Panel Creation in Design Tool Workflow standard

Navigate to the profile view in Design Tool

1. Right click on the “JOB” object in the left side of the window, and add a new insight to the job.
   1. \*Alternatively, if this job is on an existing site, you can import a backup comm tool file on that site, which will have the panel configuration, panel names, FLN device, Points, etc. already populated on the System Profile View.
2. After you add the insight to this job, you have the option to name the insight and add a BACnet Instance Number.
   1. What is the site name?
   2. Find what the bacnet instance number should be using the “BACnet Instance ID Guide 2017” spreadsheet
3. Next, right click the insight figure and click “New BLN to Insight”. You have the option to have this BLN be a PII, PII/IP, or BACnet/IP, or Remote (what is remote). This depends on the type of network drop the customer is providing, as well as the communication protocol that the site is using.
4. The BLN will have a name (default should be BLN#), descriptor (Empty), Type (default is BLN), BLN Type (this field depends on the type of communication you chose, i.e. PII/IP or BACnet/IP etc.), and a Node Name (default is BLN1).
   1. How to name BLN Name?
   2. What to enter in descriptor?
   3. What to enter in type?
   4. What to enter in BLN Type?
   5. What to enter in node name?
5. From here, right click on the BLN icon, and left click “add BLN device to BLN”
6. Here you will have multiple options:
   1. Name – How to choose device name?
      1. Use the following standard for device names : “BuildingName.FloorLevel/Area.Equipment.InstanceNumber” Example : “JHW.B3E.AHU01.PXCM71601” (JHWinters building, Basement East building, AHU01 equipment, PXCM instance # 71601) OR “GOEBEL.L01.LabArea.PXCC10301” (Goebel building, level 1, lab area (no room number known at the time), PXCC 10301)
   2. Description – How to choose description? Same as “Name”
   3. Object Name – Applicable to BACnet controllers. Same as “Name”
   4. Node Name – how to choose a node name?
   5. System Number – how to choose a system number?
   6. Reference name – The reference name dictates how the controller will be referenced when point addresses are assigned in mechanical and electrical drawings. The rule for choosing reference names is to make the reference name match the PXCM number that is usually assigned the “Name” field. A good rule is to make the reference name match the panel instance number, or some variant of the instance number.
   7. Site name – how to choose a site name?
   8. Controller type – there are several options here in the dropdown. You can choose MEC, MBC, PXCC, PXCM, PXC36. If you choose PXCC, you can either add a PXC24 or a PXC 16 depending on the FLN type you choose. Note that the FLN type that you choose will also be restricted by the BLN communication protocol. For example, you cant add a bacnet FLN to a PII BLN. If you choose a PXCC and choose your FLN type, you then have the option to choose the backplane. The backplane will depend on the controller type you want (i.e. the number of I/O points, rooftop unit for high temperatures, or other license options to have TX/IO modules and FLN licenses on them).
7. If you choose PXCM you have the option to have an FLN, in which case you will need a PXX-485 module addition. If you choose a PXC36 you have the option to have FLN’s on port A and port B. Again, the FLN options depend on the type of BLN you have, and what type of FLN you have. This whole subject gets very intricate.

You have the option to add “device options” in the clickable boxes. These include:

TX/IO modules

Field Panel GO – what is this?

Virtual AEM – what is this?

Accessory parts – includes displays

After this, navigate to the “drawings” box and complete the base drawing number. The default starts at 900 and increments by 1 for each new BLN device you add. In the “Area” field, enter the area the controller will serve. Choose vertical right or vertical left in the title block dropdown, which dictates the orientation of the drawing’s title block.

IP Settings:

IP address – what do we put here? Any instructions? If you are placing the controller on a customers network, then you need to contact the customer for an assigned IP address. If it is on the Siemens network, you need to contact the specialist for this information.

DNS Suffix – what to put here?

BACnet MS/TP Setting:

Device Instance – see the “BACnet Instance Guide 2017” for information on how to choose a device instance. The device instance number for a field panel should be simple. It may change depending on the instance scheme that the building has if it is an existing building.

MAC Address - see the “BACnet Instance Guide 2017” for information on how to choose a device instance. On a field panel, always set the MAC address to 0. This way the field panel will start the token if it needs to be restarted. However we must increment the MAC address if there are multiple field panels on the network.

Node Address - see the “BACnet Instance Guide 2017” for information on how to choose a device instance.

Baud Rate – Choose a baud rate of 32k for BACnet cases

Always choose the “Apogee” box in the Address style box

You now have the option to add TX/IO modules on the right side. Add TX/IO modules based on the “Panel Standardization” word document