 66	UI21		Spare			-	
67 / 68	UI22		Spare			-	
69 / 70	UI23		Spare			-	
71 / 72	UI24		Spare			-	
73 / 74	UI25		Spare			-	
75 / 76	UI26		Spare			-	
77 / 78	UI27		Spare			-	
79 / 80	UI28		Spare			-	
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88							
89							
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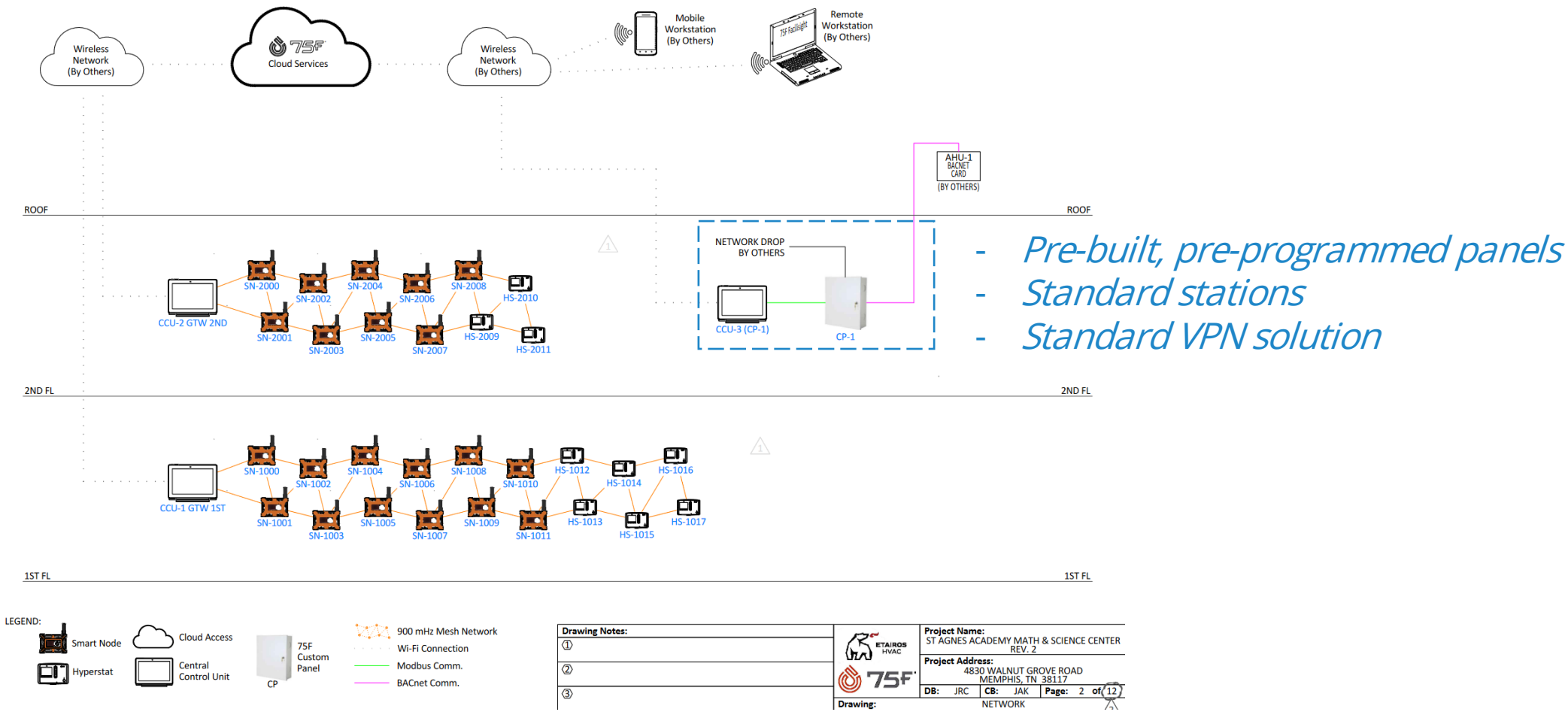
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OUR LAST 10%: STANDARDS + PRO SERVICES



HOW NIAGARA TECH TOOLS HAVE HELPED

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PROBLEM #1: DATA PIPING

floor	▼ Lower-Level	floor floorNum orientation
zone	> Brew Lab	bacnetId bacnetType ccuRef room scheduleRef
floor	▼ Upper-Level	floor floorNum orientation
zone	▼ Emily's Office	bacnetId bacnetType ccuRef room scheduleRef
equip	> Prill Treehouse-MONITORING-1001	ahuRef bacnetId bacnetType ccuRef equip group hyperstat monitoring profile zone
schedule	Zone Schedule	ccuRef cooling days followBuilding heating kind schedule temp unoccupiedZoneSetback zone
zone	▼ Hallway/Living Room	ccuRef room scheduleRef
equip	> Prill Treehouse-cpuecon-1000	bacnetId bacnetType ccuRef cpu equip gatewayRef group hyperstatSplit priorityLevel profile standalone zone
schedule	Zone Schedule	ccuRef cooling days heating kind schedule temp unoccupiedZoneSetback zone
floor	▼ Garage	floor floorNum orientation
zone	▼ Garage Monitoring	bacnetId bacnetType ccuRef room scheduleRef
equip	> Prill Treehouse-MONITORING-1002	ahuRef bacnetId bacnetType ccuRef equip group hyperstat monitoring profile zone
schedule	Zone Schedule	ccuRef cooling days followBuilding heating kind schedule temp unoccupiedZoneSetback zone
equip	▼ Prill Treehouse-SystemEquip	bacnetId bacnetType ccuRef default equip profile system
device	CM-device	cm device his network
device	House	ahuRef ccu createdAt device fmEmail gatewayRef installerEmail
point	Prill Treehouse-CM-otaStatus	ccuRef cur diag enum his hisInterpolate kind ota point sp status zone
point	Prill Treehouse-SystemEquip-airflowSampleWaitTime	airflow ccuRef his hisInterpolate incrementVal kind maxVal minVal point sample sp system time tuner tunerGroup unit wait writable
point	Prill Treehouse-SystemEquip-backFlllDuration	backfill ccuRef config duration enum kind point sp system unit ventilation writable
point	Prill Treehouse-SystemEquip-ccuAlarmVolumeLevel	alarm ccuRef his hisInterpolate incrementVal kind level maxVal minVal point sp system tuner tunerGroup volume writable
point	Prill Treehouse-SystemEquip-clockUpdateInterval	ccuRef clock his hisInterpolate incrementVal interval kind maxVal minVal point sp system tuner tunerGroup unit update writable
point	Prill Treehouse-SystemEquip-cmCurrentTemp	bacnetId bacnetType ccuRef cm current his hisInterpolate kind point sp system temp unit
point	Prill Treehouse-SystemEquip-cmHeartBeatInterval	ccuRef cm heartbeat his hisInterpolate incrementVal interval kind level maxVal minVal point sp system tuner tunerGroup unit writable

PROBLEM #1: DATA PIPING

floor	Lower-Level	floor floorNum orientation
zone	Brew Lab	bacnetId bacnetType ccuRef room scheduleRef
floor	Upper-Level	floor floorNum orientation
zone	Emily's Office	bacnetId bacnetType ccuRef room scheduleRef
equip	Prill Treehouse-MONITORING-1001	ahuRef bacnetId bacnetType ccuRef equip group hyperstat monitoring profile zone
schedule	Zone Schedule	ccuRef cooling days followBuilding heating kind schedule temp unoccupiedZoneSetback zone
zone	Hallway/Living Room	ccuRef room scheduleRef
equip	Prill Treehouse-cpuecon-1000	bacnetId bacnetType ccuRef cpu equip gatewayRef group hyperstatsplit priorityLevel profile standalone zone
schedule	Zone Schedule	ccuRef cooling days heating kind schedule temp unoccupiedZoneSetback zone
floor	Garage	floor floorNum orientation
zone	Garage Monitoring	bacnetId bacnetType ccuRef room scheduleRef
equip	Prill Treehouse-MONITORING-1002	ahuRef bacnetId bacnetType ccuRef equip group hyperstat monitoring profile zone
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Cloud-Based,
Haystack-Native
Digital Twin

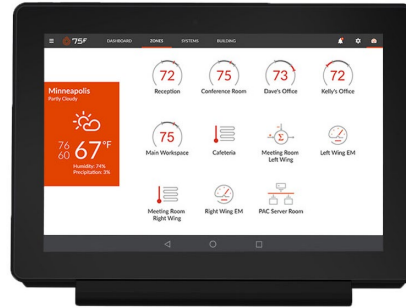
PROBLEM #1: DATA PIPING

floor	▼ Lower-Level	floor floorNum orientation
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floor	▼ Upper-Level	floor floorNum orientation
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equip	> Prill Treehouse-MONITORING-1001	ahuRef bacnetId bacnetType ccuRef equip group hyperstat monitoring profile zone
schedule	Zone Schedule	ccuRef cooling days followBuilding heating kind schedule temp unoccupiedZoneSetback zone
zone	▼ Hallway/Living Room	ccuRef room scheduleRef
equip	> Prill Treehouse-cpuecon-1000	bacnetId bacnetType ccuRef cpu equip gatewayRef group hyperstatSplit priorityLevel profile standalone zone
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*Cloud-Based,
Haystack-Native
Digital Twin*

*...so it's easy to pull
in all our existing
legacy [pick your
old OEM protocol]
controllers, right?*

PROTOCOLS (NOT GREAT)

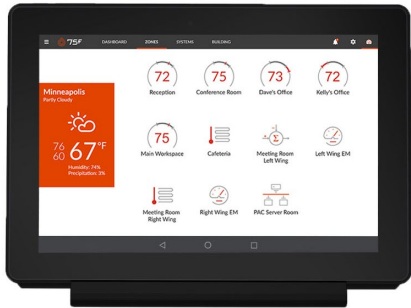


PROTOCOLS (NOT GREAT)



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        "endBit": 15,
        "logicalPointType": [
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            "value": "boolean"
          },
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            "value": "copy"
          },
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          {
            "tagName": "enable"
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          {
            "tagName": "command"
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      }
    ]
  }
]
```

PROTOCOLS (NOT GREAT)



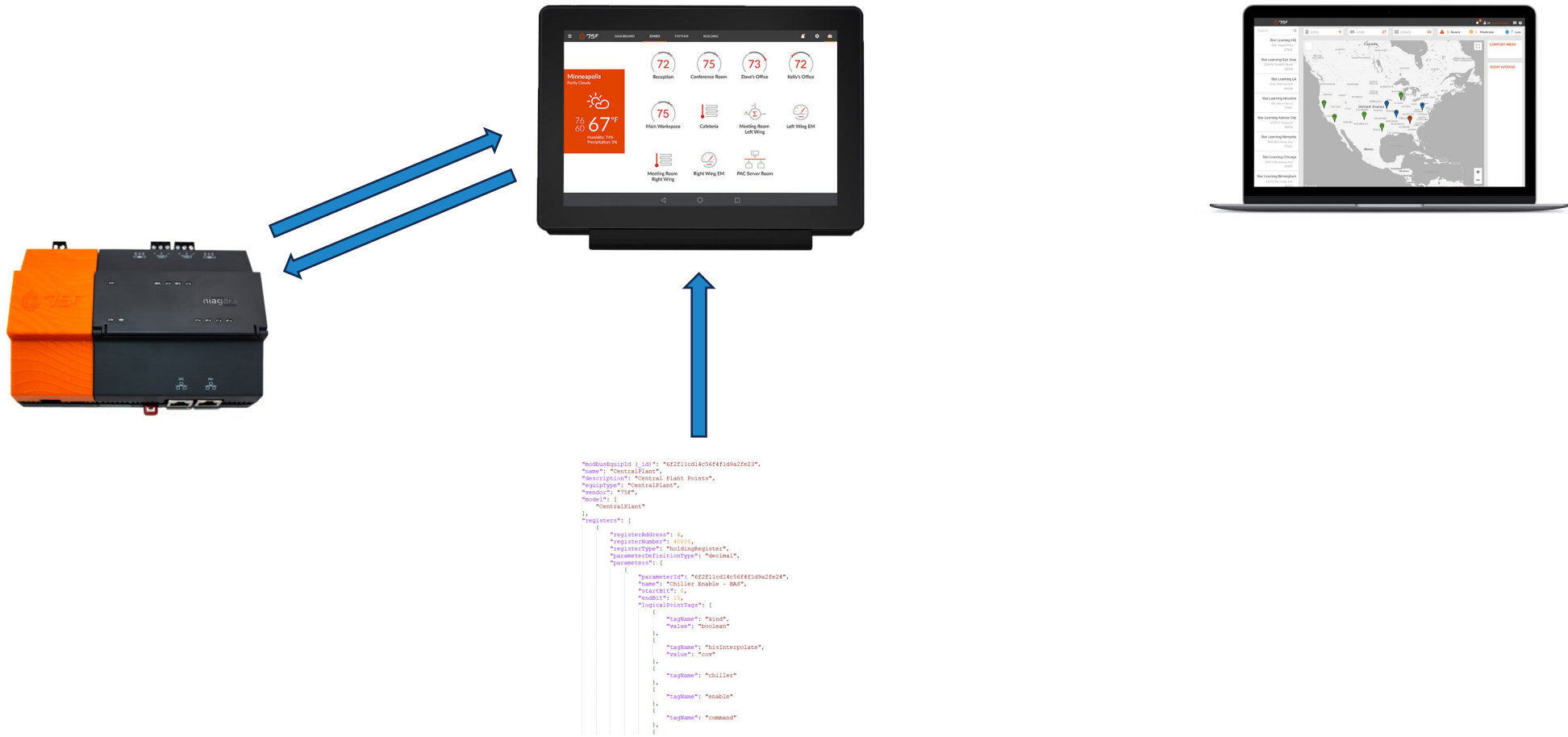
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"modbusEquipment": {
  "id": "622f11cd4c564f4d9a2fe23",
  "name": "CentralPlant",
  "description": "Central Plant Points",
  "equipmentType": "CentralPlant",
  "vendor": "TST",
  "model": [
    "CentralPlant"
  ],
  "registers": [
    {
      "registerAddress": 4,
      "registerNumber": 4000,
      "registerType": "holdingRegister",
      "parameterDefinitionType": "decimal",
      "parameters": [
        {
          "parameterId": "622f11cd4c564f4d9a2fe24",
          "name": "Chiller Enable - BAC",
          "startBit": 0,
          "endBit": 15,
          "logicalPointType": [
            {
              "tagname": "kind",
              "value": "boolean"
            },
            {
              "tagname": "isInterpolate",
              "value": "copy"
            },
            {
              "tagname": "chiller"
            },
            {
              "tagname": "enable"
            },
            {
              "tagname": "command"
            }
          ]
        }
      ]
    }
  ]
}
```

PROTOCOLS (NOT GREAT)

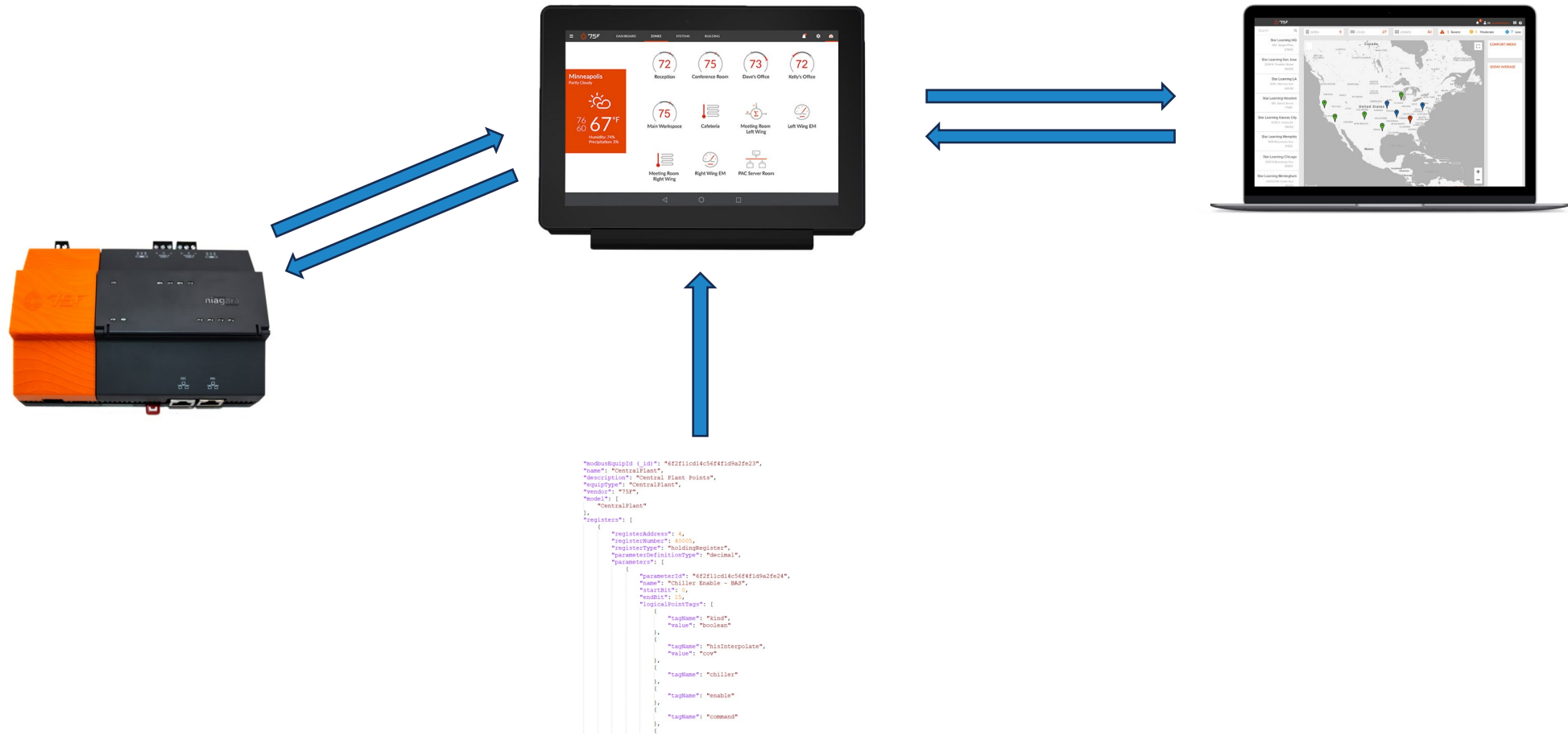


```
{
  "name": "CentralPlant",
  "description": "Central Plant Points",
  "equipment": "CentralPlant",
  "vendor": "TST",
  "model": [
    "CentralPlant"
  ],
  "registers": [
    {
      "registerAddress": 4,
      "registerNumber": 4000,
      "registerType": "holdingRegister",
      "parameterDefinitionType": "decimal",
      "parameters": [
        {
          "parameterId": "4022f11cd4c564f1d9a2fe24",
          "name": "Chiller Enable - BAC",
          "startBit": 0,
          "endBit": 15,
          "logicalPointType": [
            {
              "tagname": "kind",
              "value": "boolean"
            },
            {
              "tagname": "isInterpolate",
              "value": "copy"
            },
            {
              "tagname": "chiller"
            },
            {
              "tagname": "enable"
            },
            {
              "tagname": "command"
            }
          ]
        }
      ]
    }
  ]
}
```

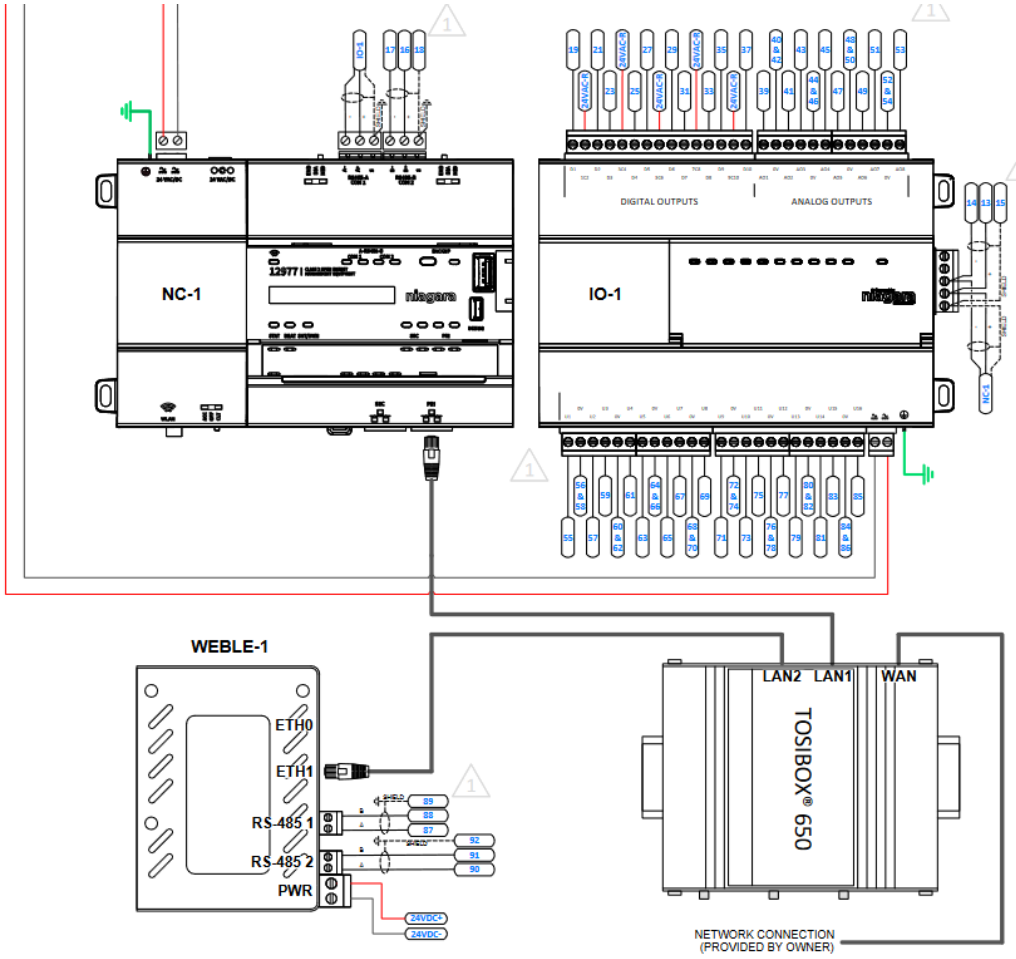
PROTOCOLS (NOT GREAT)



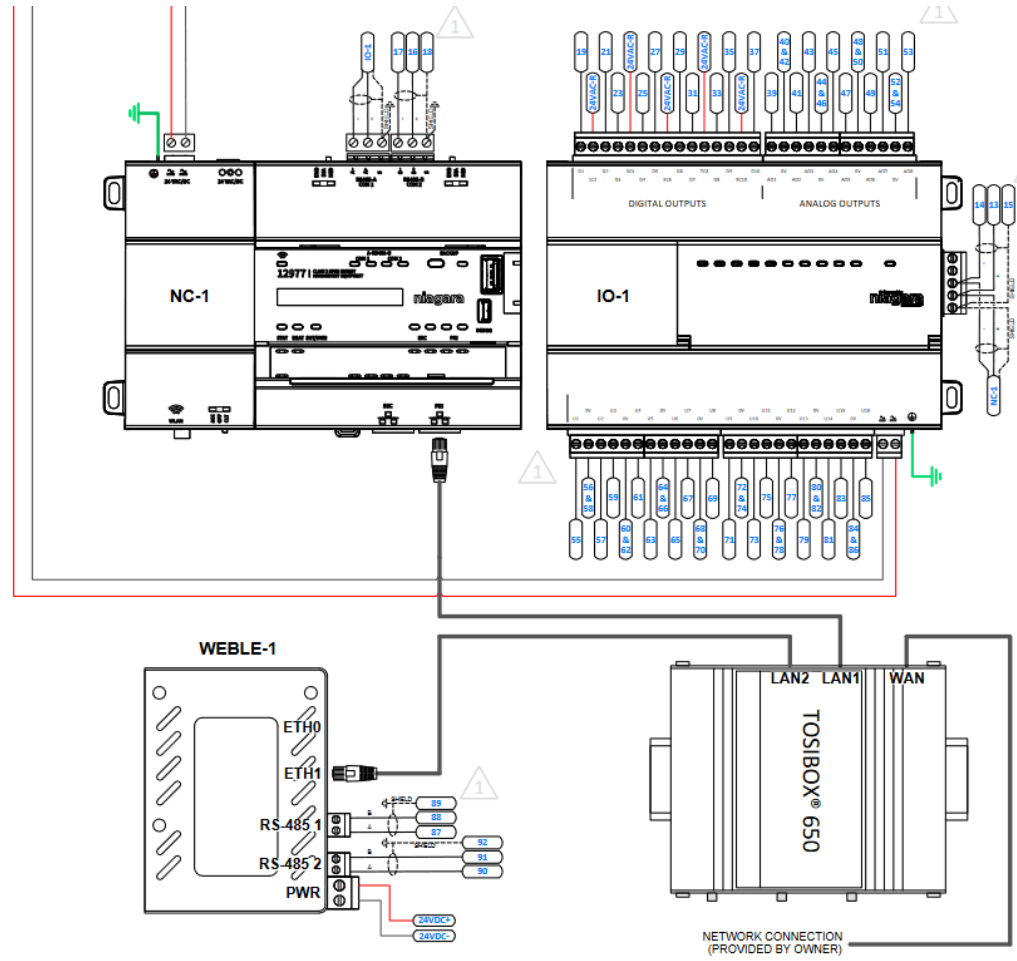
PROTOCOLS (NOT GREAT)



GATEWAYS + APIS (GOOD ENOUGH FOR US)

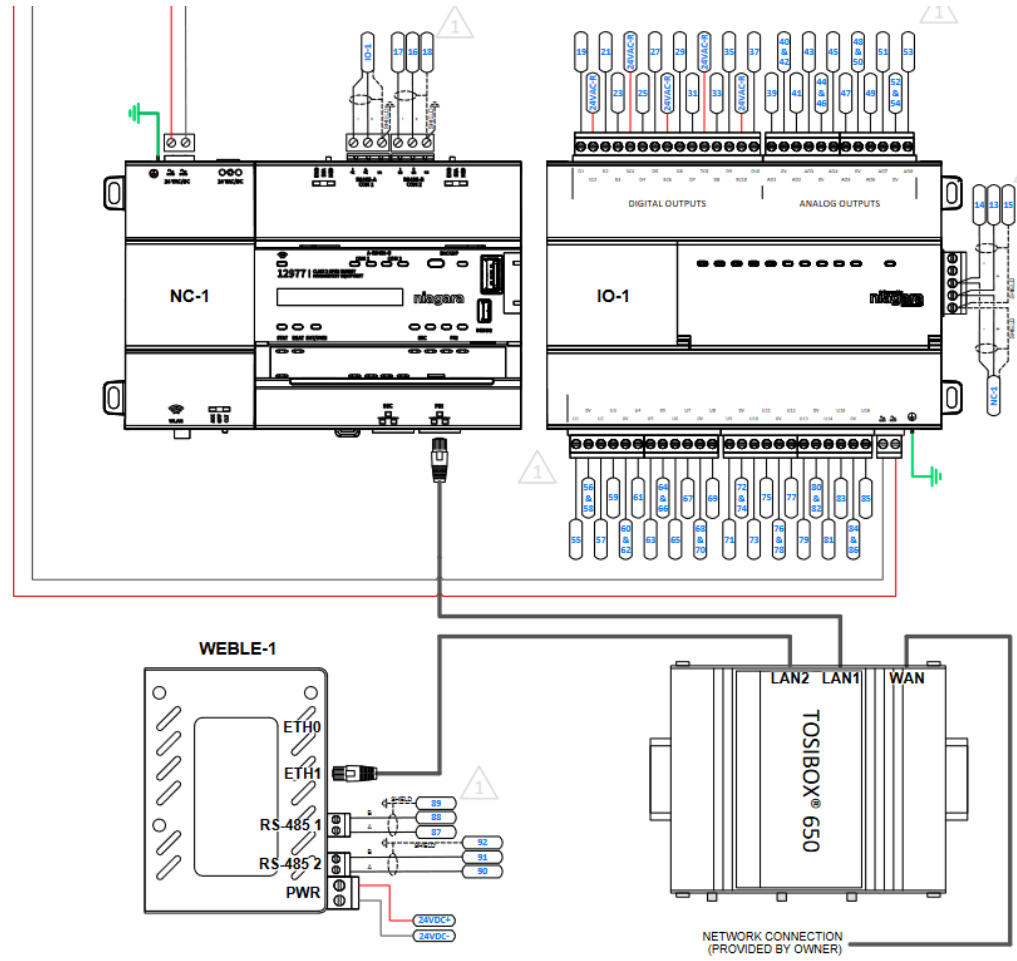


GATEWAYS + APIS (GOOD ENOUGH FOR US)



LAN1: BACnet/IP to JACE

GATEWAYS + APIS (GOOD ENOUGH FOR US)



DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Points	Seventy Five F Point Device Ext
Discovery Preferences	N Discovery Preferences
PrillTreehouse	
Id	2d814b4f-3e94-48b2-9903-97f29e22918f
Ref Type	Site
HouseSystemEquip	
LowerLevel	
Id	59f1c62e-b533-4d18-8c27-a52e12009340
Ref Type	Floor
hs:orientation	0
hs:lastModifiedDate	2024-03-22T14:40:12.454Z
hs:navId	59f1c62e-b533-4d18-8c27-a52e12009340
hs:lastModifiedBy	ccu_8c8c65cc4-7c49-41c3-9c15-6c7021cd00a
hs:siteRef	2d814b4f-3e94-48b2-9903-97f29e22918f
hs:createdDateTime	2024-03-22T14:41:19.970Z
hs:haystack75fid	3ea707d4-eb45-4f5c-b9da-16908d13dad5
hs:room	marker
hs:dis	Brew Lab
hs:floorRef	59f1c62e-b533-4d18-8c27-a52e12009340
hs:fid	3ea707d4-eb45-4f5c-b9da-16908d13dad5
MONITORING1003	
coolingDeadband	2.0 °F {ok} @ def
coolingUserLimitMax	77 °F {ok} @ def
coolingUserLimitMin	72 °F {ok} @ def
heatingDeadband	2.0 °F {ok} @ def
heatingUserLimitMax	72 °F {ok} @ def
heatingUserLimitMin	67 °F {ok} @ def
occupancyState	occupied {ok}
unoccupiedZoneSetback	5 °F {ok} @ def
zoneHvacMode	DUAL_TEMP {ok}
UpperLevel	
Garage	

floor	Lower-Level
zone	Brew Lab
floor	Upper-Level
zone	Emily's Office
equip	Prill Treehouse-MONITORING-1001
schedule	Zone Schedule
zone	Hallway/Living Room
equip	Prill Treehouse-cpucon-1000
schedule	Zone Schedule
floor	Garage
zone	Garage Monitoring
equip	Prill Treehouse-MONITORING-1002
schedule	Zone Schedule
equip	Prill Treehouse-SystemEquip
device	CM-device
device	House
point	Prill Treehouse-CM-otaStatus
point	Prill Treehouse-SystemEquip-airflowSampleWaitTime
point	Prill Treehouse-SystemEquip-backFillDuration
point	Prill Treehouse-SystemEquip-ccuAlarmVolumeLevel
point	Prill Treehouse-SystemEquip-clockUpdateInterval
point	Prill Treehouse-SystemEquip-cmCurrentTemp
point	Prill Treehouse-SystemEquip-cmHeartBeatInterval

DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Points	Seventy Five F Point Device Ext
Discovery Preferences	N Discovery Preferences
PrillTreehouse	
Id	2d814b4f-3e94-48b2-9903-97f29e22918f
Ref Type	Site
HouseSystemEquip	
LowerLevel	
Id	59f1c62e-b533-4d18-8c27-a52e12009340
Ref Type	Floor
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hs:lastModifiedDate	2024-03-22T14:40:12.454Z
hs:navId	59f1c62e-b533-4d18-8c27-a52e12009340
hs:lastModifiedBy	ccu_8c8c65cc4-7c49-41c3-9c15-6c7021cd00a
hs:siteRef	2d814b4f-3e94-48b2-9903-97f29e22918f
hs:createdDateTime	2024-03-22T14:41:19.970Z
hs:haystack75fid	3ea707d4-eb45-4f5c-b9da-16908d13dad5
hs:room	marker
hs:dis	Brew Lab
hs:floorRef	59f1c62e-b533-4d18-8c27-a52e12009340
hs:dis	3ea707d4-eb45-4f5c-b9da-16908d13dad5
MONITORING1003	
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heatingUserLimitMin	67 °F {ok} @ def
occupancyState	occupied {ok}
unoccupiedZoneSetback	5 °F {ok} @ def
zoneHvacMode	DUAL_TEMP {ok}
UpperLevel	
Garage	



floor	Lower-Level
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floor	Upper-Level
zone	Emily's Office
equip	Prill Treehouse-MONITORING-1001
schedule	Zone Schedule
zone	Hallway/Living Room
equip	Prill Treehouse-cpucon-1000
schedule	Zone Schedule
floor	Garage
zone	Garage Monitoring
equip	Prill Treehouse-MONITORING-1002
schedule	Zone Schedule
equip	Prill Treehouse-SystemEquip
device	CM-device
device	House
point	Prill Treehouse-CM-otaStatus
point	Prill Treehouse-SystemEquip-airflowSampleWaitTime
point	Prill Treehouse-SystemEquip-backFillDuration
point	Prill Treehouse-SystemEquip-ccuAlarmVolumeLevel
point	Prill Treehouse-SystemEquip-clockUpdateInterval
point	Prill Treehouse-SystemEquip-cmCurrentTemp
point	Prill Treehouse-SystemEquip-cmHeartBeatInterval

DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

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hs:lastModifiedBy	ccu_8c8c65cc4-7c49-41c3-9c15-6c7021cd00a
hs:siteRef	2d814b4f-3e94-48b2-9903-97f29e22918f
hs:createdDateTime	2024-03-22T14:41:19.970Z
hs:haystack75fid	3ea707d4-eb45-4f5c-b9da-16908d13dad5
hs:room	marker
hs:dis	Brew Lab
hs:floorRef	59f1c62e-b533-4d18-8c27-a52e12009340
hs:dis	3ea707d4-eb45-4f5c-b9da-16908d13dad5
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heatingUserLimitMin	67 °F {ok} @ def
occupancyState	occupied {ok}
unoccupiedZoneSetback	5 °F {ok} @ def
zoneHvacMode	DUAL_TEMP {ok}
UpperLevel	
Garage	



floor	Lower-Level
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point	Prill Treehouse-SystemEquip-backFillDuration
point	Prill Treehouse-SystemEquip-ccuAlarmVolumeLevel
point	Prill Treehouse-SystemEquip-clockUpdateInterval
point	Prill Treehouse-SystemEquip-cmCurrentTemp
point	Prill Treehouse-SystemEquip-cmHeartBeatInterval

DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Property Sheet

SeventyFiveFNetwork (Seventy Five F Network)

Status {ok}

Enabled ☒ true

Fault Cause

Health Ok [26-Mar-24 8:46 AM CDT]

Down ☒ false

Alarm ☒ false

Last Ok Time 26-Mar-2024 08:46 AM CDT

Last Fail Time 22-Mar-2024 09:03 AM CDT

Last Fail Cause Missing username, password, or API subsc:

Alarm Source Info Alarm Source Info

Monitor Ping Monitor

Tuning Policies Tuning Policy Map

Poll Scheduler N Poll Scheduler

Credentials

Username

Password

Api Subscription Key

SeventyFiveFSite Seventy Five F Site

Status {ok}

Enabled ☒ true

Fault Cause

Health Ok [26-Mar-24 8:46 AM CDT]

Down ☒ false

Alarm ☒ false

Last Ok Time 26-Mar-2024 08:46 AM CDT

Last Fail Time 26-Mar-2024 08:46 AM CDT

Last Fail Cause SiteId cannot be empty.

Alarm Source Info Alarm Source Info

Poll Frequency Fast

Points Seventy Five F Point Device Ext

Site Id 2d814b4f-3e94-48b2-9903-97f29e22918f

DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Property Sheet

SeventyFiveFNetwork (Seventy Five F Network)

Status

{ok}

Enabled

true

Fault Cause

Health

Ok [26-Mar-24 8:46 AM CDT]

Down

false

Alarm

false

Last Ok Time

26-Mar-2024 08:46 AM CDT

Last Fail Time

22-Mar-2024 09:03 AM CDT

Last Fail Cause

Missing username, password, or API subsc:

Alarm Source Info

Alarm Source Info

Monitor

Ping Monitor

Tuning Policies

Tuning Policy Map

Poll Scheduler

N Poll Scheduler

Credentials

Username

Password

••••••••

Api Subscription Key

SeventyFiveFSite

Seventy Five F Site

Status

{ok}

Enabled

true

Fault Cause

Health

Ok [26-Mar-24 8:46 AM CDT]

Down

false

Alarm

false

Last Ok Time

26-Mar-2024 08:46 AM CDT

Last Fail Time

26-Mar-2024 08:46 AM CDT

Last Fail Cause

SiteId cannot be empty.

Alarm Source Info

Alarm Source Info

Poll Frequency

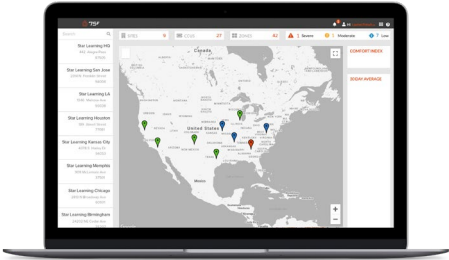
Fast

Points

Seventy Five F Point Device Ext

Site Id

2d814b4f-3e94-48b2-9903-97f29e22918f



House-Brew Lab-MONITORING-1003-zoneVOCThreshold

ccuRef, concentration, config, cpu, createdDateTime, dis, equipRef, floorRef, group, his, hisInterpolate, kind, lastModifiedBy, lastModifiedDateTime, point, roomRef, siteRef, sp, standalone, threshold, tz, unit, voc, writable, zone

Lvl 7 > 1200
Lvl 8 > 1000

DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Property Sheet

SeventyFiveFNetwork (Seventy Five F Network)

Status

{ok}

Enabled

true

Fault Cause

Health

Ok [26-Mar-24 8:46 AM CDT]

Down

false

Alarm

false

Last Ok Time

26-Mar-2024 08:46 AM CDT

Last Fail Time

22-Mar-2024 09:03 AM CDT

Last Fail Cause

Missing username, password, or API subsc:

Alarm Source Info

Alarm Source Info

Monitor

Ping Monitor

Tuning Policies

Tuning Policy Map

Poll Scheduler

N Poll Scheduler

Credentials

Username

Password

Api Subscription Key

SeventyFiveFSite

Seventy Five F Site

Status

{ok}

Enabled

true

Fault Cause

Health

Ok [26-Mar-24 8:46 AM CDT]

Down

false

Alarm

false

Last Ok Time

26-Mar-2024 08:46 AM CDT

Last Fail Time

26-Mar-2024 08:46 AM CDT

Last Fail Cause

SiteId cannot be empty.

Alarm Source Info

Alarm Source Info

Poll Frequency

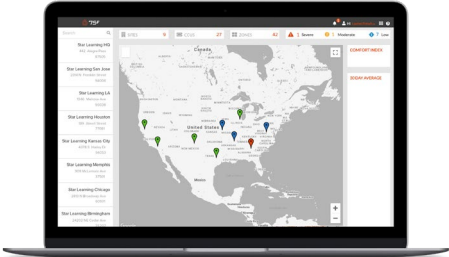
Fast

Points

Seventy Five F Point Device Ext

Site Id

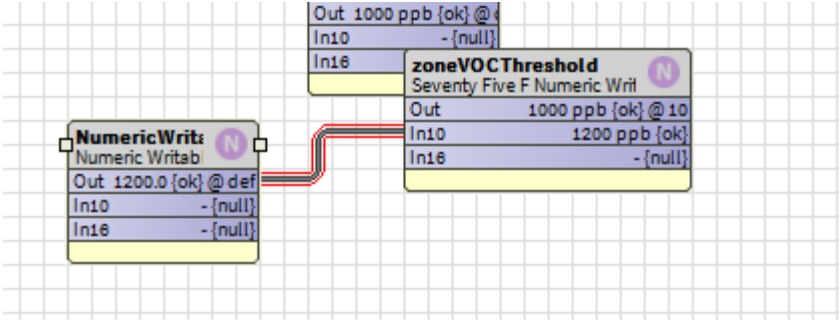
2d814b4f-3e94-48b2-9903-97f29e22918f



House-Brew Lab-MONITORING-1003-zoneVOThreshold

ccuRef, concentration, config, cpu, createdDateTime, dis, equipRef, floorRef, group, his, hisInterpolate, kind, lastModifiedBy, lastModifiedDateTime, point, roomRef, siteRef, sp, standalone, threshold, tz, unit, voc, writable, zone

Lvl 7 > 1200
Lvl 8 > 1000



DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Property Sheet

SeventyFiveFNetwork (Seventy Five F Network)

Status {ok}

Enabled true

Fault Cause

Health Ok [26-Mar-24 8:46 AM CDT]

Down false

Alarm false

Last Ok Time 26-Mar-2024 08:46 AM CDT

Last Fail Time 22-Mar-2024 09:03 AM CDT

Last Fail Cause Missing username, password, or API subsc:

Alarm Source Info Alarm Source Info

Monitor Ping Monitor

Tuning Policies Tuning Policy Map

Poll Scheduler N Poll Scheduler

Credentials Username Password

Api Subscription Key

SeventyFiveFSite Seventy Five F Site

Status {ok}

Enabled true

Fault Cause

Health Ok [26-Mar-24 8:46 AM CDT]

Down false

Alarm false

Last Ok Time 26-Mar-2024 08:46 AM CDT

Last Fail Time 26-Mar-2024 08:46 AM CDT

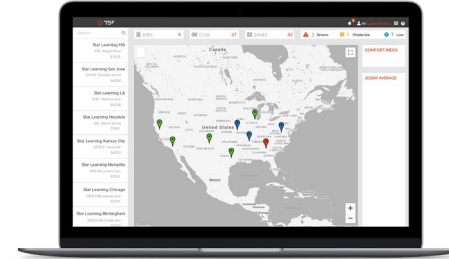
Last Fail Cause SiteId cannot be empty.

Alarm Source Info Alarm Source Info

Poll Frequency Fast

Points Seventy Five F Point Device Ext

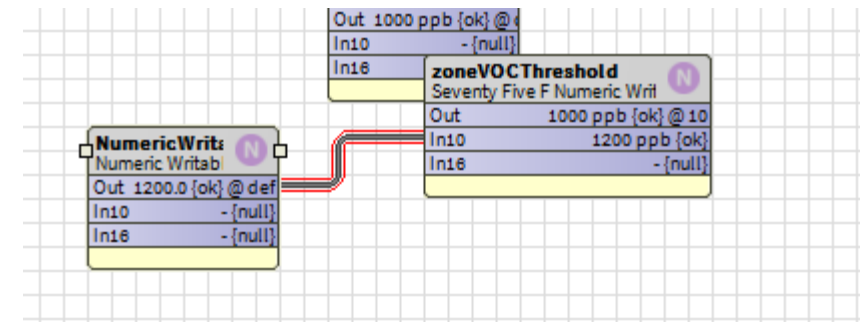
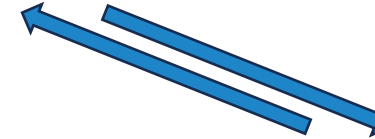
Site Id 2d814b4f-3e94-48b2-9903-97f29e22918f



House-Brew Lab-MONITORING-1003-zoneVOCThreshold

ccuRef, concentration, config, cpu, createdDateTime, dis, equipRef, floorRef, group, his, hisInterpolate, kind, lastModifiedBy, lastModifiedDateTime, point, roomRef, siteRef, sp, standalone, threshold, tz, unit, voc, writable, zone

Lvl 7 > 1200
Lvl 8 > 1000



DIRECT-TO-CLOUD DRIVER (SCALABLE FOR ALL)

Drivers

SeventyFiveFNetwork

SeventyFiveFSite

Points

PrillTreehouse

HouseSystemEquip

Seventy Five F Point Manager

Seventy Five F Learn Points

Success

Discovered

36 objects

Dis	Kind	Id
airflowSampleWaitTime	Numeric Writable	d689c17a-14db-40c3-befa-459672f27d0b
ccuAlarmVolumeLevel	Numeric Writable	a08ff2d6-3e04-4c40-9e11-6bd870e59e99
clockUpdateInterval	Numeric Writable	d867924d-5b5d-449d-ad7f-ccee716e880
cmCurrentTemp	Numeric Point	6dc185ef-be61-43fc-a3ca-2c59089d82c7
cmHeartBeatInterval	Numeric Writable	52403ab7-47ab-4d08-a5fd-d258ac86da31
cmResetCommandTimer	Numeric Writable	298bb4cb-6a02-4753-920e-a460d1637509
cmTempPercentDeadZonesAllowed	Numeric Writable	b8e00880-d2c4-4c4f-960b-32c88eb7e8c4
coolingPreconditioningRate	Numeric Writable	e64ae5ae-4fc9-462b-b0aa-81e821a8d32f
headDataToSite	Numeric Writable	9371a01-730a-4a69-06b8-d4b771a0a1a

Database

0 objects

Name	Type	Out	Enabled	Tuning Policy Name	Id
------	------	-----	---------	--------------------	----

New Folder

New

Edit

Discover

Cancel

Add

Seventy Five F Learn Points

Success

SeventyFiveF on My Host: LAPTOP-QCA6Q6KM (SeventyFiveF)

Add

Name	Type	Enabled	Facets	Tuning Policy
airflowSampleWaitTime	Seventy Five F Numeric Writable	true	units=min,precision=0,min=-inf,max=+inf	defaultPol
ccuAlarmVolumeLevel	Seventy Five F Numeric Writable	true		defaultPol
clockUpdateInterval	Seventy Five F Numeric Writable	true	units=min,precision=0,min=-inf,max=+inf	defaultPol
cmCurrentTemp	Seventy Five F Numeric Point	true	units=*F,precision=0,min=-inf,max=+inf	defaultPol
cmHeartBeatInterval	Seventy Five F Numeric Writable	true	units=min,precision=0,min=-inf,max=+inf	defaultPol
cmResetCommandTimer	Seventy Five F Numeric Writable	true	units=min,precision=0,min=-inf,max=+inf	defaultPol
cmTempPercentDeadZonesAllowed	Seventy Five F Numeric Writable	true		defaultPol

Name

airflowSampleWaitTime

Type

Seventy Five F Numeric Writable

Enabled

true

Facets

units=min,precision=0 min,min=-inf min,max=+inf mi... >> ⌚

Tuning Policy Name

Default Policy

Id

d689c17a-14db-40c3-befa-459672f27d0b

OK

Cancel

WHAT'S NEXT?

NS2024
APRIL 15 - 17 | ANAHEIM, CA

Thank You!





NS2024
APRIL 15 - 17 | ANAHEIM, CA

**Leveraging Niagara
to maximize the
value of smart and
connected field
devices**

Our Mission

Belimo is the global market leader in the development, production and sales of field devices for the energy-efficient control of heating, ventilation, and air-conditioning systems.

The focus of our core business is damper actuators, control valves, sensors, and meters.

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Belimo is the global market leader in the development, production and sales of field devices for the energy-efficient control of heating, ventilation, and air-conditioning systems.

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Our Mission

*Belimo is the global market leader in the development, production and sales of field devices for the energy-efficient control of **heating, ventilation, and air-conditioning systems**.*

*The focus of our core business is **damper actuators, control valves, sensors, and meters**.*

FIELD DEVICE APPLICATIONS

Providing energy-efficient control of heating, ventilation, and air-conditioning systems

Air

Room Comfort



Fire & Smoke Protection



Air Handling Unit



Water

Cooling Tower



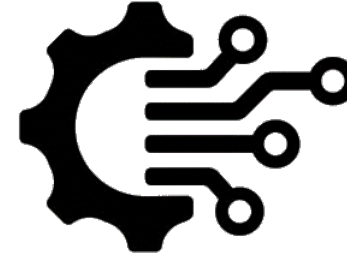
Cooling Coil



Heating Coil



ANALOG VS DIGITAL DEVICES



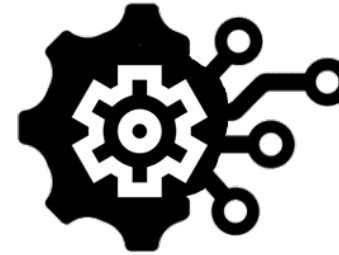
- On/off or 2-10v control
- Sensor values represented as voltage or resistance requiring conversion
- Configuration using a screw-driver, jumpers or dip switches
- No extra data

- On/off, 2-10v or BUS control
- Sensor values represented as real world properties
- Configuration using hand-held tools or smartphone
- Device operation KPIs

BASIC VS SMART DEVICES

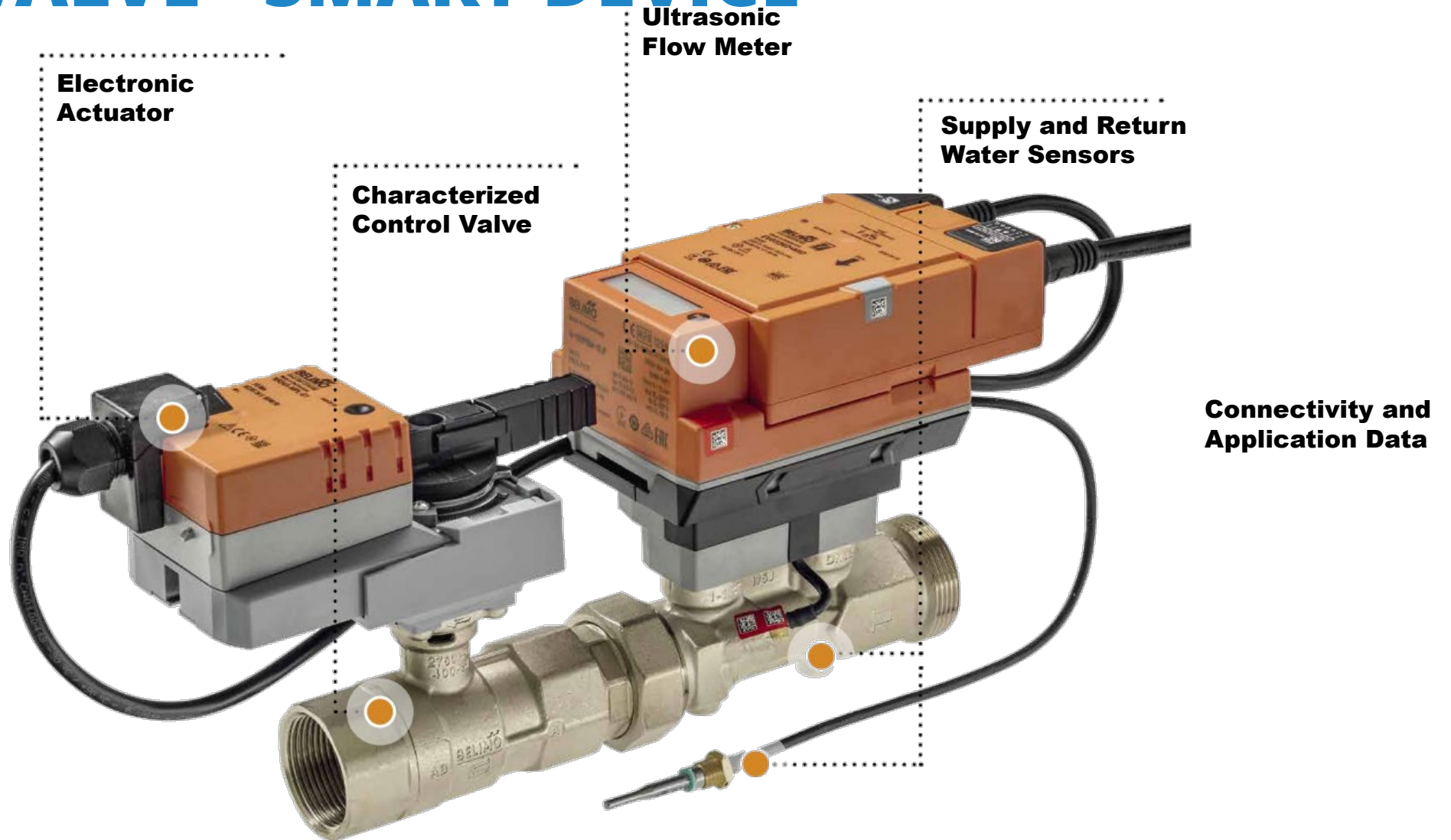


- Position setpoint from BACS
- No optimization
- No UI
- No extra data

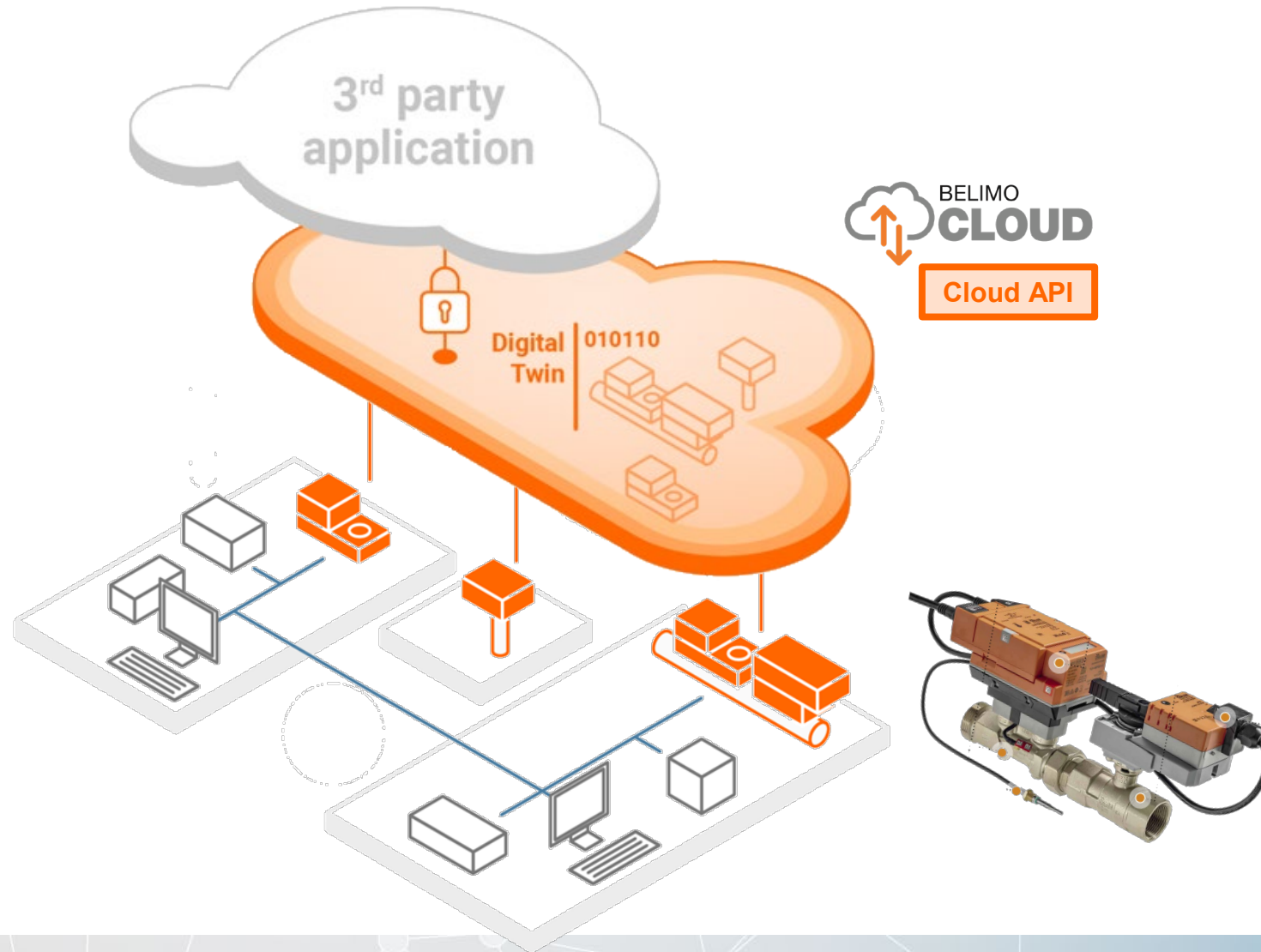


- Setpoint from BACS with local control process – i.e.; flow or temperature
- Local optimization
- Local UI
- Application data

ENERGY VALVE - SMART DEVICE



SMART DEVICE DIGITAL TWINS



LINK UP TO LEVEL UP

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by INLO...

The Niagara Widget helps you in building dashboards with data coming from Belimo devices...



\$0.00



Belimo Digital Ecosystem Driver

by INLO...

The Niagara Driver for connecting to the Belimo Cloud API. The Belimo driver for...



\$0.00



The widget and driver have both been developed by Inlon Engineering and are offered free of charge through the Niagara Marketplace



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★★★★★

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Belimo Digital Ecosystem Driver

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★★★★★

\$0.00

⏮

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FREE TRIAL ▾

FREE PRODUCTS ▾


Belimo Digital Ecosystem Driver
by INLO...
The Niagara building dashboard coming from...
★★★★★


Belimo Digital Ecosystem Driver
by INLO...
The Niagara Driver for connecting to the Belimo Cloud API. The Belimo driver for...
★★★★★

Lowest Arrivals ▾

\$0.00

The widget and driver have both been developed by Inlon Engineering and are offered free of charge through the Niagara Marketplace



LINK UP TO LEVEL UP

All Products ▾ Belimo 🔍

Interested in becoming a seller? Visit [Become A Seller](#) page.

Home > Search results for: 'Belimo'

Search results for: 'Belimo'

Filter Options

CATEGORY

FREE TRIAL

FREE P&H

Sort by: Newest Arrivals ▾

Belimo Digital Ecosystem Widget

by INLO...

The Niagara Widget helps you in building dashboards with data coming from Belimo devices...



\$0.00

Belimo Digital Ecosystem Driver

by INLO...

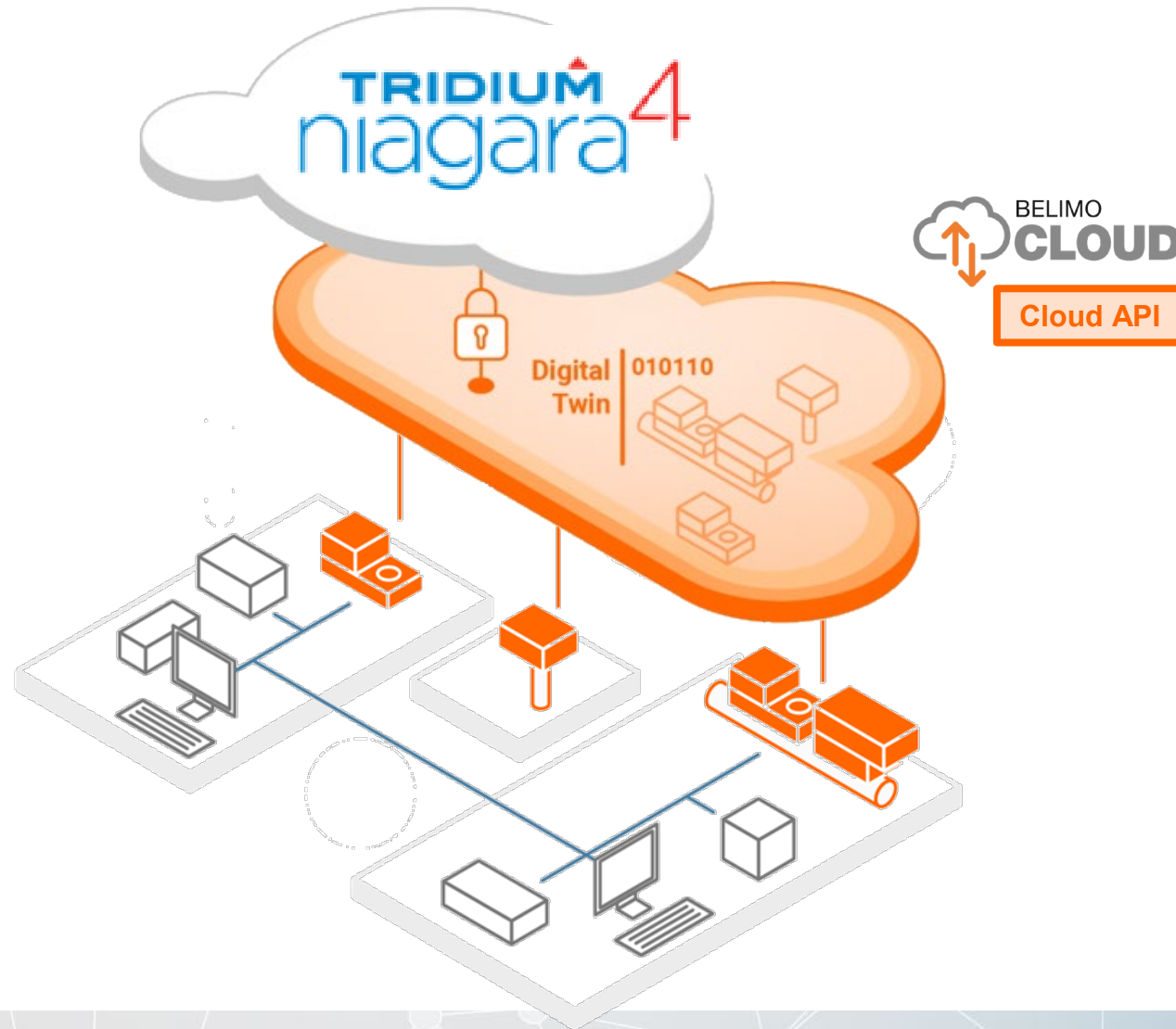
The Belimo Driver helps you in building dashboards with data coming from Belimo devices...

\$0.00



The widget and driver have both been developed by Inlon Engineering and are offered free of charge through the Niagara Marketplace

SMART DEVICE DIGITAL TWINS



ADDING DIGITAL TWIN TO DATABASE

Distech Controls EC-Net 4 Pro

File Edit Search Bookmark

192.168.1.121 (DemoBelimo) : St...

Nav

- My I...
- Config
- Serv...
- Driv...
- Bel...
- Bel...
- Alar...
- Point...
- Virtual
- EnergylotExtens...
- BacnetNetwork
- Local Device
- Bacnet Comm
- Monitor

Ownerid	Ownername	Projectname	Addresscity
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil
GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil

Virtual Virtual

Success

198 objects

Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30186-022-135	energyvalve3/1.2.2
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30187-022-135	energyvalve3/1.2.2
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30192-022-135	energyvalve3/1.2.2
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30236-022-135	energyvalve3/1.2.2
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00399-022-135	energyvalve3/1.2.2
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00400-022-135	energyvalve3/1.2.2
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00413-022-135	energyvalve3/1.2.2

3 objects

Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename	Profileref
Valve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30143-022-135	energyvalve3/1.2.2	/definitions/dataprofiles/energyvalv
Valve_Belimo	Belimo Longus	Hinwil	CH	21821-30003-022-136	energyvalve3/1.2.2	/definitions/dataprofiles/energyvalv
API Usergroup		DE	22118-40002-022-182	EnergyValve4/0.10.3	EnergyValve4/0.10.3	/definitions/dataprofiles/EnergyValv

Folder New Edit Discover Cancel Add Match TagIt Template Config

C:\Users\mraym\Niagara4.12\distech>

ADDING DIGITAL TWIN TO DATABASE

Distech Controls EC-Net 4 Pro

File Edit Search Bookmarks Tools Window Manager Help

192.168.1.121 (DemoBelimo) : Station (DemoBelimo) : Config : Drivers : BelimoDigitalEcosystem

Nav

- My Network
- Config
- Services
- Drivers
 - NiagaraNetwork
 - BelimoDigitalEcosystem
 - ValueForHIM
 - BelimoDigitalEcosystem
 - EnergyIotExtension
 - Virtual
 - Virtual
 - Virtual

Success 198 objects

Deviceid	Devicename	Ownerid	Ownername	Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename
85c725f0-1dcd-4364-a266-072d09250d74	TABS 3.OG D Nord	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30186-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
10a511c4-370f-4a2e-a4bd-22e7fff39bba	TABS 1.OG Nord D Com	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30187-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
6dd6e800-e8e9-4ca3-90ce-83bf8e4e262e	TABS 1.OG Süd C Comfort	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30192-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
		GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30236-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
		GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00399-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
		GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00400-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
		GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00413-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2

Database

Status	Deviceid	Devicename
[ok]	a85f243a-a85f-4039-8721-a78e5bed389f	TABS 1.OG D Süd Comfort@
[ok]	7d4c071a-395c-44f6-a0a9-d8ccb7496ee9	TABS 1.OG Nord B Comfort@
[ok]	6394b6b0-dc43-45ba-9bff-114e3ce0bacc	EV050R2+MID CAS

Discover Cancel Add Match TagIt Template Config

ADDING DIGITAL TWIN TO DATABASE

Distech Controls EC-Net 4 Pro

File Edit Search Bookmarks Tools Window Manager Help

192.168.1.121 (DemoBelimo) Station (DemoBelimo) Config Drivers BelimoDigitalEcosystem

BelimoIoT Device Manager

Nav

My Network

ValueForHistory EnergyBacnetExtension B BelimoDigitalEcosystem EnergyIotExtension Virtual Virtual Virtual

BelimoIoT Discovery

Success

Discovered

198 objects

Drivers

NiagaraNetwork

BelimoDigitalEcosystem

Ecosystem Config

Ecosystem Authorization

Ecosystem Resources

Monitor

Tuning Policies

BelimoIoTDevice

Alarm Source Info

Points

Virtual

EnergyIotExtension

BelimoIoTDevice1

BelimoIoTDevice2

Alarm Source Info

Points

Virtual

EnergyIotExtension

ParentNetwork

Deviceid	Devicename	Ownerid	Ownername	Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename
40-1eea-408b-9f07-d57661f86e6d	TABS 1.OG Süd A Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30186-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
4716-b30a-156c4b30c80d	TABS 4.OG D-Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30187-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
b46e-6f8e521ec676	TABS 3.OGA-Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30192-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
8c3510b7b9e1	TABS EGA Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30236-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
409250d74	TABS 3.OG D Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00399-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
9bba	TABS 1.OG Nord D Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00400-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
62e	TABS 1.OG Süd C Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00413-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2

3 objects

Devicename	Ownerid	Ownername	Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename	Profileref
TABS 1.OG D Süd Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30143-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2	/definitions/dataprofiles/energyvalv
TABS 1.OG Nord B Comfort@HQBelimo	GZSGW1WQER	EnergyValve_Belimo	Belimo Longus	Hinwil	CH	21821-30003-022-136	energyvalve3/1.2.2	energyvalve3/1.2.2	/definitions/dataprofiles/energyvalv
EV050R2+MID CAS	IA1Q808HY3	ClientAPI Usergroup			DE	22118-40002-022-182	EnergyValve4/0.10.3	EnergyValve4/0.10.3	/definitions/dataprofiles/EnergyValv

Database

Status

{ok}

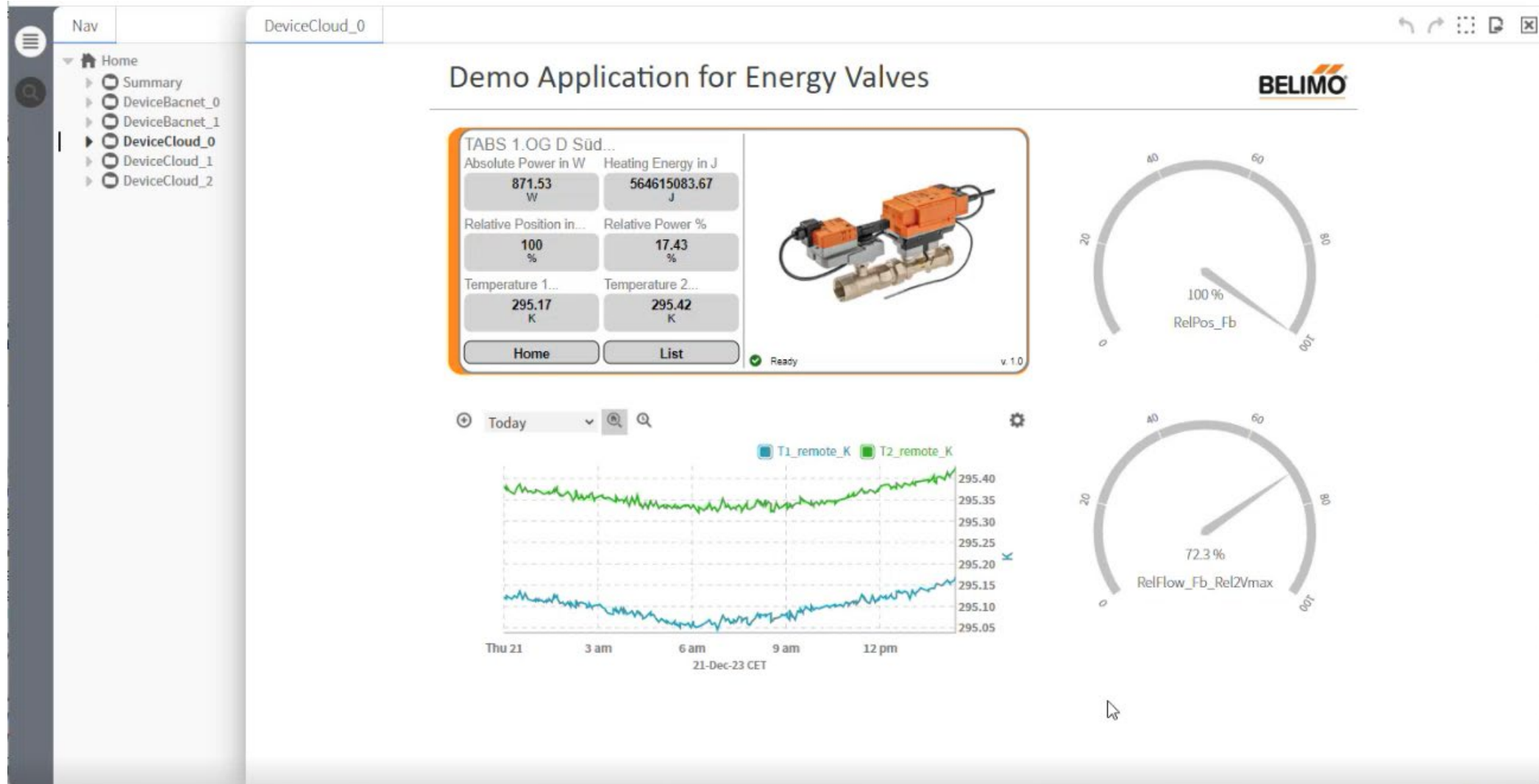
{ok}

{ok}

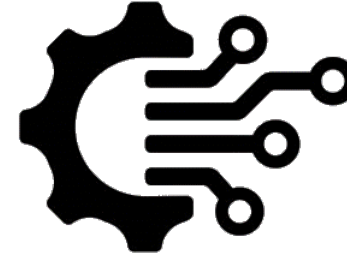
New Folder New Edit Discover Cancel Add Match TagIt Template Config



PRE-BUILT VIEWS USING EXTENSIONS



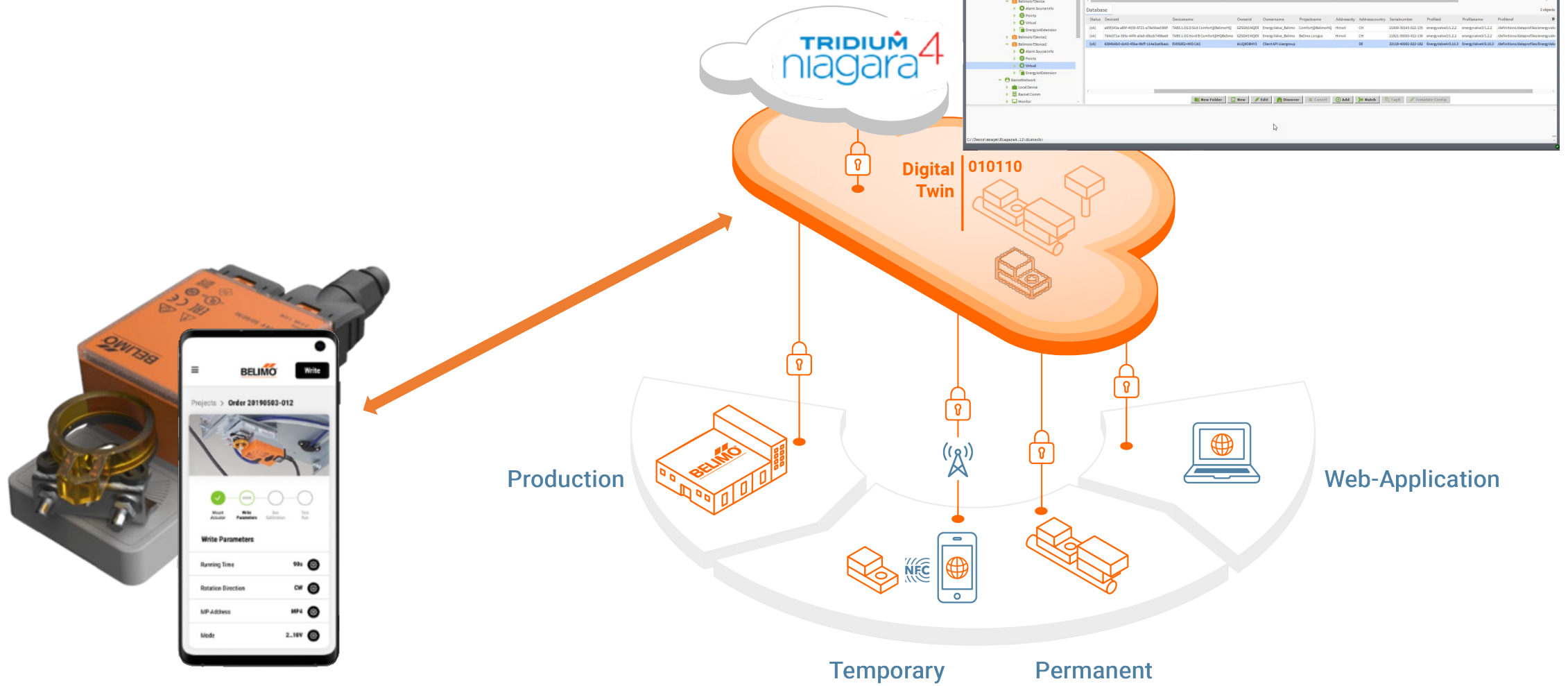
ANALOG VS DIGITAL DEVICES



- On/off or 2-10v control
- Sensor values represented as voltage or resistance requiring conversion
- Configuration using a screw-driver, jumpers or dip switches
- No extra data

- On/off, 2-10v or BUS control
- Sensor values represented as real world properties
- **Configuration using hand-held tools or smartphone**
- Device operation KPIs

BASIC DEVICE DIGITAL TWINS



ENTIRE PROJECT OF DEVICE DIGITAL TWINS

Distech Controls EC-Net 4 Pro

File Edit Search Bookmarks Tools Window Manager Help

192.168.1.121 (DemoBelimo) : Station (DemoBelimo) : Config : Drivers : BelimoDigitalEcosystem

Belimolot Device Manager

Nav

My Network

Config

Services

Drivers

NiagaraNetwork

BelimoDigitalEcosystem

Ecosystem Config

Ecosystem Authorization

Ecosystem Resources

Monitor

Tuning Policies

BelimolotDevice

Alarm Source Info

Points

Virtual

EnergyIotExtension

BelimolotDevice1

BelimolotDevice2

Alarm Source Info

Points

Virtual

EnergyIotExtension

BacnetNetwork

Local Device

Bacnet Comm

Monitor

ValueForHistory

EnergyBacnetExtension

BelimoDigitalEcosystem

EnergyIotExtension

Virtual

Virtual

Virtual

Belimolot Discovery

Success

198 objects

Discovered

Deviceid	Devicename	Ownerid	Ownername	Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename
337eed9-1eea-408b-9f07-d57661f8e6d	TABS 1.OG Süd A Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30186-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
e5abed2c-a8ed-4716-b30a-156c4b30c80d	TABS 4.OG D-Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30187-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
501426b2-6c6d-490c-b46e-6f8e521ec676	TABS 3.OGA-Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30192-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
fb96e292-e036-4449-84b4-8c3510b7b9e1	TABS EGA Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30236-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
85c725f0-1dcd-4364-a266-072d09250d74	TABS 3.OG D Nord Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00399-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
10a511c4-370f-4a2e-a4bd-22e7ff39bba	TABS 1.OG Nord D Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00400-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2
6dd6e800-e8e9-4ca3-90ce-83bf8e4e262e	TABS 1.OG Süd C Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21910-00413-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2

Database

3 objects

Status	Deviceid	Devicename	Ownerid	Ownername	Projectname	Addresscity	Addresscountry	Serialnumber	Profileid	Profilename	Profileref
[ok]	a85f243a-a85f-4039-8721-a78e5bed389f	TABS 1.OG D Süd Comfort@BelimoHQ	GZSGW1WQER	EnergyValve_Belimo	Comfort@BelimoHQ	Hinwil	CH	21909-30143-022-135	energyvalve3/1.2.2	energyvalve3/1.2.2	/definitions/dataprofiles/energyvalv
[ok]	7d4c071a-395c-44f6-a0a9-d8ccb7496ee9	TABS 1.OG Nord B Comfort@HQBelimo	GZSGW1WQER	EnergyValve_Belimo	Belimo Longus	Hinwil	CH	21821-30003-022-136	energyvalve3/1.2.2	energyvalve3/1.2.2	/definitions/dataprofiles/energyvalv
[ok]	6394b6b0-dc43-45ba-9b1f-114e3ce0bacc	EV050R2+MID CAS	IA1Q808HY3	ClientAPI Usergroup		DE	22118-40002-022-182	EnergyValve4/0.10.3	EnergyValve4/0.10.3	/definitions/dataprofiles/EnergyValv	

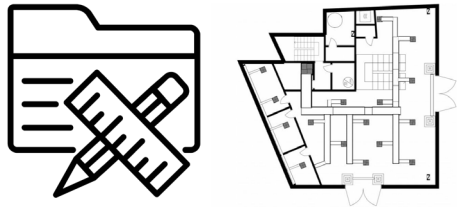
New Folder New Edit Discover Cancel Add Match TagIt Template Config

C:\Users\mraym\Niagara4.12\distech>

DIGITAL TWIN INFO VIEWABLE AND/OR CHANGEABLE IN NIAGARA

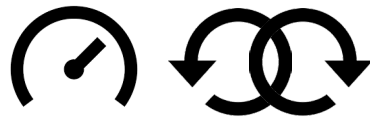
- Device Properties

- Model
- Sales Order
- Project
- Application Tag



- Device Settings

- Signal type / range
- Speed
- Direction

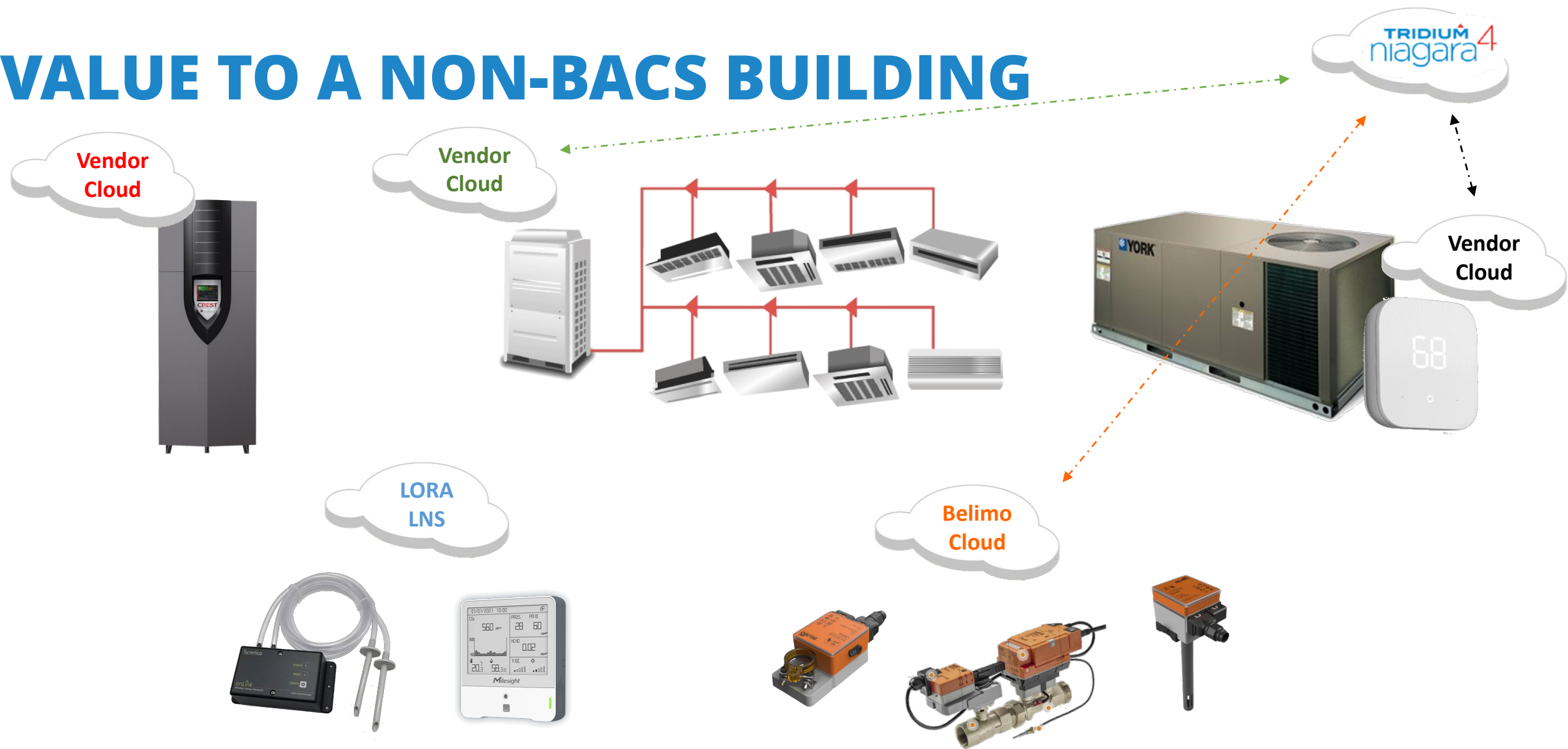


- Device Data

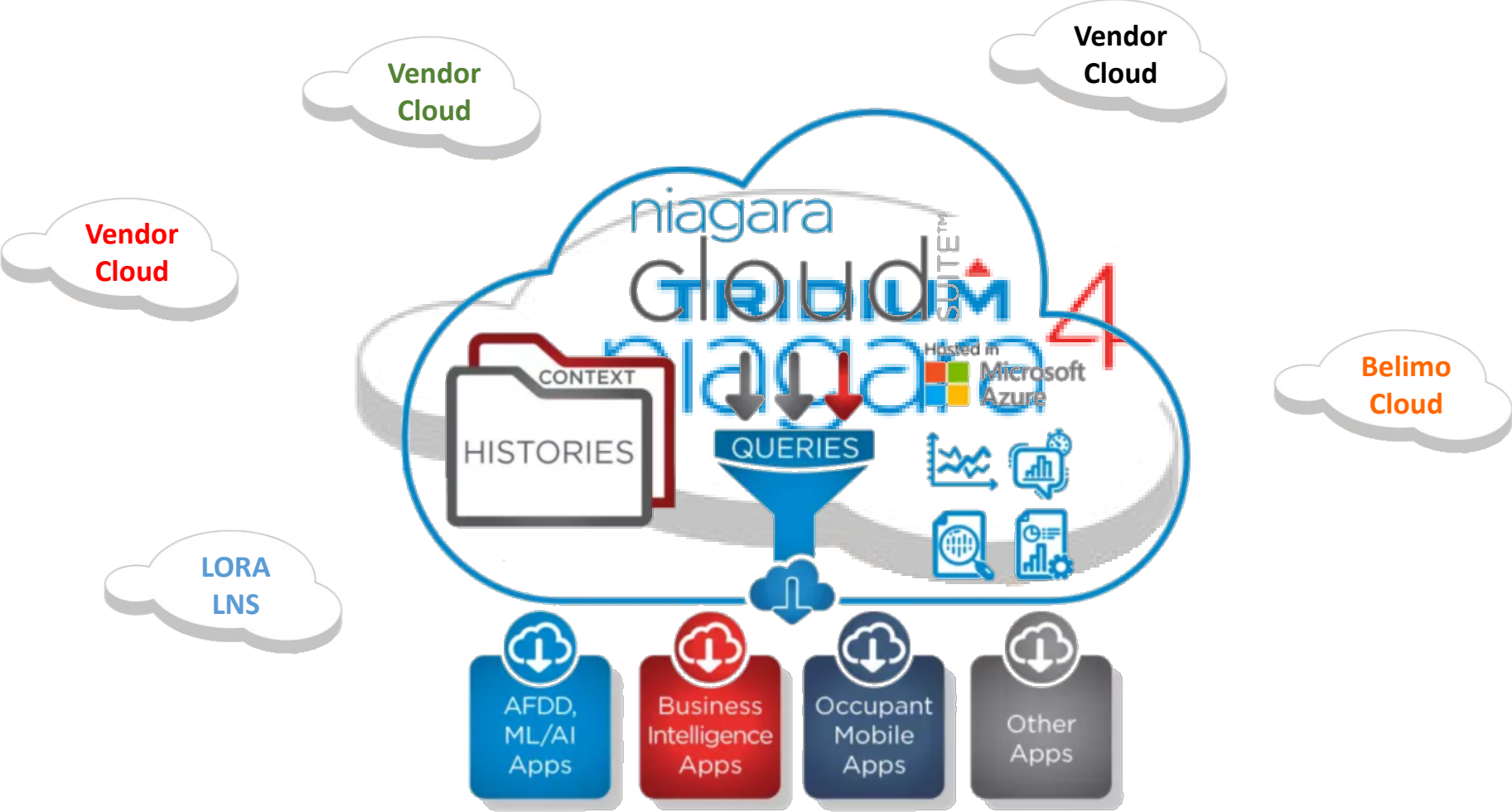
- Device history
- Device KPIs
- Location



VALUE TO A NON-BACS BUILDING



VALUE TO A NON-BACS BUILDING



THANK YOU!

