



Applications

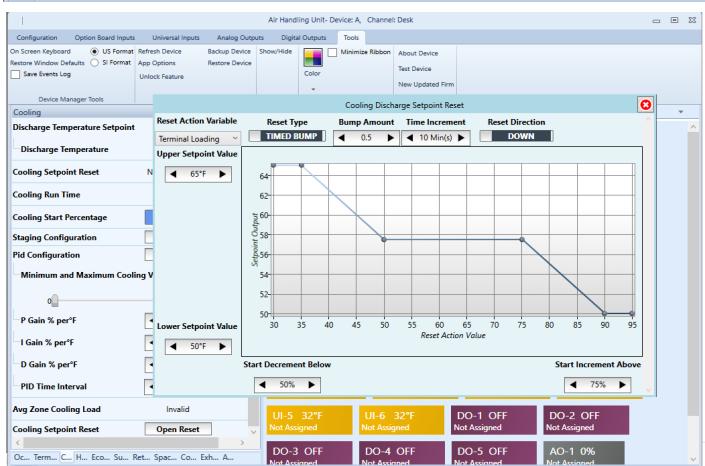
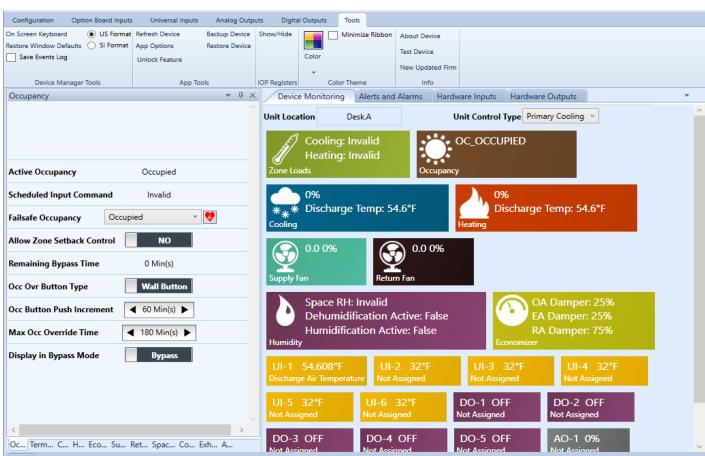
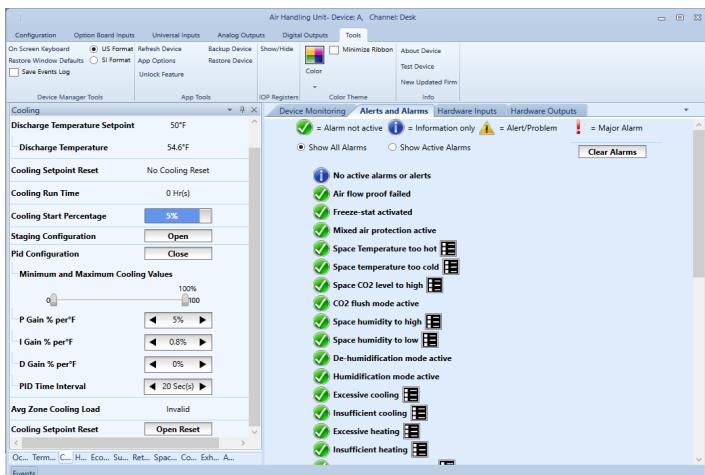
Application is compatible with Q2 Hardware. Compatible with Air Handling Unit equipment up to 6 stages of cooling or heating, analog or floating point valves or digital stages, discharge pressure/variable speed fan control, economizer, humidification and de-humidification, IAQ (CO2) control. Accepts fan-in bindings from terminal equipment controllers to communicate zone information.

Software

Software features include:

- Single Zone or Terminal Unit based AHU control options
- Full PID control of up to 6 Independent stages of cooling, both digital and analog or a mixture of both
- Full PID control of up to 6 Independent stages of heating, both digital and analog or a mixture of both
- Multiple Supply Fan control options. On/Off, Duct Pressure Control, Temperature based Variable Speed
- Multiple Return Fan control options. Building Pressure control, Volumetric Tracking, Speed Tracking
- Multiple styles of built in Discharge Temperature and Fan Pressure Reset algorithms
- Dry-bulb and Enthalpy based Economizer with CO2 and freeze protection control
- Space Humidity Control
- Built in Energy Shedding control
- Built in Alarming
 - Air Filter Alarms
 - Fan Failure and Belt Loss Alarms
 - Sensor Alarms
 - Temperature Control Alarms
 - Pressure Control Alarms
 - CO2 Alarms
 - Many more
- Changeable network variable types.
- Slave mode for any unused I/O, which can be bound to another controller.

LNS Plug-in provides graphical user interface for configuration and monitoring. Plug-in simplifies hardware I/O customization, communication parameters, and control sequences. Plug-in can be executed from-within network management tool such as LonMaker for Windows or similar.



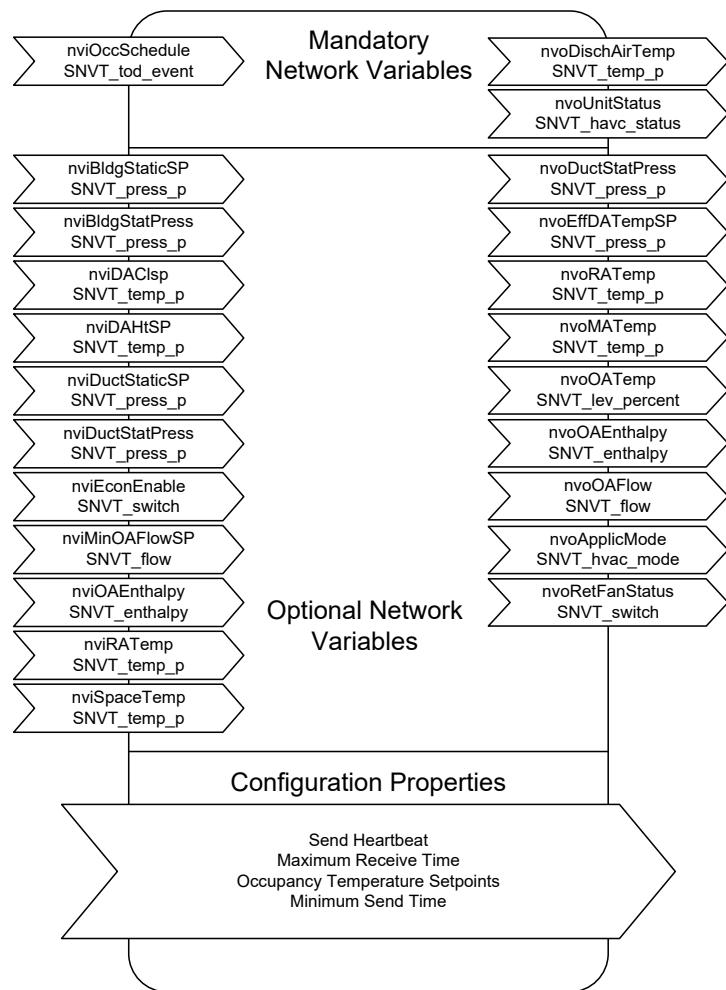


Discharge Air Controller 8610

All variables with SNVT_XXX have Changeable Types feature.

Network Profile

8610 functional block information.



Continue on next page



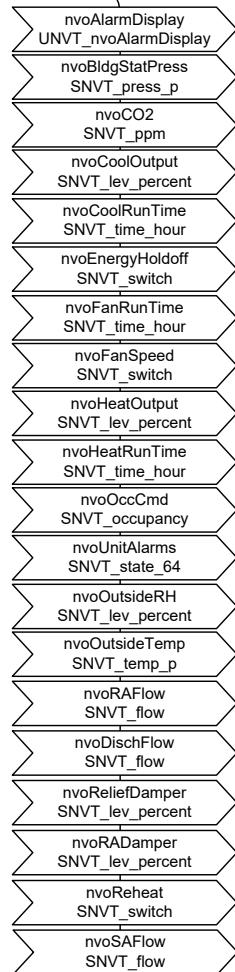
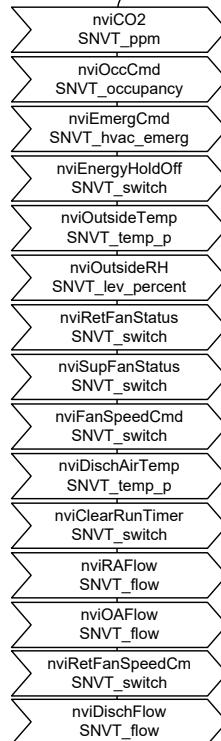


Discharge Air Controller 8610

Network Profile

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Manufacture Network Variables



Manufacture Configuration Properties

Default Occupancy State
 Default Heating Setpoint
 Default Cooling Setpoint
 Optimum Start Configuration
 Fan Type / Mode
 Heating PID Parameter / Stage Delays
 Cooling PID Parameters / Stage Delays
 Supply Fan PID Parameters / Stages
 Return Fan PID Parameters / Changeover Delay
 Discharge Temperature Alarm Configuration
 Fan Alarm Configuration
 CO2 Alarm Configuration
 CO2 Limit
 Duct Pressure Alarm Configuration



Open Loop Sensor Profile	Network Profile
<p>Open Loop Sensor profile is used by all physical inputs. Inputs can be used as slave I/O or as part of the main application.</p> <p>All variables with SNVT_xxx have Changeable Types feature.</p>	<p>Open Loop Sensor functional block information. (Physical inputs)</p> <pre> graph TD subgraph NP [Network Profile] MNV[Mandatory Network Variables] ONV[Optional Network Variables] CP[Configuration Properties] MNV --> DV[Default Value Invert Value Override Value Offset Value Maximum Input Range Minimum Input Range Maximum/Minimum Send Time Minimum Send Delta] ONV --> MRV[Manufacturer Network Variables] CP --> MCP[Manufacture Configuration Properties] MCP --> MNV2[Manufacturer Average Conditioned Value Input Assignment Input Minimum/Maximum Range Input Signal Type Network Variable Type Maximum Network Variable Size] end </pre> <ul style="list-style-type: none"> Mandatory Network Variables Optional Network Variables Configuration Properties Default Value Invert Value Override Value Offset Value Maximum Input Range Minimum Input Range Maximum/Minimum Send Time Minimum Send Delta Manufacturer Network Variables Manufacture Configuration Properties Average Conditioned Value Input Assignment Input Minimum/Maximum Range Input Signal Type Network Variable Type Maximum Network Variable Size



Open Loop Actuator Profile	Network Profile
<p>Analog Output profile is used by all analog outputs. Outputs can be used as slave I/O or as part of the main application.</p> <p>All variables with SNVT_xxx have Changeable Types feature</p>	<p>Analog Outputs functional block information.</p>



Open Loop Sensor Profile	Network Profile
<p>Digital Output profile is used by all digital outputs. Outputs can be used as slave I/O or as part of the main application.</p> <p>All variables with SNVT_xxx have Changeable Types feature.</p>	<p>Digital Outputs functional block information.</p> <pre> graph TD subgraph NP [Network Profile] direction TB MNV[Mandatory Network Variables] ONV[Optional Network Variables] CP[Configuration Properties] subgraph MNV direction LR nviHwDoCmd_x["nviHwDoCmd_x SNVT_count"] nvoHwDoValue_x["nvoHwDoValue_x SNVT_switch"] end subgraph CP direction LR DV[Default Value] IV[Invert Value] OV[Override Value] MRT[Maximum Receive Time] OA[Output Assignment] MST[Maximum/Minimum Send Time] MSD[Minimum Send Delta] FPC[Floating Point Configuration] end end </pre>

Node Object Profile	Network Profile
<p>Node Object profile includes hardware specific network variables. The variables are for internal and use by the plugin only.</p>	<p>Node Object functional block information.</p> <pre> graph TD subgraph Stack [] direction TB M1[Mandatory Network Variables] M2[Optional Network Variables] M3[Configuration Properties] M4[Manufacture Network Variables] end In[nviRequest SNVT_obj_request] --> M1 Out1[nvoStatus SNVT_obj_status] --> M2 Out2[nvoFileDirectory SNVT_address] --> M3 IT[Input Translation Table] --> M4 </pre>