

Proprietary Control System Qualification

To BACnet-Enable proprietary or partially BACnet BAS Systems, the following actions must be completed:

Johnson Metasys (Applies to each Network Engine. including NAE, NCE but not the NIE.):

- BACnet is enabled.
- The BACnet Encoding Type is set to **ASCII**.
- Verify each Network Engine has a *unique* device ID. The JCI default Network Engine device ID defaults to 500 and must be updated to a unique device ID..
- The Key2Act Connect Gateway is required if N2 Devices are present. The gateway process must be completed and repeated for each additional Network Engine one at a time prior to any other BACnet device discovery from Connect. Instructions for the gateway manager can be found here:
<https://docs.key2act.io/k2adocs/connect2018/connect-user-guide/scanning-bas-networks/configuring-a-johnson-controls-gateway>

Schneider StruxureWare:

- Must be native BACnet, the device controllers should start with a B*** to confirm. If any LON devices are connected, you will not be able to see those devices until they are translated to BACnet in the system.

ALC

- All desired points must be **Network Visible**. Mark the Network Visible check box for each point on the controller programming screen under BACnet.
- Verify all setpoints needed are network visible.
- Verify all Object IDs are set to **Static**. If they are set to **Auto**, Eikon software would need to be utilized to set these to **Static**.
- If LGR programming is present, multiple device points may come in under one Connect device causing limitations with scoring. *Only one watchdog may be applied to one device*. If one Connect device contained points from multiple ALC devices, then the scoring would appear as for one device. This would be confusing and not representative of actual ALC device performance.

Siemens Apogee/Insight:

- Requires the Connect Gateway Manager. Connect will communicate BACnet to a Siemens Apogee/Insight system if the Siemens Apogee/Insight system workstation software had been licensed with BACnet Server.
- All the Siemens Apogee/Insight system points must be exposed to BACnet. If this is not the case, a Siemens representative would need to provide and install the license and then expose the points. This is typically an additional cost to the customer.
- The Siemens Apogee/Insight system workstation must be BACnet enabled. Instructions for the gateway manager can be found here: <https://docs.key2act.io/k2adocs/connect2018/connect-user-guide/scanning-bas-networks/configuring-a-siemens-insight-gateway>

Alerton:

- **Push down data files** must be enabled in the Alerton system. If this has not been done, the points will not be identifiable in Connect. They will present as AI1, AO1, BI1, BO1 etc.
- In some scenarios, it is necessary to scan devices by description rather than by device name.

Reliable:

- Does not use RCP protocol. This is not a BACnet protocol.
- If **Dual Protocol** is selected, BACnet must be enabled. To enable BACnet, verify there are no duplicate device IDs. It is possible for devices to be assigned BACnet IDs to the same range when there are multiple buildings on the same network and when the installation intent was for the system to communicate via RCP. Changing the BACnet port and placement of a separate MiniAgent for each building can mitigate this issue.
- Depending upon the Reliable BACnet network configuration, it may be necessary to add the IP address of the MiniAgent to the Reliable BACnet Controller/Table.

Trane Tracer SC:

- The Connect Gateway Manager in Tracer SC mode must be used when LON/Comm5 devices are connected to a Tracer SC. This must be completed prior to any other device additions to Connect. Instructions for the gateway can be found here:
<https://docs.key2act.io/k2adocs/connect2018/connect-user-guide/scanning-bas-networks/configuring-a-trane-tracer-sc-gateway>
- If the Tracer SC is network connected to any Trane Comm3/Comm4 Bridges, the discovery of the bridges must be performed prior to other BACnet IP devices and after LON/Comm5 devices. This discovery process is performed the same as the Trane BCU. Perform a typical BACnet discovery for ONE Trane Comm3/Comm4 Bridge device ID with the “Scan Trane BCU Sub Devices” checkbox checked. Repeat for each additional Trane Comm3/Comm4 Bridge one at a time.
- When the Tracer SC has BACnet MSTP devices attached or a network connection to other BACnet IP devices, the system is treated like any other BACnet IP BAS. A typical BACnet scan can be executed from within Connect to configure the system.
- **Note:** It is possible for LON/Comm5 devices, Trane COMM3 / COMM4 bridge devices, BACnet MSTP/IP and Modbus devices to coexist on a single Tracer SC BAS installation.