

DESCRIPTION

The AntrumX central air monitoring solution can be directly connected to the Siemens Desigo DXR room automation controller by using the [BACnet Writes](#) feature of antrumEYE to write the contamination level of the room to an ACH target BACnet object in the DXR controller.

HOW IT WORKS

First in the ABT Configuration tool:

1. Use the SBGL_1SuAps_1ExAps_HW_E17C_US_3.001 or SBGL_1SuAps_1ExAps_HW_E17CX_US_3.001 application template (application type SBGL_HvacLgtShd14).
2. The templates are configured for GOLO, switch to standard damper or Venturi as required.

Ventilation control needs to be set to "CET VAV vent.ctrl. 13, min.vent. & ext.DCV"

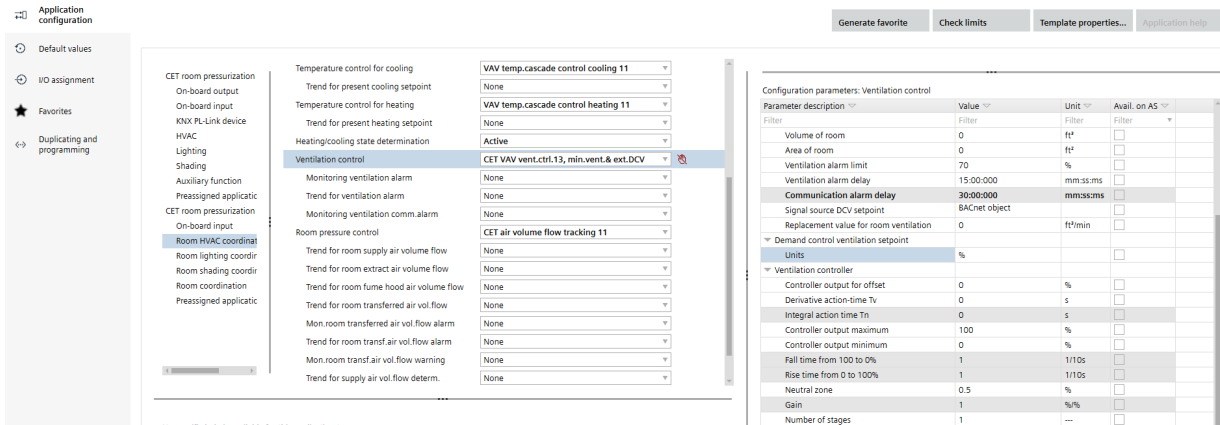
By default, the units for the Demand Control Ventilation (DCV) setpoint is set to % (required for the ventilation controller to be active).

The default tuning for the Ventilation controller is Proportional only with a 1% Gain. The ventilation airflow setpoint will reach its maximum when the DCV setpoint reaches 100%.

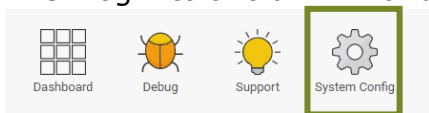
- A Gain of 2% will result in the Ventilation airflow setpoint being at maximum when the Demand control ventilation setpoint is greater than or equal to 50%.
- A Gain of 5% will result in the Ventilation airflow setpoint being at maximum when the Demand control ventilation setpoint is greater than or equal to 20%.
- A Gain of 10% will result in the Ventilation airflow setpoint being at maximum when the Demand control ventilation setpoint is greater than or equal to 10%.

3. Setting the Integral action time to 0s disables the integral portion of the controller. *Use of integral is not recommended.*

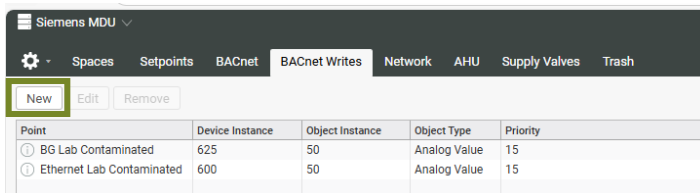
4. The Communication alarm delay should be set to 30 minutes.



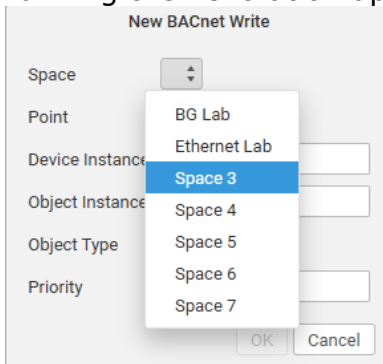
5. Then log into antrumEYE and select System Config:



6. Select the BACnet Writes tab and select New:



7. Select the appropriate space and enter the device instance of the DXR controller running the ventilation application function for the respective space:



8. Enter the 50 for the Object Instance (instance of DCV setpoint).

9. Select Analog Value as the Object Type.

10. Enter the priority for the write, typically 15, and select ok to save and proceed.

New BACnet Write

Space

Point

Device Instance

Object Instance

Object Type

Priority

The BACnet Writes list is updated with the new entry and antrumEYE starts writing the Percent Contaminated value to the DXR.

Siemens MDU

Spaces Setpoints BACnet **BACnet Writes** Network AHU Supply Valves Trash

New Edit Remove

Point	Device Instance	Object Instance	Object Type	Priority
ⓘ BG Lab Contaminated	625	50	Analog Value	15
ⓘ Space 3 Contaminated	12,345	50	Analog Value	15
ⓘ Ethernet Lab Contaminated	600	50	Analog Value	15