

### Applications

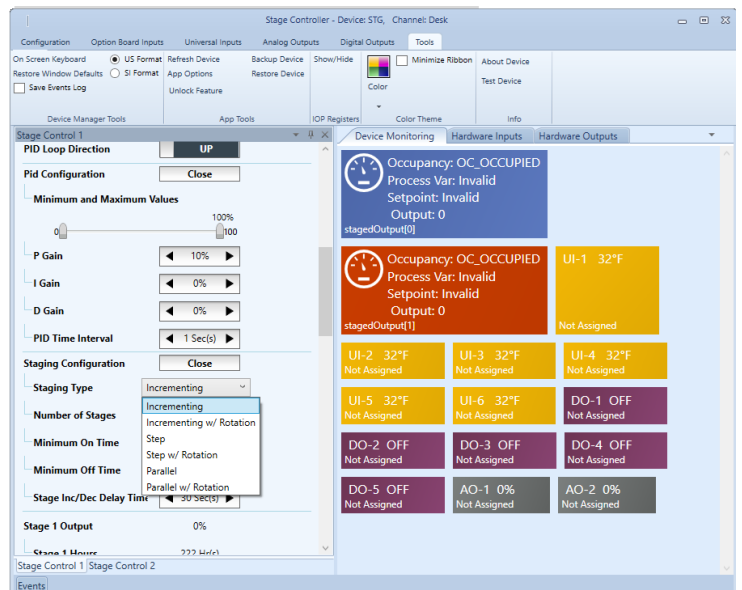
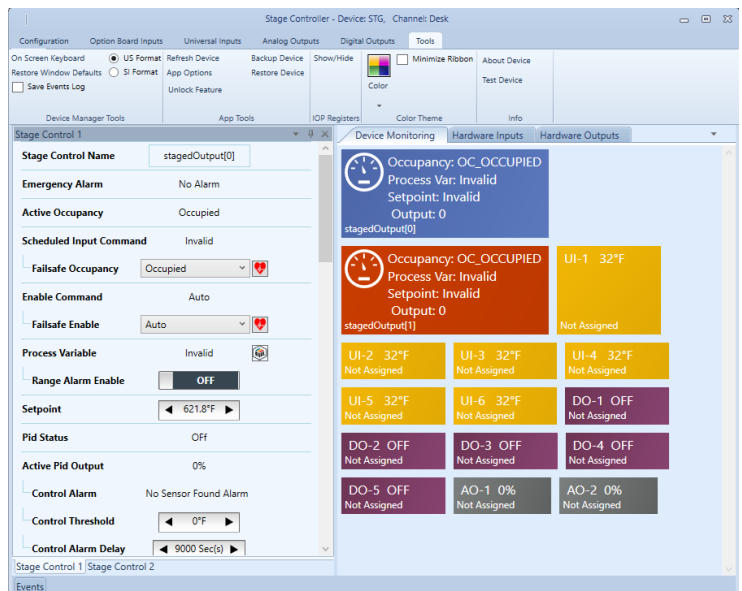
Application is compatible with Q1 Hardware. Fully customizable PID controller with 6 stages of outputs. 2 independent PID applications available to run multiple equipment on the same controller. Built in safeties and alarms for notification and precise control. Can be used on any type of equipment for control of pressures, temperatures, valves, pumps, fans, dampers or other types of equipment.

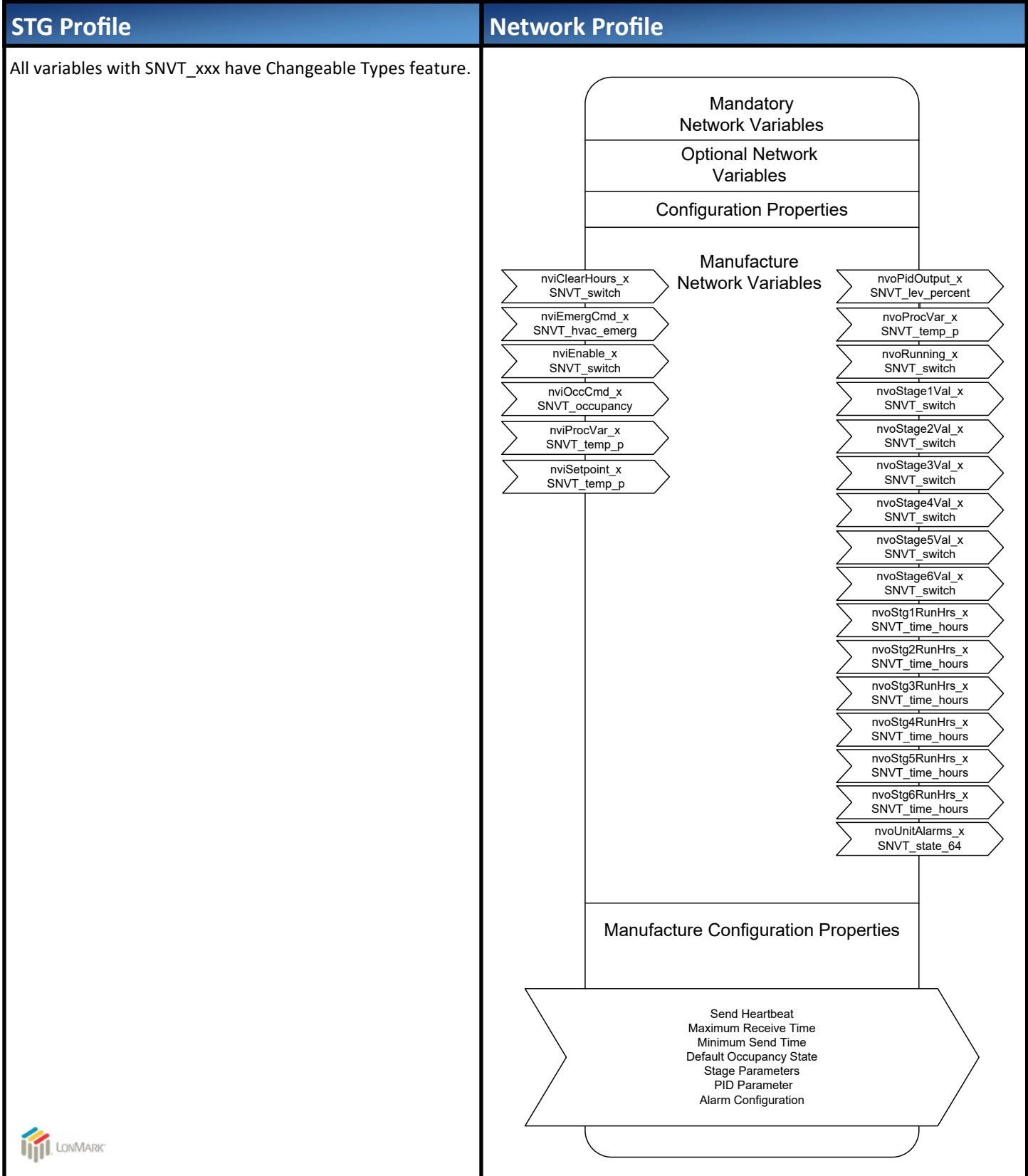
### Software

Software features include:

- Multiple inputs for occupancy of enable commands
- Fully featured PID control
- Full configurability of up to 6 stages of output timing and type
- Safeties for process variable over and under thresholds with variable restart timing
- Fail-safe settings for communications loss handling
- Individual stage proof settings
- Individual stage run hour accumulation
- Stage rotations for equalizing equipment run hours
- Built in Alarming
  - Emergency Shutdown Alarms
  - Staged Equipment Proof Failure Alarms
  - Staged Equipment "In Hand" Alarms
  - Process Variable Control Alarms
  - Process Variable out of Range Alarms
- 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.





### Open Loop Sensor Profile

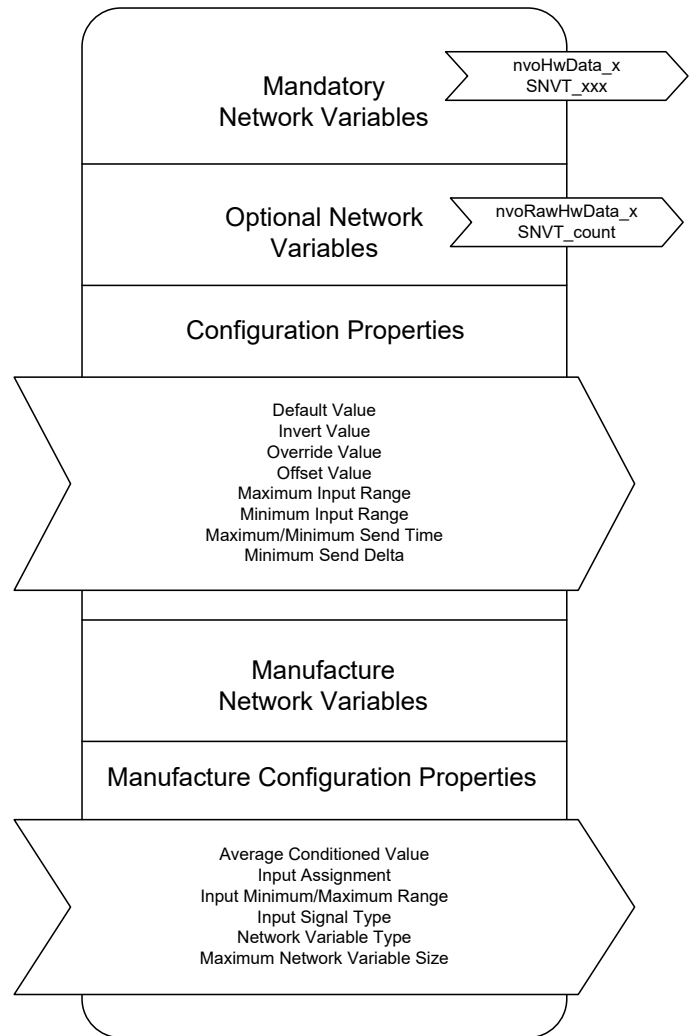
Open Loop Sensor profile is used by all physical inputs. Inputs can be used as slave I/O or as part of the main application.

All variables with SNVT\_xxx have Changeable Types feature.

### Network Profile

Open Loop Sensor functional block information.

(Physical inputs)



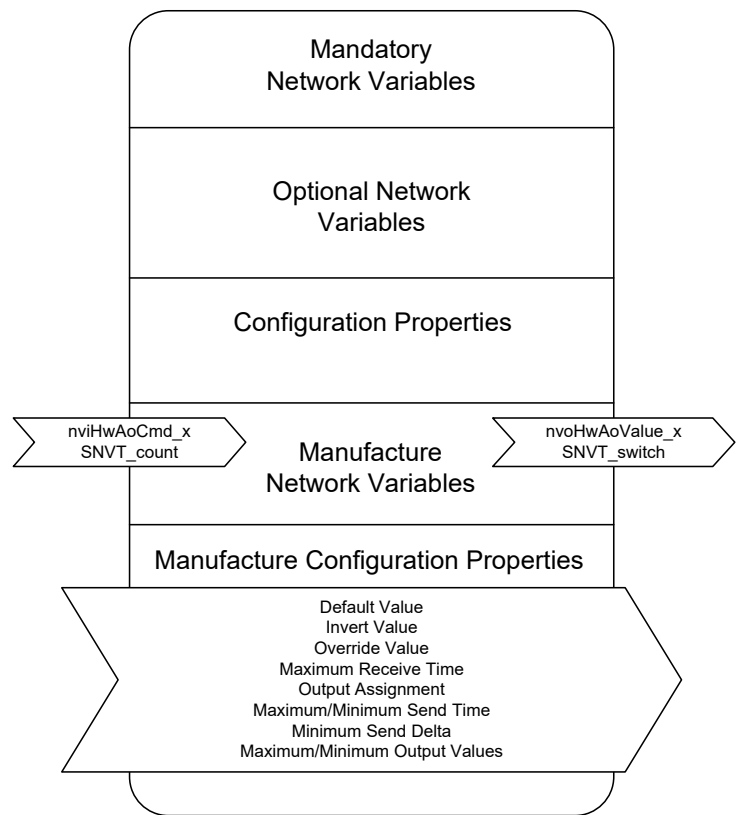
### Open Loop Actuator Profile

Analog Output profile is used by all analog outputs. Outputs can be used as slave I/O or as part of the main application.

All variables with SNVT\_xxx have Changeable Types feature.

### Network Profile

Analog Outputs functional block information.



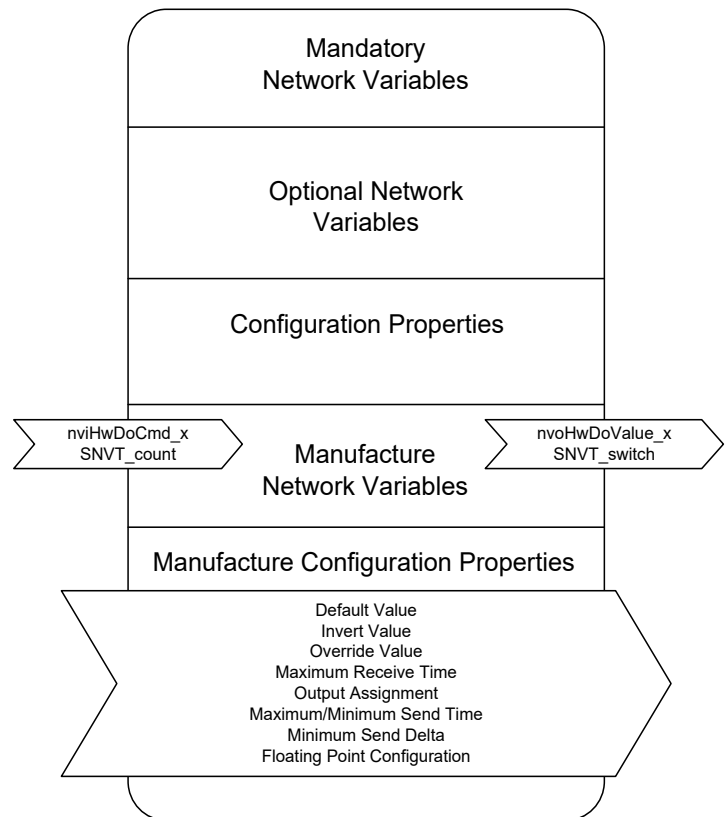
### Open Loop Sensor Profile

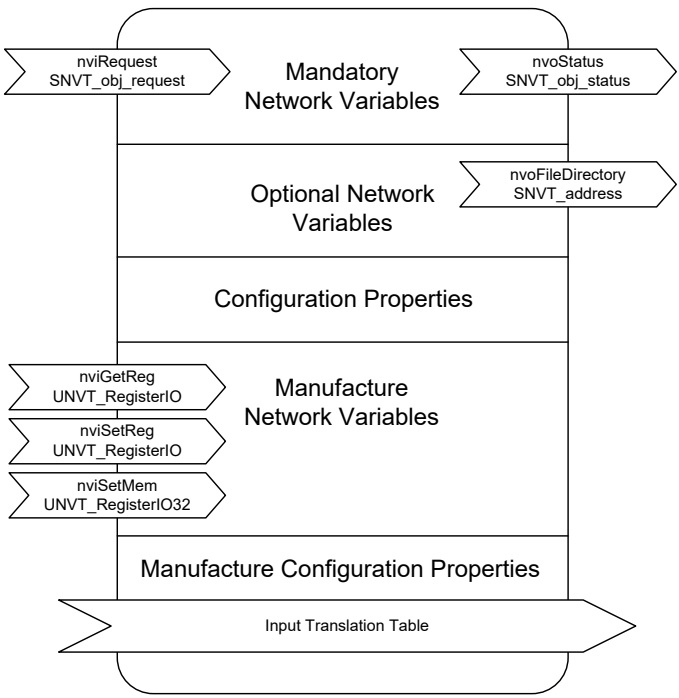
Digital Output profile is used by all digital outputs. Outputs can be used as slave I/O or as part of the main application.

All variables with SNVT\_xxx have Changeable Types feature.

### Network Profile

Digital Outputs functional block information.



Node Object Profile	Network Profile
<p>Node Object profile includes hardware specific network variables. The variables are for internal and use by the plug-in only.</p>	<p>Node Object functional block information.</p>  <pre> graph TD     subgraph Mandatory_Network_Variables [Mandatory Network Variables]         direction LR         M1[nviRequest SNVT_obj_request] --&gt; M2[nvoStatus SNVT_obj_status]     end     subgraph Optional_Network_Variables [Optional Network Variables]         direction LR         O1[nvoFileDirectory SNVT_address]     end     subgraph Configuration_Properties [Configuration Properties]     end     subgraph Manufacture_Network_Variables [Manufacture Network Variables]         direction LR         M3[nviGetReg UNVT_RegisterIO]         M4[nviSetReg UNVT_RegisterIO]         M5[nviSetMem UNVT_RegisterIO32]     end     subgraph Manufacture_Configuration_Properties [Manufacture Configuration Properties]     end     subgraph Input_Translation_Table [Input Translation Table]     end     M2 --- O1     O1 --- Configuration_Properties     Configuration_Properties --- Manufacture_Network_Variables     Manufacture_Network_Variables --- Manufacture_Configuration_Properties     Manufacture_Configuration_Properties --- Input_Translation_Table     </pre>