

Sedona Framework – Best Opportunity for Open Control

HVAC Applications – An SI's Perspective

Jon Vietti

Owner - DDC Support Services





Overview

- Why use Sedona unitary controllers?
- What HVAC applications are a good fit with Sedona unitary controllers?
- How are Sedona HVAC applications produced?
- HVAC Application Example: Fan Coil Unit (FCU)



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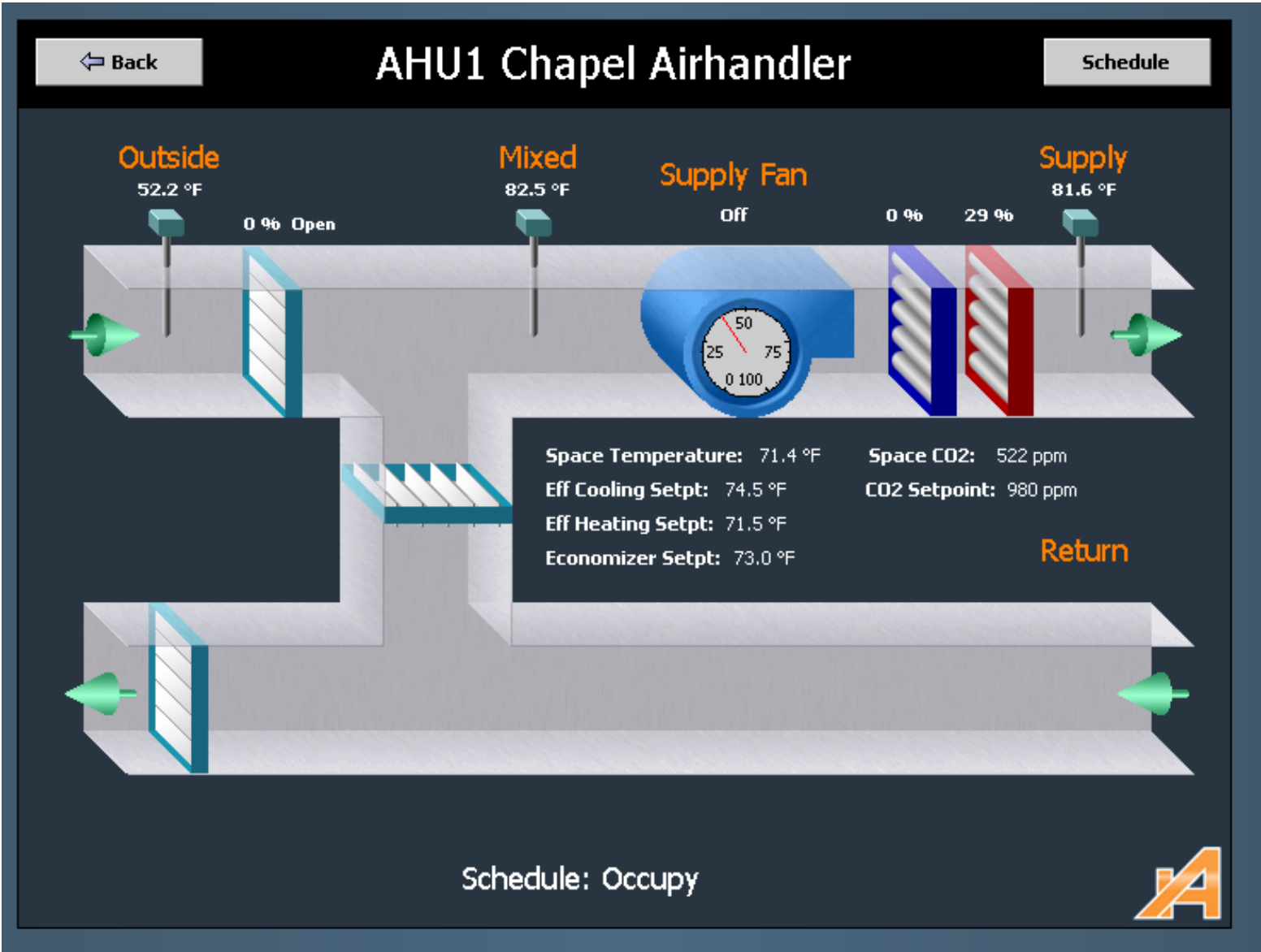
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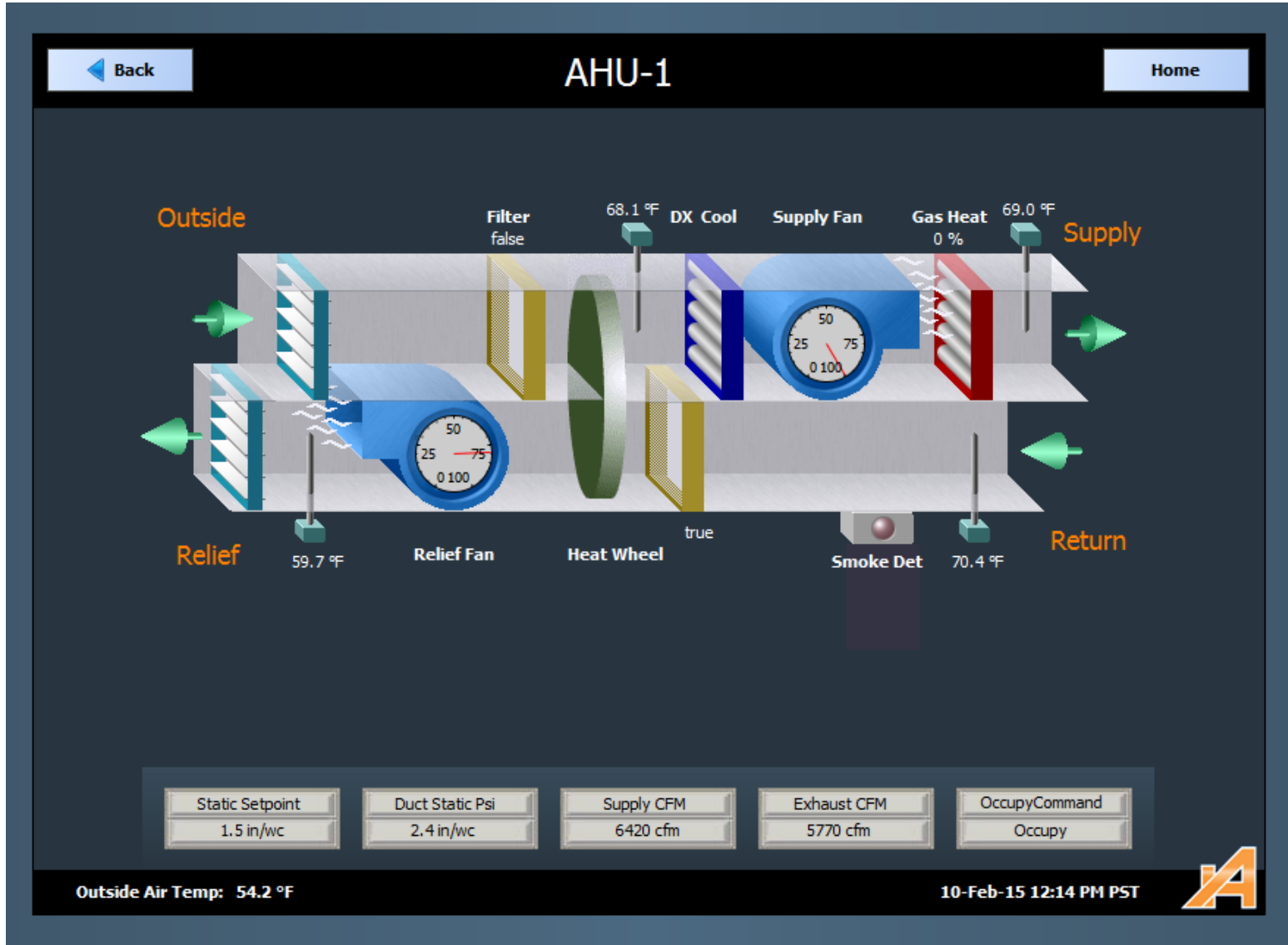
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- MAIN REASON: Similarity of Niagara AX/N4



What HVAC applications are a good fit with Sedona unitary controllers?

- RTU (AHU)
- FCU – 4 pipe/2pipe
- ERV – Heat Wheel
- Heat Pump – w/Aux heat
- Variable Demand Exhaust
- Multi-pump w/variable flow
- Boiler Plant
- Water Source Heat Pump
- ERU – Energy Recovery WWHP
- Multi-zone Slab Heat



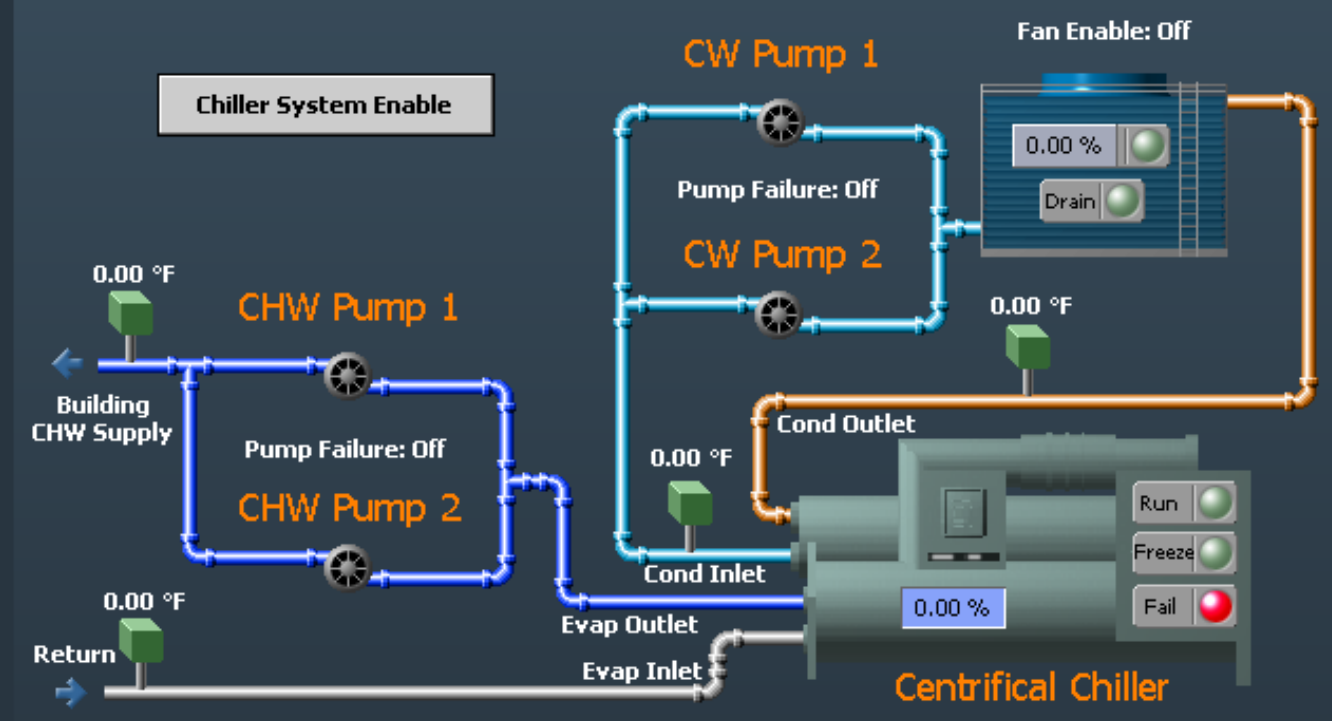


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Chiller Plant


Dashboard
HOME

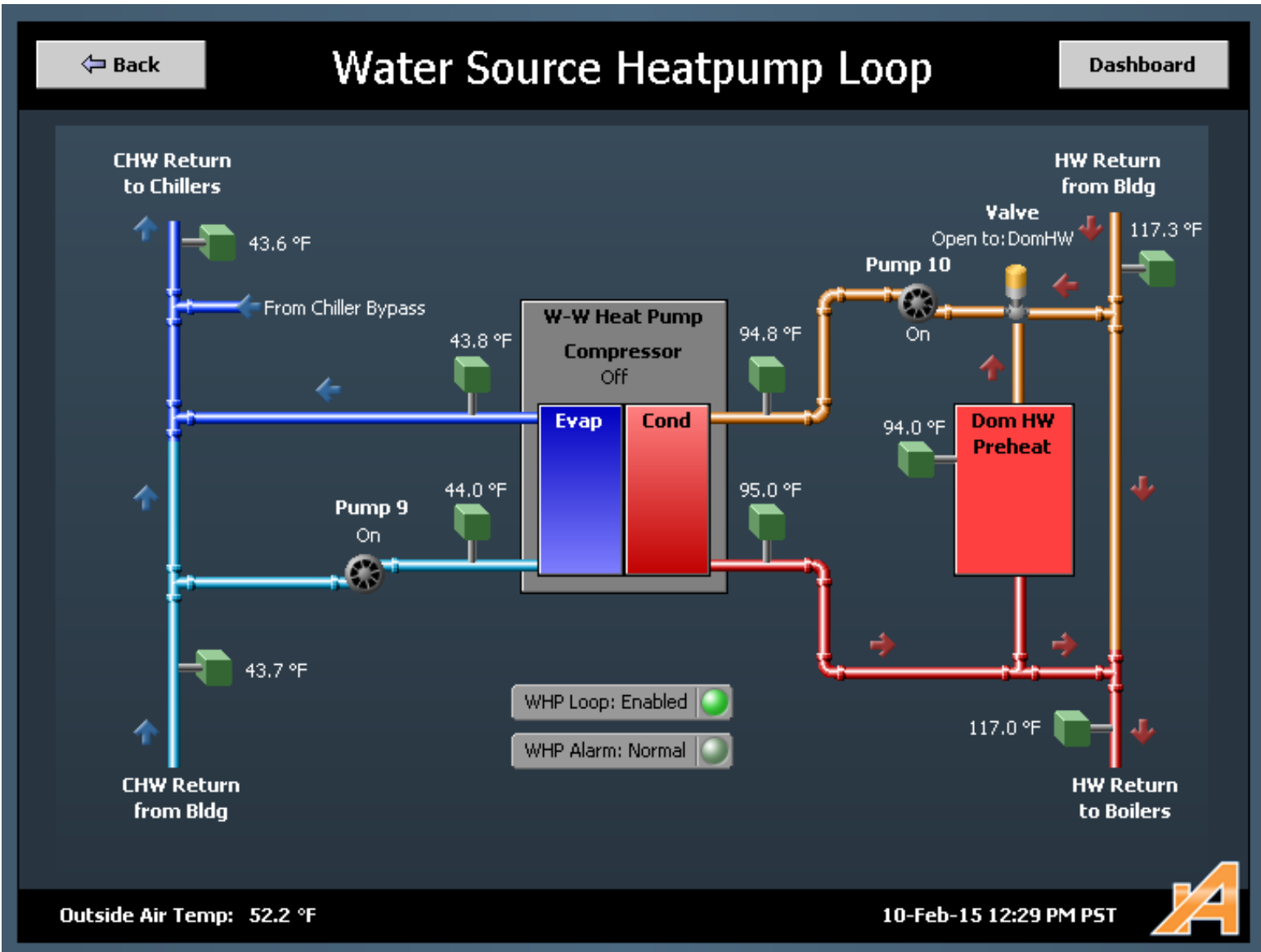
Chiller System Enable



Chiller Enable Setpt	0.00 °F
Cond Water Setpt	0.00 °F

Tower Fan Setpoint	0.00 °F
Tower Drain Setpoint	0.00 °F

Outside Air Temp: 50.0 °F
10-Feb-15 12:38 PM PST






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Master Points List for BAScontrol22 configured as RTUgeneric device - rev8.30.2016						
BACnet Name	Type	Object ID	Sedona Name	Sedona Type	Sedona ID	Notes
ZoneTemp	Numeric Point	analogInput:1	ZN_TEMP	CControls_BASC22_IO	UI1	Local 10k T3 Thermistor
ZoneSetpoint	Numeric Point	analogInput:2	ZNL_SET	CControls_BASC22_IO	UI2	Local 10k ohm slider
SupAirTemp	Numeric Point	analogInput:3	SA_TEMP	CControls_BASC22_IO	UI3	10k T3 Thermistor
OutAirTemp	Numeric Point	analogInput:4	OA_TEMP	CControls_BASC22_IO	UI4	10k T3 Thermistor
ZoneCO2	Numeric Point	analogInput:5	ZN_CO2	CControls_BASC22_IO	UI5	Def range: 10v=2000ppm
EconDmpPos	Numeric Point	analogInput:6	ECON_AI	CControls_BASC22_IO	UI6	2-10vdc feedback
MixAirTemp	Numeric Point	analogInput:7	MA_TEMP	CControls_BASC22_IO	UI7	10k T3 Thermistor
OccupySwitch	Boolean Point	binaryInput:9	OCC_LOC	CControls_BASC22_IO	BI1	Local Occupancy Sensor or switch
SfanProof	Boolean Point	binaryInput:10	SFAN_PF	CControls_BASC22_IO	BI2	CT or flow switch
Shutdown	Boolean Point	binaryInput:11	SHUTDWN	CControls_BASC22_IO	BI3	Fire/smoke/emerg shutdown
FilterFlag	Boolean Point	binaryInput:12	FILTER	CControls_BASC22_IO	BI4	Status for Trouble alert
EconDmpSig	Numeric Writable	analogOutput:13	ECON_AO	CControls_BASC22_IO	AO1	2-10vdc actuator
HeatAO_Sig	Numeric Writable	analogOutput:14	HT_AO	CControls_BASC22_IO	AO2	0-10vdc actuator
CoolAO_Sig	Numeric Writable	analogOutput:15	CL_AO	CControls_BASC22_IO	AO3	0-10vdc actuator
PExhAO_Sig	Numeric Writable	analogOutput:16	PEspeed	CControls_BASC22_IO	AO4	0-10vdc ECM or VFD signal
G_Fan	Boolean Writable	binaryOutput:17	G_FAN	CControls_BASC22_IO	BO1	Supply fan enable
Y1_CoolStage1	Boolean Writable	binaryOutput:18	Y1_CL1	CControls_BASC22_IO	BO2	DX Stage 1 enable
W1_HeatStage1	Boolean Writable	binaryOutput:19	W1_HT1	CControls_BASC22_IO	BO3	Gas or Electric Stage 1
W2_HeatStage2	Boolean Writable	binaryOutput:20	W2_HT2	CControls_BASC22_IO	BO4	Gas or Electric sStage 2
Y2_CoolStage2	Boolean Writable	binaryOutput:21	Y2_CL2	CControls_BASC22_IO	BO5	DX Stage 2 enable



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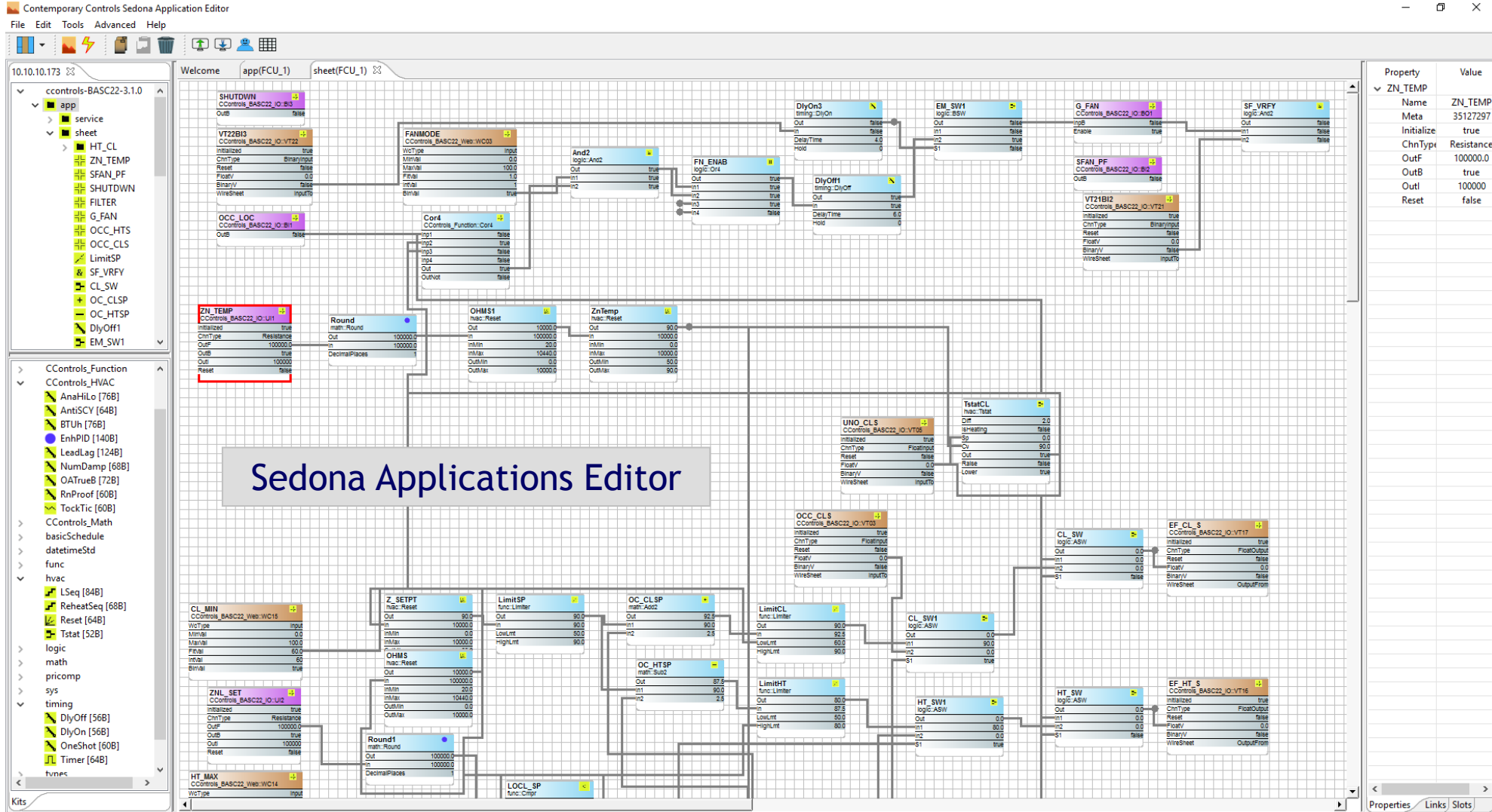
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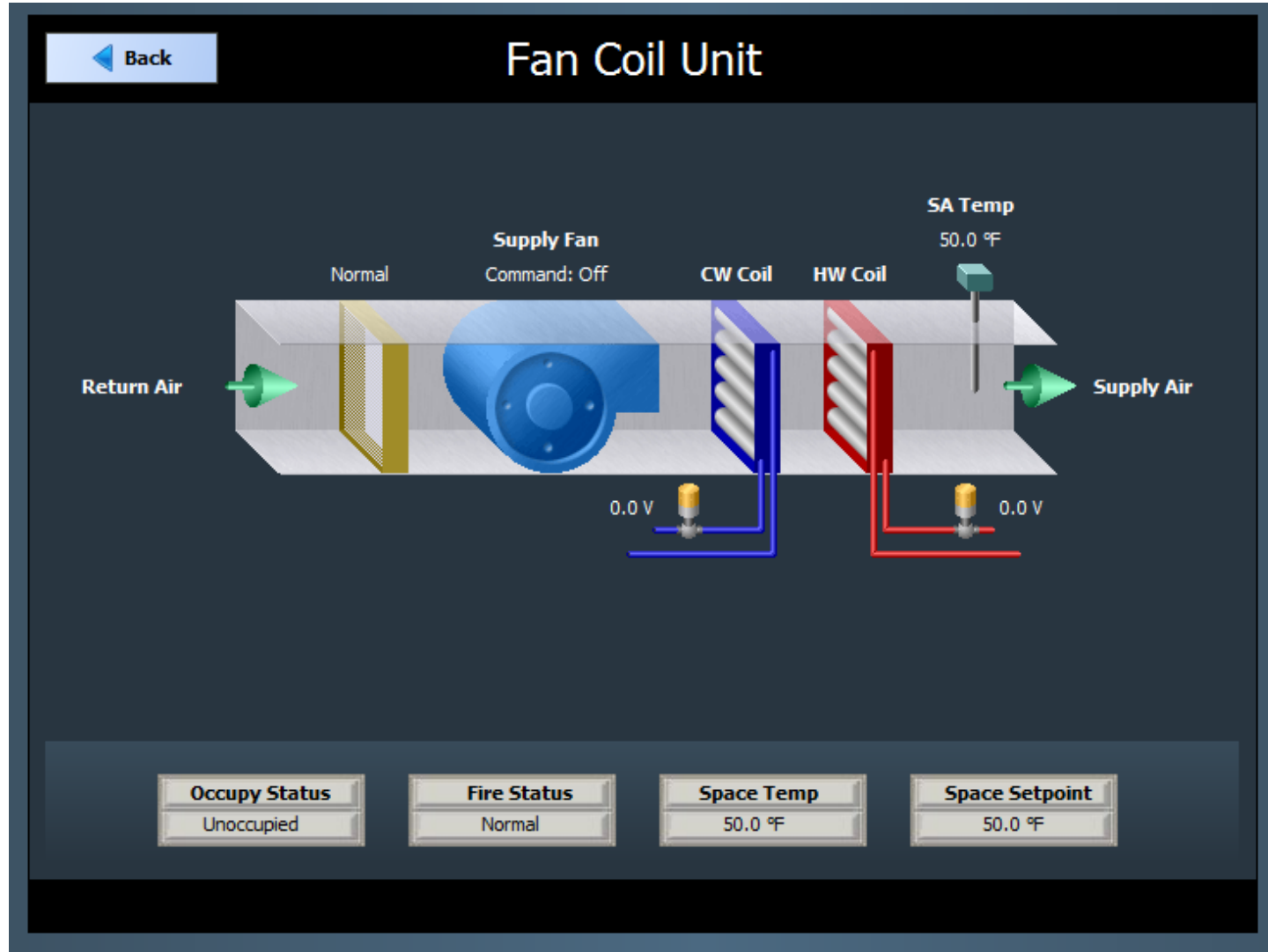
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7. Simulate / scenario test operation

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**Final Question: Why should an SI join
and participate in the Sedona Alliance?**

Thank You

